48th EDTNA/ERCA
International Conference
September 14th – 17th, 2019
Prague, Czech Republic

Conference Theme
New Pathways in the Renal Setting - Caring Together by Integrating Modern Technology Based on Knowledge & Education

Abstract Book
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ACKNOWLEDGEMENT – CORPORATE MEMBERS

Our Partners’ support, involvement and advice are greatly appreciated. Together we live and act according to our Mission and Vision and we are continuously working on achieving a high level of quality care for patients and their families. Being a Corporate Member sharing the key values, visions and missions of EDTNA/ERCA means that you are a very important part of the EDTNA/ERCA Community. Thank you for your continuous support.
ACKNOWLEDGEMENT – CONFERENCE SUPPORT

We would like to express our appreciation for the valuable support our Industry Partners’ bring by participating at the 48th EDTNA/ERCA International Conference. Our Partners support, involvement and advice are greatly appreciated. Thank You very much!

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PATRONAGE

Patronage of the City of Prague for the 48th EDTNA/ERCA International Conference

organised by EDTNA/ERCA Caring Together on 14th-17th September 2019 in Prague

is taken on by

Zdeněk Hřib, M. D.
Mayor of Prague

in Prague on 27 August 2019
Dear Colleagues,

On behalf of the Scientific Programme Committee I am honoured to welcome you all to the 48th EDTNA/ERCA International Conference in Prague, Czech Republic, and to present to you with the Conference Abstract Book.

The conference theme this year is “New pathways in the renal setting – Caring together by integrating modern technology based on knowledge & education”. Along these lines we have developed a Scientific Programme, offering a significant and valuable contribution to renal care, focusing on best research and innovations in practice. But still without overlooking the nursing core values and also the values of other health care professionals.

212 abstracts were submitted totally and blind reviewed, 198 of whom were accepted. The Scientific Programme has 25 parallel sessions, three plenary sessions, a Round Table session, one Corporate Education Session, the DOPPS Clinical Symposium, two lunch symposia, 4 E-poster sessions.

Last year the workshops were so successful, that we decide to offer to delegates also this year 8 workshops.

The news of this year’s conference are the courses, in partnership with the Aesculap Academy of Prague. The topics of the courses cover “evergreen” topics like the hygiene and the control of infection, but also new topics like the aggressions in the workplace.

The international Council of Nurses has agreed accreditation of the Conference and awarded the 48th EDTNA/ERCA Conference Scientific Programme with 18 European CME credits.

The Abstract Book lists the abstracts of authors and guest speakers, presented in session order as they appear in the final Scientific Programme. The book can be used to keep in touch with presenters and Association members.

I take this opportunity to thank all presenting authors and EDTNA/ERCA Volunteers. Their effort, time and enthusiasm made this Conference a success. Our gratitude goes also to Industry partners for supporting education sessions, workshops and the exhibition. I would like to thank the Conference Department for their professional collaboration and the Marketing Director.

Conferences such as this provide a precious opportunity for research scientists, industry specialists and decision-makers to share experiences and update their expertise. I am grateful to the many experts who have come to share their knowledge during these four days.

Ilaria de Barbieri, RN, PhD
EDTNA/ERCA Scientific Programme Committee Chair
ilaria.debarbieri@edtnaerca.org / www.edtnaerca.org
## COMMITTEES

### Executive Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
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<tbody>
<tr>
<td>Edita Noruisiene</td>
<td>President</td>
<td><a href="mailto:edita.noruisiene@edtnaerca.org">edita.noruisiene@edtnaerca.org</a></td>
</tr>
<tr>
<td>Evgenia Golland</td>
<td>Treasurer</td>
<td><a href="mailto:jane.golland@edtnaerca.org">jane.golland@edtnaerca.org</a></td>
</tr>
<tr>
<td>Maria Teresa Parisotto</td>
<td>Secretary</td>
<td><a href="mailto:mariateresa.parisotto@edtnaerca.org">mariateresa.parisotto@edtnaerca.org</a></td>
</tr>
<tr>
<td>Ilaria de Barbieri</td>
<td>EC Member</td>
<td><a href="mailto:ilaria.debarbieri@edtnaerca.org">ilaria.debarbieri@edtnaerca.org</a></td>
</tr>
<tr>
<td>Tai Mooi Ho Wong</td>
<td>EC Member</td>
<td><a href="mailto:taimooi.ho@edtnaerca.org">taimooi.ho@edtnaerca.org</a></td>
</tr>
<tr>
<td>Anna Klis</td>
<td>EC Member</td>
<td><a href="mailto:anna.klis@edtnaerca.org">anna.klis@edtnaerca.org</a></td>
</tr>
<tr>
<td>Anastasia Liossatou</td>
<td>EC Member</td>
<td><a href="mailto:anastasia.liossatou@edtnaerca.org">anastasia.liossatou@edtnaerca.org</a></td>
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### Publications

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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Maria Cruz Casal</td>
<td>Publication Coordinator</td>
<td><a href="mailto:maria.cruz.casal@gmail.com">maria.cruz.casal@gmail.com</a></td>
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### Conference Scientific Programme Committee

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<tbody>
<tr>
<td>Ilaria de Barbieri</td>
<td>Chair</td>
<td><a href="mailto:ilaria.debarbieri@edtnaerca.org">ilaria.debarbieri@edtnaerca.org</a></td>
</tr>
<tr>
<td>Helen Noble</td>
<td>Member</td>
<td><a href="mailto:helen.noble@qub.ac.uk">helen.noble@qub.ac.uk</a></td>
</tr>
<tr>
<td>Jeanette Finderup</td>
<td>Member</td>
<td><a href="mailto:jeajee@rm.dk">jeajee@rm.dk</a></td>
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### Conference, Marketing, Exhibition & Sponsorhip, Industry Relations, Secretariat

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<tr>
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<tr>
<td>Anki Davidson</td>
<td>Marketing Director</td>
<td><a href="mailto:anki.davidson@edtnaerca.org">anki.davidson@edtnaerca.org</a></td>
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### Finance Support Services

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<tr>
<td>Alois Gorke</td>
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<td><a href="mailto:alois.gorke@edtnaerca.org">alois.gorke@edtnaerca.org</a></td>
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<tr>
<td>Topic</td>
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<tr>
<td>Caring for the Well-being of Renal Healthcare Professionals</td>
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<tr>
<td>Ethical, Psychological and Social Impact of CKD</td>
<td>Mike Kelly</td>
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<tr>
<td>Haemodialysis A</td>
<td>Anna Marti Monros</td>
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<td>Haemodialysis B</td>
<td>Hanadi Mezher</td>
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<tr>
<td>Home Therapies</td>
<td>Anna Marti i Monros</td>
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<tr>
<td>Kidney Failure in the Elderly</td>
<td>Jeanette Finderup</td>
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<td>Leadership for Renal Health Care Professionals</td>
<td>Marianna Eleftheroudi</td>
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<tr>
<td>Multimorbidity in Renal Care</td>
<td>Jitka Pancířová</td>
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<tr>
<td>Nutrition</td>
<td>Kalliopi Anna Poulia</td>
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<td>Open Forum</td>
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<td>Paediatric Renal Care</td>
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## INVITED SPEAKERS

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<tr>
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<tr>
<td>Sebastien Bollue, Redsense Medical (Sweden)</td>
<td>S 01</td>
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<tr>
<td>Andy Cox, Medtronic (United Kingdom)</td>
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<tr>
<td>Ilaria de Barbieri, EDTNA/ERCA (Italy)</td>
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<tr>
<td>Siobhan Gladding, NxStage (United Kingdom)</td>
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<tr>
<td>Tai Mooi Ho Wong, EDTNA/ERCA (Spain)</td>
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<tr>
<td>Maria Teresa Parisotto, EDTNA/ERCA (Germany)</td>
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<tr>
<td>Martin Meier, B. Braun (Germany)</td>
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<tr>
<td>Kalliopi-Anna Poulia, EDTNA/ERCA (Greece)</td>
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<tr>
<td>Henning Sondergaard, EDTNA/ERCA (Denmark)</td>
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### Guest speaker - Opening Ceremony

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<tr>
<td>John Sedgewick (United Kingdom)</td>
<td>S 02</td>
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### Guest speakers (in alphabetical order)

<table>
<thead>
<tr>
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<tr>
<td>Alice Hellebrand (United States)</td>
<td>S 23</td>
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<tr>
<td>Neerja Jain (United Kingdom)</td>
<td>S 06</td>
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<td>Raymond Vanholder (Belgium)</td>
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<tr>
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<tr>
<td>Aziz Abercane (France)</td>
<td>W 08</td>
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<tr>
<td>Linda K. Ball (ANNA Immediate Past President)</td>
<td>S 20</td>
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<tr>
<td>Ivana Bartakova (Czech Republic)</td>
<td>C 01; C 02</td>
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<tr>
<td>Lesley Bennet (United Kingdom)</td>
<td>W 02</td>
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<tr>
<td>Niklas Best (Germany)</td>
<td>S 03</td>
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<tr>
<td>Elżbieta Cepuchowicz (Poland)</td>
<td>S 07</td>
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<tr>
<td>Paul Challinor (United Kingdom)</td>
<td>C 01; C 02</td>
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<tr>
<td>Ilaria de Barbieri (Italy)</td>
<td>S 07</td>
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<tr>
<td>Marianna Elefteroudi (Greece)</td>
<td>S 17</td>
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<tr>
<td>Neerja Jain (United Kingdom)</td>
<td>W 03</td>
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<td>Karen Jenkins (United Kingdom)</td>
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<td>Greig Johnstone (United Kingdom)</td>
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<td>Mike Kelly (Belgium)</td>
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<tr>
<td>Theodora Khafkia (Germany)</td>
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<td>Jennie King (United Kingdom)</td>
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<tr>
<td>Anna Klis (Poland)</td>
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<td>Małgorzata Liber (Poland)</td>
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<td>Thierry Lobbedez (France)</td>
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<td>Jaroslav Pekara (Czech Republic)</td>
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<td>Cedric Poulard, Physidia (France)</td>
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<td>Raquel Ribeiro (Portugal)</td>
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<td>Aase Riemann (The Netherlands)</td>
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<td>Michel Roden (Belgium)</td>
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<td>John Sedgewick (United Kingdom)</td>
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<td>Michael Stern (Czech Republic)</td>
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<td>Maria Arminda Tavares (Portugal)</td>
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<td>Marjelka Trkulja (Croatia)</td>
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<td>Aneta Trzcinska (Poland)</td>
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<tr>
<td>Matt Willans (United Kingdom)</td>
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SCIENTIFIC PROGRAMME HIGHLIGHTS

SCIENTIFIC PARALLEL SESSIONS
Invited Guest Speakers discuss the latest developments in renal care during the plenary sessions. Quality Abstracts including the Short orals presentations have been selected for inclusion in the parallel sessions.

S 02  Opening Ceremony
Improving Patient Outcomes Through Implementation Science: An Important Goal in Renal Care
John Sedgewick (United Kingdom)

S 06  The Patient Experience
Engaging the “poorly reached” in kidney research and awareness campaigns
Neerja Jain (United Kingdom)

S 14  European Kidney Health Alliance
Improving the life of kidney disease patients throughout Europe and the EU: the European Kidney Health Alliance
Raymond Vanholder (Belgium)

S 23  CKD & Conservative Renal Care
The Older Dialysis Patient: Issues and Concerns
Alice Hellebrand (United States)

LUNCH TIME SYMPOSIA

S 07  Polish Symposium
Vacccination in hemodialyzed patients
Anna Klis (Poland)
Elżbieta Cepuchowicz (Poland)

Co-morbidity in hemodialyzed patients as an important aspect of nursing care
Malgorzata Liber (Poland)

Nephrological nurses and occupational exposure - how? when? why?
Aneta Trzcinska (Poland)

S 17  Greek Forum
Hypertension in Chronic Kidney Disease
Vassilios Liakopoulos (Greece)

Blood Pressure measurement - technique data
Marianna Eleftheroudi (Greece)

WORKSHOPS & ROUND TABLE SESSIONS

W 01  Workshop
Developing and Maintaining Effective Teams
John Sedgewick (United Kingdom)

W 02  Workshop
Human Factors and Patient Safety: Everybody’s Business
Lesley Bennet (United Kingdom)
Karen Jenkins (United Kingdom)
W 03  Workshop  
Involving patients and family members from BAME/poor reached communities in clinical research  
Neerja Jain (United Kingdom)

W 04  Workshop  
Empower PD patients to Self-Care – Validate patient’s skills to perform PD  
Maria Arminda Tavares (Portugal)

W 05  Workshop  
An Introduction to Mindfulness Practices: Managing Stress and Anxiety  
Clare McVeigh (United Kingdom)

W 06  Workshop  
Uncovering the power of extra-ordinary leadership - The leadership Challenge  
John Sedgewick (United Kingdom)

W 07  Workshop  
Gaining EDTNA/ERCA Accreditation for your Renal Education Program – What’s Involved  
John Sedgewick (United Kingdom)  
Theodora Khafkia (Germany)

W 08  Workshop - Physidia  
Home Haemodialysis – Getting a better quality of life for your patients  
Aziz Abercane (France)  
Veliana Todorova (France),  
Matt Willans (United Kingdom)  
Greig Johnstone (United Kingdom)  
Cedric Poulard, Physidia (France)  
Fredrik Thibblin (Sweden)

S 08  Round Table Session - Baxter  
Empower PD Patients to Shared Care  

Doctors Perspective  
Thierry Lobbedez (France)

Nurses Perspective  
Gail McMullan (United Kingdom)

The Perspective of the Multidisciplinary Team  
Maria Arminda Tavares (Portugal)  
Gail McMullan (United Kingdom)  
Aase Riemann (The Netherlands)  
Kalliopi-Anna Pouia (Greece)  
Mike Kelly (Belgium)  
Thierry Lobbedez (France)
COURSES

C 01; C 02  Course
Hygiene, Infection Control and Prevention in Renal Care
Paul Challinor (United Kingdom)
Ivana Bartakova (Czech Republic)

C 03; C 05  Course
Critical states during a dialysis treatment
Michael Stern (Czech Republic)

C 04; C 06  Course
Violence & Aggression in Renal Care
Jaroslav Pekara (Czech Republic)

CORPORATE EDUCATION SESSION

S 03  Corporate Education Session – Fresenius Medical Care
The Future of Renal Nursing: Patient Centered Care in the Digital Era
Maria Teresa Parisotto (Germany)
Ivana Lupomeska (Czech Republic)
Niklas Best (Germany)
Raquel Ribeiro (Portugal)
Marjelka Trkulja (Croatia)

DOPPS SYMPOSIUM

S 05  DOPPS Clinical Symposium
Update from the DOPPS Program: Centering care around patients
Anna Marti i Monros (Spain)
Michel Roden (Belgium)
Marisa Pegoraro (Italy)
Jennie King (United Kingdom)
## SCIENTIFIC PROGRAMME

### SATURDAY, SEPTEMBER 14<sup>th</sup>, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
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<tr>
<td>16:00—17:45</td>
<td>Hall A1 + A2</td>
<td>S 01</td>
<td>Plenary Session</td>
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<td>18:00—19:30</td>
<td>Hall A1 + A2</td>
<td>S 02</td>
<td>Opening Ceremony</td>
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### SUNDAY, SEPTEMBER 15<sup>th</sup>, 2019

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<td>9:00—10:30</td>
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<td>S 03</td>
<td>Corporate Education Session – Fresenius Medical Care</td>
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<td>9:00—10:30</td>
<td>Hall A2</td>
<td>S 04</td>
<td>Parallel Session – Education</td>
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<td>11:00—12:30</td>
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<td>S 05</td>
<td>DOPPS Clinical Symposium</td>
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<tr>
<td>11:00—12:30</td>
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<td>S 06</td>
<td>Parallel Session – The Patient Experience</td>
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<tr>
<td>11:00—12:30</td>
<td>Hall A3</td>
<td>W 01</td>
<td>Workshop – Developing and Maintaining Effective Teams</td>
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<td>Hall A1</td>
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<td>Lunch Symposium – Polish Symposium</td>
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<td>12:45—13:45</td>
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<td>Round Table Discussion – Baxter</td>
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<td>Parallel Session – Haemodialysis 1</td>
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<td>Parallel Session – Home Therapies</td>
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<td>14:00—15:30</td>
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<td>W 02</td>
<td>Workshop – Human Factors and Patient Safety: Everybody's</td>
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<tr>
<td>14:00—15:30</td>
<td>Hall B</td>
<td>W 03</td>
<td>Workshop – Involving patients and family members from BAME/poor reached communities in clinical research</td>
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ABSTRACTS

SATURDAY, SEPTEMBER 14th, 2019
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    Hall A1 + A2, 16:00-17:45

The EDTNA/ERCA Collaboration Program – Creating a long-term sustainable Association together with the Multidisciplinary Team
A. Davidson, E. Noruisiene

The EDTNA/ERCA Collaboration Programme – Creating a long-term Sustainable Association together with the Multidisciplinary Team

For decades, EDTNA/ERCA have been working in close collaboration with Industry Partners, Universities & Schools and National Associations. The Mission has been and still is to put different worlds together for the benefit of the patients. The Collaboration Programme is about combining knowledge and experience and collaborate together. How does the Collaboration Programme work? Either EDTNA/ERCA identify a gap of knowledge within a certain area and topic and realize that Education is needed to achieve the Mission of the Association or our Partners identify a need of support from the Multidisciplinary experts and reach out to EDTNA/ERCA! We work both ways and, in the end, we together identify the needs & requirements and make it happen. Educational Programs vary from country to country and in each country varies from unit to unit. It is important to reduce variability of different educational programs, instead focus on what is important to increase the knowledge and awareness. It is important that Healthcare Professionals acquire during educational programs the skills and the knowledge to perform the treatment safely, recognize potential complications and manage risks. The Multidisciplinary theories and qualitative research methodologies are advantageous to build knowledge in Renal Care. Being a Corporate Member sharing the Core Values, Vision and Mission of EDTNA/ERCA means that our Partners are a very important part of the EDTNA/ERCA Renal Care Community. Together we create a long-term Sustainable Association!
Improving Patient Outcomes Through Implementation Science: An Important Goal in Renal Care
J. Sedgewick

Chronic kidney disease (CKD) is associated with adverse health outcomes, poor health related quality of life (QoL) and high health care costs. Outcomes such as mortality and CKD progression to end-stage kidney disease are established indicators of health, these do not sufficiently capture patients’ overall QoL. While outcomes, such as blood results are reported during renal care, outcomes focusing on well-being and QoL are often more important to patients. Research which fails to address what matters to patients means that symptoms and physical problems may go undetected and therefore untreated. Of concern is research which addresses patient outcomes yet fails to translate into clinical practice.

The research knowledge to practice gap is well documented and many successful interventions from health research often fail to translate into meaningful patient care outcomes. Implementation science helps address this gap, ensuring research evidence is translated into practice. Implementation science identifies factors, processes and methods which successfully embed evidence-based interventions into practice. The components of implementation science include dissemination of effectiveness research and the successful integration of treatments and interventions. Using an implementation science framework helps identify why outcomes are variable despite the evidence. Examples of implementation science frameworks include the Promoting Action on Research Implementation in Health Services (PARiHS) and Consolidate Framework for Implementation Research (CFIR). The components of these framework are explored in relation to research on self-management support in CKD, improving home dialysis uptake and advanced care planning with patients on haemodialysis.

Getting research evidence into practice for more effective and sustainable healthcare service is critical for renal health professionals. Renal healthcare professionals who use implementation science frameworks are in a stronger position to help reduce the research practice time lag. Renal healthcare researchers must not only focus on the summative endpoint outcomes of their research but also evaluate how effective the research implementation is within the specific context, thereby helping strengthen the sustainability of the intervention and promote research dissemination. Identifying ways to reduce the research-practice gap is central to improving patient outcomes and delivering effective person-centred care.
The Future of Renal Nursing: Patient Centered Care in the Digital Era

The goal of this session is to think in a critical way about how we identify ourselves as renal nurses. To reflect on the identification of ourselves as nurses we must look in the history, where we are today and were we want to be in the future.

The profile of renal nurses has been changing over the years. We raised our education level and our competencies. We now need to develop our scope of practice and our autonomy in a way that reflects these changes, but not only, in a time that new digital models of care are entering Healthcare scene we need to position ourselves as key players. The development and simplification of technology and manual tasks has corresponded with an increase in the safety of the therapy. This has allowed us to evolve from offering dialysis to a very selected number of patients, to almost all patients in need of dialysis worldwide. Our hands-on work with dialysis machines which was once very complex will became so much simpler that the need for highly qualified professionals as nurses might become irrelevant and/or automatized. It is time to refocus our attention to the core of our profession and finally offer the holistic care nurses always wanted but were just too busy with dialysis machines. It is time to change from machine experts to behavior change experts.

We believe nurses can be empowered to drive this change by choosing the right tools and investing in the knowledge needed to future professional developments.
S 04 PARALLEL SESSION
Education
Hall A2, 9:00-10:30

O 01
Post test evaluation of a patient decision aid with decision coaching for dialysis choice
J. Finderup1, K. Lomborg2, J. K. Dam Jensen1, D. Stacey3
1Renal Medicine, Aarhus University Hospital, Aarhus N, Denmark; 2Clinical Medicine, Aarhus University, Aarhus, Denmark; 3School of Nursing, University of Ottawa, Ottawa, Canada

Background
Patients with kidney failure experience a complex decision facing the choice of dialysis modality performed either at home or in hospital. A decision, which influences both their physical, psychologic and social life. The purpose of this study was to evaluate an intervention to achieve shared decision-making for dialysis choice (SDM-DC)

Objectives

1. To determine if patients experienced a shared decision-making process
2. To measure patients’ knowledge, readiness for decision-making, and decision quality

Methods

A post-test and mixed methods study design was conducted using both questionnaires and interviews. Eligible participants were patients with kidney failure facing the choice of dialysis modality. The intervention, based on the Three-Talk Model, consists of a patient decision aid and decision coaching sessions provided by the dialysis coordinator. Post-intervention, participants completed the Shared Decision Making questionnaire (SDM Q9) and the Decision Quality Measurement (DQM). Concordance between knowledge, decision and preferences was calculated to measure decision quality.

Results

A total of 349 patients participated in the intervention. The SDM Q9 mean score was 86 out of 100 (sd 12) indicating evidence of SDM. The DQM indicated a total knowledge score of 82 %, a total readiness score of 86 %, and 83% achieved a high quality decision. There was no statistic difference between participants choosing home-based treatment or hospital-based treatment for the SDM Q9 (87 versus 83; p ~ 0.627), the readiness score (87 % versus 84 %; p ~ 0.908) and the high quality decision score (83 % versus 83 %; p ~ 0.935), but a statistic difference for the knowledge score (84 % versus 75 %; p ~ 0.006).

Conclusion/Application to practice

Over 80% of participants exposed to SDM-DC experienced a SDM process and reached a high quality decision. Both participants who chose home- and hospital-based treatment experienced the intervention as SDM and made a high quality choice.

Disclosure of Interest

no
Importance of an educational program in the control of hyperphosphatemia

M. Cuba\(^1\), M. Mateus\(^1\), T. Silva\(^1\), F. Leitão\(^1\), J. Fazendeiro Matos\(^2\)

\(^1\)NephroCare Portimão, Fresenius Medical Care, Portimão, Portugal; \(^2\)NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Hyperphosphatemia is a frequently observed condition in patients with Chronic Kidney Disease. According to the literature, the treatment of hyperphosphatemia is constituted by pharmacological, nutritional and dialytic actions.

An educational program with defined strategies can contribute to improve patient adherence to treatment and prevent the numerous complications associated with hyperphosphatemia.

Objectives

• To identify patients with hyperphosphatemia;
• To reduce serum phosphorus levels in patients with hyperphosphatemia.

Methods

A quantitative, descriptive, study from September 2017 to September 2018. Patients were selected considering the following inclusion criteria:

• Serum phosphorus >5.5 mg/dL;
• phosphate binders prescription;
• Serum phosphorus value >5.5 mg/dL after 3 months from the start of phosphate binders.

After the identification of the patients, on a monthly basis a multidisciplinary intervention was carried out with the Nephrologist, the Nutritionist and the Reference Nurse (RN). The RN had an important role in providing close support and individualized educational sessions and also to serve as mediator in the multidisciplinary team. At the same time, patients started intradialytic phosphate binder.

Results

40 (23.5%) out of 173 patients with phosphorus levels over the recommended targets were enrolled.

After the implementation of the program, there was a gradual reduction of phosphorus values in the following months to 12.9% patients. We verified that when the frequency of the educational sessions was more than three months, the percentage of patients with hyperphosphatemia increased, and in June of 2018, 22.6% patients presented hyperphosphatemia, justifying, thus, a new intervention.

Conclusion/Application to practice

The results showed that the prescription of intradialytic phosphate binders in patients with hyperphosphatemia is more effective when associated with the application of a nutritional and therapeutic education program through a multidisciplinary team and with a frequency inferior than 3 months.

Disclosure of Interest

no
Investigation of factors affecting dialysis technician students' learning styles and attitudes towards technology

F. Kaban¹, E. Dane², C. Acar³, D. Yalçın³, H. Kaptanoğulları⁴

¹Training Coordinator, Vocational School of Health Services- Dialysis Department, Lecturer, Medikare Dialysis Centers, Biruni University, Istanbul, Turkey; ²Vocational School of Health Services- Dialysis Department, Lecturer, Acibadem University, Istanbul, Turkey; ³Vocational School of Health Services- Dialysis Department, Lecturer, Istanbul Bilim University, Istanbul, Turkey; ⁴Chairman-Vocational School of Health Services- Dialysis Department, Academic member, Medikare Dialysis Centers, Biruni University, Istanbul, Turkey

Background

Technology is rapidly evolving and students studying in vocational schools are from the Y and Z generation. It is important to ensure the relationship between generations and technology for a specific and effective education.

Objectives

Analysing the factors that may affect the educational processes of the group of Y and Z and according to these results to review and develop education model / materials.

Methods

Volunteer students from vocational school of dialysis technicians department participated in the research. Research is designed as descriptive. Sociodemographic characteristics, Kolb Learning Style Inventory, Rotter’s Internal-External Scale and Technology Attitude Scale were used as tools. Data were analysed via using %frequency t-test, chi square test and ANOVA test in SPSS program.

Results

Most of the students are Z generation. Learning styles have been identified as assimilator and accommodator. Most of the students have external locus of control and no significant relationship has been found in their learning styles. Attitudes towards technology; adopting technology, technology monitoring and trust in technology subheadings are significantly higher. The fear of technology was significantly higher in female students. There was no significant relationship between students’ parents’ education level, family income level and families’ attitude towards students, high school type and learning styles. Most of the students chose their department knowingly and wilfully and are satisfied. There is a significant difference in the 2nd grade in terms of satisfaction with the training models and materials. Most of them want vertical transfer to faculty.

Conclusion/Application to practice

There are studies in the literature show that the attitudes towards technology are different among generations. It is recommended that educators develop technological training models and materials that address the characteristics and learning styles of the new generation instead of traditional methods. Schools and industry leaders can collaborate on this issue and prepare projects to improve the quality of education.

Disclosure of Interest

no
O 04

An innovative pathway: community, local authority & charity partnership addresses barriers to organ donation

N. Jain¹, P. Storey¹, M. Yaqoob², B. Scotland³, H. Rainey², F. Siddiqi², S. Begum¹

¹Health Equalities, Kidney Research UK, Peterborough, United Kingdom; ²Renal, Barts Health NHS Trust, London, United Kingdom; ³Public Health, Tower Hamlets, London, United Kingdom

Background

Registration onto the UK National Health Service Organ Donation Register from the Black, Asian & Minority Ethnic communities in one deprived area is low. We know that these communities are more likely to need a transplant, wait longer for a donation and are less likely to donate. One of the major barriers to organ donation is the perceived impermissibility of donation within Islamic ruling. Anecdotal evidence suggests this will be more challenging to overcome if deemed consent of organ donation becomes law.

Objectives

We aim to demonstrate how, culturally-sensitive communication was used to address these issues and led to a further partnership approach to aid sustainability.

Methods

The local Public Health Team and a Charity delivered a peer-to-peer organ donation pilot project, a faith leaders’ seminar, focus groups, a Ramadan campaign and community outreach to address the issue of permissibility and raise awareness of risks of kidney disease and need for organ donation. Ten volunteers were recruited to deliver the project because of their passion for organ donation and natural empathy with the targeted community. Accredited training further enabled outreach awareness in their community settings.

Results

The project engaged Muslim faith leaders in conversation about the permissibility of organ donation, leading to a greater understanding and willingness to support the project. Official reporting confirms increased numbers of people registering, having engaged thousands. Following initial seed funding, encouragingly, the local authority is now funding the follow-on work.

Conclusion/Application to practice

The model has been easily adapted to other areas and/or “hard to reach” communities. The adoption of this innovative and effective pathway to education on organ donation in this community, by the local public health team, bodes well to empowering people who may be likely to “opt out” of donating.

Disclosure of Interest

no
Management of urinary tract infections in dialysis patient - A case study

D. Meshman, J. Golland
Dialysis Unit, Galilee Hospital, Naharia, Israel

Background

The absence or decrease in urinary output in dialysis patients makes using systemic antibiotic for treatment of urinary tract infections (UTI) problematic. These patients may suffer from other problems, including urinary tract disorders that require self-catheterization of the bladder. This method simulates the normal bladder emptying, and is preferable over the use of a permanent catheter that may cause infections. Self-catheterization may involve physical and mental discomfort, and may be difficult to treat UTI's in the case of antimicrobial resistance.

Objectives

to evaluate dialysis patient with recurrent UTI and to present successful nursing intervention

Methods

case study

Results

A 78-year-old dialysis patient with a neurogenic bladder, practicing clean intermittent self-catheterization several times a day for incomplete bladder emptying was followed. The patient was diagnosed with recurrent UTI's, and suffered from burning and pain in the lower urinary tract. Several courses of intravenous antibiotics were provided without improvement.

A nursing evaluation of the patient's self-catheterization process and identification of limitations was done. Nursing interventions included retraining of equipment preparation, emphasizing hands and genital area hygiene, reviewing the technique, and identifying signs of UTI. The patient was referred for consultation at a urological clinic for intravesical antibiotic instillations. After the treatment he appeared asymptomatic.

Conclusion/Application to practice

In light of the fact that these cases are not common, it is important to increase the awareness of dialysis nurses about such UTIs that can be present in dialysis patients. Intravesical antibiotic instillations may be the reasonable treatment in patients practicing self-catheterization who suffer from antibiotic-resistant infections. This treatment option and education for the appropriate hygiene should be included in the routine self-management program of patients and their family. Multi-disciplinary team that include nephrology and urology staff should be an integral part of the treatment of these patients.

Disclosure of Interest

no
SO 06

Educational and follow up program for dialysis patients' treatment outcomes

J. P. Barros¹, I. Ramos¹, R. Pinto¹, A. Pereira¹, B. Pinto², J. Fazendeiro Matos²
¹NephroCare Oliveira do Bairro, Fresenius Medical Care, Oliveira do Bairro, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Patients with end stage renal disease (ESRD) have to manage a complex therapeutic regimen, including drug intake and nutrition aspects. According to literature, providing dialysis patients with an active role in their caring process and supporting a continuous patients’ follow up and training educational process, promotes a more favourable therapeutic relation with the nursing team and improve patient outcomes.

Objectives

- Analyse the influence of a follow up and training program for dialysis patients;
- Assess adherence of patients with follow up and training interventions.

Methods

Descriptive, retrospective study.

To improve the patient’s nutrition status and medication adherence, a monthly follow-up program was implemented. Graphical schemes regarding some lab results related to dietetic aspects and the hydration status was delivered and discussed with the patients, emphasizing key related topics. When required, clarifications sessions were developed with the support of other health-care professionals. For patients living in nursing homes, close communications channels were developed with the respective nursing teams. Two distinct periods were compared: 5 months before starting the follow-up program (t-1) with 5 months after (t+1). t-Test was used to compare hydration status (p<0.05).

Results

52 patients mean age 71.45±13.55 years, and dialysis vintage 17.41±21.26 months, 34 (55.7%) were male.

When comparing t-1 with t+1:

- Serum Potassium levels: 5.00±0.06mEq/L versus 4.92±0.05mEq/L (p=0.05);
- Serum Phosphate levels: 4.30±0.08mg/dL versus 4.00±0.08mg/dL (p=0.004);

A significant decrease of the patients’ relative hydration status was also observed: 10.16±0.60% versus 9.77±0.62% (p=0.008).

Conclusion/Application to practice

A training and follow-up program, being part of the nurse’ role in therapeutic relation, seems to increase patients’ awareness and knowledge, promoting the patient’s self-care, by incrementing treatment adherence and improve their nutritional status and analytics results. Nurses were determinant for improving patients’ outcomes.

Disclosure of Interest

no
National audit of dialysis units in the Kingdom of Saudi Arabia

R. Alhameedi
Nursing Department, King abdulaziz University Hospital, Jeddah, Saudi Arabia

Objectives

The audit aimed to identify which pre-dialysis information, or if structured pre-dialysis education programmes, were available for patients and to determine the information provided at the national level.

Methods

Telephone interviews using a questionnaire was the method chosen to gather the information from the hospitals from the different regions of the KSA. The telephone interviews were conducted with the head nurses of the dialysis units. The researcher produced an audit tool. This was reviewed with an expert researcher, resulting in a simple and clear method to elicit information from across country.

Results

Twenty-four hospitals were identified as providing different options of RRT in the KSA. Twenty-one (out of 24) dialysis units were contacted, three units were not possible to contact after several attempts. All 21 responding units provided HD, CAPD and APD. Six undertook renal transplants as well. No unit gave information about conservative management or having a ‘no dialysis’ choice. Patient referral to dialysis varied.

All of the 21 dialysis units stated that they did not have a structured pre-dialysis education programme. The main barrier to an education programme was that of communication. A language barrier was identified in five units. Only four centres have Arabic speaking nurse educator, of which two called “health educator” which are a senior dialysis nurse by background and have experiences in RRT options.

Conclusion/Application to practice

The data collected provides evidence that a structured pre-dialysis education programme for patients with ESRD is not available throughout the KSA. Although it was apparent that there are efforts to provide education and information to patients in the nephrology clinics included in the audit, such efforts are neither consistent nor clear. Therefore, recommendations from this study could be applied to the different regions of the KSA, in order to improve the pre-dialysis education.

Disclosure of Interest

No
Update from the DOPPS Program: Centering care around patients

Perceptions about the dialysis modality decision process among peritoneal dialysis and in-centre haemodialysis patients - Anna Marti i Monros

Coping with kidney disease - qualitative findings from the Empowering Patients on Choices for Renal Replacement Therapy (EPOCH-RRT) study - Michel Roden

Patient perspectives on the choice of dialysis modality: Results from the Empowering Patients on Choices for Renal Replacement Therapy (EPOCH-RRT) study - Marisa Pegoraro

Associations of self-reported physical activity types and levels with quality of life, depression symptoms, and mortality in haemodialysis patients - Jennie King

Panel Discussion - All speakers and audience

All presentations will have a practical clinical focus. A brief discussion will follow each presentation and a panel discussion with all speakers and chairpersons will end the symposium.

This Symposium will focus on new findings provided by the DOPPS regarding modifiable hemodialysis practices. The program will highlight evidence-based opportunities for improving clinical management of hemodialysis patients. The international panel of speakers will present several clinically relevant practice areas, with emphasis given to the international perspectives of DOPPS. Dialogue between the panelists and audience is encouraged during the Panel Discussion in the closing minutes of the program.
Engaging the “poorly reached” in kidney research and awareness campaigns

Neerja Jain\textsuperscript{1,3}, Peter Storey\textsuperscript{2,3}

\textsuperscript{1}Health Equalities Programme Manager, UK; \textsuperscript{2}Programme Lead - Health Equalities & Rare Diseases, UK; \textsuperscript{3}Kidney Research

As a UK wide Charity, we have been involved in some exciting work which we are now further developing. This work focuses on addressing health inequalities among the “poorly reached” including people from Black, Asian & Minority Ethnic (BAME) communities. Essentially, we are reaching out to and engaging with and involving patients, carers and members of the public, directly improving kidney awareness, treatment and care for patients and involving them in kidney research.

We call these people Peer Educators – people who usually have experience of kidney disease (though not essential) but are passionate to “give back” to others and help them. We, at Kidney Research UK, recruit and train these individuals through an accredited, standardised course, leading to a qualification. They are supported and provided with resources to go and engage with and empower fellow patients or members of the public about various aspects of kidney disease to educate, support and improve their experience – everything from early detection and prevention through to managing risk factors (like diabetes) and making treatment choices through to discussing end of life management and organ donation.

Some of this work is already evidence based and has been replicated in various cities in the UK and attracted funding from the English and Scottish Governments, among others; we have piloted other projects and are developing further such as Peer Educators helping to help patients to make treatment choices & to get involved in research, working in collaboration with renal nurses.

As per the theme of the conference, we demonstrate this in our various projects - “new pathways” and ways of “caring together” - Peer Educators, in collaboration with renal nurses, each using their lived experience/knowledge, and training/education! Many of our completed projects have also won several awards.
Quality of life in haemodialysis and conservative management patients

C. McKeaveney¹, H. Noble², A. Omran M Alamrani³, G. Adamson⁴, A. Davenport³, K. Farrington⁴, D. Fouque⁵, K. Kalanter-Zadeh⁶, J. Mallett², P. Maxwell¹, ⁷, R. Mullan⁸, D. O'Donoghue⁹, S. Porter¹⁰, D. Seres¹¹, A. Slee³, J. Shields³, M. Witham¹², J. Reid¹

¹Queen’s University Belfast, Belfast, United Kingdom; ²Ulster University, Coleraine, United Kingdom; ³University College London, London, United Kingdom; ⁴University of Hertfordshire, Hertfordshire, United Kingdom; ⁵University of Lyon, Lyon, France; ⁶University of California, California, United States; ⁷Belfast Health & Social Care Trust, Belfast, United Kingdom; ⁸Northern Health & Social Care Trust, Antrim, United Kingdom; ⁹University of Manchester, Manchester, United Kingdom; ¹⁰Bournemouth University, Bournemouth, United Kingdom; ¹¹Columbia University, New York, United States; ¹²NIHR Newcastle Biomedical Research Centre, Newcastle, United Kingdom

Background

Globally, end-stage kidney disease (ESKD) patients experience significant burden associated with comorbidities and complex symptoms which impact quality of life (QoL). QoL in this population has become an important element for treatment decision making. Renal replacement therapy (RRT) significantly impacts on patients’ daily lives and can increase patients opting for conservative management. However, few studies have compared QoL in patients who chose either dialysis or conservative management.

Objectives

This study aims to report cross-sectional QoL findings from haemodialysis (HD) and conservative management (CM) ESKD populations.

Methods

This paper presents data from two patient cohorts. A cross-sectional study which compared the quality of life for 106 haemodialysis patients in two renal centres; and a multi-site study of 42 conservatively managed patients from 9 renal centres. Both studies took place in the UK. The KDQoL-36 was used to evaluate quality of life in both patient groups. Descriptive statistics and Mann Whitney-U are reported.

Results

Burden of Kidney Disease (p<.01) and Physical Composite Scale (PCS; p=.016) were significantly different between patient groups. Patients receiving HD reported greater burden but better physical functioning than CM. However, CM patients reported better QoL across symptoms/problem list, effect of kidney disease and mental components scores but this was not significantly different from HD patients. CM patients were a significantly older population compared to haemodialysis patients (p<.01).

Conclusion/Application to practice

This is first paper to compare the QoL between CM and HD patients using the KDQoL-36. HD patients experience higher burden than CM patients suggesting their kidney disease and associated treatment substantially interferes, uses more time and energy and causes greater frustration. Globally, dialysis patients are an aging population therefore more research is needed to focus patient centred outcomes to inform appropriate treatment decision making and specialist support.

Disclosure of Interest

no
SO 10

Evaluating patient and carer perspectives of a kidney supportive care program

A. Bonner1,2,3, L. Purtell1,2,3, I. Berquier2, H. Healy2,3

1School of Nursing, Queensland University of Technology, Brisbane, Australia; 2Kidney Health Service, Metro North Hospital and Health Service, Brisbane, Australia; 3Chronic Kidney Disease Centre for Research Excellence, University of Queensland, Brisbane, Australia

Background

Systematic sampling and implementing the consumer perspective is a hallmark of high quality and safety standards in the delivery of healthcare across the world. We commenced a kidney supportive care (KSC) program involving an integration of multidisciplinary renal and palliative care clinicians. The program is designed for people with advanced stages of chronic kidney disease and either high symptom burden and/or needing to make complex decisions about treatment options.

Objectives

To evaluate the patients’ and their carers’ perspectives of a recently implemented KSC program.

Methods

We used health-service evaluation research methods to recruit 10 patients and 5 carers who had attended at least two appointments at the KSC program. First participants completed a brief self-reported satisfaction questionnaire. Then they were individually interviewed using a semi-structured format to gather in-depth perceptions of the program. Quantitative data were analysed descriptively and thematic analysis was conducted on the qualitative data.

Results

Both groups were highly satisfied with the services they received in the KSC program (96% patients, 91% carers). Patients (83%) were highly satisfied that their carers participated in treatment decisions. Qualitative themes that emerged from both groups were feeling supported, alleviation of symptoms, having time for detailed discussions and receiving personalised care tailored to their circumstances.

Conclusion/Application to practice

Patients and carers identified the care they received in the KSC program differed from the other kidney treatment pathways they had experienced. The themes emphasised well-being and being active participants in clinical care. In contrast other treatment pathways tend to focus on biochemical results, fluid status or dialysis prescription. Key differences in the KSC pathway are the team-based approach to care, appointments that were either extended and/or sequential across the team members and that treatment decisions and Advance Care Plans were communicated with other clinicians involved in the patient’s care.

Disclosure of Interest

no
SO 11

Pain management using music therapy in a dialysis unit

N. Bressy¹, F. Fernandes²

¹Haut de France, Clinic Maubeuge, Maubeuge, France; ²Fresenius Medical care, NephroCare Occitanie, Muret, France

Background

Managing the pain of fistula cannulation is a constant problem faced by caregivers in dialysis units. Avoiding medication is advisable for many reasons (efficacy, cost, associated risk, etc.). In our practice we focus on relaxation methods to relieve pain, throughout the dialysis session. Our attention has been drawn by “music therapy” easily adaptable in our dialysis unit.

Objectives

The principle is to create a calm and relaxed atmosphere using background music during AVF cannulation until the end of connection in order to reduce the pain perception without drugs.

Methods

A first survey regarding pain at fistula cannulation was conducted among patients of our dialysis unit

The pain was evaluated with analogic visual scale.

A comparative survey (was performed with patients with central venous catheters and patients using analgesic patches.

Music therapy was implemented for one month in our unit (32 patients) after approval of the Unit’s Pain Management Committee

The survey was repeated after one month.

Results

75% of patients were eligible for the study.

We have reached from 64% of patients with pain scored between 1 and 10, to 84% not feeling any pain at fistula cannulation. Patients’ reactions were very positive regarding this result. Another beneficial effect was the stress reduction for patients and nurses during the waiting time before the connection.

Conclusion/Application to practice

The patient’s request is so strong that this method will be offered to everyone in the unit after validation of the method by all the management and medical staff.

Music Therapy in an effective alternative method to significantly reduce anxiety and pain perception during treatment

In our short experience, music therapy significantly improved the Quality of Care offered to our patients.

Disclosure of Interest

no
Transplant education programme - patient experience

J. S. Thomas, M. McQuaid, F. Kelly, J. Holian, A. O’ Riordan, A. Watson

Nephrology, St Vincent’s University Hospital, Dublin, Ireland

Background

Organ Donation and Transplant Ireland (ODTI) was established to provide governance, integration and leadership for organ donation and transplantation in Ireland. Beaumont Hospital Dublin, Ireland provides kidney transplantation and is the national centre for living kidney organ donation. In Ireland there are currently around 600 people waiting for life-saving transplants. In 2017, 172 kidney transplants were carried out.

Patient education is the process by which health professionals and others impart information to patients and their caregivers that support and alter their health behaviors or improve their health status. Studies have reported that the feelings of fear, anxiety, doubt and negative attitude towards transplantation can be due to a lack of information.

Objectives

The aim of this programme was to identify the educational needs for transplant patients, design a seminar to meet the needs, and deliver a quality seminar. In 2018 St Vincent’s University Hospital transplant team invited seventy patients and family members to the second annual Transplant Education Programme. A prestigious line up of speakers presented topics covering all aspects of transplantation.

Methods

A pre seminar analysis was carried out with patients and family members to ascertain the level of understanding of transplantation and identify the educational needs for the patients. Participants were aged between 25-75 years. A combination of lectures and printed material describe the transplant journey from pre to post transplant. The seminar involved all members of the multidisciplinary team who presented detailed information on transplantation.

Conclusion/Application to practice

The analysis established that the current level of patient understanding and information could be improved. The pre seminar survey also allowed us to provide appropriate information and education. Positive feedback from patients and their family members who attended the Patient Education Seminar was very encouraging and the team looks forward to providing similar seminars in the future.

Disclosure of Interest

no
Vaccination in patients with chronic kidney disease
A. Kliś

Patients with chronic kidney disease are immunocompromised and deterioration of kidney function builds up the defect of the cellular and humoral immunity. This makes the patients prone to severe life-threatening infections and results in less effective vaccination. In addition, frequent hospitalizations, immunosuppressive therapy and renal replacement therapy are important risk factors for infection.

As recommended by ACIP (Advisory Committee on Immunization Practices), vaccinations in CKD patients should be carried out in earlier stages of the disease to maximize the likelihood of an immune effect. Vaccinations recommended for dialysed are: against hepatitis B (Hepatitis B), influenza and pneumococci.

However, the basis for properly conducted prophylaxis is primarily to provide the vaccines with the appropriate conditions of transport and storage, proper preparation and administration of the preparation. Incorrect vaccination procedures performed by medical personnel may also be associated with adverse post vaccination reactions and adverse consequences for the patient.

In order to reduce the risk of mistakes when performing medical procedures, it is worth relying on developed standards of conduct that should be standardized.

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Co-morbidity in hemodialyzed patients as an important aspect of nursing care
M. Liber, E. Cepuchowicz

Introduction

Among the many factors contributing to the high mortality of hemodialyzed patients are listed comorbidities, advanced age of patients and the primary cause of kidney disease. Understanding the risk factors and recognizing the patient’s needs is one of the important professional duties of nurses, it is the basis for planning and organizing individual patient care according to his needs. Providing care to a hemodialyzed patient should take into account the problems of vascular access to dialysis, age, the type of comorbidities, intellectual and physical fitness of the patient, as well as its socio-economic situation. The material concerns 6404 hemodialysis patients in 73 FNC stations. The analysis used the FNC medical records and records in the medical documentation for the period from 2015 to 2018.

Conclusions

1. The average age of patients entering hemodialysis increases.

2. The number of patients dialyzed on the AVF fistula is reduced.

3. The percentage of inefficient patients, requiring total care or significant patient assistance increases.

4. The increase in comorbidity in the group of hemodialyzed patients concerns especially the prevalence of diabetes mellitus, hypertension and circulatory insufficiency in the described population.

Planning nursing care must take into account the individual needs of the patient resulting from both the underlying disease as well as the associated diseases, age.
Nephrological nurses and occupational exposure - how? when? why?
A. Trzcińska¹,²,³
¹Medical University of Silesia, Katowice, Poland; ²Polish Nephrology Nurses Association, Katowice, Poland; ³Polish Vascular Access Club, Katowice, Poland

Background

The problem of occupational exposure all the time is a difficult problem, not appreciated by both the medical staff and by the government. Despite the fact that in June we celebrated the ninth anniversary of the implementation of Directive 2010/32 / EU - Poland, as well as any Member States have failed to fully implement these regulations. As a result, the scale and repeatability of cases of exposure among employees indicates that the problem is not decreasing but rather increasing.

Every year in the European Union recorded 1.2 million injuries caused by a sharp instrument. In Poland such cases within a year is 37 000. Occupational exposure mostly affects nephrological nurses. If employers will not invest in increasing the safety of nurses is a problem will grow.

Objectives

The study was conducted on 500 nephrological nurses. We asked the nurse to have exchanged the circumstances of occupational exposure, we asked whether they have safe equipment, whether the employer provides them with training in this field.

Methods

Author's survey containing 35 questions.

Results

Unfortunately, nurses make a lot of mistakes in that lead to occupational exposure. Not all employers care about the safety of nurses. There is a lack of safety training for nurses.

Nephrology nurses most often undergo occupational exposure when they put on the needle cap: 94% pen with insulin, 71% pre – filled syringe, 41% standard needle after injection or after taking blood.

Conclusion

In Poland, an additional problem is extremely low wages of nurses. Nurse in Poland receives for her work on average 400 euros per month. Therefore, nurses in Poland have not one but two or three jobs. This means that nurses are very tired. Occupational exposure among nurses dialysis is a very big problem, often overlooked. Occupational exposure threatens the health and lives of nurses.
Empower PD Patients to Shared Care
T. Lobbedez, G. McMullan

Background

Peritoneal Dialysis is a renal replacement therapy that involves shared decision making among patients, family and health professionals. Patients and/or caregivers are educated by nephrology nurses to self-management their home therapy and achieve their maximum self-care. There is no consensus among nephrology nurses about how much time and what kind of information is needed to educate a patient to perform peritoneal dialysis autonomously. PD patient education programs vary from country to country and in each country varies from unit to unit. It is important to reduce variability among PD education programs, focus on what is important to empower the PD patient to Self-Care. It is important that patients acquire during education programs the skills and the knowledge to perform their treatment safely, recognise potential complications and manage risks. Nursing theories and qualitative research methodologies are advantageous to build knowledge in nephrology nursing discipline.

Objectives

- To share experience and knowledge among the Multidisciplinary Team
- To promote a greater understanding of Peritoneal Dialysis and Shared Care amongst Healthcare Professionals
- To promote actively Peritoneal Dialysis and Shared Care by Healthcare Professionals after the Session & Workshop

Learning Outcomes

- Promote peritoneal dialysis among nephrology nurses
- Share experiences and information about PD education programs among participants
- Describe a PD education program focused on patient Self-Care and validation through nephrology nurses focus group
- Update knowledge about nursing theories and qualitative research methodologies
**O 13**  
**Quality of life, emotional states and pain in patients with chronic haemodialysis treatment**  
A. Masià-Plana  
*Faculty of nursing, University of Girona, Girona, Spain*

**Background**

Patients who are diagnosed with chronic kidney disease (CKD) and need chronic haemodialysis treatment, commonly suffer from stressful and threatening situations throughout their lives. Although haemodialysis can prolong life expectancy, the long-term illness and related treatments have a strong negative impact on the physical, psychological and social well-being of patients. Also, deterioration in physical and mental conditions of CKD patients in the course of disease leads to a worse prognosis.

**Objectives**

The main objectives of this study are: 1) To study the emotional factors that are associated with the quality of life; 2) To analyse the relationship between quality of life and emotional state (anxiety and depression); 3) To acknowledge the relationship between pain, anxiety and depression in patients who are on chronic haemodialysis treatment.

**Methods**

The final sample of this study was comprised of 138 haemodialysis patients from the Girona (Spain) healthcare region who met the inclusion criteria and voluntarily agreed to participate.

A cross-sectional, observational and multicentre design was used to develop this research. The instruments used were: The Hospital Anxiety and Depression Scale (HADS), the Kidney Disease Quality-Life-Short Form (KDQOL-SF) questionnaire, the Trait Meta-Mood Scale-24 (TMMS-24), the Analog Visual Scale (AVS).

**Results**

Results show that anxiety and depression are associated negatively with quality of life. When the variables are jointly analysed, the most associated once with anxiety and depression are age, pain level, deterioration of cognitive function and physical effects of renal disease. In parallel, younger patients tend to score higher on the anxiety scale and the older patients on the depression scale. Finally, correlations between anxiety, depression and pain are positive and significative.

**Conclusion/Application to practice**

These results show the need to expand the focus of healthcare, adding the systematic evaluation of the emotional state of these patients to be able to approach them holistically.

**Disclosure of Interest**

no
Cachexia and end-stage renal disease: results from a cross-sectional analysis


¹Queen’s University Belfast, Belfast, United Kingdom; ²University College London, London, United Kingdom; ³Ulster University, Coleraine, United Kingdom; ⁴University of Hertfordshire, Hertfordshire, United Kingdom; ⁵University of Lyon, Lyon, France; ⁶University of California, California, United States; ⁷Belfast Health and Social Care Trust, Belfast, United Kingdom; ⁸Northern Health and Social Care Trust, Antrim, United Kingdom; ⁹University of Manchester, Manchester, United Kingdom; ¹⁰Bournemouth University, Bournemouth, United Kingdom; ¹¹Columbia University, New York, United Kingdom; ¹²NIHR Newcastle Biomedical Research Centre, Newcastle, United Kingdom

Background

Research indicates that wasting is common among persons with end-stage renal disease (ESRD) However, the absence of a standardised definition for cachexia in an ESRD population makes it difficult to study the incidence and prevalence of cachexia or evaluate the potential interventions. The aim of this study was to determine the known characteristics associated of cachexia in ESRD.

Methods

106 adult chronic haemodialysis patients attending two hospital haemodialysis units in the U.K. Clinical characteristics were recorded as well as dialysis vintage, comorbidities, and primary renal disease (PRD). Patients had cachectic measures of: post dialysis weight, lean tissue depletion (Fat Free Mass Index; FFMI) measured by bioelectrical impedance (BIA), handgrip strength (HGS), fatigue (Functional Assessment of Chronic Illness Therapy; FACIT), anorexia (Functional Assessment of Anorexia/Cachexia Therapy; FAACT) and bio-chemistry (C Reactive protein, CRP; Albumin, ALB; Haemoglobin, Hb).

Results

Majority of patients were male (72%; n=76) and the most common PRD was diabetes related (30%). Retrospective weight assessment assigned patients into two groups; cachectic weight loss (CWL; n=14) and no cachectic weight loss (NCWL; n=92). Mann-Whitney U tests reported CWL tended to older (p=.024), weighed less (p<.01), had lower BMI (p<.01), higher URR (p=.005) and had spent less time on dialysis (p=.006). CWL also had poorer measures for HGS (p=.018), lean tissue (FFMI; p=.003), FAACT (p=.018) and CRP (p=.024) compared to NCWL. Logistic regression found a significant model however only FFMI (OR=.324), CRP (OR=1.09) and age (OR=1.14) were significant predictors.

Conclusion/Application to practice

This is the first study to apply previously accepted characteristics of cachexia to a representative sample of ESRD patients. Physical measures (e.g. HGS) were more useful than biochemistry however further evaluation of recommended target cut-offs for cachexia is needed.

Disclosure of Interest

no
Quality of life in the aspect of dental problems in haemodialysis patients

A. Kliś¹, T. Irzyńiec², B. Jarczewska-Głośnicka³

¹Haemodialysis Unit, Szpital Wojewódzki, Bielsko-Biała, Poland; ²Silesian Medical University, Katowice, Poland; ³STOMA-DENT, Bielsko-Biała, Poland

Background

Diseases in the mouth are a common problem in patients with chronic kidney disease (CKD). Dry mouth, inflammation and insufficient hygiene lead to dysfunction of the chewing apparatus and improper nutrition, which contributes to the occurrence of malnutrition in haemodialysis patients and affects their quality of life.

Objectives

Assessment of oral hygiene and health and their impact on the quality of life of haemodialysis patients.

Methods

A standard dental examination was conducted in 49 haemodialysis patients aged 59.76 ± 14.37 years, dialysed on average 51 ± 59 months. The research material was collected using the Polish version of the Kidney Disease Quality of Life™ Short Form questionnaire (KDQOL-SF™) - Version 1.2 and the author’s questionnaire.

Results

More than 75% of patients reported oral health problems, which in most cases occurred after dialysis began. In the majority of patients, the hygiene interdental space (Approximal Plaque Index - API) was found to be corrected, while the Oral Hygiene Index (OHI) was insufficient in 24.49% of patients. In contrast to the assumptions, only 18.37% of dialysis patients reported bleeding from the gums during brushing. Only 36.73% of respondents rated their health as good and 40.82% of respondents thought that their health deteriorated during the year. The restrictions on fluid intake and the stress caused by CKD was considered to be burdensome by almost all patients. Worse oral hygiene was found in patients with short period of haemodialysis. The quality of life deteriorated with the extension of the dialysis period.

Conclusion/Application to practice

Both oral health and quality of life of patients with CKD worsens with the start of renal replacement therapy. Oral health problems and lack of proper hygiene of dialysis patients indicate the need to conduct education in this area. Ensuring regular contact with a psychologist and support groups should improve the quality of life of dialysis patients.

Disclosure of Interest

no
Intradialytic exercise and physical activity levels: effects beyond the dialysis period!

R. Sousa¹, P. Martins², P. Gonçalves¹, R. Peralta³, J. Fazendeiro Matos³
¹NephroCare Viseu, Fresenius Medical Care, Viseu, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Lisboa, Portugal; ³NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Sedentary behaviour (SB) and physical activity (PA) levels are independent risk factors for cardiovascular risk in chronic kidney disease. Haemodialysis (HD) treatment itself increases SB since patients must be inactive over 4 hours. They also face challenges to improve PA level: time constraints caused by the 4-hour HD treatment, fatigue and lack of motivation.

Objectives

Analyse the influence of an intradialytic exercise program on SB and PA levels in HD patients.

Methods

A cross-sectional study was developed: patients participated in either an intradialytic exercise programme (IEP) - exercise group (EG) and patients refusing or voluntarily withdrawing from the programme – no exercise group (NEG) during 2018. The International Physical Activity Questionnaire – Short Form was used to measure SB and PA levels. Independent sample t-test was used to compare both groups.

Results

61 patients (30 EG and 31 NEG): male 50 (82%), diabetics 31 (50.8%), mean age 64.6±13.36 years and dialysis vintage 61.9±49.55 months. took part in the study. Both groups were similar for age; age adjusted Charlson comorbidity index, lean tissue and fat tissue indexes, pre-dialysis phosphorus and haemoglobin level. SB is higher in the NEG than in the EG (1856 min/week versus 1456 min/week, p=0.020). Low PA levels were present in 43.2% of patients in EG and in 56.8% in NEG. Moderate PA levels were present in 58.3% of patients in EG and 56.8% in NEG. Moderate PA levels in both groups were similar (p=0.785). However, considering the IEP we found out that the program made a difference mainly in moderate physical activity (p=0.026).

Conclusion/Application to practice

HD patients have low PA levels. EG have a lower SB. Surprisingly, the EG prefers to spend more time walking. The intradialytic exercise program was determinant to increase moderate PA level.

Disclosure of Interest

no
Does intravascular volume status measured by inferior vena cava ultrasound correlate with bioimpedance spectroscopy?

U. Steinwandel¹,², N. Gibson¹, A. Towell-Barnard¹, J. Rippey³, J. Rosman⁴
¹School of Nursing and Midwifery, Edith Cowan University, Joondalup, Australia; ²Renal Department, Fiona Stanley Hospital, Murdoch, Australia; ³Emergency Department, Sir Charles Gairdner Hospital, Perth, Australia; ⁴School of Medicine, Curtin University, Bentley, Australia

Background

Predialytic fluid assessment remains a daily challenge for renal nurses, when aiming for adverse-event free haemodialysis treatments. Adding further objective parameters obtained through non-invasive methods into pre- and intradialytic fluid assessment could potentially improve health outcomes for haemodialysis patients.

Objectives

This project aimed to evaluate the accuracy of traditional clinical predialytic fluid assessment by renal nurses and the efficacy of 2 additional fluid assessment methods focussing on the potential preventative effect for intradialytic hypotension (IDH).

Methods

Clinical predialytic nursing fluid assessments in 30 haemodialysis patients were compared with additional initial bioimpedance spectroscopy (BIS) measurements and 3 serial intradialytic ultrasound scans of the inferior vena cava (IVC-US) performed by a second renal nurse concurrently during the same session. A retrospective data analysis compared all measurements in each individual for the predictive value for IDH. A STROBE checklist for observational cohort studies was used for the reporting of results.

Results

Seven subjects experienced episodes of symptomatic intradialytic hypotension (S-IDH), which would have been anticipated by IVC-US or by BIS in 5 patients (71%). Using an algorithm to predict IDH would have provided a sensitivity of 100% and specificity of 95%.

Conclusion/Application to practice

Both additional fluid assessment methods would have provided critical information before and during each haemodialysis session. Therefore, we consider them as being potentially effective for the prevention of intradialytic hypotension, with IVC-US being similar to BIS.

Disclosure of Interest

no
SO 18

Measurement of vascular access flow and recirculation in chronic hemodialysis patients

E. Petrovič, Z. Kupnik, K. Leskovar, A. Koroša, R. Ekart

UMC Maribor, Clinic for Internal Medicine, Department of Dialysis, UMC Maribor, Clinic for Internal Medicine, Department of Dialysis, Maribor, Slovenia

Background

Maintaining a good, well-functioning vascular access is very important in patients undergoing chronic hemodialysis. Vascular access problems lead to complications such as access recirculation causing decreased adequacy of hemodialysis.

Objectives

The aim of this study is to evaluate blood flow characteristics and recirculation of blood flow in our patients treated with hemodialysis through an arteriovenous fistula.

Methods

We performed a cross-sectional study in a cohort of ninety-eight chronic hemodialysis patients with a functioning arteriovenous fistula. The measurements of blood flow and recirculation were made by D.med NephroFlow (Düsseldorf, Germany) which uses ultrasound dilution technology and enables non-invasive access flow monitoring. The analysis is based on two ultrasonic sensor heads, which are clipped on the bloodlines of the dialysis machine. The device measures the amount of sodium in both bloodlines by ultrasonic sensors. The patients were divided into two groups according to the presence of recirculation (≥ or < 5%).

Results

Mean age of patients was 63.5 ± 13.4 years, 53 (54.1%) were men, 37 (37.5%) were smokers, 18 (18.4%) patients had recirculation ≥ 5%. Other descriptive data for all patients and both groups are presented in Table 1. Arteriovenous fistula blood flow was associated with age (r=-0.233; P=0.021), Kt/V (r=0.232; P=0.021), and arterial line blood flow rate (r=-0.21; P=0.038). Recirculation was not statistically associated with blood pump flow rate during hemodialysis (r=-0.192; P=0.058). Using t-test we found a significant difference between both groups in blood pump flow rate during hemodialysis (P=0.031), but not in other parameters.

Conclusion/Application to practice

Recirculation in hemodialysis patients with an arteriovenous fistula is detected by Nephroflow but not with routinely measured parameters of blood flow in the arteriovenous fistula or pressures in the hemodialysis line system.

Disclosure of Interest

no
O 20

Buttonhole in Daily Home Hemodialysis (DHHD): A rigorous practice for an optimal long-term result

F. Delestre

Nephrologie et Dialyses, Hôpital Tenon, Paris, France

Background

The buttonhole technique (BH) is used for our DHHD patients for 5 years. Tunnel creation follows a precise protocol.

Objectives

Our objective is to precise the indications, contraindications and complications to optimize practice.

Methods

The retrospective observational study over 5 years, includes 36 DHHD patients using self-cannulation of the arteriovenous fistula with BH. Clinical assessment was conducted monthly, transonic examination 3 monthly, also doppler and fistulography were performed. A patient reporting survey about cannulation gesture and pain was completed.

Results

39% of patients were incident in dialysis, 24 were men and 12 were women. Average age was 47.3 years (range 22-72). Average BH duration was 17.4 months (range 3-49), which equal to 6890 hemodialysis sessions.

Only 1 infection, 1 fistula thrombosis, and 9 stenoses that required dilatation by angioplasty were reported. 14 patients had no complications at all and did not require further examination. 67% of patients replied to the survey, more than half self-reported no pain during cannulation.

We established a protocol after the first infection, using Mupirocin at cannulation points after each needle removal. No infection was reported since then.

Our observation shows that blood flow in the fistula must be monitored regularly with BH, to ensure patients can maintain their independence in the long term.

Altered cannulation gesture or appearance of pain are typical indicators of a change in fistula flow.

Conclusion/Application to practice

BH is a controversial method in publications. It is used by 90% of DHHD patients in our renal unit and is enjoyed by the majority of our patients for the safety of the gesture and the non-appearance of aneurysms. BH reduces the fear of self-cannulation. Fistula flow monitoring limits the risk of tight stenosis that may prevent cannulation and so interrupt dialysis treatment. Our observation of daily cannulation of fistulas with BH demonstrates that the infectious risk is under control.

Disclosure of Interest

no
O 21

Nursing perception of the selection of existing hemodialysis patients for home therapies
J. Cainglet¹, M. Richards¹, N. Goodrich², J. Stribling², N. Richards¹
¹Nursing, SEHA Dialysis Services, Abu Dhabi, United Arab Emirates; ²Faculty of Health Science, De Montfort University, Leicester, United Kingdom

Background

Advances in the treatment for late stage of kidney disease have been hailed a major success through the life-saving health care technological innovation of dialysis for the past four decades (Mitra, 2011). Although, kidney transplantation is considered the gold standard (Agar, 2010) and the most cost effective modality in the treatment of CKD (Cang, 2016), not everyone in the dialysis population are medically suitable to undergo surgery (Agar, 2010). The growing dialysis population significantly contributes to the health care sector burden worldwide because it is the major cost driver for health care system (Couser, 2011). The rising cost of treatment is mainly driven by the dialysis modality itself (Chang, 2016).

Objectives

There is a growing interest on how to improve the service among the dialysis population using home therapy options. The study will help better understand the relationship of the nurses’ perceptions on the selection of existing hemodialysis (HD) patients on the promulgation of home therapies.

Methods

The study used a single-center quantitative survey design using an electronic survey tool to collect data from nurses. The survey questions included nurse’ renal experience, patient and family awareness, advantages and disadvantages of home therapies, essential and excluding factors to consider for home therapies and the prevailing view of nurses on home therapies.

Results

Although 90.91% of the nurses would strongly recommend home therapies in the future and 72.73% would confidently offer it as an option if the service was available among in-center HD patients. Only 14.29% among the nurses perceived that home dialysis therapy modality would be most beneficial to the patient.

Conclusion/Application to practice

The prevailing perceptions of renal nurses on modality selection is strongly determined by the current area of nursing practice.

Disclosure of Interest

no
No site infection with buttohhole needling technique when implementing double anti-sepsia two years experience
A. Marti, J. Gonzalez, C. A. Olcina, R. D. Ferreira, L. Seco
Nephrology, Consorcio Hospital General Univesitario Valencia, Valencia, Spain

Background

From the three Hemodialysis Arteriovenous Fistula (AVF) needling technique: rope ladder, area and buttonhole, during the 1990's and first decade of 2000 different authors and papers advised not to use the buttonhole (BH) due to site infection problems.

In our Hospital based Hemodialysis Unit, Home Hemodialysis (HHD) programme and stimulated by European colleagues experiences and recent publications, decided to use buttonhole as needling technique but with strict adherence to the double antisepsia.

Objectives

We present our experience and results after two years: January 2017/December 2018, of HHD, in relation to needle site infection with the implementation of double antisepsia.

Methods

During the training the patient is instructed on the importance of strict asepsia.

Double anti-septia has been described as the use of antiseptic solution before and after scab removal previous to canulation. Also its to be mentioned that our standard antisepsia protocol includes needling area soap wash previous to the canulation.

Results

Over the two years we’ve trained 18 patients for HHD, with the following Vascular Access: One Tunelled Catheter and 17 with AVF, all of them were able to self needling with BH technique.

Including the HHD training a total of 9000 sessiones have been performed. The patients were instructed to report if the presence of site redness of any other sign that there might be a Vascular Access infection.

Only one patient reported two episodes of redness in one of the puncturing sites, the Nephrologist decided to prescribe oral antibiotic, the Nurse re-trainid the patient on both the importance of strict asepsia and on the double anti-septic technique, with no need to change site.

Conclusion/Application to practice

From our experience and from other publications we conclude that when implementing proper asepsia and more precisely double anti-septic technic, BH is a safe needling technique from the infection point of view.

Disclosure of Interest

no
Improving care and overcoming barriers through learnings from our patients/families

E. Macatangay
Nephrology, Scarborough Health Network, Scarborough, Canada

Background

SIGNhd is a vendor sponsored Nursing Interest Group specializing in Home Dialysis. This forum allows for shared practices and approaches to care within Dialysis Programs throughout Canada. In sharing inspiring patient and family stories about overcoming difficult barriers to home hemodialysis (HHD) and demonstrating success in carrying out HHD independently, HHD nurse leaders learned some valuable lessons in hearing each respective patients’ stories.

Patients know themselves best, especially when it comes to their capabilities and limitations. As care providers, we are often quick to make assumptions about our patients’/families’ abilities to do HHD successfully as the “lens” we use often reflects our own biases and perceptions on what would constitute a “successful start” onto home hemodialysis.

Objectives

To share patient and family stories from four home hemodialysis programs across Canada (Newfoundland, Manitoba, British Columbia and Ontario) and the innovative solutions developed in helping to support patients/families complete their hemodialysis successfully at home.

Methods

Through sharing of patient/family stories at SIGHhd educational and sharing forums, nurse leaders were able to identify innovative practices and solutions implemented within various programs that could also be implemented as approaches to care in other programs throughout Canada.

Results

Through collaborative approaches to care between clinical staff and patients/families, patients who would have otherwise not have been able to dialyze at home through conventional approaches to home dialysis care, were able to successfully perform home dialysis independently at home.

Conclusion/Application to practice

Teaching patients/families the clinical aspects of HHD and enabling them to apply their own strategies as part of the care plan is what leads to success. Care providers having the patience and willingness to work with their patients/families to create integrated and individualized strategies that dealt with, what would otherwise have been barriers to HHD, lead to ideal patient/family outcomes.

Disclosure of Interest

no
Sharing practices and standards to improve sustainability of home haemodialysis globally. SIGNhd Global.

L. Thompson¹, E. Macatangay², A. Robinson³

¹Renal Medicine, City Hospitals Sunderland, Tyne and Wear, United Kingdom; ²Nephrology, Scarborough Health Network, Scarborough, Canada; ³Home Hemodialysis, Northern Independent Hemodialysis Unit, Prince George, Canada

Background

SIGNhd Global (special interest group of nurses for home dialysis) formed in November 2018. As a group of specialist home therapy nurses we aim to improve service delivery and treatment options for patients and their dialysis partners globally and stimulate home dialysis growth.

Objectives

SIGNhd global is a nursing collaborative that intends to work with industry, compare and contrast practice for the benefit of home dialysis patients and their dialysis partners across the globe.

Methods

Renal nursing professionals from UK, Canada, Finland, France and USA attended a global meeting to discuss their home dialysis services, and financial modelling, to select relevant common challenges.

Home Dialysis Growth formula = (New Patients + Maintenance) - Loss

Train New

Care for existing

Avoid drops

Results

Common themes

Through discussion and sharing experience the group concurred that globally there were similar issues with service delivery and cohort increase in the following areas of home therapies:

1. Sustainability of services.
2. Expanding and maintaining the home haemodialysis cohort.
3. Producing robust systems to support its availability to a wider population

Conclusion/Application to practice

Varying financial models and aspects within healthcare systems influence service delivery and available resources however, the nursing infrastructure within each organisation can adopt methods of good practice and co-production to positively impact home haemodialysis growth as an accessible safe option, thus improving quality of life for those in end stage renal failure.

Disclosure of Interest

no
To overcome barriers for self needling
A. Martí, J. Gonzalez, C. A. Olcina, A. Madrid, D. Gacho
Nephrology, Consorcio Hospital General Universitario Valencia, Valencia, Spain

Background

Home Hemodialysis (HHD) is generally a self care technique. Buttonhole (BH) has been described as the best option for self needling and consequently indicated in HHD. Nurses training patients for HHD often face difficult situations that could lead to discontinuation of training. We present three Vascular Access related situations where nurses had to optimise their training skills in order to continue HHD training.

Methods

First situation: When a patient is a candidate for HHD and self needling, the non dominant arm is the first option to place the AVF, but due to vessel problems, such as poor arterial diameter the AVF may have to be placed in the dominant arm. This reduces the ability to self needle. In our experience, tooth brushing with the arm used for needling is an excellent exercise and after one week, the ability to self needle increases dramatically.

Second situation: Patients with mobility problems in the needling arm, will need specific training programmes such as tooth brushing, immobilising the AVF arm to avoid involuntary movements, isotonic exercises to strengthen the arm. These actions usually lead to patients being able to self needle.

Third situation: Some patients have been diagnosed with a needling phobia which is very difficult for patients. In this situation HHD training nurses will need to implement a personalised programme, with longer training sessions. Our advice is not to give up, as with professionalism and patience patients are able to self needle.

Results

All the patients were able to self needle and all of them, except two have been transplanted.

Disclosure of Interest

no
The Journey Home: Growing a home hemodialysis program while fostering professional relationships

K. Brown, K. Clarke
Home Hemodialysis, Peterborough Regional Health Centre, Peterborough, Ontario, Canada

Background

Home hemodialysis (HHD) launched almost 10 years ago, and for many years, our volume of patients remained relatively static with an average of 12 patients at any given time. As part of our program review, we identified that staff working within different disciplines had become narrowly focused and were having difficulty working as a cohesive unit. Thus, the concept of the impact of positive, collegial relationships on program growth was born.

Understanding that HHD leads to optimal patient outcomes, we saw an opportunity to make a difference and positively impact our patients and our colleagues. By focusing on re-establishing positive relationships between all members of our team, we now had a renewed vision of excellence to strive for. One that would serve to enhance patient outcomes and promote healthy, workplace relationships.

Objectives

- Grow the Program
- Renew & nurture interprofessional communication between team members
- Break down barriers that had been formed over time between disciplines

Methods

- Put out the call to all staff via email and personal invitation for HHD "champions"
- 1:1 education
- Created HHD fast fact badge
- Updated and re-introduced HHD brochure
- Implemented HHD t-shirts and uniforms
- Implemented survey to staff and patients to glean their understanding of HHD
- Leveraged geographic location of transition unit, which allowed prospective patients to received real-time mentorship
- Invited prospective patients to visit us at "camp" as a trial for training
- Encouraged visits from established home patients which serves as a testimony to their success and well-being

Results

- Our program has grown by 50% and ongoing growth is projected
- Relationships and communication between disciplines continue to develop and improve

Conclusion/Application to practice

By focusing on healthy interprofessional relationships, empowering our multidisciplinary colleagues and embracing change through respectful communication, we have been successful in creating a unified team. Our ultimate growth has greatly enhanced positive patient outcomes.

Disclosure of Interest

no
Renal nurses' perceptions regarding cadaveric kidney transplantation in Abu Dhabi

M. E. Ralyona\textsuperscript{1}, M. Richards\textsuperscript{1}, E. Cullimore\textsuperscript{1}, N. Goodrich\textsuperscript{2}, J. Stribling\textsuperscript{2}, N. Richards\textsuperscript{1}

\textsuperscript{1}Nursing, SEHA Dialysis Services, Abu Dhabi, United Arab Emirate; \textsuperscript{2}Faculty of Health Science, De Montfort University, Leicester, United Kingdom

Background

The number of patients living with End-stage renal disease (ESRD) is increasing worldwide. However, organ donation is a major public health challenge for transplant programs (Joob and Wiwanitkit, 2014).

Objectives

To explore the perceptions of renal nurses regarding cadaveric kidney transplantation and to render the required health services according to the survey outcome.

Methods

The study was a descriptive exploratory survey and was conducted among purposefully selected renal staff nurses at Mafraq Dialysis Centre (MDC) in Abu Dhabi. Data were obtained from reliable documents and expertise of the survey respondents. Quantitative research design was applied utilizing the Survey Monkey. The Likert scale questionnaire tool contained 18 items which were intended to explore and collect pertinent information about renal nurse’s views regarding cadaveric kidney transplantation. The target population include 30 renal nurses from different ethnic groups.

Results

Respondents to the survey include 66.6 percent females, 33.33 percent males and the mean age is 36.5. The study denotes that renal nurses and the majority being Asian and Christians (n=33, mean score of 4.54) support that donating organs after death is an act of great kindness. Although more than 80 percent of the respondents preferred their organs to be used for donation at the time of death, only 36.36 percent of the participants spoke to their families expressing their wishes regarding organ donation in the event of death. Religious affiliation did not influence nurses’ attitudes towards organ donation. However, 27 percent demonstrated concern that their kidneys may be removed when critically ill. On a positive note, renal nurses exhibit a better understanding and attitude towards cadaveric organ donation.

Conclusion/Application to practice

Education and awareness programs regarding cadaveric organ donation should be incorporated to improve nurse’s knowledge about the legal and ethical implications related to organ retrieval and presumed consent proceedings.

Disclosure of Interest

no
SO 29

The phenomenon of urinary tract infection experienced by women with a kidney transplant

L. L. Mathiesen, J. Finderup
Renal Medicine, Aarhus University Hospital, Aarhus N, Denmark

Background

Urinary tract infection is the most common infection following a kidney transplant and the most common cause of hospitalisation within the first year of transplantation. A urinary tract infection may increase the risk of rejection and loss of graft function. Women have the highest risk for urinary tract infection caused by their anatomy. A systematic literature search did not provide a description of the phenomenon of urinary tract infection perceived by women with a kidney transplant.

Objectives

To examine how women with a kidney transplant perceived the phenomenon of a urinary tract infection.

Methods

Semi-structured interviews in accordance with Kvale and Brinkmann were conducted with five women admitted to the hospital with urinary tract infection. Using systematic text condensation, data was analysed to generate a description of the phenomenon.

Results

A urinary tract infection was a feeling of both typical and atypical symptoms and the experience made sense. The experience gave an attention to the body, but hospitalization gave an experience of being kicked back in the joy of life.

Conclusion/Application to practice

The typical symptoms were fever, pain and pollakiuria. The more atypical symptoms were a burning sensation during urination and changed urine odor. Information about pollakiuria has to be added to the patient information leaflet. Fever is a landmark symptom as it leads to hospitalisation, and hospitalisation leads to loss of control. Experiencing the symptoms of urinary tract infection focuses attention to the body.

Disclosure of Interest

no
Evaluation of barriers to kidney transplantation in a dialysis unit

R. Badran
Hemodialysis Unit, Galilee Medical Center, Nahariya, Israel

Background

Kidney transplantation is the best treatment option for end stage renal disease, allowing improved quality of life and increased survival. The rate of transplantation in Israel is low compared to Western countries.

Objectives

To evaluate barriers to kidney transplantation in a haemodialysis unit, including difficulties of registration on the waiting list and assessment of knowledge of live donor transplantation.

Methods

Questionnaires were distributed to patients and nursing staff, with both open and closed questions. The aim was to evaluate knowledge about kidney transplantation, the process of enrolment and how transplantation would influence quality of life. Patients were asked about their willingness to perform the tests required, if they received instruction from nursing staff about the process, and about difficulties involved. Staff questionnaires related to level of knowledge and involvement in the process, and assessed understanding of the significance of transplant to patients.

Results

Ten patients and nurses were evaluated.

Among patients, only 20% were aware of the option of transplantation from living donors, and 100% expressed the need for more assistance in the process involved in enrolment in the national transplant registry.

Among nurses, 100% felt the need for further education about transplantation, including the process and significance. 80% of nurses had low awareness of the option, and were not sufficiently involved in the process. Nurses were not aware of the difficulties in enrolment, and were not aware of the process involved in donations from live donors.

Conclusion/Application to practice

The importance of continuous education of both staff and patients regarding registration for kidney transplantation was highlighted. Educational programs about the process necessary for enrolment on the transplant list and the process involved in transplantation from live donors should be provided for nursing staff in dialysis units. Numbers of patients receiving kidney transplants may be increased by establishing a structured and ordered system within dialysis units.

Disclosure of Interest

no
Nursing role in identification of patients at risk of Acute Kidney Injury in AbuDhabi

M. Manuel¹, M. Richards¹, N. Goodrich², J. Stribling², N. Richards¹
¹Nursing, SEHA Dialysis Services, Abu Dhabi, United Arab Emirates; ²Faculty of Health Science, De Montfort University, Leicester, United Kingdom

Background

Acute kidney injury (AKI) is a sudden decline in renal function accompanied by an abrupt increase in serum creatinine (Scr) requiring renal replacement therapy (RRT) (NKF-KDIGO, 2012). AKI has become an expensive clinical problem due to its increasing incidence worldwide and contribution to poor health outcomes. National Confidential Enquiry into Patient Outcomes and Death (NCEPOD, 2009) reported that only 50% of the patients diagnosed with AKI received optimal care, 30% of AKI cases or 12,000 deaths could have been prevented. Nurses play a pivotal role in the prevention, early detection and management of AKI.

Methods

The pilot service development project will explore the knowledge of non-Renal nurses in identifying patients with or at risk of AKI in Abu Dhabi. A single centre quantitative survey design using Survey Monkey™, was conducted in 50 non-renal nurses in the medical acute units, with a 20-item questionnaire.

Results

The findings revealed that only 26% identified the incidence rate of AKI in general wards, 20% have the knowledge on mortality rate of AKI in hospitalized patients. Majority of the respondents distinguished that diabetes is a risk factor for AKI; however, only 52% recognized that liver disease is also a predisposing factor for AKI. Only 52% identified that NSAIDS are nephrotoxic but 85% were not aware of the new biomarkers: NGAL and Cystatin-C. Majority did know the essentials vital signs to monitor but only 14% know that even with adequate urine output, AKI can occur. Among the respondents, 58% have no idea of the assessment tool used in their wards. The benefits for additional education in AKI were perceived by 100% of the respondents.

Conclusion/Application to practice

Non-renal nurses do not have adequate knowledge in identifying patient with or at risk of AKI, this signals for intervention to increase the nurses’ knowledge in prevention, identification and management of AKI.

Disclosure of Interest

no
Illness experience in nephrotic syndrome

A. Jönsson\textsuperscript{1}, A. Forsberg\textsuperscript{2}, T. Hellmark\textsuperscript{1}

\textsuperscript{1}Institution of Clinical Sciences, Lund, Lund University, Lund, Sweden; \textsuperscript{2}Institution of Health Sciences, Lund University, Lund, Sweden

Background

Most patients with kidney disease have different degrees of proteinuria. Heavy proteinuria causes nephrotic syndrome. The incidences of nephrotic syndrome in adults are approximately three per 100 000 persons. Although nephrotic syndrome is rare, it is a serious clinical condition. Little is known about health and wellbeing among patients with nephrotic syndrome. It is important for both healthcare professionals and the individual to be able to pay attention to signs and symptoms of illness and disease.

Objectives

To explore patients experience of suffering from nephrotic syndrome.

Methods

Eight adult patients (4 men and 4 female) age 30-90 years who became ill with nephrotic syndrome between 2016 and 2018 at Skane University Hospital, Lund Sweden were included in the study. Data was collected using open-ended interviews and analyzed by the use of the phenomenological hermeneutical method of Lindseth and Norberg

Results

Three main themes reflected experience of illness in nephrotic syndrome: It doesn’t make sense; they have a kidney disease but the symptoms are elsewhere. Knowledge deficit; not knowing, not interested, not concerned. Uncertainty; patients do not know if they will become healthy or end up in dialysis or kidney transplantation in the future.

Conclusion/Application to practice

The result provides an in-depth understanding of signs and symptoms among patients with nephrotic syndrome and can constitute a foundation for clinical guidelines regarding treatment, follow-up and health promotion.

Disclosure of Interest

no
What do patients know and remember about their lives in haemodialysis? A multicentric study

Background

It has been noted that patients who followed a pre-dialysis care path are more informed than those who did not. Educational interventions have shown greater compliance when implemented in the pre-dialysis phase. Education prior to starting substitution treatments has contributed to a higher rate of survival in patients with Chronic Kidney Disease. Another study shows that compliance to multidisciplinary education, in pre-dialysis, has been independently associated with the reduction of hospital medical expenses during the first 6 months post-dialysis.

Methods

We studied 476 patients (pts) on regular hemodialysis (HD) treatment in seven Units in the Lombardy Region, Italy, M 67% – F 33%, 91% Italian pts e 9% non-European.

Age: <45 yr 8%; 46->65 yr 30,9%; 66->75 yr 33,7%; >76 yr 27,4%

Duration of HD: <5 yr 66,2%; 6-10 yr 22%; >10 yr 11,8%

50,6% (241/476) pts received pre-dialysis care.

We delivered a data collection form with 18 points about the level of knowledge of haemodialysis, vascular access, food, and food-related health damage, and some questions about daily life.

The chi-squared test and the relative p-value with 5% significant level, were used for statistical evaluation.

Results

67,8% pts who were given the pre-dialysis care, answered correctly to 70% of questions.

The 84,8% know of peritoneal dialysis and 60,9% personally participated in the choice of treatment.

82,6% are aware of which food contains high doses of potassium, while 72,35% are aware of more serious threats.

Unlike only 15,2% know which food contains more phosphorus, 78,1% understand the long term danger.

Conclusion/Application to practice

We recommend continuing the pre-dialysis care to our patients during haemodialysis to improve compliance to prescribed medication, a healthy diet, and target-driven lifestyle modifications.

This is very important for patients who did not receive pre-dialysis care.

Disclosure of Interest

no
O 34

Analysis of the experience in the use of plastic needles in the Spanish-hemodialysis units


Nephrology Department, Parc de Salut Mar, Barcelona, Spain

Background

Plastic needles (PN) have shown efficacy in hemodialysis and are presented as a positive innovation for patients and for the vascular access survival.

Objectives

To analyze the experience of PN use in the Spanish hemodialysis units.

Methods

Multicenter, cross-sectional observational study. An ad-hoc questionnaire was administered collecting socio-demographic variables and questions about concerning the experience of PN use. Google Formulario was used for the administration of the questionnaire. The chi-square test was used to compare the distribution of the observations with the Cramer’s V test as a measure of effect size. The Spearman correlation was used to estimate the association between variables.

Results

Inclusion of 78 female and 10 male nurses with an average age of 40.07±9.99 years and a median of 14.53 years of experience [P_{25}=4.25; P_{75}=21.75]. Among these, 50% have PN in their centers and 57.95% have used them. Also, 50% have received training and 76.14% wish to receive more training. A small to medium effect size (V=0.236) was observed between public centers and having PN. There was a significant relationship between having PN and having used them (p<0.001) and between having PN and receiving training (p<0.001). There was a strong correlation (rho=0.705) between professional satisfaction and perceptions of patient satisfaction (p<0.001). The professionals would include a median of 2 [P_{25}=1; P_{75}=3] modifications on the product design. Up to 81.08% of the professionals who have used PN would include a clamp and 100% would incorporate wings for a better fixation. The characteristics of PN are considered positive by 58.90% and negative by 11.74%.

Conclusion/Application to practice

PN are a good product which are positively valued by Spanish hemodialysis nurses, but some do not have them available or have not received training.

Disclosure of Interest

no
Patients and nurses perspectives about plastic cannulae for arteriovenous fistula

R. Sousa¹, A. Silva¹, M. Coimbra¹, P. Gonçalves¹, J. Fazendeiro Matos²
¹NephroCare Viseu, Fresenius Medical Care, Viseu, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Successful cannulation of arteriovenous fistula (AVF) is an important concept in haemodialysis. Plastic cannulae offer a new and innovative way to cannulate AVF and with time, expertise and training can be utilized to provide a successful cannulation for patients.

Objectives

• To understand the perspectives of patients and nurses about plastic cannula;
• To measure cannulation pain;
• To analyse the treatment outcomes mean values.

Methods

Descriptive study, through the application of a survey about known advantages and disadvantages of the plastic cannulae. The survey had 12 advantages and 9 disadvantages questions. The score answers were from 1 (completely disagree) to 5 (completely agree). The pain score was evaluated through the numeric rating pain scale. In addition, we observed the treatment outcomes between March 2017 and November 2018.

Results

We applied the survey to 27 nurses and 12 patients. Nurses had a mean age of 42.3 years and service length more than 17 years. Patients had a mean age of 69 years, haemodialysis vintage ≥83 months and use the plastic cannulae about 10 months. Patients had a mean score higher than nurses (3.53 versus 3.40). We found differences between groups regarding pain in cannulation, (t=3.110, p=0.002) and metal allergies (t=3.375, p=0.003) and the cannula repositioning (t=-3.611, p<0.001) and skin fixation (t=-2.589, p=0.014). The mean pain score was low (2.4). All treatment outcomes were better (p<0.001) than the references values for blood flow (mean=394 mL/min), Kt/V=1.87, substitution volume (23.9 L), AVF arterial pressure (-149 mmHg) and AVF venous pressure (175 mmHg).

Conclusion/Application to practice

In this study nurses and patients were satisfied. Patients clearly identify and agree more with the advantages than disadvantages of plastic cannulae.

Disclosure of Interest

no
The nurse’s role in vascular access infection prevention

P. Cale¹, C. Marchão¹, J. Sequeira Andrade¹, J. Fazendeiro Matos²
¹NephroCare Entroncamento, Fresenius Medical Care, Entroncamento, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Entroncamento, Portugal

Background

Infection is one of the many complications of haemodialysis vascular access (VA) and is responsible for approximately 20% of VA loss. Infections in established arteriovenous fistula (AVF) are uncommon, usually localised, not progressing to bacteraemia. Central venous catheters (CVC) have the higher infection rates, and AV grafts (AVG) have also increased risk of infection when compared to AVF.

Objectives

• To analyse VA infection rates, between January 1st 2016 and December 31st 2017;
• To promote the relevancy of the nurse’s role to prevent infections in VA.

Methods

Retrospective observational study. VA’ infection data collected from a central database, enrolling all patients under chronic haemodiafiltration (HDF), between 2016-01-01 and 2017-12-31. A dedicated sterile connection/disconnection set was used and nurses received special training in handling VA. Infections rates were calculated per 1.000 VA days, considered when local (inflammatory signs) and systemic symptomatology (fever) was present, confirmed by blood samples (haemogram, C-reactive protein blood cultures). If exudate was present, swabs were collected.

Results

During 2016, a total of 123 patients were monitored. Mean age 68.9±15.4 years, 68 (55.3%) were male. VA distribution: 87 AVF, 30 AVG and 23 CVC, with following infection incidence:

- 0.01/1000 AVF days;
- 0.3/1000 AVG days;
- 0.13/1000 CVC days.

During 2017, 121 patients, mean age 68.8±15.1 years, 61 (50.4%) were male. VA distribution: 87 AVF, 30 AVG and 23 CVC, with following infection incidence:

- 0.03/1000 AVF days;
- 0.04/1000 AVG days;
- 0.19/1000 CVC days.

Conclusion/Application to practice

When comparing our results with other studies, we found a low VA infection incidence. We think that the obtained results are related to the nurses’ caring, centralized dedicated VA handling training as well as the specific used medical disposables. Also, contributing to fight antibiotic resistance by ensuring proper hygiene measures of the hands, instruments and environment is of paramount importance.

Disclosure of Interest

no
Individualized cannulation technique centered to patient needs
T. Galhofas¹, G. Pinto¹, R. Peralta², B. Pinto², J. Fazendeiro Matos²
¹NephroCare Torres Vedras, Fresenius Medical Care, Torres Vedras, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Many scientific publications are available nowadays concerning vascular access (VA) for dialysis and cannulation technique (CT). Experience shows that scientific evidence has improved knowledge in this area, reflected in terms of positive results of VA, namely increased survival and reduction of complications. However, it is sometimes necessary to innovate and be creative in order to provide patients with an adequate response to their needs and expectations.

Objectives

Implement individualized VA CT approaches according to the needs of each patient.

Methods

A retrospective clinical case study of critical analysis was carried out focusing on the course of two patients with arteriovenous fistula (AVF). The descriptive data that characterize the reality in a complex and contextual way were obtained using a central data base and the information collected from the patients.

Results

Both patients had AVF (upper limb). One of them presented a VA vintage of about 30 years, with good physical and internal blood flow (Qa) assessments but with some difficulties in performing rope-ladder venipuncture due to a short tract and presence of aneurysmal dilatation. A solution was to maintain the arterial puncture in rope ladder and initiate venous puncture using MuST (Multi Single Technique). The patient maintained this combined cannulation type for 2.5 years without usual complications. The other patient had a new VA (6 months), with a Qa 620 mL/min, but with a short vascular tract. It had been decided to cannulate the arterial segment using MuST and the venous with buttonhole. Despite some episodes of bruising and cannulation difficulties at the beginning of its use (probably due to VA immaturity), treatments occurred almost without complications.

Conclusion/Application to practice

The choice of the best CT is not always linear. VA differs from each other and have different physical and operating characteristics. Combining individualized CT has shown to be a good and safe practice.

Disclosure of Interest

no
SO 38

Plastic versus metal cannulae in hemodialysis

Z. Obric, M. Drazeta

Nephrology clinic, Clinical hospital center Zemun - Belgrade, Zemun, Serbia

Background

Successful cannulation of arteriovenous fistula or graft in dialysis patients is a key element to achieve good blood flow and vascular access longevity, thus good quality of dialysis. Just some of many advantages of successful cannulation are decreased adverse events such as hematoma at puncture site, long-term aneurism formation and fistula stenosis.

Unsuccessful fistula cannulation in the initial period after maturation can lead to prolonged time of central venous catheter use and increased risk of sepsis, delayed dialysis initiation, hematoma formation, scarring, needle phobia, and loss of cannulator confidence. Furthermore, costs increase due to prolonged hospitalisation and need for further diagnostic imaging in order to identify the reason for malfunction.

For over 50 years metal needles have been used for cannulation in dialysis, but plastic cannulae have also been proposed to everyday dialysis practice, especially in Australia and Japan.

Plastic canula allow better flexibility with a decreased risk for infiltration. These differences are particularly beneficial for patients with delicate fistulas, tortuous vessels, metal allergies, oligophrenic patients, and also for medical staff safety.

In this paper, we present the main features of novel fistula plastic cannula and its innovations compared to the traditional metal needles.

Disclosure of Interest

no
How to obtain a database for a vascular access monitoring and surveillance programme?

M. Cruz¹, I. Nunes¹, B. Pinto², J. Fazendeiro Matos², M. T. Parisotto¹

¹NephroCare Faro, Fresenius Medical Care, Faro, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; ³Care Value Management, Fresenius Medical Care, Bad Homburg, Portugal

Background

A multidisciplinary team should be trained in each dialysis centre using a vascular access monitoring (VAM) and surveillance program (SVP), to ensure patients are receiving an adequate dialysis dose by maintaining a functional VA and related good patency. A database for a VAM and SVP allows an organised collection of information so that it can be easily accessed, managed, analysed and updated. A database management system (DBMS) is a piece of software facilitating the creation and management of databases. The existence of a centralized database provides users with a systematic way to create, retrieve, analyse, update and manage important VA data.

Objectives

To obtain a standardized database for a VAM and SVP, using a localized DBMS tool.

Methods

Implementation of VAM and SVP since 2011 in our unit. Design of a database using the Entity–Relationship Model by creating an Entity–Relationship diagram and later converting it into Relational Model to design our tables.

In this project we used a small DBMS: Microsoft Access.

Results

7 tables conceptually related to each other in Microsoft Access were created (Patient; VA; Maturation VA; Active VA; Inactive VA; Interventions; Access flow – Qa), with a total of 90 fields (with distinction of mandatory data of the optional fill data). The database consisted of the following elements: Tables; Forms; Reports; Queries and Macros.

Conclusion/Application to practice

The benefits of a database for a VAM and SVP are the reduction of errors, costs, risk in decision making, decrease response times and increase efficiency in VA management.

Disclosure of Interest

no
SO 40

Vascular surveillance program: 18 months results

C. Santos Cunha¹, S. Meneses¹, A. C. Pereira¹, A. P. Martins¹, E. Matos¹, I. Cerqueira¹, M. Cunha¹, S. Fernandes¹, P. Gonçalves¹, M. Fonseca³, J. Pinheiro¹⁻², B. Pinto³, R. Peralta³, J. Fazendeiro Matos³

¹NephroCare Fafe, Fresenius Medical Care, Fafe, Portugal; ²Health Science Institute, Portuguese Catholic University, Porto, Portugal; ³NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

The Vascular Surveillance Program (VSP) is an important factor in the prevention or worsening of vascular access complications in patients with chronic kidney disease. The programme contributes to the way of caring and educating, motivating the patients to actively participate in the treatment and to perform the self-care, reinforcing the treatment adherence.

Objectives

To describe the prevalence of neuropathic and vascular disorders in type 2 diabetes mellitus (T2D) patients versus those without T2D.

Methods

The VSP program started January 2017 and data was collected for 18 months.

The evaluation was carried out by the nurse and doctor and it consisted of observing the skin integrity and some tests to verify if neuropathy and vasculopathy was present. Depending on the ulceration risk, every patient was reassessed annually, every six or every 1-3 months, respectively depending on the individual risk level: low risk, medium risk or high risk.

Results

198 consultations were performed, of which 94 (47.5%) from patients with T2D and 104 (52.5%) of patients without T2D.

- 69 (34.9%) had Neuropathy, 47 (23.7%) with T2D and 22 (11.1%) without T2D;
- 111 (56.1%) had Vasculopathy, of which 65 (32.8%) with T2D and 46 (23.2%) without T2D.

Regarding the Risk Categories attributed, 76 patients presented "High Risk" to develop vascular access complications, 72 presented "Medium Risk" and 50 presented "Low Risk".

Conclusion/Application to practice

There is a high number of patients without T2D in the High and Medium Risk categories, which justifies the continued integration of these patients into the VSP for complications control and not only as a control group given the risk of developing vascular complications. Based on this knowledge, our duty as nurses is to empower these patients with the necessary information so that they are able to prevent the associated complications.

Disclosure of Interest

no
S 14  PARALLEL SESSION
European Kidney Health Alliance
Hall A2, 9:00-10:30

Improving the life of kidney patients throughout Europe: the European Kidney Health Alliance
R. Vanholder¹,²
¹University Hospital Ghent, Belgium; ²European Kidney Health Alliance, Brussels, Belgium

The European Kidney Health Alliance (EKHA) is a non-governmental organization that aims to promote the interests of kidney patients and the nephrological community at European Union (EU) level and at national level. Its strategy and actions are defined by four large European Associations representing the major stakeholders, namely the patients, nurses, physicians and kidney foundations. Over the past decades, EKHA has rolled out several initiatives amongst which Recommendations for Sustainable Kidney Care have served as a backbone for further action. EKHA also organizes each year a kidney forum at EU level, bringing together key stakeholders to discuss relevant kidney issues as outlined in the recommendations mentioned above. Furthermore, EKHA influences the policy of the European Commission with the support of a group of interested Members of European Parliament (MEPs). EKHA also facilitates and stimulates the support of research projects, such as EDITH, which is a broad study commissioned by the EU to assess differences in the frequency of kidney replacement therapies throughout Europe and the reasons for it. This year EKHA was selected by the European Commission to develop a thematic network on improving organ donation and transplantation in the EU, which will result in the issuing of a political joint statement led by several stakeholders (not only linked to kidney disease, but to any transplantable organ) which is a set of recommendations to the European regulators on how to enhance transplantation activity and outcomes. A first draft of the joint statement is available on the EU Health Platform. We hope that all these initiatives will help EKHA to roll out further activities in the coming years to improve the life of kidney patients, stimulate awareness of kidney disease and enhance interest in kidney research.
O 41

Balanced program obesity reduction kidney disease conducted by a nurse specialized in physical activity

A. Rovira¹, P. Ventura-Aguirre², G. Rodas³, I. Sañudo³, B. Romano³, N. Esteban⁴, M. Musquera¹, R. Rius⁵, J. Vidal⁵, E. Poch⁵, M. Garcia¹, A. Alicarte¹, F. Diekmann¹

¹Clinical Institute of Nephrology and Urology, Hospital Clinic de Barcelona, Barcelona, Spain; ²Sports Medicine Service, Hospital Clinic de Barcelona, Barcelona, Spain; ³Rehabilitation Service, Hospital Clinic de Barcelona, Barcelona, Spain; ⁴Graduate in physical activity and sport sciences, Independent, Barcelona, Spain; ⁵Digestive and Metabolic Diseases Service, Hospital Clinic de Barcelona, Barcelona, Spain

Background

Obesity and chronic kidney disease (CKD) are known independent risk factors for cardiovascular disease. Though it is described to present a protective role in dialysis patients respect to survival, obesity is a contraindication for kidney transplantation and is associated with an increased risk of surgical complications (wound infections, thrombosis).

It has been shown that moderate physical exercise and adapted to the physical capacity of the patient reduces mortality, improves quality of life, and halts progression of CKD. Moreover, physical exercise also improves overall surgical outcomes, and is currently a common practice in many centers worldwide.

Objectives

The main objective of this protocol is to attain a weight reduction in patients with obesity using a multidisciplinary approach, focused on nurse supervised physical exercise, to increase the likelihood of receiving a kidney transplant. Secondary objectives are to explore overall surgical and survival outcomes in this high risk population.

Methods

We developed a multidisciplinary protocol, including nutritional and physical activity. Patients with chronic kidney disease stage 5 (GFR <15ml/min or dialysis – CKD-5) and grade II-III obesity (BMI >35Kg/m²) will be included. Physical activity will be prescribed by a nurse specialized in physical activity. Protocol includes a thrice-weekly training (1h) performed under nurse supervision. Nutritional support is provided monthly. Anthropometric, clinical, functional, biomechanical, and blood composition parameters (using DEXA) will be performed before and at 3 months.

Results

Preliminary results: Following 6 weeks of activity patients have lost a medium of waist circumference of 5.5cm

Conclusion/Application to practice

Weight reduction through physical activity under the supervision of a specialized nurse poses several advantages over protocols using diet alone, such as an improvement in cardiovascular risk factors and in surgical outcomes. In CKD-5 patients, this reduction will add on to the potential benefit of receiving a kidney transplant.

Disclosure of Interest

no
New pathways—improving knowledge and education to barriers to organ donation and “opting out”

N. Jain¹, S. Baker², L. White², B. Riaz¹, P. Storey¹
¹Health Equalities, Kidney Research UK, Peterborough, United Kingdom; ²Organ Donation, Blood Policy and Abortion Services, Scottish Government, Edinburgh, Scotland, United Kingdom

Background

Registration onto the National Health Service (NHS) Organ Donation Register (ODR) from the Black, Asian & Minority Ethnic (BAME) communities was low in one of the UK countries. It is known that the BAME communities are more likely to need a transplant, less likely to donate and more likely to wait longer for a donation. One of the major barriers to organ donation was education and engagement with the so called “hard to reach”.

Objectives

We aim to demonstrate how is important, new pathways (the theme of the conference), to address these issues in a novel way as well as go onto form a fruitful partnership among various agencies.

Methods

A government department funded and supported a Charity who delivered a peer to peer kidney disease and organ donation project, and community outreach to address the issue of unmet need and raise awareness. Ten volunteers were selected because of their passion for “giving back” to their communities on a health matter, specifically, organ donation as well as their natural empathy with the targeted communities. Accredited training and ongoing support/mentorship further enabled outreach awareness in their community settings. Hence, new pathways have improved awareness.

Results

The project engaged many thousands of people about kidney disease and organ donation, leading to a greater understanding and willingness to sign up onto the NHS ODR. Official monthly figures confirm significantly increased numbers of people registering. Following initial funding, encouragingly the government department is funding the project in its fifth year.

Conclusion/Application to practice

The model has been easily adapted to other areas and/or “hard to reach” communities. The adoption of this novel pathway is an added benefit to addressing barriers to organ donation in the local communities, by the government department, bodes well to continue educating and empowering people who may be likely to “opt out” of donation.

Disclosure of Interest

no
Younger people are also accessing kidney supportive care
A. Bonner1,2,3, J. Kirby2, L. Purcell1,2,3, I. Berquier2, H. Healy2,3
1School of Nursing, Queensland University of Technology, Brisbane, Australia; 2Kidney Health Service, Queensland University of Technology, Brisbane, Australia; 3Chronic Kidney Disease Centre of Research Excellence, University of Queensland, Brisbane, Australia

Background

Advanced age is a predictor of poor outcomes in the population, including people with end-stage kidney disease (ESKD). Historically end of life treatment pathways evolved in the older population. However, ESKD occurs in adults at various ages as well and their mortality is greatly conflated. We explore the experiences of younger adults with ESKD, specifically symptom burden and kidney replacement therapy (KRT) pathway.

Objectives

To describe the characteristics of a younger vs older cohort of adults who were referred to a multidisciplinary kidney supportive care (KSC) program.

Methods

Prospectively we followed patients from February 2016 (program commencement) to December 2018. Data on participant demographics, co-morbidities (Charlson Co-morbidity Index), functional status (RUG-ADL scale and Australian Karnofsky Performance score [AKPS]) and symptom burden (IPOS-Renal) were systematically extracted from healthcare records. Analysis involved comparing the cohort ≤65 years of age at time of referral to those >65.

Results

Of 360 people referred, the median age was 74 years and 26% were ≤65 (range 27-65). There was no difference in gender splits (44% female ≤65 and 47% >65). Those ≤65 were more likely to be receiving KRT (or on a transition pathway to KRT) at referral than >65 (74% vs. 42%, respectively; p<0.05), and more likely to have been referred for symptom management (63% vs. 37%, respectively; p<0.001). Functional status showed no difference between cohorts for RUG-ADL scores (5.2 vs. 5.4, p=n.s.) although those ≤65 had higher AKPSs (63 vs. 59, p<0.005). Symptom burden scores were similar between cohorts (21.8 vs. 19.7, p=n.s.).

Conclusion/Application to practice

While most people referred to KSC are of advanced age, we identified a significant younger cohort that were accessing it primarily for the management of symptoms while receiving KRT. Nursing staff in these KRT treatment pathways are ideally placed to assess for symptom burden, co-ordinate and, if appropriate, trigger referral to KSC.

Disclosure of Interest

no
The impact of Mediterranean Diet on biochemical markers and cardiovascular risk factors in CKD


Dialysis Unit, Attikon University Hospital, Athens, Greece

Objectives

Investigation of the correlation of biochemical markers and cardiovascular risk factors with adherence to a Mediterranean diet in patients with stage 5 chronic kidney disease (CKD).

Methods

127 patients (77 male and 50 female) with CKD stage 5 (69 receiving haemodialysis, 58 receiving peritoneal dialysis), with an average age of 62±15 years old were evaluated based on their level of adherence to a Mediterranean diet by the use of the MedDietScore (MDS) nutritional indicator (theoretical range 0-55, increased values indicate increased adherence), in accordance with Panagiotakos et al.,2007. MDS was analyzed as a bisector: above (high level of adherence) and below (low level of adherence) the average rate MDS=24 and as a continuous variable.

Results

Patients with MSD>24 in comparison to patients with MDS≤24 present a lower prevalence of peripheral vascular disease (PVD) and cerebrovascular accident (CVA), lower systolic (SBP) and diastolic (DBP) blood pressure, LDL cholesterol, lower serum calcium (Ca) and malnutrition-inflammation score (MIS) and increased levels of HDL cholesterol, magnesium (Mg) and serum albumin (alb). In a multistep regression analysis, after the adjustment based on the age, gender, method and period of extra-renal dialysis, body mass index (BMI) and alb, the MDS indicator was proven to be a significant independent factor of the total (B=-1.89; p<0.05) and LDL (B=-2.7; p<0.01) cholesterol respectively, of the Ca (B=-0.40; p>0.05), Mg (B=0.29; p<0.01), MIS (B=-0.168; p<0.05) and of the systolic blood pressure (SBP) (-1.78; p<0.01).

Conclusion/Application to practice

Greater adherence to a Mediterranean diet in patients with stage 5 CKD demonstrates a beneficial effect on the biochemical markers resulting in the reduction of the cardiovascular risk factors.

Disclosure of Interest

no
Must cannulation technique minimizes cannulation site problems

R. Sousa¹, A. Silva¹, M. Coimbra¹, P. Gonçalves¹, J. Fazendeiro Matos²
¹NephroCare Viseu, Fresenius Medical Care, Viseu, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Cannulation practice is mainly based on theory, practical guidelines and experience. Buttonhole cannulation technique had some good results in reducing the incidence of aneurysms and haematomas. Some studies have reported an increased risk of infection related to cannulation site problems.

Objectives

Evaluate cannulation site problems and measure scab sizes related to cannulation technique

Methods

Descriptive, longitudinal, retrospective study, measuring the size of the cannulation site scab (USB digital microscope) and evaluating the presence of cannulation site problems and cannulation techniques (CT) in the Buttonhole group (BH) and MuST group (MG), between November 2017 and November 2018. Independent sample t-test was used to compare both groups.

Results

80 patients with arteriovenous fistulae (AVF), 37 using BH and 43 using MG. The majority were male (63%) with a mean age of 69.2±12.44 years old and 50% were diabetic. The patients were in HD for more than 61 months, with the same AVF for more than 40 months and in the same CT for about 22 months. We did not observe any differences in age (BH 69.1 versus MG 69.4 years), HD vintage (72.6 versus 66.7 months), vascular access vintage (39.5 versus 41.6 months) and cannulation technique vintage (19.9 versus 23.3 months).

We found differences in the number of previous vascular access (t=2.614, p=0.011) and in scab size (t=7.075, p<0.001). The MG had a mean scab size of 4.01 mm² and BH had 10.32 mm². About 20% of the patients in the MG did not have evidence of any scab. We found a weak and negative correlation (r=-0.484) between the presence of cannulation site problems and buttonhole CT (p<0.001).

Conclusion/Application to practice

With this investigation we were able to confirm that there are significant differences in the scab size and it's relation to the cannulation technique.

Disclosure of Interest

no
Preventive care of distal ischemia related with haemodialysis vascular access
A. Silva¹, R. Sousa¹, P. Gonçalves¹, M. Coimbra¹, R. Peralta², J. Fazendeiro Matos²
¹NephroCare Viseu, Fresenius Medical Care, Viseu, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Some haemodialysis patients with an arteriovenous fistula (AVF) receive treatment for chronic distal ischemia at some point in their life. Insufficient hand perfusion leads to pain, coldness and occasionally sores or gangrene. Proximal fistulas and diabetes mellitus also contribute to a higher incidence of distal ischemia.

Objectives

To identify patient characteristics and changes in distal hand perfusion and quantify distal ischemia related to vascular access.

Methods

Descriptive and correlational study. In July 2018 we developed a distal ischemia specific evaluation through an observation grid, radial pulse, capillary refill time (CRT), SpO₂ in both hands and vascular access outcomes. We classified the patients with an ischemia score (0 non symptoms, 1 light, 2 moderate and 3 serious symptoms).

Results

Since July 2018 we have carried out 222 distal ischemia evaluations in 110 patients. Mean age was 69.31±12.61 years, 74 (67.1%) were male, 53% non-diabetic, mean HD vintage 76.2±56.22 months. Brachial-cephalic AVF was the most common (49.1%) mean Qa was 2509mL/min. Mean ischemia score was 0.93, being that 54% had light symptoms. Patients with radial pulse absence and retard CRT had higher ischemia score (1.16 and 1.18). Patients without versus with symptoms had differences in mean previous vascular access (VA) (1.0 versus1.8, t=−2.938, p<0.001), mean VA interventions (0.93 versus 1.75, t=−4.092, p=0.004) and “ΔSatSpO₂” (-0.83 versus -4.03, t=2.137, p=0.034). Moderate symptoms had two times more VA interventions (angioplasty and surgical revision) (mean 2.8) than patients without symptoms (mean 1.0). We found that diabetes is related with proximal AVF ($X^2=6.066, p=0.005$) and radial pulse absence ($X^2=7.823, p=0.014$).

Conclusion/Application to practice

Implementation of a structured and specific evaluation for monitoring distal ischemia symptoms is needed for continuous monitoring and early intervention. In our opinion VA care can prevent vascular access dysfunction, failure and arm complications.

Disclosure of Interest

no
High-flow vascular access: the impact on the patient
A. F. Pinho¹, E. Amaral¹, C. Gonçalves¹, F. Gomes¹, B. Pinto², J. Fazendeiro Matos²
¹NephroCare Vila Franca de Xira, Fresenius Medical Care, Vila Franca de Xira, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background
High-flow vascular access (VA) causes haemodynamic changes that lead to complications such as peripheral ischemia, aneurysms development and heart failure. Implementing a VA monitoring and surveillance programme is of paramount importance, to monitor its evolution as well as the general condition of the patients.

Objectives
- Identify patients with high-flow VA;
- Assess patients’ daily activities and self-health state perception.

Methods
Observational, descriptive, retrospective study. From Oct 2017 to Oct 2018, patients with high-flow VA (Qa >2000mL/min) were identified at routine monthly assessment. VA incidents and interventions, spKt/V, albumin and age-adjusted Charlson Comorbidity index were analysed. Patients’ daily activities and self-health state perception were assessed using the EQ-5D-5L (EuroQol_5 dimensions_5 levels), previously validated.

Results
8 patients, mean age 54 (SD=18.76) years, 3 (37.5%) female.
All patients presented aneurysms at cannulation sites or on the VA tract.
3 (37.5%) had surgical or angiographic intervention due to thrombosis.
Cannulation difficulties were detected in 19 treatments and prolonged haemostasis in 2.
On average:
- albumin 4.27mg/dL (SD=0.18);
- weekly dialysed blood volume 317 L (SD=39.13)
- spKt/V 1.89 (SD=0.23).
From the EQ-5D-5L tool:
- Patients’ mobility:
  - 4 (50%) without changes;
  - 4 (50%) with slight changes;
- Personal care:
  - 7 (87.5%) unchanged;
  - 1 (12.5%) moderate changes;
- Daily activities:
  - 4 (50%) unchanged;
  - 2 (25%) slight;
  - 2 (25%) moderate;
7 (87.5%) patients perceived their health status >50%.

Conclusion/Application to practice
Patients with high-flow VA maintained good dialysis quality and albumin values within recommended target range, probably due to low average age. In the intradialytic period, the main reported complication was “cannulation difficulties” probably due to the aneurysms that were related to the thrombosis events. Apparently, high-flow VA does not interfere in the activity-related dimensions. The monitoring and care of the VA by the nursing team is fundamental for early detection of complications and to promote patients’ quality of life.

Disclosure of Interest
no
Are prosthesis segment interpositions in arteriovenous fistula producing good outcomes?
E. Amaral¹, A. F. Pinho¹, C. Gonçalves¹, F. Gomes¹, B. Pinto², J. Fazendeiro Matos²
¹NephroCare Vila Franca de Xira, Fresenius Medical Care, Vila Franca de Xira, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background
The lifespan of patients receiving haemodialysis is increasing alongside comorbidities, posing an extra challenge in maintaining a well-functioning vascular access (VA).
Mixed VA consisting of a prosthesis segment interposition in an existing arteriovenous fistula, is current practice in cases of impaired drainage vessels.

Objectives
Compare performance and efficacy of mixed VAs with the pre-interposition period.

Methods
Retrospective, descriptive-correlational, single-centre study.
In November 2018, patients who presented with mixed VAs were selected.
Both periods before (T-1) and after (T1) prosthesis segment interposition construction were analysed for: VA interventions (surgical and angiographic), VA flow (Qa), dialyzed blood volume (DBV) and single pool Kt/V (spKt/V).

Results
8 patients, average age 64.75 (SD=18.09) years. 6 (75%) male.
On average, in T-1 AV native fistulas presented vintage 49 months with 0.49/1000 treatment/days’ interventions. In T1, number of VA interventions was 0.68/1000 treatment/days on average 21 vintage months.
T-1 versus T1:
- Qa: 756 mL/min (SD=287.40) versus 971 mL/min (SD=530.19);
- spKt/V: 1.69 (SD=0.48) versus 1.77 (SD=0.29);
- DBV: 306.25 L/week (SD=26.15) versus 307.74 L/week (SD=23.10);

T-1:
- Very weak, negative relation between VA life-period and average of interventions/month r(8)=-0.190 (p=0.651);
- Moderate and positive relation between Qa and spKt/V r(8)=0.452 (p=0.261) and DVB r(8)=0.428 (p=0.290);

T1:
- Very weak, negative relation between VA life-period and average of VA interventions r(8)=-0.107 (p=0.801);
- Moderate and positive relationship between Qa and spKt/V r(8)=0.554, p=0.154 and DVB r(8)=0.377 (p=0.357).

Conclusion/Application to practice
Mixed VAs are associated with more interventions/month.
Mixed VAs present, on average, better performance of dialysis treatment parameters.
Mixed VAs may be an alternative for some patients, however it's mandatory to maintain vigilance and monitoring of these VAs on an ongoing basis to prevent and reduce interventions.

Disclosure of Interest
no
Ultrasound monitoring of the buttonhole: creation of a classification and assessment of its effectiveness

C. Rubiella Rubio, R. Iglesias Sanjuan, M. Marcet Duran, A. Alguersuari Cabiscol, J. Vallespin Aguado, J. Ibeas López
Nephrology Department, Parc Tauli Sabadell University Hospital, Sabadell/ Barcelona, Spain

Background
ButtonHole can generate difficulty in the cannulation, mainly in difficult access. Ultrasound can monitor the creation and follow-up of the tunnel.

Objectives
The creation of an ultrasound classification that allows establishing criteria for action in the difficult cannulation of the ButtonHole and assessing its effectiveness.

Methods
Design: a prospective observational study
Sample: 23 patients.
Variables:
Demographic, time in HD, previous FAV, the location of the FAV.
Tunnel characteristics:
- Aspect: a) homogeneous; b) heterogeneous
- Placement: a) centered; b) lateraliured
- No tunnel visualization (early stages).
Evolution: a) adequate, b) reoration in the same tunnel puncture, c) creation of a new tunnel and d) abandonment of the technique

Results
Age: 66.7±11.7 years. Time on dialysis: 3±2.7 years. Men / Women: 34/66%; Previous FAV: none 79%, one: 13%, two: 4% and three: 4%. Location: cephalic-wrist 40%, cephalic-elbow 9%, perforating 34%, basilic 17%. Non-dominant / dominant arm: 61/39%.
ButtonHole arterial-cannulation 82% and vein-cannulation 96%. Biohole: 30% and VWing: 4%

Appearance.
- Arterial-cannulation: Homogeneous 68.4%, Heterogeneous 21.1%, not visualizable 10.5%
- Venous-cannulation: Homogeneous 86.4%, Heterogeneous 9.1%, not visualizable 4.5%

Position:
- Arterial-cannulation: Centered 63.2%, Lateralized 26.3%, not visualizable 10.5%
- Venous-cannulation: Centered 54.5%, Lateralized 41%, not visualizable 4.5%

Evolution
- Adequate: 65.2% (Tunnel creation in process: 8.7%)
- Reorationation of the same tunnel cannulation: 26.2%
- Creation of new tunnel 4.3%
- Technical abandonment: 4.3%

Conclusion/Application to practice
- Up to a third part, ButtonHole can have associated complications in the creation and maintenance of the tunnel.
- Ultrasound monitoring allows classification of the alterations in the tunnel according to their appearance and position, allowing the reorientation and recovery of the tunnel in almost all cases. In those that are not viable, can be decided to create a new tunnel or abandon the technique, avoiding morbidity.

Disclosure of Interest
no
Resistance to Chlorhexidine as needling site antiseptic agent, and frequent use

A. Martí, A. Madrid, T. Momblanch, J. Gonzalez, E. De la Iglesia
Nephrology, Consorcio Hospital General Universitario Valencia, Valencia, Spain

Background

Following World Health Organisation (WHO) Bacteriemia Zero programme recommendation, in our Hospital Based Hemodialysis Department, we use Chlorhexidine gluconate with 70% isopropyl alcohol as needling site antiseptic agent. Neither catheter related bacteria nor needling site infections have been a problem in our Haemodialysis (HD) Units, in fact we have excellent data on this aspect.

Some patients with Arteriovenous Fistula (AVF) developed what we call Clorexidine resistance in the form of redness and/or stinging on the needling sites, disturbing for the patient that we decided not to use Clorexidine and to contact the Dermatology Department for advice.

Our colleagues advised us to change the antispetic agent and to use Undecilenamidopropil betaina, 0,1% Polihexanida, this was absolutely satisfactory as there was no patient discomfort stopped and no infection problems occured.

Objectives

In this paper we compare Clorexidine Resistance on the Home Hamodialysis (HHD) patients with the Hospital Based (HB), as we identified a higher number of resistances in the HHD compared with those in HB.

Methods

All our HB patients receive HD three times per week, while our HHD ones receive either 5 or 6 sessions per week, what makes 174/290 or 348 sessions per year, in other words there are big diferences in the use of antiseptic agent depending on the HD scheme.

Results

In our HB programme from 35 patients 5 (15%), have developed Clorexidine resistance while in our HHD program 6 out of 16 (40%) presented with the same condition, with no diferences in time on Renal Replacement Therapy, Primary disease or any other clinical condition.

Conclusion/Application to practice

In our experience and following futher research we conclude that Clorexidine resistance can be related to its frequent use.

Undecilenamidopropil betaina, 0,1% Polihexanida can be used as a safe antiseptic agent prior to needling AVF.

Disclosure of Interest

no
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Doing rope-ladder or buttonhole that’s the question?

J. Finderup, H. M. Hermansen, L. Streubel-Kristensen
Renal Medicine, Aarhus University Hospital, Aarhus N, Denmark

Background

An evidence based guideline summarizing evidence on using either the rope-ladder or buttonhole technique for AV-fistula cannulation showed inconclusive evidence and thus inability to recommend one technique instead of the other. The choice of cannulation technique must therefore be based on patients' preferences and a shared decision between the patient and the healthcare professional.

Objectives

To develop a patient decision aid to involve patients in choice of cannulation technique.

Methods

The method by Coulter et al was used to develop a patient decision aid. Both patients and healthcare professionals were involved. Five individual interviews were conducted with patients in haemodialysis having an AV-fistula as well as a focus group with four dialysis nurses. An alpha-version of a decision aid was developed and three patients and three nurses provided feedback. The alpha-version was adapted and a beta-version was tested by ten patients and four nurses.

Results

The decision aid consists of an overview of the options and descriptions of the advantages and disadvantages of the rope-ladder or the buttonhole technique, respectively. The decision aid also consists of a tool for value clarification. The decision aid meets all the IPDAS (International Patient Decision Aids Standards) except the two evaluation criteria.

Conclusion/Application to practice

All patients with an AV-fistula and having the choice between the rope-ladder and the buttonhole technique respectively are offered a meeting about the decision with a dialysis nurse. The decision aid is provided before the meeting to prepare the patient for the meeting. The patient decision aid is ready for evaluation in a larger study.

Disclosure of Interest

no
What type of dialysis better to choose first?

R. Morgenstern, M. Voroviov, L. Shwarz
Nephrology, Soroka university medical center, Beer-Sheva, Israel

Background
Pre-dialysis CKD-patients are offered options of treatment for end-stage renal failure, including haemodialysis (HD), peritoneal dialysis (PD) and kidney transplantation. Following information given about all the treatments, the patient can choose his preferred treatment method, if there are no clear contraindications.

There is a possibility of transition between dialysis methods, but the consequences aren't the same. If patient is transferred from HD to PD, commonly he doesn't have any residual renal function (RRF). Thus, sometimes peritoneal dialysis may be insufficient. However, if PD patient needs transition to HD, his blood vessels are still preserved with vascular access options.

Objectives
To optimize the treatment modality choice in CKD-patient.

Methods
Over the three years period, 8 HD-patients were transferred to PD. In order to recognize the reasons of HD preference over PD, patients were asked to define their motives.

Results
Transferring patients from HD to PD occurred between 1 and 8 years; 50% of patients due to vascular access failure, the rest- due to hemodynamic instability and maladjustment. In 50% of patients lack of RRF was noted. One-half of patients afterward were self-treated.

In a survey of the reasons for patient's primary choice the following factors arose: fear of responsibility for self-care treatment, body image, bringing illness home, daily treatment, absence of family support.

After starting PD treatment, all patients reported the improvement of well-being.

Dilemmas
• Is there a place for a care-giver team to intervene in the decision that will direct the patient to begin with an optimal method for him?
• Is there a place for PD first?

Conclusion/Application to practice
Beginning the PD treatment with residual renal function contributes to the patient's quality of life with better nutritional and fluid balance, and preserved blood vessels. Patients should be offered both modalities by experienced team and should receive balanced and unbiased information, to make a proper modality choice.

Disclosure of Interest
no
Using UV-paint for evaluating touch-contamination of a patient-assistance device for peritoneal dialysis

S. Neumann¹, S. Hess²

¹Development Department, Peripal AG, Zürich, Switzerland; ²MAVT - Product Development & Engineering Design, ETH Zürich - Federal Institute of Technology, Zurich, Switzerland

Background

Dealing with a new situation of a life-threatening disease like renal failure is challenging alone. Combining this with an unfamiliar handling procedure in the therapy and a permanent fear of an infection by touch contamination may quickly become overwhelming for the person affected. This may result in early dropouts or be a reason for refusing home treatment.

Objectives

A novel patient assistance device aims to connect the peritoneal dialysis (PD) catheter and the PD tubing system touch free. The objective of this work is to evaluate to see, if patients new to PD are able to perform handling cycles with the patient assistance device without touching infection critical surfaces on the PD catheter or on the PD tubing system.

Methods

Ten volunteers (8 males and 2 females, average 26 years, range 23-37 years) were recruited and participated in one complete handling cycle, with no training in advance but aided by the device’s quick starting guide only. While interacting with the device, the volunteers had UV-paint on their hands, which is invisible in daylight but brightly colourful under UV-light. Subsequent to the handling cycle, the surfaces were analysed with a UV-light for contact with the volunteer’s hands.

Results

The volunteers touched all expected user interface features of the device such as the three buttons on the top, the lever on the right-hand side and the clamp of the PD catheter. The tip of the uncovered PD tubing system and the inside of the PD catheter were defined as critical surfaces for potential infections. The analysis of the touched surfaces showed no UV-paint on these surfaces.

Conclusion/Application to practice

The results indicate that the patient assistance device enables even untrained patients new to a PD to connect to a PD tubing system and performing the therapy handling safely without touching critical surfaces when using the patient assistance device.

Disclosure of Interest

yes
Successful peritoneal dialysis treatment despite abdominal adhesions (a case study)
R. Badalbayev, I. Gutman, I. Romach
Peritoneal Dialysis, Tel Aviv Souraski Medical Center, Tel Aviv, Israel

Background

The literature does not recommend peritoneal dialysis (PD) treatment for patients who have a history of abdominal surgery or adhesions. If the patient still wishes to try PD, despite the possibility that it may not work, a laparoscopy approach with simultaneous adhesiolysis and catheter placement is recommended.

The only absolute contraindication to treatment with peritoneal dialysis is a lack of a functional peritoneal membrane.

Methods

We present a case where a patient insisted on PD despite a history of abdominal adhesions following a perforated appendix twenty years earlier. He underwent laparoscopic examination of the abdominal cavity and was deemed suitable for PD. Therefore, a Tenckhoff catheter was placed.

Results

The patient underwent APD treatment for two and a half years. In the first year, the treatment included 8 hours of 4 exchanges of 2L. Kt/V was 2.4. In the second year, the residual kidney function deteriorated and accordingly his Kt/V decreased to 1.6. His PD prescription was changed to 8 hours of 5 exchanges of 2.3L. Under this treatment, the patient continued for another one and a half years. During this time, the patient had an ongoing exit-site infection which was treated by local and systematic antibiotics. Eventually, the catheter had to be removed and the patient was switched to hemodialysis treatments. After 2 months, the patient insisted on trying PD again to maintain his quality of life, against our recommendations. Nonetheless, we tried to insert a new Tenckhoff catheter twice without success.

Conclusion/Application to practice

We present this case to introduce a new concept where adhesion and prior abdominal surgery should not immediately exclude a patient from PD. A patient may enjoy a good quality of life with several years of PD, albeit with a smaller volume of dialysate and close supervision, and preserve his vasculature for hemodialysis.

Disclosure of Interest

no
Patient management in the vascular access failure: a case (emergency peritoneal dialysis)

D. D. Balci¹, D. Efeyurtlu¹, F. Kurt¹, U. Maden², S. Gul², A. Inci², A. M. Sarikaya², O. Harmandar³

¹Peritoneal Dialysis, Health Sciences University Antalya Training and Research Hospital, Antalya, Turkey; ²Nephrology, Health Sciences University Antalya Training and Research Hospital, Antalya, Turkey; ³Internal Medicine, Health Sciences University Antalya Training and Research Hospital, Antalya, Turkey

Background

Vascular access is the most essential requirement for patients with chronic renal failure. The number of patients experiencing vascular problems is increasing with the increase in the duration of dialysis. For these patients, acute peritoneal dialysis can be chosen as a life-saving alternative treatment.

Objectives

A 45-year-old female patient had renal failure for 21 years. Dialysis was started from the fistula and a cadaveric transplantation was performed in the first year of her treatment. One year later, the patient had rejection and returned to dialysis. During the years when the dialysis continued, she had fistulas, grafts and vascular access problems.

Methods

The patient's general condition was poor at the time of admission, having respiratory distress, bilateral rales and edema. The patient who also had acidosis was evaluated with interventional radiology. The patient was intubated without the possibility of catheter insertion. When the vascular access was not utilized on the patient, surgical peritoneal dialysis was started after laparoscopic tenckhoff catheter placement. In the post-operative period, the patient was started on peritoneal dialysis with 1000 cc/h and high glucose concentration dialysate and the dialysis was planned as 24 hours. No leak observed on the patient. The first day of 1000 cc and following days 1600-1700 cc ultrafiltration could be done for the patient and her liquid balance was kept negative. The patient was extubated on the 4th day of intubation, and she was taken to the ward on the day 10. She was taken to the ward on the day. The patient weighed 79 kilograms on the day of service, and she was discharged from the hospital weighting 56 kilograms, with 23 kilos weight loss.

Results

Currently, she uses APD without any peritonitis and any problems on her 9th month controls.

Conclusion/Application to practice

Acute peritoneal dialysis is successful therapy and could also be considered as a life-saving alternative for patients with renal failure with vascular access problems.

Disclosure of Interest

no
An improved CAPD submodality using a new assist device: CAAPD (Continuous Ambulatory/Automated Peritoneal Dialysis)

T. Sanli¹, N. Bozkurt¹, E. Asar¹, Z. Aydin², A. Demirbas³

¹Peritoneal Dialysis, Akdeniz University Medical School Hospital, Antalya, Turkey; ²Nursing Faculty, Koç University, Istanbul, Turkey; ³Healthcare Management, Istanbul University, Istanbul, Turkey

Background

PD provides CKD patients the luxury of independence along with satisfactory clinical outcome. PD patients, require careful daily recordings of weight, blood pressure and fluid removal with close follow up.

Objectives

There is no simple, semi-automated, assist systems with improved informative capabilities, designed for CAPD. Although CAPD is a manual therapy, there is no reason to disapprove the possibility of some “partial automation” of exchanges by devices providing transmission of data and a better, simplified, assisted exchange setup whenever/wherever it is possible. Here, we introduce a new CAAPD assist device that offers real time and tele-monitoring while simplifying single exchanges for CAPD.

Methods

CAAPD device has 2digital hangs/scales for dialysis fluid bag and discharge bag (to measure infused-drained solution) contains 2 valves that filling and draining lines are placed to controll the flow of solution. Tablet/Data processor, GSMcard, bluetooth (BT) sender: Processes treatment data, sends to android based tablet via BT and also hospital through GSM “cloud”. Patient scale: A separate/wireless scale that measures patient weight and sends weight automatically to data processor via a BT sender. Tablet PC shows each stage of connection process to patient as screen commands consecutively. After the exchange completed, patient takes the message of dialysate appearance control and in case of suspicious appearance such as turbidity/fibrin, the discharge bag can be photographed and sent to nurse/doctor instantly. Thereby, transactions can be monitored and treatment records can be followed by the nurse/doctor instantly/daily, instead of monthly.

Results

Two patients (62 y/o m, 25 y/o f) have been on CAAPD used the assist device described above with no clinical problem and high satisfaction for 3months currently. We are able to follow their transactions for every exchange.

Conclusion/Application to practice

CAAPD assist device can be used with good clinical success and patient satisfaction. CAAPD as a submodality, may potentially ease PD exchanges, manual therapy recordings unnecessary and decrease modality-related tiredness of CAPD patients.

Disclosure of Interest

no
Adapting teaching and learning methodologies following a training needs analysis

C. Poole, C. Hutchinson, K. Paule, M. Starr, B. Brierley

Training and Education, Fresenius Medical Care, Birmingham, United Kingdom

Background

Maintaining continuous professional development (CPD) in a busy satellite haemodialysis unit brings many challenges which are compounded when the satellite haemodialysis units are dispersed across a wide geographical area covering two countries. Access to timely training which meets the needs of the workforce remains pivotal in terms of acquisition of skills/knowledge and clinical competence.

Objectives

The overall objectives were to:

- Design the training needs analysis (TNA) with a maximum of ten questions
- Undertake a TNA using an electronic survey tool to determine the preferred teaching and learning methodologies
- Analyse the TNA data to inform the development of the 2019 annual training plan (ATP)

Methods

September 2018 TNA (nine questions) was issued to all the satellite haemodialysis units outlining why the TNA was being undertaken electronically, instructions on how to complete the survey and the closing date.

The data collected via the TNA were reviewed by the Training and Education Department with a particular focus on the preferred methodologies for teaching and learning. The analysis led to the development of the 2019 ATP.

Results

The TNA was completed by 36% (N=225) of our workforce, a reasonable response rate, it is reported that internal surveys generally receive a 30-40% response rate (or more) on average. 64% (N=100) of the respondents have worked for the organisation for >5 years, there were therefore an informed study group. The preferred teaching and learning methodologies identified were virtual classroom, self-directed and one-to-one.

This resulted in a reduction of classroom training sessions and the introduction of “Bite Size” training sessions (N-10), delivered in the haemodialysis unit and retention of the virtual classroom sessions.

Conclusion/Application to practice

Involving the workforce in the TNA has led to some adaptation to the teaching and learning strategies for 2019. Responding to their needs is central to ongoing engagement with CPD.

Disclosure of Interest

no
Hypertension has a high prevalence across all stages of Chronic Kidney Disease (CKD). The underlying pathophysiology is multifactorial including mainly salt and water retention, decreased nephron mass, sympathetic overactivity, endothelial dysfunction and renin-angiotensin aldosterone system (RAAS) activation. CKD and hypertension are closely linked and have a bidirectional effect, where worsening of one may lead to progression of the other. There is a current controversy regarding target blood pressure recommendations after the results of the SPRINT trial came available. American (ACC/AHA) guidelines recommend a target BP of 130/80, while European (ESC/ESH) guidelines have a more conservative approach. Intensive treatment of hypertension in the setting of CKD lowers the risk of cardiovascular and all-cause mortality but its effect on CKD progression remains controversial. RAAS blockade is the mainstay of treatment, especially in proteinuric CKD, with the risk of hyperkalemia and acute kidney injury being the most common drawbacks. On the other hand, optimal volume control is crucial in advanced stages and patients undergoing dialysis. A lot of recent studies have addressed the different BP patterns at home, in the office and ambulatory day and night measurements, aiming at improving treatment strategies. Novel players in the pathophysiology of hypertension and CKD, like microRNAs and gut microbiota have emerged as either markers or therapeutic targets.
Investigation of comfort and some factors affecting patients with hemodialysis treatment

M. Mollaoğlu¹, S. Yanmış²

¹Faculty of Health Science, Department of Internal Medicine Nursing, Sivas Cumhuriyet University, Sivas, Turkey;
²Faculty of Health Science, Department of Internal Medicine Nursing, Erzincan Binali Yıldırım University, Erzincan, Turkey

Background

In the treatment of individuals with chronic renal failure, hemodialysis treatment is frequently used to ensure that patients can live longer and more easily. The concept of comfort in planning and organizing nursing care is guiding. In the treatment of hemodialysis and the care in this process; it is important to evaluate the comfortable degree that the patient has, by the health professionals.

Objectives

The aim of this study is to investigate the comfort and some factors affecting hemodialysis treatment.

Methods

This descriptive study was carried out on 95 patients who had been undergoing hemodialysis for at least 6 months. The data were obtained by Sociodemographic Characteristics Form and Hemodialysis Comfort Scale developed by the researchers.

Results

The median age of the participants was 58.37 ± 16.62. 50.5% of the patients were male, 34.7% were primary school graduates, 85.3% of them were chronic. The mean score of the hemodialysis comfort scale is 23.93 ± 6.99. The mean score of the subscales of the scale are; the sub-dimension of overcome, 15.35 ± 4.69, the sub-dimension of relaxation, 8.58 ± 3.34, respectively. In the study, it was determined that comfort scale scores of male patients were higher than those of female patients (p<0.05). It was determined that comfort scores were higher in patients, who did not have chronic disease (p<0.05). In addition, it was observed that as the age and duration of hemodialysis increased, the mean comfort score decreased (p<0.05).

Conclusion/Application to practice

The patients comfort who participated in the study was moderate. As in all individuals with chronic disease, since one of the important responsibilities of nurses is to ensure the comfort of patient with chronic hemodialysis treatment. Therefore, it is important to evaluate concept of comfort in hemodialysis patients periodically and to reflect these results to care and treatment in improving the living quality of patients.

Disclosure of Interest

no
Investigation of effect on daily life activities and symptoms in hemodialysis patients

M. Mollaoglu, E. Başer
Health Sciences Faculty Nursing Department, Sivas Cumhuriyet University, Sivas, Turkey

Background

Hemodialysis patients develop many physical and psychosocial symptoms associated with chronic kidney disease and its treatment. The presence of these symptoms also adversely affects an individual's daily living activities.

Objectives

The aim of this study was to evaluate the symptoms seen in hemodialysis patients and to examine the effect on daily living activities.

Methods

This descriptive and relational study was performed on 126 patients. Patient Information Form, Dialysis Symptom Index (DSI) and Katz Daily Living Activities Scale (KDLA) were used as data collection tools. The data were evaluated with percentage calculation, mean, standard deviation, t test, and One-Way ANOVA test in SPSS program (Version: 22.00).

Results

Hemodialysis patients stated that they had the most symptoms of tiredness, sadness, muscle-joint pain. There was a statistically significant relationship between dialysis symptom index and disease duration and dialysis year (p <0.05). In addition, the mean score of the Patients' KDLA was 14.48 (SD: 2.55). 65.1% of the patients (n: 82) maintain their daily living activities independently. On the other hand, 26.2% (n: 33) of the dialysis patients maintained their daily living activities as semi-dependent, while 8.7% (n: 11) were totally dependent on others. A statistically significant relationship was found between KDLA, marital status, year of dialysis and presence of another chronic disease (p <0.05). There was statistically significant relationship between DSI and KDLA. In hemodialysis patients, as the DSI score increased, the dependence on daily living activities increased.

Conclusion/Application to practice

The symptoms seen in patients have a negative effect on maintaining their daily living activities. Health workers should perform symptom evaluation in patients undergoing dialysis. Thus, each patient-specific individualized care plan should be designed for effective management of these symptoms in patients. Effective symptom management will be effective in maintaining patients' daily living activities.

Disclosure of Interest

no
Nurse led implementation of a safe and effective haemoglobin control protocol in haemodialysis patients
R. Israeli, M. Exman, I. Mor Yosef, M. Razon, R. Zelker
Ziv Hemodialysis Unit, Hadassah Ein Karem Hospital, Jerusalem, Israel

Background

Anaemia is a significant complication of renal failure and has been associated with increased mortality, cardiovascular disease, hospitalisations, and decreased quality of life. Nurses are advantaged in meeting international guidelines for dialysis quality indicators. Research is lacking in haemoglobin control by authorised nurses.

Objectives

To examine the efficacy and safety of a nurse-led protocol aimed to control haemoglobin levels in stable chronic haemodialysis patients in haemoglobin control measure, patient satisfaction, and nurses’ empowerment.

Methods

A prospective comparative study in 12 measurement points 6 months prior and post implementation. Data collection was based on patient records, including laboratory and hospitalisation, as well as questionnaires on patient satisfaction and empowerment of staff nurses. The protocol included guidelines for haemoglobin level control, including a designated training program for nurses.

Results

Research included 39 patients and 12 nurses. The nurses maintained haemoglobin average of 11.4 g / L post implementation. Haemoglobin fluctuation also remained the same in both periods. A higher percentage of patients had a hemoglobin sequence within the target range of three months after the protocol was implemented. There were significantly fewer infectious disease events after implementation (t(32) = 2.17, p <0.05). In addition, overall patient satisfaction after implementation was significantly higher (t(12) = 2.24, p <0.5). Nurses’ perception of empowerment was increased, but not significantly.

Conclusion/Application to practice

Nurse-led protocol by a qualified nurse keeps the haemoglobin within a safe range. A high dropout rate of patients created a sample limitation and therefore it is recommended to extend the study to additional dialysis centers. To our understanding, the practice of protocol promoted discussion and cooperation between doctors and nurses, contributes to the continuum of care. It is suggested that increase in patient satisfaction after implementation may indicate a positive attitude towards the nephrology nurse’s authority.

Disclosure of Interest

no
Nurses’ perspectives on patient participation in hemodialysis treatments
C. Kurtz1,2, N. Harib1, R. Badran1, H. Goldblatt2
1Hemodialysis, Galilee Medical Center, Nahariya, Israel; 2Department of Nursing, Faculty of Social Welfare and Health Sciences, University of Haifa, Haifa, Israel

Background

Patients' experience of care is an integral aspect of health care quality, and nurses have a strong influence on this aspect. One component of the care experience is patient empowerment, defined as a process in which patients understand their role, and are given the knowledge and skills to perform a task in an environment that encourages patient participation. However, there can often occur a conflict between encouraging patient participation and maintaining control over patient care.

Objectives

To describe nurses’ perspectives, identify difficulties and understand barriers between nursing staff and patient participation during treatment in a hemodialysis unit from nurses’ viewpoints.

Methods

Individual semi-structured, in-depth interviews were conducted with 10 dialysis nurses with post-basic nephrology courses and 5-25 years of experience, followed by thematic analysis.

Results

Three themes were identified:

1. **Supporting patients:** Nurses mentioned the importance of encouraging patients, and of providing physical and emotional assistance.
2. **Nurses’ responsibility:** Nurses expressed a paternalistic approach to patient care. The feeling of responsibility for treatment and safety came at the cost of patient participation and autonomy.
3. **Frustration:** Nurses pointed to limitations from understaffing, overwork, and lack of time for patient education as sources of frustration.

Conclusion/Application to practice

While, in theory, nurses supported the idea of patient participation, in actuality the feeling of responsibility over the patients’ care and safety took precedence, and limited the amount of autonomy given to patients. Patient participation can only take place if there is sufficient time for the required training. This aspect of care is negatively influenced by personal and organizational barriers.

Patient participation and autonomy is an underdeveloped aspect of care in hemodialysis units. The information derived from this study can be used to design and teach nurses a model of patient empowerment.

Disclosure of Interest

no
Exploring the concordance of malnutrition assessment tools with the GLIM criteria among hemodialysis patients

M. Karavetian, N. Salhab, R. Rizk, L. Poulia

Zayed University, Dubai, United Arab Emirates; Maastricht University, Maastricht, Netherlands; The Lebanese University, Fanar, Lebanon; Laiko General Hospital, Athens, Greece

Background

Malnutrition is a common condition in hemodialysis (HD) patients and it is associated with increased risk of morbidity and mortality. Various tools are used for its assessment.

Objectives

The aim of this study was to explore the prevalence of malnutrition using the malnutrition inflammation score (MIS) and the bio-electrical impedance - derived phase angle (PhA) and comparing them to the new Global Initiative on Malnutrition (GLIM) criteria for the diagnosis of malnutrition.

Methods

Seventy eligible and consenting HD patients were assessed in a cross sectional study from a tertiary hospital in the United Arab Emirates. Malnutrition was diagnosed in 2 ways: 1) based on the GLIM criteria using results of the bioelectrical impedance analysis (BIA), 2) using the MIS questionnaire. The Receiver Operating Characteristic (ROC) curves were used to evaluate the ability of the MIS and PhA to correctly distinguish the well nourished from the malnourished patients as screened by the GLIM diagnostic criteria of malnutrition. Optimal, gender specific cut-off points were also identified for PhA according to the GLIM criteria.

Results

Almost half of the sample was diagnosed as malnourished either by the MIS (48.57%) or based on the GLIM criteria (52.86%). Based on Cohen’s Kappa (k), a fair agreement was observed between the malnourished patients assessed based on the GLIM criteria with MIS (k=0.202) and PhA (k=0.279) consecutively. Based on the ROC curves, the area under the curve was greater for the MIS (0.691) as compared to PhA (0.614). PhA had better sensitivity but worse specificity compared to the MIS. Finally, the optimum cut-off point of PhA according to GLIM was PhA ≤5.7° for males and ≤3.8° for females.

Conclusion/Application to practice

MIS tool performed slightly better than PhA in the diagnosis of malnutrition in the spectrum of the GLIM criteria.

Disclosure of Interest

no
Systematic fluid assessment in haemodialysis care: Development and validation of a decision aid
J. Stenberg1, D. Keane2, M. Lindberg3,4, H. Furuland1
1Department of Medical Sciences, Uppsala University Hospital, Uppsala, Sweden; 2Department of Renal Medicine, Leeds Teaching Hospitals Trust, Leeds, United Kingdom; 3Faculty of Health and Occupational Studies, Department of Health and Caring Sciences, Gavle, Sweden; 4Department of Public Health and Caring Sciences, Uppsala University, Uppsala, Sweden

Background

Overhydration is a mortality risk factor in haemodialysis patients, and about a third of patients have poorly controlled fluid balance. Bioimpedance is a technique that can detect excess body water. However it is important to recognize that bioimpedance adds information to what is already a complex decision-making process, rather than providing a simple target applicable to all patients. Clinical guidelines incorporating the information from bioimpedance in determination of dry weight are lacking.

Objectives

To develop and validate a decision aid, which standardizes the process of recording, scoring and responding to changes in routinely measured physiological parameters, and provides a basis for a unified and systematic approach to the assessment of volume status in haemodialysis care.

Methods

We are developing a scoring system, which we have named Subjective Volume Status Score (SVSS). Experts in the use of bioimpedance have been included to address face-validity. In order to test the reliability of SVSS, nurses from a number of British and Swedish haemodialysis units will be recruited to use SVSS in individual assessments of four typical patient cases. Their assessments will be analyzed with inter-rater agreement analysis.

Results

SVSS consists of:

1. A scoring system, built upon six physiological parameters, for detection and assessment of clinical symptoms of impaired hydration status
2. Thresholds and triggers, a simple track-and-trigger system guiding the caregiver in deciding when and how to respond
3. A decision aid, which helps to incorporate the information from bioimpedance when setting the dry weight, and aims to facilitate communication in the team, by providing a common language.

Conclusion/Application to practice

Our guiding principle is that if SVSS is going to work in diverse haemodialysis care settings, then it must be simple to implement and must use physiological parameters that are already being routinely measured in the haemodialysis care.

Disclosure of Interest

no
The effect of patient compliance on the phosphorus level in blood

L. Kaurova¹, I. Bastrykina¹, O. Portnova², M. T. Parisotto³

¹Fresenius Medical Care, Fresenius NephroCare Dialysis Centre, Volgograd, Russian Federation; ²Fresenius Medical Care, Fresenius NephroCare department, Moscow, Russian Federation; ³Fresenius Medical Care, Care Value Management EMEA, Bad Homburg, Germany

Background
Mineral and bone disorders in Chronic Kidney Disease (CKD-MBD) are endemic progressive complication of CKD and characterized by systemic disturbance of mineral and bone metabolism.

Many dialysis patients receive calcium-free phosphorus-binding drugs (phosphate binders). Studies are devoted to patient compliance.

Objectives
The purpose of the study was a comparative assessment of the effect of patient compliance.

Methods
To assess the level of compliance, a self-assessment questionnaire designed for people suffering from chronic diseases was used. 57 patients completed the questionnaire.

The questionnaire was focused on identifying the three components of compliance:
- Social compliance
- Emotional compliance
- Behavioural compliance

Results
Based on the results, the patients were divided into 3 groups:
- high level of compliance - 41 people, (71.9%)
- average level of compliance – 13 people, (22.8%)
- low level of compliance – 3 people, (5.2%)

A significant group of patients with low (5.3%) and medium (22.8%) levels of compliance was identified. The patients belonging to these groups are characterized as emotionally unstable.

Patients who self-identified as low level of compliance, exhibited very high level of serum phosphates.

Conclusion/Application to practice
According to the results, we considered it necessary to identify the low and medium levels of compliance in patients on haemodialysis in order to improve patients well-being and general the survival.

Disclosure of Interest
no
Exploring renal nurses' attitudes and views to a patient's decision to refuse dialysis treatment

M. Kelly
Irish Kidney Association, Dublin, Ireland

Background

How nurses respond to the decision of a patient with end-stage renal disease not to accept or to discontinue dialysis treatment varies. When a nurse has looked after a patient for a considerable period of time, the decision of that patient to refuse treatment can raise feelings and opinions in the nurse about the choice the patient has made. Nurses' personal history, belief systems, and culture will influence how they view their patient's decision. For some nurses, it may be a positive experience accompanying a patient to their death. However, the demands and stresses on nurses today is significant, which can result in the nurse experiencing difficulty processing their feelings of grief and loss. In addition, there may be an institutional culture or peer pressure not to dwell on the loss.

Objectives

A project is proposed to find out about nurses' attitudes and views towards a patient's decision to refuse dialysis treatment and to develop a guide for nurses

Methods

This project is designed in two phases. Phase one - a short questionnaire to ascertain nurses' attitudes about what they think/feel concerning patients who do not wish to begin or to discontinue dialysis. The results of this questionnaire will be presented at this year's EDTNA/ERCA conference in Prague. Phase two - based on the results of the questionnaire a series of 'recommendations' will be drawn up, offering nurses a tool to support them in managing this group of patients.

Conclusion/Application to practice

This project will serve to yield some valuable insights into the topic and to develop a guide to support nurses in managing effectively those patients who refuse or discontinue dialysis.

Disclosure of Interest

no
The effect of working conditions on dialysis nurses' health in Greece
C. Avrami, A. Zezou, S. Zormpas
Dialysis Unit, 401 General Military Hospital of Athens, Athens, Greece

Background

Work in dialysis facilities involves long term contact with chronically ill patients in a technologically complex work environment. International comparisons make it clear that dialysis work is demanding, staffing is constantly reduced and more patients need treatment. Previous studies have highlighted that dialysis personnel face stressors related to the nature of their work. However, there is a lack of data about how work conditions in dialysis facilities influence on staff’s health.

Objectives

The aim of this study was to investigate the correlation between psychosocial, work environmental factors and nurses’ health problems in Greek dialysis units.

Methods

A cross-sectional online 3-month survey was conducted, comprising demographic and work characteristics. The staff of more than 36 hospital-based and private renal units were surveyed with Copenhagen Psychosocial Questionnaire II (COPSOQII). Statistical analysis was performed with software Stata 13.1. The questionnaire was extended by extra dialysis-specific questions.

Results

From the 101 nurses who responded, the majority were female (87.1 %), aged from 23 to 62, while the mean age was 37.6 years. Most of the dialysis staff (84%) had academic level education and 10 years in average working experience in dialysis units. Over 70% of participants considered their general health perception at least very good, despite that half developed musculoskeletal symptoms and 5% suffered from depression. Moreover, one quarter of them had sleep disorders and 1 out of 3 felt exhausted for the last 4 weeks. 55% of dialysis nurses experienced verbal aggression during the last 12 months. Finally, 57% considered their work as creative although more than 8 out of 10 referred to working fast.

Conclusion/Application to practice

Our findings suggest that staff retention can be improved by creating empowering work environments that promote job satisfaction among haemodialysis nurses. Targeted strategies are required to be applied in younger and less experienced nurses in this highly specialised field of nursing.

Disclosure of Interest

no
Which factors influence the level of nursing job satisfaction on haemodialysis private units?

I. Agostinho, S. José, M. Carreira, R. Peralta, B. Pinto, J. Fazendeiro Matos

1NephroCare Almada, Fresenius Medical Care, Almada, Portugal; 2NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Nursing turnover is a global concern due to the serious implications it causes to the institutions, regarding costs, decreasing productivity and quality of services. Considering that the nursing profession is one of the most at risk of Burnout Syndrome, it’s pivotal to study job satisfaction factors and its impact on turnover rates in nursing teams.

Objectives

Identify the key factors that contribute to job satisfaction in haemodialysis (HD) private units.

Methods

Descriptive correlational study involving six HD private units.

Participants completed a previously validated Nurse Job Satisfaction Scale (ESET) for the Portuguese population which consisted of 37 questions (rated from 1 to 5). Paper forms were used for nurses still working in the units. Nurses that left the units were contacted and asked to complete the same survey online.

Results

177 nurses were enrolled, 76.3% female, 81.4% still working in the same dialysis network. 40.1%>11 years of HD experience.

The validity and reliability of ESET were excellent, Kaiser-Meyer-Olkin measure of sampling adequacy (0.947) and the Bartlett’s test value was $X^2=1433.473$ and significant ($p=0.001$). 7 dimensions were extracted and explained 70.52% of the variance. The internal consistency Cronbach's alpha coefficient of the ESET was 0.95.

Mean satisfaction values from the 7 dimensions were:

- Leadership 3.55±0.78 (explained 39% of the variance);
- Co-workers 3.57±0.76;
- Professional Recognition 3.69±0.75;
- Recognition and Remuneration 2.33±0.89;
- Staffing 3.00±0.95;
- Organization 3.77±0.62;
- Resources 3.40±0.95.

Very good and good Cronbach's alpha coefficient was obtained for the 7 dimensions.

Conclusion/Application to practice

Although nurses were not fully satisfied with several items such as salaries, ratios (workload) and career opportunities, most of them were satisfied in working in this dialysis provider network. Organisation and Professional Recognition obtained the better scores, probably due to higher standards and values endorsed by the institution for the Patients and Employees.

Disclosure of Interest

no
Safety climate, safety behaviour and risk perception among nurses on dialysis units

M. Mateus\textsuperscript{1}, M. Cuba\textsuperscript{1}, T. Silva\textsuperscript{1}, F. Leitão\textsuperscript{1}, J. Fazendeiro Matos\textsuperscript{2}

\textsuperscript{1}NephroCare Portimão, Fresenius Medical Care, Portimão, Portugal; \textsuperscript{2}NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Safe and healthy work environments are a key factor for organizational success, particularly in high-risk professional activities. Clinical staff’s safety climate (SC) and risk perception (RP) is considered an important indicator of the implementation level of safety practice and behaviours.

Objectives

- Identify the level of SC and RP;
- Analyse the effects of the Physical (FS) and Psychosocial Safety Climate (PSC) on Safety Behaviours (SB);
- Analyse the effects of RP on SB.

Methods

Quantitative, exploratory, multicentre, correlational study conducted in 37 private Haemodialysis units, from June-2017 to September-2017. Online questionnaire for nurses with the Physical and Psychosocial Safety Climate Scale, the Physical and Psychosocial Safety Behavior Scale (Bronkhorst, 2015), Risk Perception Scale (Moen, 2007) and demographic collecting data. For data analysis correlational and multiple regression analysis were used of the variables under study.

Results

320 Nurses, mean age 35.5(SD=9.4) years, 211 (65.9%) female, 303 (94.7%) Renal Nurses and 17 (5.3%) Head Nurses.

- Higher perception level with the way SC (mean=3.45,SD=0.94) is instituted than PSC (mean=3.09,SD=1.11);
- Importance given to Physical SB (mean=4.07, SD=0.63) is higher than PSC SB (mean=3.89;SD=0.6);
- High level of risk perception (mean=4.15,SD=1.21);
- FS variable correlates positively and moderately with SB – Physical Safety Behavior ($r=0.428; p<0.001$) and Psychosocial Safety Behavior ($r=0.474; p<0.001$);
- SC and the RP are predictors of SB: SC explains 18.3% of Physical SB ($\beta=-0.476; p<0.001$) and 22.6% of Psychosocial SB ($\beta=-0.476; p<0.001$). Risk perception ($\beta=-0.063; p=0.246$) explains 1% of Physical SB and 2% Psychosocial SB.

Conclusion/Application to practice

Results are satisfactory and indicative of a positive SC, a very relevant finding given the importance it has for a safe and healthy performance and for the continuous evaluation of workers' health and safety practice.

Disclosure of Interest

no
Prevalence of musculoskeletal complaints among haemodialysis nurses

E. Westergren¹, M. Spliid Ludvigsen²,³, M. Lindberg¹,⁴

¹Department of Health and Caring Sciences, Faculty of Health and Occupational Studies, University of Gävle, Gävle, Sweden; ²Faculty of Nursing and Health Sciences, Nord University, Bodø, Norway; ³Randers Regional Hospital/Department of Clinical Medicine, Aarhus University, Aarhus, Denmark; ⁴Department of Public Health and Caring Sciences, Uppsala University, Uppsala, Sweden

Background

Discomfort or pain in at least one body region affects many nurses. Depending on location, the prevalence of musculoskeletal disorders (MSD) among hospital nurses is between 10-72 %. Most complaints derive from the neck and shoulders. While there have been a plethora of studies determining MSD prevalence among nurses, no previous study has been found to include haemodialysis nurses. The repetitiveness of priming and dismantling disposables for haemodialysis treatments might be important contributors to musculoskeletal complaints.

Objectives

The primary objective is to explore the prevalence of musculoskeletal complaints among haemodialysis nurses.

Methods

For this cross-sectional study, nurses were recruited from haemodialysis centres in Denmark (n=194) and Sweden (n=351). Incidence of musculoskeletal complaints was evaluated with the Nordic Musculoskeletal Questionnaire (NMQ). The NMQ consists of fifteen items covering nine anatomical areas (neck, shoulders, upper back, lower back, hands, feet, knees, thighs, and elbows). It is a standardised, validated and extensively used questionnaire evaluating the incidence of musculoskeletal complaints in multi-occupational health contexts.

Results

The percentage of nurses reporting musculoskeletal complaints from at least one part of their body was 90.2 % in the Danish and 88.9 % in the Swedish sample. The anatomical locations with most complaints were the neck, lower back, and hands. Except for the proportion of complaints in the neck, there were no differences between the countries. Absenteeism from work was mostly derived from complaints in the hands. There were weak correlations between complaints and age, working years, and working hours.

Conclusion/Application to practice

The prevalence of musculoskeletal complaints seems higher in haemodialysis nurses than in nurses in general. Since complaints from the hands are common, and also related to absenteeism from work, it is of particular importance that nurse managers acknowledge these occupational health and safety hazards in their efforts to achieve a good work environment.

Disclosure of Interest

no
Unchanged nursing caretime for patients undergoing haemodialysis despite changes in characteristics over four years

R. de Kleijn1, C. Uyl-de Groot2, C. Hagen3, J. Schraa, P. Pasker-de Jong5, P. Ter Wee6

1Nefrology, Universitair Medisch Centrum Groningen, Groningen, Netherlands; 2Health Policy & Management, iBMG_EUR, Rotterdam, Netherlands; 3Dialysiscenter, Meander Medisch Centrum, Amersfoort, Netherlands; 4Dialysiscenter, Ziekenhuis St. Jansdal, Harderwijk, Netherlands; 5Meander Academie, Meander Medisch Centrum, Amersfoort, Netherlands; 6Zorgsupport and Nephrology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

Background

We developed a time-validated classification tool to measure the burden of nursing care time in haemodialysis patients. The current study focused on the question whether the increasing age and comorbidity of the haemodialysis population have led to an increased burden of nursing care. We studied potential changes in the predictors of the required nursing time.

Methods

Over a 4-year period a total of 980 chronic haemodialysis patients, nurses filled out the classification tool and a form with patient characteristics. Variation of patient and dialysis characteristics were analysed as well as estimated nursing care time needed. A subgroup of 90 patients, longitudinal changes were monitored by applying the tool at the beginning, after 1 and after 4 year.

Results

Over the 4-year period the average overall needed nursing care time per haemodialysis procedure did not change as an increase in time-demanding components of the needed nursing-time was offset by time saving components. After 4 years a rise in needed nursing time was caused by limited patient mobility and psychological attention, especially in incident dialysis patients. Needed nursing time decreased as patient’s participation in their treatment increased and more utilization of fistula as vascular access. This was particularly seen in the 90 patients with 4-year follow-up in whom the average needed nursing time did not change.

Conclusion/Application to practice

Our study shows that the average nursing time needed per patient has not changed in a 4-year observation period because time consuming characteristics of the needed nursing care time due to increasing age and comorbidity of haemodialysis patients were counterbalanced by timesaving characteristics, mainly as a result of more active participation of patients in their treatments. Time required for incident patients did rise. If a centre has a high rate of incident patients, nurses need more care time for treating patients.

Disclosure of Interest

no
"My Chinese sister " - Who takes care of the caregiver?

V. Sura Zaslavski
Hemodialysis Unit, Assuta Hospital, Haifa, Israel

Background

The staff that treat chronically ill patients are exposed to severe occupational stressors during their work, which can cause Burnout Syndrome, which is manifested in physical and mental fatigue, mood swings, moodiness, anger, frustration, headache and shoulders pain.

As a result, it may cause a decrease in motivation, desire and the ability to care and moreover it can cause a decline in work functioning and the development of diseases.

Improving the degree of understanding and awareness of the damage caused to our bodies during the years of work and the importance of maintaining physical and mental health, can greatly improve caregiver’s quality of life (QOL) and accordingly the quality of care they provide to others.

Recently, there has been a major increase in the accessibility and supply of a wide range of holistic treatments. Their significant effectiveness in treating various health conditions has reached even the health maintenance organizations (HMO’s) and the community clinics, which offer a variety of treatments as part of the provision of health services. This allows the general population to benefit from using these treatments.

Methods

TCM's healing properties and effects on the human brain, were presented in many scientific studies. Chinese medicine includes several treatment methods that work together in combination, such as acupuncture, cupping, moxibustion, herbs nutrition and Tuina (massage therapy).

Using interpersonal interviews, I have shed light on the difficulties that caregivers (including; nurses, nursing aides, technologists, doctors, social workers) are struggle with following the nature of their work. Their testimony will explain how TCM has affected their health and general condition.

Results

As proven before, this study has also shown TCM’s meaningful abilities in healing and improving workers QOL. It is may be important to provide TCM treatments as part of an institutional employee health promotion programs.

Disclosure of Interest

no
S 20  PLENARY SESSION
Join session ANNA-EDTNA/ERCA
Hall B, 14:00-15:30

Vascular Access: an International Perspective

Abstract is not available
**Feasibility of a randomised controlled trial of an arts-based intervention for patients receiving haemodialysis**

C. Carswell¹, J. Reid¹, I. Walsh², H. Noble¹

¹School of Nursing and Midwifery, Queen’s University Belfast, Belfast, United Kingdom; ²School of Medicine, Dentistry and Biomedical Sciences, Queen’s University Belfast, Belfast, United Kingdom

**Background**

Many patients with end-stage kidney disease (ESKD) require haemodialysis, a treatment that impacts profoundly on quality of life. Arts-based interventions can potentially improve quality of life, however there is a lack of evidence assessing their impact on patients receiving haemodialysis and no randomised controlled trials (RCTs) of complex arts-based interventions.

**Objectives**

To evaluate the feasibility of recruitment to a randomised controlled trial of an arts-based intervention for patients with ESKD whilst receiving haemodialysis, and establish the feasibility of implementation of an arts-based intervention within a haemodialysis unit.

**Methods**

Recruitment took place in a single haemodialysis unit in Northern Ireland. During recruitment, nursing staff acted as gatekeepers and screened patients for eligibility, whilst the researcher obtained informed consent. Information on eligibility and reasons for non-participation were captured during the recruitment process and reasons for withdrawal were captured throughout the trial.

**Results**

122 patients were screened for inclusion in the study and 94 were deemed eligible for participation. A total of 24 participants were recruited into the pilot randomised trial. The most common reasons for non-participation were a lack of interest in the arts (n=29) or anxiety over artistic ability (n=11). 80% of the target sample size was reached prior to randomisation. There was an 8% (n=1) attrition rate within the experimental group, with a decline in physical health being the primary reason for withdrawal. 92% (n=11) of participants who were allocated to the experimental group completed the arts-based intervention.

**Conclusion/Application to practice**

Recruitment to a randomised controlled trial of an arts-based intervention for patients receiving haemodialysis is feasible. Implementation of an arts-based intervention within a haemodialysis unit is feasible and acceptable to both patients and healthcare professionals. A definitive randomised controlled trial can help establish the beneficial impact of arts during haemodialysis, and inform future policy and practice.

**Disclosure of Interest**

no
Are chronic kidney disease patients happy people?


1NephroCare Fafe, Fresenius Medical Care, Fafe, Portugal; 2Health Science Institute, Portuguese Catholic University, Porto, Portugal; 3NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Haemodialysis (HD) is one of the options available as a renal replacement therapy, which has an enormous physical, psychological and social impact, with repercussions on personal and family life. Happiness is a common-sense concept used in everyday language and, by definition, is the degree to which the person globally evaluates the quality of his or her life in a positive way.

Objectives

To identify the level of happiness of a person under a haemodialysis programme.

Methods

Descriptive, correlational transversal study was used. The Subjective Happiness Scale (SHS), the Barthel Index for Activities of Daily Life, Karnofsky Performance Status Scale (KPSS) and the Charlson Comorbidity Index (ICC) were applied.

Results

51 patients were enrolled, 32 (62.7%) male. Mean age 63.16 (SD=13.12) years, 37 (72.5%) were married, the remaining were single, divorced or widowed. 40 (78.4%) were retired. Average HD vintage 68.2 (SD=57.38) months.

SHS results showed:

• 35 (68.6%) consider themselves happy or very happy;
• 6 (17.7%) consider themselves not very happy;

When compared with other patients:

• 31 (60.8%) report to be happy;
• 7 (13.7%) report to be unhappy;

Correlating KPSS with:

• SHS - there was a significant ($p=0.02$), positive but weak correlation ($r_s=0.325$);
• Barthel Index - there was a significant ($p<0.001$), positive, moderate correlation ($r_s=0.671$) i.e. the lower the functional disability, the higher the performance according to KPSS.

On average, patients with HD vintage <36 months were happier.

On average, employed or retired patients were happier than unemployed patients.

On average, men were happier in spite of having higher ICC score.

Conclusion/Application to practice

Although these patients have a chronic illness, most of them consider themselves happy. 2 patients even consider themselves happy although incapable according to KPSS and ICC.

These results can be explained by the cultural habits and customs specific to the local cultural habits.

Disclosure of Interest

no
SO 76

“Hope” - a multidimensional concept in nursing care
V. Barroso Henriques¹, A. Vieira¹, F. Vieira¹, J. Fazendeiro Matos², M. T. Parisotto³
¹NephroCare Braga, Fresenius Medical Care, Braga, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; ³Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

“Hope”, often viewed as an elusive and abstract notion, is described in nursing literature as a multidimensional concept. It has been considered as one of the fundamental elements experienced by patients and families in chronic illness and is often used as an instrument of support by suffering patients.

The first instrument to measure “Hope” was created in the 70’s, several updates were made to the theoretical framework and in 1991, Herth developed a longer scale, named Herth Hope Scale (HHScale). Nowadays this instrument is widely used in the clinical context, namely in elderly patients undergoing haemodialysis (HD).

Objectives

• To determine the level of hope of patients undergoing HD.
• To identify their socio-demographic and clinical characteristics.

Methods

Descriptive, quantitative cross-sectional study. The used instrument was the Herth Hope Index (HHI-PT) (Portuguese validated version) through Likert scale. Total scoring from 12 to 48 and the reliability was verified through the internal consistency analysis by Cronbach’s Alpha. The level of significance was considered p<0.05. The socio-demographic and clinical data were collected from patients in haemodialysis and were analysed by descriptive statistics.

Results

The sample comprised 73 individuals, 57.53% male and 42.47% female, with a mean age of 65.59±19.91, predominantly Catholic, 97.26% and 60.27% with a partner. Regarding HHI-PT the internal consistency reliability was 0.84. The highest levels of hope are related to the items HHI-05 “faith that gives comfort” (mean = 3.57, SD = 0.49) and HHI12 “my life has value and worth” (mean = 3.20, SD = 0.96).

Conclusion/Application to practice

Our findings support the initial postulate: “Hope” is a prerequisite for effective coping with dialysis treatment and has a protective function against the physiological and psychological effect of a chronic illness, although further exploration for the HHI-PT factor structure in dialysis patients is required.

Disclosure of Interest

no
Quality of life of dialysis patients and treatment regime adherence
A. S. Gomes¹, C. Gonçalves¹, F. Gomes¹, B. Pinto², J. Fazendeiro Matos²
¹NephroCare Vila Franca de Xira, Fresenius Medical Care, Vila Franca de Xira, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background
It is a known fact that patients' adherence to treatment regimes improves treatment outcomes and so, should improve patient’s quality of life (QoL).

Close contact and continuous patient support by the nursing team is fundamental to promote compliance and early intervention to any treatment outcomes deviation.

Objectives
Verify in which way treatment regime adherence influences patients' perception of QoL.

Methods
Single-centre, prospective, correlational study.

EQ-5D-5L (EuroQol, 5 dimensions: mobility, self-care, usual activities, pain/discomfort and anxiety/depression) and 5 levels: 1 more independent and 5 more dependent, was applied semiannually from July 2017 until July 2018. Treatment adherence was evaluated for prevalent patients, by assessing: treatment attendance, phosphate and potassium levels and hydration status (from bioimpedance device). Degree of adherence to extra-dialytic medication was also assessed monthly by the amount expected to be delivered versus the quantity effectively delivered. Patients were then divided in two groups, according to compliance for the described criteria: adherent group (AG) versus non-adherent group (NAG).

Patients with comprehension difficulties were excluded.

Results
In 3 evaluations, 327 questionnaires were obtained.

AG results:
- Correlation between pain and self-health state perception (SSP) was moderate and negative $r = -0.400$, $p = 0.002$.

NAG results:
Hydration status:
- Moderate and negative correlation between SSP and usual activities $r = -0.518$ and anxiety/depression $r = -0.588$, both significant;

Adherence to extra-dialytic medication:
- Significant correlation ($p = 0.000$), moderate and negative between SSP and mobility $r = -0.509$; personal care $r = -0.410$ and usual activities $r = -0.482$.

Conclusion/Application to practice
In overhydrated patients the dimensions of usual activities and of anxiety/depression seem to influence perceptions about their health.

Nonadherence to medication seems to influence QoL dimensions and perceptions of health. This is a parameter on which the nursing team should reflect in order to educate patients about the importance of adherence to medication to minimize later effects.

Disclosure of Interest
No
Perception of the patients’ quality of life during the first year of dialysis treatment

C. Gonçalves¹, C. Fonseca¹, F. Gomes¹, B. Pinto², J. Fazendeiro Matos²

¹NephroCare Vila Franca de Xira, Fresenius Medical Care, Vila Franca de Xira, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Patients who are in stage 4 and/or 5 of their renal disease experience serious complications reducing their Quality of Life (QoL).

Starting dialysis usually contributes to the recovery of some fundamentals self-care activities and consequently, an improvement in QoL perception.

Objectives

Evaluate patients' perception of QoL during the first year undergoing dialysis.

Methods

QoL was assessed by the EQ-5D-5L (EuroQol, 5 dimensions: mobility, self-care, usual activities, pain/discomfort and anxiety/depression) and 5 levels: 1_more independent and 5_more dependent.

From January 2017 to August 2018, 23 patients were enrolled.

Questionnaire applied at baseline (T0), 6 months (T1), 1 year (T2). Self-health state perception (SSP) tool was correlated with age and gender.

Results

13 (57%) male, mean age 72.35 (SD=10.29) years.

Results:

Progressive increase from T0 to T2 in dimensions:

- Mean usual activities: T0_2.30 (SD=1.30) to T2_2.65 (SD=1.64);
- Mean pain/discomfort: T0_1.83 (SD=0.94), T2_2.31 (SD=1.06);
- Mean SSP: T0_62.48% (SD=19.93), T2_62.57% (SD=21.92);

Mean anxiety/depression decreased from T0_2.00 (SD=0.95) to T2_1.57 (SD=0.79).

Correlations between SSP and mobility, self-care and usual activities were weak and negative in all periods but significant:

- SSP versus mobility: T0 r(23)=-0.598; T2 r(23)=-0.456;
- SSP versus self-care: T0 r(23)=-0.504, p=0.014; T2 r(23)=-0.528 p=0.010;
- SSP versus usual activities: T0 r(23)=-0.446, p=0.033; T2 r(23)=-0.453 p=0.030.

All other correlations between SSP and other dimensions were not significant.

Conclusion/Application to practice

Variables related to mobility, usual activities and self-care are those that negatively influence patients’ perception of QoL, probably due to patients’ expectations related to the treatment, as we postulate that patients probably expect a full recovery of their condition.

Pain/discomfort is not a meaningful dimension in patients’ perception of their health.

These data help to perceive patients' most valued dimensions, providing the nursing team with appropriate caring interventions.

Disclosure of Interest

no
Investigation of fatigue and some factors affecting patients with chronic kidney disease

M. Mollaoğlu, E. Başer
Nursing Department, Sivas Cumhuriyet University, Sivas, Turkey

Background

Fatigue can adversely affect individuals in terms of social, biological and psychosocial aspects. To determine the causes of fatigue in patients with chronic kidney disease (CKD), to take measures against the factors affecting; It improves the quality of life of patients and their compliance of treatment.

Objectives

The study was carried out to investigate some factors affecting fatigue in CKD patients.

Methods

This descriptive study was conducted with a total of 110 patients attending at University Hospital nephrology service and hemodialysis unit. The data were collected using the Patient Information Form to identify the demographic characteristics and clinical parameters of patients and Fatigue Severity Scale (FSS).

Results

50.9% of the patients were women and 54.5 % of the participating patients were between the ages of 46-69. The mean score of the fatigue severity scale was 47.00 ± 13.59. Severe fatigue was detected in the patients. 69.5% of the patients had anemia and the mean hemoglobin value was 10.61 ± 2.03 g/dl. The examination of the sociodemographic characteristics showed that the higher levels of fatigue were associated with the following factors including the female gender, being at the ages 70 and older, moderate income, house wifes (p< 0.005). The mean score of fatigue severity of the individuals with a diagnosis period of 10 years or more was also high. The severity of fatigue increases as the presence of heart failure, hypertension and coronary artery disease and comorbidity increases. A positive statistically significant association was found between the anemia and fatigue severity. And also between fatigue severity with hemoglobin value was negative correlation.

Conclusion/Application to practice

Given that chronic fatigue is a major determinant of CKD patients' quality of life, nurses can bring about a fundamental improvement in patients' well-being if they recognize the most common fatigue-perpetuating factors and facilitate fatigue management interventions.

Disclosure of Interest

no
"Outstanding patient" competition among dialysis patients to promote adherence to treatment

L. Michaelashvili, A. Schneider, L. Shwarz
Nephrology, Soroka university medical center, Beer-sheva, Israel

Background

Chronic hemodialysis patients deal with the burden of dialysis regime that causes ongoing difficulties and poor health outcomes. The effectiveness of chronic dialysis depends on dialysis quality, adherence to appropriate nutrition and medications. All these can help to reduce morbidity and mortality, as well as improving the quality of life.

Objectives

To improve the adherence to dialysis treatment.

Methods

A competition of "Outstanding Patient" was arranged within the group of chronic hemodialysis patients. Data collection was performed by questionnaire containing demographics, the patient's perception of health, mood and achievement, sense of support from family, friends at home and dialysis. Laboratory indices (phosphorus, potassium) and fluid accumulation between dialysis procedures were evaluated. Knowledge on topics related to dialysis, medications, nutrition and blood tests and his condition in this regard were examined.

Results

11 patients have agreed to participate in this project, 7 women and 4 men. Average age was 58(34-78) years, vintage on dialysis 5.3 years(1-10).

Questionnaire examining emotional state support by the following scores: perception of health- average 3 on a scale of 4(range 2-4), mood and feeling of vigor 4.9 out of 6(range 1-6); overall sense of support- average 5.8 out of 7, including family, friends' and dialysis peers support. Knowledge score in average 76(40-100).

Two months after the process start, biochemical tests and fluid retention were compared.

A festive announcement was made to participants, when an outstanding patient was honored for improvement in adherence to therapy.

Conclusion/Application to practice

The process was accompanied by an atmosphere of enthusiasm among patients, a sense of competitiveness and a desire to succeed. Discussions were held among them during dialysis. The patients were interested in the tests results and about the time of the announcement. As a continuation of the process, we will continue monitoring and sharing the results and to extend their success.

Disclosure of Interest

no
Exploring the knowledge of non-renal nurses regarding the nursing management of inpatient haemodialysis patients
F. Costales¹, M. Richards², N. Goodrich², J. Stribling², N. Richards¹
¹Nursing, SEHA Dialysis Services, Abu Dhabi, United Arab Emirates; ²Faculty of Health Science, De Montfort University, Leicester, United Kingdom

Background

Due to the fact that patients with ESRD on intermittent haemodialysis are often hospitalized, they are considered to be susceptible to deterioration in their health conditions during and after hospitalization. However, the acute care facility in Abu Dhabi has no exclusive renal ward; renal patients are usually admitted on to a medical ward.

Objectives

The primary aim of this service development project is to assess the awareness of non-renal nurses in a medical ward regarding the nursing management of haemodialysis patients who are admitted in one of the acute care hospital in Abu Dhabi. The assessment concentrates on particular themes specifically anemia management, nutrition and fluid management, continuity of care and vascular access care for hospitalized hemodialysis patients.

Methods

This is a single centre evaluation using an online survey questionnaire. The sample of this study is non-renal nurses working in the medical ward that provides care for hospitalized haemodialysis patients. The inclusion criteria are non-renal nurses without haemodialysis experience.

Results

A total of 15 respondents were analyzed. The author identified some variations in the care provision process from the non-renal nurses in the medical ward. The majority are not familiar with many of the standard referral process for admitted haemodialysis patients. Although respondents were familiar with the hydration management for patients on intermittent haemodialysis, there were gaps observed in their knowledge regarding the recommended diet and anemia management.

Conclusion/Application to practice

The identified gaps in the knowledge of non-renal nurses necessitate intervention. Thus, it is suggested that implementation of awareness programs such as huddles and application of wrist band can improve communication among nurses. Provision of continuing education can positively impact quality nursing practice and patient care. In addition, it is proposed that the integration of a renal care nurse specialist in the medical team can potentially improve patient and health system outcomes.

Disclosure of Interest

no
Haemodialysis nurses’ confidence in carrying out a comprehensive renal physical assessment: a pilot project
R. Villanueva1, D. Marquez2, M. Richards1, N. Goodrich2, J. Stribling2, N. Richards1, J. K. Laguardia1
1Nursing, SEHA Dialysis Services, Abu Dhabi, United Arab Emirates; 2Faculty of Health Science, De Montfort University, Leicester, United Kingdom

Background

Nursing assessment is one of the cornerstones of nursing practice. Moreover, Nurses are the frontline in giving care to the patients, whether it is in the emergency department or any other medical wards or specialised areas. Therefore, nurses should be equipped with the knowledge and skills needed in order to provide safe and effective quality care that improves outcome for the patients.

Methods

This pilot service development project will look at the confidence level of nurses in carrying out a comprehensive physical assessment in renal patients working in a haemodialysis unit in the Emirate of Abu Dhabi, United Arab Emirates. Quantitative analysis of 30 respondents coming from the haemodialysis unit nursing staff is analysed using SurveyMonkey, an online survey tool.

Results

The data analysis revealed that nurses are confident in renal comprehensive physical assessment in areas such as cardiovascular and pulmonary assessment, peripheral oedema assessment, vascular access assessment, peripheral nerve damage as a complication of diabetes mellitus and abdominal assessment with response rates of 69%, 62.1%, 65.5%, 55.18% and 48.3% respectively. Furthermore, the nurses are confident in carrying out the overall renal comprehensive physical assessment with a response rate of 75.87%. Nonetheless, 100% of the respondents answered a comprehensive renal physical assessment training is warranted for them to deliver a safe and effective nursing care to their dialysis patients. Moreover, the respondents identified both nurse-patient ratio and non-bedside workload as a major barrier in carrying out the renal comprehensive physical assessment with a response rate of 62.07%.

Conclusion/Application to practice

In exploring the confidence level of nurses in carrying out the full physical assessment in the dialysis population and the barrier to performing the assessment, this highlighted that whilst many felt competent in such assessment there were barriers to implementation. Furthermore, a qualitative approach is warranted to further explore the confidence level of nurses.

Disclosure of Interest

no
Nursing case manager in a haemodialysis unit: the way to improve
P. Gonçalves¹, R. Sousa¹, A. Silva¹, M. Coimbra¹, R. Peralta², J. Fazendeiro Matos²
¹NephroCare Viseu, Fresenius Medical Care, Viseu, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background
Case manager-based systems have been shown to improve patient outcomes in many settings. The collaborative work reduces fragmentation of healthcare delivery in the outpatient dialysis setting. Case managers increase the services of nurses and physicians with a focus on continuous quality improvement indices.

Objectives
To understand the application of the nursing case manager model in a haemodialysis unit and in the evaluation of treatment outcomes.

Methods
Our unit is running a nurse reference program since 2010. In 2015 we gradually changed the programme to a nursing case manager model. We developed a retrospective, descriptive study, through the analysis of treatments outcomes, intradialytic complications, clinical quality indicators and new protocols (first health care, diabetes units and nursing homes) between 2015 and 2018.

Results
In 2018 we had 7 case manager nurses, responsible for up to 20 patients each. When we compared 2015 with 2018 we observed an improvement in the treatment outcomes, effective dialysis time (82.8% to 93.3%), Kt/v (84.3% to 94.2%), substitution volume (71.1% to 80.6%), number of arteriovenous fistula (72% to 77.4%), fluid management, (64.8% to 73.7%), and heparin dose (67.2 IU/kg to 64.2 IU/kg). We also observed a reduction in the major intradialytic complications: hypotension (16.7 to 11.1/months), cramps (5.1 to 1.6/months, p=0.004), thrombosed vascular access (8.0 to 2.0/year, p=0.014) and central venous catheter blood flow complications (9.7 to 6.7/months). We improved HBV vaccination (71.8% to 99.3%) and flu vaccination by changing vaccine programme management. We increased nursing liaisons especially with primary care and nursing homes.

Conclusion/Application to practice
The case managers are the backbone of nursing care and through this model, nurses can lead an effective improvement in haemodialysis unit results especially those related to the patient quality outcomes.

Disclosure of Interest
no
Providing mindfulness meditation to patients with end stage kidney disease- overview of best practice

C. Mc Veigh1, J. Reid1, I. Walsh2, H. Noble1

1School of Nursing and Midwifery, Queen’s University Belfast, Belfast, United Kingdom; 2School of Medicine, Dentistry and Biomedical Sciences, Queen’s University Belfast, Belfast, United Kingdom

Background

Chronic kidney disease (CKD) presents a global health challenge in the context of an aging population. Patients with ESKD often experience multiple comorbidities, high physiological and psychosocial symptom burden, limited life expectancy, poor quality of life and significant unmet palliative care needs. Internationally, it is recognised that mindfulness as a therapeutic, holistic treatment can positively impact overall wellbeing for patients with chronic conditions. Paying attention to the present moment, including thoughts and feelings, can improve mood, focus and resilience. Mindfulness has been described as being able to facilitate uninterrupted attention without reproach and is concerned with developing non-judgemental awareness. Mindfulness based therapies are viewed as safe and transferable approaches, with significant potential to improve psychological wellbeing.

Objectives

To provide an overview of best practice when providing mindfulness meditation skills to patients with ESKD

Methods

A literature review was conducted using the following databases: EBSCO, Cinahl, PsychINFO and Medline. Appropriate MeSH terms relating to mindfulness meditation for patients with ESKD were utilised and full text English language articles published between 2008 and 2018 were reviewed.

Results

Mindfulness meditative practices are an effective way to help manage the holistic symptom need of patients with ESKD. Previous research has demonstrated that engaging this clinical population in the practice of mindfulness meditation can have a positive effect on quality of life and psychosocial symptoms such as anxiety, stress, depression and insomnia. Mindfulness may also influence the patient’s physiological condition through improved biochemical marker levels and blood pressure reduction. Implementation methods vary and include interventions such as face to face yoga sessions, or telephone mindfulness meditation workshops.

Conclusion/Application to practice

Mindfulness is an approach that can potentially improve the holistic wellbeing of those dealing with kidney disease. However, further interventional research is needed to identify how these practices could be optimally implemented with this population.

Disclosure of Interest

no
Evaluation of the efficiency of hygiene and infection control trainings in haemodialysis centers

F. Kaban¹, N. Burbut², Ö. Usul², B. Yılmaz³, E. Dane³, D. Yalçın⁴, H. Kaptanoğulları¹,⁵

¹Training Coordinator, Vocational School of Health Services- Dialysis Department, Lecturer, Medikare Dialysis Centers, Biruni University, İstanbul, Turkey; ²Registered Mentor Nurse, Medikare Dialysis Centers, İstanbul, Turkey; ³Vocational School of Health Services- Dialysis Department, Lecturer, Acıbadem University, İstanbul, Turkey; ⁴Vocational School of Health Services- Dialysis Department, Lecturer, İstanbul Bilim University, İstanbul, Turkey; ⁵Chairman-Vocational School of Health Services- Dialysis Department, Academic member, Medikare Dialysis Centers, Biruni University, İstanbul, Turkey

Background

In haemodialysis centers, hygiene and infection control are important to ensure the safety of patients, employees and the environment and to reduce morbidity and mortality rates.

Objectives

The aim of this study is to determine the knowledge level of hygiene and infection control with health care workers in haemodialysis centers, to determine the effect of inservice training on knowledge levels, to determine the training performance level one year later, to make improvements about the content, method and frequency of the program according to the results of the analysis.

Methods

49 healthcare professionals were included in study, from 3 hemodialysis centers in Istanbul. The study was designed as a pre-test / post-test comparison and a comparative quasi-experimental type with the same health workers, with one year break. Data was analyzed by dependent t-test and ANOVA test. In addition, the analysis of Infection Control Indicators was calculated with % frequency.

Results

A significant difference was observed when the T test was analyzed by comparing the pre- and post-test results. One year after training, the test was given again to the 25 participants who took part in all of the tests previously, and no significant change was found. The knowledge of the participants was preserved. According to occupational groups, information level analysis revealed that the level of knowledge increased significantly in all occupational groups and the level of knowledge was maintained after one year, also Infection Control Indicators improved.

Conclusion/Application to practice

It was determined that the hygiene and infection control training increased the knowledge level of the employees, the tools and methods which were used for the training were appropriate. Results showed that frequency of the training system was sufficient because of the workers’ knowledge level stability. Also, Infection Control Indicators are an important parameter to detect the transformation of the information into practice.

Disclosure of Interest

no
SO 86

Timely referral to angioplasty due to arteriovenous fistula maturation failure

T. Carvalho¹, B. Pinto², R. Peralta², J. Fazendeiro Matos², P. Ponce³

¹Centro de Acessos Vasculares NephroCare Lisboa, Fresenius Medical Care, Lisboa, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; ³NephroCare Portugal, Fresenius Medical Care, Lisboa, Portugal

Background

Physical examination (PE) is determinant to identify arteriovenous fistula (AVF) maturation. If maturation has not occurred within six weeks, some procedure must be done to diagnose and correct any dysfunction. A failed maturation includes a combination of early thrombosis, low blood flow (Qa) and inadequate clearance, resulting in an unreliable use of AVF. Studies report a wide range of successful maturation rates between 40% to 80%. Timely angioplasty can safely and effectively improve the lifetime of the immature AVF with success.

Objectives

To assess if a timely referral to angioplasty due to arteriovenous fistula maturation failure improves AVF patency.

Methods

A correlational, descriptive and retrospective analysis, registry-based, including all patients referred to our vascular access centre due to AVF maturation failure from January 1st 2016 to December 31, 2017

Results

In this period 76 patients were referred to angioplasty due to AVF maturation failure, 42 (55.3%) were male, 37 (48.7%) were diabetics and 46 (60.5%) with a proximal AVF. To angioplasty were submitted 43 patients (56.6%), with an improvement in AVF use in 32 (74.4%) patients. After angiography 10 (13.2%) patients were referred to surgery. Culprit stenosis was located in the VA inflow (artery, anastomosis, or swing segment) in 41 (54.0%), and along the VA itself in 26 (34.2%). The mean interval between arteriovenous fistula creation and referral to angiography was 33.85±40.54 weeks. Using the Spearman test, we found a very low correlation between referral time and the successful use of AVF after angioplasty (rₛ=0.151; p=0.192).

Conclusion/Application to practice

Late referral may justify these results. It is essential to establish a systematic approach to improve nursing PE and promote early patients’ referral with AVF maturation failure to angioplasty.

Disclosure of Interest

no
The Older Dialysis Patient: Issues and Concerns
A. Hellebrand

The geriatric and frail individuals with multiple comorbidities have unique physiological issues that have yet to be defined. Care models, metrics and outcome parameters for people who suffer with End Stage Renal Disease and are sixty-five years of age and older demand the attention afforded to pediatrics and the general population. It is with this in mind research and discussion are paramount in providing optimal care.
Kidney supportive care: Evaluation of treatment decision-making and advance care plans

A. Bonner¹,²,³, I. Berquier², H. Healy²,³, L. Purtell¹,²,³

¹School of Nursing, Queensland University of Technology, Brisbane, Australia; ²Kidney Health Service, Metro North Hospital and Health Service, Brisbane, Australia; ³Chronic Kidney Disease Centre of Research Excellence, University of Queensland, Brisbane, Australia

Background

The wellbeing of people with advanced chronic kidney disease is greatly impaired. Their care may include kidney replacement therapy (KRT) although largely people have limited knowledge of KRT and are participating in the complex decisions of different treatment pathways. A kidney supportive care (KSC) program could assist with complex decision-making.

Objectives

To examine the type of decisions made by patients who attended a structured KSC program.

Methods

Participants were recruited from a KSC program from its commencement in February 2016 up until December 2018. Data were extracted from hospital records including: participant demographics, comorbidities (calculated using the Charlson Comorbidity Index), decision metrics (decisions about KRT, documentation of advance care plans and end of life wishes) and deaths.

Results

Over a three year period, 333 patients (54% male), mean age 71.3 years, attended the clinic with 67 (17%) making a change of treatment pathway. Of these, 35 decided not to start KRT and 26 to withdraw from KRT, with 2 opting to commence KRT and 1 changing from a peritoneal to an in-centre haemodialysis treatment pathway. Those changing pathway were older (mean age 75.7 vs. 70.3, p<0.005) and had a higher comorbidities score (7.4 vs. 6.4, p<0.001) than those who did not change pathways. During the study period <5% changed their decision, 112 had advance care documentation recorded and 131 people died. Of those who indicated a preference, 60% died at their preferred final place of care.

Conclusion/Application to practice

Through attending this KSC program, patients were better prepared to actively participate in treatment decision-making and to engage in conversations about advance care plans. The multidisciplinary KSC team have skill sets to deliver a structured yet individualised program with treatment decisions communicated to other treating teams. Patient experiences and satisfaction with the program are routinely evaluated to ensure it is meeting their needs.

Disclosure of Interest

no
Palliative care needs in chronic kidney disease on regular haemodialysis patients

T. Silva¹, M. Mateus¹, M. Cuba¹, F. Leitão¹, J. Fazendeiro Matos², M. T. Parisotto³

¹NephroCare Portimão, Fresenius Medical Care, Portimão, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; ³Care Value Management, Fresenius Medical care, Bad Homburg, Germany

Background

Chronic renal failure is characterized by a multiplicity of comorbidities and diverse symptoms associated with the progression of the disease. Some authors refer fatigue, pain and sleep disorders as the most frequent symptoms of this condition. Thus, it is necessary to perform a palliative care approach in order to promote the patient's quality of life in a regular haemodialysis program.

Objectives

- To identify the palliative care needs in the Chronic Kidney Disease (CKD) on a Regular Hemodialysis (HD) Program;
- To analyze the effects of palliative care (PC) on IRC in HD.

Methods

A quantitative and descriptive study was carried out from October 2017 to October 2018. Resorting to a patients nursing assessment tool of a central database, five patients with PC needs were selected and a personalized care action plan was developed.

Results

Average age was 76.4 years, 5 (80%) were male.

- The most prevalent comorbidities were: 60% oncological disease, 60% diabetes mellitus, 40% dementia;
- The most frequent palliative measures were:
  - Therapeutic adjustment: analgesics (100%), anxiolytics (40%), corticosteroids (20%); anti-inflammatory drugs (20%);
  - Treatment adequacy and dialysis dose (reduced treatment time/frequency and ultrafiltration rate): 80%;
  - Referral to Hospital and Community PC Team: 80%.

Conclusion/Application to practice

PC is fundamental in relieving suffering and promoting patient comfort on patients on regular HD program with associated symptomatology. Despite the small sample, the need for palliative actions in CKD is crucial. Through the actions carried out probably there was an increase in quality of life for patients and families. Nurses playing a key role in the evaluation of the patient, helping to gain autonomy, avoiding therapeutic futility with pharmacological and non-pharmacological prescriptions.

Disclosure of Interest

no
SO 89

Last days of hepatitis C virus

P. Kabai, G. Becs, J. Mátyus, L. Újhelyi, I. Tornai, J. Balla

Dialysis Centre, Fresenius Medical Care, Debrecen, Hungary

Background

The development of an interferon-free treatment method is a real breakthrough, because the Hepatitis C Virus (HCV) infection can be not only treated but also cured.

Objectives

Complete healing of HCV infected chronic dialysis patients with the interferon-free treatment.

Methods

Our patients tested positive for anti-HCV during routine pre-dialysis serological examinations. Our anti-HCV positive patients receive further treatment by hepatological clinics. Previously, this treatment consisted of co-administration of interferon and ribavirin. Many of our patients could not finish interferon based treatment because of its side effects, for example depression, fatigue and joint pain. In recent years the more efficient DAA (direct effect antiviral agents) treatment has been introduced. Total duration of therapy is 12 weeks on average with fewer side effects than previous ones, which did not occur in our current patients practically.

Results

Earlier, 14 anti-HCV positive patients were treated in a separated room by dedicated nurses. 8 out of our 11 HCV-RNS positive patients received the previously available interferon treatment, of which 2 patients became persistent negative, other 2 patients with transient negative results were observed HCV-RNA positivity again with the suspicion of reinfection and the therapy was unsuccessful in 4 patients. 9 patients received the current interferon-free therapy, of whom 1 patients are still in the release test while 8 patients have been cured successfully. Patients had become more satisfied and free to live socially again, establishing social relationships without distinction. At first, the patients with no history of blood born infections had more difficulty to accept them, but after being informed they were able to accept that these patients were no longer HCV positive. Last but not least, the overload of the nurses was reduced.

Conclusion/Application to practice

According to the results, 100% of our treated patients recovered from HCV infection, while their life expectancy and attitude towards transplantation significantly improved.

Disclosure of Interest

no
Development and introduction of a mentorship learning program for renal nurses

L. Brown, G. Fogarty
Department of Nephrology, John Hunter Hospital, Newcastle, Australia

Background

Throughout the nephrology ward, inpatient and community dialysis settings, the new graduate and transition to specialty practice nurses complete a comprehensive pathway. This ensures high quality care and management of patients, with the completion of educational material and competency based skills for the developing renal nurse. A mentor is allocated to the nurse as each joins the team, however there was previously no standardised approach in the delivery by mentors of training, assessment and support.

Objectives

To achieve consistency of mentorship through provision of targeted education for mentors to enable new to renal nurses develop to their full potential.

Methods

A training program was developed for identified mentors in the ward, inpatient and community dialysis areas. Prerequisites for the program included:

- Minimum of twelve months renal experience.
- Completion of core renal learning packages.
- Attainment of core renal competencies.

The program consisted of:

- Pre reading and an online survey to ascertain their level of knowledge.
- Six hour structured mentorship workshop.
- Mentorship meetings throughout the year (5 x 1 hour meetings).

Results

Introduced in November 2017, the program has had two successful intakes with fourteen renal nurses completing the training. Evaluations have been highly positive. Feedback has focused around the continued need for mentorship to be something provided by some and supported by all. A cultural change has begun with mentors now networking across different clinical areas.

Conclusion/Application to practice

The program format is now offered over 3 x 2 hour sessions for ease of access. It is hoped that with the training of more staff, a culture of mentor/mentee support will be evident throughout the renal department.

Disclosure of Interest

no
Psychosocial experiences of patients with end stage kidney disease: a phenomenological study

J. J. Wakio Mureithi¹,², M. C. Atieno Wagoro¹

¹School of nursing sciences, University of Nairobi, Nairobi, Kenya; ²Renal unit, Kenyatta national hospital, Nairobi, Kenya

Background

Patients suffering from End–Stage Kidney Disease (ESKD), undergo various replacement therapies that require significant lifestyle adjustments and cause emotional problems. If the emotional problems are not promptly identified and managed, patients develop mental disorders. Consequently, patients fail to comply with treatments and their health deteriorates rapidly.

Objectives

The researchers explored psychosocial experiences of patients with ESKD in an attempt to understand their challenges so that appropriate interventions are planned and implemented.

Methods

Phenomenology study was conducted with patients in ESKD in a renal unit of a National referral hospital in Kenya. Using the principle of saturation, 14 patients diagnosed with ESKD undergoing replacement therapies were purposively selected. Face-to-face in-depth interview were conducted for 16 weeks using interview guide complemented with audio recorder and field notes. Rich descriptive data on patients’ psychosocial experiences were generated. Explicitation of data was conducted following the processes of bracketing and reduction, delineating units and clustering them by meaning to form themes, summarizing and validating the statements and finally extracting themes and composing the narrative about the patients’ psychosocial experiences.

Results

Four themes that emerged from the study were social isolation, financial depletion, social role dysfunctions and alteration in sexual patterns. These experiences were from the patient’s perspectives a source of emotional and social suffering.

Conclusion/Application to practice

Phenomenology is a useful approach in exploring what and how psychosocial problems are experienced by patient

Application to practice: These findings may be used to predict the psychosocial challenges that patients in ESKD are likely to experience and guide the health care professionals on targeted psychosocial care for patients with ESKD. Further, nurses researchers can explore whether social isolation originates externally or internally.

Disclosure of Interest

no
The effect of a balance exercise programme on haemodialysis patients

1NephroCare Covilhã, Fresenius Medical Care, Covilhã, Portugal; 2NephroCare Portugal, Fresenius Medical Care, Lisboa, Portugal; 3Department of Sport Sciences, University of Beira Interior, Covilhã, Portugal; 4Research Centre in Sport Sciences, Health Sciences and Human Development, CIDESD, Covilhã, Portugal; 5NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; 6Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Protein-energy wasting is a common condition in haemodialysis (HD) patients. This fact leads to an important impairment in muscle mass and function. Furthermore, HD treatment itself relates with several factors, such as fatigue and hypotension, which reduces postural balance, increasing the risk of falls.

Objectives

To evaluate the effect of a specific exercise program on haemodialysis patient's balance.

Methods

Patients that were already included in an intradialytic exercise programme (aerobic and strength training) but remained with a poor balance evaluation (below the age and gender reference values for single leg stance test (SLS)) or history of falls in the previous month were included.

Patients were evaluated before and after the balance exercise programme for body mass index (BMI), body composition by bioimpedance spectroscopy (lean tissue index – LTI; fat tissue index – FTI) and SLS. The balance training includes 6 different exercises and was performed 2 times per week (before dialysis treatment) for 12 weeks. Each session lasts about 10 minutes. This programme was implemented in collaboration with exercise physiologists. It used the Wilcoxon test.

Results

Sixteen patients were enrolled mean age was 67±12 years, BMI of 29.16±4.15 kg/m², LTI of 12.77±2.17 kg/m², FTI of 15.84±4.52 kg/m², dialysis vintage 43.25±23.31 months. Patient adherence, assessed by attendance, was elevated (82.38±20.1%). No adverse events were reported. A significant improvement in SLS was observed between pre and post training (5.60±4.12 seconds versus 10.06±0.48 seconds, p=0.008).

Conclusion/Application to practice

A specific balance training for HD patients is a feasible and safe intervention that increased the SLS performance, suggesting an improvement on the functional balance. This strategy has the potential to reduce falls incidence in this population and future investigations should address this topic in future studies.

Disclosure of Interest

no
Factors influencing incidence of falls in haemodialysis patients

H. Oliveira¹, L. Amado¹, V. Miranda¹, R. Peralta², J. Fazendeiro Matos²
¹NephroCare Maia, Fresenius Medical Care, Maia, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Many studies have shown that falls are common in patients on haemodialysis (HD), often with serious consequences. However, not much is known concerning the characteristics of falls.

Objectives

- To assess where most falls occurred, their consequences, need for assistance and increasing dependency;
- To evaluate the relationship between the number of medications, Antihypertensive (AHT), Antidepressant Drugs (ADD) and HD time with the incidence of falls in HD patients.

Methods

Prospective, observational study from September 2017 to September 2018. For each reported fall, the patient was asked about where the fall occurred, if there were any consequences as a result of the fall and if assistance was needed. The Mann-Whitney test was used to compare those who fell with those who didn't.

Results

131 patients were enrolled. 67 falls were recorded and 53 patients had at least one event. In this group, mean age was 72.34±11.7 years, 71.7% were Female, 62.8% Diabetic, 58.5% being treated with AHT and 86.8% with ADD. Most of the falls occurred at home, 53.7% resulting in brusing in 34.3% of the cases. 47.8% of the patients didn't need assistance and 47.8% increased dependency.

The mean number of treatments lost due to falls was 3.9±23.7 treatments/patient.

The difference in the number of drugs administered in fallers (8.15±2.57) versus non-fallers (7.03±2.94) was significant (p<0.05); The difference in AHT taken in fallers (31) versus non-fallers (61) was significant (p=0.023).

The difference between HD vintage in the fallers (59.8±48.6 months) versus non-fallers (83.95±92.10 months) and ADD taken in fallers (46) versus non-fallers (56) was not significant.

Diabetic patients fell more than non-diabetic patients and this difference was significant (p<0.001).

Conclusion/Application to practice

Polymedicated patients, who take AHT and diabetic medication, appear to be the highest risk group.

Fall prevention strategies need to be developed; however, more studies are needed to understand the reason for the high incidence of falls at home.

Disclosure of Interest

no
Factors that influence the patient's perception of safety during haemodialysis

A. C. Pereira¹, M. Fonseca¹, C. Santos Cunha¹, M. Cunha¹, A. P. Martins¹, I. Cerqueira¹, S. Fernandes¹, E. Matos¹, P. Gonçalves¹, J. Pinheiro¹-², R. Peralta³, B. Pinto³, J. Fazendeiro Matos³

¹NephroCare Fafe, Fresenius Medical Care, Fafe, Portugal; ²Health Science Institute, Portuguese Catholic University, Porto, Portugal; ³NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

From an established relationship with chronic kidneys disease (CKD) patients, there are some factors that influence the perception of their safety during dialysis treatment (HD). Identification of these factors is crucial.

According to Maslow’s Hierarchy of Needs, safety is one of our basic needs. WHO (2010) defines safety as corresponding to reducing the risk of unnecessary harm to an acceptable minimum, on the acceptable minimum refers to the collective notion in the light of current knowledge, available resources and in the care context, in opposition to the risk of non-treatment or other treatment.

Objectives

Identify the factors that influence the perceived HD safety of patients with CKD.

Methods

This is a qualitative, exploratory and descriptive study. For data collection, we used a semi-structured interview until completed. Data was analysed through content analysis according to Bardin (2011) and Coutinho (2013).

Results

Factors that positively influence the patients’ perception of safety during dialysis: length of time on HD, clinical governance, safety culture, infection control measures, continuity of care, audible alarms of the dialysis machine, treatment effectiveness, lower risk of haematoma associated with cannulation, cannulation effectiveness, as well as the therapeutic relationship, the recognition of professional competence, the monitoring of treatment by the health care professionals, pain management implemented strategies and patients clarification by healthcare professionals.

Factors that contribute to the perception of lack of safety: thermal discomfort, health institution environment, vascular access problems, cannulation problems, care delivery by “associate nurses”, healthcare professional attention bias, nurse's experience and empathic stress that generates suffering by identifying the suffering of the other.

Conclusion/Application to practice

Knowing the factors that influence the person’s perception of safety during dialysis allows us to reflect about the care provided; the impact on the patient's wellbeing with CKD and enables interventions’, implementation in order to improve nursing care and guide nurses to the real needs of CKD patients.

Disclosure of Interest

no
**Break the barriers on hand hygiene in a haemodialysis unit**

M. Coimbra¹, S. Marinho¹, R. Sousa¹, A. Silva¹, P. Gonçalves¹, J. Fazendeiro Matos²

¹NephroCare Viseu, Fresenius Medical Care, Viseu, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

**Background**

Healthcare workers (HCW) need to perform hand hygiene several times day in the clinical setting, which could be a reason for lack of compliance. However, compliance can be improved by continuous education and supervision.

**Objectives**

Measure HCW hand hygiene barriers and their adherence to hand hygiene moments

**Methods**

Observational, descriptive, study exploring the perceived barriers and adherence to hand hygiene moments. In May 2018, we asked staff to complete the “Barriers to hand hygiene adherence” scale. The staff had to classify the barriers according to: 1 – disagree completely to 6 – agree completely. The barriers were clustered in 5 dimensions: “Materials & Equipments”, “Evaluation & Feedback”, “Leadership & Formal Alerts”, “Education & Training” and “Organizational environment”.

**Results**

The survey was applied to 39 HCW with a mean age of 46.4±11.77 years and mean length of service of 19.36±12.33 years. The majority were female (53.8%) and nurses (53.8%), followed by physicians. The dimension with higher mean score was “Materials & Equipment’s” (2.36±0.95) followed by “Leadership & Formal Alerts” (2.303±0.832). Male HCWs had a higher mean score in 4 dimensions, but without significant differences. The physicians had the lowest scores except in “Evaluation & Feedback”. The healthcare assistants (HCA) found more barriers to hand hygiene presenting higher mean scores in 4 dimensions. In the last audit the HCA had a higher non adherence (41.7%). The barriers “no information of unit infection rate” (t=10.217, p=0.006) and “no moisturizing hand cream” (t=7.060, p=0.029) had differences between the staff.

**Conclusion/Application to practice**

In conclusion, HCAs had the higher mean score in 4 of the 5 dimensions and had a higher non adherence rate. They require new strategies and more motivation to improve adherence.

**Disclosure of Interest**

no
Good practice guide to prevent dissemination of infection by Klebsiella pneumoniae-carbapenemase in haemodialysis center

E. Nunes, V. Gomes, A. Madureira, S. Guimarães
Haemodialysis, Caledial, Vila Nova Gaia, Portugal

Background

Global dissemination of KPC-producing bacteria is a serious threat to public health. These are characterized as resistant to β lactam antibiotic, fluoroquinolones and aminoglycosides. In March 2016, the GLC – PPCIRA of Gaia’s Hospital Center informed us they were transferring a KPC colonized patient into our dialysis unit, so a meeting was held with the clinic director, chief nurse and the Infection Control Committee (ICC) to trigger a plan of contingency from which resulted the elaboration of procedures adequate to our institution. A new multidisciplinary meeting was scheduled where, with everyone’s contribution, a norm was discussed which contained orienting lines for prevention and contention of infection/colonization by KPC-producing bacteria. Three years past and we have received 10 more colonized patients – 7 have shown negative results and no new cases were reported in our unit. It has proven essential the correct execution of isolation and cleaning procedures to avoid cross infection.

Objectives

- Promote excellence of care and specific precautions to the patience colonized with KPC-producing bacteria;
- Result delivery on the politics implemented and experience sharing;
- Enhance the importance of an Infection Control Committee.

Methods

- Integrated literature revision;
- Reflexion on actual practice.

Conclusion/Application to practice

We highlight the impact of good practices in preventing and controlling infection, and the need for an Infection Control Committee in a haemodialysis unit that elaborates an orienting guide for contention and prevention of infection/colonization by KPC-producing bacteria. Said guide is considered an instrument of quality and it renders the care that is given safer, visible and effective. The program installed is valuable and the success related to the multidisciplinary evolvement. We can affirm that only with a positive attitude surrounding the prevention and know-how of the good practices, we can act in the field of controlling infection and improving health care.

Disclosure of Interest

no
WORKSHOPS

SUNDAY, SEPTEMBER 15th, 2019

W 01 WORKSHOP
Developing and Maintaining Effective Teams
Hall A3, 11:00-12:30

Developing and Maintaining Effective Teams
J. Sedgewick, H. Noble

Background:

A team represents a group of individuals who share a common goal and take a pride in holding each other accountable in achieving extraordinary results. What distinguishes high performing teams is their ability to share a common vision and sheer determination of their journey in achieving their goals. Individuals who have an absolute level of trust in their team members and clean unflattering trust in the teams purpose is central to high performing teams. Within such team, individuals freely express ideas and feelings as the team works on a common goal; the team understand how they must work together in achieving their goals. Healthcare is often a volatile, rapidly changing environment in which the prime focus is delivering high quality safe care to range of stakeholders. It is within this rapidly changing healthcare landscape that teams must function effectively, remain engaged and sustain their productivity. Leadership is also central to effectively team performance since it is through effective team leadership that the collective and individual capability of both the team and individuals can be supported to achieve the team goals.

Learning Objectives:

a. Reflect upon the attributes of effective teams.

b. What makes high performing teams effective.

c. Consider through team based exercises and interactive assessments which will enable participants to evaluate their own teams.

d. Identify how leadership & the roles of team members impact upon the success of teams.

e. Develop an action plan regarding their own team which will assist in further developing & strengthening the team.
W 02  WORKSHOP
Human Factors and Patient Safety: Everybody’s Business
Hall A3, 14:00-15:30

Human Factors and Patient Safety: Everybody’s Business
L. Bennet, K. Jenkins

Background:

Our day-to-day lives provide numerous opportunities to make mistakes that generally have limited adverse consequences. However, some lapses carry greater risks especially in the workplace. The aim of this workshop is to explore the impact human factors have on safety and how a proactive approach to managing safety involves examining conditions, identifying potential harms and taking action to prevent them.

This workshop is interactive and will use a variety of tools and cases studies to help understand the principles and practices of Human Factors and how they can offer ways to minimise and mitigate human frailties, so reducing medical error and its consequences. Human Factors principles can also be applied in the identification, assessment and management of patient safety risks, and in the analysis of incidents to identify learning and corrective actions.

Topics will include: what makes a perfect day; understanding error, situational awareness; information transfer; Communication, Team working in practice and safety positive behaviours.

Learning Objectives:

1. To develop a safety culture in the workplace and implement systems for effective safe practice that build on an appreciation of human factors

2. To identify contributing factors for error

3. Discuss, reflect on and use a framework for remembering the different components of human factors

4. See a true story and use the case study to explore the human factors contribution to error

5. Understand how and why difficulties to communication, team working, and decision making may occur

6. Identify tools and techniques that can be applied to practice to overcome decision making, difficult situations and communication problems

7. Awareness of TEXAS safety climate survey
Involving patients and family members from BAME/poor reached communities in clinical research
N. Jain

Background:

It is well known that certain groups are represented disproportionately low in renal research (in publication: Kidney Research UK Health Inequalities Report p.112 recommendation 7; Fergus Caskey & Gavin Dreyer). Among these are the Black, Asian and Minority Ethnic (BAME) communities. It is also a priority from the UK Renal Research Strategy, Page 18 Recommendation 2 calling for charities and other organisations to raise awareness of the importance of research involvement within the kidney community and especially BAME groups and to evaluate barriers to participation and develop guidance on best practice in recruiting BAME patients.

The results of the research, published in an international, peer-reviewed journal GUT, demonstrated a direct association between higher levels of research-activity and lower rates of patient mortality following emergency admissions: https://www.nihr.ac.uk/news/research-active-trusts-have-better-patient-outcomes-study-shows/2715.

Furthermore, we also know that progression to Kidney failure is up to five times more common in people from BAME communities. There is a dichotomy between the increased incidence of disease amongst those least likely to participate or even engage in research. Hence it suggests that research is under-powered amongst those where risk is highest. In addition to progression in BAME communities, people from lower socio-economic backgrounds are also more likely to have CKD, and its risk factors. As there is considerable overlap between these two “groups”, this spells out the seriousness of the issue even more, hence the need to address this inequality.

Learning Objectives:

To reflect, share ideas and experiences:

- Appreciation of the barriers and impact of lack of meaningful patient involvement in research
- Testing of the Peer Educator intervention in engaging "poorly reached" communities in research participation
- Ways to increase awareness levels and understanding of kidney research
- How we might facilitate and achieve ongoing engagement with local researchers
- Experience in increasing the levels of public engagement by individuals acting as advisors, ambassadors and ultimately as participants through the peer educator approach
- Sharing of experience to date in increasing registrations of under-represented groups in the “Help Beat” programme in Manchester, UK

How?

Sharing our work targeting “poorly reached” communities via a grassroots Peer Educator approach; ultimately to increase levels in signposting people and improve experience to address the current under-representation of those considered “poorly reached” demographic groups in research. Utilising a mixed methods approach: with the public, renal patients and Peer Educators
MONDAY, SEPTEMBER 16th, 2019
W 04 WORKSHOP
Empower PD Patients to Self-Care – Validate Patient’s Skills to Perform PD
Hall A3, 9:00-10:30

Empower PD patients to Self-Care – Validate patient’s skills to perform PD
M. A. Tavares, A. Riemann

Background:

Peritoneal Dialysis is a renal replacement therapy that involves shared decision making among patients, family and health professionals. Patients and/or caregivers are educated by nephrology nurses to self-management their home therapy and achieve their maximum self-care. There is no consensus among nephrology nurses about how much time and what kind of information is needed to educate a patient to perform peritoneal dialysis autonomously. PD patient education programs vary from country to country and in each country varies from unit to unit. It is important to reduce variability among PD education programs, focus on what is important to empower the PD patient to Self-Care. It is important that patients acquire during educations programs the skills and the knowledge to perform their treatment safely, recognise potential complications and manage risks. Nursing theories and qualitative research methodologies are advantageous to build knowledge in nephrology nursing discipline.

Learning Objectives:

- Promote peritoneal dialysis among nephrology nurses
- Share experiences and information about PD education programs among participants
- Describe a PD education program focused on patient Self-Care and validation through nephrology nurses focus group

Update knowledge about nursing theories and qualitative research methodologies
An Introduction to Mindfulness Practices: Managing Stress and Anxiety
C. McVeigh, H. Noble

Background:

Have you ever travelled from one place to another, arriving at the destination to your surprise on autopilot........? thinking “I have no idea how I just got here?” Mindfulness is the complete opposite of being on autopilot. With mindfulness, we nurture our ability to observe everything life has to offer. Mindfulness aids us in creating an open awareness, whilst using our five senses to take in the world around us. John Kabat-Zinn describes mindfulness as paying attention in a particular way in the present moment, and non-judgmentally sensing into life and its experiences. Through mindfulness we can learn to live happily in the present moment, reduce our stress, decrease anxiety, manage emotions, and gain peace of mind. By practicing mindfulness we start to take seriously how our mind works. It helps us identify the constant mind chatter, impulses, and automatic behaviours that influence our behaviour. Mindfulness helps us find a place of calm. In this workshop we will address recent brain science supporting the popularity of mindfulness practices; you will experience some mindful meditations and you will be provided with some techniques which you can use to help learn how to be with your emotions rather than overwhelmed by them.

Learning Objectives:

During this workshop, we will practice: a) Being in the present moment - Putting past experiences behind us and living life in the here and now b) Paying attention - Bringing our attention and awareness to stressful thoughts, feelings, sensations and physical experiences in the present moment as they arise. c) We will explore being non-judgmental - Not passing judgment or criticism on what we notice as we pay attention. The workshop will help deepen your ability to be still and rest in awareness. It’s a time to befriend your own mind and body from moment to moment acknowledging your emotions and finding strategies to help you manage such issues as stress and anxiety in daily life. No experience or training required.
Uncovering the power of extra-ordinary leadership - The leadership Challenge
J. Sedgewick, H. Noble

Background:

Leadership is important in shaping organisational culture, therefore, developing effective leadership behaviours, strategies and qualities is critical. Despite this truism how much do we truly know and understand about effective leadership. When leadership works well it positively impacts upon direct care delivery and healthcare system effectiveness and efficiency. Effective leaders are important in shaping positive work environments and driving work place cultures. A significant amount of attention has focused upon what are the ideal characteristics and qualities of an effective leader resulting in leadership being defined as situational, skills driven, vision driven, collective and involving exchange relationships. Leaders within organisations whether at the bed side or board level need to demonstrate consistency in their leadership styles and behaviours and how they develop shared leadership of those around them. This includes the expression of the organisations vision and values, fostering commitment to performance management as well as the nurturing compassion as an important cultural value in organisational relationships.

Learning Objectives:

1. Reflect on and review the frequency of personal leadership behaviours within their individual renal nursing practice.

2. Discuss how great leadership is about communicating fundamental values and beliefs

3. Understand the five pillars of exemplary leadership as a framework for personal leadership effectiveness:

   * Model the way

   * Inspire a shared vision

   * Challenge the process

   * Enable others to act

   * Encourage the heart

4. Examine and identify opportunities for change and improvement in renal nursing practice through critical reflection on own leadership experiences and leadership capability.
W 07 WORKSHOP
Gaining EDTNA/ERCA Accreditation for your Renal Education Program - What’s Involved
Hall B, 12:45-13:45

Gaining EDTNA/ERCA Accreditation for your Renal Education Program - What’s Involved
J. Sedgewick, M. McCann, M. Saraiva, T. Khafkia

Background:

For more than 15 years EDTNA/ERCA has been recognising renal nursing education programs and accrediting these programs. The number of successful applications receiving EDTNA/ERCA accreditation has increased which testifies to the importance placed upon having renal education programs recognised by EDTNA/ERCA. From across Europe, Middle East and Asia renal nursing education programs have been accredited. Applications have included hospitals, universities & schools of nursing as well as renal industry partners. Achieving accreditation recognises the quality and standards of education provided and this is important to learners undertaking programs. If you are interested to know more about the EDTNA/ERCA Accreditation program please attend this workshop where you will:

1. Gain an increased understanding of the EDTNA/ERCA application process.
2. Hear from successful applicants who have achieved accreditation and what it was like ‘going through the application process from the beginning to receiving their award’.
3. Develop an insight into the criteria and evidence that is required when submitting applications.
4. Learn more about the personalised support that is offered to applicants throughout the application process.
Getting a better quality of life for your patients
V. Todorova, A. Abercane, M. Willans, G. Johnstone, C. Poulard, F. Thibblin

Background

The decision regarding the choice of the RRT modality is crucial. It impacts all aspects of patients’ lives and the lives of their families. Studies demonstrate that many patients, when given the freedom to choose, will select a treatment modality on the basis of their lifestyle. Home Haemodialysis (HHD) is a RRT modality that can provide an efficient and flexible treatment schedule. Patients who take responsibility for their dialysis treatments are empowered and this can improve the quality of their life.

Objectives

• To share experience and knowledge amongst the Multidisciplinary Team
• To promote a greater understanding of Home Haemodialysis amongst Healthcare Professionals
• To promote actively Home Haemodialysis by Healthcare Professionals after the Workshop

Learning Outcomes

• Promote Home HD among the Renal Care Multidisciplinary Team
• Share experiences and information about Home HD programs among participants
• Describe a Home HD program focused on patient Self-Care and validation through nephrology nurses focus group
COURSES

SUNDAY, SEPTEMBER 15\textsuperscript{th}, 2019

C 01  COURSE
Hygiene, Infection Control and Prevention in Renal Care
Tower, 14:00-15:30

C 02  COURSE
Hygiene, Infection Control and Prevention in Renal Care
Tower, 16:00-16:45

Hygiene, Infection Control and Prevention in Renal Care
P. Challinor, I. Bartakova

The aim of this workshop is to identify best practice in relationship to infection, prevention and control within the renal care centre. In small groups the course participants will need to follow the correct Clinical practice in hygiene, infection control and prevention. This will be an interactive workshop allowing everybody to share their expertise.
MONDAY, SEPTEMBER 16th, 2019

C 03 COURSE
Critical states during a dialysis treatment
Aesculap Academy, 9:00-10:30

C 05 COURSE
Critical states during a dialysis treatment
Aesculap Academy, 9:00-10:30

Critical states during a dialysis treatment
M. Stern

A unique hands-on simulation workshop of critical states occurring during the dialysis treatment. The aim of the workshop is to practice the management of critical states or situations within the care setting, through an individual and a team approach, to successfully reach a positive outcome. We will use advanced technology with interactive role-play, followed by feedback and discussions on how to successfully manage critical situations.

Meeting Hall is at different place than the conference centre. Travel by public transport is around 45min. Travel from and to conference centre will be provided with the conference assistant. More details will be provided after the registration!
C 04  COURSE
Violence & Aggression in Renal Care
Tower 2, 11:00-12:30

C 06  COURSE
Violence & Aggression in Renal Care
Tower 2, 14:00-15:30

Violence & Aggression in Renal Care
J. Pekara

The aim is to share and practice the skills in preventing and de-escalating situations with aggressive patients. You will have a chance to practice with a „real patient“ and share your experience through feedback and suggestions in particular case scenarios.
E-P 001

Psycho-physical well-being in therapeutic adherence in women with autosomal dominant polycystic kidney disease

E. Brioni¹, C. Magnaghi², G. B. Delli Zotti³, E. Sangiovanni³, M. T. Sciarrone Alibrandi², L. Sarno⁵, P. Manunta¹, F. Burrai⁴, L. Apuzzo⁵

¹Genomics of Renal disease and hypertension Unit, IRCCS San Raffaele Hospital, Milan, Italy; ²Nephrology and Dialysis, IRCCS San Raffaele Hospital, Milan, Italy; ³Clinical and Health Psychology Service, IRCCS San Raffaele Hospital, Milan, Italy; ⁴Education, Research and Organizational Change Department, ATS Sardagna, Sassari, Italy; ⁵Researcher, SIAN Research Center, Bologna, Italy

Background

Autosomal dominant polycystic kidney disease (ADPKD) is the most common inherited renal disease which affects less than 5 people in every 10,000. Various effective treatments exist, including blood pressure management, physical activity, low sodium diet and hydration. Therapeutic education is part of the patient’s care and treatment and is an essential strategy to address the current healthcare scenario where there is a progressive increase of people affected by chronic diseases.

Objectives

This presentation analyzes the effects of therapeutic education in patients affected with ADPKD, the level of compliance to pharmacological therapy and their compliance to dietetic and lifestyle recommendations as part of nurse-led education.

Methods

A prospective, longitudinal observational pilot study was performed. Measurement instruments included Kidney Disease Quality of life-Short Form, Hospital Anxiety and Depression Scale, and the Body Uneasiness Test. In T0, a nurse screened patients, controlled their blood pressure, provided written information on low salt diet and the importance of following moderate but constant physical activity; this sensitized the patient to the correct intake of drug therapies. During the T1 visit the patient returned for interview with a psychologist and the completion of psychological tests. During the T2 visit, an interview with a psychologist was held with the restitution and evaluation of the tests performed and an interview with the nurse for an evaluation of adherence to the prescriptions, physical activity, diet, water intake, drug therapy and blood pressure control.

Results

Therapeutic education can have a positive impact on a patient’s health by improving their compliance with pharmacological therapy, diet and lifestyle.

Conclusion/Application to practice

Therapeutic education improves the patient’s knowledge, treatment and helps correct behaviors which promote independent management of the disease. The patient is empowered to modify unhealthy behaviors and obtain a balance between this and the disease and therefore improve compliance with treatment and quality of life.

Disclosure of Interest

no
E-P 002

Estimating the prevalence of muscle wasting, weakness and sarcopenia in haemodialysis patients
A. Slee¹, C. McKeaveney², G. Adamson³, K. Farrington⁴, D. Fouque⁵, K. Kalantar-Zadeh⁶, J. Mallett³, P. Maxwell⁷,², R. Mullan⁸, H. Noble², D. O'Donoghue⁹, S. Porter¹⁰, D. Seres¹¹, J. Shields⁷, M. Witham¹², J. Reid²
¹University College London, London, United Kingdom; ²Queen’s University Belfast, Belfast, United Kingdom ³Ulster University, Coleraine, United Kingdom; ⁴University of Hertfordshire, Hertfordshire, United Kingdom; ⁵University of Lyon, Lyon, France; ⁶University of California, California, United States; ⁷Belfast Health & Social Care Trust, Belfast, United Kingdom; ⁸Northern Health & Social Care Trust, Antrim, United Kingdom; ⁹University of Manchester, Manchester, United Kingdom; ¹⁰Bournemouth University, Bournemouth, United Kingdom; ¹¹Columbia University, New York, United States; ¹²NIHR Newcastle Biomedical Research Centre, Newcastle, United Kingdom

Background
The definition of age-related sarcopenia has evolved to encompass both muscle mass and strength/function. Furthermore, it has been extended to disease states, such as chronic kidney disease. The European Working Group for Sarcopenia in Older People (EWGSOP) and Foundations for the National Institute of Health (FNIH) have developed criteria for the assessment of sarcopenia, including the use of non-invasive and portable techniques such as bioelectrical impedance assessment (BIA), anthropometry and hand grip strength (HGS) dynamometry.

Objectives
This study aimed to investigate the prevalence of muscle wasting, weakness and sarcopenia using the EWGSOP and FNIH criteria.

Methods
106 HD patients were recruited. Raw impedance measures at 50 khz were utilised to estimate total skeletal muscle mass (TSMM) and appendicular SMM (ASMM) using the Janssen et al and Sergi et al equations, respectively. SMM index values (kg/m²) were calculated by dividing SMM (kg) by height². Mid arm circumference and tricep skin fold thickness was measured and mid upper arm muscle circumference (MUAMC) calculated. HGS was measured using a standard protocol and Jamar dynamometer.

Results
Prevalence was found to vary depending on methodology used: low TSMI (moderate/severe sarcopenia combined) was 55% for the whole group, 21% Female and 68% Male. Low ASMI was 32% for the whole group, 25% Female and 35% Male. Low MUAMC was 25% for the whole group, 0% Female and 36% Male. ASMI highly correlated with BMI (r=0.8, P<0.001) and MUAMC (r=0.67, P<0.001). Muscle weakness was high regardless of cut off points used (57-70% for females and 65-81% for males).

Conclusion/Application to practice
Internationally, this is the first study comparing measures of muscle mass (TSMI, and ASMI by BIA and MUAMC) and HGS using this specific methodology in a haemodialysis population. Future work is required to confirm these results and their impact on clinical outcomes.

Disclosure of Interest
no
E-P 003

The phenomenon of the burnout in nurses working in hemodialysis

A. Pizzo¹, G. Di Pietro², D. Dileo², V. Neiviller¹, M. T. Parisotto³

¹NephroCare Italy, Nursing Coordination, Naples, Italy; ²NephroCare Italy, NC SS.Taranto Dialysis Unit, Taranto, Italy; ³Fresenius Medical Care, Care Value Management, Bad Homburg, Germany

Background

The term stress is intended as a non-specific response of the organism to an external stimulus. Stress and Burnout are often related to nursing staff. In fact, chronic stress arises with the onset of Burnout and helps to create a state of nervousness and emotional excitability that interferes in the nurse-patient relationship. Some studies have been carried out to assess the presence of stress and burnout among nurses working in hemodialysis units.

Objectives

To evaluate the stress level and possible presence of Burnout on nurses of two dialysis units.

Methods

In October 2018 the Burnout Questionnaire (BQ) was administered to 19 nurses (68.4% women) and in November 2018, a questionnaire was administered to identify the factors of greatest stress.

Results

The administration of the BQ showed that 5.26% had no stress, 36.85% low, 42.10% moderate, 15.79% high stress and 0% very high stress with the presence of Burnout. Stress factors included: rude behavior of patients 42.1%, routine work 42.1%, inter-personal conflicts, 31.6%, lack of collaboration between colleagues, 31.6%, problems related to personal relationships and/or communication between colleagues 26.3%.

Conclusion/Application to practice

In spite of the limited sample, this study confirmed that stress is a reality among dialysis nurses. The identification of the presence of stress and triggering factors, allow planning internal preventive and corrective interventions to minimize the phenomenon of Burnout by improving its assistance and supporting the emotional and psychological well-being of nurses in working in the area of chronic diseases.

Disclosure of Interest

no
Intradialytic exercise and season variations in haemodialysis patients

R. Camisa1, N. Gomes1, S. Dinis1, O. Albuquerque1, P. Martins2, J. Fazendeiro Matos3

1NephroCare Coimbra, Fresenius Medical Care, Coimbra, Portugal; 2NephroCare Portugal, Fresenius Medical Care, Lisboa, Portugal; 3NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Biological and circadian rhythms play an important role in human physiology. It is known that seasonal variations may affect body composition (BC), dietary intake, physical performance and other important parameters in ESRD patients. However, how exercise can influence those variations is poorly understood.

Objectives

To evaluate the effect of an intradialytic exercise programme (IEP) on seasonal variations of BC, normalised protein catabolic rate (nPCR), albumin, sodium and fluid overload (FO).

Methods

Retrospective cohort study with 2 groups: the intradialytic exercise group (IEG) n=25, and non-exercise group (NEG) n=23. Patients for the NEG were selected among those that had clinical criteria to perform the IEP, but refused to participate. BC was measured using a bio-impedance device. Blood samples were collected monthly and before dialysis treatment. All data were analysed between these groups from winter (January and February average) to summer (July and August average). Mann-Whitney test was used.

Results

When analysing both groups (IEG versus NEG) between winter and summer with significance:

Sodium:

Winter: 138.24 mEq/L versus 136.70mEq/L (Mann-Whitney=189.0; p=0.042);
Summer: 140.34 mEq/L versus 139.30mEq/L (Mann-Whitney=214.0; p=0.128 (not significant);

nPCR:

Winter: 1.45 g/kg/day versus 1.14 g/kg/day (Mann-Whitney=88.0; p<0.001);
Summer: 1.33 g/kg/day versus 1.10 g/kg/day (Mann-Whitney=136.9; p=0.003);

Albumin:

Winter: 4.18 g/dL versus 3.83g/dL (Mann-Whitney=158.5; p=0.007);
Summer: 4.25 g/dL versus 3.84g/dL (Mann-Whitney=163.5; p=0.016);

BC (Lean tissue index, Fat tissue index) and FO had not significant differences either between groups or sessions.

Conclusion/Application to practice

IEG had higher sodium levels combined with more FO. Levels of nPCR were higher in IEG combined with higher albumin levels. It’s clear that seasonal variations influence nutritional status of haemodialysis patients. Further studies are needed to understand why IEG had higher sodium and FO levels. IEG had better overall BC in both seasons but not significant.

Disclosure of Interest

no
Individualized teaching of the dialysis patient
C. Cunha¹, H. Pedroto¹, L. Amado¹, V. Miranda¹, R. Peralta², J. Fazendeiro Matos²
¹NephroCare Maia, Fresenius Medical Care, Maia, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background
Individualized patient training (IPT) contributes to the patient's self-empowerment. Performed in a timely manner IPT helps to diagnose any particular deviations from treatment objectives and performance indicators, contributing to continuous improvement of the patients' quality of life.

Objectives
- To verify if IPT influences effectiveness of HD treatment outcomes.
- To increase the level of knowledge of the patient in relation to his/her illness and treatment.

Methods
A sample of 154 patients was followed up from August to November 2018. Four informative guides, with "default" images were developed to reinforce the advantages of the clinical guidelines, preventing complications and promoting quality of life.

These guidelines addressed: Dialysis adequacy (DA): (Kt/V; Substitution Volume (SV), Treatment Time (TT)); Hypervolemia (hydration status); Renal osteodystrophy (food and medication care); Vascular Access (VA) (care and advantages of arteriovenous fistula (AVF)).

Monthly based IPT sessions were planned according to consulting reports from a central database. Sessions were performed by the respective responsible nurse.

Results
August and September 2018:
- 20 training sessions, with a total duration of 5 hours;
- Performance indicators (patients on target):
  - DA indicators:
    - Kt/V 94.95%;
    - SV 71.01%;
    - TT 83.15%;
    - Serum phosphorus 82.15%;
    - 85.85% with AVF.

October and November 2018
- 55 training sessions with a total duration of 23 hours, divided as follow: 13h25m for DA; 04h35m for Renal osteodystrophy; 05h00min for VA.
- Performance indicators (patients on target):
  - DA indicators:
    - Kt/V 96.95%
    - SV 79.3%;
    - TT 81.7%;
  - Serum phosphorus 81.7%;
  - 81.7% with AVF.

Conclusion/Application to practice
Individualized patient training (IPT) positively contributes to an improvement in dialysis adequacy outcomes. In this context, individualized patient training enabled patients to be involved in their treatment, respecting their learning rhythms, in a development process. For attesting the efficacy of this training program, further studies with increased time length are required.

Disclosure of Interest
no
Patients' self-care as promoter of quality of life: a case study

T. Galhofas¹, G. Pinto¹, R. Peralta², B. Pinto², J. Fazendeiro Matos²

¹NephroCare Torres Vedras, Fresenius Medical Care, Torres Vedras, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

There has been an increase in the number of older people with chronic kidney disease receiving dialysis for which there is no other option of vascular access than the implantation of a long-term permanent central venous catheter (CVC).

Objectives

Understanding how self-care in patients with a permanent CVC can increase their quality of life, well-being and independence.

Methods

A retrospective clinical case study was carried out, focusing on the personal clinical history of a patient, from the start of haemodialysis to the present day. Descriptive data, characterizing the reality in a complex and contextual way, were obtained through medical and nursing team records registered in a central database.

Results

The 38 year old female patient retired due to disability. Born with spina bifida, she had been in a regular haemodialysis (HD) program since the age of 15. She had five different internal vascular accesses (VA) until 2010 when she began using a permanent CVC. Informally, we began a health education program in order to stimulate VA' self-care, since the patient expressed a desire to preserve her autonomy, despite her limitations, and to maintain the hygiene care. After evaluating the abilities and the motivation of the patient for the task, regular training was initiated. Clinical disposables were made available for the patient to perform her own CVC dressing. The monitoring process was continuous throughout the treatments. During these 8 years the patient did not present any complications related to the CVC.

Conclusion/Application to practice

Self-care is an essential process for the motivation of patients with long-term CVC in regular HD programmes. The results were positive and demonstrated there were no cases of associated complications, namely infections.

Disclosure of Interest

no
Impact of an exercise program on physical and mental health of regular Hemodialysis patients
B. Cabecinhas1, S. Vieira1,2
1DaVita, Leiria, Portugal; 2DaVita, Gondomar, Portugal

Background

Several studies have shown that the Chronic Kidney Disease (CKD) impacts patients’ physical condition, being these individuals less physical active when compared with similar age population. The same studies reveal that this sedentary condition results, at a later stage, on higher mortality rates of the referred patients. On the other hand, recent studies demonstrate that keeping the CKD patients physically active is a key factor on preserving the mobility and physical independence throughout their lives. It is therefore essential that the CKD patients keep the physical mobility at a satisfactory level allowing them to preserve their independency on daily tasks.

Objectives

This study aims to understand measurable impacts of a physical exercise program (PEP) on the life quality (LQ) of Hemodialysis patients, focusing on eight different parameters.

Methods

In order to collect the necessary results, the Kidney Disease and Quality of Life Short Form 36 (KDQOL – SF36) questionnaire has been used. This questionnaire allowed the quantification of patients’ LQ on a yearly basis, before and after enrolling the PEP, and it has been used on a prospective study at two different clinical facilities (DaVita Gondomar and DaVita Leiria). The PEP consisted on a set of aerobic exercises, composed of stretch and strength workouts, performed during the second and third hours of regular Hemodialysis. A sample of 62 patients has been considered and the Wilcoxon test has been used on the statistical analysis of results, both for the physical and mental parameters.

Results

The Wilcoxon test conducted on the effective sample of patients reveals significant improvements on the general LQ. These results were mainly obtained for DaVita Gondomar, which is most probably related with the lower age of that patients when compared to the ones of DaVita Leiria.

Disclosure of Interest

no
E-P 008

Improvement on patient experience and outcome with HDx dialyzer
B. Choi, S. Chan
Hemodialysis, Scarborough Health Network, Scarborough, Canada

Background

Patients have poor hemodialysis outcome on conventional high flux dialysis. This leads to increase patient reported side effect such as nausea and vomiting, itchness, diarrhea on hemodialysis. There is a need of searching a new way of hemodialysis for better patient outcome.

Objectives

To indentify a new methodology of providing hemodialysis treatment to increase patient outcome and subsequently improve quality of life.

Methods

1. set up patient selection criteria for HDx hemodialysis
2. patient routine bloodwork reviewed base on KDOQUI guideline over period of months to demonstrate improve of patient dialysis efficiency
3. patient suvey pre and post new implementation of HDx dialyzer to demonstrate a positive impact on patient quality of life

Results

Patients have increase KT/V on regular bloodwork base on best practice quideline on KDOQUI. Patients reported decrease on side effects compare to conventional high flux hemodialysis. It demonstrates an improvement of patient quality of life through patient survey result.

Analysis on cost implication to the program on conventional high flux hemodialysis versus HDx hemodialysis.

Conclusion/Application to practice

There is definitely an improvement on patient hemodialysis efficiency on HDx hemodialysis. This leads to a positive improvement on patient quality of life and patient experience on hemodialysis. However HDx hemodialysis is not suitable to all patient population and patient selection criteria is the key for successful implementation of this new methodology.

Disclosure of Interest

no
Impact of an intradialytic exercise program on body composition, phase angle and functional capacity

S. Vieira, R. Rodrigues, B. Cabecinhas, A. Silva, I. Moreira

Davita, Gondomar, Portugal; Davita, Leiria, Portugal

Background

Patients on hemodialysis are sedentary, have low exercise tolerance and high physical deconditioning. The bioimpedance analysis (BIA) allows to evaluate the body composition and corporal compartments. Phase angle (AF°), derived from BIA is related to the cell mass (MC) and has been used as a predictor of health and survival in these population. Functional status has been assessed by functional capacity tests: Hand Grip (HGT) and Sit to Stand (TSTS) tests. These determine the physiological capacity of patients to perform their daily living activities independently and less tiredness.

Objectives

To assess the impact of an intradialytic physical exercise program (PEF), on body composition and functional capacity.

Methods

It was developed a longitudinal prospective study. The sample included 55 participants with an average age of 65.0±14.2 years and who had hemodialysis about 5.8±4.0 years. The intervention lasted 15 months. Patients were assessed at the start of the study and every 3 months by the following methods: BIA (muscular mass_M; fat mass_%MG; MC; cell mass index in kg/m² IMCC; AF°), anthropometric parameters, biochemical parameters and the application of HGT and TSTS. Data were treated in SPSS 24.0 (Wilcoxon test for comparison of paired variables, Friedman test for comparison between non-parametric variables and Spearman's correlation).

Results

AF° correlates positively with MM, MC, and HGT and with statistical significance since the 1st trimester. IMCC increased throughout the study, with statistical significance as well as %MG decreased in patients with more than 12 months of program. HGT is also statistically significant increasing with the PEF.

Conclusion/Application to practice

A simple and economic PEF demonstrated that there is an early increase in AF°, suggestive of improved cellular health and functional status of the patient. This is supported by the increase in muscular strength evidenced throughout the program, translating into health gains.

Disclosure of Interest

no
Learning needs analysis: the 3rd survey
E. Cullimore¹, J. Lee¹, N. Goodrich², J. Stribling², M. Richards¹, N. Richards¹
¹Nursing, SEHA Dialysis Services, Abu Dhabi, United Arab Emirates; ²Faculty of Health Science, De Montfort University, Leicester, United Kingdom

Background

SEHA Dialysis Services continues to strive to provide excellent patient care and improve outcomes. This includes professional development and education of the nursing staff. In this latest Learning Needs Analysis (LNA) we were aiming to assess continuing educational needs and to compare results to previous surveys to assist in evaluating the current staff education and training program.

Methods

An online questionnaire (Survey Monkey™) was sent to 224 nurses who were asked to assess their levels of confidence across a wide spectrum of topics ranging from technical skills, underpinning knowledge to leadership, working with others and management skills and their continuing professional development.

Results

191 questionnaires were returned (85% response rate overall). The responses continue to demonstrate a highly experienced and technically skilled workforce. 76% now either only sometimes or never worry about completing CEUs for DoH licensing requirements whereas the 2012 results revealed that 70% either always or sometimes worried about this. Another notable positive change in working with others is that over 50% of respondents are now confident in discussing and challenging clinical decisions with senior staff including nephrologists and even more are confident to discuss if not challenge decisions. This is a significant change from the initial survey in 2012 that found that around 60% of all nurses would not discuss or challenge decisions even with their immediate team leaders. One significant gap identified was that around 72% of respondents stated that they had received no leadership role education especially around workforce planning, budget and quality management and lacked confidence in these areas.

Conclusion/Application to practice

The latest LNA has highlighted that the ongoing education program has had a significant effect on the knowledge, skills and attitudes of SDS nurses, but that adaptations and additions need to made to continue to produce confident, skilled and knowledgeable nurses that impact on positive patient outcomes.

Disclosure of Interest

no
Therapeutic compliance in haemodialysis patients. Can nurses improve it?

V. Neiviller¹, A. Pizzo¹, M. T. Parisotto²

¹NephroCare Italy, Nursing Coordination, Napoli, Italy; ²Fresenius Medical Care, Care Value Management, Bad Homburg, Germany

**Background**

Adherence to therapies is a primary determinant of treatment success. The non-compliance of a patient with pharmacological prescriptions is now universally recognized as a frequent problem that increases the costs of care.

**Objectives**

The purpose of this study is to evaluate the therapeutic compliance of patients on HD.

**Methods**

In November 2018 the Morisky Medication Adherence Scale (MMAS-8) was administered in 2 Dialysis Units on a sample of 108 patients (pts). The total score obtained allows dividing the sample into high (4 points), average (2-3 points) and low (0-1 points) therapeutic adherence. The compliance was measured by analyzing the dialysis treatments of the last 3 months: mean Kt/V values, effective treatment time and displaced dialysis sessions. Dietetic compliance was measured using the laboratory values for Phosphorus and Potassium pre-dialysis (pre HD) of the same period; for the correct intake of liquids, the hydration status was assessed using the bioimpedance analysis.

**Results**

102 pts (94%) (Out of the 108 enrolled), completed the questionnaire. 66.7% were women, and the mean age was 69.1 years. 68.6% of the participants showed a high adherence to the prescribed drug therapy, 20.6% average and 10.8% low. 87.96% of pts achieved an average Kt/V > 1.4, the mean dialysis time was 235.62 minutes. 17.6% showed an average of serum phosphate levels > 5.5mg/dl, 22.2% found an average of the serum potassium levels >5.5mEq/l. 29.6% of pts had a pre HD overhydration

**Conclusion/Application to practice**

Improving adherence is a global priority for ensuring quality of life and sustainability of care.

This study highlighted that despite the high dialysis performance, nurses working with chronic disease can play a fundamental role in the patients’ motivation making them protagonists of their treatment, in evaluating and promoting adherence to pharmacological and dietary prescriptions.

**Disclosure of Interest**

no
Transition of care - quality improvement project in a hospital-based dialysis unit

S. Tchetchylin, I. Romach, R. Badalbayev
Dialysis, Tel Aviv Souraski Medical Center, Tel Aviv, Israel

Background

We are an outpatient hospital-based dialysis unit. We perform dialysis on more than 120 patients per day including chronic ambulatory patients, acute hospitalised patients and visiting patients from other dialysis units. We also serve critically ill patients including haemodynamically unstable and ventilated patients in the intensive care units.

Given the complexity of our patient population, we attempted to improve our patients' continuity of care. As part of the hospital accreditation, we found several hindering factors for high quality care: partly suitable computer software, new dialysis machines, a lack of systematic handover between nurses and poor data reports.

Objectives

1. To improve the quality of handover between nurses
2. To improve the dialysis unit's electronic medical records (EMR)
3. To improve patients' quality of care and satisfaction

Methods

1. We changed our EMR content and structure according to our needs
2. We created a designated report form for the nurses to use during handover, thereby ensuring no critical information is missed or overlooked
3. We had a special workshop for the nurses to educate them on the new EMR changes, methods of reporting general or significant events and the importance of using the new handover form.
4. We followed up and evaluated each nurse personally in order to give real-time feedback and solve ongoing problems.

Results

1. Better quality of care for dialysis patients in all settings (ambulatory and hospitalized)
2. Satisfaction from the nurses regarding the new and improved EMR
3. Satisfaction from patients which was objectively measured by a questionnaire from the hospital's Quality Assurance Department.

Conclusion/Application to practice

Quality assurance is an ongoing process. New requirements, new techniques and the complexity of patients force the team to adapt to a new situation in order to ensure high quality of care.

Disclosure of Interest

no
Online clearance monitoring (OCM Kt/V) vs. monthly laboratory Kt/V measurement in pediatric hemodialysis patients

A. Grilo, A. Natarajan, I. Shatat
Dialysis Nephrology and Transplant, Sidra Medicine, Doha, Qatar

Background

In clinical practice, a monthly blood sample is drawn (pre and post HD treatment and Kt/V is calculated) to assess for treatment adequacy. Advanced technologies are now allowing us to assess HD treatment adequacy using online clearance monitoring (OCM) without the need to draw blood from our pediatric patients and to minimize human sampling error effect.

Objectives

To examine the relationship between calculated (laboratory) Kt/V and measured OCM Kt/V in pediatric hemodialysis patients.

Methods

This is a 6 month retrospective study; all patients received their HDF treatments using Fresenius Cordiax 5008 with online-HDF and OCM. Urea Volume was assessed via bio-impedance using the Fresenius body composition monitor. Monthly calculated Kt/V (Daugirdas) was compared to 1) OCM measured Kt/V on the same day of monthly Labs, 2) OCM Kt/V average for the month, 3) OCM Kt/V average for the week before and after lab Kt/V.

Results

342 patient treatments (pt-ttt) were included in the analysis. Patient age range was 4-12 years and patient dry weight ranged between 11-22 Kg.

On average, OCM KT/V overestimated Lab KT/V by 7%. There was a modest and significant correlation between lab Kt/V and same-day OCM Kt/V (figure), r=0.44 (p = 0.03). This correlation significantly improved after excluding patient-treatments with dry weight <15 Kg, r = 0.78 (<0.001).

Conclusion/Application to practice

OCM Kt/V provides real-time, reliable, non-invasive assessment of dialysis adequacy in children. OCM Kt/V correlated better with Lab Kt/V when the patient weight was >15 kg; this may be related to the accuracy of BCM in assessing V urea in small children. Larger studies are needed to validate the use of different OCM technologies in children on dialysis before adopting them as an alternative to Lab Kt/V.

Disclosure of Interest

no
Ambulatory blood pressure in hemodialysis patients

N. Maeboonruen, P. Putaisong, N. Mahatanan, P. Susantitaphong, P. Katavrtin, K. Tiranathanagul, K. Praditpornsilpa

Renal unit, King Chulalongkorn memorial Hospital, Bangkok, Thailand

Background

In hemodialysis patients, Ambulatory Blood Pressure (ABP) provides more comprehensive information about blood pressure than in-center blood pressure measurement during hemodialysis and home manual blood pressure measurements.

Objectives

To describe results of ABP and its relation to left ventricular hypertrophy (LVH) and overhydration in haemodialysis patients.

Methods

Chronic haemodialysis patients were invited to receive ABP monitoring for 48 hours. Dipping pattern was classified by difference in systolic blood pressure (SBP) into 4 groups: “extreme dipper” (>20%), “dipper” (10-20%), “non-dipper” (0-10%) and “riser” (<0, nighttime increase). LVH was diagnosed by electrocardiography and/or echocardiography and overhydration was determined using bioimpedance spectroscopy (Body Composition Monitor-Fresenius Medical Care)

Results

Twelve chronic haemodialysis patients participated in this study. One patient was a “dipper”, another one was a “non-dipper” and the remaining 10 patients were “risers”. Ten patients (83%) had LVH (1 dipper and 9 risers) while 7 patients (58%) had overhydration (1 dipper, 1 non-dipper and 5 risers).

Conclusion/Application to practice

Most haemodialysis patients are “risers” which is likely to be unidentified without ABP monitoring. Therefore, routine ABP monitoring in haemodialysis patients should be considered.

Disclosure of Interest

Yes
E-P 016

Dialysis disequilibrium syndrome in incremental haemodialysis

N. Wongyai

Division of Nephrology, Department of Medicine, King Chulalongkorn Memorial Hospital, Bangkok, Thailand

Background

Dialysis disequilibrium syndrome is a well-known complication of haemodialysis. However, this complication has been linked to the initial sessions of haemodialysis. With a recently established incremental haemodialysis programme, we found that patients had dialysis disequilibrium syndrome during chronic once-weekly hemodialysis, long after several initial sessions.

Methods

We prospectively collected data of patients who participated in our incremental hemodialysis program. Patients with substantial residual renal function and daily urine output were invited to participate in this program. The initial prescription was once-weekly 120-min hemodialysis using low-flux dialyzer. Duration of hemodialysis was later increased to 240 min and hemodialysis filter was later changed to higher clearance to ensure hemodialysis adequacy.

Results

Four patients participated in our incremental hemodialysis program: 36-year-old male, 53-year-old female, 60-year-old female and 74-year-old male. Two patients, 36-year-old male and 53-year-old female, complained of headache starting from the 2nd-hour of haemodialysis and persisting until the next day. The headache was partially improved with 50% glucose, 50-100 ml given during the last hour of haemodialysis. In some sessions, the headache was very severe and the patient had nausea, vomiting and blurred vision. The symptoms occurred, with varying severity, in every once-weekly haemodialysis session and did not occur when the patients were switched to twice-weekly hemodialysis suggesting that these symptoms were caused by dialysis disequilibrium syndrome. The other patients did not have these problems.

Conclusion/Application to practice

Incremental haemodialysis programmes using once-weekly haemodialysis should be aware of dialysis disequilibrium syndrome even after several initial sessions.

Disclosure of Interest

no
The relationship between burnout and organizational commitment among nurses working in nephrology departments

M. Haimovich, D. Berar-Yanai
Nephrology, Hillel Yaffe Hospital, Hadera, Israel

Background

Burnout is the individual's response to emotional pressures that accumulate over a period of time. The working environment of nurses is filled with a variety of difficulties and pressures that they must deal with in their daily work. The burnout phenomenon has many implications for both the individual and on the organizational level. These include the deterioration of the mental and physical health of the employees, the reduction in loyalty to the workplace, damage to the level of service provided by the employees, and quitting.

Objectives

To describe the levels of burnout and loyalty to the workplace among nurses in the nephrology department and to examine the relationship between burnout and loyalty to the workplace.

Methods

A cross-sectional study involving nurses working in the Nephrology Department at the Hillel Yaffe Medical Center in Hadera. The data were collected using validated questionnaires: SMBM-Shirom-Melamad Burnout Measure, MBI-Maslach Burnout Inventory, OCQ-Organizational Commitment Questionnaire

Results

35 co-workers fulfilled all questionnaires. Mean burnout scores were: 1.79 in the MBI and 2.71 in the SMBM questionnaires (indicating relatively low level of burnout). Mean workplace loyalty was 3.42 in the OCQ questionnaire (indicating moderate workplace loyalty. Moderate negative correlation was found between the level of burnout and the level of nurses' loyalty to the workplace (rs = -0.619, P <0.001). In multivariate analysis, the level of burnout, marital status, and number of children above 2 were significantly related to the level of loyalty to the workplace (respectively: Beta -0.709; -0.379; 0.421, P <0.05).

Conclusion/Application to practice

We identified negative correlation between nurses burnout and workplace loyalty. These results emphasize the need to develop and implement strategic policies and programs to promote satisfaction and prevent burnout among nursing staff in general and among nurses in the nephrology field in particular.

Disclosure of Interest

yes
E-P 020
Brown tumor as complication of severe secondary hyperparathyroidism in hemodialysis patients: a case report
M. Ikteelat
Nephrology, Chaim Sheba - Tel Heshomer- Medical Center, Ramat Gan, Israel

Background

B.S., 75 yo male patient, undergoing dialysis treatment for over 5 years as a complication of Diabetic Nephropathy. The patient complained about bone pain, difficulties walking, and a need of wheelchair. Blood tests results have shown chronic hyperparathyroidism with PTH serum levels above 1000 for more than 3 years.

Brown tumor of bone, also called osteitis fibrosa cystica is a rare non-neoplastic lesion resulting from abnormal bone metabolism in hyperparathyroidism (HPT). The commonly affected sites are facial bones, clavicle, ribs, pelvis, and femur. It can simulate a malignancy on clinical examination and routine radiographs. However, with fine needle aspiration cytology (FNAC) in combination with biochemical tests, a correct diagnosis can be rendered. Brown tumor has been reported in 1.5% to 1.7% of patients with secondary hyperparathyroidism, this rate tends to increase with the increased survival of patients with chronic renal failure.

Initial treatment should include control of HPT through normalization of serum calcium and phosphate, to enable a gradual tumor regression, with or without parathyroidectomy (PTx).

Results

B.S. was treated with CINACALCET 60 mg and Zemplar 5mcg.

Then he was sent to a CT scan, which showed:

“Many Non-neoplastic lesions, part intramedullary, part cortical along the femur double sided and pelvic bones, including acetabulum and ischium, part are intracortical”.

And for diagnosis he was administered to Fine Needle Aspiration BIOPSY, which showed the following:

“The overall microscopic findings can fit to giant cell tumor of bone, however in view of clinical context, the possibility of brown tumor of bone should be considered and is more favorable rather than former”.

Based on all the above, doctors diagnosed him with BROWN TUMOR.

Based on the diagnosis and symptoms, patient was sent to PTX, which he didn’t undergo because of deterioration in his health.

Conclusion/Application to practice

Nursing staff’s role is crucial through accurate full anamnesis.

Disclosure of Interest

no
E-P 022

Transhepatic catheter access: a case study

V. Barroso Henriques1, F. Vieira1, J. Fazendeiro Matos2, M. T. Parisotto3

1NephroCare Braga, Fresenius Medical Care, Braga, Portugal; 2NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; 3Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

A well-functioning vascular access is a mainstay to perform an efficient haemodialysis (HD) treatment. In patients with a history of multiple failed vascular accesses (VA) for HD, unconventional access to the blood stream such as the trans-hepatic catheter, can be a last and effective alternative. The percutaneous transhepatic access was initially described for parenteral nutrition administration in 1989 and a few years late Po et al.(1994) reported a case in which this access type was used for HD.

Objectives

To explore a case regarding the possibility and functionality of transhepatic implantation of long-term catheters for HD in a patient with total depletion of the vascular patrimony

Methods

Descriptive, single holistic case study. The patient’s medical and nursing data were obtained from a central database.

Results

79 years old, female, widow, in a foster family, semi-bedridden, dependent for activities of daily life, undergoing dialysis since July 2010, 4 hours, HDF, 3 days per week. Main comorbidities: type 2 diabetes, hypertension, history of alcoholism, ischaemic heart disease, cerebrovascular disease and Parkinson's disease since May 2005. The patient was admitted to hospital on July of 2010 due to acute myocardial infraction and diagnosed with kidney failure. Three days later a tunneled central venous catheter was inserted in the right internal jugular vein and replaced one year later. A brachiocephalic arteriovenous fistula lasted one day, owing to thrombosis. Due to several VA dysfunctions since 2014 the patient had a transhepatic dialysis catheter inserted.

Conclusion/Application to practice

Transhepatic venous catheterization can be a safe and functional alternative route in chronic haemodialysis patients without an accessible central venous route. Complications of this technique appear minimal, and in patients without other possible VA sites, a transhepatic dialysis catheter can be a viable option for VA in dialysis, providing a remarkable durable access.

Disclosure of Interest

no
The overhydration status of patients with arteriovenous graft thrombosis

T. Carvalho1, B. Pinto2, P. Marujo1, R. Peralta2, J. Fazendeiro Matos2, P. Ponce3
1Centro de Acessos Vasculares NephroCare Lisboa, Fresenius Medical Care, Lisboa, Portugal; 2NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; 3NephroCare Portugal, Fresenius Medical Care, Lisboa, Portugal

Background

Arteriovenous Graft (AVG) dysfunction related to stenosis can result in inadequate vascular access (VA) internal blood flow (Qa) resulting in thrombosis, affecting patients (pts) morbidity/mortality. Guidelines recommend frequent monitoring and surveillance. Physical examination (PE) has a high accuracy detecting VA dysfunction. Overhydration (OH) is a complication with increased cardiovascular morbidity/mortality. Qa evaluation represents a useful indicator and is related to blood volume and hydration status. However, the reasons that facilitate AVG thrombosis are not fully understood.

Objectives

- Identify the predictors of stenosis and thrombosis on AVG.
- Understand hydration status influence in stenosis and thrombosis.

Methods

A retrospective analysis, registry-based, including all patients with AVG, referred to our VA centre due to: Qa decrease (<600mL/min)( Group 1 – G1) and thrombosis (Group 2 – G2) from January to October 2018.

Results

From a total of 452 patients (54.6% male), 271 patients were included in G1 and 181 in G2. In G1 133 (49.1%) had diabetes versus G2 65 (35.7%), p<0.01.

- Stenosis was found on 267 (98.5%) pts in G1 and 132 (99.2%) in G2.
- Average Qa in G1 before intervention was 472.79 mL/min (SD=150.97); in G2 911.29 mL/min (SD=433.71). After intervention 957.74 mL/min (SD=387.01) and 1165.58 mL/min (SD=517.46) (p<0.01).
- Average spKt/V in G1 before intervention was 1.94 (SD=0.03) versus G2 1.83 (SD=0.04).
- After intervention 2.04 (SD=0.03) and 1.94 (SD=0.04), p<0.01.

Comparing relative OH, in G1 7.92% (SD=0.50) versus G2: 7.61% (SD=0.75), p=0.823.

Conclusion/Application to practice

Results confirm that Qa decrease is a good predictor on AVG dysfunction. However, Qa decrease is not an accurate predictor for thrombosis. In both groups, spKt/V does not anticipate any problem with AVG. Hydration status does not seem to be the trigger for thrombosis. We believe that PE should be the tool to complement Qa assessment to identify AVG dysfunction and prevent thrombosis.

Disclosure of Interest

no
Physical examination of arteriovenous fistula: how are we doing it and how to improve

O. Albuquerque¹, A. Martins¹, M. Cortesão¹, N. Gomes¹, T. Carvalho², J. Fazendeiro Matos³

¹NephroCare Coimbra, Fresenius Medical Care, Coimbra, Portugal; ²Centro de Acessos Vasculares NephroCare Lisboa, Fresenius Medical Care, Lisboa, Portugal; ³NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Dialysis vascular access (VA) guidelines highly recommend the physical examination (PE) as part of monitoring programs of the VA. However, are nurses aware of the importance of the PE and perform it with the recommended frequency? What do nurses evaluate in PE? Which are the warning signs? How can they improve?

Objectives

To identify the nurses’ perception about PE of VA, how they perform it and suggest strategies to improve the procedure.

Methods

We applied a semi-structured survey on November 2018 about PE of VA to all nurses in our dialysis unit who voluntarily accepted to answer. Content analysis was used as research methodology.

Results

We applied the survey to 17 nurses; average age was 44.47±12.38 years, with long experience on haemodialysis: 12 (71%) nurses have more than 10 years of experience. All considered that PE is so relevant compared to surveillance blood flow and 16 (94%) perform it daily, assigning it a high accuracy (79.71%±15.76) in the detection of dysfunctional VA. Nurses take about 1 minute to perform PE and 15 (88%) assure at least one item of inspection and 16 (94%) one item of palpation. Auscultation is used only in specific situations. The most referred warning signs were changes on thrill (94%); pulse (41%) or auscultation (41%). As procedure improvement suggestion, 14 (82%) of nurses choose the participation in local venues and training in dialysis units with discussion of clinical cases with the multidisciplinary team as preferred method.

Conclusion/Application to practice

Nurses are aware of the relevance of PE and practice it very often but not so complete as recommended. A training on PE with practical cases and a periodic meeting about VA involving the multidisciplinary team can be a way to achieve a systematic PE approach and an effective detection of warning signs in our dialysis unit.

Disclosure of Interest

no
E-P 025

Development of nocturnal guidelines for home haemodialysis by special interest group for home haemodialysis (SIGNhd-UK)

N. Pacy¹, C. Rhodes¹, D. Dobbs¹, L. Thompson², J. Walker¹

¹Home Haemodialysis Renal, Portsmouth Hospitals NHS Trust, Portsmouth, United Kingdom
²Renal Medicine, City Hospitals Sunderland, Tyne and Wear, United Kingdom

Background

Whilst Home HD is not a new concept, it appears that the uptake of nocturnal treatments at home is underutilised even though evidence shows that frequency and longer duration of therapy has proven benefits. (Pierratos, 2004; Walsh et al, 2005; Jassal et al, 2006; Beecroft et al, 2008; Jaber et al, 2010; McFarlane, 2011; Rocco et al, 2011). Working as a group of experienced renal nurses it became apparent that there were so many differing opinions and options it was difficult to offer any definitive nocturnal guidelines.

Objectives

To develop robust evidence based nocturnal guidelines, ratified by a group of peers and could then be disseminated to the wider renal community

Methods

There are not many opportunities and it is not always easy to share experience with other colleagues. As the first special interest group for home dialysis, our aim is to provide a support network for nurses working in the field offering advice, providing guidelines and information on common areas of practice in home HD. A patient survey, Exploring views regarding nocturnal (overnight) Home Haemodialysis (Home HD) has been given to patients to try and identify any barriers to the uptake of nocturnal dialysis, these results will be available in the future.

Results

Our first guide ‘Clinical Practice recommendations for nocturnal home haemodialysis’ has been completed and will be available to the wider renal community. We will introduce our nocturnal guide/recommendations, through the special interest group and feedback on ways of promoting nocturnal dx.

Conclusion/Application to practice

We are the first special interest group to be invited by the Association of nephrology nurses - ANN-UK. Our future aspirations are to develop guidelines for solo dialysis and self cannulation which will bring the work to our multidisciplinary colleagues through SIGNhd-UK/ANN-UK and in turn, the Renal Association/BRS. This will allow our to be utilised nationally.

Disclosure of Interest

no
E-P 026
The relationship between LVEF and renal function, blood pressure, albumin, hemoglobin in CKD patients
N. Khatib, H. Kamal
Nephrology, Clalit, Haifa, Israel

Background
Cardiovascular complications are considered the main cause of morbidity and mortality of chronic kidney disease (CKD) patients

Objectives
To evaluate the relationship between left ventricular ejection fraction (LVEF) and renal function, blood pressure, albumin and hemoglobin in CKD patients stage 3-5. Patients were managed by multidisciplinary team including nephrologist, cardiologist, dietician, nursing as well as learning meetings with community clinical staff.

Methods
The medical records of 70 CKD patients stage 3-5 were evaluated retrospectively. At baseline, demographic variables and LVEF were documented; eGFR, blood pressure, serum albumin and hemoglobin were recorded every 6 for 24 months.

Results
LVEF of 32 (45.7%) of the enrolled CKD patients was ≤ 35% (mean 29.1±3.7) and their mean eGFR was 23.8±2.7 ml/min/1.73m2. LVEF of 38 (54.3%) other enrolled CKD patients was >35% (mean 55.3±6.7) and their mean eGFR was 36.6±2.1 ml/min/1.73m2. LVEF was positively and significantly correlated with eGFR (r = 0.57, p<0.001), mean arterial pressure (MAP) (r = 0.34, p=0.025), serum albumin (r = 0.43, p=0.008) and hemoglobin (r = 0.36, p=0.017). Average rate of hospitalizations throughout the study period was 3.7 admissions among patients with LVEF ≤ 35% compared to 0.9 in those with LVEF > 35%. 25% of patients with LVEF ≤ 35% started dialysis within 24 months compared to 5.3% of those with LVEF > 35%. 18.8% of patients with LVEF ≤ 35% and 15.8% of those with LVEF > 35% died within the study period. 66.7% of the deceased patients were with CKD stage 4.

Conclusion/Application to practice
Decreased LVEF was associated with worsening renal function, lower blood pressure, decreased albumin and reduced hemoglobin. Patients with LVEF≤ 35% had higher rates of hospitalizations and dialysis initiations. Such patients should be strictly managed and followed by multidisciplinary team in order to improve their outcomes.

Disclosure of Interest
no
E-P 027

Monitoring vascular access with indirect methods
S. Cappelletti, D. C. Massarenti
Hemodialysis unit and peritoneal dialysis, ASST Lariana, Como, Italy

Objectives

Access monitoring allows early identification of potential complications. Several methods are now available for access monitoring: the purpose of our work is to measure the extent of access using data from devices integrated into the monitor during the dialysis session with minimal bedtime and compare the results with the data obtained from Transonic mod HD03-CO.

Methods

Materials and methods: 37 Patients (20 M - 61 ± 8 years) with vascular prosthesis in the upper limb, subjected to three-weekly bicarbonate-dialysis - Fresenius 5008 monitor - were subjected in the first 90 'of the dialytic recirculation measurement (%). Regular and of the flow rate (QA) (ml / min) of the prosthetic access with Transonic and subsequently to measurement of the recirculation and of the effective Qb to lines in the correct position and to inverted lines with Twister-Fresenius aid. Two series of measurements were performed for each method during the same session. The data were used for the calculation of the flow rate according to the formula of Krivitsky, Mercadal, Schneditz and Wijnen. The data were analyzed to determine a correlation coefficient.

Results

The measurement of the flow rate with Transonic (pTran) and that derived from the Krivitsky formula (pKri) are linked by a linear regression (r 0.9131 p <0.0001) and it is therefore possible to write the following formula: pTran = 1.2864 * pKri - 20.3237. The correlation presents a distortion for high flow values, while in the monitoring range the relationship is linear. Similar behavior shows the correlations with the formulas of Schneditz and Wijnen.

Conclusion/Application to practice

The correct monitoring of the vascular access can be made with indirect measurements by applying simple mathematical formulas that have a highly significant correlation with the measurements obtained with the Transonic, thus implementing a vascular access surveillance program.

Disclosure of Interest

no
Usefulness of Stress Qb Test in vascular access surveillance. Results of a hemodialysis center
A. C. Brito Silva, M. Silva
Hemodialysis, Diaverum, Aveiro, Portugal

Objectives

Preventing thrombosis of the vascular access should be the main objective of a vascular access (VA) surveillance program. Early detection of stenosis should be one of the pillars of the strategy. The stress Qb test (SQbT) was developed with the objective of early identification of VA stenosis but its usefulness remains controversial.

Methods

Prospective study with Stress Qb test evaluation every fortnight between June 2018 and November 2018 in all patients with an arteriovenous fistula (AVF) in a hemodialysis center. All data regarding demographic, biometric, VA consultations, diagnosis of stenosis, angioplasty, thrombosis and loss of VA was collected. All patients had at least a quarterly assessment of Qa with a dilution ultrasound method.

Results

In a population of 177 patients, with 61.0% of males and an average age of 69.16±12.59, 6004 SQbT were performed. We found a negative correlation between higher levels of SQbT and Qa (r = -0.35, p <0.001). SQbT was positive with higher frequency in distal fistulas than in the proximal (p <0.001). The values of Qa in the AVF with positive vs negative SQbT were respectively 1029 vs. 1371 ml / min (p <0.001). A positive SQbT did not increase the risk of stenosis (OR 1.11, 95% CI: 0.55-2.27, p = 0.75), or thrombosis (OR 1.16, 95% CI: 0.37-3.62, p = 0.79). Of the 12 patients with an episode of thrombosis during the follow-up, 50% had a positive SQbT.

Conclusion/Application to practice

TSQb does not appear to be useful in the identification of stenosis and in the prevention of VA thrombosis.

Disclosure of Interest

no
The use of an ultra-sound by nurses in Hemodialysis Unit: Benefits and Limitations

J. Ramos
Diaverum - Dialysis Unit, Diaverum, Figueira da Foz, Portugal

Background

The vascular access is the key element to achieve an efficient dialysis treatment. Nowadays patients receiving hemodialysis are getting older, more vulnerable and with several co-morbidities, which have an impact in the quality of vascular system. The use of an ultra-sound in Hemodialysis Unit is an essential tool. The nurses are able to study the vascular access. The assessment and mapping the vessels by ultra sound before the first cannulation is crucial.

Objectives

To present benefits and limitations during the use of an ultrasound in Hemodialysis Unit. To demonstrate the role of the ultrasound in our practice: marking of puncture sites and the selection of puncture technique. To show the importance of the use of ultrasound as an essential tool for an adequate assessment of the vascular assess. To show the results obtained in our unit with the use of ultrasound in all new vascular access.

Methods

Simple descriptive and observational study. This study includes all the patients in which ultra-sound was use for the first cannulation, from 1 January 2018 and to 31 December 2018.

Results

For this study relating to 2018, in average the patients after the first cannulation have the CVC for a period of 42 days, one of our patients kept the CVC for a period of 162 days that was associated with difficulty of cannulation. The patients with CVC for a longer period of time are patients associate with co-morbidities, such as diabetes and heart failure.

Conclusion/Application to practice

The use of an ultra-sound on a daily basis can have a crucial impact, providing a precise cannulation. The nurse is the one of the main team members handling the vascular access. Therefore, in order to become competent in this matter is urgent to acquire theoretical and practical skills that would allow an effective evaluation and manipulation of vascular access.

Disclosure of Interest

no
E-P 031

Patient Safety Culture in a Hemodialysis clinic

A. Grilo
Dialysis Nephrology and Transplant, Sidra Medicine, Doha, Qatar

Background

Safety culture is understood today as the product of individual and group values, attitudes, skills and behavioral patterns, which determine the commitment to the management and security of an organization. Evaluating the perception of professionals about the safety culture of the patient, in the units where they work, is essential to implement measures aimed at improving the results and achieving safety and quality in the care provided to patients.

Objectives

The proposed objectives are to identify the perception of different health professional groups about the safety culture present in a hemodialysis clinic and to identify the areas where the safety culture of the same clinic can be improved.

Methods

A quantitative, observational, descriptive and cross-sectional study was carried out, and the Hospital Survey On Patient Safety Culture (Portuguese version, 2014), with a non-probabilistic sequential sample, was used. The sample (n = 108) consists of Nurses (49.07%), Auxiliary (24.07%), Physicians (17.59%), Administrative (4.63%) and Technical (4.63%).

Results

From the results obtained it is evident that "teamwork" is the strongest dimension of the organization. Dimensions with positive evaluation also are "organizational learning - continuous improvement" "Work between units" and "patient safety management support". Dimensions considered in need of improvement are: "General perceptions about patient safety"; "Professionals"; "Error notification frequency"; "Supervisor / manager expectations and actions that promote patient safety" and "transitions." The problematic / critical dimensions found in the studied context were the "Non-punitive error response"; "Error feedback and communication"; and "Openness in communication".

Conclusion/Application to practice

This study has identified improvement opportunities. Thus, it is possible to establish an improvement plan that fosters the critical dimensions and take advantage of the best-performing dimensions, namely "team work" and "Organizational learning - continuous improvement " to successfully operationalize these same measures and patient safety in the unit.

Disclosure of Interest

no
How to re-incorporate nursing documentation in a new complex electronic healthcare recording system

A. M. Boeskov, P. Wiegmans  
*Department of Nephrology, Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark*

**Background**

The introduction of a new and complex electronic healthcare recording system meant that nursing documentation almost ceased to exist. The electronic healthcare system is incommensurable whether the patient is an out-patient or and in-patient. This has provided our unit with huge challenges.

There was a need to define how and where nursing documentation should be written, so that data could be shared, seen and used throughout the Department of Nephrology.

**Objectives**

The purpose of the work was to teach the nurses where to read and document data about the patients to have an overall overview. The aim was, to focus on nursing documentation, predominantly describing *the how and the where*.

**Methods**

A 3-day workshop was established for nurses, with the participation of clinical nursing specialists to compile new guidelines.

Teaching primarily one to one, to ensure a better understanding.

We conducted audits before and after implementing the new knowledge, and to monitor the effort of the new strategy.

**Results**

A new description of the workflow was prepared, and the new guidelines were implemented.

Audits showed a higher quality, and an increase in recording of nursing documentation.

**Conclusion/Application to practice**

The nurses now know where to record and where to find the nursing documentation. By keeping a persistent focus on where we record nursing documentation, has caused the nurses to move from “*knowing how to*” to “*doing it*”.

When nursing documentation is written in the correct designated areas, it is possible to find and re-use data. This is timesaving and provides a better overall view. This gives the patients a feeling of coherency.

**Disclosure of Interest**

No
Factors influencing postural balance in haemodialysis patients

A. Lino¹, A. Furtado¹, H. Araújo¹, H. Neves¹, C. Santos¹, P. Martins², D. Almeida Marinho³, H. Pereira Neiva³, R. Luís³, J. Domingues³, J. Fazendeiro Matos⁴, M. T. Parisotto⁶

¹NephroCare Covilhã, Fresenius Medical Care, Covilhã, Portugal; ²NephroCare Portugal, Fresenius Medical Care, Lisboa, Portugal; ³Department of Sport Sciences, University of Beira Interior, Covilhã, Portugal; ⁴Research Centre in Sport Sciences, Health Sciences and Human Development, CIDESD, Covilhã, Portugal; ⁵NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; ⁶Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Haemodialysis (HD) patients have a high incidence of falls that is related with hospitalizations and mortality. Poor body balance may contribute to this problem and it's understanding should help to define strategies to reduce falls in this population.

Objectives

To evaluate the factors which can influence the HD patient’s body balance.

Methods

Cross-sectional study including 53 patients divided into 2 groups: G1 (n=11) that was within the reference value of the balance test (Single Leg Stance - SLS) and G2 (n=42) that was below the SLS reference value. Groups were compared according to age, gender, body mass index (BMI), body composition, diabetes, sedative drugs, dialysis vintage, haemoglobin, ultrafiltration rate and participation in an exercise programme. Patients that could not perform the SLS test or need walk assistance were excluded. It was used the Mann-Whitney test and considered significant for \( p < 0.05 \).

Results

Group 2 had a higher dialysis vintage (21.46±8.23 vs. 45.48±4.71 months, \( p = 0.003 \)), lower lean tissue index (15.15±3.19 versus 12.98±2.74 Kg/m², \( p = 0.029 \)) and higher fat tissue index (10.71±2.98 versus 15.99±7.06 Kg/m², \( p = 0.008 \)). Sedative drugs (\( p = 0.031 \)) and non-participation in an intradialytic exercise programme (\( p = 0.017 \)) were also related with a worst performance in the SLS. Differences were not significant for age, gender, diabetes, haemoglobin and ultrafiltration rate.

Conclusion/Application to practice

Body composition plays an important role in body balance. Strategies to improve body composition, such as exercise, may be useful. Special attention should be paid to patients using sedative drugs.

Disclosure of Interest

no
E-P 034

A review of comprehensive discharge planning to patients with new onset diabetes after transplantation

L. Indal, G. M. Erdmann

Department of Nephrology 3133/3134, Rigshospitalet, Copenhagen, Denmark

Background

Patients with new onset diabetes after transplantation (NODAT) experience multiple challenges after the diagnosis. Many patients have little understanding about the impact of the disease condition when it is left untreated or when it is not monitored. A well-designed comprehensive discharge planning provides support services such as patient-education in the hospital, well execution of written plan of care sent to the community health care center, outpatient follow-up and other interventions during and after hospitalization.

Objectives

To investigate whether there is a well-designed comprehensive discharge planning to patients diagnosed with new onset diabetes after transplantation (NODAT).

Methods

The PubMed, MEDLINE, Google Scholar and Cochrane Library were searched for randomized controlled trials and systematic reviews assessing discharge planning for both patients with diabetes mellitus such as NODAT and a general health condition using English literature between 2007 and 2016. Outcomes such as mortality/survival, readmissions, hospital length of stay (LOS), health-related quality of life (HRQOL), and patient satisfaction were included.

Results

The literature search yielded 96 relevant citations in total, published between 2004 and 2016. Articles were included based on the relevance to the topic description. Eight studies met the inclusion criteria. The citations obtained are composed of four systematic reviews, three randomized controlled trial, and one retrospective cohort study.

Conclusion/Application to practice

The review of literature confirms that there is an ongoing issue about the continuity of care for both diabetes patients specially patients with NODAT and general patients after hospitalization and that there is a strong need for further studies in order to develop a comprehensive discharge care plan from inpatient to outpatient settings.

These findings are important to clinical staff in formulating and implementing a comprehensive discharge planning programmes for patients with NODAT or diabetes mellitus in general.

Disclosure of Interest

no
Multidisciplinary treatment of a calciphylaxis injury

H. Costa Azevedo, L. Garcia Sanchez, A. Mas Prat, A. Costa Triola
Clinica Girona - Nephrology and Dialysis Service, Gerona, Spain

Background

Calciphylaxis is a vascular disorder with a high rate of morbidity and mortality. Its associates with multiples risk factors, such as the Chronic Kidney Disease (CKD), especially for dialysis patients. Another trigger factor is the alteration of mineral metabolism, typical from CKD patients.

Objectives

- Restore the integrity of skin in the injured area.
- Calcemia normalization, appropriate control of P and PTH.

Methods

- Gather the clinical information, follow the injuries evolution with images and evaluate treatment response.

Results

Male, 89 years old. Clinical History: former smoker, dyslipidemia, hypertension, secondary hyperparathyroidism, hypertensive cardiomyopathy, deep vein thrombosis and nephrogenic anemia. Began hemodyalisis program in 02/2014.

In May 2018, he presented necrotic injuries in the 1/3 of the right leg. After suspecting calciphylaxis, the treatment with acenocumarol and paricalcitol was suspended, beginning new treatment with intravenous etelcalcetide and bisphosphonates orally. At the moment the biochemical parameters were: Ca:8,1mg/dl, P:4,90mg/dl, Ca/P product:39,69mg/dl, PTH:375,5pg/ml, albumin:41,5g/l. It was decided to apply sodium thiosulfate topical. The lesions were still growing and a new therapeutic approach was proposed: daily hemodyalisis with low dialysate Ca concentration (2,5mmol/L), intravenous sodium thiosulfate 12,5g, 3 days a week and topical treatments of the injuries with transparent hydrogel, zinc oxide ointment around the affected area and protection bandage. Clear improvement of the biochemical parameters: Ca:9mg/dl, P:2mg/dl, Ca/P product:18mg/dl, PTH:127,7pg/l, albumin:34,9g/l.

Conclusion/Application to practice

The multidisciplinary approach was crucial to normalize the Ca/P product and to establish a planned care that allowed the complete recovery of the skin integrity. It was posible to improve the global prognosis of the patient, nevertheless the morbimortality continues to be high.

Disclosure of Interest

no
E-P 036

Benefits of Kidney transplant in frailty patient

M. Vera Casanova, A. Bach Pascual, Y. Castillo, A. Martinez Saez, A. Faura Vendrell, M. J. Perez Saez, E. Junyent Iglesias
Nephrology, Hospital del Mar, Barcelona, Spain

Background

Several studies have shown that frail patients undergoing a kidney transplant suffer more complications, readmissions and higher risk of mortality in the post-transplant period. Bioimpedance shows that these patients are malnourished, with high percentage of fat mass and a low percentage of lean mass. However, little is known about the possible benefits of transplantation on frail patients, but the higher rate of complications compared with non-frail patients.

Objectives

Our aim was to study the impact of frailty on renal function after transplant and the benefits of transplantation for this cohort of patients.

Methods

Prospective evaluation of frailty in patients on the kidney transplant waiting-list between June-2016 and December-2018.

Results

168 patients were included. Mean age was 61.18 ± 12.15 years, 61.3% were men and 60.7% were in hemodialysis, 28.0% in peritoneal dialysis. Median time on waiting-list was 11.12 [0-62] months. We identified 27.2% with some grade of frailty.

Frail patients did not present differences regarding renal function (creatinine 1.86 ± 0.91 vs 1.27 ± 0.43, p=0.146) nor death-censored graft survival compared to non-frail ones. Both frail and non-frail patients improved bioimpedance parameters compared to pre-transplant status.

Conclusion/Application to practice

Frail patients present with similar kidney function and graft survival than non-frail patients. Transplantation helps in the recovery of lean mass. This population need to establish proper strategies to minimize the risks associated with transplant.

Disclosure of Interest

no
E-P 037

FMEA- small act can save - or cost - a life

M. Khaskiya
Nephrology and Hypertension, Rabin Medical Center, Hasharon Hospital, Petah-Tikva, Israel, Israel

Background

Venous needle dislodgment (VND) from peripheral vascular access during dialysis can cause serious bleeding and is a life-threatening complication of dialysis patients. This is a known event and it is described extensively in the medical literature. There are several guidelines to prevent VND from different countries, probably due to the different practices around the world. Given the lack of consensus, we set out to develop our own guidelines according to the practices and experience of our dialysis unit.

Objectives

To prevent the incidence of VND in our dialysis unit by implementing new guidelines based on an analysis of needle insertion and fixation.

Methods

Failure mode and effect analysis (FMEA) was used to identify key weak points during the needle insertion and fixation, which could lead to possible VND. A team of dialysis nurses and risk management personnel were involved in the process.

Seven stages were identified in the process, with seventy-five possible failures. Accordingly, we established new guidelines and set up an intervention plan for teaching the team.

A special component was added to the software in which the nurses checks the safety of the needles fixation.

We observed nurses and patient's behavior before and after the implementation of the new guidelines.

Results

After our intervention, we increased the awareness of this potential complication and we succeeded in educating our staff and the patients in managing these events in the following areas: patient education, patient behavior (open area of the AVF, clean arm, and clear cloths) and nursing follow-up of specific components according to the guidelines. Talking to the patients, they felt safer with the new attitude.

Conclusion/Application to practice

It's recommended to continue follow-up on regular bases

Disclosure of Interest

no
E-P 038

Nursing interventions to prevent infections in Peritoneal Dialysis patients – literature review
M. Tavares
Diaverum - Dialysis Unit, Diaverum, Figueira da Foz, Portugal

Background

Peritoneal dialysis patients have a high risk of infection that can lead to patient dropout of the technique. Nurse's interventions must be evidence-based on the current published literature about infection prevention in peritoneal dialysis.

Objectives

To identify nursing interventions relevant to prevent infection in peritoneal dialysis patients

Methods

A literature review has been performed using ESBCO researching database with the descriptors: nursing interventions, infection and peritoneal dialysis. Articles published between January 1st 2014 and December 31st 2018 were selected using PICO strategy.

Results

Of 176 articles that resulted from the search, ten met the inclusion criteria. After deep analysis of this 10 articles, two showed evidence on educational intervention from nurses, three articles focus on nurse’s role to prevent peritonitis and exit-site infection, two articles focused on prevent infection in health care services, one describes nurse’s intervention to prevent general infection, one identify nursing interventions to patients undergoing in peritoneal dialysis and another identifies the guidelines to prevent infection in peritoneal dialysis.

Conclusion/Application to practice

Literature review is a useful tool to identify evidence base guidance to practice. This literature review identifies the central interventions needed to prevent infection in peritoneal dialysis patients.

Disclosure of Interest

no
Renal nurse practitioner leadership in renal supportive care

S. Russo
Nephrology, Hunter New England local health district, Newcastle, Australia

Background

The Australian Commission of Innovation sponsored a tertiary hospital hub nurse-led renal supportive care (RSC) team providing direct conservative and symptom management for renal patients in the local health district of New South Wales, Australia. The RSC Hub also provides education, consultative support and resource for spoke RSC units across other surrounding local health districts over large geographical areas.

Objectives

An opportunity for a renal nurse practitioner arose to enhance the RSC service to meet the demand and complexity of patient assessments to enable adequate and timely review. This required a strategic business plan approach. A supportive nurse executive management and medical team was crucial to the securing of this NP role.

Results

As a renal nurse practitioner with responsibility for patient management across five community dialysis units, the transition into palliative renal care has been an exciting extension to scope of practice.

Conclusion/Application to practice

Nephrology nurse practitioners are well positioned to deliver high quality patient care in complex symptom management, palliation and end-of-life care to renal patients. The collaboration between palliative care physician and renal nurse practitioner has demonstrated how exceptionally innovative nurse practitioners can exhibit nursing leadership and evolve from traditional nephrology nurse practitioner roles.

New renal pathways such as renal supportive care show how ‘caring together’ we can reduce patient burden, increase patient and carer satisfaction and improve patient’s quality of life.

Disclosure of Interest

no
Education and training: impact of phosphate binders compliance
P. Alejandre Malda, M. Vicario Marquegui, F. J. Lopez Sanchez, J. Madarieta Juaristi, X. Perez Saenz Azkunaga, J. Sanchez Jimenez
Nephrocare - Bilbao dialysis center (Dialbilbo), Bilbao, Spain

Background

Patients with end-stage kidney disease must undergo chronic non-curative treatments and take a high number of drugs at great physically, psychological, social and economic cost.

Objectives

To evaluate the variation in adherence to phosphate binders compliance. Phosphorus (P) and PTH levels measurements were performed after increasing the amount of information about medication from physicians and providing an educational program by the nursing team.

Methods

A retrospective, longitudinal, single-centre, quasi-experimental study was conducted between June 2017 and January 2018. Thirty-eight patients, with a mean age of 70.68yrs +/- 14.06 were included. The inclusion criteria were: more than 3 months on dialysis, treatment with any phosphate binder and be of legal age. The training period was 4 months in duration. Data was analysed using t-student or Wilcoxon tests for related variables. Categorical variables were expressed as percentages and compared using the MacNemar test.

Results

At the beginning of the study, P levels of 4.62 ± 1.12 and PTH levels of 410.5 (258.75 - 856.25) were observed. Following the training period, these parameters were analyzed and demonstrated a decrease. The level of P was 4.24 ± 1.19 and PTH was 392 (194.5 - 639.5). The beneficial effects of the education continued to be perceived long after the training was completed, even with lower levels of P and PTH, with a value of 3.97 ± 1.01 (statistically significant decrease in phosphorus levels P = 0.021) and 366 (212-774) respectively.

Conclusion/Application to practice

The positive impact of the increased information and training demonstrated adequate control of P and PTH levels being achieved.

Disclosure of Interest

no
E-P 043

Using the spiral curriculum model to improve record keeping in satellite haemodialysis units

C. Poole, C. Hutchinson, M. Starr, B. Brierley
Training & Education, Fresenius Medical Care, Birmingham, United Kingdom

Background

The use of electronic record keeping is well established within the healthcare environment. The electronic clinical database has been in operation in our network of satellite dialysis units for well over a decade. During this time the functionality has increased requiring robust training in its use and navigation. Developing a sound understanding of all the features of the clinical database requires an iterative revisiting of the topics, subjects or themes associated with records and record keeping.

Objectives

The overall objectives were to:

- Develop the spiral curriculum linked to the clinical database
- Increase theory and practice skills to improve record keeping (RK) for all haemodialysis care delivered
- Comply with professional standards and statutory requirements of RK
- Improve completeness and accuracy of nursing care records

Methods

The following methods were used:

1. Review of current training module activity associated with RK 2015 - 2018
2. Identification of training gaps
3. Develop additional training to enhance the spiral curriculum

Results

Review of our training modules associated with RK identified the following:

2015, 2016 and 2017 x 7 modules and in 2018 this had increased to 19 modules and the issue of 3,837 training certificates.

Early results indicate an improvement in data entry as do the nursing record audits. These results have culminated in spiral curriculum development for 2019.

1. On site “Bite Size” training on the clinical database
2. Development of a desktop reference folder containing database navigation process flows
3. 'Focus of the month calendar’ – to emphasise one element of RK each month

Conclusion/Application to practice

Contemporaneous record keeping remains the bedrock of nursing practice and it is integral for the provision of safe and effective care. Benefits of the spiral curriculum as described by Bruner (1960) have synergies with RK teaching and learning.

Disclosure of Interest

no
Applying strategy to promote, support and monitor improvements in hand hygiene compliance in haemodialysis

G. Dewsnup, G. Cater, N. Ward, N. Beddows, C. Poole
Nephrocare Head Office, Fresenius Medical Care, Kings Norton, Birmingham, United Kingdom

Background

In 2016 it was recognised that compliance with hand hygiene (HH) across a large network of satellite haemodialysis units could be improved. A strategy was developed by the senior nursing team to enhance HH focus through various learning methods. This strategy reflects the NHS and WHO determination to save lives through “clean your hands” campaigns.

Objectives

The key objectives were to:

1. Raise staff awareness of HH requirements
2. Increase infection prevention and control (IPC) Link Nurse focus on HH
3. Improve hand hygiene compliance

Methods

A varied approach was adopted to increase awareness, education and surveillance including:

- Study Days for IPC Link Nurses providing focus on improving HH compliance in their clinics which included theoretical and practical sessions in addition to external speakers
- Clinic Managers and IPC Link Nurses were given further instructions on the correct methods to perform HH audits including feedback and implementation of action plans
- Light boxes used during study sessions and for practical training in clinics.
- IPC ‘online surgeries’ were performed to provide ongoing updates/results.
- Provision of HH prompt cards to all staff
- Increased external audits/support

Results

In 2016 countrywide results showed that the average compliance during external hand hygiene audits was lower than expected. Improvements have been noted during 2017 and 2018 with average scores now being reported 10% higher during external hand hygiene audits.

Conclusion/Application to practice

In conclusion, results have shown a positive improvement with hand hygiene compliance. Whilst it is difficult to determine whether this improvement is solely as a result of the increased focus on training and monitoring, ongoing support to the clinics will continue to develop in order to maintain future compliance. Effective hand hygiene remains the single most effective method in reducing healthcare associated infections and must remain a clinical priority to maintain patient safety.

Disclosure of Interest

no
E-P 046

Education and Decision Support for Unplanned Start Patient

Z. Aydin¹, S. Ozcan²
¹Health Science Institute, Koc University, Istanbul, Turkey; ²Nursing Faculty, Koc University, Istanbul, Turkey

Background

There is still a significant number of patients starting dialysis in an unplanned manner. Education and decision aids could help unplanned start patient to involve decision making process.

Methods

According to data collected from focus group intervention performed with patient and survey applied for health care professionals, the values were determined and divided into three categories: lifestyle, health and family. A computer-based simulation was developed and the content was transferred to this application.

Results

43 patient participate to decision tree simulation, results were examined under the categories of lifestyle, health and family. Data are expressed in numbers and percentages.

1. 39.5% of the patients choose PD, and 60.5% of patients choose HD treatment.

2. While lifestyle related issues gained importance in PD treatment (24 patients), patients who chose HD treatment considered subjects more important about health and family members (36 patients)

3. It is important that the treatment does not affect the patient physically and psychologically.

4. While HD patients emphasize the importance of healthy and comfortable sleep, PD and Home HD patients emphasized the priority of kidney transplantation.

5. Patients who chose HD stated that home treatment would affect family members, and they would have difficulty in maintaining treatment because there was no one at who could help them. The patients who preferred PD stated that they could spend more time with their family members and that they could continue working during their treatment.

Conclusion/Application to practice

The results of our study indicate that to provide training to patients who urgently start dialysis treatment and support them in the choice of treatment may improve patient outcomes. It is important to conduct research with larger patient groups in this area.

Disclosure of Interest

no
Evaluating the effectiveness of patient education methods

F. Kaban¹, E. Dane², D. Yalçın³, N. Burbut⁴, Ö. Usul⁴, B. Yılmaz⁴, H. Kaptanogulları⁵

¹Training Coordinator, Vocational School of Health Services- Dialysis Department, Lecturer, Medikare Dialysis Centers, Biruni University, Istanbul, Turkey; ²Vocational School of Health Services- Dialysis Department, Lecturer, Acibadem University, Istanbul, Turkey; ³Vocational School of Health Services- Dialysis Department, Lecturer, Istanbul Bilim University, Istanbul, Turkey; ⁴Registered Mentor Nurse, Medikare Dialysis Centers, Istanbul, Turkey; ⁵Chairman-Vocational School of Health Services- Dialysis Department, Academic member, Medikare Dialysis Centers, Biruni University, Istanbul, Turkey

Background

One of the most important roles of hemodialysis nurses/technicians is making sure that patients and their relatives are educated about the treatment. The main goals of these educations are to accomplish patient’s adaptation to the treatment, improve patient’s life quality and to achieve successful dialysis treatment.

Objectives

To compare (i) the knowledge level of the patients who started treatments in 2018 and used hemodialysis education kit to the former patients who received standard education and (ii) evaluate the effects of educations in clinical and lab results.

Methods

A total of 105 patients, ages 56-65, were participated in the study. Participants were mostly primary school graduates. Hemodialysis treatment period for the majority of the participants was 1-5 years. All participants answered to hemodialysis knowledge level test (15-questions) and filled-up socio-demographic information form. Interdialytic weight gain, potassium and phosphorus levels were compared between the groups. Percentage (%) frequency, Chi-Square test was used for the analysis in SPSS 13.0 software.

Results

There was no difference regarding the knowledge levels between the patients in the experimental (n=51) and control (n=54) groups. The knowledge levels of both group were considerably high. Interdialytic weight gain was within the intended limits. While potassium levels were found to be higher than expected, 60% of the patients had the targeted phosphorus levels, in both groups. Hemodialysis knowledge level test results showed that patients from both groups can recognize potassium rich foods but cannot adapt this information into their diets. It has been observed that patients in the experimental group could adapt to the treatment faster.

Conclusion/Application to practice

This study concluded that appealing education methods accelerates patient's adaptation period to treatment. There should be periodic evaluations to check the effectiveness of both the educations and the education methods. Improving the weak points should be the main consideration in developing the most effective education method.

Disclosure of Interest

no
E-P 048

Development of a patient education system in our dialysis clinic

T. Farkas

Dialysis Centre, Fresenius Medical Care, Sátoraljaújhely, Hungary

Background

The chronic kidney disease is one of the illnesses, where diet has a specific central role. This is why the education is so important. Unfortunately, our centre does not employ a dietician.

Objectives

To organize and implement the education of patients, supporting them to maintain a good general condition and providing them with data and information.

Methods

In 2013, we reorganized the work distribution and responsibilities. One of the nurses was nominated as responsible for patient education and managed the trainings for patients, not exclusively about dietary knowledge. The responsible nurse educated the patients regularly and individually as required. We created some local documents which can be used during the trainings (e.g. training record, tests, etc). Education of new patients begins after starting of the haemodialysis program using the provided training material. Since 2016, we have had the opportunity to train by using audiovisual materials during every patient shift. All members of our team are actively involved in the patient education in cooperation with the responsible nurse.

Results

As the results of regular trainings, we have improved outcomes in the diet sensitive areas (albumin, phosphate, hydration status). From 2013 to 2017, there were 150 training events involving 456 patients. During the 2018 audit process, we received a “Best Practice” qualification for patient education at a network level.

Conclusion/Application to practice

The patient education programme is highly relevant to achieve quality patient care. In the absence of dieticians, we used our professional skills to share the information, to educate the haemodialysis patients and, when required, to collaborate with the family members and social institution.

Disclosure of Interest

no
Training for daily home hemodialysis – psychological aspects
F. Delestre, C. Montet
Nephrologie et Dialyses,Hopital Tenon, Paris, France

Background

The psychological aspect of training patients for daily home hemodialysis (DHHD) is very good in our center, beyond the technical aspect and relationship with patients, resulting in training nurses’ confidence and solid experience.

The ideal patient psychological profile to be trained is someone who understands quickly, integrates information, is serene, conforms to caregiver's desire and let others to control himself. This profile does not exist! The patient is often anxious about re-assessing is style of living and dreads learning needling at various levels. They commonly need to control their lives and their treatment.

The ideal training nurse profile is someone able to train any kind of patient, addressing any unexpected event and keeping friendly consideration.

The ideal team and the ideal patient are those who can adapt to each other (caregiver with caretaker and caregivers together). The training nurses’ challenge is to master the dialysis modality and to transfer the technique skills to patients, and to mitigate emotional relationships while keeping friendly consideration. The technology is often at the forefront and prevents to establish a good trust relation, if any, which is mandatory to treat at home.

The patient challenge is to acquire skills in a new area of knowledge, to keep a mental focus and sometimes to make physical effort (6 training days per week for several weeks). Training is considered as a formal requirement.

Conflicts can occur in the relation between caregivers and patients, leading to aggressivity, anxiety, impatience and misunderstanding. Then the role of a psychologist is important for both nurses and patients.

Conclusion/Application to practice

Based on our experience, the patient tends to offload his anxiety and fears onto the caregiver. The nurse may not be conscious of accumulating an emotional overload, she may not understand how to handle it and how to convert into positive outcomes.

Disclosure of Interest

no
E-P 050

Where do you perform your CAPD exchange?

S. Vladislavic
Department of nephrology and hemodialysis, University Hospital Split, Split, Croatia

Background

Peritonitis is a frequent and the most serious complication of peritoneal dialysis (PD). Although less than 5% of all patients with peritonitis die, it represents the main cause of death among patients treated with PD. Peritonitis can cause functional and structural changes of the peritoneal membrane, which results in solute transport changes and low ultrafiltration, and finally in method failure. Peritonitis is a major cause of unsuccessful PD and reason for transfer to haemodialysis (HD).

Objectives

To assess the socio-economic status of patients treated with continuous ambulatory PD (CAPD), based on the questionnaire form, and also to assess the quality of patients’ education conducted during hospitalization.

Methods

67 patients were included in the study (33 males and 34 females), with an average age 54.3±15.4 (20-81) years. The average age at commencing PD was 50.3±15.5 (15-76). Nineteen patients were still treated with PD, while 48 were treated with other methods (HD - 17 patients, transplanted - 31 patient). A questionnaire form was used for obtaining socio-demographic data (gender, age, residence, level of education, socio-economic status) and data on quality of education conducted during hospitalisation.

Results

The peritonitis incidence rate was statistically significantly higher in patients who had been longer on CAPD (p<0.001), and in patients who had performed CAPD exchange in the bedroom (p=0.037) rather than in the kitchen, living room or a separate room provided for CAPD only. The peritonitis incidence rate was not statistically significantly connected with gender (p=0.222), age (p=0.243), employment status (p=0.512), marital status (p=0.257), residence (p=0.42), number of household members (p=0.576), pets (p=0.424), monthly income (p=0.111) or necessity for assistance for performing CAPD (p=0.431).

Conclusion/Application to practice

Both the duration of CAPD treatment and performing CAPD in the bedroom can cause a higher peritonitis rate.

Disclosure of Interest

no
E-P 051

The dependence of compliance on the cognitive functions of patients on chronic haemodialysis.

R. Arslanova¹, I. Bastrykina¹, O. Portnova², M. T. Parisotto³

¹Fresenius Medical Care, Fresenius NephroCare Dialysis Centre, Volgograd, Russian Federation; ²Fresenius Medical Care, Fresenius NephroCare department, Moscow, Russian Federation; ³Fresenius Medical Care, Care Value Management, Bad Homburg, Germany

Background

Dialysis patients develop a number of neurological disorders of the central and the peripheral nervous system. The presence of neurological complications (such as strokes, cognitive disorders, encephalopathy) affects both the severity of the disease and the mortality of CKD patients.

Objectives

To determine the association between cognitive functions and treatment compliance.

Methods

66 out of 78 patients participated in the research; data was recorded from January to October 2018.

Patients were divided into 2 groups: compliant and non-compliant. Signs of non-compliance were: weight gains of over 4.5% of dry weight, laboratory test data: P> 1.8 mmol / L, K> 5.5 mmol / L [8], Na> 140 [9] mmol / L above target.

The Montreal Cognitive Function Assessment Scale (MoCA) was used to cluster the patients.

Results

83% of non-compliant patients did not adhere to the diet (K 49%, Na 12%, interdialytic weight gains 22%). The number of patients with normal cognitive function (NCF) was 60% in the compliant group and 40% in the non-compliant group. In the non-compliant group with NCF, non-adherence to the diet was one indicator. In the patients with reduced cognitive function, non-adherence to diet was for a greater number of indicators (75% for one indicator, 25% for 2 or more indicators).

Education can impact the cognitive functions and compliance, which explains the patients understanding of medical recommendations and the importance of compliance.

Conclusion/Application to practice

Higher preserved cognitive functions are associated with higher patient compliance, and high patient compliance is an indicator of the survival of patients on dialysis. The preservation of cognitive functions depends largely on the level of patient education.

Disclosure of Interest

no
Prevalence of obesity and evaluation of adequacy among this population during last 5 years

V. Ionita
Hemodialysis, Fresenius NephroCare, Bucharest, Romania

Background

Obesity has increasing prevalence globally including haemodialysis patients; posing another challenge to this group

Objectives

To evaluate the prevalence of obesity among haemodialysis patients in a centre located in Bucharest during the last 5 years and to compare dialysis adequacy among this group to the rest of haemodialysis patients

Methods

All the haemodialysis patients of our center were evaluated during 10 different months (March and September) over the last 5 years (2014 – 2018), looking at obesity prevalence (defined as BMI>/=30 kg/sm) and dialysis adequacy defined as Kt/V>/=1.4, using an on-line measurement device

Results

Obesity prevalence was relatively constant during this period, at about 20%. In the whole haemodialysis population, an average of 76% of patients reached the dialysis adequacy goal. Among obese patients, an average of 63% reached the dialysis adequacy goal. This difference was seen in all of the 10 months studied

Conclusion/Application to practice

Obesity has a high prevalence in haemodialysis patients, an average of 20%, (the same as in general adult population of Romania) and it is associated with inadequate dialysis in this group

Disclosure of Interest

yes
E-P 053

Synthetic vascular graft an alternative to arteriovenous fistula

A. Necula

Hemodialysis, Fresenius NephroCare, Bucharest, Romania

Background

Patient's lives and their survival depends exclusively on haemodialysis.

When the vascular capital of the patient is exhausted the synthetic vascular grafts become an alternative, the most used of which being made of microporous polyfluoroethylene.

Objectives

Obtaining a suitable vascular access using synthetic grafts as an alternative to AVF

Methods

Dialysis efficiency using the following parameters is monitored in the 15 patients using the graft as vascular access:
- blood flow rate
- blood volume processed
- the volume of substitution fluid
- Kt/V

The lifetime of synthetic grafts (average duration between 2 - 16 years) was monitored

Results

During 2014-2018, 15 patients using synthetic vascular graft were monitored showing the following results:

- 12 patients (80%) achieved dialysis efficiency parameters by: blood flow and volume, Kt/V (> 1.6), clearance (> 200) and replacement volume (> 22l);
- 1 patient (6.66%) did not reach blood volume (using a blood flow <300 ml / min);
- 2 patients (14%) developed a false aneurysm, but none developed a true aneurysm;

During the same period, another 15 patients with a native AVF and CVC were monitored:
- 7 patients (46%) with AVF
- 8 patients (53.3%) with CVC

Complications of AVF developed in 4 patients (57%) of 7:
- 2 patients (28%) underwent infectious complications of AVF over time;
- 1 patient (14%) underwent premature thrombosis;

Complications of CVC in 5 out of 8 patients (62.5%):
- 2 patients (25%) developed complications through catheter dysfunction (flow failure);
- 2 patients (25%) suffered venous thrombosis, (catheter).

Conclusion/Application to practice

The use of synthetic grafts is an alternative when vascular resources are exhausted, or in the case of surgical correction of late AVF complications.

This type of vascular graft is superior to the CVC and represents an optimal vascular access solution in the future

Disclosure of Interest

yes
The challenging journey of pregnancy and dialysis: Challenge for patient and staff

R. Naim, Z. Gavish, I. Bogner, I. Rafaelov-Atlas, J. Plotkin
Nephrology, Rambam - Health Care Campus, Haifa, Israel

Background

The prevalence of pregnancy kidney failure is rare. The appearance of CKD negatively affects pregnancy and challenges the staff with ethical issues. There are few cases in the literature reporting live births in haemodialysis patients.

Objectives

A 24-year-old patient, suffering from IGA NEPHROTATY, was not regularly followed. She arrived at the hospital at 13 weeks of spontaneous pregnancy with hypertension and diagnosed with Chronic Renal Failure. Despite multiple risks explained to the patient and her partner in cooperation with a psychologist and a social worker, decided to continue the pregnancy under haemodialysis.

The treatment included:

1. Haemodialysis 6 times a week 5 hours, weekly personal dialysis prescription, including: blood test monitoring including BNP, electrolyte concentration in dialysis like potassium and phosphorous extension, UF, Clexane administration.
2. Daily clinical and laboratory monitoring in collaboration with a gynaecologist.
3. Multidisciplinary team work: Dietitian training & Social worker involvement.
4. Detailed instruction of dialysis nursing staff regarding management dialysis for pregnant patient.
5. The patient had a live birth week 36, healthy girl.

Conclusion/Application to practice

- The goal of dialysis treatments is not only to save lives but striving for a "normal" life as much as possible. Comprehensive treatment for a woman with CKD is important to provide these needs.
- Understanding importance of having children, especially with regard to cultural background may be important in patient final decision regarding pregnancy.
- There is a major importance for staff training regarding special aspects of dialysis in pregnancy.
- Special attention for staff support due to fact that many nurses are also mothers, some pregnant and may experience various emotions in the light of the case.
- Patient education for women with CKD and transplantation for gynaecologist monitoring is crucial.

Disclosure of Interest

no
"Give light and people will find the way-" spiritual support for dialysis patients

R. Dahan, Z. Gavish, E. Kruzel-Davila
Nephrology, Rambam-Health Care Campus, Haifa, Israel

Background

Dialysis patients cope with a life-threatening disease which harbours losses that impact physical, mental, social and spiritual resources. Spiritual support is part of the palliative care that focuses on the spiritual dimension that helps coping with difficulties. It was launched on 1925 by the priest B. Anton who wanted to combine religion and medicine, realizing that sick people tend to think more about life, death and meaning of life. It gradually expanded to clinical practice. However, it hasn't been part of the integral care in haemodialysis units in our country.

We started to combine spiritual support 4 years ago. The major aim was to recruit the internal spiritual resources, maintain identity and meaning of life. Activities were organized according to the individuals’ needs, using various treatment tools: listening, containing and supportive discourse, by using text, cards and guided imagination.

Methods

Herein, two cases are presented:

78 /d, suffered from physical deconditioning, loneliness and loss of meaning of life. She reported about the absence of motherly love in her childhood. The process included: improving her emotional balance, satisfying the need for love and attention, improving sense of self-esteem, optimism and social capabilities.

85 y/d, confronted with loss of vision and independence. She had difficulties in talking about her inevitable death. The process included: understanding her limitations, acceptance of her need for help, old age and preparing for departure from her relatives. In addition, a "spiritual will" was prepared, which helped in accompanying her family after her death.

The patients expressed their satisfaction from the supportive process which helped to cope with difficulties.

Conclusion/Application to practice

Spiritual support is a human encounter that strengthens communication and therapeutic environment, its helps the stuff understand the patient's spiritual needs and improves effective support for patients and stuff.

We recommend adopting spiritual support as an essential therapeutic tool.

Disclosure of Interest

no
E-P 056

Centered approach - dialysis patient to Type 1 diabetes with eating disorders, anxiety and depression.

G. Maximov

Hemodialysis Unit. Nephrology., Sheba (Tel Hashomer) Medical Center, Ramat Gan., Israel

Background

Diabetes Type 1 is a severe chronic disease that can be first developed in childhood and adolescence, with peaks in children 5–7 years old.

Diabetic nephropathy is a major vascular complication of Diabetes Mellitus (DM). If DM is not treated early and adequately, many diabetic patients may reach end-stage renal disease (ESRD) secondary to advanced irreversible diabetic nephropathy and maintenance hemodialysis. One of the later complications of diabetes Type 1 is mental disorders: anxiety, eating behaviors and depression that require both pharmacological and psychological treatment.

Objectives

Unhealthy eating behaviors are associated with worse metabolic control, higher rates of diabetes complications, serious medical risks and premature mortality.

The treatment is executed by maintaining and coordinating a multidisciplinary team, where the patient is at the center of the intervention and participates in the therapeutic decisions. The nurse has the central role of coordinating, planning and implementing the treatment for the patient and his family.

A therapeutic approach based on the Case management model address a range of medical and mental problems. The Case Management model is designated to manage and coordinate the treatment of chronic disease and has been developed as a response to the need for complex, comprehensive and multi-team treatment in complex patients.

In this study, we will examine how eating disorder that begins in adolescence with combination of type 1 diabetes and dialysis affects health and individual's quality of life. We suppose that an eating disorder is not usually resolved without treatment and requires comprehensive care with multi-professional team support.

Conclusion/Application to practice

Conclusion: Integrative Centered Approach-Patient for the management of diabetics and mental disorders with ESRD provides better patient's promise. This method of care manager gives the nurse more possibilities to help patients, which will lead to reduction of complications.

Disclosure of Interest

No
HemoControl resolving intra dialysis hypotension

M. Drazeta, Z. Obric

Hemodialysis, Clinical hospital centre Zemun - Belgrade, Zemun, Serbia

Background

Hemodialysis with the Hemocontrol biofeedback system (HHD) is associated with improved haemodynamic stability compared with standard haemodialysis.

Automatic biofeedback system is a unique technology that may reduce intra-dialytic hypotension. The Hemocontrol function evaluates the blood volume reduction curve during HD and continuously adjusts the UF rate and the dialysate conductivity to make that blood volume curve follows a predefined trajectory, which offers the best condition for hemodynamic stability in response to fluid removal. Changes in blood volume are calculated from changes in hematocrit measured by Hemoscan. This results in a more pronounced initial decrease in blood volume and higher plasma sodium levels during the first half of the dialysis session. Since Hemocontrol uses higher ultrafiltration rates during the first half of treatment, lower ultrafiltration rates are used during the second half of the dialysis session, which is considered to be the hemodynamically the most critical part of the treatment.

This system has been evaluated in clinical trials with variable success in reducing intra-dialytic hypotension or cardiovascular morbidity. We have found that the hemocontrol biofeedback system might improve patient tolerability to hemodialysis by reducing the frequency of intra-dialytic hypotension and promoting faster recovery from fatigue after dialysis in hypotension-prone HD patients.

Disclosure of Interest

no
E-P 058

Pregnancy in women on hemodialysis

I. Mahamid

Nephrology, Nephrolife, Tel Aviv Medical Centre, Umm el Fahem, Israel

Background

Pregnancy in women with CKD has always been considered as a challenging event both for the mother and the fetus.

Pregnancy occurs among 1-7% on chronic dialysis, over the years several improvements have been achieved in the outcome of pregnant renal patients with increasing rates of successful deliveries.

The most reported maternal complications include placental detachment, anemia, infection, premature, preterm birth, uncontrolled hypertension, cesarean section, maternal death.

Objectives

Young women who is undergoing hemodialysis treatment since 1.5 year, 26 years old, second pregnant, she was in preparation for kidney transplantation, with residual renal function.

Methods

Successful pregnancies are much more frequent when the patient have residual renal function, the improvement in outcome observed in the recent years probably reflect more aggressive management of women with CKD who became pregnant, the nephrologist made for this patient a programme that include more intensive dialysis schedule, fetal monitoring, monitoring blood test potassium, phosphor, calcium, albumin, BUN levels monitoring, dry weight adjustment of medication and diet Hb, folic acid, B12 levels and anemia treatment ultrasound image in order to estimate the fetus situation

Results

The pregnancy passed successfully.

Conclusion/Application to practice

Outcomes of pregnancies and prognoses of mothers and new borns have improved in the recent years, although no guidelines in this field are available in the literature

Disclosure of Interest

no
E-P 060

Comparison of self-care ability and life satisfaction of patients receiving dialysis and healthy individuals

C. Dogan¹, A. Karakoc¹, F. Turan¹, A. Ozturk¹, D. Ates¹, F. Semercı², M. Yılmaz¹, N. O. Harmankaya¹

¹Dr. Sadi Konuk Training and Research Hospital, Istanbul, Turkey; ²Medikare Dialysis Center, Istanbul, Turkey

Objectives

Dialysis patients face a number of difficulties caused by chronic illness, as well as many limitations caused by treatment and lifestyle changes. The aim of this study was to compare the patients receiving dialysis with healthy individuals in terms of self-care ability and life satisfaction.

Methods

A total of 127 dialysis patients, 89 of whom received hemodialysis (HD) and 38 were treated with peritoneal dialysis (PD), and 90 healthy participants were enrolled in the study. The data were collected using a 28-item socio-demographic Questionnaire, Turkish Self-Care Ability Scale and The Satisfaction With Life Scale (SWLS) that were prepared by the research group. The groups were compared with each other in terms of socio-demographic characteristics, self-care ability and life satisfaction.

Results

The proportion of women in the healthy group (66.67%) was higher than the dialysis group (44.88%) (p = 0.002). It was found that the number of university graduate employees in the healthy group was significantly higher than the dialysis group (p = 0.000; p = 0.000, respectively). Dialysis patients were less able to perform their daily activities (p = 0.000), therefore, they needed and received more support. Dialysis patients were less able to go out to eat, go on holiday, read newspapers and books, go to cinema and theater than healthy group. There was no significant difference between the levels of self-care ability between the dialysis patients and healthy participants (p = 0.491), and the life satisfaction levels of the healthy group were higher than the dialysis patients (p = 0.004).

Conclusion/Application to practice

The work and family life of dialysis patients is changing, and the chronic disease causes changes in the lifestyle of the patient. Probably, all of these changes may lead to a decrease in life satisfaction of the dialysis patient.

Disclosure of Interest

no
E-P 061

Choosing a treatment for kidney failure
S. Stiperski
Nefrology, KBC Zagreb, Zagreb, Croatia

Background

Chronic kidney failure is a condition in which there is a progressive loss of kidney function.

When to start a treatment depends of many factors, but primarily on laboratory findings and clinical picture of the patient. Age and other diseases should be taken into account.

Objectives

Patients who suffer from chronic kidney failure need to be educated about their disease so they can participate in making decisions about the treatment. Doctor decides when to start dialysis and informs the patient about types of dialysis.

Methods

If patient can choose among different dialysis treatment options, the best choice for him and the family can be offered.

There are two basic types of dialysis, hemodialysis and peritoneal dialysis.

Final stage after dialysis is, surely, kidney transplantation which offers best long-term quality of life.

Results

In case study of D. Z. (1962) with diagnosis of chronic renal failure with associated diagnosis of hypertension and anemia, patient expresses a desire to start peritoneal dialysis with doctor approval after placing a peritoneal catheter.

After being educated by nurses, CAPD is performed by the patient himself. However, after some time, he is coming to an Emergency Department due to elevated inflammation parameters and the sterile dialysis fluid. Complications arise because of iatrogenic lesions so he needs a temporary dialysis via CVK.

After rehabilitation he is put back on CAPD.

Despite doctors correction of the treatment, during CAPD performance volume overload appears.

Patient is hospitalized and doctors' consilium decides that CAPD is not sufficient for effective treatment so he is put on hemodialysis via AVF.

AVF thrombophlebitis occurs so Tesio catherer is permanently placed.

Conclusion/Application to practice

Transplantation would be the ideal choice of treatment and would be best for the patient's quality of life.

Patient is put on the transplant list.

Disclosure of Interest

no
Change in compliance in a pregnant patient on chronic dialysis program. A case report

Z. É. Nagy, B. Thomas, J. Mátys, J. Balla, V. Batthány
Dialysis Centre, Fresenius Medical Care, Debrecen, Hungary

Background

Conception in women on dialysis is rare. In our case, the unplanned but joyful expectations of the arrival of a healthy baby presented us with huge challenges which we saw as an opportunity to learn.

Objectives

To provide effective treatment for a pregnant patient with good compliance until the third trimester.

Methods

A 39 years old patient living in a socially impoverished rural community with two teenage daughters. The patient commence dialysis 2014, and was non-compliant with treatment. This included failure to attend regular haemodialysis sessions, poor nutrition, fluid overload and refusal to perform the 4th operation for AV fistula. In 2017, she underwent surgery for tumor of transverse colon, but then refused any further treatment. A routine abdominal ultrasound in April 2017 revealed her pregnancy. Hormonal and psychological changes, happiness within the family, coupled with patient’s attachment to the baby, resulted in her strict adherence to treatment prescriptions. She agreed to fistula surgery and 5 sessions, in total 17 hours haemodialysis treatment weekly. For anticoagulation, low-dose low-molecular weight heparin was applied and erythropoietin dose was doubled.

Results

Besides regular gynecology visits (non-stress test, ultrasound, blood flow) an elective caesarean section was suggested. However, the baby was delivered through vaginal route in the 31st week of gestation. Parameters of baby were: male gender, weight 1.240 kg, height 40 cm. As a premature baby, further management was carried out in the perinatal intensive care unit. The newborn left the unit in good health condition weighing 3.0 kg.

Conclusion/Application to practice

5 sessions of haemodialysis treatment weekly, devoted medical attention and nursing care, including psychological support, resulted in good compliance and delivery of a healthy baby.

Disclosure of Interest

no
E-P 064

Role of blood pressure monitoring to determine optimal body weight of hyperhydrated acute patients
E. Pintér, S. Keresztesi
Dialysis Centre, Fresenius Medical Care, Kecskemét, Hungary

Background

The survival of dialysis patients is significantly influenced by the correct adjustment of the fluid balance. To treat overhydration, the proper determination of dry weight is required which is essential for monitoring the blood pressure in addition to the physical assessment.

Objectives

To monitor the blood pressure, ultrafiltration and body weight during the treatment of patients with acute kidney injury.

Methods

During the period under review (01.01.2018 – 30.09.2018), 66 patients started acute therapy. 23 patients were observed with hyperhydration in addition to renal insufficiency. We aimed for gradual body weight reduction with close blood pressure control for these patients. 43 patients dropped out of the haemodialysis program (because of recovered kidney function, death, or moving to other dialysis centres). We evaluated the patients’ ultrafiltration, decreasing of body weight, changing of blood pressure during 12 treatments on average. At the same time, we started the patients’ education, focusing on fluid balance and medications.

Results

In the study period, a decrease of body weight between 3 and 10 kilograms was observed. As a result of the significant ultrafiltration, patients reached their dry weight and became normotensive. Their antihypertensive drugs were reduced significantly. At the start of dialysis treatment, 4 of the 23 patients were hypotensive and 19 were hypertensive. When dry weight was reached, antihypertensive agents were ceased in 65% of the patients. 3 patients with hypotension and 13 patients with hypertension became normotensive.

Conclusion/Application to practice

Patients with acute kidney injury associated hyperhydration can successfully reach normotension with well planned ultrafiltration during the acute dialysis treatments. Education and patient awareness and cooperation greatly influence the achievement of volume control and the maintenance of successful fluid balance.

Disclosure of Interest

no
Why and how often need hospital based hemodialysis session the home hemodialysis patients?
A. Marti, D. Gacho, B. Lazaro, A. Bonilla, J. Gonzalez
Nephrology, Consorcio Hospital General Univesitario Valencia, Valencia, Spain

Background
Home Hemodialysis (HHD) patients require hospital sessions for different reasons, as Vascular Access (VA) related problems, re-training, clinical condition, non medical aspects.
With the impact of new technological developments as the NxStage System One® dialysis monitor and the improvements on Needling Buttonhole Technique, more and more Health Institutions and Nephrology Departments are opening HHD programmes. The more patients on HHD the more chances of them requiring Hospital Based (HB) sessions with the implication for the management of these Units.

Objectives
Based on our experience we explored the resources needed to fulfill HHD patient needs and the reasons why HHD patients required Hospital sessions.

Methods
During one year, January 2018-December 2018 we recorded any HD session required at Hospital from our HHD patients and the reason for it.

Results
Patients on HHD: 12. HD sessions at home: 3.480.
HB sessions required in one year: 123 (3,1%).
Patients requiring HB sessions: 7 out of 17.
Reasons for the HB sessions: VA: 116, important to notice that nearly 50% of the sessions were required by a single patient.
Retraining: 0
Other clinical conditions. 3
Non-medical. 4
The vast majority (nearly 90%) of HB Hemodialysis sessions required by HHD patients are Vascular Access related.

Conclusion/Application to practice
From our experience and the review of published data we conclude that Vascular Access related problems are the first reason to require Hospital Based sessions.
The more patients on HHD the more sessions that are required by them, although these sessions are more related to the specific need of one patient that to the total number.
Nephrology Departments need to be aware of HHD patients needs and to be ready to fulfil them in terms of Hemodialysis spaces and specific trained nurses.

Disclosure of Interest
no
Analysis of lethal outcomes in patients on RRT and the identification of risk factors
I. Budakova¹, O. Portnova², M. T. Parisotto³
¹Fresenius Medical Care, Fresenius NephroCare Dialysis Centre, Stary Oskol, Russian Federation; ²Fresenius Medical Care, Fresenius NephroCare department, Moscow, Russian Federation; ³Fresenius Medical Care, Care Value Management EMEA, Bad Homburg, Germany

Background

The number of patients requiring renal replacement therapy is increasing in Russia. Despite the increase in availability of RRT and the progress achieved in technical support and drug therapy, patient survival remains poor.

Objectives

To identify risk factors for death in patients with RRT.

Methods

The study involved 158 patients on haemodialysis for the period from Sept. 2013 until Sept. 2018. During this time, 28 patients (17.72%) died. Data of survivors and deceased patients were studied separately.

Group 1 - survivors: 130 patients receiving RRT for 4 to 210 months, average age 54.21 years, 57 female; 73 male;

Group 2 - deceased: 28 patients receiving RRT for 4 to 144 months, average 61.79 years, 9 female, 19 male.

A comparative analysis of clinical and laboratory test was performed. Haemoglobin, cholesterol, CRP, nutritional status, bodymass index (BMI), age adjusted Charlson’s comorbidity index and the average value for all indicators was calculated.

Results

In the mortality pattern of 39.29% of cases, the cause of death was heart failure, 21.43% sudden death, 7.4% myocardial infarction, 17.86% stroke, 14.29% other reasons. Significant differences were in terms of haemoglobin level, with a target value of 120 g / L in group 1 equal to 111.4 g / L, in the 2nd group 96.78 g / L.

When comparing groups by using the Charlson comorbidity index, it was found that group 1, patients had an average of 4.97 points, and in group 2, an average of was 7.07 points.

Conclusion/Application to practice

Patients with obesity grades I-III deserve special attention and get qualified nutritionists, physical therapy specialists with experience working with patients suffering from CKD.

Anaemia as a complication of CKD takes the first place; the correction of this condition will definitely increase not only the quality of life, also the survival rate of patients with RRT.

Disclosure of Interest

no
E-P 072

A kitchen „renal dietary“ course for chronic kidney disease patients and quality nutrition support
L. Góz, B. Thomas, J. Balla
*Dialysis Centre, Fresenius Medical Care, Debrecen, Hungary*

**Background**

In chronic kidney disease (CKD), dietary requirements vary depending on the stage of renal disease. Protein requirements differ before and after the initiation of dialysis. The need for dietary adjustments after haemodialysis begins is individualized depending on laboratory data and the level of residual renal function. It’s important to maintain the adequate sodium, potassium, calcium, phosphorus, calorie and fluid intake.

**Objectives**

To ensure that patients adhere to dietary recommendations and easily cultivate healthy eating habits.

**Methods**

In addition to continuous „theoretical“ teaching, a practical kitchen cooking course has been introduced. Patients were led to prepare their menu in small groups with the help of a professional dietitian and a nephrological nurse. After hazard prevention measures, hand washing and wearing of kitchen aprons, the dietitian gave the various assignments and recipes. „Cooking course“ began in earnest and some useful tips were provided, such as reduction in potassium content of various vegetables and fruits by precooking and draining of remaining cooking fluid. The lowering of the phosphorus content of meats can be obtained by precooking processes. Improving flavour by adding plant based spices to non-salted foods (marjoram, parsley, thyme). Choosing seldom used basic ingredients (millet) can be. Baking with flour of low protein content, can be. Stressing the importance of freshly prepared meals without preservatives.

**Results**

Patients enjoyed the preparation of the meals and eating all the prepared food was the evidence. They were curious, socialised and participated actively during the course. The recipes were shared with family members at home.

**Conclusion/Application to practice**

The whole exercise will contribute to improvements in the patients quality of life by healthy cooking and help attenuate the many complications of renal diseases. During the cooking course, patient education and their active participation was the key success factor.

**Disclosure of Interest**

no
Human resource management of renal nursing staff: The case study of Northern Greece
S. Vovlianou¹, N. Nikiforidou¹, S. Zekaki², E. Dimitriadis³
¹Renal Unit, General Hospital of Kavala, Kavala, Greece; ²Director of Nursing Service, General Hospital of Kavala, Kavala, Greece; ³President of the Nursing Department, Eastern Macedonia and Thrace Institute of Technology, Kavala, Greece

Background
By definition, human resource management (HRM) refers to the administrative function which studies, implements and supervises the improvement of activities related to the management and development of staff in an organization. This can be achieved with various documented programs and tools.

Objectives
The objectives are summarized in the increase of competitiveness and efficiency as well as the performance and satisfaction of renal nurse staff with a concurrent advanced quality of the services to renal patients.

Methods
A structured questionnaire was selected using twelve multiple choice questions and twenty Likert scale questions. The sample is made up of 46 people, all nurses having a position of responsibility in Renal Units of twelve public hospitals in the area of Macedonia and Thrace of Northern Greece.

Results
The required training of renal staff in HRM is below the average (average=2.86) as well as their work performance and their level of education and knowledge (average=2.85). At the same level averages also the use of information systems by renal nurses (average=2.92). Compared to the mentioned factors, the average value for the opportunities offered to staff to discuss with the head nurses about the difficulties that they face is much lower (average=2.37). Above the average is the available participation in training programs (average=3.17), the implementation of training sessions on quality issues (average=3.65) and the implementation of quality assessment and improvement methods (average=3.77).

Conclusion/Application to practice
The satisfaction with job performance along with training and education of nursing staff are sufficient; although training programs on quality issues are few or null. Finally, the methods used to assess and enhance the quality of care provided are also limited in renal units of Northern Greece.

Disclosure of Interest
no
Fibromuscular displasia - case report
M. Mihalić, Ž. Dika
Division of Nephrology, Arterial Hypertension, University Hospital Centre Zagreb, Zagreb, Croatia

Background

Fibromuscular dysplasia (FMD) is nonatherosclerotic, noninflammatory vascular disease that may result in arterial stenosis, aneurysm, dissection or occlusion. The cause of FMD is unknown, but smoking and genetics play a role in its development. FMD is most common in young women, although it may occur at any age. The clinical manifestations of FMD are determined primarily by the vessels that are involved and by the type and severity of the vascular lesions. FMD most commonly affects the renal and extracranial arteries. Typical angiographic finding is a string of beads appearance represented histologically by medial fibroplasia in most cases. The treatment depends on the localization. It may include medical therapy and surveillance, or revascularization by percutaneous transluminal angioplasty (PTA) or surgery.

Objectives

26-year-old woman was hospitalized on our ward due to uncontrolled arterial hypertension. Bilateral stenosis of renal arteries (RA) was found by color doppler. Angiography of renal arteries showed 20% stenosis of left RA (LRA) and significant stenosis of right RA (RRA). Balloon percutaneous transluminal renal angioplasty (PTRA) of RRA was performed. In 2011 was rehospitalized due to RRA restenosis and PTRA was performed. Control ABPM was normal. In 2012 was hospitalized in Neurology Clinic due to subarachnoid hemorrhage. Intervention with coiling and embolisation for cerebral aneurism was performed. In 2013 and 2016 was reintervention on cerebral aneurym. In 2016 was last RRA intervention (PTRA+stent). In following check ups she had controlled hypertension.

Conclusion/Application to practice

During all hospitalizations and check ups, it was necessary for the patient to be educated by medical staff on how to measure and monitor blood pressure correctly, how important it was to take prescribed therapy and why was important to stop smoking. Control of these traditional risk factors is important because it can delay development and progression of the arterial pathology and poor patient's outcomes.

Disclosure of Interest

no
E-P 075

Treatment of West Nile Fever virus infection by plasmapheresis

M. Németh, I. Papp, J. Balla
Dialysis Centre, Fresenius Medical Care, Debrecen, Hungary

Background

West Nile Fever virus infection has been diagnosed since 1960 in Hungary, which is spread by mosquito bites and blood (transplantation, blood transfusion, infected mother to infant). Its main spreading agents are Egyptian stinging leash and its carriers, the migratory birds. In our case, a 39 years old female went to a hospital with high fever, headache and skin rash. In a short time, pain occurred in her lower extremity. Based on symptoms of polyradiculitis, meningitis also was suspected. Her leg pains rapidly worsened.

Objectives

Finding the cause of patient’s complaints, mitigating and eliminating the symptoms.

Methods

Based on examination by an infectologist and a neurologist, spinal puncture, complete serological tests, skull CT and electro-neurographic test were performed. Spinal puncture proved aserosus meningitis. Result of the serological test was an acute or recently occurring virus infection of Western Nile virus; as a result, 5 sessions of plasmapheresis treatments were initiated.

Results

During plasmapheresis, plasma is separated from blood and high molecular weight auto-antibodies, immune complexes, paraproteins, cytokines, complementaries are removed. The amount of removed plasma was replaced by fresh frozen plasma, or 20% human albumin. We treated the patient 5 times in every other day. Patient’s fever lasted 10 days, her lower limb movement failure didn’t improve, therefore a stroke steroid therapy in herpesin protection was initiated. As an effect of the treatments, paresis showed an improvement, patient had left the bed after 3 weeks, and made a few steps with an impeller.

Conclusion/Application to practice

Most important is the early diagnosis and the establishment of an appropriate medical finding based on symptoms. The general climate change can contribute to the spread of the disease in our country. Precautionary measures include protecting the body in high risk areas and extermination of mosquitoes as vaccination does not exist.

Disclosure of Interest

no
Haemodialysis and peritoneal dialysis from nursing aspect. Difficulties and differences due to experience
F. Gerhák, S. Keresztesi
Dialysis Centre, Fresenius Medical Care, Kecskemét, Hungary

Background

Nephrological nurses have a significant role in treating patients with chronic kidney failure (CKD) disease. They are involved in renal care actively helping patients to choose the right treatment mode. Nephrological nurses are expected to perform patients treatment, which means the practical implementation of both modalities, haemodialysis (HD), peritoneal dialysis (PD).

Objectives

To compare a series of complex nursing activities including patients individualized treatment, education and leadership to maintain the patients quality of life.

Methods

A comparative descriptive examination to evaluate daily workflows during HD and PD treatments, duration of effective patient care (education, exit site care, etc.) and administrative tasks (handling data, recording test results).

Results

PD begins with the education of the patient; HD begins with the treatment while the patient’s education begins as routine activity at the same time. PD workflows have well-structured systematic activities, which are shared between a nurse and a physician (monthly controls, periodic examinations). HD workflows are based on solving current problems and are mainly nursing activities (e.g.: patient’s education because of high interdialytic bodyweight). In addition to detailed description of nursing activities, the PD nurses guideline help to focus on the patient’s care. There are several guidelines and protocols available for HD nurses, which include the nurses expectations, safety and effective patient care.

Conclusion/Application to practice

In both modalities, the nephrological nursing activities required high level of professional skills to perform adequate treatment, which contributes to the preservation and improvement of the patients quality of life. The completion of both treatments requires equivalent and high level of theoretical and practical skills.

Disclosure of Interest

no
E-P 077

Successful treatment of hyperlipidemia with plasmapheresis - case report

S. Besedic

Referral Center for nephrology, dialysis and transplantation, University Hospital Center Zagreb, Zagreb, Croatia

Background

Plasmapheresis is a primary or substitute therapy in patients in which plasma circulatory factors contribute to disease. Therefore, plasmapheresis is a valuable support method in such diseases.

Objectives

To show successful administration of plasmapheresis in a girl with severe hyperlipidemia.

Methods

A girl (age 5 yrs, body weight 19 kg) with a diagnosis of diabetes mellitus type I and ketoacidosis with acute pancreatitis caused by hyperlipidemia was admitted to our hospital. In addition, she had autoimmune thyreoiditis and caeliac disease (HLA DQ2 and Marsh 1 positive). Second day after admission to hospital plasmapheresis was started (in total she received 3 courses of plasmapheresis consecutively). At first course a 1000 ml of plasma was removed and substituted with 1000 ml of FFP (fresh frozen plasma). After removal of the same amount of plasma, the other two courses were substituted with FFP (750 ml) + Ringer solution (250 ml). Anticoagulant therapy was performed by Heparin bolus (500 iu). Strict control of all serum electrolytes during the procedure were maintained. The colour of blood was reddish with lipide opalescence. It should be mentioned that thick plasma flow can cause very high transmembraneous pressure (TMP) in a plasmatic filter that can jeopardize the procedure.

Results

Therapeutic plasmapheresis in combination with parenteral rehydration and insulin successfully normalized all clinical status and electrolyte disbalance.

Total cholesterol before plasmapheresis was 40.9 mmol/l (triglicerides 241.97 mmol/L); down to 11.3 mmol/L in the middle of the procedure (triglicerides 4.1mmol/l) and at the end point total cholesterol fall down to a 8.3 mmol/L (triglicerides 2.26 mmol/L).

Conclusion/Application to practice

A successful treatment of hyperlipidemia with therapeutic plasmapheresis was achieved. A combination of plasmapheresis with insulin treatment in addition with strict diet regime was performed with utmost benefit for the child.

Disclosure of Interest

no
E-P 078
Dramatic and symptomatic decline in renal function – rapid start peritoneal dialysis (PD)?
K. Dailey, S. Morgan, K. Wong, J. Uy
Renal Medicine, Royal Prince Alfred Hospital, Sydney, Australia

Background

A 45 year old female with IgA Nephropathy presented with a rapid decline in renal function. At presentation symptoms included extreme hypertension and severe headache with associated blurred vision. Intractable vomiting, proteinuria, oliguria, confusion and pitting oedema to upper thighs were also present. A tenckhoff catheter was inserted for dialysis access. Renal nursing staff were requested to commence PD at 36 hours post catheter insertion. This was required, despite risk of peritoneal leakage, due to significant ongoing clinical deterioration.

Objectives

Our objectives quickly became stabilise, establish and safety. A draft protocol was already in place however was of limited value in light of the relative contraindications outlined. This case is unique as rapid start PD, although an established therapy for uncomplicated presentations, is avoided in patients with severe symptomology. The ultimate outcomes of rapid start PD patients, as a cohort, are largely unknown. Numerous protocols for practice exist however implementation numbers are small. The objectives outlined above helped established a multidisciplinary mid and end shift case review system to ensure communication was paramount.

Methods

Rapid start PD was commenced using small fill volumes and short dwell times. Further challenges experienced included hypokalaemia requiring intraperitoneal potassium, supine positioning with ongoing severe vomiting, photophobia and hypertension despite subcutaneous and intravenous treatment. The course of PD commencement was also complicated by catheter malposition, decreased drain volumes and an ongoing state of metabolic stress. Upon stabilisation, the patient was transferred to the PD unit for training and ongoing monitoring. Despite high level care provision in this environment the patient required readmission with increased liver function tests.

Conclusion/Application to practice

Rapid start PD in this patient presentation was ultimately successful despite significant symptoms on presentation. It is felt to be feasible in complex presentations. Implementation of case review strategies highlighted the importance of specialist knowledge sharing and leadership in nursing.

Disclosure of Interest

no
E-P 079

Anthropoplicometric measurements in peritoneal dialysis patients

C. Sayan¹, L. Yucel¹, Y. Deligoz Bildaci², A. S. Artan¹, O. C. Elcioglu³, E. Haziyev¹, M. Gursu², R. Kazancioglu²

¹Hemodialysis and Peritoneal Dialysis Unit, Bezmialem Vakif University Medical Faculty, Istanbul, Turkey; ²Nephrology, Bezmialem Vakif University Medical Faculty, Istanbul, Turkey

Background

Glucose and lipid metabolism disorders like weight gain, glucose intolerance, decreased muscle mass, increased fat mass, and hyperlipidemia may be observed in peritoneal dialysis (PD) patients.

Objectives

We aimed to investigate whether there is a correlation between anthropoplicometric and metabolic parameters of PD patients.

Methods

The study included patients in our PD unit, who had consecutive anthropoplicometric measurements. Age, gender, presence of diabetes mellitus and body mass index (BMI=height/weight²) were recorded. The biceps skin fold thickness (SFT), triceps SFT, mid-arm, waist, hip and neck circumferences were recorded by the same physician. Total, LDL and HDL cholesterol, triglyceride, glucose and hemoglobin A1c (HbA1c) were recorded. Daily glucose exposure was calculated. The SPSS 20.0 program was used for statistical analysis. Pearson’s test was used for data with normal distribution and Spearman correlation test was used for abnormal parameters in the correlation analysis.

Results

A total of 24 PD patients (14 APD, 10 CAPD patients; female/male ratio: 13/11) were included. The mean age was 61.88±10.8 years. 10 patients (41.7%) were diabetic. No significant difference was found between the anthropometric measurements at the beginning of the treatment and the second year (Table-1). The number of patients with a BMI over 30 kg/m² was nine in the first measurement and 11 in the second measurement (p<0.001).

Metabolic parameters of the patients at the first and second evaluations were not statistically different (Table-2). Although the mean glucose exposure increased slightly in the second measurement, the difference was not significant.

Conclusion/Application to practice

We did not detect significant change in the anthropometric measurements although the number of patients with BMI over 30 have increased. Glucose and lipid parameters did not change significantly in one year, and was not correlated with daily glucose exposure. A long term study involving more patients is planned.

Disclosure of Interest

No
The effect of peritoneal dialysis on balance and falling risk

D. D. Balci¹, D. Efeyurtlu², A. Inci², S. Guı³, A. M. Sarıkaya², M. Bilgilişoy Filiz³, S. Koldas Dogan³, F. Sari⁴

¹Peritoneal Dialysis, Health Sciences University Antalya Training and Research Hospital, Antalya, Turkey; ²Nephrology, Health Sciences University Antalya Training and Research Hospital, Antalya, Turkey; ³Physical Therapy and Rehabilitation, Health Sciences University Antalya Training and Research Hospital, Antalya, Turkey; ⁴Nephrology, Akdeniz University Medical School Hospital, Antalya, Turkey

Background

In PD patients, physical restriction, postural balance disorders and increased risk of falling are important causes of morbidity and mortality due to complications of aging and CKD.

Objectives

To investigate the effect of full abdomen and empty abdomen on the balance in PD patients.

Methods

In this study, 51 healthy individuals were included. 11 female and 20 male patients. Patients who under PD for at least 3 years formed the patient group. The mean duration of PD was 3.8 years and the mean age was 48.84±14.29 years. The cases that may cause balance disorder were excluded the study. Ethics committee permissions were obtained. Clinical Evaluation: Postural balance was evaluated by computer aided posturography device (Tetrax®Interactive Balance System) and Berg’s balance scale. Stability scores, weight distribution index and fall index were evaluated. All evaluations were performed using SPSS-24.0. Mann-Whitney U test was used for intergroup, Wilcoxon test for intragroup comparison.

Results

Berg’s equilibrium total score was significantly lower in PD patients than in healthy individuals and the index of fall was higher. Stability scores were significantly worse in PD patients vs. healthy individuals. There was no significant difference in weight distribution index. In the comparison of PD (empty abdomen) and after(full abdomen), the stability index of the eyes-closed head-ahead position was significantly worse. There was no significant difference in the weight, weight distribution index and other stability indicators.

Conclusion/Application to practice

Postural balance disorders are seen in PD patients compared to healthy individuals, but it is thought that there is no additional negative contribution to the balance disorder and fall risk in comparing when the abdomen is full or empty. We did not find any studies about balance in PD patients in the literature review. The main consequence of this study is that while PD patients have impaired balance comparing to healthy individuals, no significant difference was found in the presence and absence of fluid in the abdomen.

Disclosure of Interest

no
E-P 082

Patients with high body mass index in peritoneal dialysis program
T. Vargáné Szabó, S. Keresztesi
Dialysis Centre, Fresenius Medical Care, Kecskemét, Hungary

Background

People have been dealing with their body mass index (BMI) since the beginning, though it was just an aesthetic aspect previously. BMI was developed by World Health Organization which defined different BMI groups based on body weight and height. In case of chronic kidney disease, peritoneal dialysis (PD) isn’t the preferred treatment mode, although this modality isn’t contraindicated by high BMI alone.

Objectives

To examine differences in treatment time, prescription and frequency of complications between normal and high BMI patients.

Methods

For the past 18 years, we have analysed the treatments of patients with the highest BMI in our centre. We compared them with other patients’ results. We have been looking for a correlation with BMI, time spent on PD program and the incidental cause of program termination.

Results

Only 24% of patients were classified in normal range of BMI, while 3% were under and 35% were over normal BMI. The remaining 38% of patients were categorized according to the rate of obesity. Among our patients, the lowest BMI was 13.8 kg/m², and the highest was 46.2 kg/m². Patients with high BMI didn’t differ in their treatment prescription from other patients. The most important decisive factor for the treatment time and loss of treatment was the compliance or non-compliance. Average treatment time was 26.2 months. In the normal and lower BMI group, this average was 23.9 months, while in the highest BMI group it was 29.6 months, due to contraindication of kidney transplantation in patients with higher BMI.

Conclusion/Application to practice

In addition to old recommendations, PD is not an impossible enterprise but is very difficult task without adequate compliance and supportive background.

Disclosure of Interest

no
Does the fast peritoneal equilibration test replace the standart peritoneal equilibration test?


Dr. Sadi Kouk Training and Research Hospital, Istanbul, Turkey

Objectives

An equilibration test between standart pet + kt/v and fast pet + kt/v in peritoneal dialysis has been performed. We aimed to compare the results and cost of fast PET with those of standart PET.

Methods

PET has been performed to 31 male and 60 female totally 91 patients. 53 of these patients apply SAPD, and 38 of them apply APD. It has been applied by using 2.27% liquid with glucose to our patients for standart PET at night after waiting for 8 hours and after draining their abdomens for 20 minutes. For standart necessary analysis and fast PET, in the 4th hour Purea, Pcrea, Pglucose and Kt/v, urine and urea and creatinine in dialysate have been tested for 24 hours. For kt/v Purea, Pcrea, Pglucose and Palbumine have been tested. For categorical variables frequency and percentage values have been given. For continuous variables; average, standard deviation and median values have been given. For relationships among categorical variables. Kappa has been applied with correspondence analysis.

For comparisons between two groups Wilcox Signed rank test has been used.

Night liquid in standart PET, Durea, Dcrea and and 0.2.4. Durea, Dcrea, Dglucose in the 2nd hour results have been treated in the PD adequest program. Fast PET application night liquid Durea, Dcrea and Durea, Dcrea, Dglucose in the 4th hour and Pure, Pkrea, Pglucose in the 4th hour results were treated in the PD adequest program.

Results

There was no significant difference between fast PET and standart PET results. The averaga cost of standart PET +Kt/v is higher than the average cost of fast PET +Kt/v (p<0,0001)

The result of Kappa correspondence Analysis: The conformity ratio is 95,3%.

Disclosure of Interest

no
Nephrological nurses and occupational exposure - how? when? why?

A. Trzcińska1,2,3
1Medical University of Silesia, Katowice, Poland; 2Polish Nephrology Nurses Association, Katowice, Poland; 3Polish Vascular Access Club, Katowice, Poland

Background

The problem of continuous occupational exposure is a difficult one, not appreciated by the medical staff or by the government. In June we celebrated the ninth anniversary of the implementation of Directive 2010/32 / EU - Poland, as well as any Member States, despite this they have failed to fully implement these regulations. As a result, the scale and repeatability of cases of exposure among employees indicates that the problem is not decreasing but rather increasing.

Every year the European Union records 1.2 million injuries caused by a sharp instrument. In Poland such cases within a year are 37 000. Occupational exposure mostly affects nephrological nurses. If employers will not invest in increasing the safety of nurses is a problem will grow.

Objectives

The study was conducted on 500 nephrological nurses. We asked the nurse to have exchanged the circumstances of occupational exposure, we asked whether they have safe equipment, whether the employer provides them with training in this field.

Methods

Author’s survey containing 35 questions.

Results

Unfortunately, nurses make a lot of mistakes that lead to occupational exposure. Not all employers care about the safety of nurses. There is a lack of safety training for nurses.

Nephrology nurses most often undergo occupational exposure when they put on the needle cap: 94% pen with insulin, 71% pre – filled syringe, 41% standard needle after injection or after taking blood.

Conclusion/Application to practice

In Poland, an additional problem is extremely low wages of nurses. A nurse in Poland receives, for her work, on average 400 euros per month. Therefore, nurses in Poland have not one but two or three jobs. This means that nurses are very tired. Occupational exposure among dialysis nurses is a very big problem, often overlooked. Occupational exposure threatens the health and lives of nurses.

Disclosure of Interest

no
E-P 085

Quality management system in a haemodialysis unit and patient satisfaction
A. Kavalieratou, G. Garofyllou
Haemodialysis Unit, Konstantopoulio G.H. N. Ionia, Athens, Greece

Background

Haemodialysis Units adopt a Quality Management System to provide quality healthcare services, to promote reliability and to increase the patients’ contentment and faith they receive the best possible care.

Objectives

The purpose was to ascertain whether the ELOT EN ISO 9001:2015 Quality Management System, “Provision of Dialysis Services in Patients with Renal Failure”, in a Haemodialysis Unit affected the patients’ satisfaction level.

Methods

The Quality Management System stipulated the use of a questionnaire containing 11 questions to measure the patients’ satisfaction. The data was collected in July 2018 during the annual audit for the continuous compliance of the Haemodialysis Unit with the quality requirements. 35 patients undergoing Chronic Haemodialysis for at least the last 6 months participated.

Results

The Quality Management System enabled the identification of the patients’ individual needs and the areas that required more attention. More specifically, 97.1% of the patients stated that the services provided had been improved and that requests such as the installation of TVs and the collaboration with a dietologist have been met. 77.1% of the patients were satisfied by the healthcare provided and 88.6% were satisfied by the staff in general. Regarding the care provided by the medical staff 74.3% of the patients were satisfied, while 54.2% found the information given for their health to be adequate. All of the patients (100%) were satisfied by the care provided by the nursing staff and almost all (97.1%) felt that the nursing staff were easy to communicate with. Only 6.1% of the patients stated that specific areas required further improvement.

Conclusion/Application to practice

A Quality Management System in a Haemodialysis Unit leads to a better understanding of the patients’ individual needs, allowing for higher satisfaction. Moreover, the evidence based documentation of the quality of the services provided and the emphasis put on continuous improvement further enhances the patients’ trust.

Disclosure of Interest

no
E-P 086

Less is more - quality improvement through simplification

K. Dailey, D. Davison

Department of Renal Medicine, Royal Prince Alfred Hospital, Sydney, Australia

Background

As specialty health environments continue to evolve, nurse led care models are imperative and can have a significant impact on patient outcomes. Increasing patient presentations related to dysfunctional vascular access in addition to increasing clinical demands on a limited pool of specialist staff led to a necessity to look for ‘potential’ skill in nursing staff in order to achieve a higher level of integrated care for our patients. The status quo of invasive intervention, to achieve replacement or rewire, in radiology had led to lengthy waiting times resulting in delayed dialysis, admissions and increasing length of stays.

Objectives

A nurse led care model, in the repair of damaged tunnelled vascular catheters, has been developed and implemented in the haemodialysis units of a major tertiary referral hospital. Implementation of point of care repair by advanced practice haemodialysis nurses has significantly reduced the concerns outlined above. A renewed focus on preservation and longevity of patient access vessels, in light of chronic disease and ongoing life sustaining treatment, has also been improved and sustained.

Methods

Clinical skill and knowledge outlines and a formal health briefing note were presented to management with approval obtained. Training was performed in simulated and live environments under direct supervision.

Results

Benefits for our patients include timely referral with direct access to treatment by trusted staff. Any delay in access to dialysis is no longer considered acceptable. The renal department and organisation has experienced an overall decrease in access related emergency presentations and costs associated with admission, patient movement, staffing and intervention in these circumstances.

Conclusion/Application to practice

This challenge carried a high level of clinical risk and negotiation. Implementation success has highlighted that recognition of further ‘potential’ in senior nursing staff can result in overall practice change and extensively improved patient outcomes in addition to overall benefits for the institution.

Disclosure of Interest

no
E-P 087

Introducing a falls risk assessment tool within the satellite haemodialysis unit setting

G. Cater, N. Beddows, G. Dewsnaps, N. Ward, C. Poole

Fresenius Medical Care Renal Services Ltd, Kings Norton, Birmingham, United Kingdom

Background

Older people make up a large and increasing percentage of the haemodialysis population. As people grow older, they are increasingly at risk of falling and injury. Approximately 30% of over 65 year olds fall each year, and for those over 75 years the rates are higher. Fall prevention programmes can be effective in reducing the number of people who fall.

Objectives

- Raise awareness of falls in the chronic haemodialysis population
- Develop a falls risk assessment tool (FRAT) to identify patients at risk
- Disseminate the FRAT tool across a network of satellite dialysis units
- Audit use of the FRAT

Methods

Falls risk literature was reviewed and the FRAT tool developed and disseminated to a network of >40 haemodialysis satellite units within the UK.

Evidence of its use was assessed via:

- Incident reporting
- Local record keeping audit
- Senior team monitoring and support visits
- Internal quality audits

Results

In 2018, 393 incidents of patient falls were reported, 60% of which occurred between treatment sessions and external to the dialysis unit (e.g. patient's home). The FRAT has heightened awareness of the risks associated with falls and recognition of those at risk. It has aided prompt referral for medical review prior to treatment initiation thus increasing patient safety.

FRAT completion effectiveness is monitored during quarterly record keeping audits and during senior team support visits and quality audits. The FRAT has been a catalyst in creating a ‘Risk of Falls’ care plan to ensure consistency and effectiveness in nursing approach.

Conclusion/Application to practice

Holistic falls risk assessments and proactive risk recognition has the potential to reduce injury and hospitalisations thus promoting patient safety.

Disclosure of Interest

no
Improving correct hand hygiene compliance in dialysis unit

R. Hais
Hemodialysis, Assuta medical center, Haifa, Israel

Background

According to the WHO, health care-associated infections are a major cause of morbidity and mortality among thousands of people each year. Hands of health workers are an active cause for transporting pathogenic generators. Failure to comply to perform hand hygiene is the main reason for cross infections in medical institutions.

Effective hand hygiene performance, using an antimicrobial soup or hand rub (ABHR), is regarded as the most effective preventive measure against spreading of infections.

The applying of the "5 moments" model (5m) assessment tool in the dialysis unit showed poor outcomes of compliance to hand hygiene performance.

Objectives

The main goal was to raise the staff compliance to correct and effective hand hygiene performance, according to the 5m. The additional goal was to empower dialysis patients by involving them in hand hygiene process.

Methods

The preintervention phase, included:

1. Questionnaire including 30 questions, to evaluate the extent of perceived importance to perform hand hygiene, filled in by the stuff (N=16, nurses and nursing aid).
2. 80 direct observations accordingly to "5 moments" model and "6 phases" of effective hand hygiene performance.

Intervention:

1. Frontal guidance of all the stuff (N=16) about the issue.
2. Guidance of patients (N=15), about hand hygiene importance.
3. Direct guidance of staff member during observations.
4. Ensure the availability of ABHR device on each dialysis machine.
5. Signing the entire staff to the divisional patient safety convention which will point out the "hand hygiene performance" and displayed in a conspicuous area.

The postintervention phase, included:

1. Questionnaire including 30 questions filled in by the stuff.
2. 80 observations accordingly to "5 moments" and "6 phases".

Results

Will be presented at the 2019 Conference.

Conclusion/Application to practice

Accordingly, to the research results I will demonstrate whether the intervention succeeded or not and which field contributed the most to the success.

Disclosure of Interest

no
E-P 091
Smart software application used in dialysis clinics – Workforce Management
C. Popescu, M. Preda
Medical, Fresenius Medical Care Romania, Bucharest, Romania

Background

We are living in a smart digital technology era. Workforce Management (WFM) is a smart software application which is intended to support a better management of the workforce. In February 2018, WFM has been integrated in the electronic database system in the three units of a private dialysis network. Starting November 2018, the application will be implemented in all the other clinics. In this work, additional methods are presented to analyze the impact of the smart application, over time.

Objectives

To maximize employee efficiency and productivity while complying with legal requirements related to nurse/patient ratio.

Methods

In order to support the processing of different types of nursing care, administrative, service processes, versus labour law requirements, the following functionalities have been implemented through the application, in each clinic database system:

- Unique and complete employee database has been created
- Scheduling activity based on work type, priority, care and service-goal deadlines, employee availability and skills
- Automatic work time, activities and efficiency tracking

Results

Scheduling aligns 100% workloads with employee skills and availability, taking into account employee shifts, scheduling preferences, and governing labour laws.

Patient ratio is covered 100%.

Several Reports related to scheduling and efficiency are automatically generated.

Conclusion/Application to practice

The integration of intelligent software in dialysis clinic processes is a step ahead to ease the employee scheduling, to improve efficiency while improving patient outcome and maintaining patient safety.

The WFM application can be used with success as a smart management tool.

Disclosure of Interest

no
Travelling and Haemodialysis
A. Kavalieratou, G. Garofyllou
Haemodialysis Unit, Konstantopoulio G.H. N. Ionia, Athens, Greece

Background

Haemodialysis poses many restrictions on the patients’ desire to travel away from home for various reasons. These patients are restricted to travelling where they can access haemodialysis services, while they also have to face their health condition and the anxiety related to it.

Objectives

The purpose of this study was to examine the incidence of travelling by patients undergoing Chronic Haemodialysis.

Methods

This is a descriptive study conducted at a Haemodialysis Unit in Athens, Greece, from May 2017 to August 2018, with the participation of 41 patients undergoing Chronic Haemodialysis. The travelling data was collected prospectively.

Results

According to the study, 51.2% of the patients travelled on 42 occasions. A total number of 299 haemodialysis sessions was undertaken away from the usual haemodialysis unit, with a range of 1 to 39 sessions per travel. The destinations involved were Greece’s mainland (66.7%), a Greek island (28.6%), a foreign country (4.7%). 78% of the patients wished to travel, as travelling had a positive impact on their lives. 88.9% of the patients not interested in travelling were above 60 years of age. Travelling was difficult due to General health (32.3%), Insecurity/fear (25.4%), Unavailability of Haemodialysis (20.3%), Family reasons (18.6%), Financial reasons (3.4%). Problems that occurred were 1 exit site infection of a central venous catheter, 1 graft failure due to thrombosis, 1 fall related injury and 2 patients experienced problems during the haemodialysis treatment.

Conclusion/Application to practice

Travelling is not uncommon among patients undergoing Chronic Haemodialysis despite the difficulties that it entails and it can increase the patients’ satisfaction and emotional well-being. It is important that health professionals encourage travelling if the patients’ health allows it, educate them on avoiding complications and support them in making the necessary arrangements and overcoming their fears. Taking a holiday can give a big boost to the patients’ morale and self-confidence.

Disclosure of Interest

no
E-P 093

Is dialysis adequacy the determinant factor for the successful assessment of a treatment?
V. Zoi, N. Piliouras, A. Maniati, D. Siopi, V. Marinopoulou
Dialysis Unit, ATTIKON University Hospital, Haidari, Athens, Greece

Background

Informing the patient in the final stage of Chronic Kidney Disease about the substitution method of his/her renal function is not only his/her inalienable right, but also one of the determining factors that could contribute to the effective extra-renal dialysis and to his/her quality of life. The method’s selection always has to be the result of an integrated presentation from the interdisciplinary team and has to be based on the patient’s personal preference.

A 58 year old patient, suffering from polycystic kidney disease is receiving haemodialysis for ten years. During the assessment period in the Artificial Kidney Unit, the indexes confirm the dialysis treatment’s adequacy (kt/V between 1.14 to 1.28), but the patient feels tired, disappointed and pessimistic. When she started receiving peritoneal dialysis, she began to feel relieved and the next months are indicative not only of the dialysis treatment’s adequacy, but also of the feeling of satisfaction for her health condition (KDQOL-SF™)

The patient describes the period upon starting peritoneal dialysis (8 months) with the phrase “I started living again”. Her monitoring by the Peritoneal Dialysis Unit confirms the absence of complications or infections, as well as greater autonomy provided by peritoneal dialysis which has beneficial effects for the specific patient.

Informing the patient not only at the stage of treatment substitution selection, but also during the course of his/her life about extra-renal dialysis is a duty of the attending physician and of the nursing staff. In order for it to be complete though, it shall always take account of the comments and recommendations made by the patient, whereas nursing staff have to persistently encourage the patient’s active participation.

Disclosure of Interest

no
The conscious decision of haemodialysis discontinuation in elderly and the nurse's aspect

V. Zoi, N. Pliouras, M. Flevotomou, E. Bathra, V. Kiriakidis, V. Marinopoulou
Dialysis Unit, ATTIKON University Hospital, Haidari, Athens, Greece

Objectives

Investigation of the haemodialysis discontinuation phenomenon in elderly patients following their conscious decision and with the support of their family environment. The challenge for nephrology nurses is for integrated management which complies with the nursing mission by defending the patient’s dignity.

Methods

Review of international experience and historical examples, of case law and of the directions of international organizations and specialized committees. Assessment of the practices followed in general in Greece and investigation of all means available for a rational complete nursing intervention.

Results

Preparation of an action plan in an interdisciplinary level aiming at setting the focus on the patient’s individual needs. The nurse remains a supporter of life and of the applied scientific experience, but shall not rely on the “comfort” of a paternalistic model.

Conclusion/Application to practice

The necessary initiatives not only revealed the essence of nursing work, which responds to the different needs and requests of the elderly patient before their end of his/her life, but also to the overall care that shall be offered to any patient receiving haemodialysis while being regarded as a person and not a numerical unit.

Disclosure of Interest

no
National transplant program in Montenegro

D. Pelicic\textsuperscript{1,2}, M. Ratkovic\textsuperscript{3,2}, D. Radinovic\textsuperscript{3}, B. J. Nikolina\textsuperscript{4,5}

\textsuperscript{1}Center for Science, Clinical Center of Montenegro, Podgorica, Montenegro; \textsuperscript{2}Faculty of Medicine, University of Montenegro, Podgorica, Montenegro; \textsuperscript{3}Clinic for Nephrology, Clinical center of Montenegro, Podgorica, Montenegro; \textsuperscript{4}Department of nephrology, arterial hypertension, dialysis and transplantation, University Hospital Centre Zagreb, Zagreb, Croatia; \textsuperscript{5}School of Medicine, University of Zagreb, Zagreb, Croatia

Background

Montenegro is located in southeast Europe and became independent in 2006. It has a population of 680,000 inhabitants and a dialysis population of 230 patients in 12 dialysis centers. If patients had live donor kidney transplants were conducted in medical institutions in neighboring countries with existing transplantation programs such as Croatia, Serbia, Bosnia and Herzegovina. However, many patients did not have live-linked donors, and their only alternative in addition to hemodialysis or peritoneal dialysis was kidney transplantation from a deceased donor.

Objectives

Montenegro is one of the countries that signed the Istanbul Declaration, which strictly prohibits trafficking in human organs. However, some patients from Montenegro have decided to perform kidney transplantation in countries with black organ market or have gone on a transplant in countries with a legal possibility to place strangers on a kidney transplant waiting list if they can financially facilitate transplantation.

Results

In February 2011, Montenegro became a full member of the RHDC - Regional Center for Health Development, which is part of the SEEHN - Southeast European Health Network, with the center in Zagreb. RHDC is an organization and project supported by the Council of Europe, with the goal of establishing all the necessary conditions for the development of transplantation in South East Europe. Links and support of RHDC contributed to the establishment of cooperation between Montenegro and Croatia.

Conclusion/Application to practice

On September 25, 2012, the first kidney transplant in Montenegro was performed with the support of a kidney transplant team from the University Hospital Center Zagreb, Croatia. Since then, 39 transplants have been carried out. However, of that number, only three were transplanted from deceased donors, others were transplants related to live or emotionally related. This has given a very important opportunity to our patients with irreversible organ failure to get the authority they need from the Eurotransplant system.

Disclosure of Interest

no
Kidney transplant - a case study and dilemmas. What is right and what is wrong?

I. Rafaelov Atias, M. Shem Tov Alisha, Z. Gavish, R. Asulin
Nephrology, Rambam-Health Care Campus, Haifa, Israel

Background

Dialysis involves many complications, so the only hope for patients is a kidney transplant, which allows for a better quality of life. In this work, we will present a case study of a patient who received a kidney from her sister who died suddenly, and her family asked the team not to tell the truth about the kidney. This event posed many dilemmas for the staff and many questions came up: what is right and what is wrong?

Methods

Case Study:

The 30-year-old hemodialysis patient was called for an urgent kidney transplant, and the family's request was not to tell the patient that the kidney belonged to her younger sister, who died suddenly. The staff faced difficult questions and dilemmas:

- Is the family request correct?
- Is it right to hide information?
- Who decides the right way?
- What will happen in the future if there is a rejection of the transplanted kidney?

After a discussion, it was decided that the family would provide the information with the support of the staff, a nurse, a nephrologist, a social worker, and a psychiatrist. After six months in the patient's transplant clinic, the patient expresses understanding and acceptance, showing responsibility for her health, showing the importance of preserving her sister's kidney, which is now part of her.

Conclusion/Application to practice

This unusual case raised many questions about telling the truth. On the other hand, it was clear that the situation could get worse if she discovered the truth without support and preparation.

We recommend:

Continue to support the patient and her family

Train the staff on ethical dilemmas

Bring the subject for discussion in the Ethics Department

This story is unusual and exciting, losing life and getting a life. Two sisters, one sister died and left a piece of life in the life of the other sister

Disclosure of Interest

no
E-P 097

Assessment of health-related quality of life in kidney transplant recipients vs dialysis patients

V. Koutlas¹, M. Ikonomou³, E. Tzalavra¹, Z. Delimitsou², C. Pappas², M. Mitsis¹, E. Dounousi²
¹Department of Surgery - Kidney Transplant Unit, University Hospital of Ioannina, Ioannina, Greece; ²Department of Nephrology, University Hospital of Ioannina, Ioannina, Greece

Background

Diminished health-related quality of life (HRQoL) is common in End-Stage Renal Disease (ESRD) patients undergoing dialysis and is associated with increased morbidity and mortality. Kidney transplantation, the treatment of choice for ESRD patients, improves both survival and HRQoL.

Objectives

The aim of this cross-sectional study was to evaluate and compare the HRQoL among three groups of patients: Hemodialysis (HD), Peritoneal dialysis (PD) and Kidney Transplant Recipients (KTRs) in our Nephrology – Renal Transplant Center.

Methods

A total of 213 (90 HD, 39 PD and 84 KTRs, mean age: 57.9 ± 13.8 HD, 58 ± 16 PD and 55.5 ± 10.7 KTRs years) stable, long term (at least 6 months on dialysis or kidney transplant) patients were enrolled, after providing written informed consent. The Greek version of the Short Form 36 items health survey was used to evaluate HRQoL.

Results

KTRs in comparison with HD patients had significantly better levels at dimensions of Vitality (VT) (p=0.01), Role Physical (RP) (p<0.01), Bodily Pain (BP) (p=0.01) and better levels of Physical Component Summary score (PCS) (p<0.01) as well. Compared with PD patients, KTRs had significantly better levels at dimensions of General Health (GH) (p≤0.05), Role Physical (RP) (p<0.01) and Physical Component Summary score (PCS) (p<0.01), but worst levels of Mental Health (MH) (p=0.01) and Mental Component Summary score (MCS) (p<0.01). The comparison between HD and PD patients showed that PD patients had significantly better scores at dimension of Vitality (VT) (p<0.01) and worst at Bodily Pain (BP) (p≤0.05).

Conclusion/Application to practice

The results of our study showed that KTRs seem to have better Physical Component Summary score compared with all dialysis patients. On the other hand, PD patients had better Mental Health compared with KTRs.

Disclosure of Interest

no
E-P 098

**Dental care in dialysis and transplant patients**

H. Klaric, Ž. Lubina, Ž. Lubina

*University Hospital Zagreb, Zagreb, Croatia, Department for Nephrology, AH, Dialysis and Transplantion, Zagreb, Croatia*

**Background**

Good dental care is important for everyone, but especially for people with a kidney disease. Oral cavity and teeth infections can be a major problem for patients with chronic renal disease and transplant patients.

**Objectives**

Chronic or stubborn infections create continuous inflammation, which is harmful. Dental cavities and gum diseases are chronic bacterial infections. In addition to causing pain, difficulty eating, and mouth odors, dental cavities and gum infections can contribute to other problems by fueling harmful chronic inflammation. Also, germs that cause cavities and gum disease don’t stay put and may spread throughout the body, especially if your immune system is weak.

**Methods**

A dental health exam is required as part of the kidney transplant evaluation process. Serious dental infections can delay, even prevent, being approved for a kidney transplant. This is because, after receiving a kidney, the medications used to prevent rejection of a transplant further weaken the body’s defenses against infection.

**Results**

To prevent infections it is necessary:

- Brush twice daily with a soft bristle brush and, ideally, floss once a day. “Thoroughly” is the key. Take your time. Three surfaces on each tooth need to be brushed, and the two side surfaces flossed.

- Use a fluoridated toothpaste to help strengthen teeth against development of cavities.

- You may have a “dry mouth” as a side effect of some drugs used to treat kidney diseases. That makes it easier for cavities and gum diseases to develop. To increase saliva, try chewing sugarless gum or sucking on sugarless candy.

**Conclusion/Application to practice**

Regular dental exams, at least twice a year, can detect and treat cavities and gum disease before they become serious. Cleaning is helpful, too, by scraping away tartar that irritates the gums.

Full or partial dentures should be carefully cleaned daily and removed at night to prevent development of sore spots or ulcers.

**Disclosure of Interest**

no
E-P 099
From the creation of a new AVF to full performances, our experience
G. Radakovic, S. Jandric
International Dialysis Centre Banja Luka, Fresenius Medical Care Bosnia and Herzegovina, Banja Luka, Bosnia and Herzegovina

Background

Each year in our dialysis center 10% of patients will have a new arteriovenous fistula (AVF). Good nursing practice of AVF cannulation and care, patient education and the maintenance of normal blood pressure can significantly influence the time needed to achieve the prescribed blood flow rate (BFR) and reduce complications related to AVF. Thorough nursing assessment of the vascular access before every treatment session can indicate a realistic condition of a new AVF.

Objectives

To prove that the use of well-structured nursing practice and monitoring of a new AVF can influence the time needed for reaching the desired blood flow rate.

Methods

We analyzed data for 11 patients: the time of maturation of AVF until the first cannulation was performed, the number of treatments with one needle, the number of treatments with two needles until prescribed BFR was achieved. Moreover, events reported in the clinical database were analysed.

Results

Each new arteriovenous fistula was evaluated before the treatment. Cannulation of new AVFs was performed by experienced and well trained nurses. All data regarding the assessment of vascular access and complications were documented in a clinical database and discussed during regular clinical meetings. Nursing education on vascular access was based on the “Vascular Access Cannulation and Care” booklet.

Ten of the eleven new AVFs are functional with the prescribed BFR. One AVF stopped functioning because of thrombosis after eight months.

Conclusion/Application to practice

Good nursing practice of AVF assessment, care and cannulation, avoidance of hypotension, proper documentation, and data analysis resulted in a high rate of successful development of arteriovenous fistulae.

Disclosure of Interest

no
Assessment of the knowledge hemodialysis patients have of the arteriovenous fistula and its care

M. Lukoševičienė, J. Kristopaitiene
B Braun Avitum, Vilnius, Lithuania

Background

Patient education is a powerful tool when striving to achieve that the arteriovenous fistula functioned for as long as possible and to ensure successful hemodialysis. The goal of this study was to assess the knowledge possessed by hemodialysis patients in relation to native arteriovenous fistula and their care.

Methods

The study was carried out at six hemodialysis centers in Lithuania in February 2018. A questionnaire-based survey was used as a tool of descriptive quantitative analysis. The questionnaire was based on scientific literature and medical practice. In the study participated 53 female and 47 male undergoing hemodialysis. The age of the respondents ranged from 25 to 85 years.

Results

The study revealed whether patients were sufficiently informed about the symptoms indicating immediately to contact the hemodialysis center. The majority of respondents named the pain and disappearance of the vibration sensation in the area of fistula as main symptoms. In cases of many other symptoms less than half of the respondents would reach out for help. The study revealed what patients knew about arteriovenous fistula and how they took care of them. All patients knew and refrained from measuring blood pressure on the fistula arm. Most of the patients were aware that they could not allow taking blood samples or injecting medication into the fistula arm. Even though 40.0% of the patients knew recommended weight that they could carry, 84.0% did not carry more than 5kg. Most of the patients knew that they had to wash their arm before hemodialysis and take the bandage off right after coming home but a lower number followed these rules.

Conclusion/Application to practice

Regular use of the tools employed in the study and assessment of the knowledge of patients about hemodialysis and taking care of the arteriovenous fistulae may result in improved patient education programs.

Disclosure of Interest

no
E-P 102
Applying of rope ladder puncture technique in our dialysis network
R. Mogyorósi, K. Hohmann
Dialysis Centre Ltd., Fresenius Medical Care, Budapest, Hungary

Background

For patients with chronic kidney disease in haemodialysis (HD) program, the arteriovenous fistula (AVF) is their “life line”. The success of long-term HD treatment depends on the problem-free vascular access.

Objectives

To extend the lifetime and patency of the AVF, we aimed to increase the use of rope ladder cannulation technique as the primarily preferred technique to 60% by the end of 2018.

Methods

We implemented our action plan last spring. An evaluation of puncture technique was performed for every patient to define the most suitable technique. Patients who have had the opportunity to change the technique were selected weekly. The nurses were retrained in the knowledge of puncture techniques. In all our dialysis clinics, a responsible nurse was designated to check the database and to control the existence of necessary data relating to the assessment, and the head nurses and training nurses were responsible for the proper implementation of prescribed technique.

Results

At the beginning of the survey, we identified rope ladder in 35 % of the patients, buttonhole in 15 % and area technique in 50 %. Following the action plan, rope ladder increased to 58 %, buttonhole to 13 % and area technique to 29 % at the end of November 2018.

Conclusion/Application to practice

The appropriate puncture technique is an essential factor in the survival and function of vascular access. Generally, the dialysis nurse is responsible for the puncture, therefore she/he must learn and improve this ability in order to protect the patient from unnecessary pain and discomfort, to ensure the viability of the vascular access, and to keep it free from infection and other complications.

Disclosure of Interest

no
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Comparison of self-care ability and life satisfaction in patients receiving dialysis
C. Dogan¹, A. Karakoc¹, F. Turan¹, A. Ozturk¹, D. Ates¹, F. Semerci², M. Yilmaz¹, N. O. Harmankaya¹

¹Dr. Sadi Konuk Training and Research Hospital, Istanbul, Turkey; ²Medikare Dialysis Center, Istanbul, Turkey

Objectives

Dialysis affects the quality of life, psychosocial well-being, support systems and physiological parameters of individuals. This study aimed to compare peritoneal dialysis patients and hemodialysis patients who had green card or were eligible for Social Security Institution (SSI) benefits in terms of self-care ability and life satisfaction.

Methods

A total of 89 patients receiving hemodialysis (HD; 35 patients with green card, 54 patients eligible for SSID) and 38 peritoneal dialysis (PD) patients were included in the study. The data were collected using a 28-item socio-demographic Questionnaire, Turkish Self-Care Ability Scale and The Satisfaction With Life Scale (SWLS) that were prepared by the research group. The groups were compared with each other in terms of socio-demographic characteristics, self-care ability and life satisfaction.

Results

The number of women in PD patients was significantly higher than HD groups (p=0.023). The number of HD patients with green card who could perform their activities of daily living was significantly lower than those HD and PD patients with SSI (p=0.000). It was found that the number of patients with SSI living in their own dwellings was higher than the other groups (p=0.000), and HD patients who had green card were going out less to eat (p=0.018). A statistically significant difference was found in terms of self-care ability levels between the groups (p=0.001). Post-hoc pairwise comparisons, self-care ability levels of HD patients who had green card were lower than those PD and HD patients with SSI. There was no significant difference in life satisfaction levels of the groups (p=0.105).

Conclusion/Application to practice

The HD patients with green card had lower self-care abilities than other HD and PD patients (p=0.001). The study suggests that socio-economic and cultural conditions rather than chronic diseases might have a negative impact on this low levels of self-care ability.

Disclosure of Interest

No
AUTHORS’ CONTACTS

Oral presentations (by presentation number)
O 01 jeajee@rm.dk
O 02 jfazendeiro.matos@fmc-ag.com
O 03 fatma.kaban@medikare.com.tr
O 04 neerjajain@kidneycareuk.org
O 08 c.mckeaveney@qub.ac.uk
O 13 afra.masia@udg.edu
O 14 c.mckeaveney@qub.ac.uk
O 15 aklis@tlen.pl
O 16 jfazendeiro.matos@fmc-ag.com
O 20 hafedh.fessi@aphp.fr
O 21 JCainglet@seha.ae
O 22 anna.marti.monros@gmail.com
O 23 maryemac@bell.net
O 27 mralonya@seha.ae
O 31 mmanuel@seha.ae
O 32 anelli.jonsson@med.lu.se
O 33 donato.leopaldi@asst-fbf-sacco.it
O 34 60184@parcdesalutmar.cat
O 35 jfazendeiro.matos@fmc-ag.com
O 36 jfazendeiro.matos@fmc-ag.com
O 37 jfazendeiro.matos@fmc-ag.com
O 41 alrovira@clinic.cat
O 42 neerjajain@kidneyresearchuk.org
O 43 ann.bonner@qut.edu.au
O 45 jfazendeiro.matos@fmc-ag.com
O 46 jfazendeiro.matos@fmc-ag.com
O 47 jfazendeiro.matos@fmc-ag.com
O 48 jfazendeiro.matos@fmc-ag.com
O 52 rachelmor@clalit.org.il
O 53 sandra.neumann@peripal.com
O 54 irisromach@gmail.com
O 55 judit.aldott@bbraun.com
O 59 safiyanmis61@gmail.com
O 60 mollaglumukadder@gmail.com
O 61 daks54@hadassah.org.il
O 66 mikekelly52@eircom.net
O 67 xrysajohn@yahoo.gr
O 68 jfazendeiro.matos@fmc-ag.com
O 69 jfazendeiro.matos@fmc-ag.com
O 73 ccarswell02@qub.ac.uk
O 74 ajadhav@hamad.qa
O 75 jfazendeiro.matos@fmc-ag.com
O 80 linash@clalit.org.il
O 81 fcostales@seha.ae
O 82 JLaguardia@seha.ae
O 83 jfazendeiro.matos@fmc-ag.com
O 87 ann.bonner@qut.edu.au
O 88 jfazendeiro.matos@fmc-ag.com
O 92 jfazendeiro.matos@fmc-ag.com
O 93 jfazendeiro.matos@fmc-ag.com

Short Oral presentations (by presentation number)
SO 05 davidmeshman@gmail.com
SO 06 jfazendeiro.matos@fmc-ag.com
SO 07 reem_alhameedi@yahoo.com
SO 10 ann.bonner@qut.edu.au
SO 11 nicolas.bressy@fmc-ag.com
SO 12 jsthomas@svhg.ie
SO 17 ulrich.steinwandel@health.wa.gov.au
SO 18 erika.petrovic@yahoo.com
SO 24 Imgatenby@aol.com
SO 25 anna.marti.monros@gmail.com
SO 29 lottma@rm.dk
SO 30 rawia.badran14@gmail.com
SO 38 obricorica@gmail.com
SO 39 jfazendeiro.matos@fmc-ag.com
SO 40 jfazendeiro.matos@fmc-ag.com
SO 44 vicky_zoi@yahoo.gr
SO 49 carolanne_rubi@hotmail.com
SO 50 anna.marti.monros@gmail.com
SO 51 lisestre@rm.dk
SO 56 aydemirbas7@gmail.com
SO 57 turkansanli@gmail.com
SO 58 cathy.poole@fmc-ag.com
SO 62 avschavs@mac.com
SO 63 lpolivia@gmail.com
SO 64 jenny.stenberg@medsci.uu.se
SO 65 lubov-iakovleva@mail.ru
SO 70 magnus.lindberg@hig.se
SO 71 riadekleijn@home.nl
SO 72 surika55@gmail.com
SO 76 jfazendeiro.matos@fmc-ag.com
SO 77 jfazendeiro.matos@fmc-ag.com
SO 78 jfazendeiro.matos@fmc-ag.com
SO 79 esra_baser568@hotmail.com
SO 84 clare.mcveigh@qub.ac.uk
SO 85 fatma.kaban@medikare.com.tr
SO 86 jfazendeiro.matos@fmc-ag.com
SO 89 kabai.peter91@gmail.com
SO 90 Lynn.brown@hnehealth.nsw.gov.au
SO 91 carole@uonbi.ac.ke
SO 94 jfazendeiro.matos@fmc-ag.com
SO 95 aalomari4@hamad.qa
SO 96 jfazendeiro.matos@fmc-ag.com
SO 97 esmeralda.nunes@caledial.pt
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<td><a href="mailto:r_dahan@rambam.health.gov.il">r_dahan@rambam.health.gov.il</a></td>
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<td><a href="mailto:anne.marie.boeskov@regionh.dk">anne.marie.boeskov@regionh.dk</a></td>
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<td><a href="mailto:hugo.dca.84@gmail.com">hugo.dca.84@gmail.com</a></td>
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<td><a href="mailto:siakov@yahoo.com">siakov@yahoo.com</a></td>
</tr>
<tr>
<td>E-P 036</td>
<td><a href="mailto:mveracasanova@gmail.com">mveracasanova@gmail.com</a></td>
<td>E-P 082</td>
<td><a href="mailto:vicky_zoi@yahoo.gr">vicky_zoi@yahoo.gr</a></td>
</tr>
<tr>
<td>E-P 037</td>
<td><a href="mailto:muchamadh@gmail.com">muchamadh@gmail.com</a></td>
<td>E-P 083</td>
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<td><a href="mailto:mariaarmininda.tavares@diaverum.com">mariaarmininda.tavares@diaverum.com</a></td>
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<td>E-P 041</td>
<td><a href="mailto:sarah.russo@rneheath.nsw.gov.au">sarah.russo@rneheath.nsw.gov.au</a></td>
<td>E-P 085</td>
<td><a href="mailto:i_rafaliov@rambam.health.gov.il">i_rafaliov@rambam.health.gov.il</a></td>
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<td><a href="mailto:patry_trinity@hotmail.com">patry_trinity@hotmail.com</a></td>
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<td><a href="mailto:cathy.poole@fmc-ag.com">cathy.poole@fmc-ag.com</a></td>
<td>E-P 087</td>
<td><a href="mailto:helena.klaric@gmail.com">helena.klaric@gmail.com</a></td>
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<tr>
<td>E-P 045</td>
<td><a href="mailto:Gemma.dewsnap@fmc-ag.com">Gemma.dewsnap@fmc-ag.com</a></td>
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<td><a href="mailto:zehryadin@gmail.com">zehryadin@gmail.com</a></td>
<td>E-P 089</td>
<td><a href="mailto:Jurate.Kristopaitiene@avitum.lt">Jurate.Kristopaitiene@avitum.lt</a></td>
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<td>E-P 047</td>
<td><a href="mailto:fatma.kaban@medikare.com.tr">fatma.kaban@medikare.com.tr</a></td>
<td>E-P 090</td>
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<tr>
<td>E-P 049</td>
<td><a href="mailto:hafedh.fessi@aphp.fr">hafedh.fessi@aphp.fr</a></td>
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<td><a href="mailto:kclarke2@prhc.on.ca">kclarke2@prhc.on.ca</a></td>
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<td>E-P 051</td>
<td><a href="mailto:rumiya.arslanova@mail.ru">rumiya.arslanova@mail.ru</a></td>
<td>E-P 094</td>
<td><a href="mailto:rumiya.arlsanova@gmail.com">rumiya.arlsanova@gmail.com</a></td>
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