

The influence on the subjective perception of nurses on the importance of technological progress

Valerio Neiviller¹, Alessandro Pizzo¹, Maria Teresa Parisotto²

¹NephroCare Italy, Nursing Coordination, Naples, Italy

²Fresenius Medical Care, Care Value Management, Bad Homburg, Germany

Introduction

In recent years, a tendency towards an increased use of Information and Communication Technology (ICT) to support activities can be observed, such as health research, clinical practices, and support for citizens in the health sector.

However, to obtain the best possible outcomes, highly specialised software and high-tech health equipment need to be accepted in the working routine by the nursing staff.

Also in the field of dialysis, manufacturers achieved significant progress in haemodialysis machines equipped with a wide range of tools for the staff. These tools have improved monitoring and high safety standards, reduced adverse events, and improved clinical outcomes.

Objectives

To evaluate the perception of the nursing staff about the importance of technology in the care of haemodialysis patients.

Methods

In December 2017, we conducted a survey with 121 nurses in 14 dialysis centres, to assess:

- the nurses' level of appreciation, interest and ability to use technology.
- the nurses' perception of the contribution that technology can make in the world of dialysis.

Results

Of the 121 enrolled nurses, 118 (97.5%) completed the questionnaire of which 76 (64.4%) were women and 81 (68.6%) were aged between 36 and 50 years. Their dialysis experience ranged from 10 to 20 years in 58 (49.2%) to more than 20 years in 39 (33.1%) nurses. 49.2% believe that patients are interested in new technologies, 19.5% think they are not interested in it, 78.8% believe that the use of health technologies increase nurses' work efficacy and patient outcomes.

Conclusion

Dialysis units are an excellent technology concentrator and a relentless generator of innovation. They use the most diverse technologies, even more distant ones from supporting patients allowing for a constant flow of innovations, by virtue of continuous evolution.

This study shows that nurses are aware of the importance of technology in the healthcare sector and dialysis environment in order to achieve more efficient workflows, provide safe and high quality care and deliver better patient outcomes.

References

1. <https://deviceatlas.com/blog/16-mobile-market-statistics-you-should-know>
2. Ministero per l'innovazione e le tecnologie (2004a). Rapporto innovazione e tecnologie digitali in Italia. Roma: Istituto Poligrafico e Zecca dello Stato.
3. Klein, K. J., e Sorra, J. S. (1996). The challenge of innovation implementation. *The Academy of Management Review*, 21, 1055-1079.
4. Davis, F. D., e Venkatesh, V. (1996). A critical assessment of potential measurement biases in the technology acceptance model: Three experiments. *International Journal of Human-Computer Studies*, 45, 19-45.



Figure 1

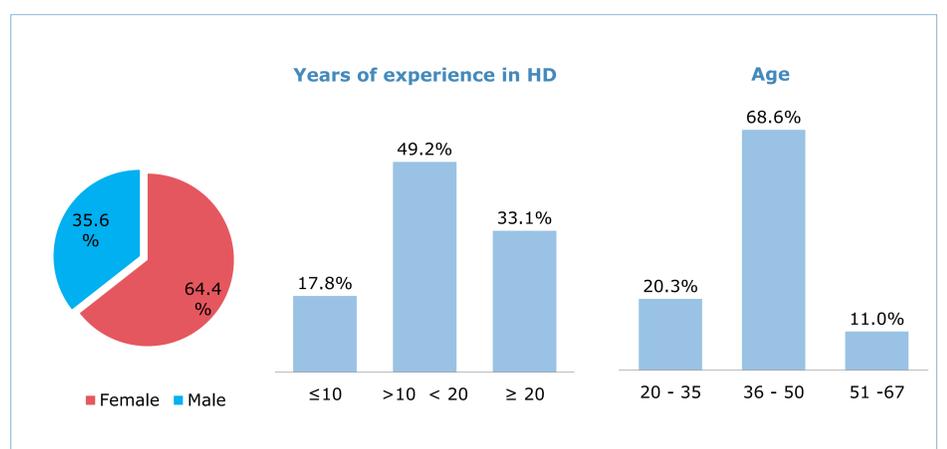


Figure 2: Nursing staff

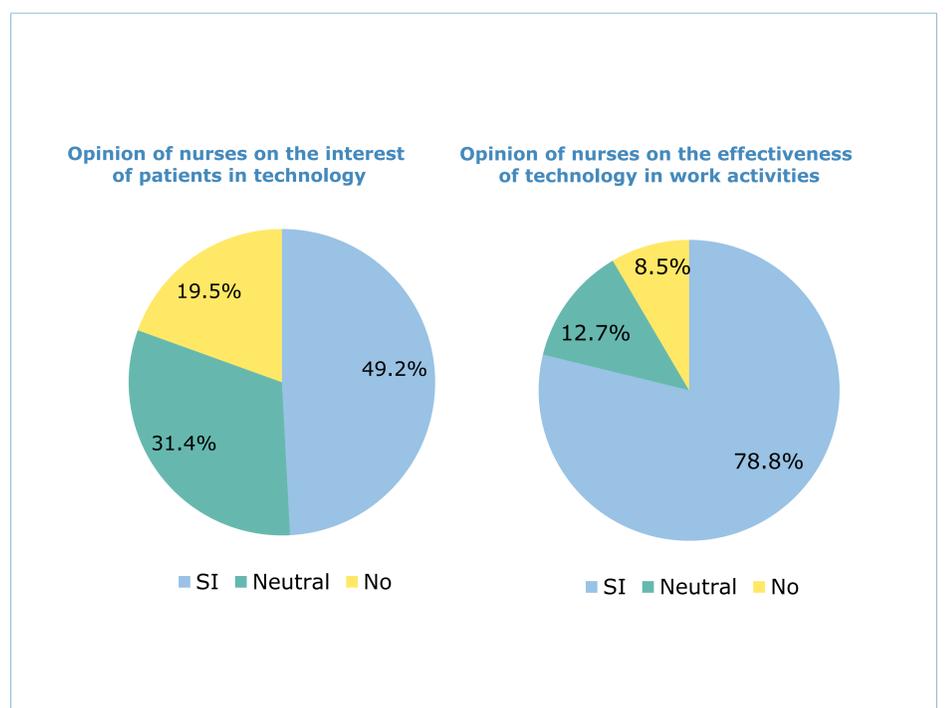


Figure 3: Questionnaire results