Patients' attitudes towards digital technologies

implementation in Pharmacovigilance within the study ProSafe

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Introduction

• The sustainability of the Health Care System requires strengthening the facilities and digital services to provide better care especially for chronic care management. The spreading of digitalization in healthcare offers new opportunities for promoting patients' therapy self management and supporting patients' engagement in pharmacovigilance ¹⁻².

• The new frontiers in medical treatments related to digital technologies offer several advantages (i.e. the implementation of a truly patient centered healthcare system) but also potential critical issues such as new risks related to patient safety monitoring.

Methods

• The project is a cross-sectional observational study conducted through two specular Italian surveys one for citizens (patients, caregivers and non-patients) and the other for health professionals disseminated through snowball technique. The study aims to explore patients' perspective on strengths and potential limitations of proximity medicine and therapeutic digitalization in relation to patient safety. The patient survey has been developed based on literature review and an active collaboration between University, Pharma Company and Patient Associations already involved in the board of the Patient Safety Council.

• A pre-test with a sample of patients and HCPs (25 person each) was performed to validate both the surveys. A power analysis was performed to ensure generalizability of the findings. A web domain was created in order to promote participation for both patients/citizens and HCP.



Results

• Pre-test with 25 patients from the 4 Patient Associations confirmed participants' interest towards the topic (96% of the sample). The final version of the surveys included 6 different dimensions.

Survey dimensions

N. questions

• The dimension "Drug safety and digital drug support" explores patients' and HCPs' attitudes towards digital applications developed to support drugs management and monitor adverse events.

• Preliminary results indicate that digital drug support applications were already used by 21% of participants.

• "Within such an 'App,' 54% of the participants rated the 'opportunity to keep track of all adverse events related to the therapy (Self-monitoring)' as 'essential,' while 80% considered the 'Possibility to share information on side effects of drug treatment with the referring physician in order to receive appropriate feedback/assistance' as essential."

Sociodemographic data	14	
Drug safety and Digital Drug Support	3	
Hospital to community continuity of care	2	
Dehospitalization of care	9	
Digitalization of care and telemedicine	8	
Informational and educational needs	1 (open question)	

• Regarding the dimension of 'Digitalization of care and telemedicine,' 47.4% of participants evaluated the opportunity for medical therapy management using telemedicine and remote patient monitoring as 'better and more personalized' than a traditional in-person visit, while 26.3% rated such an opportunity as 'worse and less careful.' Another 26.3% evaluated the two options as equivalent."

Conclusions

• The implemented methodology (active participatory research with patient's organizations involvement) ensures that findings will be truly representative of patients' perspective and the results will shed light on how proximity medicine may be implemented in order to meet patients' preferences.

• The generation of such evidence will be useful to promote rapid access to medicines for patients and generate value for the scientific community and the National Health System.

Future Directions

• Based on the elements resulting from the study some actions, co-created with Patients Associations, will follow together with an open discussion with experts from Regional Pharmacovigilance Centers, Scientific Societies, and Institutions. A particular focus will be on enhancing or preserving the safety of pharmacological treatment in the face of new challenges related to the promotion of medical proximity and the implementation of healthcare digitalization and telemedicine.



• The results will be disseminated in peer-reviewed journals and shared in scientific conferences.

References

1. Milne-Ives M, Lam C, De Cock C, Van Velthoven MH, Meinert E. Mobile Apps for Health Behavior Change in Physical Activity, Diet, Drug and Alcohol Use, and Mental Health: Systematic Review. JMIR Mhealth Uhealth. 2020; 8(3):e17046. doi: 10.2196/17046.

2. Heinemann L, Schnell O, Gehr B, Schloot NC, Görgens SW, Görgen C. Digital Diabetes Management: A Literature Review of Smart Insulin Pens. J Diabetes Sci Technol. 2022;16(3):587-595. doi: 10.1177/1932296820983863.



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