EDITORIAL

Digital information and communication technologies in primary health care: a novelty for nursing?

Tecnologias digitais da informação e comunicação na atenção primária à saúde: novidade para a enfermagem?

Silvana de Lima Vieira dos Santos[1] ⓘD , Patricia Tavares dos Santos[1] ⓘD

The Brazilian Unified Health System (SUS) is organized toward providing Primary Health Care (PHC), which should be guided by the principles of universality, accessibility, comprehensiveness, longitudinality, accountability, humanization, and equity. PHC has been essential in the fight against the pandemic caused by the novel coronavirus 2019 (COVID-19) and in the management of its consequences, such as individual and collective sequelae, the exacerbation of chronic diseases, and the population's precarious living conditions[1].

In this context, digital information and communication technologies (DICT) are important tools to maintain health care and its use by the population in Brazil and have been used since 1975 with the implementation of the Mortality Information System (SIM)[2].

Since the creation of SUS and its Department of Informatics (DATASUS), in 1991, several Health Information Systems (SIS) have been created and/or expanded[2]. Among them, special mention goes to SIM, SINASC (Live Birth Information System), SI-PNI (National Immunization Program Information System), SINAN (Notifiable Diseases Information System) and SIAB (Primary HealthCare Information System). These are important to PHC because they provide input for diagnosing, planning, and assessing the actions of healthcare services and guiding public policies.

In addition to SIS, in the last 20 years, other milestones in digital health that have helped shift the healthcare paradigm include: the enactment of laws regarding the digitization of patient records and the Brazilian General Data Protection Law; the National Information and Informatics Policy, and the National Policy on Technological Innovation in Health[2]. There is also the Brazilian National Digital Health Strategy 2020-2028, the Conecte SUS program, the computerization of PHC, and the National Digital Health Network (RNDS)[2].

The onset of the COVID-19 pandemic at the end of 2019 boosted the use of DICT. In light of social distancing and isolation measures, the use of teleconsultation also increased as a way to provide continuity of care. This context included the creation of the COVID-19 laboratory tests information model, mandatory registration of vaccinations against COVID-19, and the integration of the SI-PNI into the RNDS[3].

Among the DICT employed in SUS, we highlight the Brazil Telehealth Network program. The program provides actions such as teleconsultations, tele-education, and teleconsultancy, all with the goal of increasing the problem-solving capacity of the services provided and improving the quality of health care in the SUS[4]. Within the context of PHC, it has changed the paradigms of professional practice.

Nursing has been the professional category that has most adhered to telehealth technology in PHC, but there is still room for improvement[5]. A case in point is the use of teleconsultancy that allows nurses to access specialized professionals to discuss clinical cases and ask questions, contributing to the improvement of competencies[4].

1

Rev. Eletr. Enferm., 2022; 24:71546, 1-3

Tele-education is used to train health professionals, expanding access to offers of training sessions, fostering the development of professional skills to respond to the population's health needs.

In addition to telehealth, the RUTE Network and the Unified Health System's Open University are initiatives that provide health workers with training opportunities and are essential to expanding access to education and the development of professional skills to meet the population's health needs[6]. These initiatives have helped strengthen digital health and have proven essential in a scenario as challenging as that of the COVID-19 pandemic.

Therefore, it is undeniable that DICT are an important tool to improve the quality of direct care provided to individuals, to strengthen and disseminate formal education actions aimed at workers, and to foster permanent education and health education.

Nurses have recognized that technologies can make their professional practice easier[5] via the positive outcomes obtained with the incorporation of DICT. A study on follow-up home care provided to chronically-ill patients via teleconsultation showed that the interval between seeking out healthcare services in-person increased 10.7 days in relation to other patients with the same comorbidities who did not receive this type of care, thus reducing the demand in the healthcare unit and improving the quality of life of this population[7].

Also in relation to the technological tools used to systematize health care, SUS has used the Primary Health Care Unified Electronic Health System (E-SUS PHC), which contains the electronic medical records of citizens (E-PEC)[8]. Although the system requires, the structure of E-PEC facilitates the nursing process and the standardization of work routines, increasing the quality of care practices and record-taking in a standardized way, allowing access to information that supports decision-making[9].

Moreover, there are assistive technologies for home and external monitoring, and hard technologies such as robotic surgeries, artificial intelligence for the early detection of health problems, watches that record physiological signs, wearables with electronic tracking chips[2], which could be incorporated into PHC if there were adequate financing and training of health workers.

Having the infrastructure for the safe use of software and DICT tools coupled with quality information ensures their impact on healthcare management and delivery[3]. However, for these tools to be used to their full potential, advances are needed both in structural aspects and in the digital literacy of professionals and changes in the organizational culture.

The presence of social networks in people's daily lives and their use in the health area have been expanding. They promote the timely sharing of information, provide a space that enables care delivery and health education, strengthen communication and the relationship of service users, and are able to reach new audiences[10].

Although social networks have their advantages, it is important not to trivialize the sharing of personal health data. It is essential to comply with standards so that professionals do not infringe on ethical and legal aspects. This topic should be discussed widely given the repercussions of the use of data without due legal diligence, especially with the enactment of the LGPD, which establishes security measures for accessing citizens' data.

DICT have been present in PHC for some years now. Its use has been intensified by the COVID-19 pandemic, which has shown its potential and the obstacles to their full use. The lessons learned must be incorporated into services and universities, through research and by including digital health in the curricula of undergraduate programs.

We believe that digital health will contribute to making work processes easier, more agile, standardized, and of higher-quality. It will also enable the timely monitoring, evaluation, and intervention of health care practices, education, management and policymaking regarding digital health in nursing and education for digital literacy of the population.

REFERENCES

1. Sarti TD, Lazarini WS, Fontenelle LF, Almeida APSC. Qual o papel da Atenção Primária à Saúde diante da pandemia provocada pela COVID-19? Epidemiol. Serv. Saúde [Internet]. 2020 [cited 2022 jan 14];29(2):e2020166. Available from: https://doi.org/10.5123/S1679-49742020000200024.

2. Zara ALSA. Trajetória da saúde digital no Brasil [Internet]. Goiânia: Cegraf UFG; 2021 [cited 2022 jan 14]. Available from: http://repositorio.bc.ufg.br/handle/ri/19727.

3. Ministério da Saúde, Comitê Gestor da Estratégia e-Saúde. Estratégia e-Saúde para o Brasil [Internet]. Brasília: Ministério da Saúde; 2017 [cited 2022 jan 14]. Available from: https://www.gov.br/saude/pt-br/assuntos/saude-digital/material-de-apoio/DocumentodaVisobrasileiraparaaEstratgiaeSade2017.pdf.

4. Godoy SCB, Guimarães EMP, Assis DSS. Avaliação da capacitação dos enfermeiros em unidades básicas de saúde por meio da telenfermagem. Esc Anna Nery [Internet]. 2014 [cited 2022 jan 14];18(1):148-55. Available from: https://revistaenfermagem.eean.edu.br/2017/detalhe_artigo.asp?id=1012.

5. Leitão GGS, Silva TPS, Lima MLLT, Rodrigues M, Nascimento CBM. Educational actions in human communication health: telehealth contributions in

2

Rev. Eletr. Enferm., 2022; 24:71546, 1-3

primary care. Rev. CEFAC [Internet]. 2018 [cited 2022 jan 14];20(2):182-90. Available from: https://doi.org/10.1590/1982-0216201820210417.

6. Carvalho RA, Struchiner M. Conhecimentos e expertises de universidades tradicionais para o desenvolvimento de cursos a distância da Universidade Aberta do Sistema Único de Saúde (UNA-SUS). Interface (Botucatu) [Internet]. 2017 [cited 2022 jan 14];21(63):991-1003. Available from: https://doi.org/10.1590/1807-57622016.0027.

7. Pinheiro FM. Acompanhamento por telefone no pós-alta hospitalar de idosos hipertensos: estudo piloto randomizado [dissertation]. [Nitéroi (RJ)]: Universidade Federal Fluminense; 2015 [cited 2022 jan 14]. Available from: https://app.uff.br/riuff/handle/1/2356.

8. Ministério da Saúde, Secretaria de Atenção Primária à Saúde. e-SUS Atenção Primária à Saúde: Manual do Sistema com Prontuário Eletrônico do Cidadão PEC – Versão 4.2 [Internet]. Brasília: Ministério da Saúde; 2021 [cited 2022 jan 14]. Available from: https://cgiap-saps.github.io/Manual-eSUS-APS/.

9. Zacharias FCM, Schönholzer TE, Oliveira VC, Gaete RAC, Perez G, Fabriz LA, et al. e-SUS Atenção Primária: atributos determinantes para adoção e uso de uma inovação tecnológica. Cad. Saúde Pública [Internet]. 2021 [cited 2022 jan 14];37(6):e00219520. Available from: https://doi.org/10.1590/0102-311X00219520.

10. Singh SP, Rai AK, Wal A, Tiwari G, Tiwari R, Parveen A. Effect of social media in health care: uses, risks, and barriers. World Journal of Pharmacy and Pharmaceutical Sciences [Internet]. 2016 [cited 2022 jan 14];5(7):282-303. Available from: https://doi.org/10.20959/wjpps20167-6783.

3

Rev. Eletr. Enferm., 2022; 24:71546, 1-3