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Patient care in primary care: technology's contribution during a pandemic

Atención al paciente en atención primaria: contribución de la tecnología durante una pandemia

Cuidado do paciente na atenção primária: Contribuição da tecnologia durante uma pandemia

ABSTRACT

Objective: To evaluate how and which technologies can be implemented to continue the care of health education, focusing on those classified as 'risk group' for COVID-19. **Method:** This is an integrative review carried out in the MedLine and Lilacs databases, from 2015 to 2020, at the end an analysis was carried out to identify the relevance and eligibility in the articles. **Results:** There are several situations where technologies were used, such as screening and guidance in teleconsultations, support groups and support for doubts in a virtual environment from social media, websites and personalized applications to pass on information about symptoms to users. **Conclusion:** It can be seen the efficiency of the use of technologies in primary care and with this, an innovative area is perceived that is able to bring improvements for the user and ease for the health team, being a differential for nursing, adding all competences in computerized tools enhancing the expansion of care.

DESCRIPTORS: Health education; Pandemics; Call center; Continuity of patient care; Betacoronavirus.

RESUMEN

Objetivo: evaluar cómo y qué tecnologías se pueden implementar para continuar la atención de la educación sanitaria, centrándose en los clasificados como 'grupo de riesgo' para COVID-19. **Método:** Esta es una revisión integradora realizada en las bases de datos MedLine y Lilacs, de 2015 a 2020, al final se realizó un análisis para identificar la relevancia y elegibilidad en los artículos. **Resultados:** Existen varias situaciones en las que se utilizaron tecnologías, como la detección y orientación en teleconsultas, grupos de apoyo y apoyo a dudas en un entorno virtual desde redes sociales, sitios web y aplicaciones personalizadas para transmitir información sobre los síntomas a los usuarios. **Conclusión:** se puede observar la eficiencia del uso de tecnologías en la atención primaria y con esto se percibe un área innovadora que puede aportar mejoras para el usuario y facilidad para el equipo de salud, siendo un diferencial para la enfermería, agregando todas las competencias en herramientas computarizadas mejorando la expansión de la atención.

DESCRIPTORES: Educación en salud; Pandemias; Centro de llamadas; Continuidad de la atención al paciente; Betacoronavirus.

RESUMO

Objetivo: Avaliar como e quais tecnologias podem ser implantadas para dar continuidade no cuidado da educação em saúde, tendo enfoque naqueles classificados "grupo de risco" para o COVID-19. **Método:** Trata-se de uma revisão integrativa realizada nas bases de dados MedLine e Lilacs, no período de 2015 a 2020, ao final realizado uma análise para identificar nos artigos a relevância e elegibilidade. **Resultados:** Observa-se variadas situações onde foram utilizadas as tecnologias como no rastreamento e orientações em teleconsultas, grupos de apoio e amparo a dúvidas em meio virtual a partir das mídias sociais, sites e aplicativos personalizados para repasse de informações sobre sintomas aos usuários. **Conclusão:** Pode-se constatar a eficiência do uso das tecnologias na atenção primária e com isso, percebe-se uma área inovadora que mostra-se capaz de trazer melhorias para o usuário e facilidade para a equipe de saúde sendo um diferencial para a enfermagem, agregando todas competências em ferramentas informatizadas potencializando a expansão do cuidado.

DESCRIPTORES: Educação em saúde; Pandemias; Teleatendimento; Continuidade da assistência ao paciente; Betacoronavírus.

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INTRODUCTION

In the year 2020, the unexpected pandemic of SarsCov2, a new coronavirus, caused COVID-19 by contamination from person to person.¹ Brazil faces high levels of contamination reaching 2,419,091 people affected by the virus, 87,004 deaths and 1,634,274 victims recovered by July 27th, 2020². Worldwide figures show that social and economic characteristics are associated with the level of more aggressive and accentuated contamination that multiplies, as in countries such as Italy, the United States and China.⁴

There are many asymptomatic people, however, there are people who, due to their previous comorbidities, have a worsening of their general clinical condition.³ Nursing routinely performs interventions to maintain the clinical condition and prevent injuries to patients with comorbidities.⁵ In addition, preventive measures were adopted, such as social isolation, where there is a distance between the professional and the user. However, there are those who seek the basic unit first, showing that the population needs to be assisted.⁴

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One of the ways of working with the national health promotion policy is through health education in which thematic processes are worked on so that the autonomy of care is expanded by the target population⁷ and disseminate knowledge for the continuous support of care.⁸ In view of the need for the health professional, it can be mentioned as a tool the ICTs (information and communication technologies), adapted to health services to support health-care providers and others such as telehealth.⁶ ORIA et al 2018, reports technologies such as educational albums, series, booklets, videos, manuals and workshops, supported by the telephone medium⁹, in addition to social platforms that are able to attract users fulfilling the established need.

In this context, technologies are auxiliary tools in primary care. The innovations studied bring new ideas for implementing tools in the midst of a sporadic pandemic. The study aims to assess how and which technologies can be deployed to continue care, focusing on the "risk group" for COVID-19.

METHOD

It is an integrative literature review. The steps were used: 1) Choice of the guiding question; 2) Delimitation of the inclusion criteria; 3) Representation of articles; 4) Analysis of the findings; 5) Interpretation of results; 6) Description of the evidence found. The guiding question was: "How can technology help care for primary care patients in the midst of a Pandemic?"

The search for scientific articles took place between March and July of the year 2020, through the Virtual Health Library (VHL), through Medical Literature Analyzes and Retrieval System Online (MEDLINE) and Latin American and Caribbean Literature in Health Sciences (LILACS) databases. For the searches, the controlled descriptors were used and combined with Boolean operators OR and AND. Free

articles were elected, in Portuguese and English, published in the period from 2015 to 2020. For data extraction, a form of equivalents to bibliometric characteristics related to the selected articles was prepared.

RESULTS

As a general result, 262 studies, 32 articles in LILACS and 230 articles in MEDLINE were found in the search bases. After inserting the filters, 26 studies were potentially eligible. Following the complete reading, 15 unsuitable articles were excluded, obtaining 11 articles approved for the final sample illustrated in Figure 1.

DISCUSSION

Technological methods in health education

A study carried out in the United Sta-

Figure 1. Flowchart of article selection.

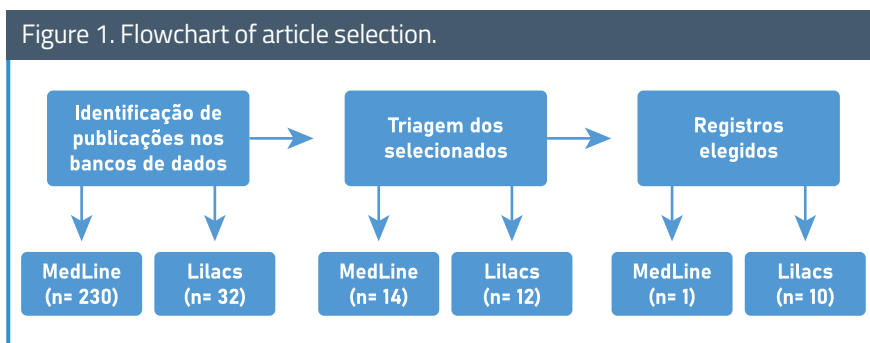


Chart 1. Complete description of the characteristics analyzed in the selected articles

ANO E AUTOR	LOCAL	PRÁTICA ABORDADA	REPERCUSSÃO	CATEGORIA IMPLANTADA
Pinto L et al, 2015 10	Brasil	Blogs e rede de observatórios	Aproximação comunicação com a comunidade	Gestão e Educação em Saúde
Ishwaria M et al 2019 11	Estados Unidos	Aplicativo, Mídias sociais	Um bom atendimento	Gestão
Devine K A et al, 2018 12	Estados Unidos	Sites, intervenções telefônicas	Aceitabilidade, promoção da saúde	Educação em saúde
Kang X et al, 2016 13	China	Aplicativo de mídia social	Qualidade dos exames e preparos	Educação em saúde
Attai D J et al, 2015 14	Não especificado	Mídias sociais	Envolvimento das mulheres	Educação em saúde
Piscotty R et al, 2015 15	Não especificado	Mídias sociais e smartphones	Transferência rápida de informações, melhoria da comunicação	Educação em saúde
Chipps J et al, 2015 16	África	Telefones Celulares	Ferramentas importantes utilizadas nos celulares, para aprendizagem	Educação em saúde
Ano e autor	Local	Prática abordada	Repercussão	Categoria implantada
Daumas R P et al, 2020 17	Brasil	Teletendimento	Acompanhamento de agravos, redução de demanda em urgências	Gestão e Educação em Saúde
Dimer N A et al, 2020 18	Brasil	Telecomunicação e Teleterapia	Ferramenta satisfatória para as adversidades	Educação em saúde Consultas
Harzheim E et al, 2020 19	Brasil	Teleconsulta, Aplicativo	Rastreia, monitoria e trata pacientes	Educação em saúde Consultas
Sarti T D et al, 2020 4	Brasil	Telessaúde e Telemedicina	Orientação, rastreio e monitoramento de casos da COVID 19	Educação em saúde Consultas

tes, with adolescents and children diagnosed with cancer, showed recommendations for informational applications of the expected symptoms, pain assessment system and applications were also used to analyze drug acceptance.¹² Positive results also found in the use of social media applications for the correct preparation instruction in the colonoscopy exam, presenting satisfactory numbers to the previous ones.¹³ From this, conditions were identified in which the professional was able to interact with the patient, answering questions and reinforcing all the medical guidelines necessary for the procedure.^{6,13}

In Africa, it shows that the transfer of information was facilitated by the use of Smartphones. Once he is connected to an internet network, the user or professional can access any information in any location and it is possible to create forums to answer questions from the population. However, if it is not used in a conscious and isolated way for this purpose, it ends up becoming a means of distraction, aborting the initial proposal.^{15,16}

Social media, because they are easy to use, showed great purpose as online support groups, meeting the demands arising from doubts or anxiety.¹⁴ Added to this, another segment that can be implemented are thematic videos of short films and audiovisual productions.¹⁰

Resources applied to medical appointments

The use of teleservice has become a national protocol for clinical management in Brazil, it expands the registries and access to all in primary care, it has proved efficient in teleconsulting about COVID 19 and telemedicine systems in which users can ask questions and learn about the prevention of Sars Cov 2, without necessarily going to the health service, and the professional monitoring risk groups.^{04,19}

From telehealth, patients have the integrality of their right to preserved health, the success of this tool was so great that SARTI et al, 2020, affirms that the-

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re should be continuous consultations at distances even outside the context of a COVID-19 pandemic, as the resource used in primary care relieved emergency services, facilitated access and organized service flows. However, there is a fear of the population, regarding the quality of care, becoming fearful with the service.¹⁸

Care management tools

To DAUMAS et al, 2020, the media such as radios and social media can be used to pass on information with the possibility of specific use for management, resulting in a more organized and agile service for the client. Assistance can be made more flexible by collecting online information, administering face-to-face scheduling for cases of real need, preventing the user from exposing themselves, for example, in the midst of a COVID-19 pandemic in an unnecessary way that could be resolved through a technological means at home.^{17,18}

Although several tools are simple in nature, blogs are complex and require certain technical knowledge, however, it is worth using because they have evidence of satisfactory results. Trainings can be worked on for health teams to develop skills and expand their means of communication and creativity 10 mainly in atypical times of great calamities. The means of communication and technology have transformed the educational context of health today, where the impact was evident in data management.¹¹

CONCLUSION

With the realization of this research, it is possible to verify the efficiency of the use of information and communication technologies in primary care, not only in atypical episodes, but also, there are possibilities, based on experienced prototypes, that these means of communication remain present in the official protocols.

There are several technologies that can be used, some require a higher level of competence to manage them, however,

in these cases continuing education with the team in order to qualify them, facilitates and assists in their implementation.

With this, we perceive an innovative

area that shows itself capable of bringing improvements for the user and ease for the health team, still being a differential for nursing as a professional manager and

caregiver who can add all their skills in computerized tools. , potentiating the expansion of care in places that were previously unable to cover. ■

REFERENCES

- BRASIL. Coronavírus (COVID 19) O que é COVID19? Ministério da Saúde. Brasília, DF, 2020. Acesso em: 20 de julho de 2020. Disponível em: <https://coronavirus.saude.gov.br/sobre-a-doenca#o-que-e-covid>.
- BRASIL. Painel Coronavírus. Ministério da Saúde. Brasília, DF, 2020. Acesso em: 21 de julho de 2020. Disponível em: <https://covid.saude.gov.br/>.
- Nedel F. Enfrentando a COVID-19: APS forte agora mais que nunca!. APS [Internet]. 15abr.2020. Disponível em: <https://apsemrevista.org/aps/article/view/68>. Acesso em 26 de julho de 2020.
- Sarti, Thiago Dias et al. Qual o papel da Atenção Primária à Saúde diante da pandemia provocada pela COVID-19?. Epidemiologia e Serviços de Saúde [online]. v. 29, n. 2. Disponível em: <https://doi.org/10.5123/S1679-49742020000200024>. Acesso em 27 de Julho de 2020.
- TORRES, Ruth Cristini et al. Educação em saúde como ferramenta de enfrentamento das doenças renais crônicas. Journal of Health Connections, Sergipe, Vol. 9, No 2 (2020). Disponível em: <http://periodicos.estacio.br/index.php/journalhc/article/viewArticle/6884>. Acesso em 27 de Julho de 2020.
- CAETANO, Rosângela et al. Desafios e oportunidades para telessaúde em tempos da pandemia pela COVID-19: Uma reflexão sobre os espaços e iniciativas no contexto brasileiro. [Cad. Saúde Pública] v. 36, n. 5, 2020. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2020000503001&lng=en&nrm=iso. Acesso em 28 de Julho de 2020.
- FALKENBERG, Mirian Benites et al. Educação em saúde e educação na saúde: conceitos e implicações para a saúde coletiva. [Rev Ciênc. saúde coletiva] Rio de Janeiro, v. 19, n. 3, p. 847-852, Mar. 2014. Disponível em: <https://doi.org/10.1590/1413-81232014193.01572013>. Acesso em 27 de Julho de 2020.
- DOMINGUES, Griesiele Aparecida Silva Ferreira. Experiência do enfermeiro com o uso da tecnologia em cuidados com o paciente com diabetes no pós cirúrgico. [Revista Eletrônica Acervo Saúde] n. 47, p. e3118, 30 abr. 2020. Disponível em: <https://doi.org/10.25248/reas.e3118.2020>. Acesso em 20 de julho de 2020.
- ORIA, Mônica Oliveira Batista et al. Eficácia de intervenções educativas realizadas por telefone para promoção do aleitamento materno: revisão sistemática da literatura. [Rev. esc. enferm. USP] São Paulo, v.52, 2018. Disponível em: <https://doi.org/10.1590/s1980-220x2017024303333>. Acesso em 28 de julho de 2020.
- PINTO, Luiz Felipe. ROCHA, Cristianne Maria Famer. Inovações na Atenção Primária em Saúde: o uso de ferramentas de tecnologia de comunicação e informação para apoio à gestão local. [Ciênc. saúde coletiva online] 2016, vol.21, n.5 pp.1433-1448. Disponível em: <https://doi.org/10.1590/1413-81232015215.26662015>. Acesso em: 29 de julho de 2020.
- Ishwaria M. et al. A Big World Made Small: Using Social Media to Optimize Patient Care. Livro educacional da Sociedade Americana de Oncologia Clínica [revista em internet] 17 de maio de 2019, 39. Disponível em: https://doi:10.1200/EDBK_246643. Acesso em 30 de julho de 2020.
- DEVINE, Katie et al. Digital Health Interventions for Adolescent and Young Adult Cancer Survivors. Clinical Cancer Informatics - [Revista on-line] 29 de junho de 2018. Disponível em: <https://doi:10.1200/CCI.17.00138>. Acesso em 30 de julho de 2020.
- KANG, Xiaoyu et al. Delivery of Instructions via Mobile Social Media App Increases Quality of Bowel Preparation. [Clinical gastroenterology and hepatology: the official clinical practice journal of the American Gastroenterological Association] 14(3), 429-435.e3. 2016. Disponível em: <https://doi.org/10.1016/j.cgh.2015.09.038>. Acesso em 30 de julho de 2020.
- ATTAL, Deanna. J et al. Twitter Social Media is an Effective Tool for Breast Cancer Patient Education and Support: Patient-Reported Outcomes by Survey. [Journal of medical Internet research] 17(7), e188. 2015. Disponível em: <https://doi.org/10.2196/jmir.4721>. Acesso em: 30 de julho de 2020.
- PISCOTTY, Ronald et al. Hold the phone? Nurses, social media, and patient care. [Nursing]. 45. 64-67. Mai 2016. Disponível em: <https://doi: 10.1097/01.NURSE.0000459797.02711.8a>. Acesso em 29 de julho de 2020.
- CHIPPS, Jeniffer et al. Using mobile phones and social media to facilitate education and support for rural-based midwives in South Africa. [Curationis] 38(2), 2015. Disponível em: <https://doi.org/10.4102/curationis.v38i2.1500> . Acesso em: 29 de julho de 2020.
- DAUMAS, Regina Paiva et al. O papel da atenção primária na rede de atenção à saúde no Brasil: limites e possibilidades no enfrentamento da COVID-19. [Cadernos de Saúde Pública online]. v. 36, n. 6. Disponível em: <https://doi.org/10.1590/0102-311X00104120>. Acesso em: 28 de julho de 2020.
- IMER, Nathalia Avila et al. Pandemia do COVID-19 e implementação de telefonaudiologia para pacientes em domicílio: relato de experiência. [CoDAS online]. 2020, vol.32, n.3. Disponível em: <https://doi.org/10.1590/2317-1782/20192020144>. Acesso em: 29 de junho de 2020.
- HARZHEIM, Erno et al. Ações federais para apoio e fortalecimento local no combate ao COVID-19: a Atenção Primária à Saúde (APS) no assento do condutor. [Rev. Ciênc. saúde coletiva online].2020,vol.25, pp.2493-2497. Disponível em: <https://doi.org/10.1590/1413-81232020256.1.11492020>. Acesso em: 30 de junho de 2020.