[Vol-7, Issue-7, Jul- 2020] ISSN: 2349-6495(P) | 2456-1908(O)

Use of Parodies as Educational Technology in the Health Education Process

Maiza Silva de Sousa¹, Elizandra Silva de Carvalho Meireles², Aluísio Ferreira Celestino Júnior³, Armando Sequeira Penela⁴, Eliseth Costa Oliveira de Matos⁵, Ilma Pastana Ferreira⁶, Widson Davi Vaz de Matos⁷, José Henrique Santos Silva⁸, Caroline Silveira de Oliveira⁹, Marlene Ribeiro de Oliveira¹⁰, Nicole Pantoja de Oliveira Santos¹¹, Bruna Braga Maciel¹²

Abstract— Objective: to describe the development of a book as a health education strategy, which brings together 32 parodies on various health issues that can be worked from primary care to hospital care. Method: this is a methodological research, technological applicability, with a qualitative approach which was developed in four stages: (1) definition of the themes to be addressed; (2) preparation of parodies; (3) orthographic/metric review; (4) Graphic printing of the material produced. Results: based on the pertinent literature and the academic experience of the authors, the thematic areas addressed were first selected, being: infectious diseases, parasitic diseases, chronic-degenerative diseases, self-care with health and others such as prenatal care, health management, humanization and urban violence; then the parodies were elaborated and some dealt with matters in duplicate in order to complement the theme addressed, allowing its use in different contexts. Conclusion: the development of this type of educational technology in the health area is something new in the literature, therefore, the parodies compiled in the book can be used by any healthcare professional to facilitate the adherence of users/customers in the health education process.

Keywords— Educational Technology; Health Education; Music; Health Care.

I. INTRODUCTION

Health education activities are one of the main approaches of the professional nurse in the practice of care. In this context, educational technologies emerge as

essential tools to assist and complement the best development of assistance to the user/client (Texeira & Mota, 2011). Viana (2011) broadly defines the term technology as applied knowledge, which in health can be

¹Graduate Student in Nursing at the University of State of Pará (UEPA); Member of the Research Group Determinants of Infectious and Parasitic Processes in Amazonian Environments (DPIPAA), Belém, Brasil. Postal code: Rod. Augusto Montenegro, №1872, Parque Guajará.

²Nurse at the University of State of Pará (UEPA), Belém, Brazil.

³PhD in Infectious and Parasitic Agents from the Federal University of Pará and Professor at the University of State of Pará (UEPA), Belém, Brazil.

⁴Master's Degree in Biology of Infectious and Parasitarian Agents from the Federal University of Pará and Professor at the University of State of Pará (UEPA), Belém, Brazil.

⁵PhD in Tropical Diseases from the Federal University of Pará and professor at the University of State of Pará (UEPA), Belém, Brazil.

⁶PhD in Nursing from the Federal University of Rio de Janeiro and professor at the University of State of Pará (UEPA), Belém, Brazil.

⁷Nurse at the University of State of Pará (UEPA) and Resident Nurse, Oncology Nursing Residency Program, Federal University of Pará, Belém, Brazil.

⁸Nurse at the Escola Superior da Amazônia (ESAMAZ); Specialist in Oncology for Centro Universitário (UNIFAMAZ), Belém, Pará, Brazil.

⁹Graduation in Dentistry from the University Center of Pará (CESUPA); Specialist in Orthodontics for CESUPA.

¹⁰Specialization in Orthodontics from the University Center of Pará (CESUPA); Specialization in Public and Family Health Dentistry (ABO-PA) and Professional Masters in Dentistry and Public Health from the Federal University of Minas Gerais (UFMG).

¹¹Graduation in Dentistry from the University Center of Pará (CESUPA); Specialization in Odontogeriatrics and Professional Master's in Dental Clinic from the University Center of Pará (CESUPA).

¹²Graduate Student in Dentistry at the University Center of Pará (CESUPA).

used in the prevention, diagnosis, treatment of diseases and even in the rehabilitation of its consequences.

Health technologies are classified into three types: light, light-hard and hard. Light technologies are those of a relational nature, such as bonding, reception and autonomy. The soft-hards are called technologies-knowledge that operate in the work process of a certain unit, with well-structured knowledge. And hard technologies are machines, devices, standards and organizational structures (Abreu, Amendola & Trovo, 2017; Aquino, Melo, Lopes, & Pinheiro, 2010; Merhy, 2002; Pereira, Sousa, Santos, Bezerra, Gomes & Santos, 2016).

In the health education process, nurses can use several light-hard technologies to assist in the practice of care. They favor communication between professionals and patients, and can produce knowledge and stimuli that help the development of practices considered healthy and positive for individuals health preservation (Pereira, Sousa, Santos, Bezerra, Gomes & Santos, 2016).

Among the various educational resources, there are booklets, audiovisual tools, multimedia and the use of music, which has been incorporated as a therapeutic resource, in addition to being widely used as a pedagogical tool, especially in educational contexts outside the care environment (Sant' Anna, Escudeiro, Ferreira, Teixeira & Branco, 2016).

The use of music as a pedagogical tool that is applied through parodies stands out. Several studies have demonstrated the importance and effectiveness of this type of methodology in teaching various subjects, such as chemistry, biology, environmental education, microbiology, but reports of its use as a resource applied to health education are not equally frequent (Paixão, Lima, Colaço, Lima, Casimiro, Castro & Pantoja, 2017).

Therefore, this study addresses the development of a book as a health education strategy, which brings together 32 parodies on health topics and can be worked since primary care to hospital care. It is a light-hard technology developed by two nursing students and a teacher, due to the need for practical, playful and applicable tools in different contexts of health care.

II. METHODS

It is a methodological research, of technological applicability, with a qualitative approach. The applied methodological research was adopted because it is a process of development of a new product, being this, an educational technology focused on health, specifically a

book containing a set of parodies to be used in different fields of health care according with the theme addressed in each of them (Polit, Beck & Hungler, 2009).

The study was developed in four stages: (1) definition of the themes to be addressed; (2) elaboration of parodies; (3) orthographic/metric revision; (4) graphic printing of the material produced.

The stage related to the selection of themes had as a criterion the coverage corresponding to care related to basic, primary, secondary and tertiary care and all of them should be permeated with an educational/preventive approach. Likewise, the themes should contemplate health problems of relevance in different contexts of health care, that is, conditions with epidemiological relevance that have some type of individual impact (morbidity, mortality and quality of life) and society impact (costs, time away from work or school and productivity), whose health education strategy could have some impact as a favorable intervention.

The musical selection had as main criterion the popular dissemination of the songs, that is, compositions known by the greatest number of people, thus enabling a greater reach of individuals. The resource would be made available to people whose professional practice would allow its use in different healthcare environments. For this reason, the language used in the texts could not be restrictive to the technical language of the health area, but be widely understandable by community health agents, teachers, teaching assistant, elderly or sick caregivers and, thus, also by professionals with higher education in the health area.

III. RESULTS

Based on the relevant literature and the authors' experience in extension and teaching activities focused on health education, the thematic areas addressed were selected first, as shown in Frame 1.

Frame 1: Thematic areas and respective subjects covered in educational technology.

Areas	Subjects	
Infeccioous	Aids	
deseases	Botulism	
	Dengue	
	Yellow fever	
	Zika	

	Mayaro	
	Leprosy	
	Tuberculosis (2)	
	HPV (2)	
	Leptospirosis	
	Meningitis	
	Mycoses (2)	
Parasitics	Pediculosis Helminthíasis (verminoses)	
deseases		
Chronic	Diabetes mellitus	
degerative	Arterial hypertension (2)	
diseases	Alergy	
	Dyslipidemia	
Self-care	Vaccination	
	Physical ativity	
	Santization of hands	

	Food poisoning	
	Trash	
	Oral health (2)	
Others	Prenatal care (2)	
	Management heath	
	Humanization	
	Urban violence	

Source: Celestino, Jr., Carvalho & Sousa (2018).

Duplicate subjects were designed to complement the topic addressed, to allow them to be used in different contexts, as well as to use music that may be of knowledge and taste better appreciated by different people who use the educational resource.

Frame 2 shows the list of parodies with the subjects covered and the respective songs that serve as the basis for the content worked.

Frame 2: Songs used for each specific theme of the parodies.

Subjects	Songs	Authors
Aids	Garota de Ipanema	Tom Jobim e Vinícius de Moraes
Botulism	Meu erro	Herbert Viana
Dengue	Terezinha	Chico Buarque de Holanda
Yellow fever		
Zika		
Mayaro		
Leprosy	Era um garoto que como eu	Franco Migliacci e Mauro Lusini,
Leptospirosis	Another brick in the wall	Roger Waters
Meningitis	Anunciação	Alceu Valença
Sepsys	Eu amei te ver	Tiago Iorc
Pediculosis	Malandragem	Cazuza
Helminthíasis	A cobra e o pé de limão	Autor desconhecidos
Diabetes	Fico assim sem você	Abdullah e Cacá Moraes
Alergy	Romaria	Renato Teixeira
Dyslipidemia	Este ano quero paz no meu coração	Paulo Sérgio Vale
Vaccination	Já sei namorar	Tribalistas
Physical Ativity	É preciso saber viver	Roberto e Erasmo Carlos
Sanitization of hands	Superfantástico	Ignácio Balesteros e Edgard Poças
Food poisoning	Adivinha o que	Lulu santos

Trash	Meteoro	Fernando Fakri de Assis
Health management	Gita	Raul Seixas e Paulo Coelho
Humanization	Esse cara sou eu	Roberto Carlos
Urban violence	Felicidade	Gabriel Moura, Leandro Fob, Seu Jorge, Pretinho da Serrinha

Source: Celestino, Jr., Carvalho & Sousa (2018).

In addition to these themes that present only one parody, there are six for which two parodies were produced in order to further facilitate their approach, as we can see in Frame 3:

Frame 3: Songs with two parodies and the respective songs used for their production.

Subjects	Song	Author
HPV I	Te esperando	Bruno Caliman
HPV II	Saudade d'ocê	Vital Farias
Tuberculosis I	Faz um milagre em mim	Joselito e Kely Danese
Tuberculosis II	I want to break free	Queen
Mycosis I	Poeira	Lourenço Olegário filho
Mycosis II	Pororó	Ministério força e vitória
Arterial hypertension I	Em plena Lua de mel	Reginaldo Rossi
Arterial hypertension II	Romântico Anônimo	Bruno Calimam e Ivo Mozart
Oral health I	Ai se eu te pego	Sharon Acioly e Antônio Diggs
Oral health II	A história do pedregulho	José Paulo Fernandes
Prenatal I	1000 graus	Clóvis Pinho
Prenatal II	O natal existe	Edson Borges

Source: Celestino, Jr., Carvalho & Sousa (2018).

After the orthographic revision, the graphic design and editing was prepared, with the cover (Figure 1) in polychrome and monochromatic core. The book has 60

pages and was made in Couché Brilho 300g Offset 75g paper with the ISBN registered under the number 978-85-88314-69-6.

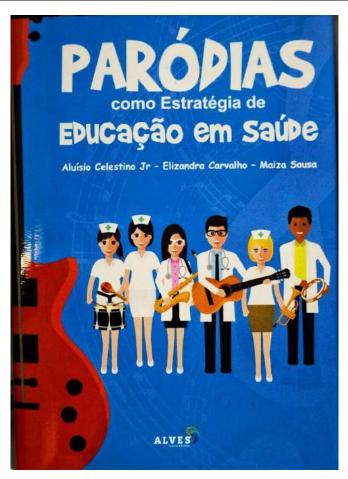


Fig.1: Parody book cover.

Source: Celestino, Jr., Carvalho & Sousa (2018).

IV. DISCUSSION

Educational technologies are resources used for different purposes and in the varied contexts. The thematic variation shown in the elaborated technology allows action in different contexts of care. The literature has described the use of parodies in the teaching of subjects such as environmental education, chemistry, geography, microbiology, as well as the use of educational booklets in the area of health, either to raise the awareness of patients about performing invasive procedures as for health education practices and self-care (Santiago, Souza, Mululo, Oliveira, Rodrigues, Melo, Aguiar, Mota & Santos, 2016).

There are elements that are often associated with health care practice: pedagogical practices and technologies. These are essential tools for a good interaction with the user. However, the inadequate approach can often be the cause of professional dissatisfaction, as the user does not always understand what is being passed on to him, and it is common to hear: "I have repeated it several times and he has not learned; I

don't know what I do anymore to change my behavior" (Vasconcelos, Grillo, & Soares, 2018).

Teixeira (2010) describes that educational technologies in different types: tactile and auditory, expositive and dialogical, printed and audiovisual; and its combined use helps to improve the relationship between professional-user, which has a greater assimilation of what the professional passes about health education. It also highlights that these are the types of technologies used for health education in the community. In this way, the parodies presented in this book work as accessible educational technology and can be used by any health professional in order to improve their educational activities.

Corroborating this, several studies showed that the technologies offering information about diseases and and living conditions of patients, increase their interest in learn more about the subject and know their health prospects (Silva, Carvalho, & Carvalho, 2015). So it was possible to know the risks offered by the disease and helps make decisions in performing procedures, for example.

Sant'Anna, et al. (2016) make this very clear when they publish their study on the social representations of patients submitted to cineangiocoronariography examination and verify that most of them attribute it a sense of death, in a symbolic or proper way, due to the lack of guidance about the procedure. To minimize the problem, an educational booklet with information and guidance on cineangiocoronariography was implemented, resulting in reduction in the level of stress, fear and anxiety of users, before the exam.

Instead playbooks, parodies are not widely used technologies in the health field. Literature shows its use especially in regular teaching of diverse subjects. For example, Paixão, et al. (2017) report the use of this technology in teaching of microbiology, highlighting the importance resulting in increasing students interest about this subject facilitating learning; and Machado (2015) spokes about the use of parodies as a learning object in teaching mathematics.

Due to its great plurality in human health themes and musical appeal of great public, the technology presented has full possibility of being used in the approach to health education with relevant motivational appeal in health care.

V. CONCLUSION

Therefore, we concluded that the use of parodies as methodological tool in health education process is an effective alternative, since it enables the dynamic and playful assimilation of the contents passed by the professionals. The book presented in this study comprises 32 parodies on various topics in health area to enrich the exchange user/client information, as well as ensuring their participation in health education process.

Thus, it is highlighted that the development of this type of educational technology is something that could be more valued in literature, and the existence of many products like this in the health area is not documented. So, the compiled parodies can be used by any health professional and in varied audiences, facilitating the health education process and contributing to increase the interest of users/clients, mainly in the practice of self-care.

ACKNOWLEDGEMENTS

To Universidade do Estado do Pará (UEPA) represented by Dra. Margareth Bitencourt, to Mrs. Maria de Nazaré da Silva Cruz for the support in the technical and logistical assistance of the book launch.

REFERENCES

- [1] Abreu, T. F. K, Amendola, F., & Trovo, M. M. (2017). Relational technologies as instruments of care in the Family Health Strategy. *Revista Brasileira de Enfermagem*, 70(5), 981-987. Recuperado em 2 setembro, 2019, de http://dx.doi.org/10.1590/0034-7167-2016-0337.
- [2] Aquino, P. S, Melo, R. P, Lopes, M. V. O & Pinheiro, A. K. B. (2010). Análise do conceito de tecnologia na enfermagem segundo o método evolucionário. *Acta Paulista de Enfermagem*, 23(5), 690-696. Recuperado em 2 setembro, 2019, de http://www.scielo.br/pdf/ape/v23n5/17.pdf.
- [3] Machado, L. A. R. (2015). Paródias como objeto de aprendizagem. Trabalho de Conclusão de Curso, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brasil. Recuperado em 2 setembro, 2019, de https://www.lume.ufrgs.br/bitstream/handle/10183/134394/0 00986817.pdf.
- [4] Merhy, E. E. Em busca de ferramentas analisadoras das Tecnologias em Saúde: a informação e o dia a dia de um serviço, interrogando e gerindo trabalho em saúde. In: Merhy, E. E, Nono, R. (2002) Agir em Saúde: um desafio para o público (2ª ed.). São Paulo: Hucitec, pp.113 150.
- [5] Paixão, G. C, Lima, L. A, Colaço, N. J. O, Lima, R. A, Casimiro, T. C, Castro, L. H. P & Pantoja, L. D. M. (2017). Paródias no ensino de microbiologia: a música como ferramenta pedagógica. Rev Eletron *Comun Inf Inov Saúde*, 11(1), 1-12. Recuperado em 2 setembro, 2019, de https://www.researchgate.net/publication/328821888_Parodi as_no_ensino_de_microbiologia_a_musica_como_f erramenta_pedagogica.
- [6] Pereira, D. S, Sousa, R., Santos, A. C., Bezerra, M. A. S., Gomes, F. L. C & Santos Z. M. S. A. A Tecnologia Como Ferramenta Promotora da Saúde. (2016). In: Santos, Z. M. A. S, Frota, M. A &
- [7] Martins, A. B. T. (2016). Tecnologias em saúde: da abordagem teórica à construção e aplicação no cenário do cuidado (1ª ed.) [livro eletrônico]. Fortaleza: EdUECE, pp. 65-82. Recuperado em 2 setembro, 2019, de http://www.uece.br/eduece/dmdocuments/Ebook%20%20Tecnologia%20em%20Saude%20-%20EBOOK.pdf.
- [8] Polit, D. F, Beck, C. T & Hungler, B. P. (2009). Fundamentos de pesquisa em Enfermagem (5ª ed.). Porto Alegre: Artmed.
- [9] Sant' Anna, R. S, Escudeiro, C. L, Ferreira, S. C. M, Teixeira, M. L. O & Branco, E. M. S. C. (2016). Educational Technology in Health for Users of Hemodynamics on Coronary Angiography Exam: Descriptive Study. Rev Enferm UFPE on line, 10(10), 3768-3777. Recuperado em 2 setembro, 2019, de https://pdfs.semanticscholar.org/dca7/c66cc28a1c3e5fa13af8 090b26518c693d12.pdf.
- [10] Santiago, C. O., Jr, Souza, A. C. S, Mululo, J. C. P, Oliveira, G. N, Rodrigues, C. C, Melo, R. A., Aguiar, P. L. Mota, S. C., Santos, I. B., Terán, A. C. (2016). As paródias como ferramenta de sensibilização do tema água na educação

- ambiental. *Educação Ambiental em Ação*, 15(57), 1-11. Recuperado em 2 setembro, 2019, de http://www.revistaea.org/artigo.php?idartigo=2450.
- [11] Santos, A. G. C & Gonçalves, F. T. D. (2017). Os efeitos terapêuticos da música em pacientes submetidos a sessões de hemodiálise. *Revista Eletrônica Acervo Saúde*, 9(3), 1112-1117. Recuperado em 2 setembro, 2019, de https://www.acervosaude.com.br/doc/20 2017.pdf.
- [12] Silva, C. T. S, Carvalho, J. M & Carvalho, F. L. Q. (2015). Tecnologias Voltadas para Educação em Saúde: O que Temos para a Saúde dos Idosos?. Anais do II Seminário de Tecnologias Aplicadas em Educação e Saúde – STAES, realizado na Universidade do Estado da Bahia, Salvador, Brasil. 26-27 de outubro; pp. 14-21. Recuperado em 2 setembro, 2019, de https://www.revistas.uneb.br/index.php/staes/article/downloa d/1615/1091.
- [13] Teixeira, E. (2010). Tecnologias em enfermagem: produções e tendências para a educação em saúde com a comunidade. Revista Eletrônica de Enfermagem, 12(4), 598.
- [14] Texeira, E. & Mota, V. M. S. S. (2011). Tecnologias educacionais em foco (1ª ed.) São Caetano do Sul: Difusão Editora.
- [15] Vasconcelos, M., Grillo, M. J. C & Soares, S. M. (2018). Práticas educativas e tecnologias em saúde (1ª ed.). Belo Horizonte: NESCON UFMG.
- [16] Viana, A. L. D, Iozzi, F. L., Albuquerque, M. V & Bousquat, A. (2011). Saúde, desenvolvimento e inovação tecnológica: nova perspectiva de abordagem e de investigação. *Lua Nova*, 83, 41-77. Recuperado em 2 setembro, 2019, de http://www.scielo.br/pdf/ln/n83/a03n83.pdf.