



Educational video for promoting men's health: a descriptive comparative study

Vanessa Caminha Aguiar Lopes¹, Elaine Cristina Carvalho Moura¹, Isabela Maria Magalhães Sales¹, Silvana Santiago da Rocha¹

1 Federal University of Piauí

ABSTRACT

Aim: To evaluate the knowledge of adult men about promoting well-being, healthy eating and mental health in the work of men, before and after the application of educational video. **Method:** Descriptive, before-and-after, comparative study performed in a commercial facility within the scope of a health unit in June 2015. The sample included 20 working men. **Results:** The mean age was 26.8 (\pm 6.7) years. Only 25% performed clinical examinations annually. After video application, there was an increase in total scores (p<0.01). The sentences with increase of significant hits approached alcoholism (p<0.01, p=0.02) and hygiene (p=0.02, p=0.04). **Discussion:** The information of the educational video evidenced the need for clarification of the themes and importance of conducting preventive exams. **Conclusion:** The educational video was an accessible and promising intervention for effective health promotion, in the face of a significant improvement in knowledge assessment scores.

Descriptors: Men's Health; Health Education; Instructional Films and Videos.

INTRODUCTION

Studies indicate that the male population has a lower life expectancy than the female population worldwide⁽¹⁾. The old model of care directed to four population groups, namely: children, adolescents, women and the elderly, was insufficient to meet the health needs of Brazil, especially for disregarding 40 million men in the age group of 25-59 years. The Política Nacional de Atenção Integral à Saúde do Homem (PNAISH - National Policy for Integral Attention to Human Health) was established with the objective of facilitating and expanding the access of the male population to health services, given the risk factors presented, especially those related to external causes(2). To meet these requirements, technologies that match and meet the specifications of the programs in relation to the target audience are necessary.

Each technology has a purpose, method and degree of understanding and the nurse must know the activities that best fit each educational objective that they want to achieve, and they are classified as hard, light-hard and light. Hard technology refers to the complex instrumentation, encompassing the equipment for treatments, examinations and the organization of information; the light-hard refers to the professional knowledge, being inscribed in the way of organizing its performance in the work process. Light technology is produced in work-in-progress, in a process of relations between the health worker and the user/patient⁽³⁻⁴⁾.

In this way, educational videos fall into the category of light technologies and are instruments for attending to Brazilian public policies in the scope of health promotion, from the transmission of information, dynamization and expansion of cognitive abilities derived from the wealth of objects and subjects that allow interaction with them. This feature also enables

memory extension and network performance as the rigor of its construction methodology increases⁽⁵⁾.

In this context, non-adherence to comprehensive health measures makes men more vulnerable to serious and chronic diseases, in addition to early death when compared to women in the same age group⁽¹⁾. As a consequence, their access to health services occurs through specialized assistance, which constitutes an aggravation of morbidity and results in accentuated costs for the institutions, also indicating the need to direct resources for education and health promotion⁽⁶⁾.

Health education comprises a health promotion tool and is revealed as a key in the work process to act through care lines that preserve the integrality of the interventions and insertion of the male population in the activities related to the improvement of health. It consists in the systematic production of training knowledge for the development of health actions, which requires a critical and reflexive thinking to list transformative actions that lead people to autonomy in health decisions, to take care of themselves, their family and the community⁽⁷⁾.

In the meantime, educational technologies have been produced, in particular, for the promotion of human health, since it is not an active subject in matters involving health and in the search for a health services network⁽⁸⁾. These instruments require evaluation of their effectiveness.

Men refer to the hours of operation of the health services as one of the factors that make access difficult, because it coincides with the workload. With a view to breaking down this barrier, health education strategies can be developed in the workplace of the male public, such as barbershops, industries and football clubs. The actions were well accepted by men and constituted activities with representativeness and effectiveness in achieving this gender⁽⁹⁻¹¹⁾.

The present study is justified in the actions of Brazilian health care policies and by the need to evaluate light technologies produced with a view to promoting human health. It aimed to evaluate the knowledge of adult men in terms of promoting well-being, healthy eating and mental health at work, before and after the application of an educational video. Such research set out to answer the question: What is the effect of the use of an educational video in promoting human health?

METHOD

This is a comparative descriptive study of the before and after type, performed in a commercial establishment in coverage of a health unit located in the Northeast region of Brazil, in June 2015. Sampling was non-probabilistic, of the type for convenience, and included 20 working men, aged 18 years or more, who participated in health education with a video. Exclusion criterion was limited to reading and/or completing the data collection instrument. The study took place in a room of its own, provided by the establishment, with an area of 30 m² and with a television set, a computer and a sound box.

The educational video for the promotion of human health was produced by the Extension Program, funded by the Secretariat of Higher Education, "Nursing practices in the promotion of the health of children, men and the elderly: art, simulation and technology - second stage". The media were developed in a process involving a panel of specialists consisting of three female nurses and one doctor, and students of nursing and medicine, with the application of

the Arch of Maguerez⁽¹²⁾, as well as simulation of health practices to provide greater realism.

The use of this method aimed to consider the socioeconomic, cultural and nosological conditions of the target population, through reflection, scientific basis and identification of the felt and unheeded health needs of men. After qualification through a course of theater and screenwriting carried out in a federal public institution, the final appreciation of the material was carried out and the video was filmed and edited.

The instrument for collecting data before and after the educational video entitled "Promoção do bem-estar, alimentação saudável e da saúde mental e no trabalho do homem" (ISBN 978-85-7463-835-5 - Promotion of well-being, healthy eating and mental health and in the work of man) presented 14 statements (arranged in a results table). The questions considered the scripts and videos, meeting the criteria of the psychometric model used in the evaluation of instruments: behavioral, simplicity, clarity, variety, modality and typicality, as well as being varied and comprehensible to the different strata of the population that should be achieved⁽¹³⁾.

Thus, the first part of the instrument presented socio-demographic, educational and health data, and it questioned whether the participant had attended lectures and/or courses on the subject of the video; the second part contained sentences constructed under semantic validation⁽¹⁴⁾ by three specialists. These were answered with the options: "true", "false" or "do not know", so that the wrong or "I do not know" answers were computed as errors and each sentence with correct answer was given a value equal to 1 (one). In this way, the final sum was obtained, ranging from 0 (zero - no hit) to 14 (fourteen - total hits).

For the analysis of the data, the Statistical Package for the Social Sciences® version 18.0 was

used. Each question was tested for normality of its distribution and the Student's t-test of dependent samples for the parametric data and the Wilcoxon test for the nonparametric ones were performed, considering the 95% confidence interval and significance of 5%.

The development of this study followed the ethical and legal aspects of national and international research in human subjects, according to the Ethics Committee of the Federal University of Piauí (UFPI), opinion no. 657.823/2014, and the participants signed the informed consent in two copies.

RESULTS

Twenty men with mean age of 26.8 (±6.7) years, ranging from 18 to 43 years, participated in the study. Of these, 11 (55%) were in the focus range of the PNAISH from 25 to 59 years. Most were single (12;60%) or married (7;35%); with incomplete or complete secondary education (15;75%); two (10%) had incomplete or complete primary education and three (15%) reported having a higher education level.

In relation to the city of origin, men who are natural of the capital of Piauí (14; 70%) were the majority and three (15%) were from other states of Brazil. Regarding health-related practices, six (30%) were alcoholics and two (10%) were smokers. The self-reported diseases identified were systemic arterial hypertension (2; 10%) and diabetes mellitus (1; 5%), so that 18 (90%) reported no disease. Only five (25%) usually perform annual check-ups or clinical exams.

When questioned about the frequency of intimate hygiene, 11 (55%) reported performing two or three times a day, eight (40%) reported four or more times a day and one (5%) said they performed only when necessary. Regarding the use of condoms, 12 (60%) reported using it at

all times, four (20%) use only when the partner requires, three (15%) do not use it and one (5%) mentioned using it eventually, without regularity. Of the participants, 14 (70%) practice regular physical activity; and 13 (65%) stated that they did not participate in courses or lectures on the themes of the video previously.

The results of comparative descriptive and inferential analysis of knowledge self-reported by men before and after the educational intervention with video are described in Table 1.

Before the educational video was presented, a total mean score of 10.2 was observed, with a minimum score of 6 points. The sentences with the lowest percentage of correct answers referred to the use of personal protective equipment (10; 50%), rectal examination (10; 50%) and intimate hygiene after urination (6; 30%). On the other hand, the statements that most influenced the average number of correct answers were those related to hygiene after intercourse (19; 95%), condom use for the prevention of sexually transmitted diseases (STDs) (19; 95%) and recognition of alcoholism (18; 90%), according to Table 1.

After the application the total average increased, reaching 11.9, with a minimum of eight points. Of the questions that obtained less frequent hits, there was an increase of 10% in item 1, 5% in item 8 and 40% in sentence 10. Questions that dealt with consequences of alcohol consumption (item 4) and frequency of daily intimate hygiene (item 10) reached the totality of 20 hits (100%) (Table 1).

The inferential statistical analysis of the before-and-after results showed a significant increase in the total scores obtained by the participants (p<0.01). The sentences that obtained a statistically significant increase addressed characteristics of the alcoholic person (p<0.01), consequences of alcohol consumption (p=0.02), paper use after micturition (p=0.02) (p=0.03),

Table 1. Frequency distribution of the means (\pm standard deviation), minimum and maximum, and correct answers for males (n=30) before and after the educational video. Teresina, PI, Brazil, 2015

	Before		After		
Variables	n (%)	M (±DP)	n (%)	M(±DP)	р
		Mín-Max		Mín-Max	
Total score		10,2 (1,7) 6-12		11,9 (1,5) 8-14	<0,01 ^t
(1) Personal protective equipment at work should be disposed of only when it is not uncomfortable to use them (F)	10 (50)		12 (60)		0,58 ^t
(2) People who drink alcoholic beverages for a long time tend to be isolated, irritated and addicted (T)	12 (60)		19 (95)		<0,01 ^u
(3) Alcoholic is the person who needs more and more glasses to satisfy himself or who feels bad while not drinking for a while (T)	18 (90)		19 (90)		1,00 ^u
(4) Consuming alcohol increases blood pressure, makes you fat, and can cause heart and vascular disease (T)	15 (75)		20 (100)		0,02 ^u
(5) Feeling sad, unwilling to perform activities that were once common and feeling guilty are signs of depression (T)	15 (75)		18 (90)		0,26 ^u
(6) The practice of physical activity should be initiated intensively, for many days and for many hours (F)	15 (75)		17 (85)		0,32 ^u
(7) Healthy eating involves making 4 to 6 balanced meals a day, avoiding fats, and including fiber, fruits and vegetables (T)	15 (75)		16 (80)		0,32 ^u
(8) Only men who have pain, burning, and discomfort while urinating should have a prostate exam (rectal examination) (F)	10 (50)		11 (55)		0,76 ^u
(9) Men need to use toilet paper after urinating. (T)	6 (30)		14 (70)		0,02 ^u
(10) To do the intimate hygiene, just wash the penis with water once a day (F)	17 (85)		20 (100)		0,08 ^u
(11) The penis has structures, called glands, that produce pasty, white, odorless secretions (T)	13 (65)		19 (95)		0,03 ^u
(12) Lack of intimate hygiene can lead to penile cancer and limb amputation (T)	15 (75)		19 (95)		0,04 ^u
(13) Intimate hygiene should be done primarily after sexual intercourse and/or masturbation (T)	19 (95)		19 (95)		1,00 ^u
(14) Condom use prevents sexually transmitted diseases and penile cancer (T)	19 (95)		20 (100)		0,32 ^u

Source: primary. Acronym: M: mean, SD: standard deviation; Min-Max: minimum-maximum; t: Student's t-test significance; u: significance of the Wilcoxon test

and association between poor hygiene and penile cancer (p=0.04), as described in Table 1.

DISCUSSION

The application of the educational video on the promotion of well-being, healthy eating and mental health and in the work of the man was effective in providing information and/or knowledge, constituting an improvement in terms of the general performance of the participants. This methodology was understandable and accessible to the target audience.

The socio-demographic and health characteristics found in the study were similar to other studies with educational interventions in human health carried out in Brazil and abroad (9-11). Modifiable risk factors, such as smoking (10%), alcohol consumption (30%) and physical inactivity (30%)

were considerable. Such characteristics contribute to the development of chronic diseases, as well as to the decline in reproductive health, and it is essential to develop adequate preventive strategies in line with the development of health policies⁽¹⁵⁾.

Blood tests for identification of prostate-specific antigen and rectal examination are recognized as primary measures in the detection of prostate cancer⁽¹⁶⁾. However, knowledge about the tracing and treatment of this disease is limited⁽¹⁰⁾. Men's concern about exposure makes it difficult to achieve the goals of prevention and health promotion programs. Rectal examination is still an unacceptable measure, despite the low cost, and there are reports mentioning that the examination raises the fear of physical and psychological pain⁽¹⁷⁾.

This non-adherence is related to gender stereotypes that characterize hegemonic masculinity, whose disease indicates the fragility of the body and, consequently, its bearer. Although some men are more amenable to rectal examination, there is still a need for greater awareness regarding the promotion of their health^(10,18). An essential point is the demystification of important conditions, such as those expressed by the thought that only men with pain, burning and discomfort when urinating should do this examination (item 8).

The information transmitted through the educational video sought the attention of the participants to the need for clarification and to the importance of conducting preventive exams, given the ability to detect diseases still in the initial phase, before the manifestation of the first symptoms. Regarding the preventive measures of penile cancer, expressed in items 13 and 14 (95%), the evaluation revealed a greater knowledge of the men.

This disease is considered rare in developed countries and presents an important incidence

in Brazil, with emphasis in the North and Northeast regions. In general, it has associated factors: phimosis, STDs, smoking habits, inadequate hygiene and resistance to seeking medical attention. The lack of hygiene generates an accumulation of urine residues and the production of smegma, which can cause chronic irritation associated or not with bacterial infection in the glans or foreskin⁽¹⁹⁾.

A review study emphasized the importance of performing male intimate hygiene as the main measure of penile cancer prevention, and should be performed with soap and water daily, especially after sexual intercourse and masturbation. The performance of intimate hygiene is daily⁽²⁰⁻²¹⁾, similar to the hygiene frequencies prevalent in the present study.

Although it is not possible to say that men perform this hygiene with the main objective of penile cancer prevention, activity with educational media has increased the knowledge about the benefits of good health practices in this context. Another important aspect was the percentage of 40% of men who use condoms occasionally or who do not use condoms. The use of condoms is essential in any type of sexual practice, since it is the safest form of STD prevention, which is frequently associated with penile cancer⁽²²⁾.

The development of the study in a commercial establishment, with working men, allowed the visualization of a specific environmental configuration in which health promotion approaches can be applied. Studies are growing in barbershops and stores, focusing on chronic diseases, communicable diseases, physical activity and health behaviors. Conducting educational strategies in the workplace enables men and women to reach a diverse age group with a greater risk of health disparities⁽²³⁾.

It should be emphasized that the simulation of health practices applied in the video pro-

duction, with the purpose of providing realistic conditions to the videos, seemed to facilitate the man's conduction in the visualization of positive attitudes of life through the health promotion bias. Thus, the educational video allowed the visualization of simulations of the reality of the man, having autonomy for the adherence of appropriate and healthy practices according to their context of life.

CONCLUSION

The study presented as a limitation the small public, considering that the sampling was for convenience. The application of educational video was an accessible and promising intervention for effective promotion of health, in the face of a significant improvement in the scores of knowledge evaluation after media exposure. The greater acquisition of knowledge about the topics discussed does not necessarily mean a change in behavior, but rather a potential for adherence. It is important to consider the aspects involved, such as social, cultural, financial availability and access to health services.

Nursing professionals, especially in partnership with the multidisciplinary team, have in this strategy a valuable contribution to the orientation of thoughts as well as to the development of self-care, which are closely linked to the promotion of health. In addition, it is pertinent to extend the access to the videos to the male population and to demonstrate the reliability of the measures used in the study that followed a semantic validation by a panel of specialists.

REFERENCES

 Oliveira MM, Daher DV, Silva JL, Andrade SS. Men's health in question: seeking assistance in

- primary health care. Ciênc saúde coletiva. 2015 Jan;20(1):273-8.
- Leal AF, Figueiredo WS, Nogueira-da-Silva GS. Charting the Brazilian Comprehensive Healthcare Policy for Men (PNAISH), from its formulation through to its implementation in local public health services. Ciênc saúde coletiva. 2012 Oct; 17(10):2607-16.
- Rocha SM, Almeida MC. O processo de trabalho da enfermagem em saúde coletiva e a interdisciplinaridade. Rev latinoam enferm. 2000 Dec; 8(6):96-101.
- Merhy EE. Um ensaio sobre o médico e suas valises tecnológicas: contribuições para compreender as reestruturações produtivas do setor saúde. Interface (Botucatu). 2000 Feb; 4(6):109-16.
- Tuong W, Larsen ER, Armstrong AW. Videos to influence: a systematic review of effectiveness of video-based education in modifying health behaviors. J Behav Med. 2014 Apr; 37(2):218-33.
- 6. Siqueira EL, Oliveira GR, Mendes JD, Ximenes JM, Moraes KM. Atenção à saúde do homem: trabalhando a percepção do profissional enfermeiro na estratégia saúde da família. Sanare. 2014 jun; 13(1):48-55.
- Falkenberg MB, Mendes TPL, Moraes EP, Souza EM. Educação em saúde e educação na saúde: conceitos e implicações para a saúde coletiva. Ciênc saúde coletiva. 2012 mar; 19(3):847-52.
- 8. Eid AP, Kohn KC, Motta RF. Política de saúde do homem: para além do que se vê. Diaphora. 2012 dez; 12(2):70-8.
- 9. Moore N, Wright M, Gipson J, Jordan G, Harsh M, Reed D, et al. A survey of African American Men in Chicago Barbershops: implications for the effectiveness of the barbershop model in the health promotion of African American men. J Community Health. 2016; 41:772-9.
- 10. Ilic, D. Educating men about prostate cancer in the workplace. Am J Mens Health. 2013 July; 7(4):285-94.
- 11. Pringle A, Zwolinsky S, McKenna J, Robertson S, Daly-Smith A, White A. Health improvement for men and hard-to-engage-men delivered in English Premier League football clubs. Health Educ Res. 2014; 29(3):503-520.
- 12. Prado ML, Velho MB, Espíndola DS, Sobrinho SH, Backes VMS. Arco de Charles Maguerez:

- refletindo estratégias de metodologia ativa na formação de profissionais de saúde. Esc Anna Nery. 2012 mar; 16(1):172-7.
- 13. Alexandre N, Gallasch C, Lima L, Rodrigues R. A confiabilidade no desenvolvimento e avaliação de instrumentos de medida na área da saúde. Rev Eletr Enf [Internet]. 2013 jul [cited 2016 Feb 15]; 15(3):802-9. Available from: http://dx.doi. org/10.5216/ree.v15i3.20776. doi: 10.5216/ree. v15i3.20776.
- Pasquali L, organizador. Instrumentos psicológicos: manual prático de elaboração. Brasília: LabPAM/IBAPP: 1999.
- Rizio T, Thomas W, O'Brien W, Collins V, Holden C. Engaging primary healthcare nurses in men's health education: a pilot study. Nurse Educ Pract. 2016 Mar; 17:128-133.
- 16. Belinelo RGS, Almeida SM, Oliveira PP, Onofre PSC, Viegas SMF, Rodrigues AB. Screening examination for prostate cancer: men's experience. Esc Anna Nery. 2014 dez; 18(4):697-704.
- 17. Oliveira, PMP; Lima, MMF; Cezario, KG; Oliveira, MG. The workers knowledge about prostate cancer: a descriptive exploratory study. Online braz j nurs (Online) [internet] 2012 May [cited 2015 Aug 14]; 11(1):171-9.
- 18. Sandiford L, D'Errico E. Facilitating shared decision making about prostate cancer screening among African American men. Oncol Nurs Forum. 2016 Jan; 43(1):86-92.
- Paula SHB, Souza MJL, Almeida JD. Câncer de pênis, aspectos epidemiológicos e fatores de risco: tecendo considerações sobre a promoção e prevenção na Atenção Básica. BIS, Bol Inst Saúde; 2012 jul; 14(1):111-8.
- 20. Zequi SC. Penile Cancer: the importance of prevention. Int braz j urol. 2013 Oct; 39(5):611-3.
- Stratton KL, Culkin DJ. A Contemporary Review of HPV and Penile Cancer. Oncology (Williston Park). 2016 Mar; 30(3):245-9.

- 22. Silva RS, Silva ACM, Nascimento SG, Oliveira CM, Bonfim CV. Demographic and epidemiological aspects of mortality from penile cancer. Acta paul enferm. 2014 Feb; 27(1):44-7.
- 23. Linnan LA, D'Angelo H, Harrington CB. A literature synthesis of health promotion research in salons and barbershops. Am J Prev Med. 2014 July; 47(1):77-85.

All authors participated in the phases of this publication in one or more of the following steps, in according to the recommendations of the International Committee of Medical Journal Editors (ICMJE, 2013): (a) substantial involvement in the planning or preparation of the manuscript or in the collection, analysis or interpretation of data; (b) preparation of the manuscript or conducting critical revision of intellectual content; (c) approval of the version submitted of this manuscript. All authors declare for the appropriate purposes that the responsibilities related to all aspects of the manuscript submitted to OBJN are yours. They ensure that issues related to the accuracy or integrity of any part of the article were properly investigated and resolved. Therefore, they exempt the OBJN of any participation whatsoever in any imbroglios concerning the content under consideration. All authors declare that they have no conflict of interest of financial or personal nature concerning this manuscript which may influence the writing and/or interpretation of the findings. This statement has been digitally signed by all authors as recommended by the ICMJE, whose model is available in http://www. objnursing.uff.br/normas/DUDE_eng_13-06-2013.pdf

Received: 09/24/2016 Revised: 11/13/2017 Approved: 11/13/2017