



HERPES VIRUS TYPES 1/2 INFECTIONS: EVALUATION OF ONLINE VIDEOS
INFECÇÕES POR HERPES VÍRUS TIPOS 1/2: AVALIAÇÃO DE VÍDEOS ON LINE
INFECCIONES POR HERPES VIRUS TIPOS 1/2: EVALUACIÓN DE VÍDEOS ON LINE

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ABSTRACT

Objective: to evaluate the thematic proposals associated with herpes virus types 1 and 2 infections addressed in the YouTube™ virtual platform, taking into account the possibility of multiple scenarios for the practice of care. **Method:** this is a quantitative and exploratory study, with specific searches describing the possibility of visualizing a previous study on herpes virus types 1 and 2 on the YouTube™ virtual platform. Results were presented in the form of tables. **Results:** 57 videos were selected as a sample, covering important topics such as information on herpes virus 1 and 2, epidemiological data, signs and symptoms, importance of treatment and prevention. **Conclusion:** the importance of the internet in relation to the transmission of information was observed, as well as in promoting a continuous education to all users who have access to it. **Descriptors:** Human Herpesvirus 1; Human Herpesvirus 2; Ulcer; Infection and STD; Videos; Health Education.

RESUMO

Objetivo: avaliar as propostas temáticas associadas a infecções por herpes vírus tipos 1 e 2 abordadas na plataforma virtual YouTube™, tendo em conta a possibilidade dos múltiplos cenários para a prática do cuidado. **Método:** trata-se de estudo quantitativo e exploratório, realizando-se buscas específicas que descrevessem a possibilidade de visualizar algum estudo prévio sobre herpes vírus tipos 1 e 2 na plataforma virtual YouTube™. Apresentaram-se os resultados em forma de tabelas. **Resultados:** selecionaram-se, a partir dos cruzamentos realizados na plataforma, 57 vídeos como amostra, abordando assuntos importantes como informações sobre herpes vírus 1 e 2, dados epidemiológicos, sinais e sintomas, importância do tratamento e formas de prevenção. **Conclusão:** observou-se a importância da internet no que tange à transmissão de informação e, também, e em promover uma educação continuada a todos os usuários que têm acesso à mesma. **Descritores:** Herpes Vírus Humano Tipo 1; Herpes Vírus Humano Tipo 2; Úlcera; Infecção e DST; Vídeos; Educação em Saúde.

RESUMEN

Objetivo: evaluar las propuestas temáticas asociadas a infecciones por herpes virus tipo 1 y 2 abordadas en la plataforma virtual YouTube™, teniendo en cuenta la posibilidad de los múltiples escenarios para la práctica del cuidado. **Método:** se trata de estudio cuantitativo y exploratorio, realizándose búsquedas específicas que pudiera describir la posibilidad de visualizar algún estudio previo sobre herpes virus tipos 1 y 2 en la plataforma virtual YouTube™. Se presentaron los resultados en forma de tablas. **Resultados:** se seleccionaron, a partir de los cruces realizados en la plataforma, 57 videos como muestra, abordando asuntos importantes como informaciones sobre herpes virus 1 y 2, datos epidemiológicos, signos y síntomas, importancia del tratamiento y formas de prevención. **Conclusión:** se ha observado la importancia de la Internet en lo que se refiere a la transmisión de información y, también, en promover una educación continuada a todos los usuarios que tienen acceso a la misma. **Descriptores:** Virus Del Herpes Humano 1; Virus Herpes Humano 2; Úlcera; Infección y STD; Vídeos; Educación en Salud.

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INTRODUCTION

Herpes Virus infections (HSV), particularly types 1 and 2 (HSV-1 and HSV-2, respectively) are noteworthy among sexually transmitted infections due to their worldwide impact,¹ in which HSV-1 generally affects children and adolescents through direct contact with oral lesions, and HSV-2 occurs more frequently in adolescents and adults in the sexually active age range.²

This virus is capable of bringing the patient to chronic disease with intermittent, recurrent and latent infection, so that the lesions may be located near the initial primary infection site or at the same site. Another important biological feature is the ability to remain in a state of latency in the nervous tissue and, thus, make the individual infected with HSV a potential propagator of the pathogen during the period in which the infection is reactivated.³

In the year 2000, a survey was conducted in which 29.1% of volunteer blood donors in the city of Rio de Janeiro were found to be seroprevalent.⁴ It has been identified in another research that the transmission from man to woman can be up to six times greater when compared from woman to man.⁵ This fact can be explained by the anatomical differences found between the genders, which tends to favor infection in women.⁶ It is known that in countries such as Brazil, cases of HSV-related diseases are not mandatory, and the numbers and data are obtained through studies conducted by researchers who are based, in most cases, Sexually Transmitted Infections clinics (STI) of the public and private health system.⁷

They are among the risk factors for infection: older age; low socioeconomic status; greater number of sexual partners; previous history of abortions; active sex life at an early age; previous history of STI, among others.⁷ It is understood that sun exposure, sleep quality associated with stress, depression and/or sadness, as well as deficient feeding, can be factors that decrease the resistance of the immune system, which can trigger the activation of HSV-1 and consequently, to promote the development of lesions associated with it.⁸

Although there are many measures to prevent HSV, educational and counseling measures are still fundamental. It is estimated that a reduction of about 50% in HSV-2 is associated with the simple use of a barrier method, such as the male condom.⁹ In addition to the use of condoms, other preventive measures, such as adequate food, stress and sleep control, avoid sharing of interferences with contaminated persons and active herpetic lesions¹⁰ and, finally, some published studies show that circumcision has a protective effect of individuals.¹¹⁻²

It is reported that there are antiretroviral medications that have specific characteristics that allow a better action of the immune system, reducing viral replication, reducing disease time and avoiding new eruptions.¹³ Another method that has been shown to be effective today is the use of low intensity laser therapy.¹⁴

Over the last 25 years, the Internet has been shown to be a great information system capable of allowing all individuals connected to it to obtain a range of information.¹⁵ As a result, many tools have emerged in recent years that allow users to perform various types of communications without the need for advanced technical knowledge, allowing them to access the many possibilities that allow them to share ideas and entertain themselves, in a public space.¹⁶

Among the digital communications tools that have emerged in recent decades, the YouTube™ platform, created in 2005, is available in 61 different languages and increasingly accessed over the years. In this way, this digital platform is being used increasingly as a vehicle for disseminating information geared towards collective health.¹⁷

One can say that the Internet is a complex source of information that is health-related, allowing users access to all types of information, from a search for a supposed diagnosis, until the acquisition of a medicine for the cure of the supposed disease. It is also worth mentioning that there are personal pages as well as virtual communities, being able to access information at any time and place, quickly and easily.¹⁸

It is added, however, that often when this information is offered in a virtual environment and its quality is assessed, it is found to be incomplete, incorrect and/or contradictory, thus generating situations of anxiety, confusion and, consequently, more uncertainties about the researched topic. It is emphasized, therefore, that the user's ability to understand this information, as well as distinguish what is reliable information or not, is of great importance, especially in countries such as Brazil, which have several regions with very low educational levels.¹⁸⁻⁹ However, there are still challenges to approach the disinformed population, inserting it in the new digital era, with new technologies and their consequences.²⁰

This study is justified by the need to recognize the virtual environment as a space for the publication of content on various topics, including health care, such as human herpes virus. It has now become a safe and challenging quality care, since there is an enormous amount of information that is transmitted daily through the internet. It is thus believed that it is important to know and analyze the content of the videos published on

YouTube™ so that they can add positive results to the care established by health professionals.

OBJECTIVE

- Evaluate thematic proposals associated with herpes virus types 1 and 2 infections addressed on YouTube™, taking into account the possibility of multiple scenarios for the practice of care.

METHOD

Initially, the search for the present theme was carried out in order to verify if there were articles published previously using the same methodological path or close to what would be developed and that also described the possibility of visualizing some previous study on herpes virus types 1 and 2. Thus, studies were identified on: adolescence and HIV²¹ and one on an online video contest about the destigmatization of herpes virus infection²², being that this last one was not an analysis realized with videos published in the Portuguese language. In this way the option was to carry out an exploratory analysis.

Specific searches were carried out with the quantification of the accesses to the videos, having no way of identifying the individuals who made the posts. It is also emphasized that the virtual platform chosen for the accomplishment of these postings has free access and, in this research, the comments of the participants and their criticisms were not evaluated, thus not requiring submission to the Research Ethics Committee (REC), as well as in previously published studies.^{21,23}

Thus, two examiners began the search using the following keywords, starting from the definition of Descriptors in Health Sciences (DeCS): human herpes virus 1; human herpes virus 2; ulcer; infection; STD. These descriptors were cross-referenced to each other by the use of the term "AND". The content of the videos was therefore analyzed, analyzing whether they directly refer to the herpes virus, using as a base the description and the title of each one in the Portuguese language.

From the crosses made, 57 videos were taken to form the sample. The videos were analyzed individually, searching for direct references of the items contained in the video, and then the findings were counted and distributed through simple and absolute frequencies (percentage) through their layout in tables.

Accesses on the YouTube™ platform were carried out in a free way, based on previously published works,^{21,23} however, it was necessary to use a time limit of the dates of publication of the videos, due to the constant renewals of the videos. September 10, 2018 was determined as the post limit. It is reported that the time limit of four minutes of video duration and having high definition were the eligibility criteria, and those that were repeated were excluded.

RESULTS

The sample was initially formed for a total of 111 videos, however, after applying the exclusion criteria, 54 were eliminated, remaining 57 videos for the study.

The videos were excluded, according to the criteria previously established, and after the careful and complete analysis of their contents, the following were selected: information on prevention and treatment of herpes virus; information about the disease and its action mechanism; papers prepared by students and academics from the health area presented to a specific audience according to age and social level and campaigns of the Ministry of Health. Repeated videos, homemade recipe for treatment and shoddy videos were discarded.

Most of the videos watched were reporting, with about 45.63%. The following themes were addressed in the remaining videos: health, education and homemaking, as mentioned in table 1.

Table 1. Classification of videos found on HSV-1 and HSV-2. Nova Iguaçu (RJ), Brazil, (2018).

Classification of videos according to: YouTube™	Absolute value	Relative value (%) (%) (%)
News Report	26	45.63
Thematic in health	21	36.9
Educative	7	12.2
Home video	3	5.27

Table 2 shows the frequency ratings of the videos, according to the categories analyzed, which may contain different aspects of the infection.²¹ it was observed that 79% were related to information on the disease, in which health

professionals used an easy-to-understand language to approach the subject, and the others included treatment (68,5.7%), prevention (43,9 %), disease definition (33.5%), epidemiological data (15.8%) and nutrition (15.8%).

Table 2. Frequency of subjects covered on human herpes virus 1 and human herpes virus 2. Nova Iguaçu (RJ), Brazil, (2018).

Factor cited	Absolute value	Relative value (%)
Information on the disease	45	79
Treatment	39	68.5
Prevention	25	43.9
Definition of the disease	19	33.5
Epidemiological data	9	15.8
Nutrition	9	15.8

DISCUSSION

It has become possible, with the advancement of digital technologies and virtual interactions, to disseminate information that reaches audiences of different age groups, cultures and social classes, impacting users.^{15,18-19} It was verified that, due to the fact that this communication occurs through videos using an audiovisual language, making it possible to associate images and sounds, videos become an attractive source of transmission of information and opinions;²⁴ in this way, YouTube,TM as a video sharing platform, allows the use of this language and enables the user to interact with society from anywhere and at any time.²⁵

It is noted that most of the videos selected in this study were related to reports and they had a citation frequency of 45.63%, accompanied by videos related to health issues, with a frequency of 36.9%. It has been observed, as in other studies, that many media have invested in the use of the Internet as a means of reproducing information, with the objective of reaching a wider range of people, since it is a new form of interaction and communication.²⁵

It is described, for the factors cited in the videos, that a large part provided information about the disease (79%), and these were reported by professionals addressing subjects such as signs and symptoms, characteristics of the eruptions, higher prevalence of occurrence in females, due to the anatomical differences between the gender and existence of a greater probability of transmission from man to woman than from woman to man, and such information is in agreement with the results of other studies that approached the subject of HSV.⁶

It should be noted that, among the other five items analyzed (treatment, prevention, disease definition, epidemiological data and nutrition), the subject addressed with greater emphasis was the treatment, which was maintained with a frequency of 68.5% citation among the videos. Information on the inability to cure the infection is presented, the importance of the use of antiviral drugs, mainly in immunosuppressed individuals, since they tend to decrease the infection time and prevent the occurrence of new eruptions.⁷

It was added that the videos that addressed prevention had a slightly lower frequency than the treatment (43.9%), and the importance of health

education was highlighted, especially with regard to the use of methods and barriers (and the importance of not sharing personal items (fomites). Stress, sleep pattern and sun exposure were also factors associated with the development of lesions, as well as in other studies, since, besides being included in prevention, they are triggers for the development of infection.⁸

There is little information on nutritional information (15.8%), although good nutrition can be considered an important factor in the prevention of infection.⁸

In the study, there was a considerable increase in videos posted on HSV-1 and HSV-2, probably due to the greater number of accesses to the virtual media and/or platforms, as well as health promotion and education events with the dissemination of new possibilities for obtaining information and raising awareness through the Internet. It is of the utmost importance, as the subject matter is related to public health, to understand how information is transmitted and to follow the advances in communication, since the media has a fundamental role in this process, generating benefits to the population with interdisciplinary information in health, and can influence the public in a negative or positive way.²⁶

It should be emphasized that actions taken in primary care should be linked to the community in order to be able to meet their demand according to their needs. It is understood that the health professional has an important role in the promotion of health education, consequently, it is important to follow the information that is being disseminated to this population through social media and virtual platforms.²⁷

CONCLUSION

The analyzed videos were related to health events, which made it possible to reach an extensive amount of Internet users. It is inferred that related issues concerned information about the disease such as viral replication and signs and symptoms followed by the approach to the main treatment methods and the importance of following them in an appropriate manner, as well as prevention methods. It is possible, therefore, by the adequate production and placement of videos, to contribute in a positive way so that internet users can obtain information about the

pathology in a broad way, besides being able to involve the citizen in this process of knowledge and optimize the distribution of quality explanations.

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