ORIGINAL ARTICLE

FIRST READER ON PREVENTION OF DRUG USE FOR TEENS

CARTILHA SOBRE PREVENÇÃO DO USO DE DROGAS PARA ADOLESCENTES

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ABSTRACT
Objective: to describe the process of production and validation of an educative booklet targeted at teenagers on the main drugs of abuse. Method: this is a quantitative study of methodological type. The development, evaluation and improvement of the primer was divided into three stages: the construction with an integrative review of literature, where it analyzed the publications available on prevention of drug use by adolescents; the validation of the material through judges, where they evaluated the content, the language and the appearance of educational technology; and the validation by 40 adolescents evaluating the style of writing, the appearance and presentation. We used two different instruments for the assessment and the Content Validity Index (CVI) for the concordance of the booklet. Results: it produced the educational material and validated with statistical analysis ratified by the CVI equal to 0.83, with concordance accepts and the level of concordance of 97.5% by teenagers. Conclusion: it can be argued that the booklet entitled "Drugs: how to prevent?" proved to be a valid and reliable tool to be used on health promotion and prevention of drug use in adolescents. Descriptors: Adolescence and Substances; Drug Users; Educational Technology; Illicit Drugs; Risk Behavior; Validation Studies.

RESUMO
Objetivo: descrever o processo de produção e validação de uma cartilha educativa direcionada a adolescentes sobre as principais drogas de abuso. Método: trata-se de um estudo quantitativo do tipo metodológico com desenvolvimento, avaliação e aperfeiçoamento de uma cartilha dividida em três fases: a primeira foi a construção, com revisão integrativa da literatura, onde se analisaram as publicações disponíveis sobre prevenção do uso de drogas por adolescentes; a segunda fase foi a validação do material por meio de jurados, onde se avaliou o conteúdo, a linguagem e a aparência da tecnologia educativa; a terceira fase consistiu da validação por 40 adolescentes, avaliando o estilo de escrita, a aparência e a apresentação. Utilizaram-se dois instrumentos diferentes para a avaliação e o Índice de Validade de Conteúdo (IVC) para a concordância da cartilha. Resultados: produziu-se o material educativo e validou-se com análise estatística ratificada pelo IVC igual a 0,83, com concordância aceita e o nível de concordância de 97,5% pelos adolescentes. Conclusão: pode-se afirmar que a cartilha intitulada “Drogas: como prevenir?” se mostrou um instrumento válido e confiável para ser utilizado na promoção da saúde e prevenção de drogas em adolescentes. Descritores: Adolescência e Substâncias; Usuários de Drogas; Tecnologia Educacional; Drogas Ilícitas; Comportamento de Risco; Estudos de Validação.

RESUMEN
Objetivo: describir el proceso de producción y la validación de un folleto educativo dirigido a los adolescentes enfocando las principales drogas de abuso. Método: se trata de un estudio cuantitativo del tipo metodológico con desarrollo, evaluación y mejora de una impresión dividida en tres etapas: la primera fue la construcción, con la revisión de la literatura integradora, donde analizó las publicaciones disponibles acerca de la prevención contra el uso indebido de drogas por los adolescentes; la segunda fue la validación del material a través de los jueces, donde se evaluó el contenido, el lenguaje y la aparición de la tecnología educativa; la tercera etapa consistió en la validación por 40 adolescentes, evaluando el estilo de redacción, la apariencia y la presentación. Se aplican dos tipos de herramientas para la evaluación y el índice de validez de contenido (CVI) para la concordancia del folleto. Resultados: los materiales educativos producidos y validados con análisis estadísticos ratificados por el CVI igual a 0,83, con concordancia acepta y el nivel de concordancia de 97,5% de los adolescentes. Conclusión: se puede argumentar que el folleto titulado “Drogas: cómo prevenir?” resultó ser un instrumento válido y fiable para ser usado en la promoción de la salud y prevención del consumo de drogas en los adolescentes. Descriptores: Adolescencia y Sustancias; Usuarios de Drogas; Tecnología Educativa; Drogas Ilícitas; Comportamiento de Riesgo; Estudios de Validación.

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INTRODUCTION

It should be noted that adolescence is a sometimes-difficult phase in the life of each single, being this age, set between 10 and 19 years old by the World Health Organization (WHO) that the young person experiences significant discoveries that contribute to the formation of his personality and individuality. It is understood that conceptualize the adolescence just as age is a very simple way to analyze it, since it covers the change of the young until adulthood in biological, social and, especially, psychological aspects.

It is perceived that, in Brazil, the use and abuse of alcohol and other drugs (legal and illegal) gradually grew among young people of all social classes, especially among teenagers, today being defined as a public health issue. It has been the use of drugs deserved greater attention in the light of the negative repercussions on cultural, ethical-legal, political, economic, family and individual aspects.\(^1\)

It should be noted that young people who start the use of psychoactive substances with few years of life, typically defined in the interval between 13 and 14 years old, have a greater negative psychosocial risk education. Delayed and deficit in mental health implications, these individuals, who begin the use of substances at an older age, in their great majority, do not suffer.\(^2\)

It is the health interventions performed by means of public health programs targeted to these subjects, although necessary and urgent, are quite complex, since they depend on support from different social sectors, including state, county and federal entity, in addition to the involvement of health professionals and adherence of the target population.

It is known that Health Education is a method in which scientific information is transmitted in a simple way by means of professionals trained for that. In this way, get to the everyday life of the people, having in view that the knowledge of factors influencing the health-disease process provides subsidies for the adoption of new habits and behaviors.\(^3\) Uses, by educational technologies, instruments in support of the guidelines verbalized, being a teaching tool that has a large positive impact on education of subjects.\(^4\)

It becomes relevant to the construction of an educative booklet that explains preventive knowledge about the prevention of use of drugs of abuse in class teenager, because it is a didactic mode that transmits knowledge with dynamic distractions and raising awareness about the negative problems that the practice of drug addiction can trigger.

OBJECTIVE

- To describe the production process and validation of an educative booklet targeted at teenagers on the main drugs of abuse.

METHOD

It is a quantitative study of methodological type, conducted in the period from 2017 to 2018, returned to the construction and validation of a primer to be used in health promotion and prevention of drug use in adolescents.

There followed three stages: in the first, we analyzed the publications regarding the prevention of drug use in adolescents are available in the main databases of the past ten years, used as a theoretical foundation, followed by a graphic design, with the drafting of art by means of figures, formatting and configuration. Elected, in the second stage, the judges of the study area and sampling was used a non-probabilistic intentional (Figure 2) with division of judges in categories: six judges of Pedagogy, six with training in graphic design and six nursing researchers in the area of drugs, with titration of master and/or doctorate degree. The Fehring Model,\(^5\) five in which considered themselves able to compose the group of experts for the validation of content, only the judges with a minimum score of five points, as described in figure 1, followed it.
We analyzed the level of relevance of the contents of the booklet through the Content Validity Index (CVI), in which Alexander and Coluci\(^8\) speak that, to ascertain the validity of the subitems, the agreement must be minimum of 0.80 to 0.90.

Became, in the third stage, the validation of the material by teenagers who were selected by means of probability sampling does not intentional, with a total of 40 adolescents, aged 10 to 19 years old, enrolled in municipal schools in the municipality of Picos-PI.

Elaborated the evaluation instrument sent to the judges in accordance with the proposal of Galdino Neto,\(^7\) on professional performance, attributes related to content, language, illustrations, layout, motivation and, finally, an open space for observations of the participants. This tool consists of 22 questions, multiple choice. It was built in the same way, the instrument for the assessment of adolescents from the document used by Galdino Neto,\(^7\) with socioeconomic data and a semi-quantitative six questions about graphics, text, content, writing style, appearance and motivation.

The software Statistical Package for Social Science (SPSS 20.0 for Windows) analyzed the data. The study was submitted to the Committee for Ethics in Research (CEP) of the Federal University of Piauí, Campus Senator Helvídio Nunes de Barros, following the standards expressed in the resolution 466/2012 of the National Health Council on ethical issues involving research with humans,\(^8\) having been adopted in the opinion of the N 2,344,659.

**RESULTS**

Held in the process of development of the booklet, adaptations to that this was used with adolescents fulfilling its aim of contributing to the prevention of drug use.

It developed in the first stage of the study, the initial version of the booklet sent to the judges and entitled “Alcohol and drugs: how to prevent?”

Together with a professional in the area of design, comprising 26 pages with content that sought to convey information in a simple, attractive and easy to understand, with a suitable language to the public, proceeding in the same way with choice of colors and graphics.

It was decided, therefore, rather than just have the information, write a story, having as main character a teenager, where it tells about his school and how everything changed with the information about drugs brought by health professionals, mentioning the basic concepts of drugs, such as acquiring the addiction, prevention and risk factors. It was used, yet, as a way of guaranteeing the interactivity of the primer with adolescents, two games applicants: Homework and hunting-words, which contributed to the memorization of the components seen above.

**Validation of the primer**

\(^{1}\) Moura Mil de, Leal JB, Leal JB et al. First reader on prevention of drug...
Contacted in the process of validation of the booklet (second phase of the study), three groups of judges, chosen from a systematized manner with the aim of ensuring the accurate assessment of material (Figure 2).

![Flowchart of the groups of judges](https://doji.org/10.5205/1981-8963-v13i04a237875p1106-1114-2019)

**Figure 2.** Flowchart of the groups of judges. Picos (PI), Brazil, 2017.

It codified, once accepted by the judges, the same by symbols to represent the area of activity and a number in order to establish a sequence, becoming accessible to researchers their areas of practice, being indicated by acronyms in that: it is the area of knowledge; J is the specific area, and B is the area of designs.

Informs that the group of judges of knowledge, they are all adults aged 23 to 44; time of formation at least three years and at most 20 years. In relation to the time of work, the less time is 2 years and the highest 17 years; the largest titration is doctor and the lowest is master; all had participation in scientific events in the last five years within its area of operation, and the teaching is given to the majority of the judges.

Details that, in the specific group of judges, they are all adults aged between 29 and 57; time of formation at least three years and at most 20 years. In relation to the time of work, the less time is 9 years and the highest 21 years; the largest titration is doctorate and the lowest is master; all had participation in events in the last five years within its area of activity, and on the teaching, all are teachers. It is emphasized that each professional brought differentiated contributions, where all were of great importance for the improvement of the material.

It describes that all judges of the design are adults aged 27 to 32; time of formation, at least three years and at most 12 years. In relation to the time of work, the less time is three years and the highest ten years; the largest titration is doctor and the lowest is a specialist; all had participation in events in the last five years within its area of operation, and the majority of them faculty.

**Evaluation of the content of the booklet**

It shows, in Table 1, each question is carried out in accordance with the attributes checked, the number of individuals who judged the item as "I Agree" or "Disagree" and the percentage obtained from responses, in accordance with the evaluation required.
It is understandable, when analyzing the data in the table above, which, in part relating to content, were modified items 1.1, 1.2, 1.4 and 1.5, because these were evaluated as required by a total of five to eight judges in the option “I Disagree”. It can be observed, too, that, taking into account the judges in the assessment of relevance to the material, was of 100%.

He adds that, in the language category, only two judges assessed the item 2.2 as “I disagree”, being necessary to modify only this, and all the other judges reviewed these items in a positive manner, with a percentage greater than or equal to 50%, which shows the significance and relevance of the same.

It stands out, in the illustrations, the item 3.3, corresponding to the legend, which did not exist in the booklet, leading all judges to contribute to modification by means of item “I disagree”. Whereas in the remaining items, there was no need for changes, because the majority of the judges responded positively, representing a positive percentage calculation superior to those who disagreed.

It is perceived, by analyzing the layout of the booklet, that all items (4.1, 4.2, 4.3 and 4.4) were well accepted, there is, therefore, the need to make changes, because the majority of the judges responded “I Agree”, with significant percentages, reflecting the idea that the material is suitable to be presented.

Have changed in relation to the motivation, the item 5.2, because six (33.3%) judges answered, “I disagree”, and 5.3, because 13 (72.2%) judges answered, “I disagree”.

Main suggestions for modifications by the judges

They are, in figure 2, the main observations made and any changes made, which, subsequently, will be discussed in the nuances involving this process.

It complied with the suggestions below and, probably, the changes were relevant to the primer to become attractive and easy to read for teenagers. It should be emphasized that the suggestions does not need to be respected, since the concordance between the judges in the assessment of relevance to the material, was of 100%.
It is believed that the participation of judges in the evaluation of the booklet was of fundamental importance for the adaptation of the content to the context of adolescents, thus completing the expectations of the public, where this may have information and different interests in relation to those who drew up the educational material. Has this step as essential in the process of building the educational resource.10

It is noted, in the process of validation of the booklet, by means of the CVI, that there was concordance of 0.83 of the judges on the relevance of the material produced, making it applicable.

Signed, as to the importance of the primer, that the judges evaluated the issues of scale, with a rating of four points as Coluci criteria.6

They utilized the results of agreement in this category to calculate the CVI and the note of each item in that 1 is equal to 0.0; 2, 0.16; 3, 0.5 and 4, to 0.33; in which the simple average, where the CVI global was 0.83; accepted value of validation as Alexander and Coluci6, to verify the validity of the level of agreement obtained in items. items, the minimum agreement must be of 0.80 to 0.90.

Validation by target audience

Presented to the primer, after carried out the adjustments in accordance with the suggestions brought by judges, to adolescents, completing the validation process, because the contributions made by the target public is of paramount importance to the validity of the material. It should be emphasized that this is not a clinical evaluation, only the ascertainment of adolescents about the clarity, understanding and the relevance of the contents of the booklet.

It punctuates who participated in the study adolescents aged 12 to 16 years old, being 23 females and 17 males, where the predominant sex was the female; the weekly day of study referred to by all was five hours corresponding to the time in which they are in school.

May observe, in table 2, the results achieved in each answer to the questions and
Table 2. Responses of teenagers in percentages.³ Picos (PI), Brazil, 2017.

<table>
<thead>
<tr>
<th>Variables Questions</th>
<th>Positive N</th>
<th>Positive %</th>
<th>Negative N</th>
<th>Negative %</th>
<th>Impartial N</th>
<th>Impartial %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 The cover of a booklet called your attention?</td>
<td>36</td>
<td>90.0</td>
<td>04</td>
<td>10.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.2 The phrases are easy to understand?</td>
<td>35</td>
<td>87.5</td>
<td>03</td>
<td>07.5</td>
<td>02</td>
<td>05.0</td>
</tr>
<tr>
<td>1.3 The text is interesting?</td>
<td>38</td>
<td>95.0</td>
<td>02</td>
<td>05.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.4 The illustrations serve to help to understand the text?</td>
<td>39</td>
<td>97.5</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>02.5</td>
</tr>
<tr>
<td>1.5 In your opinion, any teenager who read this primer will understand what this is about?</td>
<td>27</td>
<td>67.5</td>
<td>07</td>
<td>17.5</td>
<td>06</td>
<td>15.0</td>
</tr>
<tr>
<td>1.6 The booklet helped you think about drug prevention?</td>
<td>39</td>
<td>97.5</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>02.5</td>
</tr>
</tbody>
</table>

It was examined whether, in Table 2, that the level of concordance between the positive responses varied in the range from 67.5% to 97.5% among the items discussed, thus obtaining a satisfactory result and sufficient for the validation of the booklet by the audience, because of the six items analyzed. The topics 1.3, 1.4 and 1.6 were the ones who obtained the highest number of positive responses, with a percentage of 95.0%, 97.5% and 97.5%, respectively. Adolescents, at 90.0%, “the cover of the booklet caught his attention” in a positive way, thought it, still. Nearly all adolescents judged that the sentences are easy to understand (87.5%) that the text is interesting (95.0%), that the illustrations serve to help understand the text (97.5%), and that “the booklet helped them to think about the prevention of drugs” (97.5%). It reveals the adequacy of the primer to the audience.

It is evident, however, the point 1.5, whose replies were the most unsatisfactory, because, although the majority consider that any teenager who read the booklet will understand what it is (67.5%), an expressive percentage found not to be understandable to all (17.5%) or did not opine (15%). It is believed that this is related to how the question was written and exposed in the questionnaire, because, at the time of application of the questionnaire, some students asked about the issue as if it had understood the question.

It should be emphasized that there were some limitations, because, in the second stage of the study, there was a difficulty to find a professional in the area of design in the city and, subsequently, the collection of data with the judges was somewhat difficult and tiring. The researcher had to do it in a short period, being that the vast majority of judges contacted and who met the criteria not responded back to the letter of invitation or accepted, but did not send back the assessment, making it hard work and that consumed much time of the author.

Trusts, finally, although no one can disrespect the limitations of the research, which, by means of the data collected and the results achieved, it is obvious that teenagers ruled the primer as understanding, relevant, interesting and motivating. There has been no suggestion of change in material by them, being that, in this way, the material remains the same and suitable for publication.

**DISCUSSION**

Have to adolescence as a stage of transition from childhood to adulthood and, therefore, need to understand that the development can be acquired by different means and contexts.¹¹ It is known that in adolescence happens several changes in the human being, making it a crucial step in which affects the use of drugs.¹²

Make sure that the use of drugs is taken as a health problem in society, because it causes social concerns, since the public that consumes more drugs are the adolescents.¹³

Cites that in health education, one of the strategies used most is the prevention, because it causes the individual to have a critical thinking and who is able to find alternatives to properly troubleshoot his problems.¹⁴

It follows that the consumption of drugs is causing several concerns with individual and social consequences and, for some years, this theme has been studied and public policies is being developed.¹⁵

It should be emphasized that the use of educational booklets, is an innovative and distracting that can assist in preventing drug abuse by adolescents and to this need of segments oriented for its creation.
It should be emphasized that a great challenge in the construction of educational materials is to transmit the contents of complete manner for adolescents, without tiring, as well as set in the choice of colors.\(^7\)

Approval was obtained from the booklet of 100% with the concordance of the judges but, according to Galdino Neto (2015), the adoption of educational material, by judges, reinforces the importance of considering suggestions consistent of them, regarding any item, even when this is numerically approved.\(^7\)

It should be emphasized that the choice of understanding and pedagogical understanding is a fundamental requirement in the process of construction of educational material. The intention of the primer with the use of clear and short sentences, and with a good concordance, provides the reader, the likelihood of having the construction of knowledge through reading dialoged, proving that these means of information produce a meaningful learning, with consequent possibility of changing attitudes.\(^16\)

Adds that another topic addressed by the judges was the importance of illustrations, which must be appropriate to the theme, public and gender, to facilitate the access to the participants, the understanding and the remembrance of the text.\(^17\) Has become the image direct influence in the decision-making process if the reader will read or not the information.

Addresses in studies, which, in addition to reading, the ability of understanding is essential to achieve the satisfaction of the public, thus contributing, in the readability of the material. It is reported that adolescents with same age and schooling may present different reading skills.\(^16\)

There is the acceptance by the judges on the relevance of educational material also in other validation studies,\(^18\) stating that the criterion concerning the relevance of the material and its applicability is important, since, if a material presents with the valid content and understandable, it can be applied to the desired audience.

It is pointed, in studies, that there is a lack of knowledge, difficulty to memorize contents and vulnerability of the public, and these are some of the factors those justify the development of educational technologies.\(^19\)

**CONCLUSION**

It can be argued, to complete the survey, that the participation of judges researchers in the area of knowledge in the validation of the booklet has enabled a suitability of content in the context of these adolescents; their suggestions were quite used to the adequacy of the material, allowing an improvement of the final version of the booklet. It is understood that the judges in the area of design, equivalent form with the others, were of great importance, because it evaluated the illustrations and the layout with specific technical vision and, finally, the adolescents represent a differential in the validation process, bearing in mind that, in the considerations made, they evaluated the primer as relevant, interesting and motivating.

It was concluded that this research has had a great personal and professional significance, because it provided knowledge on the prevention of drugs, due to the development of a type of research little studied and in a new and interactive modality in reality. Aims that this educative booklet “Drugs: how to prevent?” be truly employed for the promotion of health of adolescents, causing them to reflect on the risks posed by drug use.

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