
VACCINATION AGAINST INFLUENZA: CONSTRUCTION OF AN EDUCATIONAL INSTRUMENT TO INCREASE ADHERENCE AMONG NURSING PROFESSIONALS¹

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ABSTRACT: This study aimed to construct an educational instrument in the modality of a booklet, so as to sensitize nursing professionals to vaccination against influenza, and promote greater adherence among these to it. It is constructivist research in which nursing professionals from a university hospital participated in the stages of its elaboration and the validation of knowledge. The printed booklet "Influenza/Flu - health professionals need to know" was made available on the site www.hu.ufsc.br, during the 2011 vaccination campaign. The following were confirmed: lack of information on the theme; broad use of the site, by the number of accesses and possible readings; its importance for sensitizing nursing professionals; and contribution to educational actions in the institution. The booklet is an instrument which permits the achieving of adequate levels of adherence to the vaccination, allowing safe care for the patient, and protection of the health of the professional, the family and the community.

DESCRIPTORS: Nursing. Vaccination. Health education. Manuals.

VACINAÇÃO CONTRA INFLUENZA: CONSTRUÇÃO DE UM INSTRUMENTO EDUCATIVO PARA MAIOR ADESÃO DOS PROFISSIONAIS DE ENFERMAGEM

RESUMO: Este estudo objetivou construir um instrumento educativo, na modalidade de cartilha, com o intuito de sensibilizar e promover maior adesão dos profissionais de enfermagem à vacinação contra Influenza. Trata-se de uma pesquisa construtivista, com participação de profissionais de enfermagem de um hospital universitário, nas etapas de elaboração e validação dos conhecimentos. A cartilha impressa "Influenza/Gripe - O profissional da saúde precisa saber" foi disponibilizada no site www.hu.ufsc.br, por ocasião da Campanha de vacinação 2011. Confirmou-se desinformação sobre o tema; ampla consulta ao site, pelo número de acessos e possíveis leituras; sua importância para a sensibilização dos profissionais de enfermagem; e contribuição para ações educativas na instituição. A Cartilha é um instrumento que pode permitir o alcance de níveis adequados de adesão à vacinação, proporcionando assistência segura ao paciente, e proteção da saúde do profissional, da família e da comunidade.

DESCRIPTORIOS: Enfermagem. Vacinação. Educação em saúde. Manuais.

VACUNACIÓN CONTRA LA INFLUENZA: ELABORACIÓN DE UNA HERRAMIENTA EDUCATIVA PARA LOGRAR UNA MAYOR ADHESIÓN DE LOS PROFESIONALES DE ENFERMERÍA

RESUMEN: Este estudio tuvo como objetivo la construcción de una herramienta educativa en forma de panfleto, con el fin de conocer y promover una mayor adhesión de los profesionales de enfermería a la vacunación contra la influenza. Se contó con la participación de los profesionales de Enfermería de un hospital universitario en las etapas de desarrollo y validación de los conocimientos. El panfleto impreso "Influenza/Gripe - El profesional de la salud necesita saber", fue lanzado en el sitio: www.hu.ufsc.br, en la Campaña de vacunación 2011. Se confirmó la desinformación sobre el tema; gran consulta del sitio por el número de visitas y lecturas posibles de la misma; la importancia para sensibilizar a los profesionales de Enfermería, y la contribución para acciones educativas en la institución. El panfleto es una herramienta que puede permitir el logro de niveles apropiados de adhesión a la vacunación y la revacunación, proporcionando una atención más segura del paciente y la protección de la salud de los profesionales, la familia y la comunidad.

DESCRIPTORIOS: Enfermería. Vacunación. Educación en salud. Manuales.

INTRODUCTION

In their daily routine, nursing professionals live with inadequate and unhealthy conditions and are exposed to situations which can be harmful to the maintenance of their health.¹

Due to the characteristics of their activities, these professionals are more susceptible to infectious illness than the population in general; and once infected, as in the case of influenza, they may fall ill or – even should they not fall ill – transmit the infection to patients and other professionals in their workplace, family and community.²⁻⁴ Besides the individual and social cost caused by the infectious illness, there is also the institutional and financial burden due to this being the most frequent cause of absenteeism from work of professionals in this area.²

Although immunization with the trivalent inactivated vaccine against influenza prevents infection in young adults by between 70 and 90%, attendance in the vaccination services by nursing professionals is below the anticipated percentage of 80%,⁵ revealing a relative lack of concern with their own health. This fact occurs not only in Brazil, but in other parts of the world, with rates of vaccination against influenza among nurses standing out as being lower than those observed among other health professionals.^{3,6-7}

The recognition of the health professional – and within this group, of the nursing professional – as a category which has influence not only through the care and treatment of this infectious illness but also through spreading it as a result of direct contact with the susceptible patient has led to the creation, in various countries, of a vaccination schedule which is specific to this end, which does not happen in an official way in Brazil. In this perspective, increasing adherence to vaccination among these professionals is a challenge imposed on the health institutions. The educational factor is indicated as a key element in facing this challenge.^{2-4,6-8}

The Federal University of Santa Catarina (UFSC) has its University Hospital (HU) as a supplementary body. The HU/UFSC is a large-size public institution, of tertiary complexity, is the only in the state linked to the Ministry of Education (MEC), and only attends patients of the Unified Health System (*Sistema Único de Saúde* - SUS). It is a center of excellence in teaching, research and extension courses in the area of health for the entire state of Santa Catarina.

The HU/UFSC, as a teaching hospital, has among its commitments that of carrying out continuous education for its professionals, as it is not enough to undertake educational activities aimed only at the patient, the student and the community. Education is an ongoing process which needs to be ensured for the professionals too. This vision is in line with that called for by the Ministry of Health's National Humanization Policy, which associates humanization with valuing of the service users, professionals and managers, and which is operationalized, among other actions, in exchanging and constructing knowledges, encouraging processes of continuous education.⁹

In its turn, nursing at the HU/UFSC has had a history of concern about education at work since its conception, this being formalized in 1988 with the creation of the Center for Education and Research in Nursing (CEPEn), the counselling body of the HU/UFSC's Nursing Directorate (DE), which works in close partnership with the Undergraduate Nursing Course¹⁰ and the Professional Master's Course in Management of Nursing Care at the UFSC. This course proposes the construction and development of managerial product in nursing, for application within the HU/UFSC.

In the light of the importance of vaccination and the difficulty of obtaining adequate levels of immunization among these professionals, and of the quality of the auxiliary instrument with the aim of broadening adherence, the product proposed was the elaboration of an educational resource termed a booklet, assuming as a presupposition that educational materials facilitate the process of teaching and learning.^{3-4,11-12} Booklet is understood here as a basic compilation offering instructions, through illustrations, for a specific pattern of behavior.¹³ It is an instrument which, in helping with the acquisition of knowledge, favors the changing of attitudes and behaviors.¹⁴ This type of material also allows rapid and permanent consultations regarding an issue and, if taken home, can favor learning in a family.¹⁵

The use of the booklet in the process of teaching and learning, or in education at work, has the following advantages: it can contain more extensive texts, permitting better explanation of the message and favoring the process of convincing people; it has high selectivity; it allows the incorporation of various means of communication; it permits a variety of sizes and formats; and it makes use of personal treatment, helping in the internalization of the message.

Based on these premises, it was questioned: how can we construct an educational instrument which can sensitize nursing professionals to, and promote their greater adherence to, vaccination against influenza? To that end, this study aimed to construct an educational instrument in the modality of a booklet, with the aim of sensitizing the nursing professionals to vaccination against influenza and promoting their greater adherence to it, in this way improving vaccine coverage in the institution.

METHOD

The methodology used for the elaboration of the booklet was constructivist in nature, and was undertaken with the participation of the nursing professionals from the UFSC's University Hospital. As a research method, the constructivist approach makes it possible to "investigate the context based on the problematic issues identified in it, outline resolutive strategies in the collective, and thus build the knowledge of the participating subjects".^{16,291} Based on this presupposition, the production of knowledge results from a relational and dialogic construction of meanings, in which the assessment of the credibility and acceptability of assertions requires a critical evaluation of their impact.¹⁶ The method establishes the development of knowledge in three non-separate stages, characterized by a starting point, from which emerges the whole research process; a dialogicity, creating knowledge, in which the relationships between researcher and participants is established; and a period for verification of the results obtained in the previous stages, with the dialogs and interactions, and with the expectation that these results will later be validated.¹⁷

In this study, these stages were developed in the period September - November 2010, through the participative process, resulting in the production of the booklet entitled "Influenza/Flu - the health professional needs to know", in the following way: the starting point - the initial stage, constituted by the definition of the objective, of the methodological line to be followed, and the goal to be achieved, that is, to broaden the vaccine coverage against influenza, through the sensitization by the knowledge. This initial period also integrated the study of the issue based on the current literature and, based in this, the elaboration of 28 questions on prevention, immunization and influenza.

The dialogicity creating knowledge - the intermediate stage - was characterized by a pres-

entation of the 28 questions, elaborated in the previous stage, to 15 members of the DE/HU/UFSC (nurses, nursing technicians and auxiliary nurses). The classification of the 15 questions in order of importance was requested, so that they could be covered in the booklet.

The verification of the results - the final stage - involved the analysis of the previous classification and the definition of the messages which would be transmitted to the health professionals. This verification resulted in the elaboration of the booklet, through the format of the questions and responses, observing the following premises: succinct language, introduction of new terms, and adaptation to the technical and intellectual level of the target-public.¹³ Also, in this stage, the researchers proceeded to the validation of the first version of the booklet by a different 15 representatives of the categories which form the target-public, plus two experts from the area of vaccines, and the suggestions offered in relation to the language, the diagrams and the precision of the information were incorporated.

Following that, a further validation was undertaken, through Workshops on the sensitization in relation to Influenza/Flu. These workshops were undertaken at three distinct times and had, as their participants, 15 permanent members of the nursing staff from the DE/HU/UFSC. The selection of the participants was random at all the stages, except for the specialists, and was based on a list of the permanent members of staff provided by the HU's Auxiliary Human Resources Department and used previously in the vaccination campaign against influenza in 2010, when vaccinated and un-vaccinated permanent staff members allocated to critical and non-critical areas of the hospital were identified, within the space of the HU/UFSC. The technique developed during the workshops included reflection on the issue, critical reading of the preliminary version of the booklet, and the individual filling out of a leaflet with two columns: in the left column the participants were to write what they perceived as positive in the booklet, and in the right, what could be improved or should not be included. At the end of each workshop, people were requested to share their individual reflections with the group, with a view to new analyses and reflections based on the reflections made individually.

After the validations, with the support of the DE and the general management of the HU/UFSC, the printing and distribution of the final version of

the educational instrument was made, along with making it available electronically over the Internet on the site www.hu.ufsc.br, on the occasion of the 2011 Campaign for Vaccination against Influenza. Due to the ease of disseminating on the information system, it was also placed on the sites <http://www.gepades.ufsc.br>, <http://www.pen.ufsc.br>, Florianópolis Municipal Health Department - Epidemiology <http://epidemiologicasfloripa.snappages.com/inicio.htm>, being accessed by the search system on Google at http://issuu.com/rodrigo_gv20/docs/cartilha_2011_-_versao_da_internet.

This study was approved by the UFSC Committee for Ethics in Research with Human Beings (CEPSH), under Decision n. 723, on 04/26/2010.

RESULTS

The results found were described and analyzed from two perspectives: that of the dialogic process of the construction of the educational instrument, and that of the evaluation on the booklet after it was ready .

Dialogicity creating knowledge: from the idealization to the conception of the educational product

The formulation of the questions was based on a review of the Brazilian and international literature on the topic, added to with the informal questions made by the permanent staff members during the 2010 campaign against influenza/flu.

Of the total of 28 questions presented to the members of the Nursing Directorate, 15 questions were classified in order of importance. The questions which were stressed most were: is the vaccine against Influenza H1N1 "new" or "experimental"? followed by the questions: is there a difference between seasonal influenza (common flu) and Influenza A (H1N1)?; and Does the vaccine against the Influenza A (H1N1) virus available in Brazil constitute of inactivated or live attenuated virus?

In sequence, questions were classified referent to the existence of recommendations for avoiding outbreaks of flu in health institutions, simultaneity of vaccination and the duration of the protection afforded by the vaccine. Also identified as relevant were questions on: what Influenza A (H1N1) is, its transmission, incubation period, steps for its prevention, its relationship to chronic illness and the vaccination of the health profes-

sional. Questions related to the virus's resistance in the environment, how it relates to pregnancy and breastfeeding, the period for vaccination and adverse events follow the previous questions in importance. Although important, questions considered less relevant in order finalized the classification; these were composed of the meaning of the terms H1N1 and adjuvants, agent virulence, diagnostic test, post-flu vaccination, allergy, storage of the vaccine and cross-protection between the vaccines against H1N1 and seasonal flu.

Some participants established the same level of importance for various questions, indicating a lack of clarity on an issue which had been intensely discussed in the media and which one could suppose to be thoroughly understood by the professionals, who among their responsibilities have that of advising people on health issues.

The text presented in the modality of questions/answers and highlights was linked, forming a simple and accessible format, so as to promote the identification of the target-public with the issue proposed. The illustrations were thought to aid in comprehending the message, so as to emphasize relevant points and keep the reader's attention.

The validation developed through the sensitization workshops showed that the suggestions for the improvement of the booklet were centered on graphical aspects such as the size of the letters, the color of the text boxes and the placing of the illustrations. The question arose among the nurses of whether the quantity of questions was not excessive, with a risk of demotivating people with lower educational levels from reading it. This concern did not arise among the nursing technicians and auxiliary nurses. These professionals assessed that the quantity and quality of the information were appropriate for helping professionals in taking decisions on whether or not to adhere to the vaccination against influenza/flu.

The educational instrument "Influenza/Flu - health professionals need to know"

In health, the use of booklets with a view to the education of service users is a common practice. The literature shows that the use of these instruments in the training of caregivers, such as in the case of pre-term babies or in guidance for the self-care of patients with diabetes or cancer, shows good results.^{11,14-15,18} However, booklets aimed at the education of the health professional are not so common, a fact which should be improved

in the process of continuous education in health and in the process of teaching-learning, so as to complement needs and fill gaps in a constructivist-dialectic perspective.

In the HU/UFSC, the vaccine against influenza has been offered free-of-charge to its professionals since the year 2000. Since then, many strategies have been implemented to improve adherence to it, such as, for example, mobile vaccination teams, schedules for vaccination which suited all three work shifts, leaflets attached to pay slips, lectures, calls over the Intercom system and posters.

Taking into account absolute numbers, the increase in adherence is clear: 1,394 vaccinations were distributed among the permanent members of staff, students and professors in 2000, and 2,271 in 2010. However, until the year 2010, statistics were not available on the coverage on a percentage basis per area. This done, it could be observed that of the professionals allocated in the Nursing Directorate, in 2010, 59.9% of its permanent staff were vaccinated (data as yet unpublished). This percentage, although above those obtained in other studies, remains below the ideal.¹⁹

It was based on this result - of less than two thirds of the professionals being immunized against influenza - that the elaboration of the "Influenza/Flu - the health professional needs to know" booklet was proposed observing the following premises: succinct language, introduction of new terms and technical adaptation to the target-public.¹³ Also incorporated was content on the issue, with the heading "Did you know", aiming to hold the readers' attention without tiring them. Finally, it was decided to present the content of all the questions initially proposed, even if not in the question format, to urge the reader to think about new aspects on the topic. Graphical resources were inserted into the body of the booklet, with illustrations to help the internalization of the message and to make it attractive.

The booklet was printed on A4 paper, with 12 pages (front/back) to take up less space and to be able to be kept by the professional, for use in quick consultations and for contemplating the main information. Various fonts and letter sizes were used, with a view to inhibiting monotony and keeping the reader's interest. Text boxes in different colors and arranged in non-uniform ways were introduced to emphasize some aspects where the intent was to highlight the message.

Although the booklet had been elaborated considering the nursing professionals working in

the HU/UFSC Nursing Directorate, the hospital's general management supported the idea that access to it should be extended to the professionals from the institution's other Directorates (Medicine, Administration and Care Support).

The main message that this booklet seeks to transmit is: in being vaccinated, the HU/UFSC professional is protecting herself, her family, the patients under her care and the community as a whole. As secondary messages: Influenza/Flu is an illness which can turn serious, and the vaccine for preventing it is safe and effective.

Regarding the positive aspects, there was consensus on the idea's validity and applicability, configuring a simple and objective educational instrument, easy to use and understand, showing clearly the importance of the vaccine and of the vaccination of nursing professionals. In addition to this, it was observed that its distribution to the permanent staff members showed the institution's interest in its professionals. Finally, there is an expectation that its use will help improve adherence to this practice.

Considering that this is the first version of the booklet, it is understood that it shall and must go through successive revisions, with the incorporation of future suggestions which may be received.

DISCUSSION

Constructivism, as a method of investigation, refers to the interactionist principle, in which knowledge is relative neither to the object alone nor to reason, but results from the interaction of the subject and of the object, with emphasis on the subject as the producer of knowledge. It is a process which involves stimulating and sharing ideas, which makes possible a collective thinking and acting which is capable of constructing new mental sequences, which may be added to the values which each one possesses, or even modify them. This method of research is presented as a dynamic system of collective learning, using discussion and dialogic reflection as an instrument, modifying the subjects' mental models and constructing new ways of thinking and acting. It is a constructed procedure with a creative effort which can strengthen the inter- and intra-group relationship and drive forward the remodelling of the institution's structure or organization, because it deals with studies in organizational settings.¹⁶ Creating knowledge centered in an issue experienced by the subjects, actors who are integrated into this world experi-

enced, draws one to recognize the importance of thinking and acting in their real world.

In dealing with infectious-contagious diseases, knowledge – principally of the forms of prevention – is essential for the care and for the subjects who experience and co-exist with the issue. It is also interesting to remember that the health of the professional who cares is directly related to the health of the patient under her care, that is, the infected health professional, if she does not take the appropriate steps, can transmit the illness to the patient and cause him harm.^{2,19}

Unfortunately, in spite of all the care which the professional characteristically has for her patient, she does not show the same care for her own health. Specifically in the case of influenza, simple steps such as hand-washing and showing consideration when coughing, when associated with vaccination, are shown to be highly effective as preventive actions.³

In spite of this, the worldwide level of vaccine coverage of health professionals, although it is one of the indicators of quality for patient safety programs, remains far below the level of 80% necessary to afford “herd immunity” with a view to the protection of patients who are susceptible to the disease, but who do not respond effectively to the vaccination.⁵ In part, this often occurs because of ignorance about vaccination and the persistence of taboos and dubious beliefs.⁶

Knowledge created by information is one of the psychosocial determinants which motivate the perception of risks and attitudes of self-protection.²⁰ Therefore, the individual who has knowledge on a specific topic, based in scientific information, has better conditions for making an informed decision on the benefits and risks of the vaccine, which permits better promotion of his health and favors his quality of life. Nevertheless, one cannot forget that in order to create knowledge, the information needs to be received, processed and assimilated by the individual, such that, on being internalized, it creates changes in behavior. For this to happen, barriers – such as those related to individual and collective beliefs, perception of time available and level of understanding – need to be removed.²¹

In a quest for better practices, and believing there to be a positive relationship between adherence to vaccination against influenza and education, health institutions and organizations have sought to develop and apply a variety of educational strategies such as the adoption of

slogans included in institutional marketing materials, educational videos, leaflets attached to pay slips, posters put up in shared places and booklets; always with the aim of mitigating, or even eliminating, the barriers which exist, so as to work on this challenge imposed upon them.^{4,7-8,12}

FINAL CONSIDERATIONS

The nursing staff of the HU/UFSC have been concerned about training their professionals appropriately and promoting the safety of the same. To this end, educational actions are a constant element in the institution’s day-to-day, including a concern with vaccinal coverage which protects not only the patient, but also the professional responsible for her care.

In this context, many actions with an educational character have been carried out over the years. The elaboration of this booklet can be added to these, seeking to inform, sensitize, educate and motivate the nursing professional to change behavior in relation to vaccination, in which increasing adherence to appropriate levels leads to safer care for the patient and protection of the health of the professional, her family and community.

The printed booklet “Influenza/Flu - The health professional needs to know” was made available on the HU/UFSC page on the Internet on the occasion of the 2011 Vaccination Campaign. The statistics provided by the hosting website indicated that in the period April – September 2011, the page was accessed 580,374 times and read by 154,473 persons using the Internet, working out at approximately one reader for every four accesses. These were identified as originating from 23 countries in five continents, in spite of the booklet being written in Brazilian Portuguese.

The intention is for this work to result in further initiatives, with a view to promoting and valuing the nursing worker and to contributing with educational actions, not only in the HU/UFSC, but also in other institutions which wish to follow the same path.

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