

El desarrollo de la habilidad profesional médica “detección temprana de cáncer de mama”

The development of professional medical skill “early detection of breast cancer”

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RESUMEN: Este artículo muestra una metodología para la preparación de los profesores de la carrera de Medicina con vistas al desarrollo de la habilidad “detección temprana de cáncer de mama”. Su objetivo es ofrecer una vía a su tratamiento, pues su desarrollo en el proceso formativo del estudiante precisa se estructure desde las relaciones interdisciplinarias. Se exponen los fundamentos teóricos de la metodología, su forma de implementación y sus resultados. Fue preciso utilizar los métodos analítico-sintético, histórico- lógico y holístico configuracional. La validación fue mediante el criterio de expertos para su inserción en la práctica pedagógica.

Palabras clave: Habilidad profesional médica; Cáncer de mama; Metodología.

ABSTRACT: This article shows a methodology for the preparation of the professors of the Medicine career with a view to the development of the skill “early detection of breast cancer”. Its objective is to offer a way to its treatment, since its development in the student's formative process is not conceived from interdisciplinary relationships. The theoretical foundations of the methodology, its form of implementation and its results are exposed. It was necessary to use the analytical-synthetic, historical-logical and holistic configurational methods. The validation was through the criteria of experts and the pre-experiment for its insertion in the pedagogical practice.

Keywords: Medical professional skill; Breast cancer; Methodology.

Introduction

Currently, the quality of the medical student's training process is a global concern. For this purpose to be fulfilled, it is essential that the student develops professional medical skills for the solution of the most frequent health problems.

In this regard, in order to achieve the objectives stated in the study plan and in the professional's model, the Integrative Core Discipline General Medicine constitutes an integrating axis of the content, the latter consisting of the system of knowledge, skills and values, as well as the relationships with the environment and the creative experience.

In this perspective, the development of medical professional skills is an indicator of the quality of the training process; however, there are differences in establishing medical professional skills. According to the region of the world and the type of medicine practiced, the level of attention to a medical skill is prioritized over others.

Specifically in Cuba, in order to solve the most frequent health problems in the population, attempts have been made to define and operationalize the medical professional skills, starting with the C study plans, where the Main Integrative Discipline of General Medicine, in charge of the training of the labor component, has emerged from the C study plan to the current E study plan; such training has had a disciplinary character. In this regard, the scientific productions of: Salazar (2004); Corona (2008); Barrera (2015); Cisneros (2015); Elías (2015); Losada (2017); Creagch (2022), among others.

The research carried out by the aforementioned authors constitutes a reference of obligatory consultation since it deals with the specific skills of the medical profession; however, they intend to develop them from a specific subject of the study plan. Likewise, as far as the skill of early detection of breast cancer is concerned, no theoretical approaches have been found in the literature review carried out.

Therefore, a way is required to offer didactic instruments to teachers for the treatment of the content that contributes to the early detection of breast cancer, in order to stimulate the development of medical professional skills, especially due to the high morbidity and mortality associated with this disease.

The objective of the present article is derived from the above: to socialize a methodology for the preparation of teachers of the medical career, in function of the development of the skill of early

detection of breast cancer in students, from a didactic-methodological orientation with interdisciplinary character that enables a professional training of the future doctor in tune with the current social demands.

Development

With respect to the term methodology and its essence, multiple definitions and interpretations have been offered depending on the purpose for which it is established. In general, there is a coincidence of criteria in considering it as: “a systemic sequence of stages, each of which includes actions or procedures that depend on each other and that allow the achievement of certain objectives” (De Armas, 2003 as cited in Creagch, 2022, p.61).

Likewise, (Matos, 2003, p.25) defines the methodology as: 654

The expression of the method, the operational and functional way to transform the object from the initial state to the desired state. It is associated with the operational aspects, with a logical sequence of procedures that allows access to the object. This criterion means the delimitation of the method as a way to transform a given object.

In turn, the methodology constitutes a scientific result, so it must have a flexible character that allows its implementation, both at a general level, as well as at a particular level according to the proposed objective.

This is how the methodology offered has been conceived. It is structured in a systemic sequence of steps, which contain mutually dependent actions for the achievement of the objectives, although they respond to a logical order.

Structuring the Methodology for the development of breast cancer early detection skills.

The structure of the proposed methodology is based on the criteria that: “by didactic arrangement it has two apparatuses “(...) the theoretical or cognitive apparatus and the methodological or instrumental apparatus” (Bermúdez and Rodríguez, 1996 as cited in Creagch, 2022).

The theoretical body is composed of the concepts, characteristics, fundamental ideas and principles, for the development of the medical professional skill early detection of breast cancer, from the methodological preparation in the Integrating Main Discipline General Medicine, in the fourth year of the medical career.

The methodological or instrumental components are formed by the objectives, the phases with their corresponding actions and methodological instrumentation, in order to achieve the purpose of the methodology.

From this perspective, among these components there are systemic relationships, with a logical and orderly sequence of activities and resources, which enable the methodology to be integrative, contextualized and flexible, so as to achieve a dynamic for the development of the professional medical skill early detection of breast cancer from the methodological preparation in the Integrating Main Discipline General Medicine, in the fourth year of the medical career from the articulated integration of the discipline and year groups.

I-. General Objective:

To improve the methodological preparation of the teachers from the collective of the Integrative Main Discipline General Medicine in the establishment of interdisciplinary relations for the development of the professional medical skill early detection of breast cancer, fourth year of the medical career.

II-. Specific objectives:

Short term:

- To orient the methodological preparation of the Integrative Principal Discipline of General Medicine (DPIMG) towards an interdisciplinary approach.

Mid-term:

- Integrate the contents related to the mammary gland in cognitive nodes of the disciplines that affect the year, so that they contribute to the development of early detection of breast cancer as a medical professional skill.

Long term:

- Articulate forms of evaluation that promote the developmental learning of students in the fourth year of medicine, based on the conception by teachers of tasks related to the mammary gland that contain an interdisciplinary approach.

Methodology stages.

The present methodology consists of 4 stages:

- 1- Sensitization and diagnosis
- 2- Activity planning and design.

3- Execution

4- Evaluation

Stage I. Sensitization and diagnosis.

The objective is to promote the mobilization, motivation, preparation and involvement of teachers, as well as the characterization of the discipline and the fourth year group, in order to ascertain the preparation needs, interests, expectations and theoretical and methodological needs on the development of the professional medical skill of early detection of breast cancer; for its implementation in educational practice through cognitive nodes.

Action 1. Sensitization

Action 2. Characterization of the current state of medical professional skill development early detection of breast cancer.

Stage II. Planning and design of activities

The system of objectives, contents, actions and operations, with greater potentialities in the establishment of the cognitive nodes for the development of the medical professional skill Early Detection of Breast Cancer, from the DPIMG in the fourth year of the medical career, are determined.

The design of the activities should be in correspondence with the needs of the teachers and the potentialities offered by the programs of the subjects for the development of the medical professional skill Early Detection of Breast Cancer. For the involvement in these activities, coordination between managers and teachers at different organizational levels from the DPIMG is required.

It is necessary that the activities achieve an adequate level of concreteness in the different forms of teaching organization, in correspondence with the level of preparation reached by the teachers and the particularities of the students.

Action 3. Study, analysis and design of actions of the program of the DPIMG discipline based on the correspondence between the contents of the subjects of the discipline and the rest of the subjects of the fourth year of the medical career.

Action 4. To determine the cognitive nodes for the development of the professional skill Early Detection of Breast Cancer.

The cognitive node of the mammary gland and the knowledge system implicit in the medical intervention activities, as well as the medical diagnostic activities integrated by the different phases of the scientific method.

From the determination of the secondary cognitive node of the mammary gland, it is possible to structure the content related to the Early Detection of Breast Cancer, articulating each one of the implicit topics in the programs of the different subjects that affect the year with potentialities for it.

In this case, a methodological workshop is suggested: “Working with the concepts and skills of the year. Their role in establishing the interdisciplinary approach through cognitive nodes.

Action 5. Design of the proposal of activities to be carried out.

With the objective of favoring differentiated attention to teachers, the activities will be designed based on the inadequacies detected for the development of the medical professional skill early detection of breast cancer.

The activities should stimulate and direct the cognitive interests of the teachers towards interdisciplinarity in the development of the medical professional skill early detection of breast cancer, as well as the importance of the transition to an interdisciplinary didactic.

Action 6. Coordination.

Creation of the team of teachers of the year group that will receive the methodological preparation based on the development of the skill. In this space, besides offering the proposal of activities of the DPIMG, it is important to listen to and coordinate with its members each of the activities to be executed based on the objective of the year to which it contributes according to the Model of the career professional.

The role of those responsible for this action is to facilitate the planning and organization of the activities, providing them with the information they need, the ways to achieve the quality of its implementation, the logistical support they require and the preparation in resources to realize the development of the professional skill early detection of breast cancer in classes.

Once this moment is over, the year group should incorporate the designed activities to the Methodological Work Project of the year. These can be redesigned based on the results of the class visits on this process that are carried out during the course.

Stage III. Execution

In this stage, the methodological procedure for the development of the professional medical skill of early detection of breast cancer from DPIMG is carried out in coordination with other areas: library, computer laboratories, audiovisual materials projection room, the material and human conditions necessary for the execution of each of the planned activities.

The implementation of what has been designed follows the guidelines established with the professors of the discipline and the year, according to the existing organizational levels. It is essential to observe the development that is being achieved, in order to identify progress, setbacks and stagnation in the preparation for the development of the professional medical skill of early detection of breast cancer. This provides flexibility to the process.

Action 7. Implementation of activities for the development of medical professional skills for early detection of breast cancer from DPIMG.

The group of teachers who will receive the methodological preparation will range between 10 and 11 teachers in order to favor team work.

The activities designed will be integrated within the methodological work system of the discipline and the year, such as: Methodological Meetings, Methodological Workshops and Instructional Methodological Classes.

Stage IV. Evaluation

At this stage, the effectiveness of the methodology for the development of medical professional skills in the early detection of breast cancer from DPIMG will be verified.

All participants have a leading role. In this stage, the results obtained from the management carried out by the DPIMG in the structure of the academic year, the level of involvement shown by the teachers and the quality with which each of the actions were executed will be explored.

The evaluation will be comprehensive, for this purpose it should be done on a quantitative basis (number of teachers of the discipline, the year and other participating agents) and qualitative measured in the impact generated in the teachers in relation to the acquisition of theoretical and methodological knowledge to establish interdisciplinary relationships. In each of the stages, a partial evaluation of the actions carried out should be made.

Action 8. Application of different research methods and techniques to determine the real situation (survey, interview, observation, others) or through participatory techniques, where the criteria of the participants are expressed in relation to the methodological activities conceived.

Action 9: In this last aspect, it is suggested that a methodological meeting be held to analyze the impact of the methodology after its application in the development of the professional medical skill of early detection of breast cancer from the DPIMG in the fourth year of the medical career.

Results

In order to verify in the pedagogical practice the validity of the methodology, we proceeded to the application of the experts' criterion method, for which two fundamental moments were taken into account: the selection and consultation of the experts.

The possible experts were pre-selected, within the framework of the methodological teaching activities and teaching councils carried out at the University of Medical Sciences of Guantánamo. The pre-selection of 41 experts was carried out by means of a survey so that they could self-evaluate the exercise of their competences in relation to the methodology and its fundamental thematic.

The preselected experts are general medicine professionals with ten or more years of experience in general comprehensive medicine in the diagnosis and treatment of breast cancer, who have an outstanding participation in theoretical, assistance and methodological training activities, with high prestige in the teaching and assistance functions they perform, as well as affective and cognitive involvement to collaborate with the research.

Then, from the analysis of the survey results, they were statistically processed and those with a competence coefficient (K) greater than 0.8 were selected, according to their experience in the field of development of medical professional skills, which led to the selection of only 31 experts as experts on the subject.

Subsequently, the second step was the consultation with the experts, which was carried out in two rounds, in which they expressed their critical ideas regarding the methodology, based on a survey applied to them.

In the first round, the experts offered evaluations on the methodology for the preparation of the medical teacher in the development of the professional medical skill of early detection of breast cancer from the DPIMG. Fundamentally, changes, inclusions and exclusions of some aspects were

suggested, such as: the dialectic relationship between the structural and functional components with the contents of the secondary cognitive node of the mammary gland.

The suggested changes were made, giving way to the second and final round of consultation with the experts. In this round, a significant level of acceptance of the components of the methodology, as well as of the relationships established between these components and the declared stages, was observed. The results of this last consultation with experts made it possible to calculate the absolute frequency and cumulative frequency matrix.

The evaluation of the 10 aspects to be evaluated, received a significant valuation when eight of them were considered between the values of -0.367 and 0.126, to be valued as Very Adequate and two were between 0.126 and 0.537 which were Fairly Adequate.

It can be concluded that the evaluation of the aspects received a significant valuation as most of the criteria were considered in the Very Adequate and Fairly Adequate categories, with those in the Adequate category being more relative, and none were placed in the Poorly Adequate and Not Adequate categories. This shows the degree of acceptance and agreement of the experts with the content of the proposed didactic model.

The experts considered important the structuring of the structural and functional components of the methodology, as well as the scope that the objectives and actions can have in the continuous and systematic process for the development of medical professional skills of medical students, as well as their comprehensive training.

Conclusions

The structuring of the methodology enabled the perception of the importance of the didactic, practical and attitudinal preparation of the teachers to treat the development of the medical professional skill early detection of breast cancer; with an interdisciplinary approach from the knowledge system concerning the early detection of breast cancer; which favors the incorporation of this knowledge to the teaching practice.

The methodology is valid and pertinent to use to treat the development of the professional medical skill early detection of breast cancer, from the DPIMG, which responds to its training process, by incorporating this system of contents in the form of primary cognitive node, as well as the

secondary cognitive nodes derived from the potentialities of the contents of the subjects of the main integrating discipline.

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