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# Training for Primary Care Nursing Staff on Dispensarization in Phase Three

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**ABSTRACT**

**Introduction:** Nursing staff must maintain constant updating. It is necessary for PHC nursing staff to assume a more active conduct in dispensarization in phase three.

**Objective:** Propose an educational strategy that contributes to raising the level of information of nursing staff in PHC about phase three of dispensarization.

**Methods:** The results achieved in the research carried out with an intervention study are described, between April 11, 2022 and January 9, 2023, in the urban clinics of the Municipality and Province of Sancti Spíritus, Cuba. The entire nursing staff participated. The level of information about the dispensing process was evaluated by applying a survey before and after the strategy was developed. Based on the results obtained, an educational strategy was designed, which was evaluated by experts.

**Results:** The level of information on dispensarization that prevailed before applying the strategy was inadequate; once the educational strategy was received, they presented an adequate level of knowledge. This strategy is a representation of reality. From the social point of view, improvements are achieved in the health status of the population. The experts consulted considered the proposed strategy viable.

**Conclusions:** the educational strategy to raise the level of information in nursing staff is applicable in any context of health institutions. To carry out similar studies, it is necessary to identify the problems of practice in each action scenario.

**Keywords:** Nursing; Dispensarization; Information Level; Strategy

## Introduction

Nursing staff who are part of the Primary Health Care (PHC) program must constantly update the profile to which they are linked. Health literacy is understood as the process focused on obtaining knowledge, motivation and individual competencies to understand and access information, express opinions, and make decisions related to the promotion and maintenance of health. [1,2] All training for health personnel is aimed at responding to the need of every university graduate who, when applying the knowledge acquired, begins to need elements not received during the degree, or needs to deepen or update them, avoiding the obsolescence of knowledge, as expressed Sánchez in his review. [3] This update has a positive influence so that the people served have a better state of health and well-being. Dispensarization in Cuba constitutes, together with the Analysis of the Health Situation, a fundamental element of family medicine. Or-

ganizes the work of the Family Doctor and Nurse, as established in their work program. [4] This process is generally applied by medical personnel and nursing personnel are limited to complying with the guidelines. It is necessary that the nursing staff in PHC assume a more active behavior in the dispensarization of the population, in phase three. [5,6] For this, training is essential as a critical component that requires an investment of time and a strategy to train them.

To achieve a successful educational intervention, in line with the current trend of humanization of medicine, the proactive involvement of the personnel executing the different processes carried out in health is vital. [7] The author's experience in educational strategies and in her daily practice with the Basic Health Teams (EBS) served as motivation for carrying out this study. From the General Directorate of Health (GDH) in Sancti Spíritus, supervision has been carried out systematically that includes the review of documents that govern the work of nursing staff in PHC. It has been proven that the actions that are often established are aimed at solving a health problem that a patient presents, but they are not implemented to act on dispensarization. There is no educational intervention strategy in the province on the third phase of dispensarization from the perspective of nursing staff. All of the above suggests that the objective of the research is to propose an educational strategy that contributes to raising the level of information of nursing staff in PHC about phase three of dispensarization. It was identified as the professional improvement of the nursing staff in PHC that raises the level of information for action in phase three of dispensarization as an unquestionable way to achieve the purpose that has been explained.

## Methods

### Design

The results achieved in the research carried out with an intervention study are described, between April 11, 2022 and January 9, 2023, in the urban clinics of the Municipality and Province of Sancti Spíritus, Cuba. Mixed, qualitative and quantitative research techniques and procedures were integrated. The study went through the following stages:

**First Stage:** The description of the level of information of the nursing staff about the dispensarization process was carried out.

**Second Stage:** The educational strategy was designed to raise the level of information in the study population about phase three of dispensarization.

**Third Stage:** The feasibility of the strategy was defined according to expert criteria.

### Subjects

The nursing staff who worked in the urban clinics of the municipality participated. It was decided to work with all of them (N=91).

### Variable

The level of information in the participating nursing staff about the dispensing process was evaluated (high, medium, low). Dependent, qualitative, ordinal, polytomous variable; It is defined as the level of accumulation of primary data such as observations or field notes collected but not processed or analyzed. [8] It includes analytical processing such as the information/dispensarization cause-effect relationship; synthetic: reconstructing events in a summarized way and logical: chain of judgments in which one is a consequence of another or others. Storage: repository of information that serves to make better informed decisions; recovery: medium in which documents, records, needs and interests are found. The dissemination, procedure of documents that correspond to their cognitive interests of information about dispensarization. The viability of the educational strategy to raise the level of information about phase three of dispensarization was taken into account as a dependent variable. This was evaluated taking into account the criteria of the experts consulted. The educational strategy to raise the level of information about phase three of dispensarization constituted the independent variable.

### Procedures

To know the level of information on the topic to be investigated, a survey developed for this purpose was applied before and after the strategy was developed. Each item was given a score based on the responses given.

It was evaluated in the following way:

- 5 for each correct answer: yes and zero points for incorrect answer: no.
- In the case of the no response option, 0 was given to each response, with the maximum score being 35 points for the total number of correct responses according to all the items in the survey carried out.
- 2.5 points were offered for the exponent maybe.

Then the distribution of the scores was determined and the cut-off points were established for the high, medium and low levels of information. To scale the level of information between high, medium and low, we proceeded as follows:

**Scale:**

- **High Level:** from 35 to 24.5 points.
- **Medium Level:** from 24 to 18 points.
- **Low Level:** less than 17.5 points.

The validation of the strategy was carried out in two moments: qualitative validation also known as creation and quantitative validation or evaluation of metric properties. The qualitative validation was carried out in 3 phases. An instrument was developed with 7 items.

First, the instrument was applied in the form of a survey to all the participants included in the study: 91, then an instrument was constructed with 7 closed questions related to each of the indicators to be measured in the variables mentioned above. In the second phase, the questionnaire was given to 16 professionals who, in a rating sheet, evaluated the design and content of each of the questions, and were also free to suggest new questions. The survey was then evaluated by 5 writing experts to rate order and wording. At the end of the process, the questionnaire was made up of 7 questions on information related to the dispensarization process. The questions were matched with the seven indicators of the variable. There is no index for content validity, being supported by the form or procedures used to construct the survey and by the people who constructed it.

After constructing the instrument, it was applied to the students, thereby obtaining the necessary information for the quantitative analysis. The average time to complete the survey was determined. Internal validity was carried out by calculating the discrimination index (DI) of each item or corrected item-total correlation (item remainder) [9]. This index was obtained by ordering the respondents according to the scores obtained in the test and was compared with the results obtained by those in the upper third with those in the lower third An item was considered to have a good discrimination index from +0.2 high reliabilities. The reliability related to the application time measured by the intraclass correlation coefficient was 0.986 (indicates that there is a very high correlation between the first and the second measurement), showing that the scores found are stable over time. The validity of the survey was determined by calculating the discrimination index (DI) of each item. None of the survey items had ID values less than 0.20. The coded sheets were reviewed at the time of the survey, to avoid omissions of questions, and during the introduction of the data to the program. Verification was carried out by reading the codes aloud and comparing them with what was recorded in the database.

Based on the results obtained, an educational strategy was designed to raise the level of information in those studied. It had 160 hours, of which 130 were in person and the rest for independent preparation. Once this strategy was designed, it was evaluated by experts selected according to the highest coefficient of competence. An expert is understood to be an individual, group of people or organizations capable of offering, with a maximum of competence, conclusive assessments on a given problem; formulate real and objective forecasts about the effect, applicability, viability and relevance that the proposed solution may have in practice and provide recommendations on how to improve it. [10] The educational strategy, in the form of a course, for participating health personnel was applied between September 19, 2022 and January 9, 2023. This was developed by the authors of this document. It was carried out in four-hour sessions three times a week, for three months. Conferences, practical classes and periodic evaluations were included, the latter were taken into account to evaluate the evolution of the level of knowledge achieved in these professionals, together with the results of the survey that was applied to them once the strategy was applied. At the end of the research, the participants were evaluated taking into account their response to the established objectives.

The course responded to the methodological requirements declared in Resolution 140, of 2019, of the Ministry of Higher Education, Instruction 1 of 2020: Regulations of Postgraduate Education of the Republic of Cuba. [11] The structure, methodological design, evaluation system, issuance and delivery of academic and curricular credit were taken into account. The course included a set of contents that addressed relevant research results and transcendent academic issues, with the purpose of strengthening competence, which was certified through a final theoretical-practical evaluation. From a structural point of view, it included title, academic committee, duration in hours, modality, objectives, topics, contents and bibliographies. The same was applied by the authors. The researchers took some steps to increase the credibility of the study. Prolonged stays were maintained during the observations when the participants were surveyed, intentional sampling for the selection of subjects, external reviews of the research process, comparison between theories, checking the data with the participants, detailed, in-depth and complete descriptions, reflections on the prejudices, beliefs and conceptions of the researcher to avoid biases, among others.

### Prosecution

The Microsoft Office Excel 2019 program was used for the database, and the IBM SPSS Statistics v program was used for the analysis. 19. [12] No other statistical tests were used in this regard.

### Bioethical Aspects

The study was approved by the Ethics Commission of the Scientific Council of the Faculty "Dr. Faustino Pérez Hernández" from the University of Medical Sciences of Sancti Spíritus. The primary data were used for research purposes, as stipulated in the Declaration of Helsinki. [13]

## Results

It was confirmed that the level of knowledge was inadequate in the majority of those studied. The results are shown in Table 1. As can be seen, the level of information on dispensarization that prevailed was inadequate. It was observed that many of the participants did not mark the incorrect answers, but did not recognize the correct ones as such. In the proposed strategy, the set of objects and processes that were developed are related to each other, identifying certain independence and coherence. The evaluation was carried out longitudinally in the short, medium and long terms, in correspondence with the level of knowledge that those studied managed to achieve. This strategy is a representation of reality. It establishes the relationship between the real and the ideal, which allows analyzing and interpreting the object of study in all its manifestations. It met the following construction criteria:

a) Concretion of information on dispensarization, from the nurse's perspective.

b) Improvement of dispensarization, as an expression of the systemic articulation of the biological and social dimensions.

c) Modification of the dynamic aspect of the development of the object with the establishment of the relationships between each element of the proposal, as well as in the feedback process between the subjects involved in the study area. From the social point of view, by raising the level of information of the nursing staff in the PHC, improvements are achieved in the health status of the population with greater satisfaction with the services. From a practical theoretical point of view, scientific material is offered in the form of a strategy to achieve better levels of information, which leads to greater knowledge, about the dispensarization process in its third phase. A systematic scheme adjusted to a system or method is offered, in which objectives and ways to carry them out are proposed. It is structured sequentially, flexible and dynamic, allowing modifications and changes to be made. It is a work program in the PHC focused on the individual and his idiosyncrasies. Objectives are defined and forms of intervention are proposed, ensuring that the nursing staff in the PHC is actively integrated into the dispensarization process.

**Table 1:** Level of information of the nursing staff of the urban Family Doctor and Nurse offices about dispensarization. Sancti Spiritus. 2022-2023.

| Sections/ Knowledge level | About the Dispensing Process | | Level of Information on Dispensing Groups | | Level of Information on Dispensarization Interventions. | | Level of Information on the Characteristics of Dispensarization | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| Appropriate | 8 | 8,80 | 8 | 8,80 | 6 | 6,60 | 8 | 8,80 | 8 | 8,80 |
| Inappropriate | 83 | 91,20 | 83 | 91,20 | 85 | 93,40 | 83 | 91,20 | 83 | 91,21 |
| Total | 91 | 100 | 91 | 100 | 91 | 100 | 91 | 100 | 91 | 100 |

Economically, health personnel are saved time and effort in searching for ways to achieve the necessary training to raise their level of information about dispensary treatment. The skills that the trained population can acquire can contribute to the control of different health situations in the population. The strategy from a scientific point of view focused on the transformation of the temporally and spatially located object from a real state to a desired state, with the use of certain resources and means that responded to certain guidelines. The context proposal is flexible to the characteristics and variables of the context that affect specific situations.

This strategy has features typical of this type of intervention. Some of them are:

- Conception of a systemic approach, based on the relationships of coordination, subordination and dependency.
- Dialectical character that is given by the search for the qualitative change that will occur in the object (real state to the desired state), by the constant adjustments and readjustments that its actions may undergo and by the articulation between the objectives (goals pursued) and the methodology (instrumented paths to achieve them), among others.
- Adoption of a specific typology delimited by the object of transformation itself.
- Diagnosis of the real and potential situation of subjects and context.
- Identification of dissatisfactions and satisfactions regarding educational phenomena, objects or processes in a specific context or field.
- Establishment of objectives and goals to be achieved within certain time periods.
- Definition of actions and activities that respond to the established objectives and responsible entities.
- Resource planning and methods to enable execution.
- Evaluation of the effects caused by the change proposal.

The strategy was evaluated by a group of experts who determined its viability. The results achieved in this regard are reflected in Table 2.

**Table 2:** Expert evaluation in relation to the feasibility of the strategy.

| Expert Evaluation | Very Suitable | | Quite Adequate | | Adequate | | Not Very Suitable | | Not Dubitable | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| Applicability | 14 | 93,33 | - | - | 1 | 6,66 | - | - | - | - |
| Feasibility | 13 | 86,66 | 1 | 6,66 | 1 | 6,66 | - | - | - | - |
| Need | 15 | 100 | - | - | - | - | - | - | - | - |
| Relevance | 14 | 93,33 | - | - | 1 | 6,66 | - | - | - | - |
| News and scientific level | 15 | 100 | - | - | - | - | - | - | - | - |

Note: Source: Feasibility survey.

The table above shows that the majority of the experts consulted considered the proposed strategy viable. They admitted that strategic planning constitutes the alternative for the implementation of the proposal. This form allows problems to be identified and prioritized, identify strengths, weaknesses, opportunities and threats of the environment in which the population finds itself and develop tasks to solve the problem. All subjects are involved. They consider its use in the daily practice of EBS to be novel and highlight its leading role in the organization and conduct of the process The experts surveyed agreed that qualitative methodology provides a way to obtain broad and detailed information. The experiences and experiences of the subjects provide solid elements for the construction of the strategy since they themselves identify problems and situations in practice while proposing alternative solutions.

The primary criterion is that the theoretical data form a gear that leads to the educational strategy to raise the level of information in the PHC nursing staff about the third phase of dispensarization. They declared that the relationship between its components is evident in relation to the environment and the categories resulting from the research process. The analysis of the specialists' discourse led to assessing the educational strategy through consensus as viable, for its practical application in this type of training. Once the educational strategy was applied, it was possible to corroborate that with the information given to the nursing staff studied, the level of knowledge increased. The results are shown in Table 3. 97.81% of the participants, once they received the educational strategy, presented an adequate level of knowledge related to the dispensarization process in phase three. Only two remained at an inadequate level taking into account the processes and characteristics of dispensarization, this was the result of low attendance at the meetings.

**Table 3:** Level of knowledge of nursing staff about dispensing after applying the strategy.

| Sections/ Knowledge Level | About the Dispensing Process | | Level of Information on Dispensing Groups | | Level of Information on Dispensarization Interventions. | | Level of Information on the Characteristics of Dispensarization | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| Appropriate | 89 | 97,81 | 91 | 100 | 91 | 100 | 89 | 97,81 | 89 | 97,81 |
| Inappropriate | 2 | 2,19 | 0 | 0 | 0 | 0 | 2 | 2,19 | 2 | 2,19 |
| Total | 91 | 100 | 91 | 100 | 91 | 100 | 91 | 100 | 91 | 100 |

## Discussion

The results related to the level of information about the dispensing process achieved in this research could be seen as somewhat contradictory if it is taken into account that the study was carried out with the personnel that complements the EBS binomial who is responsible for this action in the population. But it is pertinent to recognize that the medical staff is the one who leads this process and the nursing staff is in charge of carrying out the actions indicated by them. The dispensing process is well established but the nursing staff does not fully master the actions carried out to maintain it. The greater role of these personnel would guarantee a better quality of life in the population. Several investigations corroborate the effectiveness of nursing actions based on the dispensarization of patients. [14,15] All those consulted place nursing staff in a very important position in prevention actions but also emphasize the need to train this staff, with which the authors agree. These results coincide with those found by other researchers, [16,17] where the knowledge of those studied was not within acceptable ranges despite the information to which they had access.

In the authors' opinion, to achieve an improvement in the health status of the population and teamwork, it is necessary for nursing staff to adopt a leading role in the interventions to be carried out from the dispensary process. The educational strategy to raise the level of information in PHC nursing staff to act in the third phase of dispensarization, goes into the relationships of daily, social and health life. This strategy with its actions and activities would constitute a bulwark in the daily work of the EBS in the PHC. The experts consulted to define

the viability of the proposed strategy issued favorable considerations in relation to the actions and activities included in it. They contributed that the theoretical systematization identifies that the strategy, the methodology for its preparation and the theoretical assumptions reveal the elements selected for its preparation and its foundation, coinciding with what was proposed by Díaz. [18] To demonstrate the rigor of this research, the authors assumed the criteria to evaluate credibility. It refers to whether the researcher has captured the complete and deep meaning of the participants' experiences, particularly those linked to the problem statement [19].

It also has to do with the ability to communicate the language, thoughts, emotions and points of view of the participants. It is defined as the correspondence between the way in which the participant perceives the concepts linked to the approach and the way in which the researcher portrays the participant's points of view. [20] There are several investigations where educational strategies were applied in different types of populations where the effectiveness of this form of training is demonstrated. [21-24] The results achieved coincide with the research consulted. It is demonstrated that the educational strategy was effective because a high level of knowledge was achieved in the majority of the participants. Nursing staff in the PHC, as part of the EBS, have an important role in participating in actions aimed at improving the health status of the population they serve. Incorporating this information provided in the strategy into your work system contributes to achieving this purpose. It coincides with research that reflects the importance of educational strategies [25, 26].

### Limitations and Strengths of the Study

The research had a relatively small sample. The time to evaluate the effectiveness of the strategy is short, which could be limitations of the study.

## Conclusion

The educational strategy to raise the level of information in nursing staff is applicable in any context of health institutions. To carry out similar studies, it is necessary to identify the problems of practice in each action scenario.

## Conflict of Interest

The authors declare not to have any interest conflicts

## Authors' Contribution

- Surany Rodríguez Cabrera: Bibliographic search. Reviewed the final report.
- Milayda Martin Pérez: Literature review and search. Review and correction of the final report.
- Juan Carlos Mirabal Requena: Review, bibliographic search, preparation and preparation of the final report.

All authors agreed with the final report.

## References

1. Sørensen K, Van den Broucke S, Brand H, Fullam J, Doyle G, et al. (2012) Health literacy and public health: A systematic review and integration of definitions and models. BMC Public Health 12(80): 1-13.
2. Juvinyà Canal D, Bertran Noguer C, Suñer Soler R (2018) Health literacy, more than information. Gac Sanit 32(1): 8-10.
3. Sánchez Rodríguez Y, Labrador Rodríguez O (2019) Historical-revolutionary development and characterization of professional improvement in the Cuban health sector. EDUMECENTRO 11(3): [aprox. 18 p.].
4. (2023) Ministry of Public Health Department of Primary Health Care. Family Doctor and Nurse Program (2nd Edn.)., Havana: Medical Sciences Editorial.
5. García HDM, Rodríguez RC, Allegue HF, Asnalema FPM, Reyes JFO, et al. (2019) Database for preparing the analysis of the health situation. Postgraduate in Community Family Medicine. Magazine of the Faculty of Medical Sciences of the University of Guayaquil.
6. Gafas González C, Roque Herrera Y, Bonilla Pulgar GE (2019) Comprehensive health care model vs. Quality of care at the first level, Riobamba 2014-2017. Educ Med 20(S1):136-142.
7. Betancourt Torres I, Lópe Aguilera ÁF, Furones Mourelle JA, Castro-Ortega MK, Lima Sarmientos L, et al. (2021) Educational intervention for human improvement from culture in medical science students. EDUMECENTRO 13(2): 108-127.
8. González Rivero MC, Stable Rodríguez Y, Delgado López Y (2021) Proposals to improve selective information dissemination services, based on the analysis of their evolution. Libraries. Research Annals. 17(4) edición especial: 1-23.
9. Valencia Benítez JC, Carmenates Barrios OA (2022) Validation of the survey instrument for its application in training centers. Conrado 18(88): 14-20.
10. Herrera Masó J, Calero Ricardo J, González Rangel M, Collazo Ramos M, Travieso González Y (2022) The method of consulting experts at three levels of validation. Havana Journal of Medical Sciences 21(1).
11. (2019) Official Gazette. Resolution 140 of 2019 of the Ministry of Higher Education, Instruction 1 of 2020: Regulations of Postgraduate Education of the Republic of Cuba. Official Gazette.
12. (2024) QuestionPro. What is SPSS and how to use it.
13. (1964) World Medical Association. Declaration of Helsinki of the WMA. Ethical principles for medical research on human beings. Ratified at the 64th General Assembly, Fortaleza, Brazil, October 2013. Helsinki: 18th World Assembly.
14. Naranjo Hernández Y (2020) Characterization of frail older adults from the Nursing perspective. Careconscience, p. 11.
15. (2020) Pan American Health Organization. Nursing perspectives and contributions to promote universal health. PAHO.
16. Martínez Torres E, Torres Rojo Y, Baldoquín Rodríguez W, Rodríguez Roque MO, Pérez Carrera A (2021) Training strategy for the diagnosis and management of arbovirosis in Cienfuegos. Medisur 19(2): 220-227.
17. Puma Quito RS, Mesa Cano IC, Ramírez Coronel AA, Pacurucu Avila NJ (2021) Effectiveness of nursing interventions based on safe intravenous drug administration protocols: systematic review Venezuelan Archives of Pharmacology and Therapeutics 40(3): 274-282.
18. Díaz Ferrer Y, Cruz Ramírez M, Pérez Pravia MC, Ortiz Cárdenas T (2020) The expert judgment method in educational research: view from a sample

of doctoral theses. Cuban Magazine of Higher Education 39(1): e18.

19. Silva Cancio Velloso I, Soares Tizzoni J (2020) Criteria and strategies for quality and rigor in qualitative research. Cienc enferm. 26: 28.
20. Baldor MV, Casalongue Vezzoni AE (2023) Representations of Health Professionals and Older Adults about Learning in this stage of life [Thesis]. Argentina: University of Gran Rosario.
21. Rodríguez Aldana A, Fernández Torres S, Pérez Sariol V, Mojena Sánchez S, Ortiz Núñez L (2020) Community Intervention Strategy to enhance knowledge about noise pollution. Campechuela. MULTIMED 24(1): 102-118.
22. Rojas J, Contreras I, Chaparro C, Quintero A, González R (2019) Evaluation of the level of knowledge of mothers after applying an educational strategy. Venezuela 2015. Rev chil Nutr 46(2): 107-112.
23. Gómez Tejeda J, Diéguez Guach R, Pérez Abreu M, Tamayo Velázquez O, Iparraguirre Tamayo A (2020) Evaluation of the level of knowledge about COVID-19 during the investigation in the population of a clinic. Magazine April 16 59(277).
24. Mirabal Requena JC, Álvarez Escobar B, Naranjo Hernández Y, Valdés Álvarez V, Sáenz Martínez LM (2020) Self-care strategy in older adults against COVID-19 in the community. Rev Panorama. Cuba and Health 15(3): 52-57.
25. Oro Moreno Y, Pérez Zaldívar MI, Silva Fernández SB, Olamendi Rodríguez T, Serviño Concepción M, et al. (2020) Pedagogical strategy for the preparation of nursing graduates on bioethics and the environment. Edumed-Holguin.
26. Naranjo Hernández Y, Méndez Reus ZC, Rodríguez Meneses MI, Santos León M (2022) Efficacy of nursing intervention in knowledge about prevention of COVID-19 in adults who experienced it. AMC 26: e8534.

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