

Research Article

Nursing Research Priorities in Oncology and Hematology: Delphi Study

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Keywords

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- Nursing
- Oncology
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Abstract

Background: In order to develop the best possible nursing practice, is necessary to launch structured and coordinated research plan. One of the most recognized strategies to achieve this goal is to define nursing research priorities. The aim of this study is to define nursing research priorities in an Oncology Department of a Northern Italy Hospital

Materials and methods: This is three rounds Delphi Study.

Results: Forty-eight nurses (87.27 %) completed all three rounds. Seventy-three emerged themes were recorded and organized in three areas (clinical, organizational and relational), in which were identify nursing research priorities

Discussions and conclusions: The main themes chosen, identify as the most important, suggest the attention of enrolled nurses in: management of central venous devices, symptoms and chemotherapy drugs.

INTRODUCTION

Several studies, suggest identifying the relevance of the research questions concerning the solution of problems that nurses encounter in working practice [1-6]. For the results to be applied in practice, it is necessary that the research questions are considered interesting for the work [2].

One approach documented in the literature able to identify relevant research questions, is represented by the Delphi technique [7].

At the moment, in Italy, there are only two studies conducted in internal medicine and diabetic field [8,9]. In prevention oncology and hematological actions, early detection, and treatment of disease-related symptoms, as well as the innovations that the new biological drugs have made, justify the importance of research programs take in this area [4,10]. In this study, we aimed to define nursing research priorities in an Oncology Department of a Northern Italy Hospital using the Delphi method.

MATERIALS AND METHODS

It was defined a study design consisting of an observational study using a three round Delphi technique [11]:

- First round consists in the identifying research questions

through a semi-structured interview conducted on a nurse panel on duty in considered Oncology Department

- The second round consists in the definition of the questions of interest through the formation of an expert panel who analyzed the themes identified in the interviews.
- The third round consists in the definition of the priority interest areas and questions by administering a questionnaire to all nurses above mentioned

Table 1 shows a target population picture

In the first round, semi-structured interviews were conducted on the sample recruited. It provides for the compilation of a biographical data together with some useful data to subsequent correlate the training support and participation in research activities. The article about the training course has been divided into base and post-base. It was asked the nurses to think about clinical practice and to identify three themes subjectively worthy, to be explored with research projects. In the third study round, it was administered a questionnaire to establish a priority order among the research topics identified during the first round. The questionnaire is multiple choices. The letter specifies the project objectives and informs about the treatment of the data collected. The questionnaire refers to the structure of the study

Table 1: Data on the nursing staff on duty at the Oncology Department of Novara.

Operative Unit	Division	Nr. of nurses
Radiotherapy	Ward	14
	Day Hospital	4
Oncology	Ward	//
	Day Hospital	10
Haematology	Day Hospital	5
	Ward	10
Palliative Cares	Hospice	8
	Home palliative cares	4
Total		55

conducted by Soanes [12] and the questions identified in the first round were grouped into macro-areas: Clinical; Organizational; Psychological and Relational area.

Each participant was asked to choose three subjects in each research macro-area. The data collected were processed using EPI INFO. Associations were evaluated using the Chi-Square test of Pearson. The use of statistical tests was considered a significance level of 0.05 (CI 95%).

RESULTS AND DISCUSSION

It was conducted 55 interviews on 100% of the population of interest. The sample age is included between 26 and 55 years. The mean is 42.64 (\pm 7.658 SD), median: 44 years. The respondent majorities have attended regional schools of nursing (71%), the remaining part is in possession of a Nursing Bachelor's degree in (29%).

73 research topics have emerged from 55 interviews deemed of interest by professionals. Table 2 shows the most common themes emerged from the interview divided based on membership ward.

Table 3 shows the most frequent themes emerged from the interviews.

The themes that emerged were grouped into three areas (clinical, organizational, and relational) and the questionnaire was drawn up.

The questionnaires filled in correctly are returned were 48 (87.27 %). The data concerning the characteristics of the sample responding to the questionnaire (Round III) are like those that emerged from the interviews (Round I).

In clinical area, consensus (57%) is delivered on two topics such as symptoms and the central venous devices (CVD) management.

In the organizational area, three topics raised about 75 % of the answers: the work organization (35%), admissions / discharge (20%) and staff training (18%) seemed to be the topics of greatest interest.

In the relational area, the interest was placed almost exclusively on the aspects relating to the improvement of effectively communication systems and to the psychological and relational aspects end of life-related.

Statistical correlations were analyzed between some considered variables and selected questions.

The considered variables were:

- Operative ward membership
- Service membership (Inpatient, DH, Surgery)
- Postgraduate training

The identified research priorities for each area were stratified according to the Operative nurses' ward membership who participated in the study. This kind of correlation showed no statistically significant differences. Other analyzed correlations are between the service in which they are working nurses and the selected priorities. This allowed us to make some considerations. The nurses of the wards showed an interest in the management of symptoms higher than nurses of Day Hospital ($p = 0.01$).

For central venous devices management, another topic chosen by most nurses were not statistically significant differences. Another topic for which there was a statistically significant difference was blood products infusions and stem cells management. The wards nurses have a greater chance of choosing a theme about this topic than nurses of Day Hospital ($p = 0.01$)

Concerning the Day Hospital, statistically significant

Table 2: Themes most frequently emerged from the interviews divided by Operative Unit.

Unit	Themes	Frequency
Oncology	-Management of CVD	4
	-Relationship with the cancer patient	3
	-Organizing course for patients	2
Radiotherapy	-Continuity of Care	6
	-Management of dying patients	5
	-Management of symptoms	4
Haematology	-Good communication between health care workers	8
	-Organization of the ward	4
	-Update fields in Oncological and Hematological area	4
Palliative Cares	-Pain management	5
	-Hospice organization	3
	-Supportive procedures in end of life	2

Abbreviations: CVD: Central Venous Devices

Table 3: Topics by far the most frequent emerged from the interviews.

Themes	Frequency
- Good communication between health care workers	10
- Management of dying patient	8
- Management of symptoms	8
- Continuity of care	8
- Ward organization	8
- Pain management	6

differences were observed for the chemotherapy drugs management for which the Day Hospital nurses seem to have a greater interest ($p = 0.022$) and, for alternative medicines relating issues ($p = 0.03$).

In organizational area, significant differences are observed for the topics Admissions / Discharges. The probability of choice in this area is higher for a nurse of the ward compared to a nurse of the Day Hospital and the χ^2 test showed a statistically significant association ($p = 0.032$).

In the relational area, the only topic that showed statistically significance difference was the aspects related to the end of life. The wards nurses showed an interest higher than nurses of the DH ($p = 0.01$).

The study aimed to identify nursing research priorities in Oncology and Hematology of a Northern Italy Hospital bringing out the issues that nurses believed priority. It is addressed to all rounds of the study to the entire target population, or rather to all the nurses on duty at the department said. At the time nursing research project are few, although studies show that nurses know the importance of research to improve the quality of care¹³. The absence in the organization of the nurse researcher and of the research nurses could be a barrier to the development of these activities.

The themes identified for each topic was different and some themes obtained a greater consensus than others. It is the case of the pain symptom that, inside the topic symptoms management, was found to be the most chosen by professionals. There are several literature findings in which the cancer pain is recognized in the evaluation of research priorities as the most important question¹⁴⁻¹⁵. Themes rather than the original findings have emerged in the literature about the management of central venous devices. This topic raised 30% of consensus. These data show the importance of in time re-prioritization. In fact, while studies show how the pain symptom is a priority for the experts, there are no evidences about the central venous devices management as a priority issue.

Regarding the organizational area, the issues of primary interest were: analysis of training needs; subdivision of work skills; human resource management.

The studies published on the identification of nursing research priorities seemed to be going in different directions. In fact, there is no evidence militating in favor of the themes emerged in this area. Probably the themes emerged were affected by the characteristics of the sample and membership organization. Some studies showed that the interest may also vary according to the specific contexts in which projects born. Incidentally, in the interview were required nurses to indicate the topics of interest thinking of her own clinical practice.

For the relational area, the effective communication with the cancer patient and caregiver together with the terminally ill patient and his family were the most chosen. In this case, the correspondence with the literature sources exists and you can find some important references on communication as a priority topic for research development.

CONCLUSIONS

This study presents sampling and methodological limitations.

The nursing research requires an adequate strategic planning for growing and doing what it is necessary to emerge themes that professionals consider priority.

The main themes chosen as part of the clinic involved the management of central venous devices, symptoms and chemotherapy drugs.

Most of the nurses considers essential to implement the training needs analysis to develop the skills of professionals and improve nursing practice with the drafting of clinical pathways.

The course of the cancer undermines all balances physical mental and social aspects of the person and his family. The report cannot be limited to the person but it must involve all those who are next.

The results of this research could be used both to develop most extensive similar projects, in concert with the department and the corporate management, both for direct business plans of nursing research.

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