

Palliative Care Research: Using the Delphi Method

Investigação em cuidados paliativos: a utilização do método Delphi

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Keywords

Delphi Technique;
Palliative care; Review.

Abstract

Introduction: Due to the challenges that are increasingly complex in palliative care, the need to develop community health care raises.

Aim: Understand the application of the Delphi method for research in palliative care.

Material and Methods: Started an integrative literature review using research on EBSCO host database.

Results: The primary purpose of the eight articles selected is to create indicators for health evaluation. The Delphi method used in all the studies has in common, besides the intention to create new data in health care practice, the use to manage a high number of data from geographically distant points.

Conclusions: Our literature research allowed us to conclude that there are still few studies using the Delphi method in palliative care. This instrument has excellent utility in the systematization, organization and evaluation of the contexts and care practices. We reinforce the importance of developing this resource in this context.

Palavras-chave

Método Delphi; cuidados paliativos; revisão

Resumo

Introdução: Considerando os desafios cada vez mais complexos em cuidados paliativos, a necessidade de desenvolvimento de cuidados na comunidade aumenta.

Objetivo: Compreender a aplicação do método Delphi em investigação em cuidados paliativos.

Material e métodos: Desenvolveu-se uma revisão integrativa da literatura utilizando a investigação na EBSCO, plataforma de bases de dados de pesquisa.

Resultados: O objetivo principal dos oito artigos selecionados foi a criação de indicadores para a avaliação em saúde. Em todos os estudos o recurso ao método Delphi teve por ponto comum, além da intenção de criar novas informações na prática de cuidados de saúde, o seu uso para a gestão de uma grande quantidade de dados provenientes de pontos geograficamente distantes.

Conclusões: A nossa revisão de literatura permitiu-nos concluir que existem ainda poucos estudos a utilizar o método Delphi em cuidados paliativos. Este instrumento tem grande utilidade na sistematização, organização e avaliação dos contextos e práticas de saúde. Reforçamos a importância do desenvolvimento deste recurso neste contexto.

Introduction

From the current development in palliative care emerges a set of challenges, particularly in the community area, hospital monitoring, pediatric context and regarding the preferred aspects of care. These areas, with increasingly complex issues, favour the use of research methods such as the Delphi

method, to gain knowledge on specific fields and, subsequently, decision making. It is identified as a method, instrument or technique, and it is decided to use the method nomenclature in this document, justified by the complexity of this resource, but mainly because it is the most common terminology applied.

Considering the use of the Delphi method in palliative care research, an integrative literature review was conducted to understand the applicability of this new research method in studies in the palliative care field.¹

The Delphi method, a name applied by the RAND company in the mid-1950s, has the purpose of gathering the opinion of a group of specialists/experts on a particular theme, of reaching consensus, developing it by the use of a questionnaire. Decision making is privileged, according to the analysed priorities and unpaid judgments. The organization of ideas, the expression of opinion by experts and their feedback is enhanced. This action facilitates the resolution of questions with a poor agreement, or poor knowledge and participants may be geographically distant, participating anonymously and without influence from third parties on the answers.²⁻⁷

Several variations of this method have been created. It can distinguish three types of Delphi method: the consensus / classic Delphi oriented towards consensus; The Delphi dialectic/politics that tends to identify and understand different perspectives, resolving conflicts and, ultimately, the Delphi decision which is characterized by an expert panel built with decision-making experts. More variations exist depending on the study objectives, the defined panel and the type of study design. The common point among all mentioned types focuses on data search to promote decision making and problem-solving.^{2,3}

The process of applying this method is summarized as follows:

- The identification of an expert panel – differentiated and maintaining anonymity among participants; the creation of a questionnaire to be sent to this expert panel;
- The receipt of responses by the researcher, to be analysed and summarized, with the results to be returned to the expert panel together with a second questionnaire;
- New return of results of this second round;
- This procedure is repeated until consensus is reached to answer the research objective.³⁻⁶

This research method characterizes for: Enabling privileged access to expert opinion; Allow consensus to be reached; Research conducted with this method yields good response rates; Present a simple, well-tailored study design that is easily interpreted. Also, participants remain anonymous with each other, which enhances the possibilities of response without

external pressure and the feedback obtained to be motivating.

Regarding the limitations to this method it is noted that: It is not guaranteed that Delphi method studies differ from the answers obtained by any random group; isn't applied to any identified problem; The criteria for defining the expert group; The anonymity managed to enhance the participants' lack of responsibility for their responses; Its flexibility, with the absence of well-defined application guidelines; The existence of feedback tends to centralize the opinion of the participants and sharing the results of central measures may rule out the importance of extreme responses, leading to wrong conclusions.^{2-4,6}

However, the time and cost of its application vary in opinion, being consensual the dependence on the type of study.⁶

Material and Methods

This study starts from an integrative literature review, which allows us to include research data in an organized way, on a particular theme. In this case, it was based on scientific documentation in the EBSCO host – Research Databases database by the platform of the Universidade Católica Portuguesa, Lisbon, on May 15th, 2016; complemented by technical documentation of books and other previously accessed articles. This review aims to understand the contribution of using the Delphi Panel method in Palliative Care studies, presenting the following research question: What is the contribution of the Delphi method in palliative care research?

The information was synthesised, interpreted and contextualized with a view to the defined objective response.⁸

From research started with descriptors, including the area of nursing and palliative care, the absence of results guided the research to the use of the following keywords: *Delphi study* and *palliative care* – Figure I.

From the 44 results obtained a selection by title and abstract was applied considering the inclusion criteria – a study in palliative care, applying the Delphi panel method, in Portuguese or English – and the exclusion criteria – not having full text available and not fitting the desired area of study. Eight articles were selected from the 26 actual results since the 44 identified were not fully presented after viewing the results: 13 duplicate articles, four full-text articles and 1 study in German (Figure II).

Figure I – EBSCO research plan

1	delphi AND method AND technique AND research AND palliative: 2,816 results
2	delphi AND method OR technique AND research AND palliative: 29,595,306 results
3	delphi AND method OR technique AND research AND palliative <i>in title</i> : 0 results
4	delphi AND method OR technique AND research AND palliative <i>in abstract</i> : 0 results
5	delphi AND method AND technique AND research AND palliative <i>in title</i> : 0 results
6	delphi AND method AND technique AND research AND palliative <i>in abstract</i> : 0 results
7	delphi AND research AND palliative: 4,330 results
8	delphi AND research AND palliative <i>in title</i> : 0 results
9	delphi AND research AND palliative <i>in abstract</i> : 0 results
10	delphi AND palliative: 4,608 results
11	delphi AND palliative <i>in title</i> : 0 results
12	delphi AND palliative <i>in abstract</i> : 0 results
13	delphi study: 101,772 results
14	palliative care: 324,507 results
15	delphi study AND palliative care: 4,321 results
16	delphi study AND palliative care <i>in abstract</i> : 445 results
17	delphi study AND palliative care <i>in title</i> : 44 results

The data obtained came from Medline with Full Text, CINAHL Plus with Full Text and ScienceDirect (Table I).^{9,10}

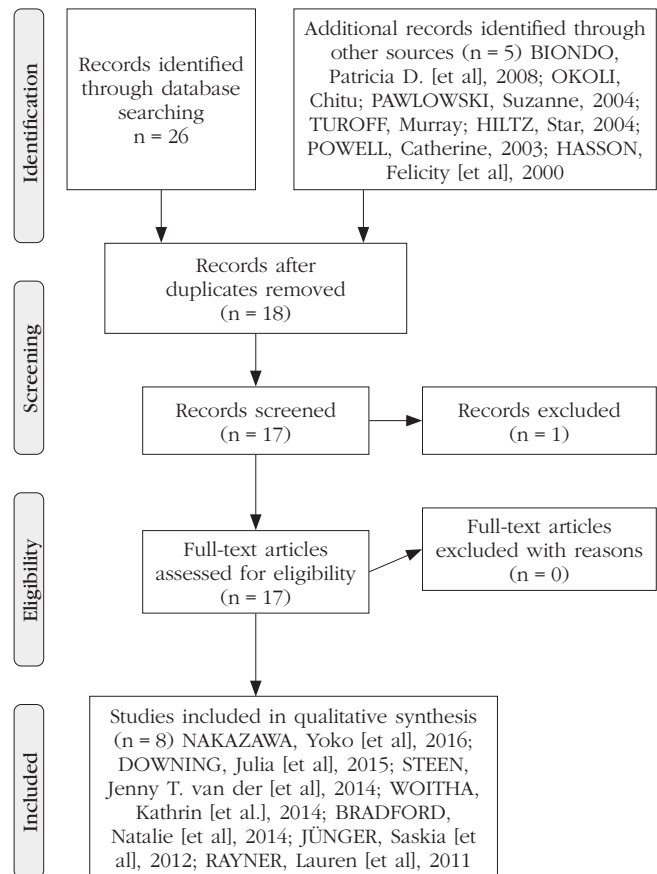
Some of the theoretical contributions were obtained by bibliographic research in the João Paulo II University Library, at the Universidade Católica Portuguesa and provided as printed documentation on the subject.

Results

In the selected articles, we can find different types and applications of the Delphi panel. Varying between the Delphi method and the modified method – the latter considered by the difference in the number of rounds, less than five^{2,3} – primarily applied asynchronously, by using tools that maintain the anonymity of participants, such as online surveys and using two to five rounds in their study design.

Public health support in a European country seeking to improve palliative care relied on a three-

Figure II – PRISMA Diagram



-round Delphi panel design with 107 participants involved at different levels of care, starting with meeting proposed actions for each of the objectives to be achieved and subsequent evaluation of the relevance of consensual actions, ending with their prioritization. In this case study, the method was used for its applicability in problem-solving and maintaining anonymity of the participants, not influencing the answers. The results obtained were useful in enabling the creation of a basic platform for the development of care. Priority was given to valuing the close collaboration between primary care and specialized palliative care services.¹

In Japan, in order to create quality indicators in the provision of palliative care to cancer patients, the use of a questionnaire based on a modified Delphi three-round panel study successfully defined indicators.¹¹

Another study using this method, in a modified Delphi panel considered the purpose of validation of quality indicators, including the Europall project, with seven European countries, encompassed. For the enjoyment of geographically distant elements, 56 quality indicators were organized and structured

Table I – Studies analysis from integrative literature review

Database	Title	Periodic	Conclusions
<i>Science Direct</i>	BEHMANN, Mareike [et al] – Public health actions to improve palliative care in Germany: Results of a three-round Delphi study.	Health Policy [In line]. Vol.106 (2012), p. 303-312.	Study using three Delphi panel rounds to bring together proposals for action to improve palliative care in Germany in public health and yielded useful results that valued the close collaboration between primary care and specialized palliative care services.
<i>MEDLINE</i>	BRADFORD, Natalie [et al] – Components and Principles of a Pediatric Palliative Care Consultation: Results of a Delphi Study.	Journal of Palliative Medicine [In line]. Vol.17, n° 11 (2014), p. 1206-1213.	The definition of the best pediatric palliative care was the objective of this study, which sought the consensus of a set of experts in a set of five Delphi panel rounds, having defined components and principles of application of palliative care in this area, with application in the area. of education and research.
<i>CINAHL Plus with Full Text</i>	DOWNING, Julia [et al] – Priorities for global research into children's palliative care: results of a International Delphi Study.	BMC Palliative Care [In line]. Vol.14, n° 36 (2015), p.1-10.	In a pediatric context with emerging needs, this study uses the Delphi Panel in two rounds to seek a rigorous definition of global research priorities in Pediatric Palliative Care. The definition of research areas was achieved and thus promoted the motivation and orientation of future research.
<i>Science Direct</i>	JÜNGER, Saskia [et al] – Consensus Building in Palliative Care: A Europe-Wide Delphi Study on Common Understandings and Conceptual Differences.	Journal of Pain and Symptom Management [In line]. Vol.44, n° 2 (2012), p. 192-205.	From the different perspectives of palliative care in Europe, a consensus was reached in terms of norms and standards for European palliative care. This study used the Delphi Panel in two rounds, via online, concluding by the contribution of this method in response to the goal set.
<i>Science Direct</i>	NAKAZAWA, Yoko [et al] – Population-Based Quality Indicators for Palliative Care Programs for Cancer Patients in Japan: A Delphi Study.	Journal of Pain and Symptom Management [In line]. Vol. 5, n° 4 (2016), p. 652-661.	In the Japanese context we searched for indicators of evaluation of palliative care, hitherto undefined. This paper presents a study based on the modified Delphi model, in which three interactive rounds made it possible to define quality indicators, with a view to enhancing care for cancer patients.
<i>CINAHL Plus with Full Text</i>	RAYNER, Lauren [et al] – Expert opinion on detecting and treating depression in palliative care: A Delphi study.	Palliative Care [In line]. Vol.10 (2011), p. 1-10.	Applied in the area of depression in palliative care, a Delphi study sought to gather the best information on the development of best practices in depression management, and did not gain consensus on expert opinion, suggesting the need for randomized data clarification studies. of evidence-based practices.
<i>CINAHL Plus with Full Text</i>	STEEN, Jenny T van der [et al] – White paper defining optimal palliative care in older people with dementia: A Delphi study and recommendations from the European Association for Palliative Care.	Palliative Medicine [In line]. Vol.28, n° 3 (2014), p. 197-209.	This study, with the Delphi Panel, sought in a specific area, such as caring for older people with dementia, to define what is meant by better palliative care in dementia. Delphi's Five Rounds created the first definition of palliative care in dementia.
<i>CINAHL Plus with Full Text</i>	WOITHA, Kathrin [et al] – Validation of quality indicators for the organization of palliative care: A modified RAND Delphi study in seven European countries (the Europall project).	Palliative Medicine [In line]. Vol. 28, n° 2 (2014), p. 121-129.	The validation of quality indicators in palliative care was sought in this study at European level. The modified RAND Panel Delphi process was used in two rounds with a panel of multi-professional elements, effectively obtaining quality indicators capable of measuring and comparing different organizational aspects.

for measuring and comparing organizational aspects in palliative care. It reflects the enormous potential of this method. In this study, instead of using individual experts, a multi-professional team was used, something not yet described in the modified Delphi panel.¹²

Also of European interest, the objective of creating an empirical basis to reach consensus in the distribution of palliative care, considered the Delphi method in two rounds, available online, maintaining the anonymity of participants. This method was used to facilitate consensus among experts from geographically distant points, and the authors of the study recognized its importance in providing palliative care at the European level.¹³

In the pediatric context, two studies were addressed, the first to highlight the importance of establishing evidence bases and the need to create global research priorities and the second to define the main components of consultation in pediatric palliative care. In both, the use of the Delphi method made it possible to achieve the proposed goals by creating clinical guidance elements and the identification of research areas.^{14,15}

Two other contexts considered in the selected articles were: dementia and depression in a palliative context. In five Delphi method rounds, respectively, it was possible to reach a level of consensus capable of generating the first definition of palliative care in dementia at the clinical, policy and research levels. Secondly, the use of this method proved effective in determining the level of consensus among experts in the field, not only at the clinical level but also in research. It was one of the reasons why it was considered in this study as an interactive method with 62% response level, similar to that obtained in other studies¹⁴, achieving by this method the highest consensus in the choice of antidepressants of choice.^{16,17}

Discussion

The articles analysed show essential contributions to the process of applying the Delphi method in the palliative investigation, according to BIONDO et al. The same author states that despite its successful application in this area of care, it is not very commonly used in the development of instruments, which can be corroborated considering the published literature.²

The same authors emphasize that the use of this method facilitates international collaboration, a rapid

transference of knowledge and interaction between different palliative contexts.²

This popular, flexible and structured method enhances consensus building. However, this same aspect is pointed out as a deficit, as far as consensus building is concerned. The data obtained are expert knowledge and as such, should be submitted to due validation.⁶

Also, and as verified in the studies analysed,^{11,12} the modified Delphi method has been increasingly used, and some future methodological difficulties can be predicted.⁴

Despite the limitations, the studies analyzed addressed different contexts in palliative care. The use of the Delphi method allowed the definition of concepts, the creation and validation of quality indicators in countries with differentiated health programs, from Germany to Japan. In these countries was possible to enhance the care to patients and families, favoring the choice of the context of desired care and death, the development of pediatric care and ensuring care in different age groups, considering specific areas, such as dementia and depression.

All the highlighted elements are positive and promoters of the use of this method, considering the future perspectives of its use in the development of PhD studies. The diversity of palliative care structures in Portugal, the characterization of palliative care as multi-professional and the need to mobilize different professionals about subjective opinion aspects in geographically distant contexts are elements of high demand, which this method proves to answer.² As already mentioned, the use of the Delphi method has obtained reasonable response rates,^{2,16,17} for different research instruments, from video conferencing to e-mail.

Conclusions

This review allows us to affirm the importance of the Delphi method, now in the context of palliative care and, in an innovative way, although its applicability in the Portuguese context is scarce, considering the lack of studies.

It is still a new resource in palliative care research. Its usefulness in the systematization, organization and evaluation of care contexts practices. These are prominent benefits in research with reflection in practice and the care for patients and families. Advantages of anonymously gathering participants at geographically distant points allow us to work with different care contexts, in different social quarters

and at the multi-professional level. Distinct areas in the context of health were covered in the articles obtained. It could be highlighted the diversity of the method application, with the precaution of considering the appropriate suitability of the theme to the research method, as safeguarded in literature. The research addressed is characterized by the creation of new knowledge, promoting change and practices, which reinforces the suitability of this method to the intended study context and the current level of studies.

The study limitations are the heterogeneity of contexts, the languages considered in the studies research and the research deficit in the Portuguese culture.

It is suggested the understanding of the better use of this method in the Portuguese context, knowing that the community and hospital context needs communication and work improvement. This article responds to the objective of this study, considering that it is essential to keep up research on this topic, namely its application in the construction of health instruments in Portugal.

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