Nurses Barriers to Evidence-Based Practice in Palliative Care: A Systematic Review

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Research Article

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Abstract

Background

Research shows low EBP uptake among palliative care nurses, which is a global concern because the demand for palliative care services is rising, raising the urgent need to improve healthcare quality. Promoting EBP uptake in palliative care can improve healthcare quality. This systematic review investigated nurses’ barriers to EBP implementation in palliative care.

Method

PubMed and Google Scholar were used to identify six articles. Articles were included for review if published within the past ten years (English-only) and investigated barriers to EBP implementation in palliative care.

Results

Four barriers were identified: (a) time and resource constraints, (b) lack of readiness for organisational change, (c) negative attitudes towards palliative care, and (d) process-specific difficulties.

Conclusion

The findings of this systematic review can be used to inform policy changes to improve the uptake of EBP in palliative care.

Introduction

Evidence-based practice (EBP) in nursing refers to no gap between what nurses know and do (Duncombe, 2018). Nurses are trained to rely on scientific evidence to inform practice, but there are concerns that they continue to rely on traditions (Duncombe, 2018). EBP nursing has been linked to better patient outcomes, safety, and healthcare quality (Melnyk et al., 2017). Therefore, nurses jeopardise healthcare quality, patient outcomes, and safety when they lack EBP competencies. This review investigates nurses’ barriers to EBP in palliative care settings.

There is a growing demand for palliative care services worldwide (Riahi and Khajehei, 2019). Therefore, quality concerns, safety, and improved patient outcomes in palliative must be addressed. Palliative care is very complex because patients at the end of life have many physiological, psychological, spiritual, and social needs that must be addressed simultaneously in the face of the complex multimorbidity (Visser et al., 2015). It is challenging to draw evidence from randomised controlled trials (RCTs) that investigate the effectiveness of interventions. Every patient in palliative care is unique. Hence, drawing evidence from RCTs may sometimes be challenging regarding the generalisability of findings from one patient to another. The rationale for conducting this systematic review is elaborated on below.

Rationale

The primary rationale for investigating nurses’ barriers to EBP in palliative care is the rising demand for quality palliative care services (World Health Organisation (WHO), 2021). In Israel, the growing demand for palliative care needs has prompted the government to introduce the palliative care advanced practice nursing to bridge the current care quality gap due to the under-utilisation of EBP (Collett et al., 2019). Statistical projections also indicate that globally, the demand for palliative care will increase significantly due to the rising prevalence of serious health-related illnesses requiring palliative care services (Centeno & Arias-Casais, 2019). By 2060, it is estimated that more than 48 million people will die every year from severe health-related diseases that require palliative care services (Centeno & Arias-Casais, 2019). Research also shows that it has been highly challenging to maintain quality care in palliative settings due to the evolving nature of the practice (Pantilat et al., 2017). This trend has been associated with an inefficient use of palliative care resources and low sustainability of palliative care services (Pantilat et al., 2017). Since EBP has been associated with improved patient outcomes and healthcare quality (Melnyk et al., 2017), it is imperative to investigate nurses’ barriers to EBP in palliative care and what can be done to improve the uptake of EBP.

Aim and Objectives

The aim of this systematic review is to identify nurses’ barriers to EBP in palliative care. The following objectives were addressed:

1. To examine the global demand for palliative care services.
2. To identify nurses’ barriers to EBP in palliative care.
3. To explore nurses’ facilitators of EBP in palliative care.

Methods

Search Strategy
Articles were searched on Google Scholar and PubMed. Google Scholar indexes scholarly materials from various journals found online, whereas PubMed is a publicly-available database indexes journal articles in various healthcare sciences. The following keyword combination was used on PubMed: (evidence-based practice OR EBP) AND (palliative care OR long-term care) AND (barrier OR challenges). On Google Scholar, the Boolean connectors “AND” and “OR” were not applied. Instead, the keywords were put on the search bar using quotation marks separated with whitespaces without commas. Keywords and synonyms were searched one at a time to optimise the search process. Bibliographies of relevant articles were also searched.

**Inclusion and Exclusion Criteria**

Articles were selected for review if published in English, peer-reviewed, and about nurses' barriers to EBP in palliative care settings. Only primary studies were selected for review. Hence, secondary research, such as systematic reviews, scoping reviews, and all other types of literature reviews, were excluded. Governmental publications, organisational reports, and student dissertations/theses were excluded. Studies conducted in long-term care settings without implications of end-of-life care were also excluded. Table 1 below presents the inclusion and exclusion criteria used.

| Inclusion | Exclusion |
|-----------|-----------|
| Publication date: 2012-2022 | Grey literature: governmental publications, organisational reports, and student dissertations/theses |
| Language: English only | Setting: Long-term care/nursing homes/homecare without end-of-life care |
| Population: Cancer and non-cancer patients | Secondary research: systematic reviews, meta-analyses, scoping reviews, literature reviews, integrative reviews, et cetera. |
| Country: Global | |
| Age group: All | |
| Setting: Palliative care | |
| Research design: qualitative, quantitative, mixed-methods | |
| Type: Peer-reviewed | |
| Subject: Nurses’ barriers to EBP | |

After applying the search strategy outlined above, the identified articles were screened using the inclusion and exclusion criteria, yielding six articles. Initially, 11 citations were identified on PubMed and 89 citations on Google Scholar after title screening. Twenty-one items were eliminated because they were duplicates – reporting the same research findings in different article versions or between PubMed and Google Scholar. Eventually, abstracts of 79 articles were screened, whereby 59 records were removed because they missed one or more inclusion/exclusion criteria. The remaining 20 articles were sought for full-text removal, whereby one of them was unavailable. The remaining 19 articles’ full texts were screened using the inclusion and exclusion criteria, whereby one article was excluded because it was a governmental publication, two articles were published in non-English languages, and ten of them were irrelevant because they did not provide the required setting or the focus of the articles could not imply nurses’ barriers to EBP practice in palliative care. Figure 1 below presents a summary (PRISMA flowchart) of the search process.

**Quality Assessment of Papers**

Since studies of various research designs were selected for this systematic review, it was vital to use a quality assessment tool that accommodates various research designs. The CASP (Critical Appraisal Skills Programme) checklists were preferred in this project (Brice, 2018). CASP has eight checklists for various research methodologies, such as qualitative studies, randomised controlled trials, and case-control studies (Brice, 2018). The tool helps assess the methodological rigour of various research studies.
Data Analysis

A thematic analysis approach proposed by Braun and Clarke (2006) was used to identify and collate codes concerning nurses’ barriers to EBP in palliative care. After assessing the methodological quality of the studies, the next step entailed reading them one more to gain familiarity with their data. Second, initial codes were generated from the results and discussion sections of the articles. Codes were assigned based on how the authors implied a barrier to EBP in palliative care. Third, closely related codes were put together to form a more abstract theme, which means when the narrative around each code is combined with another, they provide a bigger picture of the whole issue. Finally, the themes were reviewed, named, and then defined appropriately. The reviewing process entailed cross-checking the codes assigned to each theme to ensure they were relevant enough; in the process, some thematic codes were dropped and replaced with others. Themes were defined based on the bigger picture generated after combining various thematic codes.

Ethical Considerations

The studies used in this systematic review are publicly available, and the researcher was not directly involved with participants in such studies. Therefore, the primary ethical concern in this systematic review was plagiarism. All information obtained from primary and secondary sources was acknowledged appropriately using APA in-text and referencing guidelines.

Results

Characteristics of Selected Studies

Coffey et al. (2021) conducted a mixed-methods study using a pre-post design. They aimed to explore barriers to EBP in dementia palliative care. Dalberg et al. (2013) conducted qualitative focus groups with paediatric oncology providers to identify barriers and facilitators of integrating an EBP-based model into their routine practice. Kernohan et al. (2018) interviewed palliative care researchers in Ireland to identify barriers to successful knowledge transfer in EBP in palliative care. Nilsen et al. (2018) conducted interviews with nursing home managers to explore barriers to and facilitators of EBP in palliative care in nursing homes. Rankin et al. (2015) conducted qualitative interviews with healthcare professionals to identify barriers to and facilitators of implementing an EBP-based clinical pathway in a palliative care setting. Finally, Temkin-Greener et al. (2015) undertook a descriptive quantitative study whereby they asked palliative care clinicians to identify the usefulness of various EBP-based clinical guidelines. Their study was relevant to this systematic review because the participants were also asked to indicate some barriers to implementing the clinical guidelines in their settings. Table 2 below provides a complete description of the various characteristics of the studies, namely the research design used, sample size, country, data collection, data analysis, findings, quality assessment findings, and critical appraisal (strengths and weaknesses).

Quality Assessment Findings

The cut-off score of the methodological quality of the selected studies was 65%. As shown in Table 2 below, all the studies met the cut-off; one study scored 91.67% (Rankin et al., 2015), Kernohan et al. (2018) scored 83.33%, three scored 75% (Coffey et al., 2021; Dalberg et al., 2021; Nilsen et al., 2018). The study with the least methodological quality scored 66.67% (Temkin-Greener et al., 2015). Before presenting the synthesis of the findings, it is worth mentioning that Coffey et al. (2021) used a mixed-methods approach. Still, the CASP checklist for qualitative studies was used to assess it because findings from the qualitative part of the study were used in this systematic review. Also, CASP does not provide a checklist for descriptive (quantitative) studies. Instead, Temkin-Greener et al. (2015) study was assessed using the checklist for cohort studies.

Table 2.

Summary of the characteristics of the selected studies.
| Authors (Date)          | Country       | Research Design          | Sample Size                                                                 | Data Collection                                                                 | Data Analysis                                                                                                                                                                                                 | Findings                                                                                       | Quality Assessment | Critical Appraisal                                                                                                                                                                                                 |
|------------------------|---------------|---------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coffey et al. (2021)   | Ireland       | Mixed-methods (pre-post study) | 59 nurses were surveyed; three directors of nursing were interviewed        | Questionnaires (quantitative part); interviews (qualitative part)               | Comparisons between before and after programme implementation were done using chi-square test; deductive content analysis                                                                                     | The main barriers identified were (a) time and resource constraints and (b) lack of readiness to change                                                                                           | 75%                | The mixed-methods approach improved the methodological rigour of the studies                                                                                                                                   |
| Dalberg et al. (2013)  | United States | Qualitative research (phenomenology) | Seven nurse practitioners                                                      | Four focus groups                                                               | Qualitative thematic analysis                                                                                                                                                                                                                                            | Process-specific difficulties due to team ineffectiveness was the main barrier to EBP in palliative care                                                                                          | 75%                | The study used a sample of seven nurse practitioners, which is a relatively small sample size to generate generalisable findings.                                                                           |
| Kernohan et al. (2018) | Ireland       | Qualitative research (phenomenology) | 15 palliative care researchers (PhD holders)                                | Qualitative semi-structured interviews                                           | Qualitative thematic analysis                                                                                                                                                                                                                                            | Barriers identified: (a) time and resource constraints; (b) negative attitudes towards palliative care                                                                                         | 83.33%             | The main limitation of their study is that the voice of nurses directly involved in palliative care was not used.                                                                                                   |
| Nilsen et al. (2018)   | Sweden        | Qualitative research (phenomenology) | Five palliative care nurses                                                   | Qualitative semi-structured interviews                                           | Conventional content analysis                                                                                                                                                                                                                                            | Three barriers identified: (a) time and resource constraints; (b) negative attitudes towards palliative care; (c) lack of readiness to change.                                                | 75%                | The small sample of palliative care nurses may lack generalisability                                                                                                                                         |
| Rankin et al. (2015)   | Australia     | Qualitative research (phenomenology) | Three nurses                                                                 | Qualitative semi-structured interviews                                           | Qualitative thematic analysis                                                                                                                                                                                                                                            | The main barrier that was identified in their study was time and resource constraints                                                                                                               | 91.67%             | They used a sample of palliative care nurses recruited through purposive sampling. Therefore, their study's findings may lack generalisability                                                                   |
| Temkin-Greener et al. (2015) | United States | Quantitative descriptive study | Eleven directors of nursing, nine nurse managers, and three nurse practitioners | Two-item questionnaire using Likert scales                                        | Descriptive statistics                                                                                                                                                                                                                                                  | The main barrier identified in their study was time and resource constraints                                                                                                                        | 66.67%             | The main weakness is that the study did not investigate in causal relationship to help understand the origin of the barrier identified.                                                                        |
Synthesis of Findings

Four barriers were identified from the thematic analysis of the six articles: (a) time and resource constraints, (b) negative attitudes towards palliative care, (c) lack of readiness to change, and (d) process-related difficulties. They are elaborated on below.

Barrier 1: Time and Resource Constraints

Five out of six studies indicated that time and resource constraints were a significant barrier to nurses’ implementation of EBP in palliative care settings (Coffey et al., 2021; Kernohan et al., 2018; Nilsen et al., 2018; Rankin et al., 2015; Temkin-Greener et al., 2015). Coffey et al. (2021) argued that work-based learning groups could facilitate the uptake of EBP in palliative care. However, they discovered that nurses inconsistently attended to them due to time and resource constraints (Coffey et al., 2021). Their observations are consistent with Kernohan et al. (2018). They also demonstrated that knowledge transfer could improve the uptake of EBP in palliative care but professionals, majorly nurses, indicated lack of time and resources as the primary barrier. The same sentiments were shared by Nilsen et al. (2018), Rankin et al. (2015), and Temkin-Greener et al. (2015). Thus, it can be concluded that time and resources are the most frequent and common barriers to nurses’ EBP implementation in palliative care.

Barrier 2: Negative Attitudes Towards Palliative Care

Two studies demonstrated that palliative care nurses who had negative attitudes towards palliative care were likely to be less motivated to implement EBP (Kernohan et al., 2018; Nilsen et al., 2018). While investigating facilitators of and barriers to scientific knowledge transfer in palliative care settings, Kernohan et al. (2018) implied that professionals who were sceptical about the value of research were less likely to implement EBP. Nilsen et al. (2018) also discovered that professionals’ resolve to pursue EBP guidelines amid numerous concurrent changes in work hindered nurses from implementing EBP in palliative care. In other words, palliative care nurses need to have positive attitudes toward EBP guidelines to implement them passionately.

Barrier 3: Resistance to Change

Two studies implied that resistance to change is a barrier to nurses’ EBP implementation in palliative (Coffey et al., 2021; Nilsen et al., 2018). Coffey et al. (2021) demonstrated that palliative care administrators were themselves resistant to the changes brought about by active EBP implementation. The authors quoted one of the participants, who said, “had a background in [palliative care training] already, so I suppose what it did was to give us the confidence to keep on doing what we were doing” (Coffey et al., 2021, p.5). Coffey et al. (2021) showed a resistance to change with attitudinal origins, which is why this barrier can be linked to Barrier 2 above. On the contrary, Nilsen et al. (2018) demonstrated a type of resistance to change related to a lack of readiness to implement EBP due to issues, such as lack of EBP competency.

Barrier 4: Process-Related Difficulties

Only one study implied that process-specific difficulties hinder nurses from implementing EBP in palliative care (Dalberg et al., 2013). Dalberg et al. (2013) argued that EBP implementation requires technical competencies that many palliative care nurses may not have. Barrier 4 is closely connected to Barrier 3 in that it is also about confidence and competency in implementing EBP. These findings are discussed in the next section below.

Discussion

Application to Nursing Practice

The findings can be used to design effective interventions to improve the uptake of EBP in palliative care nurses. For instance, nursing leaders in palliative care can develop EBP training modules and offer them to nurses. Inefficient EBP knowledge transfer can be addressed by allocating sufficient resources and time to participate in collective learning. Such educational programmes can address negative attitudes, resistance to change, and process-related difficulties.

Directions for Future Research

Time and resource constraints were identified as the most common barrier to EBP implementation in palliative care in various countries. However, only one study supported Barrier 4, process-related difficulties. The main process-related difficulty identified was the lack of confidence and competency in EBP implementation. Future research should focus on developing an EBP knowledge assessment tool that can evaluate the educational needs of palliative care nurses. Nursing leaders can use the tool to identify and address the educational needs of nurses. Also, future research should investigate more process-related barriers since only one was identified in this review.

Policy Implications

The primary policy implication of the findings of this systematic review is that there is a need to improve the nursing curriculum on EBP to improve EBP skill acquisition among palliative care nurses during their training. Another implication is that nursing leadership in palliative should develop policies
to enhance EBP knowledge transfer among nurses and other professionals. This approach can enhance EBP uptake even when nurses lack EBP-based skills and competencies.

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Figures
Figure 1

PRISMA flowchart showing how the six articles were selected.