Exploring the factors that affect new graduates’ transition from students to health professionals: a systematic integrative review protocol

Eric Nkansah Opoku 1,2, Lana Van Niekerk 1,2, Lee-Ann Jacobs-Nzuzi Khuabi 1,2


ABSTRACT

Introduction To become a competent health professional, the nature of new graduates’ transition plays a fundamental role. The systematic integrative review will aim to identify the existing literature pertaining to the barriers during transition, the facilitators and the evidence-based coping strategies that assist new graduate health professionals to successfully transition from students to health professionals.

Methods and analysis The integrative review will be conducted using Whittemore and Knafl’s integrative review methodology. Boolean search terms have been developed in consultation with an experienced librarian, using Medical Subject Heading terms on Medline. The following electronic databases have been chosen to ensure that all relevant literature are captured for this review: PubMed, EBSCOhost (including Cumulative Index of Nursing and Allied Health Literature (CINAHL), Medline, Academic Search Premier, Health Science: Nursing and Academic Edition), Scopus and Web of Science. A follow-up on the reference list of selected articles will be done to ensure that all relevant literature is included. The Covidence platform will be used to facilitate the process.

Ethics and dissemination Ethical approval is not required for this integrative review since the existing literature will be synthesised. The integrative review will be published in a peer-reviewed journal once all the steps have been completed. The findings will also be presented at international and national conferences to ensure maximum dissemination.

INTRODUCTION

The transition from undergraduate student to health professional is recognised as a period of great stress for the new graduate. On commencing clinical practice, new graduates enter a relatively new and often challenging environment. They have to make substantial adjustments from being students whose procedures and activities were supervised in a controlled environment to practising independently as qualified health professionals. This change in status from a student to a health professional is marked by changes in both roles and expectations, which requires that the theoretical knowledge acquired in school be transferred to the practice context. Furthermore, new graduates are expected to plan and implement relevant client treatment programmes. This transition has been described as a period of stress, requiring effective management of conflicting values and role uncertainty.

In a phenomenological study conducted by Brennan et al in the UK, junior doctors who participated in the study described their transition from medical students to junior doctors as extremely stressful; both physically and emotionally. The study highlighted that participants were overwhelmed with feelings of anxiety due to uncertainty about their...
clinical decisions including diagnosis and treatment. Inadequate preparation for this transition may cause the new health professional’s therapy to be ineffective.

The transition to practice for new graduates was described as gradual and complex, involving a complete transformation particularly in the first year after graduation. A thorough literature review by McCombie and Antanavage established that new graduates experience low personal and professional confidence, particularly at the initial stage of the transition. A phenomenological study by Seah et al. reported that all participants experienced shock on starting work due to the confusing nature of the hospital facility operations, administrative requirements, expectations of other health professionals and professional title.

To become a competent health professional, the nature of a new graduate’s transition plays a fundamental role. Several strategies have been identified in the literature to alleviate the challenges inherent in transition into practice. Supervision has been consistently emphasised as significant during transition. In occupational therapy, supervision has been shown to contribute to new graduates’ ability to relate their acquired knowledge to practice. Hummel and Koelmeyer conducted a quantitative cross-sectional study among occupational therapists (n=74) in Australia to investigate their perceptions, regarding their first year of practice. They found that formal supervision by an experienced health professional, who is capable of providing essential feedback and support, was considered a vital component of a successful transition and fundamental to the new graduate’s perceived success at work. Tryssennaar and Perkins also found supervision to be a vital component to promoting competency. Also in the nursing profession, consistent emphasis has been placed on supervision as an effective strategy to help new graduate nurses to relate the knowledge acquired in the classroom to practice. Thus, effective supervision equips new practitioners with competencies that are relevant to clinical practice supported the transition into practice.

Aims and objectives

This integrative review aims to identify research conducted in the last two decades (1999–2019) on the factors that affect newly graduated health professionals’ transition into independent practice. The specific objectives are:

- To determine the challenges associated with new health graduates’ transition into practice.
- To identify the factors that facilitate transition of new health graduates into practice.
- To describe the coping strategies employed by new graduates to ensure successful transition into practice.

METHODS AND ANALYSIS

The integrative review will be conducted using Whittemore and Knaff’s integrate review methodology as a guide. This methodological framework comprises five...
stages: (1) problem identification, (2) literature search, (3) data evaluation, (4) data analysis and (5) presentation.

**Problem identification**
The nature of a health professional’s transition into independent practice is critical to development of clinical competence. There is wealth of literature on the transition of new graduates into practice for health professionals from diverse backgrounds. This integrative review will explore the factors that affect newly graduated health professionals’ transition into practice comprehensively. To capture the scope and the diversity of available literature, three broad research questions were developed to guide this review. These are:

- What types of challenges do new health graduates face during transition into practice?
- What factors facilitate the transition of new health graduates into practice?
- What coping strategies do new health graduates employ to ensure successful transition into practice?

**Literature search**
A search will be done to identify literature from electronic databases. Hand searches will be done to retrieve literature that were not found in the databases. Additionally, a follow-up of the reference lists of the included articles will be done to ensure that all relevant literature are included in the review.

Taking the research question and purpose into consideration, the following electronic databases have been chosen for the search for relevant literature for this review: PubMed, EBSCOHost (including CINAHL, Medline, Academic Search Premier, Health Science: Nursing and Academic Edition), Scopus, Cochrane and Web of Science. These databases and search terms were selected in consultation with an experienced subject librarian. The search terms include Medical Subject Heading terms on Medline (see table 1).

An initial search was done on 3 April 2019 to check the suitability of the search string. These results are presented in table 2. Limiters applied were Published (January 1999 to April 2019), SmartText searching and Language (English only).

The search will be done using the abstract/title field and will include articles published within the last two decades. Hand searching of the reference lists of included articles will be done to ensure that all articles relevant to the study are included.

**Inclusion criteria**
The review will include only research articles published in English within the last two decades (1999–2019). There will be no restriction by country. Preliminary inclusion and exclusion criteria have been developed as a guide in the selection of studies for this review. These are presented in table 3.

Only primary studies on transition of new graduate health professionals into practice, when education has been completed, will be included. This is the period between starting work as a supervised novice to being a competent health professional who has completed the transition. Figure 1 illustrates the period of transition into practice.

**Data evaluation**
All studies that meet the inclusion criteria will be included in this review. Titles and abstracts of all retrieved literature will be uploaded onto Covidence, which will be used to manage the project. The Covidence platform will remove duplicates automatically before the review process will begin. Quality assessment will consider issues such as the clarity of the study aim, the participants and the relevance to answer the research questions of the proposed review. Three independent reviewers will screen all studies against the inclusion criteria to determine their eligibility to be included in this integrative review. Following the title and abstract screening, the full texts of the included publications will be uploaded for full-text screening against the same predetermined inclusion and exclusion criteria by

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**Table 1** Search strings derived from Medical Subject Heading

<table>
<thead>
<tr>
<th>TOPIC AND TOPIC</th>
<th>Search strings</th>
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<tbody>
<tr>
<td>‘New graduate’ OR ‘Novice Professional’ OR ‘Health student’</td>
<td>‘Transition’*</td>
</tr>
<tr>
<td>‘Clinical practice’</td>
<td>‘Clinical competence’ OR ‘Professional Competence’</td>
</tr>
</tbody>
</table>

**Table 2** Initial database search results

<table>
<thead>
<tr>
<th>Database</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBSCOHost</td>
<td>268</td>
</tr>
<tr>
<td>PubMed</td>
<td>109</td>
</tr>
<tr>
<td>Scopus</td>
<td>66</td>
</tr>
<tr>
<td>Web of Science</td>
<td>68</td>
</tr>
<tr>
<td>Cochrane</td>
<td>2</td>
</tr>
</tbody>
</table>

**Table 3** Provisional selection criteria

<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
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</thead>
<tbody>
<tr>
<td>Peer-reviewed research articles on new health graduates’ transition from novice to experienced health professionals.</td>
<td>Conference abstracts, doctoral theses and grey literature on new health graduates’ transition to practice.</td>
</tr>
<tr>
<td>Primary sources of systematic reviews that meet the inclusion criteria will be included.</td>
<td>Systematic or literature reviews on new health graduates’ transition to practice.</td>
</tr>
<tr>
<td>Peer-reviewed articles published in English in the last two decades.</td>
<td></td>
</tr>
</tbody>
</table>
the same three reviewers. Full-text publications which meet the inclusion criteria will be selected for data extraction. Conflicts will be resolved by consultation among the three reviewers until a consensus is reached. The Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols diagram will be used to represent the number of articles that were identified in each of the steps of the review process for visual representation.

Once consensus has been reached on eligibility, relevant data will be extracted. The primary reviewer will read each of the selected full-text publications. A data charting form, adapted from Uys et al. will be used in the extraction of the data that will answer the research questions and organise existing literature. To test the feasibility, the form will be tested by the lead reviewer on a random sample of the publications included in the review. Key information obtained from the full articles reviewed will be charted. For each of the included studies, the researcher will extract the following data:

1. Study characteristics: author names, publishing journal, year of study published, country of study and the population of the study.
2. Study aims, objectives and/or research questions, the study design.
3. The findings, with particular emphasis on the barriers, the facilitators and coping strategies of transition into practice.

Data analysis
An inductive and thematic approach to data analysis will be used. Weft QDA, a qualitative data analysis system, will be used to analyse and categorise the literature into theme areas. The analysis will focus on extracting themes from the following areas:

► The challenges associated with transition into practice for new health graduates.
► The facilitators of transition into practice for new health graduates.
► The coping strategies employed by new graduates to ensure successful transition into practice.

Presentation
Once the data evaluation and extraction process have been completed, the study findings will be presented in the form of descriptions and narrations. Given the likely heterogeneity of studies that will be included in this study, narrative summaries of the characteristics of each study will be presented. The findings will be synthesised and written up into a coherent article.

Patient and public involvement
The proposed integrative review will not have any patient or public involvement.

DISCUSSION
The researchers anticipate that the findings of this integrative review will contribute to advancing knowledge of the barriers, the facilitators and the coping strategies of transition into practice. These can enable clinical supervisors, academics and policymakers to better understand challenges faced and strategies that can assist novice health professionals. Students and new graduates in health sciences might be informed of the obstacles that they are likely to encounter when they commence practice after graduation. They might also be informed of the facilitators and coping strategies that have been found to assist transition into practice. Findings from this study might also inform curriculum development to better prepare students for transition into practice.

Ethics and dissemination
Ethical approval is not required for this integrative review since existing literature will be synthesised. Once all the steps have been completed, the integrative review will be published in health professional education or practice journal. The findings will also be presented at international, national and local conferences.

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Contributors All three authors of this article contributed to the conceptualisation, drafting, development and editing of this integrative review protocol. ENO drafted the initial protocol manuscript as part of his master’s degree, LVN and L-AJ-NK guided the development of the protocol and made substantial conceptual and editing contributions and have approved this manuscript. All researchers contributed to all drafts of the manuscript and will be involved in screening and extracting the data once the integrative review commences. The researchers are all committed to being accountable for all aspects of this protocol.

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Patient consent for publication Not required.

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Figure 1 Period of transition into practice illustration.
REFERENCES


