Exploring the transition from student to clinician by the first cohort of locally trained occupational therapists in Ghana.

By

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DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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ABSTRACT

Background: The nature of a new clinician's transition from student to clinician is a significant determinant of the ease or difficulty of the journey to professional competence. Transition into practice for the new graduate has been described as a complex experience characterised by periods of stress and anxiety. In Ghana, after several failed attempts to establish occupational therapy services, the Ministry of Health in collaboration with the University of Ghana started an undergraduate programme in Occupational Therapy in 2012 (the first of its kind in the West African sub-region) to educate occupational therapists locally. This exploration of the experiences of transition into practice for the first cohort of locally trained occupational therapists was important because they worked autonomously and in a self-directed manner in their first year of practice after graduation, in a country where occupational therapy had not been established.

Aims and objectives: The aim was to explore the experiences of the first cohorts of locally trained occupational therapists during transition from being students to clinicians within the first year of their practice in Ghana. The objectives were to explore the challenges and facilitators of their transition, the coping strategies employed to effectively manage the challenges they encountered and their experiences of continued professional competence.

Methodology: The research comprised of three stages; stage one was to develop a systematic scoping review protocol to explore the factors that affect new clinicians' transitions into practice. In stage two, the scoping review was conducted to synthesize literature published in the last two decades on the transitions of new clinicians into practice. The focus was to determine the challenges and facilitators of new clinicians' transitions from student to clinician and the evidence-based coping strategies that can be employed to ease the transition. Stage three was a phenomenological study aimed at exploring the transition from students to clinicians by the first cohort of occupational therapists in Ghana. Two in-depth interviews were

done with each participant. Inductive content analysis was used to analyse the data into four overarching themes. Ethical approval was obtained from the Health Research Ethics Committee of Stellenbosch University prior to conducting this study.

Results: In the scoping review, 562 studies were initially identified, relevant data was extracted from 24 studies that met the inclusion criteria and were analysed to form this review. Four overarching themes emerged namely: systems and structures, personal capacities, professional competence and mediating processes. Each theme revealed the barriers, facilitators and coping strategies of transition into practice among new health graduates. In the phenomenological study, four themes emerged: 'Being "new" in a new profession', 'Introducing occupational therapy into a medical model health system', 'Personal and professional competence,' and "The future is bright". New graduates found continued professional competence activities essential for successful transition into practice.

Conclusions and recommendations: New graduates needed assistance to translate knowledge into practice. New graduates lacked adequate supervision given the lack of practicing occupational therapists to fulfill supervisory roles. What was evident from the findings is that, well-organized collaboration between undergraduate university educators, leadership and management of health facilities, other health professionals and the new graduates can facilitate a successful transition into practice. Future research is needed to explore the transition of other cohorts of occupational therapy graduates to explore if they had similar experiences. This will allow for a more holistic understanding of students transition into practice to generate further suggestions to enrich occupational therapy education and practice in Ghana.

ABSTRAK

Agtergrond:

Die aard van 'n nuwe klinikus se oorgang van student na kliniese praktisyn is bepalend van die gemak of moeite waarmee die oorgang na ‘n professionele vaardigheidsvlak gemaak word. Die oorgang van student na klinikus vir die nuwe gegradueerde word beskryf as 'n komplekse ervaring wat gekenmerk word deur tye waarin spanning en angs ervaar word. Na verskeie mislukte pogings om arbeidsterapie te vestig in Ghana het die Ministerie van Gesondheid in samewerking met die Universiteit van Ghana in 2012 'n voorgraadse program in arbeidsterapie gevestig (die eerste in sy soort in die Wes-Afrikaanse deelstreek) om arbeidsterapeute op te lei. Hierdie studie het die eerste groep arbeidsterapeute se ervarings tydens hulle oorgang van student na klinikus ondersoek, wat belangrik was omdat hulle outonoom en self-gerig moes werk vanaf die eerste jaar na hul gradeplegtigheid in 'n land waarin arbeidsterapie nog nie gevestig was nie.

Doelstellings en doelstellings: Die doel was om die ervarings van die eerste groep arbeidsterapeute te ondersoek tydens hul oorgang van student na klinikus binne die eerste jaar van praktykvoering in Ghana. Die doelwitte was om die uitdagings en fasiliteerders van hul oorgang te ondersoek, die hanteringstrategieë wat hulle gebruik het om die uitdagings wat hulle teëgekom het effektief te bestuur en hul ervarings van voortgesette professionele bevoegdheid te ondersoek.

Metodologie: Die navorsing het drie fases beslaan. Fase een was die ontwikkeling van 'n sistematiese oorsig-literatuurstudie protokol om die faktore wat die aanpassing van nuwe kliniese terapeute in praktykvoering beïnvloed, te ondersoek. In fase twee is die oorsig-literatuurstudie gedoen ten einde literatuur wat in die afgelope twee dekades gepubliseer is aangaande die oorgang van nuwe klinici in die praktyk te sintetiseer. Die fokus was om die

uitdagings en fasiliteerders gedurende die oorgang van student na klinikus te bepaal en die bewysgebaseerde hanteringstrategieë wat gebruik kan word om die oorgang te vergemaklik te identifiseer. Fase drie was 'n fenomenologiese studie wat daarop gemik was om die oorgang van student na kliniese terapeut vir die eerste groep arbeidsterapeute in Ghana te ondersoek. Twee in-diepte onderhoude is met elke deelnemer gevoer. Induktiewe inhoudsanalise is gebruik om die data te ontleed in vier oorkoepelende temas. Etiese goedkeuring is van die Gesondheidsnavorsingsetiekkomitee van die Stellenbosch Universiteit verkry voordat hierdie studie uitgevoer is.

Resultate: Daar is aanvanklik 562 studies geïdentifiseer in die oorsig-literatuurstudie; daarna is relevante data onttrek uit 24 van dié studies wat voldoen het aan die insluitingskriteria. Die data is geanaliseer en in die oorsig-literatuurstudie vervat. Vier oorkoepelende temas is geïdentifiseer, naamlik: stelsels en strukture, persoonlike kapasiteit, professionele bevoegdheid en bemiddelingsprosesse. Elke tema het die hindernisse, fasiliteerders en die hanteringstrategieë van oorgang na praktyk onder nuwe gegradueerdes toegelig. In die fenomenologiese studie het vier temas na vore gekom: ‘Om “nuut” te wees in 'n nuwe beroep’, ‘Arbeidsterapie in 'n mediese model gesondheidsstelsel’, ‘Persoonlike en professionele vaardighede’, en “Die toekoms is helder”. Daar is verder bevind dat nuwe gegradueerdes voortgesette professionele leeraktiwiteite noodsaaklik geag het vir suksesvolle oorgang na die praktyk.

Gevolgtrekkings en aanbevelings: Nuwe gegradueerdes het hulp nodig om hulle kennis in die praktyk toe te pas. Nuweling-gegradueerdes het nie voldoende toesighouding gehad nie, weens gebrek aan praktiserende arbeidsterapeute. Die resultate het gewys dat goed geordende samewerking tussen voorgraadse dosente verbonde aan die universiteit en die leierskap en bestuur van gesondheidsfasiliteite, ander gesondheidsorgpersoneel en die nuwe gegradueerdes 'n suksesvolle oorgang na die praktyk kan vergemaklik. Toekomstige navorsing is nodig om

die oorgang van ander groepe gegradueerdes in arbeidsterapie te ondersoek ten einde vas te stel of hulle soortgelyke ervarings sou hê. Dit sal 'n meer holistiese begrip van die oorgang na praktykvoering verskaf en verdere voorstelle genereer om arbeidsterapie-onderwys en -praktyk in Ghana te verryk.

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ABBREVIATIONS

HREC	Health Research Ethics Committee
WFOT	World Federation of Occupational Therapists
MOH	Ministry of Health
GHS	Ghana Health Service

DEFINITION OF KEY CONCEPTS

Transition into practice: Transition to practice denotes exit from the role of a student and entry into the role of a clinician (1).

Clinician: A healthcare professional who utilises a recognised scientific base and has the authority to work as a primary caregiver of a patient in a healthcare facility (2).

Intra-semester clinical placement: Clinical placements that are scheduled during the academic semester

Inter-semester clinical placement: Clinical placement scheduled during the break between two academic semesters.

School: "school" refers to an Occupational Therapy Programme offered at a University.

SECTION ONE – INTRODUCTION

INTRODUCTION

This thesis is presented in four sections. Section one introduces the research project by contextualizing the study as well as highlighting the aim and objectives of the study. The section will also present a detailed discussion of the purpose of the study, ethical considerations and trustworthiness and rigour of the study. Section two comprises an article reporting a scoping review protocol on the barriers and facilitators experienced during transition from student to health clinician and the evidence-based coping strategies that assist new graduates in this transition. Section three presents an article reporting a scoping review on the factors that affect new graduates' transition from students to clinicians. Section four presents a phenomenological study on the experience of transition from student to clinician by the first cohort of occupational therapists in Ghana.

BACKGROUND

Efforts to establish occupational therapy services in the healthcare system in Ghana dates to the late 1960s when some selected health professionals, predominantly psychiatric nurses, were sponsored by the Ghana Health Service (GHS) to study occupational therapy in the United Kingdom. On completion of their training they returned to work only in psychiatric hospitals. Occupational therapy flourished within psychiatry for over twenty years until late 1980s when the trained occupational therapists left the profession due to a financial crisis that plagued psychiatry in Ghana during that period. Subsequently, occupational therapy services were rendered in the psychiatric hospitals by occupational therapy assistants who learnt the services on-the-job as they assisted the occupational therapists. Occupational therapy had only been associated with psychiatry in Ghana. The absence of qualified occupational therapists left a huge gap in the healthcare delivery system, negatively affecting the holistic approach to

healthcare envisioned by the Ghana Health Service (3).This unsatisfactory situation made the training of occupational therapists expedient, not only to offer services in the psychiatric hospitals but also in physical settings, special schools and other healthcare settings. In solving this problem, the Ministry of Health (MOH), in collaboration with the University of Ghana, started a new Occupational Therapy Programme at the University to educate occupational therapists locally. The programme was established in consultation with experienced occupational therapists from South Africa, the United Kingdom and Tanzania as well as representatives from the World Federation of Occupational Therapists (WFOT).

In 2012, the occupational therapy programme was started with a first cohort of 20 students. This Bachelor of Science in Occupational Therapy is the first of its kind in Ghana and in the West African sub-region. The 4-year programme comprises both theoretical and practical components. Clinical placements form the main practical component of the program and involve intra-semester and inter-semester clinical placements at various public and private health facilities and special schools.

The education of occupational therapy students was faced with several challenges, including a shortage of academic staff as the programme was started with only two occupational therapy programme-specific academic staff. As a result, courses that were meant to be taught by professional occupational therapy lecturers were taught by lecturers from other professions, such as physiotherapy and speech and language therapy. Despite recognition of the potential negative effects on students' knowledge of the core concepts and philosophies of occupational therapy, little could be done to prevent the situation.

Occupational therapy students' clinical placements were constantly in settings where occupational therapy services had not been established, because the profession was not yet a part of the health system in Ghana. Occupational therapy students were supervised by other

health professionals such as physiotherapists, nurses and medical practitioners. These health professionals may have had little or no idea about the roles and scope of occupational therapy but there was no other option because of the absence of qualified practising occupational therapists in the country.

In 2016, the first cohort comprising eighteen occupational therapy students graduated from the University of Ghana. This group of occupational therapists is the first to be educated locally in Ghana and the whole of the West African Sub-region. Anecdotal evidence suggests that for this cohort of occupational therapy graduates, the first year of practice as an occupational therapist as well as the transition from student to clinician in Ghana has been a unique experience

Generally, on commencing practice as clinicians, new graduates enter a new and complex world, with differing characteristics (4). Transitioning into practice requires the transfer of the theories and skills learnt in school to the clinical context. Inadequate preparation for this transition may cause the clinician's therapy to be ineffective (4). This transition has been described as a period of stress, role conflicts and role uncertainties (5).

The complex nature of the transition from student to clinician requires that new clinicians develop professional identity and competence; a developmental process that requires support and guidance from an experienced profession-specific supervisor (6). Evidence suggests that supervision by an experienced professional, who is capable of providing essential guidance and support, is considered a significant determinant of successful transition and central to the new practitioners' perceived success at work (7)(8). Tryssenaar and Perkins (6) established that guidance from a supervisor was crucial to enable new clinicians to develop clinical skills. They also established that support from supervisors enabled new clinicians to develop strategies to

overcome professional issues relating to client case work, organizational and management issues, professional development, as well as personal and emotional issues.

Hummell and Koelmeyer (7) conducted a cross-sectional survey among 74 occupational therapists in Australia, to investigate their perceptions of practice in the first year after graduation. Their findings revealed that supervision by an experienced colleague from the same profession, who provided essential feedback and support, was crucial for new practitioners to develop professional identity and central to perceived success as new clinicians.

Tryssenaar and Perkins (6) established that supervision is a vital component to promoting job competency. Halfer and Graf (9) contended that supportive supervision and positive relationships with other professionals and co-workers were particularly important. Another important factor that affected student's successful transition to practice was the underlying presence and level of professional confidence (10). New clinicians generally had low professional confidence, especially at the point of transition from undergraduate training to professional practice as a clinician (11).

Exploring the experiences of transition into practice of the first cohort of occupational therapists in Ghana was deemed important educational research, as they worked autonomously and in a self–directed manner during their first year of employment. This group of occupational therapists did not have the opportunity of working under profession-specific supervision during educational fieldwork placements and subsequent transition after graduation. The researcher believed it was important to explore the barriers, facilitators and the coping strategies that influenced the transition of the first cohort of occupational therapy graduates into practice. Findings could assist curriculum development, clinical supervision, other new graduates' transition into practice and the overall development of occupational therapy education and practice in Ghana.

In this exploratory sequential mixed method study, the researcher aimed to conduct a scoping review on the factors that affect the transition of new graduate health professional into practice; and a phenomenological study into the experiences of transition from students to clinicians by the first cohort of occupational therapists in Ghana.

RESEARCH QUESTION

1. What factors affect new graduate health professionals transitioning into practice?
2. What were the experiences of the first cohort of occupational therapists during transition from being students to clinicians within the first year of practice in Ghana?

AIM OF THE STUDY

The aim of the research study was to conduct a scoping review on the factors that affect transition from students to health professionals, and to explore the experiences of the first cohorts of Occupational therapists during transition from being students to clinicians within the first year of practice in Ghana.

OBJECTIVES

1. To conduct a scoping review on factors (Challenges, facilitators and coping strategies) that affect transition from students to health professionals.
2. To explore the challenges and facilitators faced by the first cohort of occupational therapists in their entry into practice in Ghana?
3. To explore the coping strategies employed to effectively manage the challenges.
4. To explore participants' experiences of continued professional development.

PURPOSE OF THE STUDY

Findings from the study might provide a basis for understanding the relevance and responsiveness of the undergraduate occupational therapy curriculum in preparing new

graduates for practice within the context of Ghana. Subsequent cohorts of occupational therapy students might be in a well-informed position on what to expect after school. This might prepare them better for transitioning to practice. In addition, since occupational therapy is relatively new in Ghana and West Africa, understanding the experiences of the first cohorts of occupational therapists trained in this sub-region might assist the program and curriculum planning of new occupational therapy undergraduate programmes within other African countries. Also, because data was collected in Ghana, the findings might be relevant to inform developments in occupational therapy education and practice in other *low and middle-income countries*. There is the possibility that the findings might elucidate aspects of the transition from students to clinicians that will have value in other countries as well. Also, findings might assist policy makers, employers and supervisors in providing adequate support and guidance for new graduates.

ETHICAL CONSIDERATIONS

The following principles of ethics were upheld during the course of this research study.

AUTONOMY

The researcher obtained ethical approval from Stellenbosch Health Research Ethics Committee (HREC) before conducting this study. Participants gave informed consent prior to their involvement in this research. All potential participants received a research information leaflet which contained a clear description of the research including; the purpose, nature, data collection procedure, role of participants, potential risk, confidentiality issues and their right to autonomy. Participants were assured that participation was voluntary and that they could withdraw at any point of the study. The researcher envisioned no risk to the participants who were willing to participate. Participants were assured of confidentiality and de-identification

prior to signing the consent forms. The researcher clarified participants questions and unclear aspects of the research prior to signing the consent form. Informed consent forms were signed by the participants together with the researcher and a witness. Confidentiality was maintained in the research by using pseudonyms and password-protected computers throughout the study.

BENEFICENCE

The participants might benefit indirectly through the results and the recommendations. Also, participants might have benefited from discussing the unfolding analysis (during member checking) because the principle of universality applied. This means that, participants might have benefited from their shared experiences as they might have felt not alone in what they experienced during transition into practice. To show appreciation for participation and for their time, participants received a monetary compensation. Participants will also be given a copy of the final study report.

NON-MALEFICENCE

No undue discomfort or harm came to the participants for participation in the study. The researcher was alert to signs of discomfort. No sign of discomfort was recognised as participants felt comfortable talking about their experiences.

JUSTICE

All potential participants were given a fair chance to be selected as research participants by evaluating them against the same, prior-determined selection criteria. The researcher respected the dignity and rights of the participants throughout the research process. Participants were informed of this standard prior to the start of the data collection process and were encouraged to alert the researcher should they at any stage feel that their dignity or rights were being disrespected. There were no issues of disrespect for participants' rights and dignity throughout the research process.

RESEARCHER ASSUMPTIONS AND BIASES

The researcher of this study is an "Insider", because he graduated with the first cohort of occupational therapists in Ghana who were the participants of this study. He currently works as a Senior Research Assistant at the Department of Occupational Therapy in the University of Ghana.

There are numerous potential benefits of being an "insider" researcher identified in the literature. Due to the close association and already established community links, it may be easier for a an "insider" researcher to have access to the study participants. The researcher is viewed by the participants as a more "alike" person, minimising the influence of "difference" between the researcher and the participants. This promotes the establishment of rapport and enables reciprocity between them. It is also reported that, participants are more likely to open up when interviewed by an insider. Open dialogue results in a more in-depth data than would have otherwise been gained by an outsider. Insider researchers are also considered to have tacit knowledge as a result of their familiarity with the research participants which informs the research and promotes a greater understanding. The objectivity, authenticity and reflexivity of the research is increased because the researcher is close to the research project (12,13).

Challenges associated with being an "insider" researcher have also been identified in the literature. In as much as being an insider grants easy access to participants, some participants may not feel comfortable opening up to an insider and may prefer the anonymity of an outsider(14). Also, the insider researcher's familiarity and similarity to the participants can cause presumptions(14) causing inadvertent failure to seek or provide enough details during data collection consequently ruling out effective in-depth analysis(12). The insider researcher may lack the objectivity required to ensure accurate findings, unless effective strategies are put in place to ensure credibility of the research study(12).

Strategies utilised by the researcher to alleviate the challenges of being an insider researcher included: asking probing questions and encouraging participants to reflect, researcher reflexivity, review by outsider researchers, discussion of codes, sub-themes and themes with outsider researchers, assuring participants of confidentiality and de-identification. Further strategies to ensure trustworthiness and rigour have been discuss below(12).

TRUSTWORTHINESS AND RIGOUR

The different aspects of trustworthiness and rigour as proposed by Lincoln and Guba (15) were ensured in this study. It contains the 'four canons' or criteria with which trustworthiness is 'measured' in qualitative paradigm. These include credibility, dependability, transferability and confirmability.

CREDIBILITY

Credibility is the extent to which the researcher has established confidence in the truth of the findings for the subjects or informants and the context in which the study was undertaken(16). An important strategy to ensure credibility is to spend sufficient period of time with informants(16). The researcher had 3 contact sessions each lasting an average of one hour with each participant, either in person or on the phone. One of these contacts was to perform member checking. This strategy was to ensure that the researcher had accurately translated the participants' viewpoints into data.

Reflexivity

Reflexivity refers to assessment of the influence of the investigator's own background, perceptions, and interests on the qualitative research process. Reflexivity can be ensured by the researcher making use of a field journal(16). The researcher kept a reflective diary of the research journey, which was updated after every contact session with a participant or after any session of working with the data. In it, the researcher recorded relevant thought processes and

reasoning, affective states, interpersonal dynamics and personal background which was thought to influence the meaning-making process.

Triangulation

Triangulation is based on the idea of convergence of multiple perspectives for mutual confirmation of data to ensure that all aspects of a phenomenon have been investigated (16). Data source triangulation is based on the importance of variety in time, space, and person in observation and interviewing (16). Data source triangulation was achieved in this research by interviewing participants at different times (by interviewing participants more than once), in different places (by changing the venue where interviews take place). Furthermore, data source triangulation was achieved by using in-depth interviews, field notes and reflective diaries (15).

Peer debriefing

Peer debriefing refers to the researcher discussing the research process and findings with an impartial colleague who have experience with qualitative methods (16). Peer debriefing was done through regular contact sessions with the research supervisors, during which research strategies and methods, as well as findings and interpretations was discussed and evaluated.

DEPENDABILITY

Dependability stems from the fact that qualitative research looks at the range of experience rather than the average experience, so that atypical or non- normative situations are important to include in the findings. Maximum variation sampling approach was also used to ensure as wide a variety of information as possible is included within the parameters of this study(17). Dependability also relates to the consistency of findings. The exact methods of data gathering, analysis, and interpretation in qualitative research must be described (16).

TRANSFERABILITY

Transferability refers to the degree to which the findings can be applied to other contexts and settings or with other groups. Transferability is more the responsibility of the person wanting to transfer the findings to another situation or population than that of the researcher of the original study. As long as the original researcher presents sufficient descriptive data to allow comparison, he or she has addressed the problem of applicability (16). The researcher ensured transferability by creating thick descriptions for each participant.

CONFIRMABILITY

Confirmability is the extent to which the researcher ensures freedom from bias in the research procedures and results. It is the degree to which the findings are a function solely of the informants and conditions of the research and not of other biases, motivations, and perspectives (16). The different aspects of confirmability were ensured by keeping careful record of the entire research process and taking notes of actions and compiling them into an audit trail. All members of the study population were given a fair chance of being selected as research participants, by evaluating them against the same prior-determined selection criteria.

Thick Descriptions

The researcher also ensured dependability and transferability by creating thick descriptions for each participant not only by recording relevant detail surrounding the interviewing itself, but also by reflecting upon and interpreting the environment, circumstances, actions, meanings and motivations that surrounded each point of contact or the data-collection event (16).

INTRODUCTION OF SUBSEQUENT SECTIONS

The following sections of this thesis is prepared in accordance with a new format, which requires the candidate to submit said manuscripts to a scientific journal of choice. The sections were written in the format outlined in the "Author's Instructions" for each selected scientific journal. These instructions prescribe, for example, the length of the abstract and the total manuscript as well as the referencing style and the preferred English language to be used. Full details of the author guidelines for the selected journals are included as appendices in the proceeding sections. The table below introduces the subsequent sections, the journal submitted or to be submitted to, and relevant details on the journal.

Table 1: Brief Description of Subsequent Sections

Section	Brief Description	Submission Status	Journal [Impact Factor]	Reference Style	Preferred Language
Two	A manuscript reporting a scoping review protocol titled, "Exploring the factors that affect new graduates' transition from students to clinicians: A systematic scoping review protocol".	Submitted for review	BMJ open [2.376]	Vancouver	British English
Three	A manuscript reporting a scoping review titled, "Exploring the factors that affect the transition from students to clinicians: A scoping review". This review explored the barriers and facilitators experienced during transition from student to health clinician and the evidence-based coping strategies that assist new graduates in this transition.	Submission-ready manuscript	International Journal of Clinical Practice (IJCP). [2.566]	Vancouver	British English
Four	Manuscript reporting a phenomenological study titled, "Exploring the transition from student to clinician by the first cohort of occupational therapists in Ghana".	Submission-ready manuscript	British Journal of Occupational Therapy (BJOT) [0.754]	Harvard	British English

In order to provide a better insight into the data and improve readability of the thesis, the following adaptations to the author guidelines of the scientific journals were made in the manuscript.

- Details of the authors, and the ethics committee are not blinded in the manuscript
- Table and graphs are inserted in the manuscript for readability purposes.
- Margins were not adjusted
- A Turnitin Originality Report for the articles are included (See Appendix 6).
- A separate reference list is included for the articles.

CONCLUSION

Undergraduate training in occupational therapy is a new development in Ghana.. There is no published literature in the Ghanaian context that explores the first cohort of occupational therapists' transition from students to clinicians. There is the need to explore and understand these experiences of transition into practice for various significance such as informing curriculum development, clinical supervision, other new graduates' transition into practice and the overall development of occupational therapy education and practice in Ghana. The sections that follow will present a scoping review protocol, a scoping review on factors that affect new health graduates' transition from students to health professionals, and a phenomenological study on transition into practice by the first cohorts of occupational therapists in Ghana.

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SECTION TWO – RESEARCH MANUSCRIPT 1

TITLE PAGE

Exploring the factors that affect new graduates' transition from students to health professionals: A scoping review protocol.

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ABSTRACT

Introduction: To become a competent health professional, the nature of new graduates' transition plays a fundamental role. A scoping review will be beneficial in examining the availability and the extent of literature on the factors that affect transition into practice for new graduate health professionals, identifying possible gaps in this area of research, and synthesising findings which will be used to identify future research development areas. This systematic scoping review aims to identify existing literature pertaining to the barriers of transition, the facilitators and the evidence-based coping strategies that will assist new graduate health professionals to successfully transition from students to health professionals.

Methods and analysis: The scoping review will be conducted using Arksey and O'Malley's methodological framework. A Boolean search terms has been developed upon consultation with an experienced librarian, using Medical Subject Heading (MeSH) terms on Medline. The following electronic databases have been chosen to ensure that all relevant literature is captured for this review: PubMed, EBSCOhost (including CINAHL, Medline, 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. Covidence platform will be used to facilitate the process.

Ethics and dissemination: Ethical approval is not required for this scoping review since existing literature will be synthesised. The scoping 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.

ARTICLE SUMMARY

Strength and Limitations of this Study

- The search strings for this scoping review was developed in consultation with an experienced librarian.
- The search is comprehensive and will include electronic databases (PubMed, EBSCOhost (including CINAHL, Medline, Health Science: Nursing and Academic edition), Scopus, Web of Science and Cochrane. Hand searching and follow up of reference lists of eligible publications will be done to ensure that all relevant literature is included in the study.
- The authors will conduct a blind review to ensure rigorous and consistent application of the inclusion and exclusion criteria.
- Qualitative data analysis software, namely Weft QDA, will be used to analyse the literature to maximise the findings in terms of both implications for clinical practice and research.
- The findings from the scoping review might not be exhaustive of all available literature on factors that affect new graduates' transition into practice because it will be limited by the inclusion and exclusion criteria.

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 a student whose procedures and activities were supervised in a controlled environment to practising independently as a qualified health professional.(1) 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.(2) 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.(3) Inadequate preparation for this transition may cause the new health professional's therapy to be ineffective.(4)

The transition to practice for new graduates is described as gradual and complex, involving a complete transformation particularly in the first year after graduation. A thorough literature review by McCombie and Antanavage (5) established that new graduates experience low personal and professional confidence, particularly at the initial stage of the transition. A phenomenological study by Seah (6) reported that all participants - experienced shock upon 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 new graduates' 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 emphasized as significant during transition. Supervision is revealed to contribute to new graduates' ability to relate their

acquired knowledge to practice.(7) Hummel and Koelmeyer (8) 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, is considered a vital component of a successful transition, (8) and is fundamental to the new health professional's perceived success at work.(9) Tryssenaar and Perkins (2) also established that supervision is a vital component to promoting competency. Effective supervision equips new practitioners with competences that are relevant to their professional career. This impacts on their practice by increasing their clinical skills, increasing their self-confidence and perception of competence, consequently improving quality of service to clients.(10)

The literature identifies the availability of several supports and coping strategies aimed at easing the challenges of transition into practice. Moores (7) found that work colleagues play an important role in ensuring successful transition as they provide advice and information to new graduates. Support from experienced colleagues and other new graduate peers was reported to be the most valued.(7) Halfer and Graf (11) confirmed the importance of supervision and emphasised the value of positive relationships with other professionals and co-workers. A thorough literature review by Moores (7) revealed that interactions with peers in the form of group learning, networking and structured discussions on topics relevant to clinical practice supported their transition into practice. In an Australian cross-sectional study by Hummell and Koelmeyer, (8) the novice occupational therapists (n=74) who participated reported that informal support from other new graduates within and beyond the workplace, eased their role transition.

Continued professional development opportunities have also been reported as important in the transition of new graduates into practice. Seah (6) reported a positive link between novice

professional's engagement in continued professional development and increased professional confidence in the clinical environment.

A scoping review will be beneficial in examining the availability and the extent of literature, identifying possible gaps in this area of research, and synthesising findings which will be used to identify future research development areas. This scoping review aims to identify existing literature pertaining the barriers and facilitators experienced during transition from student to health professional and the evidence-based coping strategies that assist new graduates in this transition.

AIMS AND OBJECTIVES

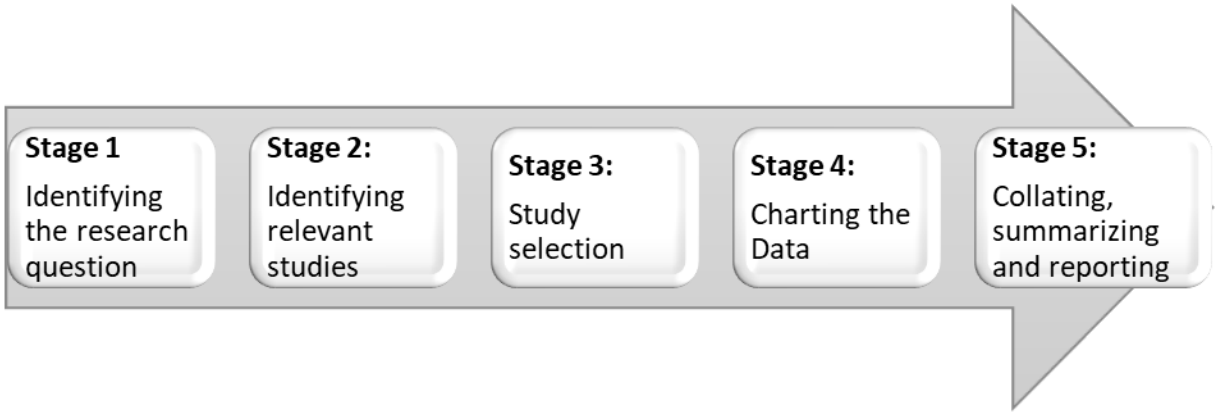
This scoping review aims to identify research conducted in the last two decades (1999 – 2019) on the factors that affect newly graduated health professionals' transition from students to health professionals. The specific objectives are:

- 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 scoping review will be conducted using Arksey and O'Malley's (12) methodological framework as a guide. This methodological framework comprises five stages and are discussed in the subsequent sections. (See Figure 1)

Figure 1:Methodological Framework [11]



Identifying the research question

The researchers will start by identifying the research question to guide the search strategies(12). This scoping review will explore the factors that affect newly graduated health professionals' transition into practice. To capture the scope and the diversity of available literature, (12) three broad research questions were developed to guide this review. These are;

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

Identifying relevant studies

The researchers will conduct a search to identify literature from electronic databases (12). 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 ensure that all relevant literature is included in the review.

The following electronic databases have been chosen for the search for relevant literature for this review: PubMed, EBSCOhost (including CINAHL, Medline, 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 (MeSH) terms on Medline (See *Table 2*).

Table 2: Search strings derived from MeSH

TOPIC	**'New graduate' OR 'Novice Professional' OR 'Health student'**
AND TOPIC	Transition*
AND TOPIC	'Clinical practice'
AND TOPIC	'Clinical competence' OR 'Professional Competence'

An initial search was done to check the suitability of the search string.(12) This results are presented in *Table 3*.

Table 3: Initial Database Search Results

EBSCOhost	268
PubMed	109
Scopus	66
Web of Science	68
Cochrane	2

The search will be done using the abstract/title field and included 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.

Study Selection

This stage involves screening and selecting relevant studies against a predetermined inclusion and exclusion criteria (12). The review will include only research articles published in English within the last two decades (1999 to 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 4.

Table 4: Provisional Selection Criteria

Inclusion Criteria	Exclusion Criteria
Peer-reviewed research articles on new health graduates' transition from being students to health professionals.	Conference abstracts, doctoral theses and grey literatures on new health graduates' transition to practice.
Primary sources of systematic reviews that meet the inclusion criteria will be included	Systematic or literature reviews on new health graduates' transition to practice.
Peer-reviewed articles published in English in the last two decades.	

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 Platform which will be used to manage the project. The Covidence platform will remove duplicates automatically before the review process will begin. Three independent reviewers will screen all uploaded studies against the inclusion criteria to determine their eligibility to be included in this scoping 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. Full text publications which meet the inclusion and exclusion 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 (PRISMA-P) 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.(13)

Charting the Data

Data charting involves the data extraction process.(12) Charting refers to a technique for synthesizing and interpreting data by sorting sources according to key issues and themes.(12) Once consensus has been reached on eligibility, the primary reviewer will read each of the selected full text publications. A data charting form, adapted from Uys *et al* (14) 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 study was published, country of study and the population of the study.
2) Study aims, objectives and/or research questions, the study design

3) The findings section of the data charting form from Uys *et al* (14) was adapted, with particular emphasis on the barriers, the facilitators and coping strategies of transition into practice which is the focus of the proposed scoping review.

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

Collating, summarizing and reporting the results.

This stage involves collating, summarizing and reporting the results (12).Once the data extraction process has been completed, the study findings will be presented in the form of descriptions and narrations. Summary tables will be used to present the relevant elements of each study. The findings will be synthesized and written up into a coherent article.

Patient and Public Involvement: The proposed scoping review will not have any patient or public involvement.

DISCUSSION (ETHICS AND DISSEMINATION)

The researchers anticipate that the findings of this scoping 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 policy makers 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 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.

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

ACKNOWLEDGEMENTS

The authors acknowledge the assistance of Mrs. Ingrid Van der Westhulzen (Subject librarian) at the University of Stellenbosch for contributing towards developing the initial search strings for the scoping review.

AUTHOR CONTRIBUTIONS

All three authors of this article contributed to the conceptualisation, drafting, development and editing of this scoping review protocol. EN Opoku drafted the initial protocol manuscript as part of his master's degree, L Van Niekerk and L Jacobs-Nzuzi Khuabi 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 scoping review commences. The researchers are all committed to being accountable for all aspects of this protocol.

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Competing interest: None declared

Patient Consent: Not applicable

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inform support strategies? *Aust Heal Rev*. 2017;41(3):308–12.

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SECTION THREE – RESEARCH MANUSCRIPT 2

TITLE PAGE

Exploring the factors that affect the transition from students to health professionals: A scoping review.

Short title**: Transition from students to health professionals**

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Conflict of interest: None declared

ABSTRACT

Introduction: The nature of a new health professional's transition from student to health professional is a significant determinant of the ease or difficulty of the journey to professional competence. A scoping review will be relevant to explore the availability and the extent of literature on the factors that impact transition of new health professionals into practice, identify possible gaps in this research area, and synthesise findings which will inform further research. The aim of the scoping review was to identify research conducted in the last two decades on the barriers and facilitators experienced, and the coping strategies employed by new health professionals during their transition into practice.

Method: Arkey and O'malley's methodological framework for conducting scoping reviews was used to identify the barriers, the facilitators and the coping strategies of transition into practice. The framework comprises identifying the research question, identifying relevant studies, study selection, charting the data and collating, summarizing and reporting.

Results: Of the 562 studies identified, relevant data was extracted from 24 studies that met the inclusion criteria, and analysed to form this review. Thematic analysis approach was used to categorise the findings into theme areas. Four overarching themes emerged namely: systems and structures, personal capacities, professional competence and mediating processes. Each theme revealed the barriers, facilitators and coping strategies of transition into practice among new health graduates.

Conclusion: The transition into practice for new health practitioners has been described as complex and a period of great stress. Programmes aimed at increasing the practical experiences are required to support new health professionals in the process of closing the gap between learning and practice. Continued professional development activities should be readily available and attendance of these encouraged.

Keywords

Role transition, clinical practice, new clinicians, professional competence, novice professionals, scoping review.

INTRODUCTION

The transition into practice for new practitioners has been described as complex and a period of great stress.(1),2) The academic environment and the practice environment have been described as different worlds as knowledge acquired in the classroom was deemed practically untransferable to the real world.(3,4) Due to the gap between academic and practice contexts, evidence suggests that, new health professionals might be overwhelmed with feelings of inadequacy,(5) unpreparedness (6) and doubtfulness related to their competence.(4,7) Evidence also suggests that, the reality of practice appears as a shock to new health practitioners.(6,7) These feelings negatively affects the personal and professional confidence of new health professionals.(8) Other challenges of transition identified in the literature include role confusion(9), overwhelming workloads,(3) sophisticated workplace protocols(10) and lack of respect and recognition.(11)

The nature of a new health professional's transition from student to health professional has been shown to be a significant determinant of the ease or difficulty of his/her journey to professional competence. The literature in this field suggest several strategies to alleviate the challenges that characterise the transition from student to health professional. Consistent emphasis is placed on supervision to help new health professionals relate the knowledge acquired in the classroom to practice.(4,12-15) Effective supervision equips new health professionals with skills needed to function in their respective areas of practice.(12) Moores and Fitzgerald (12) established that meaningful interactions with other new health professionals in the form of study groups, peer support meetings and social interaction sessions contribute significantly to successful transitions to practice.(13) Other support strategies emphasised in the literature include adequate orientation for new health professionals,(11) support from more experienced senior colleagues,(14) preceptorship programmes (15) and other health professionals.(16) New health professionals have also been advised to utilise continuing

education opportunities. Evidence suggests that continued professional development avenues positively impact on new health professionals' self-confidence and professional identity.(7)

A scoping review will be relevant to explore the availability and the extent of literature on transition of new health professionals into practice, identify possible gaps in this research area, and synthesise findings which will inform a larger study to be conducted in Ghana on the factors that impact transition of new health graduates into independent practice. This scoping review aimed to identify existing literature on the barriers, facilitators and coping strategies that influences new health professionals' transition to practice. The findings of the scoping review may assist new health professionals, clinical supervisors, educators and policy makers in their preparation to make or support the transition. It may further inform curriculum development to better prepare students for practice, as well as identify future research development areas pertaining to transition into practice among new health practitioners.

AIMS AND OBJECTIVE

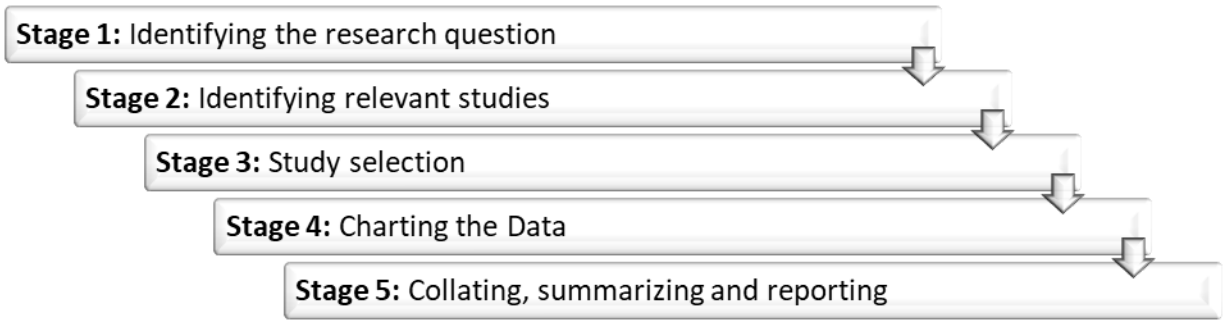
The aim of the scoping review was to identify research conducted in the last two decades (1999 – 2019) on the barriers and facilitators experienced, and the coping strategies used by new health professionals during their transition into practice. The specific objectives are:

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

METHODS AND ANALYSIS

The protocol for this scoping review has already been published elsewhere. Arksey and O'Malley's (17) methodological framework for conducting scoping reviews guided the scoping review (See Figure 1). The process of the review are discussed in the subsequent sections.

Figure 2: Methodological Framework [11]



Identifying the research question

The overarching question that guided this review was 'what factors affect the transition of new health professionals from students to health professionals?' To capture the scope and the diversity of available literature[11], three specific research questions were developed to answer the question.

a. What challenges do new health professionals face during transition into practice?
d. What factors facilitate the transition of new health professionals into practice?
e. What coping strategies do new health professionals employ to ensure successful transition into practice?

Identifying relevant studies

A search was done to identify literature from five electronic databases namely PubMed, EBSCOhost (including CINAHL, Medline, Health Science: Nursing and Academic edition), Scopus, Cochrane and Web of Science. The first search was done April 3, 2019. The search strategy included the keywords New clinician OR Novice Professional OR Health student AND Transition* AND Clinical practice AND Clinical competence OR Professional Competence. The search strategy used was developed in consultation with an experienced subject librarian. Limiters applied were published date (January 1999 to April 2019), SmartText searching and Language (English only). Hand searches and follow up of the reference lists of the included articles was done to retrieve literature that were not found in the databases.

Study Selection

Titles and abstracts of all retrieved literature were uploaded onto the Covidence Platform, which was used to manage the project. Covidence platform automatically removed duplicates. Studies were then assessed for eligibility according to the following criteria:

Table 1: *Selection Criteria*

Inclusion Criteria	Exclusion Criteria
Peer-reviewed research source on new health professionals' transition from students to health professionals.	Conference abstracts, doctoral theses and grey literature.
Primary sources of systematic reviews that meet the inclusion criteria will be included	Systematic or literature reviews
Published in English	
Published after 1999	

Charting the Data

Charting refers to a technique for synthesizing and interpreting data by sorting sources according to key issues and themes(17). Once consensus was reached on the eligibility of sources, data was extracted from full text publications using a data charting form adapted from Uys *et al*(18). For each of the included studies, the researcher extracted the study characteristics (author names, publishing journal, year study was published, country of study and the population of the study), study aims, objectives and/or research questions, the study design and the findings (with particular emphasis on the barriers, the facilitators and coping strategies of transition into practice) Critical appraisal was not done because the intent of the authors was to determine the quality of the research studies but to identify knowledge and the scope of literature on the factors that affect new health professionals' transition into practice,

Collating, summarizing and reporting the results.

Once the data extraction process was completed, findings were analysed and categorised into theme areas using thematic analysis approach.(19) The first author did the analysis which was reviewed and refined with the assistance of the second and third authors.

RESULTS

The primary search strategy identified 562 studies from which 185 duplicates were removed. 377 studies were then screened against title and abstract and 284 were excluded. Following the title and abstract screening, the full texts of the included studies were uploaded onto Covidence platform for full text screening against the same predetermined inclusion and exclusion criteria. Overall, 92 studies were assessed for full-text eligibility. A final total of 24 studies met the

inclusion criteria and relevant data was extracted and analysed to form this review (See **Figure 3: PRISMA flow chart**)

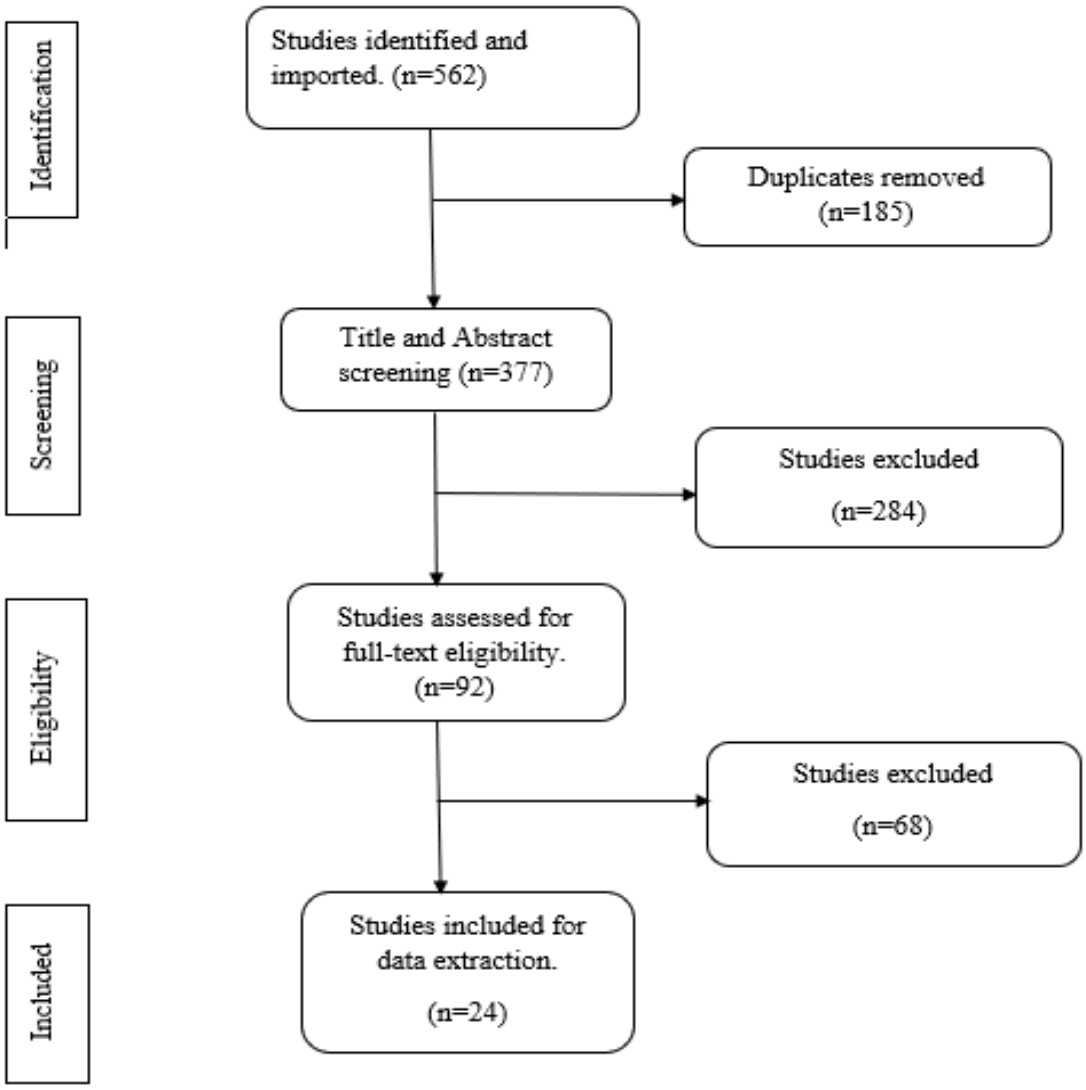


Figure 3: PRISMA flow chart

Most sources originated in Australia (n = 8; 33.3%), followed by Canada (n = 5; 20.8%), the USA (n = 3; 12.5%), the UK (n = 2; 8.3%) and Norway, Turkey, Oman, Jordan, Philippines and Ireland (n=1 for each country; 4.2%). Twenty studies used qualitative methodologies, 3 used quantitative methodologies and one study used mixed methods. Thirteen studies pertained the profession of nursing (54.2%), seven were on occupational therapy (29.2%), two about medicine/doctors medical (8.3%) and one each on physiotherapy and midwifery (4.2%). *Table*

5 presents a summary of the sources that were included in the scoping including characteristics such as first author, year of publication, country of origin, study aims, sample size, profession of participants, the methodology used and the publishing journal.

Table 5: Summary of sources included in the final analysis

First Author (Ref), year, Country of origin	Study aims/objectives/question	Sample size, profession	Methodological tradition, Publishing Journal
1. O'shea (20), 2007, Ireland (High Income)	To explore newly qualified staff nurses' experiences of being on clinical placement post registration, and the meanings that this experience held for them.	n=10 Newly qualified nurses,	Qualitative phenomenology, Clinical Nursing
2. Labrague (3), 2019, Philipine (Lower-middle income)	This study describes the transition experiences of newly graduated Filipino nurses during their initial clinical placement process one-year post registration	n=15 newly graduated nurses,	Qualitative phenomenology, Nursing Forum
3. AbuAlRub (21), 2018, Jordan (Upper-middle income)	To explore the challenges that face new Jordanian nurses in the first year of employment	n=30, Newly qualified nurses, and n=6 key informants	Qualitative phenomenology, International Nursing Review
4. Awaisi (15), 2015, Oman (High income)	To explore the experiences of new clinician nurses during their transition period in the Sultanate of Oman	2009 (n=15) and 2010 (n=10) cohorts of nursing clinicians, students (n=8), preceptors (n=6), clinical instructors (n=5), head nurses (n=5), and managers (n=4) who had experienced working with new clinician nurses.	Qualitative case study International Journal of Nursing Studies
5. Black (22), 2010, USA (High Income)	To explore the experiences, learning, and development of promising novice therapists throughout their first year of practice in the United States.	n=12, Novice physical therapist	Grounded theory, Journal of the American Physical Therapy association
6. Brennan (23), 2010. UK (High income)	To explore the experiences of junior doctors during their first year of clinical practice.	n=31, Newly qualified doctor,	Qualitative phenomenology, Medical Education

7. Casey (24), 2004, USA (High Income)	To identify the stresses and challenges experienced by cohorts of clinician nurses.	n=270, New clinician nurses	Quantitative cross-sectional survey. Nursing Administration
8. Clare (5), 2003, Australia (High income)	To explore the transition from undergraduate student to clinician nurse.	N=550, Clinician nurses and N=350 directors of nursing.	Mixed methods Collegian
9. De Bellis (4), 2015, Australia (High Income)	To identify the issues and difficulties experienced by new nursing clinicians in the clinical environment as they commence their career as registered nurses	n=21 Newly registered nurses.	Qualitative phenomenology, Contemporary Nurse
10. Doherty (10), 2009, Australia (High Income)	To investigate the perception of new graduates on their preparation for practice, at seven months post-graduation.	n=18 Newly registered first cohort of occupational therapists.	Quantitative cross-sectional survey, Australian Occupational Therapy Journal
11. Tryssenaar (6), 2001, Canada (High income)	The study explored the lived experience of rehabilitation students during their final placement and first year of practice.	n=6 Occupational therapist(n=3), and 3 Physical Therapy (n=3) students	Qualitative phenomenology, American Journal of Occupational Therapy
12. Lee (16), 2003, Australia (High Income)	To explore the experiences of five new clinician occupational therapists.	n=5 New occupational therapy clinicians	Qualitative phenomenology, Australian Journal of Rural Health
13. Mangone (25), 2016, Australia (High income)	To explore the effectiveness of addressing transitional issues during debriefing sessions for new clinician nurses and trainee enrolled nurses.	Three focus groups consisting of four to five new nursing graduates.	Qualitative study, Contemporary Nurse
14. Nour (26), 2018, Canada (High income)	To explore the experiences of newly graduated- nurses in acute healthcare settings within Canada.	n=14 Newly registered nurses	Grounded theory, Canadian Journal of Nursing Research.
15. Phillips (11), 2014, Australia (High income)	To identify the factors that clinician nurses believe assists them in successful transition to registered nurse practice.	Already existing 8 focus group interviews (n = 67) and participant responses to opened-ended questions from an electronic survey (n = 392)	Qualitative study. Nurse Education in Practice

16. Regan (14), 2017, Canada (High income)	To describe new clinician nurses' transition experiences from the perspectives of new clinician nurses and nurse leaders in unit level roles.	N = 42 New clinician nurses and nurse leaders (n=28)	Qualitative phenomenology, Nursing Management
17. Reynolds (27), 2014, UK (High income)	To elicit the lived experience of newly qualified midwives from the point of registration to 12 months post-registration	n = 12 Newly qualified midwives,	Qualitative phenomenology, British Journal of Midwifery
18. Seah(7), 2011, Australia (High income)	To explore the lived experience of transition from student to practitioner within first six months of practice.	n = 8 Newly graduated cohort of Master of Occupational Therapy clinicians	Qualitative phenomenology, Australian Occupational Therapy Journal
19. Tastan (28), 2013, Turkey (Upper-middle income)	To identify the factors affecting the transition period of newly graduated nurses.	n = 234 Newly graduated nurses	Descriptive quantitative, International Nursing Review
20. Toal-Sullivan (29) 2006, Canada (High income)	To explore the experience of transition and how beginning practitioners learn about doing practice.	n = 6 Newly graduated Occupational therapists,	Qualitative phenomenology, British Journal of Occupational Therapy
21. Tryssenaar (30) 2001, Canada (high income)	To describe the lived experience of becoming an occupational therapist.	n=1 Newly graduated Occupational therapist, case study	Qualitative Phenomenology British Journal of Occupational Therapy
22. Wangensteen (31) 2007, Norway (High income)	To illuminate how recently graduated nurses' experience their first year as a nurse.	n = 12 Recently graduated nurses	Qualitative Phenomenology, Journal of Clinical Nursing
23. Zinsmeiter (32) 2009, USA (High income)	To gain insight into the transition period of clinician nurses.	n = 9 Newly graduated nurses,	Qualitative Phenomenology, Journal of Nursing in Staff Development
24. Bearman (33) 2011, Australia (High income)	To explore the experiences of developing professional identities during internship	n=30 New graduated medical doctors, and intern supervisors (n=6)	Grounded theory, Advancement in Health Science Education

Data extraction was done with the three specific objectives in mind. The studies reviewed identified multiple factors and multifaceted experiences of new health professionals with self, clients, staff, other health professional, workplace protocols and the healthcare delivery system as a whole, which affected their transitions either positively or negatively. Once data were charted, findings were summarised and categorised into codes, sub-themes and main themes. Four overarching themes were developed: '*systems and structures', 'personal capacities', 'professional competence' and 'mediating processes'* with a number of sub-themes (see *Figure* 4)

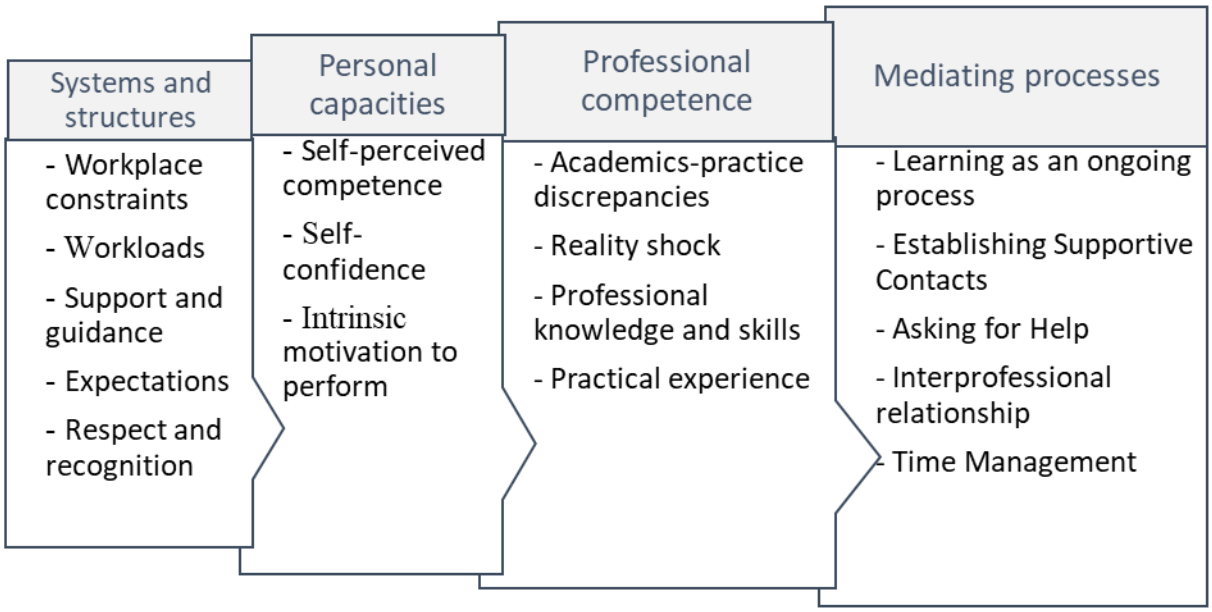


Figure 4: Themes and sub-themes

DISCUSSION

In this scoping review, knowledge about the transitional experiences of new graduates from various health professions is presented after collating and analysing literature about the challenges, facilitators and the coping strategies that influence new graduate health practitioners' transition into practice.

4.1.Systems and structures

The theme '*systems and structures'* reflects the barriers new health practitioners had to overcome and the challenges they faced during transition to practice. Five sub-themes emerged: *workplace constraints, workloads, support and guidance, expectations, and respect and recognition.*

Workplace constraints: Among the challenges encountered by new health professionals were those relating to the complexity of systems in the workplace. New health professionals reported having a naive understanding of the hierarchy of the system, administrative processes, workplace politics and organisational battles; this impacted on their transition into practice. (4,6,14,16,33) One study reported that, not knowing the "what, how, why, where and when" of workplace routines pose various challenges for new health professional.(4) Variations in operations and administration also served as a source of frustration for new health professionals as they moved between workplaces during rotations.(33) New health professionals were expected to automatically adapt to the 'the-way-things-are-done' and the 'it-is-always-done-this-way' of the wards.(14) Most of these procedures were experienced as contrary to what new health professionals had been taught in school, thus causing confusion.(15)

Workloads: Complex and overwhelming work-related responsibilities were experienced among new health professionals.(3,4,16,29,31) One study reported that new health professionals are made

to handle complex cases and procedures which are unreasonably beyond their capabilities.(3) Research also reported heavy patient loads among new health professionals which require them to either work overtime or work under pressure in order to meet all responsibilities.(29) New health professionals generally felt overworked at the end of the day.(25)

Respect and Recognition: A lack of respect and recognition for new health professionals during transition into practice was reported. Phillips *et al* (11) suggested that new health professionals are not afforded the respect they deserved, especially those that are younger. They emphasized that, lack of respect undermines new health professionals' self-confidence, which translates into a lack of self-worth.(11) Unprofessional behaviour from other health professionals and senior colleagues, included experiences of being treated as subordinates(15) as well as bullying and insults,(5) negatively impacted on the adjustment of new health professionals. Reynold *et al* (27) and Tryssenaar(30) reported that new health professionals do not feel valued in their practice. In fact, one study reported that new health professionals considered quitting their jobs after the first year due to lack of recognition and appreciation and an overall experience of dissatisfaction at work.(26)

Support and Guidance: The importance of having a well-structured system of support and guidance for new health professionals' transitions have been emphasized in the literature. New health professionals who have sufficient orientation programmes reported sound transition into practice.(11,13,16,31,32) On the other hand, new health professionals who do not get sufficient orientation encountered difficulties with the transition. (4,16,21,26) In addition to orientation programmes, several studies reported strategies that support new health professionals' transition into practice including: residency programmes, (21) preceptorship programmes (13,28,31) and mentoring programmes.(5,16,22) New health professionals needed support from experienced

senior colleagues,(4,5,11,16,23,30,31) as well as other new health professionals.(4) New health professionals reported feeling motivated to perform better when they received feedback on performance from other health professionals (31) and clients.(29) Particular emphasis was also placed on supervision as an effective strategy to help new health professionals overcome the stressors of the transition.(6,7,11,13)

Expectations: New health professionals reported feeling overwhelmed by unrealistically high expectations placed on them.(3,13,25,26,29) Labrague *et al* (3) reported that new health professionals felt pressured and stressed when unachievable expectations were placed on them. Nurses in Clare & Loon's (5) study expressed gratitude to their superiors for having realistic expectations of their skills. They further emphasized that, realistic expectations gave them the opportunity to grow their confidence.(5) In some other studies, new health professionals reported that they were ignorant of what was expected of them.(7,26) In Zinsmeiter's (32) study, new health professionals report that, when both new health professionals and other health professionals have clear expectations of their role, the transition becomes comfortable.

4.2.Personal Capacities

The theme "personal capacities" reflects the personal characteristics of new health professionals that influence their transition from student to health professional. Three sub-themes emerged; *self-perceived competence, self-confidence,* and *intrinsic motivation to perform.*

Self-perceived competence: One factor that affected new health professionals' transition into practice was their perception of their own competence. New health professionals' perception that they do not know enough made them question their competence and readiness for

practice.(4,6,7,18-22,26,27,31-33) Several situations were reported where new health professionals were caught in a dilemma related to diagnosis, assessment and treatment procedures.(5,7,23) Nurses in Clare's (5) study described the overwhelming feeling of inadequacy as the worst aspect of their transition. Feeling inadequate results in new health professionals feeling vulnerable and fearful of taking on responsibilities because of their fear of making mistakes.(23,29)

Self-confidence: Confidence was emphasized as a personal quality that contributes significantly to the success of transition into practice. However, self-confidence seemed to be determined primarily by new health professionals' perception of how competent they were and how prepared they were for practice.(4,10,11,17,21,22,24,32) A quantitative cross-sectional survey by Doherty *et al* (10) revealed that, occupational therapy new graduates perceived self-confidence has a positive significant relationship with their self-perceived competence level in clinical decision making.

Intrinsic Motivation to perform: New health professionals reported several factors motivating them to continue to pursue competence in the face of challenges encountered during transition. The fact that they were playing an integral role of changing the health of patients for the better motivated them to persist. Others found motivation by associating their role to the spiritual benefits they expected in future.(15) Other new health professionals were motivated by the excitement in acquiring new skills and growing in their professions.(3,5)

4.3.Professional competences

This theme reflects the relationship between knowledge, skills and attitudes new health professionals acquired through their education, and practising in the field. Four sub-themes emerged; *academics-practice disparity, reality shock, professional knowledge and skills, and practical experiences.*

Academics-practice disparity: Research reported a dichotomy between what was learnt in the classroom and the expectations of actual performance in practice.(3,4,16,21,29) De Bellis *et al*(4) emphasized that the knowledge participants in their study acquired from their undergraduate education was not applicable in their practice. The incongruency between education and practice was believed to often lead to a *reality shock* in the practice environment. (21)

Reality shock: The sources reviewed suggested that new health professionals experienced high levels of shock, coupled with anxiety and nervousness upon entering the world of practice.(6,7,20,25-27,29,32,33) O'shea *et al* (20) emphasized that, reality shock and anxiety among new health professionals was intense, particularly in the first five months of transition into practice. New health professionals often experienced conflict between their expectations of practice and the reality of practice.(29) They experience varying levels of stress beyond their expectations which impacted their transition.(3,6,13,20,21,25,26,30-33) New health professionals often felt incapable of managing stressful emotional work-related situations such as death and dying.(13, 20,23)

Professional knowledge and skills: The sources reviewed suggested that, it is in practice that new health professionals realise a deficit in their knowledge and skills. The gap between education and practice caused a mismatch between new health professionals' expectations of their roles and what is actually practiced on the field, leading to role confusion.(6,13,29) New health professionals

demonstrated inadequacy in specialised clinical skills such as communication skills,(10,22,24) organisational and management skills,(16,20,22) clinical decision-making skills,(5,22) and skills required for specific practice areas.(6,16,29) Newly qualified occupational therapists in a study by Toal-Sullivan (29) reported that they felt unprepared in specialised clinical skills, such as splinting, cognitive remediation, wheelchair prescription, hand therapy and home safety equipment.

Practical experience-: Sources reviewed reflect that inadequacies in the knowledge and skills of new health professionals is strongly associated to insufficient practical and clinical exposure in their undergraduate training.(4-6,21) Increasing hands-on experience of new health professionals during education can help prevent knowledge and skills inadequacies during practice.(7) New occupational therapists in their first year of practice emphasized that, prior clinical placement experience helped ameliorate the stress and uncertainties that characterise transition into practice.(7) Brennan *et al* (23) also emphasized that new health professionals should cultivate a 'doing, not observing' attitude during transition into practice.

*4.4.**Mediating processes***

This theme reflects the strategies employed by new health professionals to change or manage challenges they encountered during transition into practice. Four sub-themes emerged; *learning as an ongoing process, establishing supportive contacts, asking for help,* and *effective time management.*

Learning as an ongoing process: Research emphasized the importance of new health professionals recognising that professional competence comes through continuous learning and experience.(7,17,33) New health professionals should not expect themselves to know everything

when transitioning into practice, rather, they should view their knowledge and skills within the confines of a new health professional.(16) With this mindset, new health professionals were advised to strive towards professional competences through personal reading, (4,22) revisiting lecture notes,(4) taking continuing education courses,(6) learning from the mistakes they make,(22) creating an informal learning culture together with peers (33) and observing and learning from their experienced senior colleagues.(22)

Establishing supportive contacts: The sources reviewed suggested that new health professionals seek to improve their clinical competence through establishing contacts with significant others. New health professionals reported that other new health professionals served as a significant source for alleviating the stressors of transition.(4,6,11,16-18,23,25, 31) New health professionals established meaningful interactions with peers through peer support meetings,(5,25) study groups,(5) networking (6,17) and peer debriefing sessions.(5,22) Other supportive contacts included: previous lecturers,(4) senior colleagues (5,6) and other health professionals.(7,17,30) New health professionals have established that ensuring meaningful personal and social lives helped alleviate transition stressors.(17,29,30) Furthermore, literature emphasized a healthy interprofessional relationship with other members of the multidisciplinary team as a positive transition factor.(28,30)

Asking for help: New health professionals resorted to ‘asking for help’ when they do not know what to do.(33) Sources reviewed suggested that new health professionals sought supervision when confronted with new situations.(4,6) In situations where there were no mentors and supervisors, new health professionals sought distant mentors and coaches.(6) Listening and always asking questions was also emphasized as a coping strategy to ameliorate the challenges of transition.(4,22)

Effective time management: Effective time management strategies was found to help alleviate some challenges of transition.(6,7) New occupational therapy graduates reported that managing their time well enabled them to manage overwhelming work schedules, prevent working overtime and enable them to have meaningful personal and social lives.(6)

CONCLUSIONS

What is evident from this scoping review are the many challenges new health professionals encounter during transition into practice, support strategies that can ameliorate the challenges and the coping strategies employed by new health professionals to make transition successful.

Orientation programmes are needed. These should include information on systems and procedures in a format that is easily accessible to new generation learners and detailed and comprehensible enough to deal with challenges that cause unnecessary anxiety. In addition to line managers, new health professionals benefit from mentor and peer support. We recommend both formal and informal systems in which creation of support networks are fostered.

New health professionals should be made to know during orientation programmes that, it is okay to ask for help or seek supervision from senior colleagues. Conversely, senior colleagues should maintain a good professional relationship with new health professionals and accord the respect and recognition due them. This will enable new graduates to easily approach them for professional assistance.

Support programmes are required to assist new health professionals in the process of closing the gap between learning and practice. We recommend that such a programme should aim at increasing the practical experiences of students in the educational curriculum, training students to

develop skills such as communication skills, clinical decision-making skills, management and organisational skills and time management strategies.

Ongoing learning should be an explicit expectation for all health professionals. However, care should be taken to normalize the gap between competencies new health professionals bring to the field and the clinical expectations they face. This should be done in such a way as to remove the expectation that new health professionals should already have all competencies required.

Continued professional development activities should be readily available and attendance of these encouraged. Line managers and mentors of new health professionals should be sensitised to the fact that certain competencies can only be acquired during the transition into practice. This should be done in such a way as to empower them to support the learning that is still required.

AUTHOR CONTRIBUTIONS

All three authors of this article contributed to the conceptualisation, drafting, development and editing of this scoping review. EN Opoku drafted the initial protocol manuscript in partial fulfillment of his master's degree, Van Niekerk and Jacobs-Nzuzi Khuabi guided the development of the protocol and made substantial conceptual and editorial contributions. All authors participated in editing the final version and have approved this manuscript.

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SECTION FOUR – RESEARCH MANUSCRIPT 3

TITLE PAGE

Exploring the transition from student to clinician by the first cohort of locally trained occupational therapists in Ghana.

Short title: Transition into practice of the first cohort of Occupational therapists in Ghana.

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Keywords:

New graduate, Role transition, Novice health professionals, clinical practice, Novice occupational therapists, Ghana.

ABSTRACT:

Introduction: The transition from student to occupational therapist for new graduates has been described as a period of extreme stress and anxiety; novice therapists enter a world that is different and more complex upon starting clinical practice. The first locally-trained occupational therapists in Ghana worked autonomously and in a self–directed manner in their first year of practice in a country where occupational therapy had not been established. The study sought to explore the transition from student to clinician, made by the first cohort of locally trained occupational therapists in Ghana.

Methods: An interpretive phenomenological approach was used to explore participants' experiences of their transition from occupational therapy students to clinicians in Ghana. Six participants were selected using maximum variation purposive sampling. Data were collected by means of in-depth interviews and analysed using an inductive and iterative approach.

Results: Four themes emerged: *Being "new" in a new profession*, *introducing occupational therapy into a medical model health system*, *Personal and professional competence*, and *"The future is bright.* New graduates found continued professional competence activities essential for successful transition into practice.

Conclusion: Collaboration among undergraduate educators, leadership and management of health facilities, other health professionals and other new graduates can help new graduates' transition successfully into practice.

Keywords: New graduate, transition, novice clinicians, clinical practice, occupational therapy, first cohort.

INTRODUCTION:

The absence of occupational therapy services in Ghana's health care system over the years, has created a gap in healthcare, and threatened the holistic approach to healthcare delivery every country strives to achieve (Ndaa, 2014). After several failed attempts to establish occupational therapy services, which included sponsoring selected health professionals to be educated in occupational therapy in the United Kingdom, the Ministry of Health collaborated with the University of Ghana to start an undergraduate programme in Occupational Therapy in 2012. This was the first of its kind in Ghana and the West African sub-region (Ndaa, 2014).

The four-year undergraduate programme comprises both theoretical and practical components. Clinical placements (fieldwork) form the main practical component of the programme and involves intra-semester[1] and inter-semester[2] clinical placements at various public and private health facilities as well as special schools. In 2016, the first cohort comprising of eighteen students graduated from the Programme with a Bachelor of Science in Occupational Therapy. Exploring the experiences of this cohort is an important educational research as they worked autonomously and in a self–directed manner in their first year of practice after graduation in a country where occupational therapy had not been established. This group of occupational therapists therefore did not have the opportunity to work under profession-specific mentorship during their undergraduate fieldwork placements nor during their transition to clinicians.

[1] *Intra-semester clinical placement:* Clinical placement held in the middle of an academic semester during term time.

[2] *Inter-semester clinical placement:* Clinical placement held during the break between two academic semesters.

The complexity of transition into practice for novice professionals, as emphasized in literature suggests that, the first year of practice as occupational therapists, and making the transition from students to clinicians for the first cohorts, has been a unique and challenging experience in a country where the profession is introduced for the first time (Naidoo, Wyk and Joubert, 2014;Tryssenaar and Perkins, 2001). This interpretive phenomenological study aimed to explore the experiences of the transition from student to clinician by the first cohort of locally trained occupational therapists in Ghana.

LITERATURE REVIEW:

Challenges of transition into practice

New graduates in occupational therapy have described the transition from student to clinician as a period of extreme stress and anxiety (Tryssenaar & Perkins, 2001)**.** Evidence suggests that, novice therapists enter a world that is different and more complex upon starting clinical practice (Naidoo et al., 2014). In a phenomenological study among six rehabilitation students to explore their lived experience of final placement and first year of practice in Canada showed that, transition into practice can be marked by intense feeling of shock extending across areas of professional competences and even personal lives (Tryssenaar & Perkins, 2001).

Occupational therapists have been found to experience challenges with transferring knowledge acquired in the classroom to practice contexts. In a phenomenological study (n=6) that explored novice occupational therapists' experiences of transition, a gap between knowledge taught in school and required in practice was identified (Toal-sullivan, 2016). New occupational therapy

graduates often experience moments of self-doubt and concerns about their competences (Lee and Mackenzie, 2003; Tryssenaar and Perkins, 2001).

Role confusion and uncertainties among new occupational therapy graduates have also been documented (McCombie & Antanavage, 2017). In a phenomenological study by Toal-Sullivan (2006) on experiences of transition from student to new clinician in Canada, newly qualified occupational therapists struggled to differentiated their own roles from those of other health professions such as physiotherapy and teaching. New graduates were furthermore reported to find working with leadership structures and workplace protocols in health facilities challenging and confusing (Doherty, Stagnitti and Schoo, 2009; Tryssenaar and Perkins, 2001).

In a phenomenological study by Lee and Mackenzie (2003), new graduates emphasized the lack of professional support and supervision from senior occupational therapy colleagues. They also identified limited resources and funds to work with as significant challenges encountered during their practice.

Developing professional competence

Clinical placements form a significant component of undergraduate health education and is an important determinant of the success of new graduates' transition into practice**.** These placements enable students to develop a foundation for practice and expose them to the clinical practice world (Toal-Sullivan, 2006). Research has identified professional support in clinical practice as a significant strategy to ease the transition of new graduates into practice (Lee and Mackenzie, 2003; Hummell and Koelmeyer, 1999). Formal supervision by an experienced clinician was identified

as a crucial determinant of the success of transition into practice (Hunt and Kennedy-Jones, 2010; Hummell and Koelmeyer, 1999).

Formal supervision is not only a determinant of the success of transition but also a crucial indicator of new graduates' perceived success in the work setting (Kennedy-Jones 2010). Supervision was also found to be crucial for new graduates to develop clinical skills and to develop strategies to overcome various challenges of transition including working with clients and other health professionals, management and organizational issues as well as personal and emotional issues (Tryssenaar and Perkins (2001)). Other formal professional development strategies identified in the literature include taking continuing education courses and being a member of formal professional support communities (Tryssenaar and Perkins, 2001; Seah, Mackenzie and Gamble, 2011).

Research also emphasised informal professional development strategies as crucial to success of new graduates' transition into practice. The value of support and constructive feedback from senior colleagues, other new graduates, other health professionals and tutors from previous university was indicated in the literature (Tryssenaar, 1999; Toal-Sullivan, 2006; Lee and Mackenzie, 2003). Participants in a phenomenological study by Lee and Mackenzie (2003) reported that constructive feedback from other therapists enhanced the confidence of new occupational therapists. In the same study, participants discussed that peer support networks serve as an important source of information and advice. Tryssenaar (1999) encouraged new graduate occupational therapists to maintain a healthy interprofessional relationship with other health professionals as they can be useful and supportive during the transition periods.

Occupational therapy profession is relatively new in the African continent. There are no publish literature on transition of occupational therapy students into practice from Africa. Presently, the experience of transition into practice made by the first cohort of locally trained occupational therapists in Ghana has not been explored. Findings from the study could assist curriculum development, clinical supervision, other new graduates' transition into practice and the overall development of occupational therapy education and practice in Ghana. Also, because the data will be generated in Ghana, the findings may be relevant to inform developments in occupational therapy education and practice in West Africa and other *low and middle-income countries*. There is the possibility that the findings might elucidate aspects of the transition from student to clinician that will have value in other countries as well.

METHOD

Design

This qualitative interpretive phenomenology was undertaken to explore the participants' experiences of transition into practice through co-construction of meaning with the participants, through inductive reasoning (Smith & Osborn, 2003). Interpretative phenomenology enables researchers to explore the experiences as well as understand how the participants make meaning of the experiences (M Reiners, 2012). In this study, the first cohort of locally trained occupational therapists described their experiences of transition into practice through in-depth interviews.

Participants

Participants were selected through purposive sampling for their relevance to the research topic and their potential to shed light on the phenomenon of interest. To illuminate different aspects of the

phenomenon of interest, maximum variation purposive sampling was used to select six of the eighteen first cohort of locally-trained occupational therapists (Suri, 2011). Six participants is considered sufficient when the researchers intend to explore a detailed interpretative accounts of a phenomenon (Pietkiewicz & Smith, 2014).

Recruitment commenced when research information sheets were emailed to all 18 occupational therapists comprising the first cohort. The researchers got access to the participants emails from the Occupational Therapy Association of Ghana after a formal request was made to the association with a copy of the research information leaflet. Twelve showed interest in participating in the study. The researchers selected the participants who provided the most variation in terms of sex, specialization field of practice, locality and the type of work setting. The principal author contacted selected participants to explain the study and to answer questions they had pertaining to the research before obtaining verbal consent and arranging the first interview with participants. Table 6 shows the detailed information of the six participants of the study.

Table 6: *Research participants' characteristics*

Participants' Pseudonyms	**Gender**	**Practice Setting**	**Specialization Field(s)**
Adjumma[3]	Female	Rural Faith-based Health Facility	1. Psychiatry 2. Paediatrics 3. Community 4. Adult Stroke
Abena	Female	Urban public Health Facility	1. Psychiatry

[3] Pseudonyms used to represent participants

Ayison	Male	Urban public Health Facility	1. Adult stroke 2. Paediatrics 3. Orthopaedics
Aliyah	Female	Urban Public Health Facility	1. Paediatrics 2. Orthopaedics 3. Adult Stroke 4. Burns and Plastics
Agyeman	Male	Urban Private Special School	1. Paediatrics 2. Community
Ananyah	Female	Urban Public Health Facility	Adult Stroke

Data Collection

Data collection comprised two face-to-face in-depth interviews with participants by the first author, each lasting for an average of one hour. Written informed consent and personal information of the participants were obtained on the first interview day prior to the commencement of the interview. The interview was guided by the question, "*Tell me what it was like for you to adjust from being a student to being an occupational therapist?*". The second interview was conducted after transcribing and analyzing the first interview. During the second interview, the interviewer discussed the provisional findings from the first interview with participants. The participants had the opportunity to confirm the interpretations, elaborate further and add depth of understanding. To enable the researcher to deeply explore participants' experiences, the interview was more like a discussion than a question-and-answer session (Nayar & Stanley, 2015). Interviews were conducted at a time and place convenient for each participant and quiet enough for maximum

concentration and to prevent interference with recording. Interview locations included participant's homes, workplaces and other quiet outdoor locations. Total time for data collection was about 15 hours. All interviews were audio-taped, and field notes were also taken on each interview. For confidentially sake, no one else was present at the time of the interview beside the participants and the researcher. Data saturation was evident by the end of the fourth interview. That is, the themes derived from the fifth and sixth interviews reinforced already identified themes but did not identify any new information. All interviews were conducted in English language.

Ethical considerations

Ethical approval was obtained from the Health Research Ethics Committee of Stellenbosch University. Prior to each interview, both the researcher and the participants signed a written consent form which contained information explaining the research including reasons for conducting the study, goals of the researchers, interviewer characteristics and how confidentiality and de-identification would be maintained, through the use of pseudonyms and the use of password protected computers.

Trustworthiness and Rigour

The different aspects of trustworthiness and rigour as proposed by Lincoln and Guba (1985) were ensured in the study (Lincoln & Guba, 1985). Member checking was performed with each participant to ensure the researcher had accurately captured participants' experiences in the research findings (Krefting, 1991). Participants were in agreement with the summary of the findings, thus ensuring internal validity. To ensure rigour and credibility, the researchers kept a reflective diary of the research journey which was updated after every contact session with a participant or after any session of working with the data. Detailed field notes were taken before

and after each interview to reduce potential researcher biases (Krefting, 1991). Triangulation of data was achieved through using in-depth interviews, field notes and reflective diaries (Lincoln & Guba, 1985). Each participant was also interviewed twice with each interview lasting an average of one hour. Maximum variation sampling approach was used to ensure as wide a variety of information is included as is possible within the parameters of this study (Suri, 2011). Additionally, peer debriefing was done through regular contact sessions with two researchers who are experienced in qualitative research. This ensured consistency in the development and interpretation of themes and codes, thereby strengthening the reliability of the results (Krefting, 1991). The study was conducted by a masters student, an Associate Professor and a Doctor of Occupational Therapy who are experienced qualitative researchers.

Data Analysis

The researchers adopted an inductive and iterative approach to data analysis (Smith & Osborn, 2015). All interviews were audiotaped and transcribed verbatim. The lead researcher repeatedly listened to the recordings, read and reread the transcripts closely to familiarise himself with the accounts of the participants. An inductive data analysis approach was used to analyse the data into codes, common themes and overarching themes. Coding was first done by the first author, discussed, reviewed and refined together by all three authors. Analysis followed each interview prior to the next interview in such a way that, data analysis occurred alongside data collection. This enabled the researcher to identify common themes and to expand the discussion where appropriate, during the interview (Pietkiewicz & Smith, 2014).

FINDINGS

The following four themes emerged from the data: 1. *Being "new" in a new profession* 2. *Introducing occupational therapy into a medical model health system* 3. *Personal and professional competence,* and 4. *"The future is bright".* (See Table 7).

Table 7: themes, sub-themes and codes

Themes	Sub-themes	Codes
Being "new" in a new profession	Academic – practice disparity	* Inapplicability of theories from undergraduate programme * "Academics and practice are different worlds"
	Preparedness for practice	* Cluelessness in the field * Role confusion * Inadequacy in specialized skills * Low self-confidence
	Interactions with clients	* Clients availability * Incorporative clients * "clients stopped coming for therapy" * High patient to therapist ratio
	"They saw me as expert"	* High expectations of people * Unknown and Unrealistic expectations * Pressure from people's expectations
	"Other health professionals didn't know my role"	* Role conflicts with physiotherapists * Wrong perception of OT roles * Explaining OT roles to others
	Feeling belittled	* "…You are not needed here" * Being young * Lack of motivation * Others perceptions of new occupational therapy graduates' professional status
	Unavailability of support and feedback	* Lack of supervision * Lack of workplace support for new graduates
Introducing occupational therapy into a medical model Health system	Leadership and workplace protocols	* Long bureaucratic processes * Leadership distorted views of occupational therapy * Medical model-oriented healthcare * Confusing leadership structure * Inattentiveness to new graduates' concerns

	Educating others on OT roles	* Presentations on occupational therapy roles * Explaining occupational therapy roles to clients * Forming inter-professional groups
	Lack of resources	* Lack of space and equipment to work with. * Resorting to bedside and home therapy
	"Making things work"	* Raising funds * Organising space for therapy * Working with occupational therapy assistants
	Recommendations for other health professions	* Learning more on occupational therapy roles * Avoiding hostility towards new graduates
	Recommendations for leadership and management	* Space for occupational therapy services * Employment of more occupational therapists
Personal and professional development	Formal and informal learning	* Personal reading and research * Attending workshops, trainings and conferences * Learning from other health professionals * Learning from foreign occupational therapy mentors * Social media groups as learning avenues
	Trial and error	* "…doing things I knew nothing about" * Trying intervention read about * "I had to do everything my own way"
	Attitude towards learning	* Open-mindedness * Recognising learning as a life-long process * Learning from mistakes
	Recommendations for new graduates	* Preparations for reality shock * Take advantage of professional development avenues * Readiness to accept corrections
	Recommendations for students and students training	* "Make changes to the curriculum" * Students should know their subject matter * Incorporate more practical and demonstrations * Review students' clinical placements
"The future is bright"	Expectations of Occupational therapy in Ghana.	*Hope in the face of challenges *Increased research and evidence-based practice *Occupational therapy in every hospital * Occupational therapy as part of decision making in healthcare. * Increased awareness on occupational therapy

i. Being "new" in a new profession

The theme "being new in a new profession" reflected participants' description of their transition, personal capacities and professional competencies as a result of being new graduates in a profession that was new in Ghana.

One of the realities all the participants indicated was a disparity between studies and practice. They described academics and practice as two different worlds. The application of some theoretical knowledge learnt in school was not immediately obvious. One of the participants stated,

> *"… they are two totally different worlds… What I learnt in school seemed not to be applicable in the setting that I was in, and it appeared all that I did in school was theory and now I am on the field and expected to do hands-on things, but I didn't know what to do."* (Adjumma[4], first interview).

The different nature of the world of practice made participants feel ill-prepared. All the participants indicated a feeling of cluelessness and uncertainty at the initial stages of their practice. They struggled with comprehending their role as occupational therapist in the practice context, which included working with clients and other health professionals. The feeling of "not knowing anything" resulted in participants' low self-confidence. One participant stated,

> *"Initially, I was not confident because I didn't know what occupational therapy was myself even though I'd spent four years in school. I just didn't know what I was doing out there. My four years in school did not really prepare me for the field. It was more of theory and they didn't tell me I had to survive on my own."* (Aliyah, first interview).

[4] Pseudonyms used to represent participants

Amidst the cluelessness, uncertainty and low self-confidence all the participants, except one, reported that clients and other health professionals perceived them as experts. This created high expectations that the participants felt were unattainable. These high expectations coupled with role uncertainties made participants anxious as they felt compelled to prove themselves and to defend their profession. Participants expressed their uncertainty regarding expectations from others.

> *"I didn't know what was expected of me in my setting…I knew they were expecting me to do much, but as to what exactly those expectations were, I couldn't tell. They also saw me as expert … they were like wow! Occupational therapist? …they knew that there were only eighteen locally-trained occupational therapists in Ghana and West Africa, and they were fortunate to have one of them."* (Adjumma, first interview)

Another participant stated:

> "*I don't know but for some reasons they had so much confidence in me ... They knew I have been to a university and I have a degree in occupational therapy so I should know a lot … And I didn't want to disappoint them"* (Ayison, first interview)

There were feelings of disappointment in the therapy rendered to clients during transition into practice:

> *"Sometimes I pray I get the opportunity to meet the clients I met in my first year to correct my mistakes…to right my wrongs…honestly…* (participant sighs*) …sorry I am getting emotional now"* (Adjumma, first interview)

Some participants described their therapy with clients as trial and error as they were not sure their interventions will work:

> *"I was just doing trial and error…if I try and it doesn't work, then I know that next time I don't have to take that path*" (Abena, first interview).

Another participant stated:

> *"It actually feels like you are doing something that you have no knowledge on…you've not seen anyone practice it before"* (Adjumma, first interview)

Some participants indicated that clients and other health professionals were uncertain of their roles as occupational therapists. They emphasized that they had to sensitize other health professionals, clients and administrative staff on their roles as occupational therapists.

> *"Other health professionals didn't know my role…they only attributed occupational therapy to craft work…so I had to go around every ward to do a presentation on what occupational therapy is about"* (Abena, first interview)

A critically challenging experience for the participants was a lack of supervision from experienced occupational therapists. This was attributed to the lack of established occupational therapy departments and occupational therapy practitioners in the country. Some participants stated that, they were supervised by other health professionals who lacked knowledge on what occupational therapists do.

> *"there was no supervisor…I was only reporting to a physician assistant who didn't also know what occupational therapy is"* (Adjumma, first interview).

Working with other health professionals was a challenging experience for new occupational therapy graduates, particularly as they perceived that physiotherapists were fulfilling the role of occupational therapists. This perceived overlap in roles resulted in new graduates' opinion that

physiotherapists felt threatened by the new appointments of occupational therapists in certain settings.

> *"Before I was posted to my setting, physiotherapists were made to assess ADL functioning using Barthel index… ADL assessment was given to me after my presentation on occupational therapy roles…the physiotherapists were not happy about it and they threaten to take back that role…they feared occupational therapists might be a replacement of their services."* (Anyanah, first interview).

Participants highlighted instances in their transition where they felt belittled as they were not accorded the necessary respect and recognition.

> "*sometimes they talk to me as if I am one of the orderlies…they don't accord any respect…they thought I was just someone who had learnt some vocational skills and have come to teach the patients"* (Abena, first interview).

Others also experienced instances where they felt their services as occupational therapists were irrelevant:

> *"…Even after presenting on occupational therapy roles, they ask you questions trying to imply that you are really not needed here…we are already doing all the things you've talk about…or we can do without them…besides we don't even have a space for you*". (Aliyah, first interview).

Some also expressed instances where they felt inferior because they were young:

> *"They tell you they are older than you and you just graduated into the system hence you should obey their every command"* (Ayison, first interview).

ii. Introducing occupational therapy into a medical model health system

This theme reflected participants experiences with the systems, protocols and the structures of their workplaces as they strived to establish occupational therapy services in a new environment.

All the participants indicated that there were no support strategies at their workplace to integrate new graduates into the health facility system. The experience was what Seah et al (2011) described as "being thrown in the deep and having to either sink or swim".

> *"There was no strategy to integrate us into the facility… not even orientation…we had to help ourselves to fit in"* (Aliyah, first interview)

Some participants highlighted that, because of the long bureaucratic processes at their workplaces, it took a long time for their concerns to be addressed. Others also found it confusing and frustrating working within the system.

> *"When I started work, there wasn't any structured protocol…it was very confusing and frustrating working with the system…there wasn't any proper structure in the hospital…it was so disorganized…so it was a big headache for me"* (Abena, first interview).

In contrast, other participants reported that their concerns were completely overlooked, and they were discouraged from changing the status quo.

> *"When I report any issue to my superior, he tells me to forget about it…he even discourages me…he tells me to find a corner and sit…and shouldn't find any trouble for myself*". (Agyeman, First interview)

All participants, except one, discussed that the leadership of their health facilities only gravitated towards a curative approach to healthcare, to the detriment of rehabilitation. They believed that leadership preferences for medical model healthcare made it difficult to establish occupational therapy services in those health facilities.

> *"The management of my facility were only concerned about cure for patients…they didn't understand rehabilitation…and so they didn't know the members that make up a rehabilitation team… so they didn't see the need to give us a space".* (Adjumma, First interview)

Participants stated that lack of space and equipment to start occupational therapy services was a major challenge to their transition, they resorted to bed-side and home therapies which limited their potential.

> *"There was no space for occupational therapy…therapy was usually done by the patients' bedsides…which actually limited me"* (Anyanah, first interview)

Another participant stated:

> *"Sometimes you'll know the person needs your help… you know you can do something…but you can't even get the equipment to help the person with"* (Aliyah, first interview)

Participants discussed efforts to educate other health professionals, clients and other administrative staff on the role of occupational therapy.

> *"At a point, I had to lobby to do a presentation on occupational therapy roles…I made clear what my roles were…that was one way I dealt with all the conflicts that were going on"* (Agyeman, second interview).

Another participant stated:

> *"…always had to explain what occupational therapy is everyday…always…always telling people that you are not a physiotherapist but an occupational therapist".* (Aliyah, first interview)

Clearly this could be an overwhelming experience of having to explain your role anytime you mention occupational therapy. One participant stated:

> *"Sometimes I get tired of having to explain my role all the time…okay so what do you do?...and I'm like…I'm an OT just like PT*" (Adjumma, first interview).

In the absence of internal support from hospital leadership, participants were not ready to give up:

> *"OT activities demands a lot of money which management were not ready to give…I had to write a lot of proposals to companies to solicit for funds and all that"* (Abena, second interview).

Some participants experienced intraprofessional conflicts as the occupational therapy assistants who were already in the system felt threatened:

> *"…So they had to do everything in their power to limit me…so they will oppose everything I want to put in place just to suppress me… as a newly qualified OT, I had so much enthusiasm…so there was always that kind of friction*" (Abena, First interview)

Some participants urged other health professionals to be receptive of new graduates and endeavour to learn about the role of occupational therapy.

> *"They should not be hostile to new OTs…they should look at OTs as one key health professional who puts the icing on the cake…to make patients functional and then live good and satisfying lives…they should not resist what OTs are coming on board with"* (Anyanah, Second interview).

iii. Personal and professional development

This theme reflected participants' experiences of ensuring continued professional development as well as recommendations to improve the level of professional competence of the occupational therapy community in Ghana.

Participants appreciated the need to develop both professionally and personally. All participants highlighted the use of both formal and informal avenues to ensure continued professional development. All participants indicated personal reading and research:

> *"Assessment was an issue…I hadn't seen an OT actually assess a client fully for me to know that okay, this is how it is done…most of it was what I had read from books that I try to implement"* (Anyanah, first interview)

Another participant stated:

> *"I resorted to reading all the time…I had to read and read and read and also go online to search and watch YouTube videos*" (Adjumma, first interview)

All participants indicated attending conferences, workshops and training to improve their competence.

> *"Am always interested in workshops and conferences because I feel like I don't know anything…so whenever I hear of workshops, I am interested".* (Aliyah, second interview)

Some participants learnt from other health professionals especially physiotherapists.

> *"I learnt from the physios because most of the things they do, we are supposed to do them…so I ask them why they do it…get the rationale and then learn from them".* (Ayison, first interview)

Some participants were fortunate to have foreign occupational therapy mentors whom they sought advice and guidance from.

> *"I encountered an occupational therapist from Australia who became my mentor…so I will contact her if I had any challenge…then she will reply…that was how I survived within the first year".* (Adjumma, first interview).

Some participants identified a positive attitude towards learning as a start to professional competence.

> *"I always made up my mind to open up and be willing to learn all the time…I was ready to accept criticism".* (Agyeman, first interview).

Other considered the need to learn from their own mistakes:

> *"I feel low-spirited when I think I am not doing something right…at the end of the day, I go home and try and think…ow! What could I have done about that differently?"* (Abena, first interview)

All except two participants admonished future occupational therapy graduates to prepare for a reality shock and be ready to adapt:

> *"…there is a more challenging world compared to the classroom…you will realise therapy doesn't always go as you expect it to…you should be ready to adapt to these realities".* (Ayison, second interview).

All the participants perceived inadequacies in the occupational therapy undergraduate curriculum and called for changes.

> *"Our curriculum should be changed…it should be more practical-based…practical case scenarios…even if it involves going on ward-rounds with students like the medical students do…we should be concerned about these things not theory theory theory…some of the courses should be scrapped because I didn't see the need"* (Adjumma, first interview)

Another participant stated:

> *"the courses have very good names but the problem is with the course content…A lot has to be done to the curriculum to ensure that when students are done with school, they will have basic clinical skills…like clinical assessment and interventions…even therapeutic communication"* (Anyanah, first interview)

Others also advised that clinical examination should be more attuned to practical application:

> *"Clinical examination should be a measure of the students' clinical skills not another measure of their theoretical knowledge*" (Agyeman, first interview)

Concerning students' fieldwork placements, participants indicated that:

> *"…the logbooks should be a record of the cases they saw…what they assessed and what interventions they gave…this will help them reflect more on the important things…not the theoretical knowledge about the values and principles of the OT profession*" (Anyanah, first interview)

iv. "The future is bright"

This theme reflected the participants' expectations of the occupational therapy profession in Ghana in ten years' time. Participants expressed hope that occupational therapy will thrive in the face of all the challenges they are experiencing in the *budding* stages.

> *"the ultimate is that, in spite of all the challenges, we are trying hard to be given the recognition we deserve in our health system…we should still move on and focus…one day it will work out for us"* (Ayison, second interview).

Other participants expect occupational therapy in Ghana to have a strong contextually relevant research foundation coupled with evidence-based clinical practice.

> *"I expect OT in Ghana to be big!…having a strong foundation of research that are relevant to our context…that can inform our practice here in Ghana…you know…evidence-based practice I believe is the foundation to succeed as a health profession".* (Agyeman, second interview)

All, except for one participant, discussed that they expect occupational therapy departments to be in every hospital in Ghana.

> *"I expect that OT will be accepted in each and every hospital… that most of the hospitals will embrace OT and see it for the important profession it is*" (Anyanah, second interview)

All the participants expressed their expectation that occupational therapy will be well known in Ghana.

> *"I am looking forward to some years where OT will be a household name…like you meet people and they will be like… oh! I was in this setting and an OT helped me do this or that or for a relative of mine or my child…yes!...I pray we get there…people will encounter us and they will see positive results…yes!...very very soon"* (Adjumma, second interview)

Another participant also stated:

> *"we should have a lot of OT centers in most of the hospitals…we should be in the industries…in the ministry of health…out there in the institutions where we have to be…we are a broad profession and with the right people supporting us, I think we will go far"* (Abena, second interview).

DISCUSSION OF FINDINGS

The aim of the study was to explore the experiences of transition from student to clinician by the first cohort of locally trained occupational therapists in Ghana. It was easier to access the study participants because one of the authors was in the same cohort with the participants. Familiarity with the participants promoted the establishment of rapport and reciprocity during the interview.

Open dialogue with participants resulted in a more in-depth data which promoted a greater understanding of participants' experiences of transition into practice. The researchers believe that, the objectivity, authenticity and reflexivity of the study was increased because the first author was in the same cohort as the participants (Blythe, Wilkes, Jackson, & Halcomb, 2013). Themes identified were consistent across all participants.

The findings revealed moments of self-doubt, cluelessness in the field and concerns about competencies and preparedness for practice. These resulted in participants' lack of self-confidence. This is consistent with existing literature which emphasises the influence that practical experiences have on new graduates' transition into practice (Lee and Mackenzie, 2003; Tryssenaar, 1999). It was felt that the practical experiences of students should be enhanced through practical demonstrations, case studies and clinical fieldwork experiences, to expose students to the world of practice and enable them to develop a firmer professional foundation before starting practice.

There were many challenges in trying to practice occupational therapy when participants barely understood what occupational therapy was themselves. Participants felt they were not adequately prepared for practice, more so to practice independently without supervision. Participants implied a difficult transition into practice. There was a feeling of betraying the trust of their clients as they wished they could meet them again to "right their wrongs". This finding confirmed the need for supervision highlighted by Hunt and Kennedy-Jones (2010) who discussed that supervision helps new graduates to develop their professional identity and improves their overall perceived success in the work context. Lack of supervision was thus identified as a critical factor that made the transition more challenging. Participants were on their own, doing what they thought was right. Robertson and Griffiths (2009) emphasised that supervision assisted new occupational therapy graduates to make the right decisions and to develop confidence in the field.

The process of learning to “fit in” at the workplace was a source of great stress. The lack of orientation and induction programmes to integrate new graduates into the work environment made working within the system difficult. The confusing nature of workplace leadership structure, long bureaucratic processes and the lack of knowledge of superiors on occupational therapy made transition challenging for new graduates.

What made the transition even more stressful was the high, possibly unrealistic, expectations placed on occupational therapy graduates, who were also struggling to find their feet amidst all the challenges. Participants felt it was necessary to gain endorsement from other health professionals and clients, which demanded that new graduates prove their value, particularly to clients and other health professionals, placing unnecessary pressure on them. Expectations that new graduates should already possess all the clinical competencies should be discarded. Both new graduates and other health professionals should recognize learning as an ongoing process.

Working with other health professionals was not without difficulties as participants perceived overlapping responsibilities, specifically with physiotherapists, resulting in role conflict. Health professionals should recognize that the wellbeing of patients is the focus of healthcare and that every profession is central to achieving this mandate. The physiotherapist and the occupational therapist are likely to work on the same patient, hence the need to collaborate for the good of the patient.

What was evident in this study was leadership and management preferences and biases towards the medical model approach to healthcare. It was clear that occupational therapy and rehabilitation did not seem to be a priority. This situation triggered “frustration” and “anger” as new graduates’ concerns were mostly ignored.

Participants reported the lack of infrastructure (i.e. insufficient space and equipment) impacted on their ability to render optimal occupational therapy services at health facilities. Services were restricted to the bedside or within patients' homes. This was consistent with findings by Lee and Mackenzie (2003) who reported that new graduates considered inadequacy of resources as problematic and improvising was a source of great stress for their transition.

Participants recognised the need for continued professional development through attending conferences, workshops, training, personal reading, seeking support from mentors and other health professionals. This finding is consistent with literature (Seah, Mackenzie and Gamble, 2011; Toal-Sullivan, 2006; Lee and Mackenzie, 2003; Tryssenaar and Perkins, 2001) which emphasise continued professional development activities as essential for easing new graduates transition into practice.

Participants recommended that their university curriculum should be modified to include more practical experiences to help the development of skills required for practice. This is consistent with findings from Tryssenaar (1999). Despite the varying challenges of transition participants experienced, a compelling sense of enthusiasm to establish occupational therapy services in Ghana was evident. Participants' expectations of occupational therapy in Ghana was an indication that the profession will thrive. The researchers recommend unity, determination and perseverance as every occupational therapist contributes their quota towards establishing the profession in the country.

CONCLUSION AND RECOMMENDATIONS

This study employed an interpretive phenomenological approach to explore the transition from students to clinicians by the first cohort of locally trained occupational therapists in Ghana. The themes that emerged enabled us to understand the challenges of being "new in a new profession", as well as the barriers encountered while introducing occupational therapy into a medical model health system. The study also identified some facilitators of the transition and the various ways new graduates ensured continued professional competence.

The researchers recommend that, as the profession is a young and growing one, the occupational therapy curriculum should aim at increasing the practical experiences of students. It should also focus on training students to develop skills required for practice, such as assessment skills, communication skills, management and organizational skills, time-management skills and clinical decision-making skills. Furthermore, occupational therapy education should enable students to have a deep understanding of the profession's philosophies, knowledge and skills (Seah et al., 2011).

Programmes to orientate and induct new graduates into their practice settings are recommended. These programmes should focus on informing new graduates on the leadership structure, systems and processes in a format that is detailed, comprehensible and easily accessible to prevent stress and anxiety.

Also, leadership of health facilities should recognize that the complex nature of health requires the services of various health professionals including rehabilitation professionals (Hall & Weaver, 2001); Koch, Gitchel and Kristin, 2009). Accessible avenues are needed for new graduates to

communicate their concerns. This should be done in such a way as to empower new graduates to voice their grievances, and due consideration should be given to all concerns.

It is important for new graduates to recognise that certain competencies can only be acquired during practice and they should hence endeavour to attend continued professional development activities.

What is highlighted in the findings was that a well-organized collaboration between university educators, leadership and management of health facilities, other health professionals and other new graduates can help new graduates to transition successfully into practice. Future research should seek to explore other cohorts of graduates' experience of their student to clinician transition to identify if there are similarities or differences in their transitionary experience. This could allow for a more holistic understanding of students transition into practice to generate more suggestions to optimize occupational therapy education and practice in Ghana. Information obtained from this study is not only valuable for contexts with newly established occupational therapy programmes, but also contexts with well-established occupational therapy profession. Further research is needed to explore the factors that affect the transition of novice occupational therapy professionals into practice in contexts where the profession is well-established, to further improve occupational therapy education globally.

LIMITATIONS

A number of potential limitations should be taken into consideration when interpreting the results. Even though some experiences might apply to other cohorts, findings are unique to the study participants and might not be transferable to other cohorts of occupational therapy students. Another limitation was that the study was retrospective as participants had to reflect on past

experiences. A prospective study might better represent participants' experiences of transition as it is happening.

KEY FINDINGS

- New graduates lacked adequate supervision given the lack of practicing occupational therapists to fulfill supervisory roles.
- New graduates needed assistance to apply knowledge in practice.
- Continued professional development activities facilitated new graduates' successful transition into practice.
- The first cohort of new graduates are enthusiastic to establish occupational therapy services in the Ghanaian health system

What the study has added

The study allowed for an understanding of the first cohort of occupational therapy graduates' experiences of transition into practice, within a West African context, which might inform practice and policies.

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APPENDICES

APPENDIX 1: PARTICIPANTS' INFORMATION LEAFLET AND CONSENT FORM

Title of Research Project:	
Exploring the transition from student to clinician made by the first cohort of locally trained occupational therapists in Ghana	
DETAILS OF PRINCIPAL INVESTIGATOR (PI):	
Title, first name, surname: Mr. Eric Nkansah Opoku	**Ethics reference number:** HREC1-2019-9536
Full postal address: Eric Nkansah Opoku, Department of Occupational Therapy University of Ghana P. O. Box KB 143, Korle-Bu – Accra, Ghana.	**PI Contact number:** +233202289856

My name is Eric Nkansah Opoku. You will know me as your programme mate in your BSc. Occupational therapy education. I would like to invite you to take part in a research project that aims to explore your experiences when practising occupational therapy in your first year after graduation in Ghana.

Please take some time to read the information presented here, which will explain the details of this project and please contact me if you require further explanation or clarification of any part of this project. It is very important that you are completely satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary,** and you are free to decline to participate. In other words, you may choose to take part, or you may choose not to take part. Nothing bad will come of it if you say no: it will not affect you negatively

in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part initially.

This study has been approved by the **Health Research Ethics Committee at Stellenbosch University.** The study will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, the South African Guidelines for Good Clinical Practice (2006), the Medical Research Council (MRC) Ethical Guidelines for Research (2002), and the Department of Health Ethics in Health Research: Principles, Processes and Studies (2015).

What is this research study all about?

The main aim of the study is to explore the first cohort of Occupational therapists in Ghana lived experience of the transition from students to clinicians within their first year of practice. Six first cohort occupational therapists will be interviewed at any location participants find convenient. In-depth interviews will be used to understand participants' lived experiences and will be voice recorded for analysis. The findings could serve as a basis for understanding the relevance or responsiveness of the undergraduate occupational therapy curriculum with regards to adequately preparing students for practice after graduation and also to inform subsequent cohorts of occupational therapists on what to expect after school. This study will also inform policy makers, employers and clinical supervisors in providing adequate support and supervision for new graduates.

Why do we invite you to participate?

You have been invited to participate in this study because you are one of the first cohort of occupational therapists to be trained in Ghana and West Africa, and for your ability to share your

unique experience with regards to the transition from student to clinician. That is your experience as an occupational therapy clinician during your first year of practice in Ghana.

What will your responsibilities be?

As a participant, it will be expected of you to

- Select a place of convenience for the interview.
- Communicate your experience with the researcher during two face-to-face in-depth interviews (first interview will be 2hours and the second will be 1hour 30minutes).

Will you benefit from taking part in this research?

There are no direct benefits for the participants, but your shared experiences and insights will be valued and respected as true for someone who has personally experienced practising occupational therapy in Ghana as first cohort. The greater community of occupational therapists might benefit from the findings. Your experiences can inform subsequent cohorts of occupational therapists on what to expect after school. This might prepare them better for transitioning to practice.

The findings can also provide a basis for understanding the relevance or responsiveness of the undergraduate occupational therapy curriculum in preparing new graduates to practice. These in effect, will positively impact the occupational therapy profession in Ghana.

Are there any risks involved in your taking part in this research?

There are no foreseeable risks to you partaking in this research. The study does not require the conduction of procedures that could cause physical harm. You have the right to refuse to share any

information you perceive as confidential/personal and private. Feel free to alert the researcher if you feel uncomfortable with the direction of the interview.

All information collected in the study will be protected and treated as confidential. Measures will be taken to ensure your responses remain confidential. From the start your identity will be kept confidential by allocating you a pseudonym. These pseudonyms will be used in the write up or any other form of dissemination of the research findings.

Interview recordings and transcriptions and all other forms of electronic data generated by the study will be stored on the researcher's personal computer and backed up on an external hard drive as well as on a virtual drive and will be password protected. This information will only be known by the Researcher and his two supervisors. Hard copies of signed informed consent forms as well as any other documents containing participant information will be locked away in a steel cabinet.

Will you be paid to take part in this study and are there any costs involved?

- You will be compensated for your time and effort to take part in the study. You will receive Gh₵50.00 per interview**.** You will not have to pay for anything, if you do take part.

Is there anything else that you should know or do?

- You can phone Mr **Eric Nkansah Opoku** at **+233202289856** if you have any further queries or encounter any problems.
- You can phone the Health Research Ethics Committee at 021 938 9677/9819 if there still is something that has not been explained to you, or if you have a complaint.
- You will receive a copy of this information and consent form for you to keep safe.

If you are willing to participate in this study, please sign the attached Declaration of Consent and hand it to the investigator. You will receive a copy of this information and consent form for your own records.

Declaration by participant

By signing below, I ……..……. agree to take part in a research study entitled (Exploring the transition from student to clinician made by the first cohort of occupational therapists in Ghana).

I declare that:

- I have read this information and consent form, or it was read to me, and it is written in a language in which I am fluent and with which I am comfortable.
- I have had a chance to ask questions and I am satisfied that all my questions have been answered.
- I understand that taking part in this study is **voluntary,** and I have not been pressurised to take part.
- I may choose to leave the study at any time and nothing bad will come of it – I will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the study doctor or researcher feels it is in my best interests, or if I do not follow the study plan that we have agreed on.

Signed at (*place*) .....…..…… on (*date*) ……...……...2019.

…… ……

…… ……

Signature of Participant **Signature of witness**

Declaration by investigator

I *(name)* ……...……declare that:

- I explained the information in this document in a simple and clear manner to …….....
- I encouraged him/her to ask questions and took enough time to answer them.
- I am satisfied that he/she completely understands all aspects of the research, as discussed above.
- I did/did not use an interpreter. (*If an interpreter is used then the interpreter must sign the declaration below.)*

Signed at (*place*) .....…..…… on (*date*) ……...……...2019.

…… ……

…… ……

Signature of investigator **Signature of witness**

APPENDIX 2: PARTICIPANTS' DATASHEET

Participants' Personal Information Form

Full name: ……..……..

Gender: (*Please tick*) ☐ Male ☐ Female

Place of work (during first year of practice) ……..

Type of Institution of work *(in first year of practice*)

☐ Private Hospital ☐ Public Hospital

☐ Special school ☐ Faith-Based Health facility

☐ Others (*please specify*): ……..

Specialization of Practice (*Please tick*)

☐ Psychiatry ☐ Adult stroke

☐ Paediatrics ☐ Orthopaedics

☐ Community ☐ Burns and plastics

☐ Others (*please specify*): …….

Primary Phone #: ……..…… Alternate Phone #: ……

In-depth interview guiding question, "**Tell me what it was like for you to adjust from being student to being an occupational therapist".**

APPENDIX 3: SCOPING REVIEW DATA EXTRACTION FORM

Author names	Publishing journal	Year of publication	Country of origin	Study population, size and setting	Study aim/ objectives/question	Study design	Findings

APPENDIX 4: BMJ OPEN AUTHOR GUIDELINES

BMJ Open is an open access journal dedicated exclusively to publishing medical research. The journal aims to provide rapid publication of research across a range of medical disciplines and therapeutic areas, through a continuous publication model. As well as publishing definitive articles, including small and specialist studies, *BMJ Open* will consider protocols and pilot studies. Submissions will only be published after peer review, and reviewers' comments will be published alongside accepted manuscripts.

BMJ Open will not consider for publication any study partly or wholly funded by the tobacco industry.

Peer review of study protocols

BMJ Open will consider publishing without peer review protocols that have formal ethical approval *and* funding from a recognised, open access advocating research-funding body (such as those listed by the JULIET project). Please provide proof that these criteria are met when uploading your protocol. Any protocols that do not meet both these criteria will be sent for open external peer review, with reviewer comments published online upon acceptance, as with research articles. Reviewers will be instructed to review for clarity and sufficient detail. The intention of peer review is not to alter the study design. Reviewers will be instructed to check that the study is scientifically credible and ethically sound in its scope and methods, and that there is sufficient detail to instil confidence that the study will be conducted and analysed properly.

As with research articles, protocols will be published under a Creative Commons licence.

ORCID

BMJ Open mandates ORCID IDs for the submitting author at the time of article submission; co-authors and reviewers are strongly encouraged to also connect their ScholarOne accounts to ORCID. We strongly believe that the increased use and integration of ORCID IDs will be beneficial for the whole research community

Submission guidelines

Please review the below article type specifications including the required article lengths, illustrations, table limits and reference counts. The word count excludes the title page, abstract, tables, acknowledgements, contributions and references. Manuscripts should be as succinct as possible.

If your article is accepted you can take advantage of BMJ's partnership with Kudos, a free service to help you maximise your article's reach.

Protocol

Protocol manuscripts should report planned or ongoing research studies. If data collection is complete, we will not consider the manuscript. We encourage the submission of protocol manuscripts at an early stage of the study. Protocols nearing completion of data collection will be treated on a case by case basis and the final decision on whether to consider a protocol for publication will rest with the Editor.

Publishing study protocols enables researchers and funding bodies to stay up to date in their fields by providing exposure to research activity that may not otherwise be widely publicised. This can help prevent unnecessary duplication of work and will hopefully enable collaboration. Publishing protocols in full also makes available more information than is currently required by trial registries

and increases transparency, making it easier for others (editors, reviewers and readers) to see and understand any deviations from the protocol that occur during the conduct of the study.

The SPIRIT (Standard Protocol Items for Randomized Trials) statement has now been published. It is an evidence-based tool developed through systematic review of a wide range of resources and consensus. It closely mirrors the CONSORT statement and also reflects important ethics considerations. We encourage investigators to adhere to the SPIRIT recommendations when drafting their protocols and include a completed SPIRIT checklist with their trial protocol submission.

The PRISMA-P (Preferred reporting items for systematic review and meta-analysis protocols) is a new reporting guideline. An article stating the guideline checklist has now been published. The PRISMA-P checklist contains 17 items considered to be essential and minimum components of a systematic review or meta-analysis protocol. Systematic review authors and assessors are strongly encouraged to make use of PRISMA-P when drafting and appraising review protocols and authors should include a completed PRISMA-P checklist with their protocol submission.

Various other resources exist that list the ingredients of an authoritative trial protocol, e.g. the UK Dept of Health/Medical Research Council Clinical Trials Toolkit and the US National Institutes for Health provide advice on how to structure a trial protocol. *BMJ Open* will consider for publication protocols for any study design, including observational studies and systematic reviews. We recommend Prospero for registration of systematic reviews.

Following the lead of The BMJ and its patient partnership strategy, *BMJ Open* is encouraging active patient involvement in setting the research agenda. As such, we require authors of Study Protocols to add a Patient and Public Involvement statement in the Methods section.

General BMJ policies apply (see above) on manuscript formatting, editorial policies, licence forms and patient consent (where applicable to study designs). Protocols should include, as a minimum, the following items.

Protocol papers should report planned or ongoing studies. Manuscripts that report work already carried out will not be considered as protocols. The dates of the study must be included in the manuscript and cover letter.

Protocols for studies that will require ethical approval, such as trials, are unlikely to be considered without having received that approval.

Title: this should include the specific study type, e.g. randomised controlled trial.

Abstract: this should be structured with the following sections. Introduction; Methods and analysis; Ethics and dissemination. Registration details should be included as a final section, if appropriate.

An Article Summary, placed after the abstract, consisting of the heading 'Strengths and limitations of this study', and containing up to five short bullet points, no longer than one sentence each, that relate specifically to the methods.

Introduction: explain the rationale for the study and what evidence gap it may fill. Appropriate previous literature should be referenced, including relevant systematic reviews.

Methods and analysis: provide a full description of the study design, including the following. How the sample will be selected; interventions to be measured; the sample size calculation (drawing on previous literature) with an estimate of how many participants will be needed for the

primary outcome to be statistically, clinically and/or politically significant; what outcomes will be measured, when and how; a data analysis plan.

Ethics and dissemination: ethical and safety considerations and any dissemination plan (publications, data deposition and curation) should be covered here.

Full references.

Authors' contributions: state how each author was involved in writing the protocol.

Funding statement: preferably worded as follows. Either: 'This work was supported by [name of funder] grant number [xxx]' or 'This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors'.

Competing interests statement.

Word Count: 4,000 words. Should the word count exceed this number, please state this in the cover letter upon submission.

Formatting your paper

These are general formatting guidelines across BMJ, please always refer to journal-specific instructions for authors for article type specifications.

Title page

The title page must contain the following information:

Title of the article

Full name, postal address, e-mail and telephone number of the corresponding author

Full name, department, institution, city and country of all co-authors

Word count, excluding title page, abstract, references, figures and tables

Keywords

Authors can usually opt to (or are required to) choose keywords relevant to the content of the manuscript during the submission process. This assists in the identification of the most suitable reviewers for the manuscript. The selected keywords should also be included in the abstract itself.

Authors and Institutions

On submission of your article through our submission system you will be asked to provide a name, email address and institutional affiliation for all contributing authors. In the final published article author names, institutions and addresses will be taken from these completed fields and not from the submitted Word document.

Manuscript format

The manuscript must be submitted as a Word document. PDF is not accepted.

The manuscript should be presented in the following order:

Title page

Abstract, or a summary for case reports (Note: references should not be included in abstracts or summaries)

Main text separated under appropriate headings and subheadings using the following hierarchy: BOLD CAPS, bold lower case, Plain text, Italics

Tables should be in Word format and placed in the main text where the table is first cited. Tables should also be cited in numerical order

Acknowledgments, Competing Interests, Funding and all other required statements

References. All references should be cited in the main text in numerical order

Figures must be uploaded as separate files (view further details under the Figures/illustrations section). All figures must be cited within the main text in numerical order and legends should be provided at the end of the manuscript.

Online Supplementary materials should be uploaded using the File Designation “Supplementary File” on the submission site and cited in the main text.

Please remove any hidden text headers or footers from your file before submission.

Style

Acronyms and abbreviations should be used sparingly and fully explained when first used. Abbreviations and symbols must be standard. SI units should be used throughout, except for blood pressure values which should be reported in mm Hg.

Whenever possible, drugs should be given their approved generic name. Where a proprietary (brand) name is used, it should begin with a capital letter.

Figures and illustrations

Images must be uploaded as separate files. All images must be cited within the main text in numerical order and legends must be provided (ideally at the end of the manuscript).

Colour images

For certain journals, authors of unsolicited manuscripts that wish to publish colour figures in print will be charged a fee to cover the cost of printing. Refer to the specific journal's instructions for authors for more information.

Alternatively, authors are encouraged to supply colour illustrations for online publication and black and white versions for print publication. Colour publication online is offered at no charge, but the figure legend must not refer to the use of colours.

File types

Figures should be submitted in TIFF, EPS, JPEG or PDF formats. In EPS files, text (if present) should be outlined. For non-vector files (eg TIFF, JPEG) a minimum resolution of 300 dpi is required, except for line art which should be 1200 dpi. Histograms should be presented in a simple, two-dimensional format, with no background grid.

For figures consisting of multiple images/parts, please ensure these are submitted as a single composite file for processing. We are unable to accept figures that are submitted as multiple files.

During submission, ensure that the figure files are labelled with the correct File Designation of "Mono Image" for black and white figures and "Colour Image" for colour figures.

Figures are checked using automated quality control and if they are below the minimum standard you will be alerted and asked to resupply them.

Please ensure that any specific patient/hospital details are removed or blacked out (e.g. X-rays, MRI scans, etc). Figures that use a black bar to obscure a patient's identity are not accepted.

Tables

Tables should be in Word format and placed in the main text where the table is first cited. Tables must be cited in the main text in numerical order. Please note that tables embedded as Excel files within the manuscript are NOT accepted. Tables in Excel should be copied and pasted into the manuscript Word file.

Tables should be self-explanatory and the data they contain must not be duplicated in the text or figures. Any tables submitted that are longer/larger than 2 pages will be published as online only supplementary material.

Multimedia files

You may submit multimedia files to enhance your article. Video files are preferred in .WMF or .AVI formats, but can also be supplied as .FLV, .Mov, and .MP4. When submitting, please ensure you upload them using the File Designation “Supplementary File – Video”.

References

Authors are responsible for the accuracy of cited references and these should be checked before the manuscript is submitted.

Citing in the Text

References must be numbered sequentially as they appear in the text. References cited in figures or tables (or in their legends and footnotes) should appear at the end of the reference list to avoid re-numbering if tables and figures are moved around at peer review/proof stage. Reference numbers in the text should be inserted immediately after punctuation (with no word spacing)—for example,[6] not [6].

Where more than one reference is cited, these should be separated by a comma, for example, [1, 4, 39]. For sequences of consecutive numbers, give the first and last number of the sequence separated by a hyphen, for example, [22-25]. References provided in this format are translated during the production process to superscript type, and act as hyperlinks from the text to the quoted references in electronic forms of the article.

Please note that if references are not cited in order the manuscript may be returned for amendment before it is passed on to the Editor for review.

Preparing the Reference List

References must be numbered consecutively in the order in which they are mentioned in the text.

Only papers published or in press should be included in the reference list. Personal communications or unpublished data must be cited in parentheses in the text with the name(s) of the source(s) and the year. Authors should request permission from the source to cite unpublished data.

Journals from BMJ use a slightly modified version of Vancouver referencing style (see example below) available in Endnote. Note that the BMJ uses a different style.

BMJ Reference Style

List the names and initials of all authors if there are 3 or fewer; otherwise list the first 3 and add ‘et al.’ (The exception is the Journal of Medical Genetics, which lists all authors). Use one space only between words up to the year and then no spaces. The journal title should be in italic and abbreviated according to the style of Medline. If the journal is not listed in Medline, then it should be written out in full.

Example references

Journal article: 13 Koziol-Mclain J, Brand D, Morgan D, et al. Measuring injury risk factors: question reliability in a statewide sample. *Inj Prev* 2000;6:148–50.

Book: 15 Howland J. Preventing Automobile Injury: New Findings From Evaluative Research. Dover, MA: Auburn House Publishing Company 1988:163–96.

Chapter in a book: 14 Nagin D. General deterrence: a review of the empirical evidence. In: Blumstein A, Cohen J, Nagin D, eds. Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates. Washington, DC: National Academy of Sciences 1978:95–139.

Abstract/supplement: 16 Roxburgh J, Cooke RA, Deverall P, et al. Haemodynamic function of the carbomedics bileaflet prosthesis [abstract]. *Br Heart J* 1995;73(Suppl 2):P37.

Electronic citations: Websites are referenced with their URL and access date, and as much other information as is available. Access date is important as websites can be updated and URLs change. The "date accessed" can be later than the acceptance date of the paper, and it can be just the month accessed.

Electronic journal articles: Morse SS. Factors in the emergency of infectious diseases. *Emerg Infect Dis* 1995 Jan-Mar;1(1). www.cdc.gov/nciod/EID/vol1no1/morse.htm (accessed 5 Jun 1998).

Electronic letters: Bloggs J. Title of letter. *Journal name* Online [eLetter] Date of publication. url eg: Krishnamoorthy KM, Dash PK. Novel approach to transseptal puncture. *Heart* Online [eLetter] 18 September 2001. http://heart.bmj.com/cgi/eletters/86/5/e11#EL1

Legal material: Toxic substances Contro Act: Hearing on S776 Before the Subcommittee of the Environment of the Senate Comm. on Commerce, 94th Congress 1st September (1975).

Law references: The two main series of law reports, Weekly Law Reports (WLR) and All England Law Reports (All ER) have three volumes a year e.g. Robertson v Post Office [1974] 1 WLR 1176

There are good historical precedents for the use of square and round brackets. Since 1891, round ones have referred to the date of the report, square ones to the date of publication of the report. Apart from not italicising the name of the case, we use the lawyers' style; be careful with punctuation, e.g. Caparo Industries plc v Dickman and others [1990] 1 All ER 568-608.

Digital Object Identifier (DOI)

A DOI is a unique string created to identify a piece of intellectual property in an online environment and is particularly useful for articles that are published online before appearing in print (and therefore have not yet been assigned the traditional volume, issue and page number references). The DOI is a permanent identifier of all versions of an article, whether raw manuscript or edited proof, online or in print. Thus, the DOI should ideally be included in the citation even if you want to cite a print version of an article.

Cite an article with a DOI before published in print: Alwick K, Vronken M, de Mos T, et al. Cardiac risk factors: prospective cohort study. *Ann Rheum Dis*Published Online First: 5 February 2004. doi:10.1136/ard.2003.001234

Cite an article with a DOI once published in print: Vole P, Smith H, Brown N, et al. Treatments for malaria: randomised controlled trial. *Ann Rheum Dis*2003;327:765–8 doi:10.1136/ard.2003.001234 [published Online First: 5 February 2002].

Online only supplementary material

Additional figures and tables, methodology, raw data, etc may be published online only as supplementary material. If your paper exceeds the word count you should consider if any parts of the article could be published online only. Please note that these files will not be copyedited or typeset and will be published as supplied, therefore PDF files are preferred.

All supplementary files should be uploaded using the File Designation “Supplementary File”. Please ensure that any supplementary files are cited within the main text of the article.

Some journals also encourage authors to submit translated versions of their abstracts in their local language, which are published online only alongside the English version. These should be uploaded using the File Designation “Abstract in local language”.

APPENDIX 5: INTERNATIONAL JOURNAL OF CLINICAL PRACTICE AUTHOR GUIDELINES

Submission

Authors should kindly note that submission implies that the content has not been published or submitted for publication elsewhere except as a brief abstract in the proceedings of a scientific meeting or symposium.

Once the submission materials have been prepared in accordance with the Author Guidelines, manuscripts should be submitted online at https://mc.manuscriptcentral.com/ijcp

AIMS AND SCOPE

IJCP is a general medical journal. IJCP gives special priority to work that has international appeal. IJCP encourages enquiries from potential contributors prior to formal submission.

IJCP publishes the following articles, which are subject to peer review, unless otherwise stated.

Editorials. IJCP Editorials are commissioned and are peer reviewed at the editor's discretion. **Perspectives.** Most IJCP Perspectives are commissioned and are peer reviewed at the editor's discretion.

Study design and interpretation.

Original data from clinical investigations. In particular: Primary research papers from RCTs, observational studies, epidemiological studies; pre-specified sub-analyses; pooled analyses.

Meta-analyses.

Systematic reviews. From October 2009, special priority will be given to systematic reviews.

Non-systematic/narrative reviews. From October 2009, reviews that are not systematic will be considered only if they include a discrete Methods section that must explicitly describe the authors' approach. Special priority will, however, be given to systematic reviews.

'How to…' papers.

Consensus statements.

Short reports.

Letters. Peer reviewed at the editor's discretion

PREPARING THE SUBMISSION

Cover Letters

Cover letters are not mandatory; however, they may be supplied at the author's discretion.

Parts of the Manuscript

The manuscript should be submitted in separate files: title page; main text file; figures.

Title page

The title page should contain:

A short informative title that contains the major key words.

The title should not contain abbreviations

A short running title of less than 40 characters;

The full names of the authors;

The author's institutional affiliations where the work was conducted, with a footnote for the author's present address if different from where the work was conducted;

Acknowledgments.

Acknowledgments

Contributions from anyone who does not meet the criteria for authorship should be listed, with permission from the contributor, in an Acknowledgments section. Financial and material support should also be mentioned. Thanks to anonymous reviewers are not appropriate.

Conflict of Interest Statement

Authors will be asked to provide a conflict of interest statement during the submission process. For details on what to include in this section, see the section 'Conflict of Interest' in the Editorial Policies and Ethical Considerations section below. Submitting authors should ensure they liaise with all co-authors to confirm agreement with the final statement.

Main Text File

As papers are double-blind peer reviewed the main text file should not include any information that might identify the authors.

The main text file should be presented in the following order:

Title, abstract and key words;

Main text;

References;

Tables (each table complete with title and footnotes);

Figure legends;

Appendices (if relevant).

Figures and supporting information should be supplied as separate files.

Tables

Tables should be self-contained and complement, not duplicate, information contained in the text. They should be supplied as editable files, not pasted as images. Legends should be concise but comprehensive – the table, legend, and footnotes must be understandable without reference to the text. All abbreviations must be defined in footnotes.

Figure Legends

Legends should be concise but comprehensive – the figure and its legend must be understandable without reference to the text. Include definitions of any symbols used and define/explain all abbreviations and units of measurement.

Figures

Although authors are encouraged to send the highest-quality figures possible, for peer-review purposes, a wide variety of formats, sizes, and resolutions are accepted.

Colour Figures. Figures submitted in colour may be reproduced in colour online free of charge. Please note, however, that it is preferable that line figures (e.g. graphs and charts) are supplied in black and white so that they are legible if printed by a reader in black and white. If an author would prefer to have figures printed in colour in hard copies of the journal, a fee will be charged by the Publisher.

Additional Files

Appendices

Appendices will be published after the references. For submission they should be supplied as separate files but referred to in the text.

Graphical Table of Contents

The journal's table of contents will be presented in graphical form with a brief abstract. The table of contents entry must include the article title, the authors' names (with the corresponding author indicated by an asterisk), no more than 80 words or 3 sentences of text summarising the key findings presented in the paper and a figure that best represents the scope of the paper (see the section on abstract writing for more guidance). Table of contents entries should be submitted to Scholar One in one of the generic file formats and uploaded as 'Supplementary material for review' during the initial manuscript submission process. The image supplied should fit within the dimensions of 50mm x 60mm, and be fully legible at this size. Examples for arranging the text and figures as well as paper title and authors' names are shown below.

Supporting Information

Supporting information is information that is not essential to the article, but provides greater depth and background. It is hosted online and appears without editing or typesetting. It may include tables, figures, videos, datasets, etc.

Note: if data, scripts, or other artefacts used to generate the analyses presented in the paper are available via a publicly available data repository, authors should include a reference to the location of the material within their paper.

General Style Points

The following points provide general advice on formatting and style.

• **Abbreviations:** In general, terms should not be abbreviated unless they are used repeatedly and the abbreviation is helpful to the reader. Initially, use the word in full, followed by the abbreviation in parentheses. Thereafter use the abbreviation only.

• **Units of measurement:** Measurements should be given in SI or SI-derived units.

• **Numbers:** numbers under 10 are spelt out, except for: measurements with a unit (8mmol/l); age (6 weeks old), or lists with other numbers (11 dogs, 9 cats, 4 gerbils).

• **Trade Names:** Chemical substances should be referred to by the generic name only. Trade names should not be used. Drugs should be referred to by their generic names. If proprietary drugs have been used in the study, refer to these by their generic name, mentioning the proprietary name and the name and location of the manufacturer in parentheses.

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Peer Review and Acceptance

Manuscripts are judged on the significance of the contribution to the literature, the quality of analysis and the clarity of presentation. Papers are expected to demonstrate originality and meaningful engagement with the global literature.

Except where otherwise stated, manuscripts are double-blind peer reviewed by anonymous reviewers in addition to the Editor. Final acceptance or rejection rests with the Editor-in-Chief, who reserves the right to refuse any material for publication.

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For manuscripts reporting medical studies that involve human participants, a statement identifying the ethics committee that approved the study and confirmation that the study conforms to recognized standards is required, for example: Declaration of Helsinki; US Federal Policy for the Protection of Human Subjects; or European Medicines Agency Guidelines for Good Clinical Practice. It should also state clearly in the text that all persons gave their informed consent prior to their inclusion in the study.

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2. Been involved in drafting the manuscript or revising it critically for important intellectual content; and

3. Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content; and

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APPENDIX 6: BRITISH JOURNAL OF OCCUPATIONAL THERAPY AUTHOR GUIDELINES

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For all submissions upload a Title page (this is not seen by reviewers) and the main article in the format required. See Journal layout for important requirements. You may also submit an optional Cover letter outlining anything you wish to bring to the Editor-in-Chief's attention (not seen by reviewers).

Ethics approval: For all research article and practice analysis submissions ensure that blinded ethics approval information is in the article and that the full information (including year of approval) is in your Title page. See Preparing your manuscript for further requirements.

Informed Consent: Your submitted article must include a sentence (usually in the Method is best) confirming that written informed consent was obtained from all participants, or a sentence explaining why this was not required/obtained. You should be able to produce this consent if there are queries. See Research ethics and patient consent for further details.

Manuscripts should be written in concise, fluent and grammatically correct English and should have been carefully prepared prior to submission using the guidelines below.

Manuscripts submitted to the journal should not be simultaneously under consideration by any other publication and should not have been previously published. You will be asked to confirm this (on behalf of all authors on the submission) during submission and at submission of revised papers.

As part of the submission process you will be required to warrant on behalf of all authors that you are submitting your original work, that you have the rights in the work, that you are submitting the work for first publication in the Journal and that it is not being considered for publication elsewhere and has not already been published elsewhere, and that you have obtained and can supply all necessary permissions for the reproduction of any copyright works not owned by you.

Specific Requirements for Article Types

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Research articles should normally be between 2,000–5,000 words (main text, not including references) and should have not more than 35 references**.** Table text is not generally considered part of the word count unless the table is deemed unnecessary since the text would be more appropriate within the main text. Articles with more than this may be returned at submission.

Quantitative, qualitative and mixed method studies are all eligible for submission. A research article should be original and present an advance in knowledge that has international relevance.

Submissions reporting RCTs should be of registered trials, with the full registration details in your title page and the trial number in your abstract.

Feasibility or Pilot Studies/Trials can be submitted in this category. Your title and abstract should both indicate clearly the kind of study (feasibility or pilot). We encourage submissions that adhere to the CONSORT extension for feasibility and pilot trials.

Title Page: Ensure full ethics approval information (including year) and any acknowledgements required are in your separately uploaded Title page. See Journal layout for requirements. This does not go to reviewers.

Abstract: A structured abstract of around 200 words should be supplied under the headings Introduction, Method, Results (or Findings) and Conclusion. Do not include references in your abstract. Avoid abbreviations or acronyms in the abstract unless absolutely necessary. If you have to use an abbreviation you must state it in full the first time, and also restate the full name with abbreviation on the first mention in the main text.

Article structure:

Most research article submissions will be structured with the following sections:

Introduction*:* A brief rationale for the study and an outline of the primary aims, hypotheses or research questions.

Literature review: A critical appraisal of current relevant literature, identifying limitations in knowledge and a rationale for the study.

Method: Justification of method(s) of data collection and analysis, described to allow replication of the study, with coherence between methodology, data collection and analysis. Issues concerning validity, reliability, trustworthiness, credibility and ethics must be addressed. Please note singular is the norm (Method).

Results/Findings: The results must be presented in a way that is accessible to readers and clearly linked to the aim(s) of the research and methods employed.

Discussion and implications: The implications of the study for occupational therapy must be outlined and the contribution of the study to the current state of knowledge stated. Limitations must be addressed and further areas of work outlined.

Conclusion: A clear summary of the main points of the paper. Please note singular is the norm (Conclusion).

Include BLINDED information on ethics approval in your article and a sentence confirming written informed consent, or why it was not required.

Include these before your Reference list (if published they will appear in text boxes in the article):

Key findings – a summary statement of two or three bullet point key findings. These should not exceed 30 words in total (10–15 words each).

What the study has added – a succinct statement of how the study has contributed to the relevant field. This should be a single sentence, of around 30 words in total.

Tables and figures. We normally request a maximum of four in total unless there are special circumstances, which must be explained in your cover letter (or by emailing us to discuss). Large tables or other additional supplementary data can be hosted online only by SAGE.

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Research ethics

Full ethics approval with any reference number AND the date (year is sufficient) of approval OR 'Ethics approval was not required for this study', if this is the case.

Declaration of conflicting interests

'The Author(s) confirm that there is no conflict of interest' OR list any conflicts of interest.

Funding

List any funding sources that funded this research or, if no funding, 'This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.'

Acknowledgements

The acknowledgements should also be included here — these should state clearly who is being acknowledged and why. Include any contributors who do not qualify for authorship (for example an academic supervisor who is not directly involve in the research study).

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For reference list items by the authors (where redacting author names is more revealing than leaving them in) it is better not blind.

Do not forget to include the key findings and 'what the study has added' information, depending on article type.

Abstract

Please follow the requirements of the article type concerned.

Keywords

A maximum of six keywords should be provided to help with article database retrieval.

Tables and Figures

The main text should clearly identify where each table and/or figure should be placed. Ensure that you refer to the table or figure in your main text, doing so in this format: Figure 1, Table 2 (not abbreviated). We request that you submit a maximum of 4 figures and tables in total, unless you have previously obtained approval for more from the BJOT editorial office**.**

Tables

Submitted tables should be primarily cell based and fully editable. Do not embed tables or provide them as graphics. Please use the Table option in Word (preferred) or similar. Do not use coloured text and avoid cell shading unless absolutely necessary.

Table captions should be in this format, and be placed above the table (in addition they can be inserted during the online upload process).

Table 1. This is the title of the table.

Please number tables consecutively and do not use parts (Table 2, Table 3 and not Table 2a, Table 2b)

Figures

Figures can be line drawings, graphs, images and photographs (colour or grayscale). Please include a caption that is not embedded in the figure itself, typed above the figure concerned (in addition they can be inserted during the online upload process).

Figure captions should be in this form, and placed above the figure (not embedded in it):

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APENDIX 7: TURNITIN ORIGINALITY REPORTS

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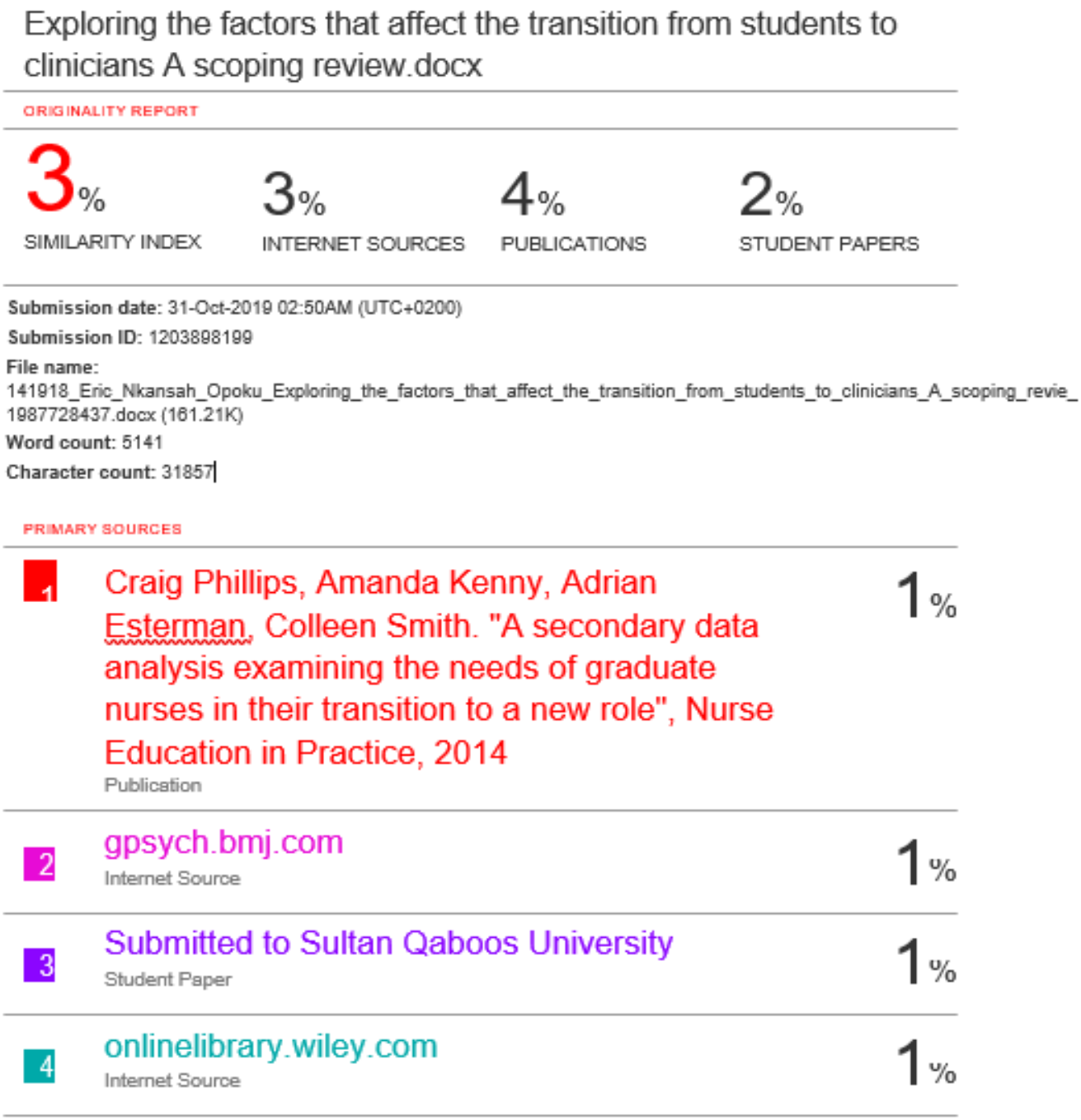

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