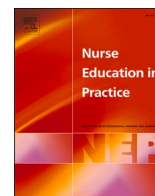




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The use of clinical practice to facilitate community engagement in the Faculty of Health Science

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ABSTRACT

Aim: This article seeks to describe how clinical practice can be used to facilitate community engagement in the Faculty of Health Science.**Design:** The study followed a qualitative exploratory, descriptive and contextual design.**Methods:** The study was conducted in the Faculty of Health Science at a public university in Namibia, Southern Africa. A total of 19 academic staff were purposively selected to participate in the focus group interviews. Thereafter, Giorgi's method of phenomenological data analysis was used to analyse data. Lincoln and Guba's strategies were used to establish trustworthiness. The ethical considerations followed Dhai and McQuoid-Mason's four principles.**Results:** The three themes that emerged as findings were: facilitation of community engagement through home visits as part of clinical practice; facilitation of community engagement through clinical rural placements; and facilitation of community engagement through interprofessional education and practice.**Conclusions:** It is concluded that health science students and academic staff should conduct home visits, students' placement should also include rural based facilities and allow inter-professional education and practice in clinical practice. However, there remains an overall need to explore for community engagement projects that may be conducted in rural settings. Additionally, a generic service-learning course for all undergraduate health science students may help facilitate community engagement through interprofessional education and practice.

1. Introduction

Clinical practice entails opportunities given to students for the purpose of experiential learning in clinical settings and university clinical skills centre. It aims for students to attain required clinical competencies (Lee et al., 2018). Clinical practice is a crucial aspect for health science education because most training programme, such as nursing are practice-based science. In clinical practice, students learn through the application of theory, feedback and reflection on their experience (Hughes and Quinn, 2013). Additionally, during clinical practice, students must dedicate considerable effort to be socialised into their professions (Kim and Shin, 2020). Clinical practice commences at different levels in health science education, for example in nursing education, it commences from year one and runs throughout to fourth year. It serves as a requirement for registration with the professional regulatory bodies on completion of the training programme, therefore student's time spent

in clinical practice are recorded and audited. Hence, attendance of clinical practice must be coordinated between the schools and clinical settings (Henriksen et al., 2020). Clinical settings are complex environments with a mixture of structures such as political, institutional and social (Dobrowolska et al., 2015). Therefore, clinical practice opportunities are offered at various settings, including the hospitals, clinics and other contexts, such as community settings. Henceforward, allowing for community engagement to be conducted.

Community engagement is one of the core functions of academic institutions, alongside teaching and research. It involves the application of institutions' resources to answer the problems confronting the communities they serve and it is achieved through collaboration with those communities (Gelmon et al., 2013). Community engagement in the context of higher education may be displayed as a strategic aim, as service, research, learning and teaching activities. Community engagement can be conducted in the form of community education or

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continuing education and agreed practices to improve relationships between the university and different sectors in the community (Brown et al., 2016). Moreover, volunteerism, community-based research, participatory action research and service are appreciated as forms of community engagement (Esau, 2015; Jinkins and Cecil, 2015; Ross and Stoecker, 2017). Additionally, practices such as distance education, outreach and professional community services, service internships, as well as community-based projects in the form of directed study or extra credit models are used for community engagement (Bandy, 2018). Students exposed to community engagements develop into competent and caring practitioners who are aware of health disparities in their community (Thomas and Smith, 2017). However, the focus has been on service learning as a form of community engagement in health science education. Additionally, there are many studies on higher education institutions' engagement with stakeholders (Sheila et al., 2020), but not solely on academic staff. As more health science programmes are introduced to the institution of higher education where the current study was conducted, it may also increase its social responsiveness and accountability, which is communicated via community engagement (Larkins et al., 2013). Consequently, engagement of higher education institutions with community may lead to further prospects for more initiatives and more positive social change (Zizka et al., 2021). GUNI Network (2018) reported that university students should have opportunities for engaged experiential learning in community settings, simultaneously, excellence in community engagement is recognised for merit and career incentives for academic and administrative staff as well as students. Therefore, more routes of community engagement should be implemented. The focus of this article is to describe how clinical practice can be used to facilitate community engagement.

1.1. Research design

A qualitative, exploratory and descriptive design that was contextual in nature was employed (Maree, 2016; Polit and Beck, 2017; Grove and Gray, 2019).

2. Methods

2.1. Research setting

The study was conducted in the Faculty of Health Science at a public university in Namibia. The Faculty of Health Sciences only offered nursing programmes at the time of establishment, but has grown to accommodate other schools, namely the School of Medicine, School of Public Health, School of Pharmacy, Departments of Physiotherapy, Occupational Therapy, Dentistry and Radiography. Programme offered include both post and undergraduate qualifications. The programmes from these schools are offered at the university's main campus and the health science campus. The latter campus is in the premises of two referral hospitals in Windhoek. In addition, the Schools of Nursing and Public Health offer programmes at the four satellite campuses of the university located in the northeast, northwest and southern Namibia.

The nursing training in Namibia is offered at the state-owned universities, private-owned universities and colleges, where bachelor's degree, diploma and certificates level qualifications are offered. The nursing training dominantly follows constructivism as its educational philosophy and experiential learning, which is a vital component is emphasised through clinical placements (Nuuyoma and Aron, 2020). This also incorporate the use of preceptorship programme. For the facilitation of clinical education, health science students are allocated for clinical practice at health facilities near their campuses and are also sent for longer placements at health facilities in other regions. The duration of community health clinical rotation in the context of the study is between two to six weeks. Moreover, provision for home visits is made in the nursing curriculum, specifically for Midwifery Science, Community Health Nursing and Mental Health Nursing courses. The

students are required to identify an individual person or family to follow-up in home environment for the purpose of promotion of health, disease prevention and rehabilitation of clients with chronic conditions. To enter the community, students and academic staff follow the community entry process. The community entry process helps in observing and establishing protocols as well as assisting in meeting project objectives (Amu, 2016).

2.2. Population and sampling strategy

The participants were academic staff in the Faculty of Health Science. In accordance with the qualitative research approach, the study employed non-probability purposive sampling (Maree, 2016). In this study, the researcher sampled academic staff who had two years' experience and longer in teaching and research at the higher education institution; and were teaching the programmes offered in the Faculty of Health Science at the time of data collection. All potential participants who met the sampling criteria were invited to participate; in this way the researcher practiced honesty in her sampling. Participants were aged between 35 and 64 years including 16 females and three males. A total of 19 academic staff participated in the study, a sample that was determined by data saturation.

2.3. Data collection method

A total of three focus group discussions were conducted and each consisted of 6 – 7 participants. Permission to undertake the study was granted by the Dean of the Faculty of Health Science. All Associate Deans of the Schools were also copied in the communications regarding the study. All academic staff were invited to participate in the study via messages sent to their university-linked email addresses. The researcher attached the research information letter to the email and informed them about dates she would visit different campuses. A second email was sent as a reminder to those who opted to participate in the study. The time and sites to conduct group interviews were agreed on by the participants, depending on their availability. Group interviews were conducted and moderated by the researcher (first author), in the boardrooms and small classrooms at different campuses so it was comfortable and had minimum disruptions in terms of loud noises and ringing telephones. Data were collected from July 2018 to February 2019.

The researcher designed a focus group discussion guide, which consists of a list of questions to be covered during the discussions. Before the main data collection, the researcher conducted a pilot study by interviewing two participants who also met the sampling criteria. The results thereof were analysed with data from the main study. The participants were asked: "How can community engagement be facilitated through clinical practice in the Faculty of Health Science at an Institution of Higher Education. In addition, the researcher prompted more based on the participants' responses. Facilitative communication techniques, such as probing, summarising, listening, paraphrasing, reflecting and using silence were employed to ensure the collection of in-depth information.

On average, focus group discussions lasted approximately 60 min. The actual duration was also determined by saturation of data as sufficient time was given to allow for prolonged engagement. All discussions were audio recorded, followed by verbatim transcriptions.

3. Data analysis

The data analysis process followed Giorgi's method of analysing phenomenological data (Grove et al., 2013). Giorgi (2012) advises that for researchers to employ this phenomenological psychological method in analysing data, they need to possess an attitude of phenomenological reduction. In this study, the researcher dismissed all past experiences on community engagement as well as her own assumptions on the phenomenon, she was sensitive to the phenomenon under study, namely

community engagement and avoided making negative comments on the phenomenon in front of the participants. Once the researcher adopted the correct attitude, she first read the whole description in the transcribed data to get a sense of the whole idea from the study participants. Thereafter, the researcher reread the entire descriptions from the beginning. As she was rereading the descriptions, she marked descriptions that made her experience a transition in meaning of community engagement and attitudes adopted during the study. This process is called 'constituting parts' and these parts are called 'meaning units'. The researcher transformed the data into expressions that reveal the psychological import of what was mentioned by the participants; the psychological value of what the subject said was made explicit for the phenomenon being studied. This step is considered as the heart of the Giorgi data analysis method. Lastly, the direct and psychologically more sensitive expressions were then reviewed and essential structures of the participants' perceptions were written down (Giorgi, 2012).

An independent coder separately analysed the data. That means the transcript of verbatim and audiotaped focus group discussions and field notes were given for independent analysis by an expert in qualitative research, who possessed a Doctoral Degree in Nursing Science (Creswell, 2013). The researcher and independent coder met to verify and reach consensus on the final themes extracted from the collected data. The involvement of an independent coder was vital in ensuring confirmability and dependability of the study (Miles et al., 2014; Polit and Beck, 2017).

4. Methods to ensure rigour

Quality criteria were met by adhering to the four criteria for developing trustworthiness as proposed by Lincoln and Guba (1985). The authors (Lincoln and Guba, 1985) proposed four constructs to trustworthiness that more accurately reflect the assumption of the qualitative paradigm, namely credibility, transferability, dependability and confirmability. Moreover, the fifth criterion, which is authenticity, was also applied to the study. Techniques applied in this study to ensure credibility included prolonged engagement, member checking, peer debriefing, triangulation, persistent observation and authority of the researcher. Transferability is fundamentally a collaborative endeavour which entails a researcher providing detailed descriptive information regarding the study that allows readers to make inferences about extrapolating the findings to other settings (Polit and Beck, 2017). In this study, the two techniques that ensured transferability are the detailed descriptions of study methods and design and the nominated sample. Confirmability was ensured via an audit trail, peer debriefing and reflexivity by the researcher. Authenticity was achieved through communicating honestly with the potential participants so their decisions to participate in the study and their responses to questions were based on the truth provided by the researcher.

5. Ethical considerations

The ethical considerations followed in this study were according to Dhai and McQuoid-Mason's (2011) four principles. These are the principles of respect and autonomy, non-maleficence, beneficence and justice. Permission was obtained from the Faculty of Health Sciences - Higher Degrees Committee (HDC-01-31-2017), Academic Ethics Committee (REC-01-40-2017) of the University of Johannesburg and the Research Ethics Committee (SC/358/2017) of the Institution of Higher Education where study was conducted. Participants gave written informed consent; additional permission to use an audio recorder during the focus group discussions was sought from participants.

6. Findings and discussion

The three themes that emerged as findings of the study are: facilitation of community engagement through home visits as part of clinical

practice; facilitation of community engagement through clinical rural placements; and facilitation of community engagement through inter-professional education and practice. To link the findings of the current study to the wider literature, conceptualisation of the findings was done by integrating the findings into existing wider literature. The current study's findings fit into the existing literature as they give evidence and description of how clinical practice is used to facilitate community engagement. Some previous findings concur with this study, the current findings also support recommendations made by previous researchers, however, some conflicting findings were also noted. The three themes are discussed below by integrating related literature.

6.1. Facilitation of community engagement through home visits as part of clinical practice

The participants explained that the clinical practice included activities that require students to conduct home visits for problem identification in the home environment and produce a report thereafter. However, participants felt that it is not enough to have home visit activities in the curriculum; for it to make an impact and render engagement opportunity, the academic staff are also urged to participate. This was explained as follows:

"As we are speaking now, our curriculum has got provision for students to visit clients in their home environment and identify problem. What I want to say is that, at least our curriculum has included some practices whereby they need to go out, students also write reports after visiting clients. It's now for us educators to emphasise more on this and also participate not just to leave the whole activity to the students. These really give us opportunity to engage with our community" FGP5a (sounding confident)

The home visit activities should allow for follow-ups to be conducted and evaluate impact of interventions introduced in the previous visit:

"Home visit is a common community-based learning activity required in most modules, we just have to make sure lecturers and students do follow-ups. It is not proper to go and introduce interventions but we do not follow up to assess whether conditions has improved." FGP3b

It emerged from the focus group discussions that when planning for clinical practice, home visits should be designated time and date within the schedule to allow for students to participate in community engagement:

"It is important to allocate students to home visit or have proper schedule in the rotation list" FGP3c

Home visit as part of clinical practice should be a family-focused intervention, which accommodates people of all age groups in their family homes (Peterson et al., 2018). Home visits is an essential component of health care because it provides an opportunity for assessment and interactions in the patient's/client's home environment (Pohl et al., 2014). In addition, it provides services in a family's home environment and this is one facet of a community-based structure of family support services (Wingate et al., 2014). In a case where a home visit is conducted by a multidisciplinary team, the patient's data are shared among different professionals to discuss care and future directions (Kusumoto et al., 2018). Therefore, making it ideal to facilitate community engagement through clinical practice.

The home visit is a skill that health profession students should learn during their training and it is therefore incorporated in the form of community-based projects. This is because home visits are considered an important skill for future health professionals to be prepared to care for the population's health requirements. Therefore, it is highly recommended that home visits be part of the health professionals' training (José et al., 2011). The students get an opportunity to practice more to improve their competence, empathy and also to reflect on their practice (Pitkälä et al., 2018). Since home visits allow interaction between

community members and academic staff in a community context, it is seen as an opportunity to facilitate community engagement in the Faculty of Health Science. However, for home visit to be fully integrated component of clinical practice, it should appear in the clinical rotation lists as an activity to be conducted and academic staff should provide support in terms of accompanying the students and ensure follow-ups are conducted.

6.2. Facilitation of community engagement through clinical rural placements

Participants felt that there is a need to place students in rural-based health facilities during clinical practice instead of being placed only in urban settings:

"I... I was more of... you know we have a lot of health facilities deep in the rural areas. That means that's where we expect a lot of challenges, we should try to have students placed in far deep rural facilities. One would like to see students placed in more rural based facilities than town based facilities. We are aware of the challenges like in terms of transport and accommodation but we need to have them more rural context" FGP4a.

In rural areas, it's where we have a lot of challenges like lack of clean water supply, no electricity and many others. Students and educators need to be exposed to more of these so that they come up with projects such as how to purify water and so forth. What I am saying here is that we need more of rural practice in order to facilitate engagement" FGP4a (speaking softly).

An area is considered rural when it is sparsely populated, when it is outside of the boundaries of a city or town, or an area designated for commercial, industrial, or urban residential places (Business Dictionary, 2019). Rural areas are commonly associated with open spaces, farms and vegetation. In addition, rural areas are identified as traditional rather than modern, agricultural rather than industrial and stagnant rather than dynamic (Chigbu, 2013). According to Chigbu (2013), the rural area is characterised by cultural homogeneity, low economic activities, more traditional lifestyle, fewer or no industrial zone, lower population, less infrastructural conveniences, sparse settlement pattern, faced with the loss of heritage challenges, low influence by globalisation and usually associated with poverty. As evidenced from the characteristics above, the rural area is described in terms of population, landscape and settlement structure (Brown & Schafft cited in Kozioł et al., 2015). Moreover, rural communities are immersed in tradition and cultural symbolism (Oosterbroek et al., 2019). This makes it a suitable context to allocate students as it provides an opportunity to practice trans-cultural and multi-cultural care as well as learning cultural norms, values and practices that may influence health.

The clinical placement is considered rural when students practice at healthcare facilities or do community-based projects in areas recognised as rural areas or settings. Daly et al. (2013) noted that rural placements are usually situated in primary and community care settings. These settings include the rural and remote locations of the country. The rural placements are part of the curricula for almost all health professional training. It is noted that most healthcare systems are challenged with finding and retaining healthcare professionals to serve in rural areas. The placement of students in rural areas thus increases their likelihood to pursue their careers in these settings (Kitchener et al., 2015). This is because rural placement exposes students to challenges and opportunities of rural practice and therefore promotes preparedness to serve in rural settings (Oosterbroek et al., 2019). The placement of students in rural settings facilitate community engagement because it avails opportunities for students and academic staff to interact with community members. Despite that, more health challenges are experienced rural areas therefore need interventions and create more opportunities for students and academic staff to implement projects aimed to attend to identified challenges.

6.3. Facilitation of community engagement through inter-professional education and practice

The participants viewed community engagement as a team-based activity rather than an individual activity. Therefore, this can be facilitated in clinical practice when students and academic staff work in teams that either consists of staff members from different professions:

"... within the faculty, there is a need for integrated teams with representatives from different disciplines and they need to work together" FGP1b

"Yes, it's actually a good idea, we will have an interprofessional team, a nurse has role a medical doctor has a role etc (counting on fingers). As an interprofessional team, there is a person for everything, even when you go to the community, this is a complete team, they have corrected information available from every profession. It will be nice because even in the hospital, we work as a team for us to reach one goal, why should we separate? we must learn from the university that working in a team is important, not only starting to the hospital. From there we have to learn to collaborate for example if they build a health centre at the School of Medicine, the nursing students can also practice there, there must be collaboration from here already" (pointing on table) FGP5c.

Interprofessional refers to a team of professionals from diverse disciplines working together (Bonello et al., 2018). Interprofessional education occurs when students from two or more professions acquire knowledge about others, learn from and with each other to enable effective collaboration and better health outcomes (WHO, 2010). They learn together and from one another to improve teamwork and quality of care (Barr and Low, 2013). The students' interactions are defined by integrating and understanding central principles and concepts of each contributing profession and having an awareness of basic language and mindsets of different professions (Barr et al., 2017). However, Steven et al., (2017) emphasised that interprofessional education must consist of activities that allow shared learning and must lead to achieving common learning outcomes, rather than just a notion of learning together. The higher education institution where this study was conducted offers programmes in nursing, public health, medicine, pharmacy, radiography, physiotherapy and dentistry. In addition, there is another faculty that offers a programme in social work and psychology. This context offers an opportunity for interprofessional education and practice.

Buring et al. (2009) noted that interprofessional education, as a pedagogical approach, plays a major role in preparing health profession students to render patient care in a collaborative team environment. This is because learning together can foster trust and respect, mutual awareness, countering ignorance, prejudice and rivalry, therefore leading to collaborative practice (Barr et al., 2017). In addition, interprofessional education also takes place in the community context, as a form of community-engaged learning such as service-learning. This enables students to match and learn differences in their professions' roles, responsibilities and also to learn how they relate to one another. Thistlethwaite (2015) emphasised that a critical aspect is to define the common learning outcomes that should be attained by all students.

There are three main strategies that may be used for interprofessional education and practice in clinical settings. These are; identify patients with complex healthcare needs and allow the interprofessional team that includes students to attend to them; secondly, allow day-to-day interprofessional interactions in clinic settings and lastly, conduct case conferences across professions to discuss patients' conditions and the care interventions for each profession to identify their roles (Bodenheimer et al., 2018). Although the three main strategies were designed for facility – based interprofessional education and care, the steps followed are also suitable for community members in community settings. Other strategies that may be used for interprofessional education are case discussions, simulations, clinical observations, clinical

rotations, video conference discussions, interprofessional gaming, chat room discussions and service-learning (Barzansky et al., 2019). As evidenced from the above interventions, interprofessional education is suitable to be delivered in the classroom environment, community settings and eLearning platforms. With that view, interprofessional education and practice can facilitate community engagement via community-based interprofessional initiatives, which involve students working on a specific project in the community setting in teams consisting of students from other programmes (Illingworth and Chelvanayagam, 2017).

The WHO (2010) further stated that globally, interprofessional practice is widely acknowledged as one of the key approaches to address healthcare issues. There is an African proverb that says “two heads are better than one”; in this context, when different health professions team together they are more empowered to gain entry into the community and also find solutions to the problems. On the other hand, students from different health professions are available and problems in the community are tackled in a single visit, which leads to community members developing trust in the faculty and hence contributing to the university’s public good notion.

The findings of this study have implications for local, national and international context. For local and national context, nursing education is challenged with the limited exposure of students to community-based activities and most current clinical education-related strategies are institutional-based. Findings of this study may assist students and academic staff to employ more strategies to have contact with community members in community settings and promote social responsibility in the faculty. At international contexts, the study findings contribute to knowledge of how unique clinical placement maybe used to facilitate community engagement. The implications for international contexts are that students’ placements maybe incorporated into the home visits programme as well as promoting interprofessional education and practices for settings where different health science programme are offered.

As a limitation, data collection process was constrained by a lack of responses to invitations for participation in the focus group discussions from academic staff in some schools in the faculty. Therefore, not all schools in the Faculty of Health Science at this specific higher education institution were represented. The participants from this study were only from the School of Nursing, School of Public Health and Department of Radiography.

7. Conclusion and recommendations

Clinical practice can be used as a route to facilitate community engagement in the Faculty of Health Science. The findings were that students should be allowed to conduct home visits and be placed in health facilities that are more rural based. In addition, it was also indicated that there is a need for students to be introduced to interprofessional education and practice in clinical practice. The home visits schedule should be part of routine rotation lists and academic staff are encouraged to participate. As a recommendation, academic staff in the Faculties of Health Science may explore for community engagement project that may be conducted by students during clinical rural placement. Additionally, it is recommended for prospective researchers to explore the possibility of designing a generic service-learning course that suits all undergraduate health science students in the faculty to facilitate community engagement through interprofessional education and practice.

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CRedit authorship contribution statement

Vistolina Nuuyoma: Conceptualization, Methodology, Data

collection and analysis, Project administration, Resources, Writing - original draft preparation. Agnes Makhene: Supervision, Validation, Project administration, Writing - review & editing.

Competing interests

The authors declare that they have no competing interest that may inappropriately influence writing this article.

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