

# Concept Analysis of Clinical Peer Mentor Support in an Undergraduate Nursing Higher Education Institution programme, South Africa.

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## Abstract

**Background:** A peer mentor is considered as a senior student nurse that supports novice student nurses with support. However, student support initiatives focuses more on the theoretical aspect with no attention to clinical support. A clinical peer mentor which emerged as a clinical support structure is seen as a critical component to nursing academic and theoretical support. The emergent study finding found that clinical peer mento support in a nursing undergraduate programme ensured holistic support to nursing students.

**Materials and Methods:** An ethnographic design and Strauss and Corbin's Grounded theory data-analysis approach were used in this study. Data were collected through individual and focus group interviews from 40 key informants and through observations, natural conversations and document analysis. Ethical clearance was secured from the research ethics board, and ethics principles were observed through the study.

**Results:** Data revealed that clinical peer support is needed by student nurses as an additional student support measure.

**Conclusion:** Clinical support to student nurses, is a major student nurse support towards academic and clinical integration and access. The clinical peer mentor support allows a student nurse to prepare for clinical work practise enabling them to pass each academic year and being clinically competent and as graduated nurse, who is competent and efficient.

**Key Words:** Access, clinical peer mentor, embedded, structure.

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## I. Introduction

A large population of the student nurse body admitted into Higher Education are previously disadvantaged students and who also hail from rural areas. The idea is that upon completion of their studies they will serve in the rural areas as a form of supporting the already direly staff shortages of nurses [1,2,3]. However, increasing student access without required support to enable them to be competent and benefit from their fields of study is futile. Providing access to students from disadvantaged backgrounds without the required support is an injustice to the agenda of increased access and transformation in Higher Education [4]. In this study, the needed support to the existing support is clinical peer mentor support. This is a gap in understanding of the current term for contextual practise as literature has shown. One study initiative by a collaborative relationship between the College of Science, Health and Engineering (SHE) and Clinical School led to the development of the pilot Bachelor of Nursing Clinical (BNC) Peer Mentor program in 2019[5]. This was an early initiative to which more understandings and study on the concept clinical peer mentor is needed for understanding and to embed as a formal support structure in AMS.

The term clinical peer mentor emerged in this study's findings and is a relatively new term in literature as part of a structured support system to student nurses in HEI. This study's finding found that a huge component of the student nurse academic studies encompasses clinical practise and the clinical support is by clinical peer mentors.

Nursing is a dynamic profession and the teaching course must be relevant and meaningful and must include support which places the academic and clinical support aspects in context. Clinical support to student nurses promotes their interest in the chosen field of work and also ensures that they understand and are supported enabling clinical competency, passing as competent and providing patients with the best care [6] [7]. At current, student support service in HEI's to student nurses includes a generic support consisting of academic mentors and peer mentors who provide academic support to students [8]. Being provided with theoretical support only, [9] explain, leaves student nurses without any clinical support except from limited and sporadic support by lecturers or clinical facilitators. Furthermore, when student nurses fail a clinical assessment or exam

and need re-assessment, in the university clinical skills laboratory sessions or hospital setting, there is a lack of clinical support to help the student prepare adequately for the assessment [9].

The student nurses academic journey involves compulsory placement in the clinical setting as part of their course competent [10]. The clinical support at the hospitals was negatively perceived by professional nurses to student nurses, which several studies support. A study on the Iranian paramedical, nursing and midwifery students revealed that students were dissatisfied with the support they received from clinical educators [11]. The clinical educators were unsupportive and openly criticised student nurses in front of peers. Appropriate professional and respectful communication with the students gives them a feeling of being important and reinforces their individual and professional identity [11]. To expect more support than the minimal which is provided in the hospital by professional nurses, is asking for too much. Professional nurses in the hospitals are inadequate given the heavy workloads, lack of time, resource constraints, staff shortages and high patient-care demands [12]. The clinical support failure transgresses the intent of access and responsive support in particular to student nurses. The inadequate clinical learning opportunities causes failure to integrate theory to clinical practise and vice versa and this causes academic and clinical failure to a student nurse. The SANC, *Nursing Act* (Act No. 33 of 2005), stipulates that the student nurse clinical hours should not be less than 60% of the entire duration of the course [10].

The much needed responsive student nurse support needs clinical support to student nurses allowed them to feel a presence during the beside nursing either in the clinical setting or in the clinical laboratory. This assisted student seeking help when unclear on a clinical task or step and helped solve their problems [13]. Clinical peer mentors should be structurally placed in the clinical practise setting or in the simulated nursing laboratory of a learning institution. The inclusion of a peer mentoring program in clinical support will provide much needed clinical support and add to the positive clinical practise and learning student nurses need [14].

The need to understand the concept of clinical peer mentor will pave an ease of way to appreciate the need and inclusion into the current AMS in Higher Education, for student nurses. To support student nurses in the clinical setting, they needed a structured clinical support environment. This could moreover assist the student nurse with academic, psychosocial and clinical support of novice student nurses. The benefits would allow them clinical integration and become clinical competent and pass successfully the learning outcomes [15]. Moreover, in their study, [12] states that clinical practise support is to give student nurses meaningful clinical learning opportunities. Moreover, humanistic and respectful behavior with the students along with effective supervision improves their morale and motivates them [11].

This paper therefore aims to underpin the concept analysis of a clinical peer mentor in an undergraduate nursing education programme in South Africa.

## **II. Methodology**

This ethnographic study approach was carried out on Higher Education SNPH with staff and student and a selected government hospital. Utilising this approach allowed the researcher the opportunity to be immersed in the culture of the informants so as to understand how the phenomenon of academic monitoring and support is conceptualised and practiced by the nursing students and nurse educators. A total of 40 informants were included in the study.

**Study Design:** Ethnographic study approach

**Study Location:** The study locations included Hospital X is situated in Umlazi on the east coast of eThekweni municipality, KwaZulu-Natal. This hospital was chosen as the study setting as student nurses are allocated to this hospital as part of their clinical training and an easy to access facility in terms of travel distance to the researcher.

The hospital serves at least two million people of which constitutes largely the Black population. The hospital has a bed space of 1,200 beds ("Hospital X (name undisclosed for anonymity). The SNPH selected as this study setting is situated centrally in the eThekweni district of KwaZulu-Natal [16]. The SNPH consists of a four-year undergraduate nursing programme which offers the basic four year nursing degree. The limited, but adequate, research settings entail intensive field-work, producing robust data evident in thick descriptions in ethnographic research [17].

**Study Duration:** January 2014-December 2016.

**Sample size:** 40 study informants.

**Sample size calculation:** Informants were purposively selected and later theoretically sampled as determined by their involvement in and experience of AMS. A total of 40 informants participated in this study. They included 24 Bachelor of Nursing students, four peer mentors, four academic mentors (student tutors), four nurse educators, an AMS coordinator, a student counsellor and two Academic Development Officers. Sampling of primary and secondary documents also formed part of the purposive sampling, which led to the understanding of

the cultural phenomenon under study during the study process. The sample description of primary documents included student nurse consultation notes undergraduate degree cohort and student academic and clinical competencies student support surveys. Secondary documents emerged for analysis from the primary document analysis and included policies, reports, minutes from official AMS meetings, established pillars of AMS in the cultural context, government-gazetted documents and other government policies on social transformation especially in the context of AMS in the selected HEI.

**Subjects and selection method:** Informants were purposively selected and later theoretically sampled as determined by their involvement in and experience of AMS. Informants' insight, experience and involvement in nursing and AMS, as student nurses and as staff were therefore purposefully and theoretically sampled until data saturation was reached.

**Inclusion criteria:**

1. Student nurses
2. Executive leadership from the College of Health Sciences
3. Teaching Staff from the SNPH
4. Support students and staff at the SNPH
5. AMS staff from the College of Health Sciences.

**Exclusion criteria:**

1. Non- student nurses
2. Executive Leadership other than the College of Health Sciences
3. Hospital Staff
4. Administrative staff from the SNPH and hospital.

**Procedure Methodology:** Once ethical clearance was obtained from the University Research Ethics Board, gatekeeper permission was obtained from the Registrar to have access to the students and permission was obtained from the Nursing Department and Hospital X to collect data from the students. Ethical principles were observed throughout the study.

After having obtained permission and ethics to conduct the study, the researcher began with 1) ethnographic host observation in the hospital and the SNPH clinical skills laboratory cultural placement setting; and oscillated between 2) interviews and FGDs and (3) primary and secondary document analysis.

Interview and FGD schedules were designed around the research cultural phenomena. For document analysis a document analysis template was adapted and modified to the purpose of this study from the [18]. The document was edited and modified for the purposes of this study. The items consisted of the date of observation; observer; student consultation date with any of the AMS and academic personnel; purpose of the learning document; school groups of students; mark review and learning gaps; statement of learner problems; clinical problems in the clinical and HEI setting; clinical support provided; theoretical problems; theoretical support provided; concise, complete and purpose of information of the document. The researcher (myself) was responsible for identifying documents for analysis and utilized the tool for document analysis.

The participant observation access into the hospital and university SNPH cultural settings allowed the researcher (myself) to adopt an "insider" approach. Student nurse ethnographic hosts were given a study information sheet and a student card which reassured them of the researcher's study purposes and the confidentiality clause. All observable behaviour was noted down on ethnographic field notes.

Ethnographic host's observatory notes were documented away from the ethnographic hosts. This ensured that they behaved naturally [19]. However, as ethnographic hosts began to interact freely without hesitation, passive observation would occur [20]. Interacting by behaving the same as cultural hosts allows the researcher to blend in and observe the cultural phenomenon as they experience it [21].

In the hospital cultural placement setting, the researcher (myself) conducted observations at least four times a week from 6 a.m. to 4 p.m. As a result, the work-shift change of the student nurses, ethnographic hosts and the cultural setting dynamics at large. One year was spent by the researcher in the cultural settings.

**Statistical Analysis:**

Data was analysed using [22] grounded theory framework which is regarded as useful in concept analysis. Grounded theory data analysis [22] was utilised to analyse data which occurred in phases of open-coding, axial coding and selective coding. Once data was analysed, it was placed, according to [22] paradigm framework, which consists of six elements which includes conceptualisation, contextual conditions, antecedent conditions, action and interaction strategies, intervening conditions and consequences.

Data analysis in the open-coding phase firstly entailed the accumulation of open-codes which then led to condense data leading to emergent categories, properties and dimensions of a property [22]. Axial coding

involves analysis of the larger textual body in order to uncover the development of relationships amongst axial categories for its sequential and spatial relationships, cause and effect and end-result relationships. Axial coding assists to put back relevant data into incomplete data. Selective coding was done by placing the refined categories and subcategories under the antecedent conditions, contextual conditions, action and interaction strategies. Intervening and consequences conditions were drafted on a large map. These findings were placed together. This simultaneously allowed the common link of the core phenomenon to develop and emerge. The core phenomenon of interest was Clinical Peer Mentor Support as part of the existing AMS structure in an undergraduate nursing education programme. The refined and selected codes under the conditions revealed the core phenomenon and the attributed characteristics emanating from it. This was achieved by reiterative data analysis until data saturation was reached, leading to the emergent conceptual framework.

Aiding data analysis was selected elements of Walker and Avant's [23] model of concept analysis which was utilized for in-depth interrogation of the concept in terms of attributes, antecedents and consequences of this concept. By selecting a concept interrogation of the concept for meaning, eschewing the attributes or characteristics associated with the concept allows for broad insight into the concept.

### **III. Results**

In order for the clinical peer mentor support to be in place there needs to be a context. The emergent clinical peer mentor term in the AMS conceptual framework from the emergent data, emerged.

Data findings revealed that study participants needed clinical peer mentor support as part of the AMS specific to the undergraduate nursing degree programme. As data findings reveal, clinical peer mentor support was needed for student nurses specifically. At current study findings found that there was no formal or official clinical support by AMS but was offered by friends and other peers who are at times, senior student nurses.

*.... friends help us in the clinical setting with clinical skills... [FGD 1]*

*... As senior students we volunteer to support our students in the clinical settings ... [KI 19]*

*"... Having like peer mentors like at campus may help...someone senior to consult with".[Natural conversational interview Method, ANC, CI, 2014]*

The clinical peer mentor was a peer but in the clinical sense, where active engagement between student to student, allowed for further feedback and mastery of skill. This is highlighted from a natural conversational method between the researcher and student nurse ethnographic host:

*"...To be honest with you...I could not put drip up; give injection and not even allocated to qualified staff to these procedures...I feel having like peer mentors like at campus may help. Then students would have someone senior to consult with". [Natural conversational interview method, ANC, CI, 2014]*

*".... clinical support by a friend or a senior student nurse...[FGD 1]*

The need then for clinical support as advocated by data findings is a fellow peer from the same academic year or higher. The presence of such a clinical peer mentor allowed consistent support to the fellow student nurse who grasped the clinical practise and concepts easily, as highlighted in the natural conversational ethnographic interview excerpt in the hospital cultural setting, below.

*"...we need clinical support...But being together, helped us to support each other. In fact, we both follow each other" [Natural conversational interview method, ANC, CI, 2014]*

The interaction of student nurse ethnographic hosts in the SONPH clinical setting, showed exactly how clinical peer mentor was provided in a clinical procedure. A student nurse peer mentor ethnographic host taught a first year student nurse ethnographic host on taking body temperature on a mannequin. First the student nurse peer mentor ethnographic host read through the English written clinical procedure sheet loudly. Thereafter, by code switching he communicated in isiZulu first and then in English language to the student nurse ethnographic host, as highlighted in the observation recorded in the SNPH CSL in the excerpt below:

*"eh...first yabo (see) ukubingelela isiguli....then your name...yabo (see)...then...um...(student nurse ethnographic peer mentor host re-looks at the sheet and reads again to then look at student nurse ethnographic host who is waiting for his next advice)...say you have to take his temperature but ekhwapheni lakhe umzuzu 1 (isiZulu translation in English: under his armpit for 1 minute). [Study host observation: SNPH CSL, CI, 2014]*

Aside from being supported and taught in the clinical setting or the HEI clinical laboratory setting environment, by observing peers, allowed student nurse ethnographic hosts to understand and practise competently. This is reflected in observing a clinical interaction between student ensure ethnographic hosts during clinical practise, they are allowed to make mistakes and reaffirm clinical learning, as highlighted in an observation in the SNPH CSL:

*“.....Observing two students do a clinical competency such as catheter insertion made me understand by the 2 students doing this together. The one kept reminding the other that she forgot to do 1 step. Going back and forth, the student remembered and got used to the procedure steps”. [Study host observation, SONPH CSL, CI, 2014]*

The emergent clinical peer mentor concept in this study in the hospital and SONPH setting was envisioned as contributing to student nurse clinical development, ongoing clinical support and hospital integration, as highlighted in the interview excerpt below:

*“...Well it's just a dream we have a peer mentoring programme for all the students, it mustn't just be for university students or (hospital) students but we must have a peer mentoring programme which is situated within the hospital when the students come in the senior student mentor the young ones...” [CII 17]*

#### **IV. Discussion**

This study found clinical peer mentor support was needed in undergraduate nursing programme. Clinical peer mentor support included support by a fellow student nurse or a senior student nurse. [14] similarly state that a peer mentor involves a senior student nurse that provides mentorship, support, education and role modelling for junior or novice student nurses.[24] concurs with student nurses seeking assisting from their peers as clinical peer mentors in invaluable. Due to shortages of professional nurses, this makes it impossible for student nurses to always receive timely and opportune assistance from staff in the clinical setting. If there is help and guidance it is usually from the task of student nurse supervision has been assigned to graduates and inexperienced nurses [40]. Therefore [25; 12] find that at the clinical settings or even the structured simulation laboratory, as part of student support, peer mentors can provide additional support to students in clinical settings. Stone et al. [26] found that this takes of the stress and demands from nurse clinical facilitators, hospital staff and nurse educators.

Introducing via a pilot study, the clinical peer mentor program in nursing, [5] states the peer mentor is a peer who offers clinical support in the clinical placement, simulation and clinical laboratory and as well as specific subjects and training modules. Therefore, the term clinical peer mentor, which includes their role in providing psycho-motor skill development. Likewise, [27] find that clinical peer mentoring is a critical component to nursing student support. They address inadequate skill and competency acquisition. Peer-mentors are expected to provide and support peer-mentees in clinical settings through the mentoring programme. Mentors are considered as role models who ought to demonstrate high-level professionalism in clinical practice [28].[29] in their study of mentors in critical care nursing setting, participants verbalized greater work competency, understanding and benefit from being mentored by own on their own peers in the clinical setting. In their study, they found that respondents validated, mentors provided support from the classroom setting to the clinical setting where the theory-practice gap was reduced. Purposefully, the peers were able to in a mutual manner identify common stressors and offer critical thinking and problem solving.

As this study's finding revealed, the informal pairing of a student nurse and a senior colleague or class mate, allowed for in the context support as and when the student nurse required. This took place in the hospital placements and in the higher education institution clinical laboratory. [30] supports this by stating that the role of the clinical peer mentor could be informal or formal. In this regard, both had benefit. [30] alludes to informal mentoring which is involves a as a self-selection of mentors and mentees. The process involves both mentor and mentee having general discussion on the clinical learning process and outcome. However, [31] highlights to offer a structured support service by a clinical mentor would be a structured program where formal sessions are set up between the mentor and mentee in the clinical setting. Towards understanding the role of a clinical peer mentor, is the embedding of the structured clinical peer mentor support. In their study, [15] found that ethnographic hosts needed structured clinical peer mentor support. The clinical peer mentor is a senior student nurse who could provide clinical support in the SONPH simulation laboratory and in the hospital setting where student nurses are placed for clinical practise. This is supported by [32] stating that clinical mentoring sees that student nurses receive clinical support from their peers to reduce the theory–practice gap.

#### **V. Conclusion**

The phenomenon of clinical peer mentorship in the academic monitoring and support emerged as part of the solution to the high attrition rate of student nurses which later impacts on the nursing and midwifery workforce numbers. The need for relevant, responsive and comprehensive AMS with clinical support need to be in place to meet student nurses unique academic, clinical and personal needs. Understanding the concept, clinical peer mentor in nursing is a start to the formalisation and structring of clinical peer mentor support in the current AMS . In order for the student nurse to benefit from a holistic, comprehensive and responsive AMS with

the clinical component of support that incorporates the clinical peer mentor, AMS structures and support from the nurse educators, clinical facilitators and hospital staff are needed for a rigorous monitoring and evaluation of student nurse performance.

## References

- [1]. World Health Organization. 2013. Transforming and scaling up health professionals' education and training: World Health Organization Guidelines, 2013. Geneva: WHO.
- [2]. Gumede, D.M., Taylor, M. and Kvalsvig, J.D. 2021. Engaging future healthcare professionals for rural health services in South Africa: students, graduates and managers perceptions. *BMC Health Serv Res* 21, 220 (2021). <https://doi.org/10.1186/s12913-021-06178-w>
- [3]. Ross, A. 2014. Building on Tinto's model of engagement and persistence: Experiences from the Umthombo Youth Development Foundation Scholarship Scheme, *African Journal of Health Professions Education*, 6(2), 2014, 119123. doi:10.7196/AJHPE.404
- [4]. Tinto, V. 2014. Tinto's South Africa Lectures, *Journal of Student Affairs in Africa*. 2(2). Retrieved on 5th December 2016 from <http://www.africanminds.co.za/wp-content/uploads/2015/01/JSAA-Vol-2-Issue-2.pdf>
- [5]. McDonald, E., Manessis, R and Blanksby, T. 2019. LA TROBE University: Peer Mentoring in Nursing - Improving Retention, Enhancing Education The Bachelor of Nursing Clinical Peer-Support Program. Retrieved from <https://unistars.org/papers/STARS2019/P30-POSTER.pdf> on 4 March 2023.
- [6]. Jokelainen, M., Turunen, H., Tossavainen, K., Jamookeah, D and Coco, K. 2011. A systematic review of mentoring nursing students in clinical placements. *J Clin Nurs*. 20:2854–67.
- [7]. Ooms, A., Fergy, S., Marks-Maran, D., Burke, L and Sheehy, K. 2013. Providing learning support to nursing students: A study of two universities. *Nurse Educ Pract*. 13:89–95.
- [8]. Miller, A. 2002. *Mentoring Students and Young People: A Handbook of Effective Practice*. London, England: Kogan Page.
- [9]. Mannix, J., Faga, P., Beale, B and Jackson, D. 2006. Towards sustainable models for clinical education in nursing: an ongoing conversation. *Nurse Education in Practice*, 6 (1), 3–11.
- [10]. Motsaanaka, M.N., Makhene, A. and Ally, H. 2020. Student nurses' experiences regarding their clinical learning opportunities in a public academic hospital in Gauteng province, South Africa. *Health SA* ;25:1217. doi: 10.4102/hsag.v25i0.1217. PMID: 32161671; PMCID: PMC7059638.
- [11]. Joolae, J., Soodabeh., S and Farahani, Mansoureh & Amiri, J., Roghayeh, S and Shokoh, V. 2016. Support in Clinical Settings as Perceived by Nursing Students in Iran: A Qualitative Study. *Nursing and Midwifery Studies*. Inpress. 10.17795/nmsjournal31292.
- [12]. Mlaba, Z.P. and Emmamally, W. 2019. Describing the perceptions of student nurses regarding barriers and benefits of a peer-mentorship programme in a clinical setting in KwaZulu-Natal. *Health SA* ;24:1118. doi: 10.4102/hsag.v24i0.1118. PMID: 31934419; PMCID: PMC6917410.
- [13]. Lambert, V and Glacken, M. 2006. Clinical education facilitators' and post-registration paediatric student nurses' perceptions of the role of the clinical education facilitator. *Nurse Educ Today*. 2006;26(5):358–66. doi: 10.1016/j.nedt.2005.11.005.
- [14]. Jacobsen, T.I.; Sandsleth, M.G. and Gonzalez, M.T. 2022. Student nurses' experiences participating in a peer mentoring program in clinical placement studies: A metasynthesis. *Nurse Education in Practice*, Vol 61, ISSN 1471-5953.
- [15]. [Mudaly, P and Mtshali, N. (2018). Academic monitoring and support of undergraduate nursing education programme: A middle-range theory. *Curatationis*, 41(1), 11 pages. doi: <https://doi.org/10.4102/curatationis.v41i1.1881>
- [16]. Wikipedia: The Free Encyclopedia. 2023. University of KwaZulu-Natal. Retrieved from University of KwaZulu-Natal - Wikipedia
- [17]. O'Reilly, K. 2012. *Ethnographic methods*, second edition. *Ethnographic Methods, Second Edition*. 1-261. 10.4324/9780203864722.
- [18]. Australian National University (2009) *Academic Skills and Learning Centre (ASLC)* (2009). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?jsessionid=B2D8535C12BAB2A264D88CCDBDC7EC2?doi=10.1.1.683.3428&rep=rep1&type=pdf>
- [19]. Hammersley, M. and Atkinson, P. (2005). *Ethnography: Principles in Practice*. London, Routledge.
- [20]. Hammersley, M. and Atkinson, P. (2007). *Ethnography*. 3<sup>rd</sup> Ed. London, Routledge.
- [21]. Pole, C. and Morrison M. (2003). *Ethnography for education*. Berkshire, England: Open University Press.
- [22]. Strauss, A and Corbin. J. 1990. *Basic qualitative research: Grounded theory procedures and technique*. Los Angeles Sage Publications.
- [23]. Walker, L and Avant, K. 2011. *Strategies for theory construction in nursing* . 5<sup>th</sup> Ed. New York NY: Prentice Hall.
- [24]. Tshabalala R.N. 2011. 'Experiences of a group of student nurses regarding mentoring in the clinical practice', dissertation, School of Nursing Science, Potchefstroom Campus, North West University; <https://doi.org/10.1.1.887.1161&rep=rep1&type=pdf> [Google Scholar]
- [25]. Kaphagawani, N.C.C. 2015. Nursing students clinical learning experiences in selected colleges in Malawi: a model to facilitate clinical learning. Unpublished PhD (Nursing Education) thesis, North-West University, Mafikeng, South Africa
- [26]. Stone, R., Cooper, S and Cant, C. 2013. The Value of Peer Learning in Undergraduate Nursing Education: A Systematic Review. *ISRN Nursing*. Article ID 930901. Retrieved on 10<sup>th</sup> December 2016 from <http://dx.doi.org/10.1155/2013/930901>
- [27]. Yüksela, A., and E. Bahadır-Yılmaz. 2019. "The Effect of Mentoring Program on Adjustment to University and Ways of Coping with Stress in Nursing Students: A Quasi-Experimental Study." *Nurse Education Today* 80: 52–58. <https://doi.org/10.1016/j.nedt.2019.06.006>
- [28]. Ntho, T.A., Pienaar, A.J and Sehularo, L.A. 2020. Peer-mentees' challenges in an undergraduate peer-group clinical mentoring programme in a nursing education institution. *Health SA*;25:1435. doi: 10.4102/hsag.v25i0.1435. PMID: 33101718; PMCID: PMC7564816
- [29]. Sibiyi, M.N., Ngxongo, T.S.P. and Beepat, S.Y. (2018). "The influence of peer mentoring on critical care nursing students' learning outcomes", *International Journal of Workplace Health Management*, Vol. 11 No. 3, pp. 130-142.
- [30]. Henry-Noel N., Bishop M., Gwede C.K., Petkova E. & Szumacher E. 2019. 'Mentorship in medicine and other health professions', *Journal of Cancer Education* 34(4), 629–637. 10.1007/s13187-018-1360-6.
- [31]. Gan, I. 2019. 'How do nurses' work arrangements influence nurse managers' communication? A qualitative study, *Journal of Nursing Management* 27(2), 1–8. 10.1111/jonm.12817.
- [32]. Arnesson, K and Albißon, G. 2017. 'Mentorship – a pedagogical method for integration of theory and practice in higher education', *Nordic Journal of Studies in Educational Policy* 3(3), 202–217. 10.1080/20020317.2017.1379346.