

Perceptions of facilitators using Case-based Educational Strategies in a Nursing Management Decentralized Program in South Africa

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ABSTRACT:

Background: *Case-based education has a long history in the disciplines of education, business, law and the health professions. Research suggests that students who learn via a case-based method have advanced critical thinking skills and a greater ability for application of knowledge in practice. In medical education, case-based methodology is widely used to facilitate knowledge transfer from theoretical knowledge to application in patient care. Nursing education has also adopted case-based methodology to enhance learner outcomes and critical thinking.*

Objectives: *The objective of this study was to explore the perceptions of case-based facilitators in a decentralised nursing management education program located in Durban, South Africa.*

Methods: *This descriptive, exploratory study used focus groups to examine perceptions of facilitators (N=15) using case-based education in a nursing management program.*

Results: *The average facilitator was female, between 41 and 50 years of age, working part-time, educated with a baccalaureate degree, working as a professional nurse between 11 and 20 years, and slightly more than half had worked as a facilitator 3 or more years.*

The three major themes emerged were related to the student learners, the learning environment, and using facilitation to teach the programme.

Conclusion: *Decentralised nursing management educational programs can meet the needs of nurses who are located in remote areas which are characterised by poor transportation patterns and limited resources and have great need for quality healthcare services.*

Key Words:

Case-based learning; facilitation; nursing management; South Africa; decentralized nursing programs

Introduction**Nursing Management and Nursing Education in South Africa**

There was a great need to expand nursing education to all parts of South Africa and also to change teaching strategies. Nursing education curriculum were changed to reflect a shift from disease focus to population needs (1) and methods of delivery moved from traditional, more passive teaching to case based methods (2). Most lectures are given in the form of facilitation as compared to teacher orientation (3). Students are active participants and self- directed learners who are continuous learners (4).

The University of KwaZulu- Natal responded positively to the government call to make nursing education more accessible by establishing an independently funded unit within the school of nursing in 1990. Decentralised programmes are available in nursing management, psychiatry, community nursing, bridging programme and primary health care (5). The decentralised programmes are coordinated by the school of nursing faculty who work with facilitators who are also employed by the nursing program. Most facilitators are appointed on part-time basis and the nursing management programme had two full time faculty members based centrally in Durban. The full-time faculty visited each centre at least quarterly to observe the facilitators' teaching methods and present selected content demonstrating case-based methods.

Education in nursing management requires that students be prepared to address the complex health care environment in hospitals, clinics, and/or primary health care facilities. Most students have been educated in nursing programs that utilised teaching methods that were lecture-based and content-oriented. Recent advances in education suggest that students should be educated by methods that include case-based learning, problem-based learning and other active methods of knowledge dissemination (6). Students register with the university and attend lectures in one of the 12 centres located in their living areas around the KwaZulu-Natal, Eastern and Western provinces. When the students register for the decentralised nursing management course, they receive a book containing all of the cases and suggested references in order to prepare for the in-person lectures. On completion the student obtains a nursing management certificate and is registered with the South African Nursing Council (SANC). Other university students take decentralised modules as part of the baccalaureate degree. The nursing management module is equivalent to 64 credits (7).

There has been a steady increase of registered students in the nursing management decentralised program; there were seventy three (73) students in 2003, four hundred and seventy two (472) in 2007 and 360 students in 2011. Some of the reasons for such growth are the incentive that is given to graduates on completion of training and promotions are based on education qualification. (8). The South African government has introduced a scarce skill allowance if a registered nurse has an extra qualification in the identified specialties and performing functions pertaining to those scarce skills (9). All nurse managers are expected to have a nursing management qualification in order to be in charge of their departments. The consistently large number of students demonstrates the ongoing need for nursing management education programs.

Format of the Nursing Management decentralised programme

The program was identical in all 12 centers so as to ensure uniformity. The nursing management programme used case studies organised around the following themes: a) problem solving; b) leadership; c) health & health system; d) management, and e) ethical & legal prescriptions. Twenty-eight cases were developed on a variety of topics including conflict management, performance appraisal, decision-making, motivation theories, and scope of practice. Students come to their centre bimonthly and activities are planned from 9 AM through 3 PM. The usual daily format was: a) overall view of the case study that the student had received previously with the facilitator probing for student insights into that case and

encouraging students to share their clinical examples; b) breaking into small groups of 5-7 students to discuss identified questions related to the case; c) small group leaders reporting back to full group about their answers to the questions; and, in closing, d) the facilitator summarises the key points in the case and lessons learned. Figure 1 illustrates a sample case.

Literature Review

Whether they are reading patients and a situation, talking to family members, or working with other members of the health care team, nurses need astute clinical judgment informed by attuned relational skills, such as listening, as well as reflecting and interpreting the patient's concerns and experience (10). Nursing faculty are challenged to creatively teach these complex skills. The case-based method is an innovative pedagogy that has five primary critical thinking characteristics: problem based, student centered, reiterative, small group, and facilitation. Learning these characteristics is most effectively accomplished through the use of situation-specific cases (11). Case-based learning requires the integration of analytic skills linked to specific cases that a nurse is likely to encounter in clinical practice. Problem-based learning is a student-centred approach based on higher-level problem solving skills that involve active rather than passive learning. Facilitation is the enhancement of the teaching-learning processes that assists students to assume control and direct one's own learning (12). Teaching through actual cases is believed to enhance critical thinking skills (13;14) and positive student outcomes (15). These methods transform the teaching-learning process from a passive to a more interactive approach and the educational outcomes may provide enhanced clinical practice and management skills. According to (16), the use of case-based education or problem-based learning has been linked to increased self-direction and critical thinking skills

Problem Statement

For students who are unfamiliar with case-based learning, a transition to more active learning must occur (17; 18). The role of facilitation in enhancing case-based learning has not been well studied. Since both students and facilitators are integrating new teaching and learning roles in the educational process, their needs and experiences require further investigation. The relevant literature suggests that the processes and outcomes of facilitation in nursing education have not been well studied. It is not easy or comfortable for students to shift from a passive into a more active role since they might feel confused about expectations and argue that they need more support and direction from the facilitator.

A modified case-based learning presentation provides small student groups with a case and specific relevant questions to that case in an attempt to stimulate clinical decision making. This approach fosters student collaboration, open discussion, and critical thinking within a structured problem-solving format and is frequently used in medicine, nursing, and pharmacy curricula (19). According to (20) case based learning is characterized by the use of an ill structured clinical problem as the context for a group of students to learn critical thinking skills and acquire knowledge about the identified situation. Case based learning differs from traditional pedagogy in that the focus is on clinical situations and the teacher's role is more one of facilitating then delivering information. The facilitator sets up an environment in which case based learning is collaborative and group-centered. The core attributes of cases are that they are relevant, realistic, engaging, challenging, and instructional and based in real-world professional contexts (21). The problem identified in the case is ill structured and the learning activity is one of problem solving. The process for case based learners is that they are self-directed and the goal is to improve critical reasoning skills. The outcome is that the learner is more prepared to act professionally and think critically about common clinical situations.

Aim and the Research Objectives of the Study

The aim of this study was to explore perceptions of facilitators with regard to using case-based educational methods in a decentralized nursing management program. The objectives were to: 1) explore the perceptions of facilitators in the decentralized nursing management program; 2) determine the needs of facilitators in enhancing case-based learning in a decentralized nursing management program; and 3) make

recommendations for the preparation and future support of facilitators to promote active learning via case-based approaches

Definition of key concepts

Facilitators are nurses employed by the university on a part-time basis, located in decentralized settings, and meet with the nursing management students on a regular basis.

Case-based educational strategies use “real-life” examples to encourage problem-solving and develop critical thinking skills to address the complexity faced in the clinical setting.

Decentralized Nursing Programme: A nursing programmes that is offered by the university and is coordinated by facilitators in remote areas. Students attend classes on Saturdays.

Contribution to field

South Africa is characterized by wide geographic expanse and a poorly developed public transportation system. The healthcare institutions have been severely tested by the impact of the HIV/AIDS caseload and quality has suffered. Nurses need expertise in management skills in order to maximize resources and meet the healthcare needs of the diverse South African population. It is not realistic financially or logistically to expect nurses who are interested in enhancing their nursing management skills to travel or relocate to gain that knowledge. A decentralized program that uses facilitators who live in different geographic areas can bring education into those communities while the university can control the quality of the program through frequent communication between the full-time university faculty and periodic site visits in order to model different teaching strategies.

Research method and design

A grounded theory approach based on the methods of Strauss and Corbin’s (1990) was utilized in this study. To answer the research questions, a qualitative, exploratory, descriptive approach was used to ensure the uncovering of data from the participants.

Population and Sampling

The population of this study included all facilitators in the decentralised nursing management program who were using facilitation as a teaching-learning method. One focus group was used with the facilitators.

Data Collection

Data were obtained by conducting one focus group with facilitators after pilot interviews were completed. One of the investigators conducted the focus group to obtain in-depth information about the process and outcomes of facilitation. The focus groups were audiotaped to facilitate transcripts of each interview. One of the initial open-ended questions was: ‘How do you experience facilitation in the teaching-learning process in the nursing management concentration?’ Additional probing questions included:

1. How did you find case based teaching? Was it easier to facilitate or not?
2. Were there times when you used traditional teaching?
3. Kindly share some challenges when you used case based teaching
4. Were students prepared in class?
5. Were students capable of challenging one another in class?
6. How did they respond to your comments about the presentations in class
7. Anything to share about your facilitation and the nursing management programme?

Field notes were also taken by the researcher.

Data Analysis

Data were analyzed based on Strauss and Corbin’s approach to grounded theory and three coding procedures: open coding, axial coding, and selective coding. Open coding during data collection occurred

until theoretical saturation was reached and no new categories emerged. Data were analysed with concepts, categories of concepts, properties, and dimensions of properties derived from the process (22). Analysis was based on reading the transcripts, identifying summaries, eliminating redundant information, and developing the clusters of concepts, categories, properties and dimensions. After open coding, axial coding involves connecting categories found in open coding. Selective coding is the process of selecting the core categories identified from the data and developing these in the analysis.

Ethical Considerations

The study was conducted at the University of KwaZulu-Natal, therefore review and approval was obtained through the university's research ethics committee. Permission was sought from the head of school and faculty was informed about the purpose of the study. Informed consent was obtained from all participants. Participation was voluntary and all data was kept confidential in a locked file in the investigators' office. Code numbers were used to identify participants and protect confidentiality. Participants were informed that they may choose to participate or withdraw participation at any time during the interview process.

Trustworthiness

According to Lincoln and Guba as cited by (23), credibility, dependability, confirmability and transferability are the four criteria for developing the trustworthiness of a qualitative inquiry. **Credibility** is a criterion for evaluating integrity and quality in qualitative studies, referring to confidence in truth of the data. The study was carried among the facilitators who were employed in the nursing management programme. They were reminded of honesty and confidentiality. The in depth interviews were tapes so as to allow true interpretations of the findings. Data was analysed by two independent researchers and findings were compared for objectivity and confidence in the truth. Performing member checks by consulting with participants with the results to see if they recognize the findings to be their true experiences. **Dependability** refers to the stability of data over time and over conditions. The participants were working in different sites at the time of data collection. The same interview guide was used for all participants despite whether the facilitator is based in the urban or rural area. **Conformability** refers to the objectivity or neutrality of the data and interpretations. Data was collected through interviews and focus groups were held with the participants. The transcripts are reported verbatim and are indicated in the discussion as stated by the participants. Interview material, transcripts, documents, findings, interpretations and recommendations were kept for the purpose of an audit trail. **Transferability** is the extent to which the qualitative findings can be transferred to other settings or groups. The thick descriptions are provided so as to enable someone in making a transfer to reach a conclusion on the finding stated in the study.

Discussion of results

The average facilitator was female, between 41 and 50 years of age, working part-time, educated with a baccalaureate degree, working as a professional nurse between 11 and 20 years, and slightly more than half had worked as a facilitated 3 or more years. Table 1 presents the demographic and nursing-related information about the sample.

Table 1: Demographic and professional characteristics of facilitators (N=15)

Gender	Female	12 (80%)
	Male	03 (20%)
Age	31-40years	02 (13%)
	41-50 years	11 (74%)
	Above 50 years	02 (13%)
Work Status	Full time	02 (13%)
	Part time	13 (87%)
Education	Masters degree	02 (13%)
	Bachelor Degree	07 (47%)
	Diploma	06 (40%)
Years working as professional nurse	0-10years	02 (13%)
	11-20 years	08 (54%)
	21-30 years	02 (13%)
	31-40 years	03 (20%)
Years of experience as facilitator in nursing management program	1-2 years	47%
	3-4 years	33%
	Longer than 4 years	20%

Themes that emanated from the focus group were arranged as follows:

- (a) The student learners
- (b) The learning environment
- (c) Using facilitation to teach the programme

Learner-related themes

Many facilitators felt that some of the learners were very slow and that this delayed class discussions.

The difficulty is short periods of facilitating and this hinders progress as there are students that are very slow learners.

There are learners who are also not mastering the content due to the fact that they do not understand the language.

The language is sometimes the problem for some students

One facilitator indicated that she did not understand as student, but now she understands better as a facilitator.

I learn more management through facilitation. Some chapters that I did not understand as a student is much clearer to me now that I facilitate in the programme

One indicated that there must be free sessions where students will be informed of their progress. These free sessions must be slotted mid-year not towards exam time so as to give proper feedback to the students.

Environment-related themes

Resources are part of facilitation. If the resources are inadequate, facilitators will be held back. Technology is needed in this day and age. Availability of computers and overhead projectors are needed in all centers. The security guards were regarded as an obstacle in giving access to some of the learners. There

was a misunderstanding about the venue at one of the nursing colleges and therefore students were denied access.

The teaching aids need to be improved like including the computer presentation together with the projector

Facilitation and Programme-related themes

There were positive and negative comments about the teaching strategy and content of the programme

Some facilitators felt that the period for facilitation was too short while others indicated that the content must be well detailed; a memorandum should be added on each and every case study.

Some case studies are not that easy to understand and therefore a memorandum should be included with the study guide for facilitators

The majority stated that the programme was well planned and that it allowed for prior planning. All of them agreed that the programme allows them to correlate theory with practice.

Very interesting to put theory into practice.

I also motivate the learners to correlate theory with practice and to use the theory in the practical work situation.

The impact of facilitating through cases extended beyond the nursing management programme. Facilitators reported that they were able to apply these strategies to other modules and also their own personal lives.

I enjoy this facilitation method and found it very easy to adjust to because IMCI facilitation uses the some sort of approach.

This programme has brought so many changes in their lives. They have grown professional and personally.

I have grown personally; I am capable of solving problems in my daily activities

The programme has influence some changes in the delivery of health care system in the country.

It allows for planning ahead in the Health care systems.

Limitations of the study

Results reflect the themes emerging from a focus group with nursing management facilitators and it is possible that different themes would emerge if the curriculum focus was different. All facilitators were employed by one university but were located throughout a relatively wide geographic area.

Recommendations

- The facilitators need ongoing support when implementing the case based education system which can be achieved through continuous staff development and 1:1 consultation
- Add more sessions or alternate exercises to accommodate slow learners
- Organise ID cards well in advance so that students can have access to the teaching site, university, library and computers

CONCLUSION

Decentralised educational programs can serve to meet the needs of nurses who are located in remote areas characterized by poor transportation patterns and limited resources but great need for quality healthcare services. Nursing management courses teach skills to ensure effective, safe, and efficient use of existing resources and promote the health of populations being served. In order to achieve consistency throughout the decentralised centres, nursing faculty based at the university need to be creative in providing ongoing consultation and input. This research demonstrated the need for a variety of communication routes including technology to ensure that the case-based learning strategies were applied universally.

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Competing interests

‘The authors declare that they have no financial or personal relationship(s) which may have inappropriately influenced them in writing this paper.’

Authors' contributions

ZN (University of South Africa) was the project leader who participated in the initial conceptualization of the research, data collection and data analysis.

PP (Durban University of Technology) collected and analysed data.

KN(Hunter University) participated in the initial conceptualization of the research and also with the manuscript preparation.

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