

Clinical Research: Neonatal Nurses' Perception and Experiences

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### **Context of the paper**

The purpose of this study was to explore the neonatal nurses' perception and experience when they participate, or conduct nurse led clinical research in neonatal nursing.

### **Research Design**

The design used in this study was phenomenological research design in order to discover the clinical neonatal nurses' perceptions and experiences. New & Bogossian used the Heideggarian phenomenology in order to explore the implication and adjoin interpretation to experience helps in better understanding.

There are three key features of this research design which includes semi-structured, audiotape and face-to-face interviews that facilitate in exploring the neonatal nurses' experiences in clinical research. Interviews were conducted outside the work environment of nurses to provide them a comfortable and convenient environment. Interviews were semi-structured, and questions were open-ended structured. Open-ended questions were structured to explore viewpoint and experience of neonatal nurses and provide them an opportunity to freely respond their own words. However, during the interview it was ensured that content roam around areas of relevance. (Harrigan, 2009).

Phenomenology was appropriate because this research design believe that the researchers are unable to detached their presumption or presupposition. In this research design, researchers hold explicit viewpoint. This design was appropriate to gather data regarding the perception and experience of neonatal nurses about the Nurse Led Clinical

Research and help in exploring this phenomenon. This design provides flexibility to researchers to ask questions in relation to the previous answer of the participants. As well as this design is iterative, so research questions and data collection can be adjusted based on what is learned (Smith, Flowers & Larkin, 2009).

Also, because this research design assists in finding common themes from a broad data collect from interviewing nurses. These common themes were formulated after interviewing four nurses that helps in exploring perception and experience. This design helped in obtaining comprehensive explanations regarding a phenomenon by using a technique of interviews.

This research design embraces the common characteristics of human science research; for example qualitative research value, emphasize on comprehensiveness of experience and a look for experience essences, as well as measure experience and perception as an inseparable and integrated relationship of area under discussion.

## **Sampling**

The sample of five nurses was taken in this study, which were female. Out of five, four were trained registered nurses from Australian hospitals; however one nurse was British registered and trained under British hospital system. Furthermore, they were eligible for senior clinical nurses as they have 12 years of experience in neonatal nursing and aged between 38 to 50 years.

The five nurses involved in this study were all female; four of whom had undertaken their registered nurse training through the hospital system in Australia, the other being a British registered nurse who undertook pre-registration training in the

British hospital system. The participants fulfilled the positions of senior clinical nurses to clinical nurse consultants, had a minimum of 12 years of neonatal nursing experience and ranged in age from 38-50 years.

The ultimate decision regarding sample size was based on the significance of new information obtained, whether more interviews add value in generating themes or not; as well as an aid to data theorization that has to be concurrent for collection and analysis. After interviewing the fifth nurse, it was evident that no new theme emerges; hence, it was decided that further no interview will be conducted (Woodside, 2010).

The purposive sampling technique was used in this research. It is common sampling technique based on preselected criteria pertinent to research questions. This technique was an appropriate technique for the study because in such qualitative research where exploration of perception and experiences were involved require such a technique which is not research bias to gauge study objectives effectively, but certain criteria are associated for sampling. Purposive sampling refers to such technique on which before collection of data, there was no fixed prior to data collection, and sampling depend on time, resources as well as objectives of the study. However, size of sample in this technique depends on theoretical saturation refers to a data collection point from where no new experience and perceptions can be gained in this study. Therefore, purposive sampling is most appropriate sampling technique when the data analysis and review are done in conjunction with the collection of data.

## **Data Collection**

The data are collected through qualitative research approach, and the data was collected through conducting face-to face interviews with neonatal nurses and was semi-structured in nature. During interview open-ended questions were asked from neonatal nurses. The data was collected outside the work environment. The data format includes audiotapes and field notes. Audiotaped interviews were used to explicate and analyze themes. Furthermore, each hospital was visited by researchers to attain the participation of neonatal nurses.

The data collection method in this study was appropriate in providing answers to research questions, as well as with research design. As, the qualitative research design provide flexibility that is essential to measure experience and perception of neonatal nurses. On the other hand, also provide flexibility while interviewing through exclusion, addition, or wording of particular questions during interviews because responses of participant might affect by how and which questions were asked. Additionally, semi-structured interviews were supposed as the most suitable method of data collection when participants are required to engender their own perceptions or thinking, at the same time focused on areas of relevance.

The sample size is selected based on purposive sampling technique and stop recruiting more interviews because after the fifth interview, researchers identified apparently that further interviewing is not required as it was not going to add or aid in generating more themes.

## Data Analysis

The data was analyzed by transcribing the audiotape interviews to script, and then through the process of coding data is transformed into information to make it analyzable. The method of Colaizzi 21 was used to code data. For analysis, the interviews were read, re-read and re-listened many times by the researchers to get a hold over the data in terms of understanding. The statements that were directly significant with the phenomenon were selected and coded and formulated it into a meaningful manner. Then this meaningful information was classified and grouped into common themes. Two researchers who were familiar with this method validated the meaning, and themes eradicated. The two themes namely current culture and embryonic culture emerged, which were conceptually different from each other. Additionally, sub-themes were also identified which comes under these two themes such as Current culture includes three sub themes that are access, role and time; however, embryonic culture also includes three subthemes that are engagement, preparedness and nurturing (Warren & Karner, 2009).

The data analysis methodology used in this study was tend to be appropriate because it helped in identifying two main themes, as well as an aid in finding sub-themes. The collection of field notes during interviews is the most appropriate step towards data analysis, as field notes reflects the proper speaking of participants the time of analysis and diminishes researchers biases which probably comes from the lived participant's experience during interviews. The appropriateness of data analysis of this study can be measured through the data was validated by two researchers, and many times reassessed to develop a better understanding, as well as to formulate appropriate themes. The themes were extracted after evaluating the data several times.

## **Ethics**

The phenomenological design of study contributes towards its credibility and trustworthiness, auditability and fittingness. Researchers bracketed themselves consciously to understand the perspective of the respondents interviewed. The audiotape also helps in bracketing researchers while interview transcriptions. Furthermore, the subjects received a text copy to validate the interpretation of their perspectives related to nurse led clinical research.

Ethical consideration in a research is to ensure that participants' rights are not violated, as well as the confidentiality and anonymity. The ethical considerations applied in this study are informed consent, confidentiality and autonomy. Informed consent is to ensure participants' respect and clarifying in what they were going to participate. To maintain confidentiality researchers must be sensitive to data. Researchers also needed to maintain autonomy and explains the risks, benefits and alternatives, as well respect each participant decision of participating in the study (Modell & Humphrey, 2008).

## **Findings**

The key findings of this study include that the perception and experience of neonatal nurses were similar about the need for nurse led clinical research in neonatal care. With reference to the current culture, the clinical research is thought to be a burden and do not consider as a prime role of neonatal nurses. Because, of lack of organizational support to neonatal nurses in this context, hence they are unable to develop their skills and knowledge to conduct a clinical research (New & Bogossian, 2008).

This study can be used in other settings as well because the findings revealed that the experiences of neonatal nurses are similar to other nurses' experience, who works in other fields. Furthermore, the common themes of perception regarding barriers make this study applicable to other settings.

### **Summary**

The practices of nursing are increasing rapidly in the research field for the last 2 decades. Literature and this study findings reported common barriers such as lack of skill and time constraints to conduct research, as research is not linked to central function of neonatal nurses. However, studies differ in identifying the participation of neonatal nurses in research. On the other hand, the research design almost same in evaluating perception and experience of neonatal nurses in conducting clinical research.

## References

Harrigan, K. R., (2009), Using Hybrid Research Methodologies for Testing Contingency Theories of Strategy, in Donald D. Bergh, David J. Ketchen (ed.) 5 (Research Methodology in Strategy and Management, Volume 5), Emerald Group Publishing Limited, pp.121-136.

Modell, S., & Humphrey, C.,(2008), Balancing Acts in Qualitative Accounting Research, Qualitative Research in Accounting & Management, Vol. 5, No.2, pp.92-100.

New, N., & Bogossian, F. (2008), Nurse Led Clinical Research: Neonatal Nurses' Perceptions and Experiences, Neonatal, Paediatric and Child Health Nursing, Vol.11, No.3, pp.13-18.

Smith, J. A., Flowers, P. & Larkin, M., (2009), Interpretative Phenomenological Analysis: Theory, Method and Research, Sage Publications Ltd, London.

Warren, C. A. & Karner, T. X. (2009), Discovering Qualitative Methods: Field Research, Interviews, and Analysis, Oxford University Press, Oxford.

Woodside, A.G. (2010), Case study Research: Theory, Methods And Practice, Emerald Group Publishing, Bingley.