

# [Research critique of qualitative research on registered nurses](https://assignbuster.com/research-critique-of-qualitative-research-on-registered-nurses/)

All healthcare professionals are required to understand and promote evidence based practice, and therefore are required to identify and evaluate primary research which is relevant to their own areas of practice and professional activity (Rycroft-Malone et al, 2004 p. 81-82). Nurses can critique evidence for practice that is available within peer reviewed publications, and can choose from a spectrum of research evidence derived within qualitative and quantitative contexts. While it has long been established that within medicine and healthcare, the scientific paradigm and the quantitative domain are considered to provide the best evidence to inform practice, (Upshur, 2001 p. 5; Sackett et a, 1996 p. 71), there is an increasing drive for the recognition of the contribution of qualitative research to the evidence base of an essentially human-oriented discipline (Rycroft-Malone et al, 2004 p. 81, Upshur, 2001 p. 5; Stevens and Ledbetter 2000 p. 91).

In this essay, the author will undertake a critical evaluation of an identified qualitative research study. The article will be reviewed using the Cormack (2000) framework for evaluation of primary research articles, and will draw on other published research on qualitative methodologies to evaluate the article and its importance for nursing knowledge and practice.

Critique of the Article

The chosen article is Pang et al (2009, p. 312), a study of professional values of Chinese nurses, published in the journal Nursing and Health Sciences. It is published in a reputable, peer-reviewed publication, which would suggest that it is likely to be of sufficient quality to warrant a full critique.

Title

The title is concise: Nursing values in China: the expectations of registered nurses. (Pang et al, 2009, p. 312). As such, it informs the reader of the focus of the study, and its subject matter. However, it does not indicate in this title the nature of the study.

Authors

The authors qualifications and places of work are given. All are registered nurses, and four out of the five have doctoral qualifications, while the fifth has a masters level qualification. This suggests that they have both the clinical knowledge and experience and the research expertise to carry out such a study. They are all employed in academic settings, and four out of the five are employed within the Chinese/Asian context, while one is employed at an American university. This could be argued to be a positive strength of this study, because the authors have the local and contextual knowledge to research within this cultural arena, but have a non-partisan author as well to provide balance and a wider perspective.

Abstract

The article starts with an abstract which immediately introduces the reader to the purpose of the research, which was to identify the essential professional values of Chinese nurses and their manifestations in the current health-care environment (Pang et al, 2009, p. 312). This is a positive aspect of this article because it clearly indicates to the reader the focus of the article.

The abstract then summarises the sample, data collection method and method of analysis, followed by the results and an evaluation of the findings and their implication for practice. However, this abstract does not at any time discuss the qualitative approach used in this study, or make reference to ontological framework or any influencing models or theories (Silverman, 2001 p. 85).

Introduction/Literature Review

The introduction contextualises the research by introducing the reader to the Chinese context, in terms of cultural change and its relationship to a global context. They link the evolution of professional ethics to reform and the working conditions of nurses within China, with specific reference to values (Pang et al, 2009, p. 312). This author would argue that it would have been better to perhaps provide more detail here so that the reader could better understand Chinese culture and politics.

The authors introduce key concepts within the introduction, which is a strength of the reporting of this study. This relates to their focus on values, and they explore this concept with reference to relevant literature, linking values to key aspects of nursing knowledge and practice. This allows the reader who is a nurse to understand and identify the importance of this study for their own practice, and the relationship between their practice and professionalism and this analysis of values. They further discuss the rationale for the research by making reference to nurses awareness of their values and how these values impact their behaviour and link this to humanistic nursing practice (Pan et al, 2009, p. 312). They then show that the issue of professional values in China is something reasonably novel, and therefore, worthy of investigation. Because the concept of professional values is relatively new in China, there is limited research to guide professional development. (Pang et al, 2009, p. 312).

This introduction, therefore, is the only aspect of the study which involves a critical review of the literature, in terms of contextualisation of the research and providing a rationale for the study. While this is appropriate, there is no evidence of any real critical analysis of the quality of the research cited within this section, although more research is referred to later on in the discussion section of the paper. This author would argue that a wider range of research which demonstrates the importance of the concept of values in nursing should have been included here. Cormack (2000) argues that the literature review should identify the underlying theoretical frameworks and present a balanced evaluation of material which supports and goes against the position that the authors propose, and in this paper, there is not enough exploration of the theoretical frameworks, and certainly no attempt at a balanced evaluation of the focus on values here.

The hypothesis

There is no hypothesis in this paper as this is a qualitative study, and qualitative studies do not use hypotheses these are a characteristic of quantitative studies (Silverman, 2001, p. 80).

Operational Definitions

The authors do identify terms used in relation to nursing values, and to the Chinese context, but this author would argue that there is not enough exploration of operational definitions, particularly in relation to the methodological approach which has been used.

Methodology

Cormack (2000) suggests that the methodology section should provide a clear statement about the chosen research approach, and the authors clearly state that they have used a qualitative approach to obtain thick description of nurses perceptions and experiences of professional values (Pang et al, 2009, p. 313). However, this is the only reference to the nature of the study. Sandelowski (2009 p. 77 states that using qualitative description as a distinctive research methodology in its own right is erroneous. It does justify the choice of approach, because of the paucity of related research in China (Pang et al, 2009, p. 313). However, the authors have made no attempt to describe, explore or evaluate any philosophical orientation, research paradigm, framework, ideological underpinnings, or qualitative theories which relate to the work they are carrying out. The field of qualitative research methodology is vast, complex and full of a wide range of methodological frameworks and theoretical models (Silverman, 2001 pp. 85-102), and there are a number of ways in which qualitative research principles are applied to research projects. Therefore, it could be argued that this paper has a serious lack of methodological explanation and transparency, which would not only limit the ability to replicate and reproduce this study, but also limits its transferability to populations beyond the study sample (Blaxter et al, 1996 p. 185; Dale 2005 p. 184).

The reporting of the study does not provide enough transparency to allow this author to evaluate its methodological rigour, as there is no exploration of any of the above concepts, and no evidence that the authors of the study have attempted to justify their approach or evaluate the pros and cons of their methodological framework. However, the use of a qualitative method is justified.

Subjects

The authors of the study do clearly identify their subjects (Cormack, 2000).

Sample Selection

The sample is described as a purposive sample (Pang et al, 2009 p. 313), and this is an appropriate method of sampling for a qualitative study such as this (Dale, 2005 p. 183). However, the authors could have explained the nature and rationale for purposive sampling, to make this report more accessible to the reader who is less familiar with research terms and concepts. The sample size is described, but no details are given of how the participants were recruited, which does not allow the reader to evaluate this process and its appropriateness.

Data Collection

Cormack (2000) suggests that the reader should consider whether data collection procedures are adequately described. Pang et al (2009 p. 313) have used focus groups and in-depth interviews to collect data, and they justify their use of focus groups. They describe their individual interviews as semistructured, which is an appropriate approach within most qualitative methodologies (Bowling, 2000). However, they further state that the participants were allocated to either method according to their interests. Based on the available time, the focus group participants were assigned to homogenous groups. (Pang et al, 2009, p . 313). While this is not necessarily outside the remit of a qualitative study, it does suggest that the ordering of the data collection process may include or introduce some bias, particularly as participants who preferred it went into focus groups.

There is good clarity about the process of data collection, but it would have been useful, particularly for replication studies, if the authors had included a table or chart with the questions used, and provided examples of the additional probing questions that were used to explore the answers to the main questions (Pang et al, 2009, p. 313). Silverman (2001 p. 85-101) supports the use of supplementary questions within semistructured interviews, and certainly this is a valid way of eliciting as much information as possible from the participants.

Ethical Considerations

The authors of the study do include a section on ethical considerations, which is crucial in nursing research which involves vulnerable individuals, including nursing staff themselves. There appears to be ethical approval from appropriate bodies, and some level of review. The authors state they gained informed consent, maintained confidentiality and assured participants of the right to withdraw (Pang et al, 2009 p. 313).

Results

The results are presented within the text, under sub-headings. The authors provide demographic data, and then an exploration of the themes which were found under the sub-heading of Essential professional values (Pang et al, 2009, p. 313). There is a good level of detailed description of each theme, and there are several direct quotes from the research data, which aids transparency and auditability of the research (Dale, 2005 pp. 183-186). However, there is no graphic representation of findings, or modelling of themes or how themes were arrived at. Using models or other graphical representations of thematic findings can enhance accessibility.

Data Analysis

In the case of qualitative research, it is important that the reader can identify the processes involved in arriving at thematic results such as this (Silverman, 2001, pp. 85-101; Kearney, 2001 p. 145). The process of thematic analysis is described in detail, which not only shows a degree of methodological rigour but also enhances replication. However, this author would argue that more detail could have been included here for even greater clarity, and there could have been some explanation of the justification for this methodological approach, showing the provenance of this type of analytical process, as well as usefulness of the measures used to promote rigour. The trail of the analysis could have been made clearer (Koch, 2006 p. 91).

Discussion

The discussion included in this article is very interesting, particularly to the non-Chinese reader. It presents some of the issues in relation to culture and ideology. Cormack (2000) asks whether the discussion is balanced, and reading this, there does appear to be a balanced evaluation, especially of conflicts between Chinese or personal ideologies, and professional ideologies. Each theme is discussed sequentially in this section, making reference to key literature, and to other research which is relevant to the findings. The differences between Western and Chinese values are highlighted, as would be expected given the focus of the article. Limitations of the study are described and discussed in a separate section, but there is not really much explicit evaluation of the implications for practice. The discussion clearly links the findings of these studies with a number of universal concepts and concerns of the nursing profession and healthcare practice. Nursing values are linked with nursing ethics (Arman and Rhensfeldt, 2007 p. 372). This is closely linked to viewing patients as individuals, and with the concept of caring (Arman and Rhensfeldt, 2007 p. 372), which is also a central theme of the critiqued article. Issues of conflict with personal and professional ideologies also appear elsewhere in nursing research and debate, and can occur outside of cultural conflicts (Juthberg et al, 2007 p. 329). There are ongoing debates on how much nurses change during their professional lives, in relation to their personal and professional values, and Lindh et al (2007 p. 129) argue that nurses should not have to compromise their values in order to practice their profession. Pang et al (2009 p. 315) show that nurses in China were entrenched in positive ideologies and that nursing values relate closely to the identified themes.

Conclusions

The article presents a small conclusion, but no separate recommendations for practice. The conclusion summarises the findings, of identifying these seven essential values of Chinese nurses, and their correlation with established codes of ethics for nurses (Pang et al, 2009 p. 315). They state that professional values are influenced by traditional Chinese culture and the current socioeconomic trends (Pang et al, 2009, p. 315). They recommend the development of a culturally sensitive professional values scale for China, for use in future quantitative or mixed methods designs, suggesting that this study provides useful information for development of such an instrument (Pang et al, 2009, p. 315). This author would argue that this is a sad state of affairs, to only see these qualitative findings as contributing to future quantitative studies, but it reflects the general perception of qualitative research being of significantly lower status than quantitative in relation to evidence for practice (Upshur, 2001 p. 5).

This author would argue that this study provides a good exploration of Chinese nursing ethical and value-based meaning, and as such demonstrates the commonality of nursing practice across what are considered to be significant and clearly demarked cultural boundaries.

Conclusion

This review has highlighted the relevance of this article to wider nursing theories and concepts, and has shed light on the values possessed by Chinese nurses which appear to be similar to those of other nurses. There are issues with the quality of reporting of this study, particularly in relation to methodological transparency, but this author would argue that the study does contribute to nursing knowledge in a very real way. The type of reporting may be the limitation, not the research itself.

2. Research Critique (on Quantitative research)

Nurses are expected to provide the best standards of care possible for their patients and clients, and in order to do this, they are required to provide evidence-based practice wherever possible. Part of this process of providing care based on the best available evidence involves appraising primary research (Elliott, 2001, p. 555). If nurses are to improve their practice, and apply evidence to improve their clinical and theoretical knowledge and skills, they must be able to assess the quality of the available research which is relevant to their practice (Freshwater and Bishop, 2003k p23; Hek, 2000, p. 19). According to Hek (2000 p. 19-21), evidence based practice incorporates professional expertise, patient need and preference, and the best available evidence. But in order to identify this best evidence, the nurse must undertake an evaluation and critical review of research studies, to see if the research is useful and of sufficient quality to be applied to their practice (Fink, 2005).

This essay evaluates a quantitative research article which has relevance to nursing practice, because it deals with a chronic condition and one which is prevalent in worldwide populations. The author will review Tangkawanich et al (2008 p. 216) Causal model of health: health-related quality of life in people living with HIV/AIDS in the northern region of Thailand. This article is published in a reputable journal, The Journal of Nursing and Health Sciences which addresses issues of interest and concern to nurses internationally, and as such, offers specific insight into HIV/AIDS and nursing within a global context.

There are a number of appraisal tools available to healthcare practitioners to assist them in analysing and critiquing primary research articles. Such models are developed over time in relation to standardised conceptualisations of what constitutes quality and rigour in research and in its reporting. For the purposes of this essay, the primary tool used is that proposed by Cormack (2000), but the author will make reference to other critiquing guides and information, including the popular CASP tool (PHRU, 2009, online)

Discussion

1. Title

The title is concise (Cormack, 2000) and describes the focus of the research itself. While it clearly indicates what the purpose of the study was (Cormack, 2000), it could be clearer and more indicative of the nature of the study. While the nature of the research in setting out to examine the causal relationships between age, antiretroviral treatment, social support, symptom experience, self-care strategies and health related quality of life (Tangkawanich et al, 2008 p. 216) in the chosen sample and population, is apparent in the abstract, there is little indication of these particular variables in the title, although the description of the causal model (Tangkawanich et al, 2008 p. 216) does indicate the nature of the research. The use of the word causal (Tangkawanich et al, 2008 p. 216) also suggests that this is a quantitative research article. It does not clearly indicate the research approach used (Cormack, 2000). To the less research-aware reader, it would be difficult to divine this information from the title alone, and it could be argued that it would be better to include in this title a clearer indication of the nature of the study. This would then help the reader to identify if this is the type of research study that would be applicable to their own practice or learning.

2. Authors

The authors qualifications are provided, and they all are registered nurses, all of which have postgraduate degrees, and two of which have doctorates. They all work within nursing education within a University context. This would suggest that they have the research skills and expertise to carry out such a study. However, there is no indication in the author list whether or not any of them have the statistical expertise for the study.

3. Abstract

Tangkawanich et al, (2008 p 216) provide an abstract, which is identified by Cormack (2000) as an important introduction to the article. The study effectively summarises the research, by identifying the variables being tested. The authors do not, however, present the hypothesis in the abstract (Cormack, 2000). The abstract contains a summary of the study sample, and also identifies the research tools that have been used. They include the results and a summary of conclusions from these findings. As such, the abstract does represent the article itself (PHRU, 2009, online), and for the reader, it does make it easy to identify whether or not the article is relevant to their interest. In particular, it does indicate clearly that it is a quantitative paper which uses recognisable data collection tools.

4. Introduction and Literature Review

Although Cormack (2000) separates these two into distinct subheadings, within this article, the introduction and literature review are contiguous. The author has noted that this is often the case in the reporting of such studies, but this may simply be a convention of the publication itself, and not the preference of the authors of the study. The authors use the introduction to contextualise the problem in relation to published research, stating the importance of health-related quality of life (HRQL) for people living with HIV/AIDS (PLWHA), because of the impact of the disease on these individuals daily lives (Tangkawanich et al, 2008 p. 216). They discuss changes and advances in treatment options for this condition, and relate this to HRQL, and then discuss the disease itself, and how these impact upon HRQL (Tangkawanich et al, 2008 p. 216). They summarise some research about this topic, and also look at self-care strategies, symptom management and treatment (Tangkawanich et al, 2008 p. 216). There is some exploration of HRQL and its relationship to nursing and to existing literature on this topic, which aids understanding of the concept prior to reading the rest of the article. They highlight some important topics in relation to the focus of the article, including treatment, social support, and other issues (Tangkawanich et al, 2008 p. 216).

Although the introduction/literature review contextualises and introduces this study, this author believes that a more detailed critical analysis of the literature would be warranted here. It is not enough to cite previous research as a means of establishing the credentials of the study, as it were. A wider range of research could have been included (Gerrish and Lacey, 2006, 38; Fontana, 2004, p. 93), and this research could have been evaluated to identify its quality. It is left to the reader to pursue this matter and determine the quality of the research upon which they base the premise and justification for this study. This could be considered a limitation in the reporting of this research.

5. The Hypothesis

The authors do not state a hypothesis (Cormack, 2000), as such, but instead present a research question. The purpose of this study was to examine the causal relationships between age, antiretroviral treatment, social support, symptom experience, self-care strategies, and the HRQL in Thai PLWHA ((Tangkawanich et al, 2008 p. 217). The nature of this statement would suggest that it is not an experimental study, but that it is within a quantitative research paradigm.

6. Operational definitions

Cormack (2000) suggests that people appraising research question whether operational definitions are clearly presented. In this study, operational definitions are explained within the introduction but in language that would make it inaccessible to the less experienced or less knowledgeable reader.

7. Methodology

The methodology section does not clearly state or discuss the choice of a quantitative approach (Cormack, 2000). The focus of the section on Methods is rather on the instruments that are being used. The quality of this study seems to rest in the choice of a quantitative approach, and the choice of data collection instruments. Quantitative research approaches offer a better standard of evidence, with generally greater ability for replication and greater rigour (Kitson et al, 2000 p. 149; Duffy, 2005, p. 233). As far as research for healthcare practice is concerned, quantitative studies hold better status than those based with a qualitative paradigm (Hek, 2000 p. 19; Newman et al, 1998 p. 231; Pepler et al, 2006, p. 23). There is however no real discussion of the underpinning principles of quantitative research (Parahoo, 2006).

It is good that the research instruments are explained in such detail, because it helps overcome one of the limitations of quantitative research, that of not asking the right questions to elicit answers that relate to person al experience (Johnson and Onwuegbuzie, 2004 p. 14).

8. Subjects

There is very limited detail given of sample selection, save stating that eight hospitals were randomly selected using a lottery method without replacement and that the 422 participants were randomly sampled (Tangkawanich et al, 2008 p. 217). This could constitute a limitation of this research, as it is not possible to identify if there was any sampling bias, how participants were recruited, who recruited them, and any ethical issues in relation to participant recruitment (Hek, 2000, p. 20; PHRU, 2009, online, Bowling, 2002). This author would argue that this is a weakness of the study, as these are crucial elements of quality measurement in primary research within healthcare (Austin, 2001 p. 1; Cooper, 2006, p. 439; Nuremberg Code, 1949, online).

9. Sample selection

Sample selection is not discussed in any detail, which could be a weakness of the study, as mentioned above (Cormack, 2000). Sample size is stated, but it is not stated whether this was statistically determined, which could also be considered a weakness, as achieving a statistically sound sample size is important within quantitative research (Daggett et al, 2005, p. 255; Donovan, 2002).

10. Data Collection

Data collection procedures are not adequately described in this study (Cormack, 2000). This would be problematic for replication and for rigour. There is no indication who administered the questionnaires, whether or not they were self-report in the participants own time and convenience, or whether a researcher was present at the time of completion. This could be considered a weakness of this studys reporting. The issue of researcher bias is important in the completion of data collection tools, and while questionnaires may be considered a way of avoiding this, if they are remotely administered, it is not always possible to check they are full, or honest, or completed by the intended target (Gillham, 2000, p. 48). Having the researcher present, however, could introduce bias or influence of some kind, particularly in vulnerable people (Bowling, 2001). As these are vulnerable adults attending clinics for their chronic condition, not discussion how the data was collected from them is a serious failing and may also constitute an ethical issue.

However, a strength of this study could be considered to be the use of multiple data collection instruments, and the detail with which they are described, and their provenance accounted for. They have used the Social Support Questionniare, the Symptom Experience Questionnaire, the Self-Care Strategies Questionnaire, and the Health-Related Quality of Life Questionnaire (Tangkawanich et al, 2008 p. 217). These are described in detail, and where they are based on previously developed research or derived directly from previous studies, this is also described. As these are established research data collection tools, this would suggest they have been previously validated, which adds to the quality of the research (Yu and Cooper, 1983 p. 36; Oppenheim, 1992; McDowell and Newell, 1996; McColl et al, 2001 p. 1). The demographics of the sample are addressed to some extent, and the use of multiple tools also helps to address potential confounding variables or factors (PHRU, 2009, online).

11. Ethical Considerations

It is clearly stated within the study that ethical approval was derived from an appropriate body, and that informed consent was achieved, both of which signify good ethical consideration here (Cormack, 2000). However, there is no explanation of what information was given to the participants, how informed consent was achieved, or if there was any issue with communication or accessibility for people with different communication needs. It does not specifically address issues of anonymity and confidentiality (Cormack, 2000), but instead seems to focus on safety (Tangkawanich et al, 2008 p 218).

12. Results

The results of this study are presented in tables, diagrams, and in great detail within the text of the paper. The key results and demographic issues are presented, but data presentation is summarised in a results section and then in more detail in the discussion. The findings are not very accessible, but p values are clearly stated, which is important in a study of this kind. PHRU (2009, online), within the CASP tool, poses the question of do you believe the results?. This is an important question. The results seem plausible, and relate to established statistical analysis procedures (see below). But because of the lack of detail about the sample, and the selection method, it is not possible to eradicate the doubts about these findings, in relation to potential bias. But in the context of the authors wider knowledge and understanding about people living with HIV/AIDS, the results seem believable. However, the issue of bias cannot be overlooked. More transparency in reporting of key elements of this study would have made it easier to determine whether these results constitute good evidence for practice (Rosswurm and Larrabee, 1999 p. 317; Pepler et al, 2006, p. 23).

12. Data analysis

The authors carried out the statistical analyses using SPSS, which is an established statistical programme, and LISREL, which is not a programme this author is familiar with. They describe generating descriptive statistics for each of the variables under consideration, but do not present these in any detail (Tangkawanich et al, 2008 p. 218). They then describe the use of multivariate analysis for specific model development, and using other tests, some of which are familiar to the author, some of which are not. While the multivariate analysis and X2 tests are acceptable tests of inference or relationships between variables (Duff, 2005 p. 234), anyone who does not have the specialist knowledge of the other tests would find it hard to determine their appropriateness here. The level of specialist statistical knowledge required to understand this would be significant. More transparency could have been achieved by including an explanation of these tests.

13. Discussion

The discussion appears quite balanced (Cormack, 2000), and is very detailed, which is good, given the complexity of this study, involving as it does multiple data collection instruments. The study relates the findings back to a wide range of other research studies, which is a strength of this part of the report, showing congruence with many other findings in relation to quality of life, age, socioeconomic status, social support, antiretroviral treatment, symptoms, and self-care (Tangkawanich et al, 2008 p. 219). Limitations of the study are also acknowledged (Cormack, 2000). However, the implications for practice are presented in a separate section.

14. Conclusions

The conclusion supports the results obtained (Cormack, 2000), although it is not a very detailed summation of the complexity of the findings. H