Assignment: Evaluative essay comparing and contrasting the appropriateness of qualitative and quantitative methods for exploring a research topic Assignment: Evaluative essay comparing and contrasting the appropriate qualitative and quantitative methods for exploring a research topic.

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Nurse-Led Psychoeducation in Psychiatric Wards

Introduction

Universal mental health care faces several dilemmas, such as the issues of high readmission rates of patients, stigma, non-compliance to medicines, and shortage of healthcare facilities (Economou, 2015; Semahegn *et al.*, 2020; Wainberg *et al.*, 2017). These challenges are well demonstrated in Hong Kong, where psychiatric care facilities can easily be flooded. In a cross-sectional study done in Hong Kong, patients confirmed high nonadherence treatment rates attributed to their social environment (Lo et al., 2021). Addressing these complexities requires optimally good practices rooted in evidence-based research that can be scaled up or sustained. One of them is the nurse-led psychoeducation programs that are to enhance the patient's knowledge in the psychiatric ward on their conditions, their compliance to the medication, and even personal coping skills that may be developed to enable them to manage their symptoms on their own. Psychoeducation is supposed to reduce hospitalization, alleviate the load on healthcare systems, and improve customer position (Agency for Healthcare Research and Quality, 2015).

To assess the effectiveness of a nurse-led psychoeducation intervention, the research method employed should be appropriately chosen in the form and the design, as it should adequately reflect the nature and multifaceted aspect of the intervention and accurately meet the study objectives (Opoku, Ahmed, and Akotia, 2016). The methodologies used in the studies cannot simply focus on quantifiable indicators like readmission rates but must also investigate the stakeholders' perceptions of the interventions provided. Qualitative methods are utilized in the quest for depth of understanding, while quantitative methods test and confirm hypotheses to acquire breadth of comprehension of the phenomenon of interest (Palinkas, 2014). These two

perspectives are critical in grasping the general applications of such initiatives and developing strategies that work properly while also considering patients' needs.

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Quantitative Research Method: Randomized Controlled Trials (RCTs)

The best methodology in this case is Randomized Controlled Trials (RCTs). RCTs are the gold standard for testing the effectiveness of an intervention, having the highest levels of internal validity and establishing causality (Krauss, 2021). In the case of testing the efficacy of nurse-led psychoeducation programs implemented in psychiatric wards, and RCT would allow quantification of the intervention's effects on the actual pattent outcomes—specifically, the rehospitalization rate. This method entails the allocation of the participants to either the group that receives the psychoeducation intervention or the group that receives usual care. An RCT works like a game of chance wherein one or more treatments are tested against a control group, where patients are randomly placed in the treatment or control group (Zabor, Kaizer, and Hobbs, 2020). By

comparing them, it is easier for the researchers to determine the level of change the specific intervention has caused, which is not attributed to other factors.

The strength of the quantitative approach for assessing nurse-led psychoeducation programs is its scientific rigor and ability to replicate the study (Palinkas, 2014). These characteristics make RCTs ideal for addressing the quantitative research question: "What are the implications of psychoeducation programs in decreasing readmission rates in the psychiatric wards?" The nature of the given method is systematic, and the study results are not skewed by bias or confounding factors, which adds more credibility to the results (Fernainy *et al.*, 2024). For instance, since

RCT is an effective research methodology since it offers concrete and definitive proof that reveals causality inkages (Krauss, 2021). Through assessing data comparing the treatment and control groups, it will be possible to determine whether the psychoeducation program leads to low readmission rates. It is especially significant for medical research as many policies depend on sound and credible data. Furthermore, the capability of conducting multiple RCTs in different areas or with different samples also helps to replicate the studies and increase the external validity of the outcomes (Deaton and Cartwright, 2017). For example, assuming an original RCT supports the effectiveness of psychoeducation programs in Hong Kong, subsequent trials in other regions can replicate these results and create a more comprehensive intervention evidence base.

Nevertheless, RCTs are not without some weaknesses, although they are relatively minor and easily overcome compared to their advantages. There is one significant limitation related to their contextuality. Although RCTs provide valuable information regarding numerical outcomes like readmission rates, they can fall short of capturing the perspectives of patients and clinicians (Mulder *et al.*, 2017). This

Another problem with the Randomized controlled Trial method is logistics. It can be challenging to arrange for and conduct an RCT to meet the standards of scientific rigor. An RCT involves considerable planning, substantial costs, and careful adherence to trial procedures (Hariton and Locascio, 2018). Getting a large and diverse sample could sometimes be difficult, especially in focused healthcare settings such as psychiatric care, where the patients are few due to stigma or culturally diverse (Singhal,

Ethical issues that may arise when conducting RCTs, especially in terms of trial design and conduct are also important consideration. The first is the concern of equitability between the participants in the treatment group and the control group.

Unequal handling of human research subjects is a noteworthy ethical apprehension since justice necessitates equal treatment (Resnik, 2014). A question of fairness may arise from participants in the control group not being allowed to benefit from a potentially helpful intervention. Researchers need to determine how best to deal with this issue, mainly when the intervention is offered to the subjects in the control group after the

From the discussions above, RCTs pose specific logistical and ethical considerations; hence, implementing a sound data management system should not be overlooked. To enhance the reliability of the results cautious data collection and analysis are vital. Some of the measures include ensuring the identity of the participants is concealed from other participants to ensure they are not identifiable and the

Qualitative Research Method: Semi-Structured Interviews

and openness, which emphasizes the researchers' freedom to explore the participants' experiences, perceptions, and attitudes while at the same time allowing the researchers to follow a certain plan of questioning (DeJonckheere and Vaughn, 2019). This method requires using a set of open-ended probing questions, while the interviewer can ask several follow-up questions throughout the process. Semi-structured interviews can be

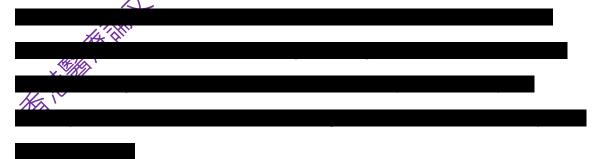
used to develop a better understanding of the perception that patients and providers have about the program. This method is particularly suitable for exploring the qualitative research question: "What are the perceptions of the care offered by the nurse-led teams among the psychiatric patients?"

Semi-structured interviews allow the exploration of psychoeducation programs
because information can be followed up through sharing knowledge and discussions
with participants with different experiences, revealing how patterns exist and
investigating variations and differences in experience (Kakilla, 2021). On the other hand,
structured interviews restrict the respondent to a few responses, which may sometimes
One of the principal benefits of applying semi-structured interviews is the ability
to gather qualitative data that reflects the respondents' experience. This is especially the
case in mental health facilities since some of the experiences that patients experience
include major emotional events and psychological disorders (Staniszewska et al., 2019).

narrate how they benefited from a process of psychoeducation where they get to learn how the disease affected them and how they could take charge of their lives again.

Secondly, flexibility is another benefit of semi-structured interviews, as they can be modified throughout the interview process (Elhami et al., 2022). Interviewers can use various approaches based on who the participant is and try to get as much valuable information as possible. This is particularly useful in psychiatric setups as patients vary

However, the semi-structured interview methodology is not devoid of some pitfalls. A significant drawback involves the subjectivity of the researcher and subject while interpreting events and experiences (Ruslin et al., 2022). For instance, its results could be susceptible to retrospective recall to social desirability effects or participants' subjectivity during the survey. Similarly, the opinion of the researchers at the time of data



Another drawback of semi-structured interviews is that they are not very generalizable. As this approach usually entails a relatively small sample, the results may

not reflect the population (Vasileiou *et al.*, 2018). For example, data collected from patients in one particular psychiatric ward may not be extrapolated to those with different demographic or clinical profiles in the other ward.

Semi-structured interviews take time (Ruslin et al., 2022) and resources, whether in data collection or analysis. Interrogative surveys are time-consuming, especially when interviewing many participants and transcribing the data for analysis. Also, interviewers have to be effective communicators and capable of developing a good relationship with

Issues of ethics play an important when it comes to undertaking semi-structured interviews, especially in areas that are sensitive, like psychiatric disorders. Maintenance of confidentiality is imperative because the participants are likely to reveal personal and sometimes sensitive information during the interviews (Kang and Hwang, 2023). Any data collected must be anonymized, and the investigators must keep recordings or transcripts of data secure for the participants' protection. Another primary ethical

Despite the drawbacks, semi-structured interviews are powerful for obtaining comprehensive and detailed information on nurse-led psychoeducation programs. They

enable the researcher to capture the firsthand accounts of patients and other stakeholders within the health workforce, information that can be difficult to obtain using other research methods (DeJonckheere and Vaughn, 2019). For example, interviews may explore patients' views on the participation of nurses in their healing process, their understanding of the information shared during psychoeducation sessions, or the impact of culture on their engagement in the program.

Mixed-Methods Approach: Integration of RCTs and Semi-Structured Interviews

The mixed-methods approach combines quantitative and qualitative research paradigms to enhance the validity of the findings on the researched phenomena. Despite its application to nurse-led psychoeducation programs in psychiatric wards and a relatively small patient sample, this approach merges the strengths of RCTs with semi-structured interview versatility. Given that psychoeducation is a multifaceted construct

The most significant strength of the mixed-methods approach is its capability to provide a more comprehensive outlook of an intervention (Wasti *et al.*, 2022). Since it combines both methods, RCTs are highly valuable for generating quantitative data about the number of hospital readmissions. In contrast, the semi-structured interviews help to investigate the subjective experience of the patients and the staff who participated in the program (DeJonckheere and Vaughn, 2019). For example, the RCT component could show that patients who engage in psychoeducation have fewer readmissions than their

aved.
Another notable advantage of mixed research is its ability to implement triangulation, as integrating results from different data sources can improve the reliability
triangulation, as integrating results from different data sources can improve the reliability
and validity of the results achieved (Dawadi, Shrestha, and Giri, 2021). For example, if
the analysis of the numerical data shows a decline in readmission rates while interviews
expose patients' constructive attitudes toward the program, the fact that both sets of data
align corroborates the conclusions. On the other hand, if there are disagreements, for
reflects the
multifaceted nature of the intervention (Wasti <i>et al.</i> , 2022).
One major drawback is that time and material resources can be costly (Office for
Health Improvement and Disparities, 2020). Implementing RCTs and semi-structured
interviews takes a lot of resources, including time, funding, and technical expertise, as
well as combining and analyzing data from both approaches. To avoid resource
allocation conflict between planned and emergent activities, researchers should

Other issues may be experienced while conducting mixed-methods research, including data integration (Rai, 2018). Qualitative and quantitative data analysis and synthesis require enhanced methodological expertise and clear interpretative frameworks (Noyes *et al.*, 2019). The researcher has to decide the relevancy and the of these disparities and their implications for evaluating the intervention.

Ethical issues are also likely to be more of a concern mixed methods research due to the dual purpose of participants as data and instruments and the nature of handling different data types. Thus, maintaining confidentiality, obtaining informed consent, and handling possible power issues are critical to ethical considerations (Arellano, Alcubilla, and Leguízamo, 2023). For instance, participants may be reluctant

Critical Evaluation of Research Methods

Quantitative research approaches (RCTs) are well suited for assessing concrete and portable outcome forms, such as readmission rates. Following a formalized approach, they maintain impartiality, making them critical for proving cause-and-effect relationships and generating usable data for effective decision-making (Krauss, 2021). However, they are overly prescriptive, which hinders the identification of subtle

experiences because they mainly emphasize quantifiable results of care without touching on context and feelings.

Semi-structured interviews, which fall under qualitative research, offer rich details of the life experiences of patients and staff (DeJonckheere and Vaughn, 2019). It measures the psychoeducation's therapeutic, societal, and psychological touchpoints which the quantitative approaches may not cover. Semi-structured interviews help the

establish causality (Ruslin et al., 2022).

Although both RCTs and semi-structured interviews have benefits and merits, a mixed-method approach would provide a more detailed assessment of the intervention. This process allows the researcher to easily determine to which extent a change may have occurred by some specific outdones of interest in a given context. Because a mixed-method approach incorporates qualitative and quantitative tactics, it extensively examines efficiency and program satisfaction by comparing multiple methods (Wasti et al., 2022).

Conclusion

in conclusion, this essay has conferred the suitability of Quantitative, Qualitative, and Mixed-Method Research Approaches in studying nurse-led psychoeducation programs in psychiatric wards. RCTs are quantitative and produce highly accurate and transferable data, ideal for showing controlled impacts and tangible outcomes such as the impact on readmissions and eradicating bias (Fernainy et al., 2024). However, they appeal less to the level of qualitative analysis required when documenting the patients'

and clinicians' impressions and narratives, which is crucial in understanding the relevance of the intervention (Mulder et al., 2017).

The mixed method offers benefits from both paradigms; incorporating quantitative data with meaningful qualitative details, results in a more thorough analysis (Wasti et al., 2022). Mixed methods also enable the measurement of objective and self-reported data, which is crucial for accurately capturing the intervention in the study environment. Therefore, a mixed-methods research design is the most appropriate evaluation design to determine the effectiveness of psychoeducation interventions conducted by nurses.

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