Exploring the Relationship Between *Medication Beliefs* and Therapy *Outcomes* Among Hemodialysis Patients at Dr. Moewardi Regional General Hospital

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ABSTRACT

Background: Chronic kidney disease is a progressive and irreversible condition that requires long-term hemodialysis therapy. Continuous treatment may influence patients' beliefs about medicines and therapy *outcomes*, particularly quality of life. **Objectives:** This study aimed to determine the sociodemographic and clinical characteristics, *medication beliefs*, therapy *outcomes*, and the relationship between *medication beliefs* and therapy *outcomes* among hemodialysis patients at Dr. Moewardi Regional General Hospital, Surakarta. **Methods:** This analytical observational study used a *cross-sectional* design with purposive sampling and involved 80 respondents. *Medication beliefs* were assessed using the *Beliefs about Medicines Questionnaire*, quality of life was measured using the *World Health Organization Quality of Life Brief questionnaire*, and clinical *outcomes* were evaluated using *creatinine clearance* values. Data were analyzed using univariate and bivariate analyses with the *Chi-square* test at a significance level of $p < 0.05$. **Results:** Most respondents had positive *medication beliefs* (65.0%) and good quality of life (65.0%). Clinical *outcomes* showed that the majority of respondents had increased *creatinine clearance* values (85.0%). Statistical analysis using the *Chi-square* test showed no significant relationship between *medication beliefs* and quality of life as a therapy outcome ($p = 0.065$).**Conclusion**: *Medication beliefs* were predominantly positive among hemodialysis patients; however, they were not significantly associated with quality of life as a therapy outcome.

Keywords: chronic kidney disease; hemodialysis; *medication beliefs*; quality of life; *creatinine clearance*

INTRODUCTION

Chronic kidney disease is a progressive and irreversible condition that may progress to end-stage kidney disease requiring long-term hemodialysis therapy. The increasing prevalence of this disease contributes substantially to morbidity, mortality, and healthcare costs worldwide. Although hemodialysis is essential for maintaining patients' survival, long-term treatment may negatively affect physical, psychological, social, and environmental well-being, making quality of life an important indicator of therapy *outcomes.* In addition to clinical factors, psychosocial factors such as medication beliefs may influence treatment adherence and health *outcomes* because patients who perceive their medications as necessary tend to be more adherent, whereas excessive concerns about medications may reduce adherence and affect disease management. Previous studies have reported significant associations between self-efficacy, coping mechanisms, duration of hemodialysis, and quality of life; however, evidence specifically examining *medication beliefs* as a determinant of therapy *outcomes* in hemodialysis patients remains limited, particularly in Indonesia. Therefore, this study was conducted at Dr. Moewardi Regional General Hospital, Surakarta, a type A referral hospital with a large hemodialysis population, to explore the relationship between *medication beliefs* and therapy *outcomes*. *Medication beliefs* were assessed using the *Beliefs about Medicines Questionnaire,* while therapy *outcomes* were evaluated through *quality of life using the World Health Organization Quality of Life Brief* questionnaire and clinical *outcomes* using *creatinine clearance* values.

METHODS

This study employed a quantitative analytical observational design with a *cross-sectional* approach and was conducted at the Hemodialysis Unit of Dr. Moewardi Regional General Hospital, Surakarta, from May to June 2026. A total of 80 patients with chronic kidney disease undergoing hemodialysis were selected using purposive sampling. *Medication beliefs* were assessed using the *Beliefs about Medicines Questionnaire*, while quality of life was measured using the *World Health Organization Quality of Life Brief questionnaire*. Therapy outcomes were evaluated based on quality of life and creatinine clearance values. Data were analyzed using univariate and bivariate analyses with the *Chi-square* test, and statistical significance was set at $p < 0.05$.
The research process flow is shown in the chart below:

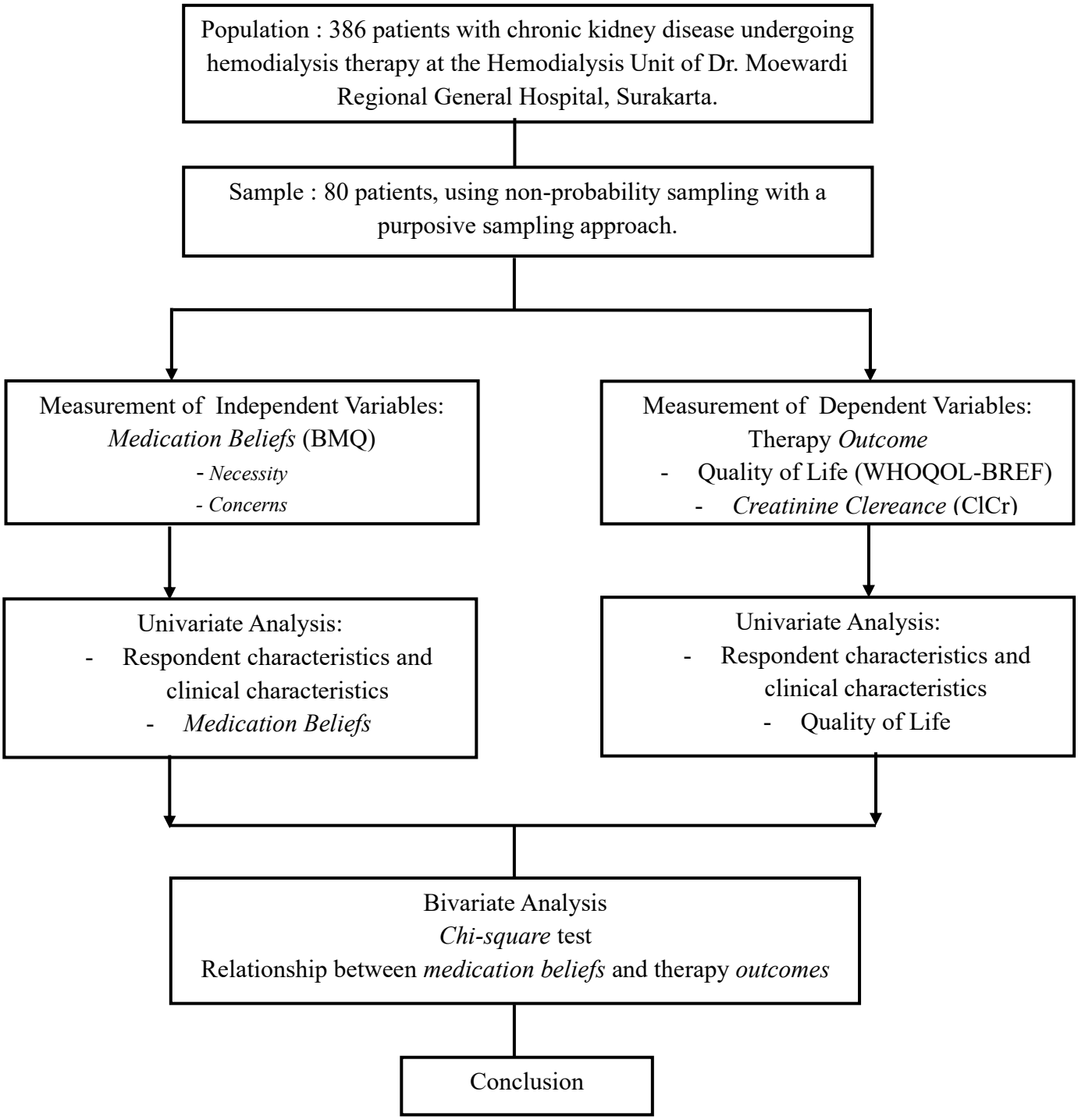

Figure 1. Research Stages Flowchart

RESULTS

Based on a study of hemodialysis patients at Dr. Moewardi Regional General Hospital, Surakarta, the majority of respondents held positive *medication beliefs* and reported a good quality of life. Evaluation of therapeutic *outcomes* based on clinical parameters revealed that most respondents exhibited improved *Creatinine Clearance* (ClCr) values. Bivariate analysis using the *Chi-Square* test yielded a p-value of 0.065 ($p > 0.05$), indicating no significant association between *medication beliefs* and quality of life—as a therapeutic *outcome*—among hemodialysis patients. These findings suggest that patients' beliefs regarding their treatment have not been shown to have a significant relationship with the quality of life of patients undergoing hemodialysis therapy.

CONCLUSION

The study results yielded a p-value of 0.065 ($p > 0.05$), indicating no significant relationship between *medication beliefs* and therapy outcomes—specifically quality of life—among hemodialysis patients at Dr. Moewardi Regional General Hospital, Surakarta. Although descriptive analysis showed that the majority of respondents held positive *medication beliefs* (65.0%) and reported good quality of life (65.0%), the association between these two variables did not reach statistical significance.

These findings differ from those of Hanafi *et al*. (2020), Sinaga *et al.* (2022), and Dwiatmojo *et al.* (2025), who reported that psychological factors—such as *self-efficacy,* duration of hemodialysis treatment, and coping mechanisms—were associated with the quality of life of hemodialysis patients. This discrepancy is likely attributable to differences in the variables examined, respondent characteristics, research instruments, and sample sizes. The researchers suggest that, despite the lack of a statistically significant relationship between *medication beliefs* and quality of life, maintaining positive beliefs about treatment remains crucial for boosting patient motivation to adhere consistently to therapy. Therefore, patient education regarding treatment benefits—supported by psychosocial approaches and family involvement—should continue to be provided as part of efforts to improve the quality of life for hemodialysis patients.

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