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Relationships of Healthcare Communication, Emotional Support and Family Support on Hemodialysis Decisions

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Abstract. Hemodialysis is a primary therapy for patients with end-stage chronic kidney disease. This study aims to examine the relationship between healthcare communication, emotional support, and family support on patients' decisions to undergo hemodialysis. A cross-sectional survey method was employed, involving 77 patients at the Hemodialysis Unit of Dustira Hospital, Cimahi. The research instruments included structured questionnaires measuring variables such as healthcare communication, healthcare emotional support, family support, and consent decisions. Data were analyzed using SmartPLS software. The results showed that healthcare communication had a significant influence on emotional support ($R = 0.640$, $p < 0.001$) and family support ($R = 0.611$, $p < 0.001$). Healthcare communication also had a very strong and significant impact on patients' consent decisions ($R = 0.663$, $p < 0.001$). Although the emotional support from healthcare providers had a small impact on consent decisions ($R = 0.034$, $p > 0.05$), family support had a relatively small but greater influence ($R = 0.108$, $p < 0.05$). In conclusion, effective communication between healthcare providers and family support is crucial in the medical decision-making process for hemodialysis patients. Enhancing the quality of communication between healthcare providers and patients is essential to support better medical decisions and improve patient health outcomes.

Keywords: healthcare communication, hemodialysis, healthcare services, emotional support, medical decision-making

Abstrak. Hemodialisis merupakan terapi utama bagi pasien dengan penyakit ginjal kronis stadium akhir. Penelitian ini bertujuan mengkaji hubungan antara komunikasi tenaga kesehatan, dukungan emosional, dan dukungan keluarga terhadap keputusan pasien dalam menjalani hemodialisis. Metode kuantitatif survei cross-sectional, melibatkan 77 pasien hemodialisis di Unit Hemodialisis RS Dustira Cimahi. Instrumen penelitian berupa kuesioner terstruktur yang mengukur variabel komunikasi tenaga kesehatan, dukungan emosional tenaga kesehatan, dukungan keluarga, dan keputusan persetujuan. Data dianalisis menggunakan perangkat lunak SmartPLS. Hasil penelitian menunjukkan komunikasi tenaga kesehatan memiliki pengaruh signifikan terhadap dukungan emosional (koefisien jalur = 0.640, $p < 0.001$) dan dukungan keluarga (koefisien jalur = 0.611, $p < 0.001$). Komunikasi tenaga kesehatan juga berpengaruh sangat kuat dan signifikan terhadap keputusan persetujuan pasien (koefisien jalur = 0.663, $p < 0.001$). Meskipun dukungan emosional tenaga kesehatan berpengaruh kecil terhadap keputusan persetujuan (koefisien jalur = 0.034, $p > 0.05$), dukungan keluarga memiliki pengaruh lebih besar meskipun relatif kecil (koefisien jalur = 0.108, $p < 0.05$). Kesimpulannya, pentingnya komunikasi efektif dari tenaga kesehatan dan dukungan keluarga dalam pengambilan keputusan medis pasien hemodialisis. Meningkatkan kualitas komunikasi antara tenaga kesehatan dan pasien sangat penting untuk mendukung keputusan medis yang lebih baik dan meningkatkan hasil kesehatan pasien.

Kata kunci: komunikasi kesehatan, hemodialisis, pelayanan kesehatan, dukungan emosional, keputusan medis.

PENDAHULUAN

Hemodialysis is one of the primary therapies for patients with end-stage chronic kidney disease. The decision-making process for undergoing hemodialysis involves various factors, including effective communication between healthcare providers and patients, as well as adequate emotional and family support. Effective communication between healthcare providers and patients is crucial to ensure that patients receive accurate and sufficient information about their condition and the available treatment options. Research indicates that good communication can enhance patient understanding, adherence to therapy, and overall health outcomes (Sansom-Daly et al., 2020; Street Jr et al., 2009). In addition to communication with healthcare providers, emotional and family support also plays a crucial role in the decision-making process related to hemodialysis. Family support can provide patients with comfort and confidence in facing the challenges of long-term treatment (Cohen et al., 2007; Ream et al., 2021; Yaner et al., 2020). emotional support from both family and healthcare providers helps reduce anxiety and improve patients' quality of life (Lewin & Schaefer, 2017). This study aims to examine the relationship between healthcare communication, emotional support, and family support on patients' decisions to undergo hemodialysis. Through this research, we hope to reveal the significant roles of each factor in influencing patients' decisions, providing insights to improve the quality of communication and support for hemodialysis patients.

METODE PENELITIAN

This study employs a quantitative method to examine the relationship between healthcare communication, emotional support from healthcare providers, and family support on patients' decisions to undergo hemodialysis. A quantitative approach was chosen as it allows for objective measurement and statistical analysis of the collected data, providing a clearer picture of the relationships among the studied variables (Creswell & Creswell, 2017).

The research design is a cross-sectional survey, where data are collected from some

respondents. This study involves 77 respondents who are hemodialysis patients at the Hemodialysis Unit of Dustira Hospital, Cimahi. Respondents were selected using purposive sampling, with inclusion criteria being patients who have undergone hemodialysis for at least six months and are over 18 years of age.

The instrument used in this study is a questionnaire consisting of four sections to measure the variables of healthcare communication, emotional support from healthcare providers, family support, and decision-making regarding hemodialysis consent. The questionnaire has undergone validity and reliability testing to ensure it is a proper measurement tool. Data were collected using a structured questionnaire with a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) for favorable questions, while unfavorable questions used a Likert scale from 1 (strongly agree) to 5 (strongly disagree). Before data collection, researchers explained the purpose of the study and obtained written consent from each respondent. Researchers ensured that all respondents understood the questions in the questionnaire and provided honest answers.

The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software version 3.0. This method was chosen because it can analyze complex relationships among latent variables and test models involving many indicators (Hair Jr et al., 2021). The analysis steps include testing the validity and reliability of the instruments, as well as path analysis to test the hypotheses regarding the relationships among variables.

HASIL DAN PEMBAHASAN

Data on research characteristics can be seen in the table below.

Table 1. Research characteristic data

Variable	Category	Number	Percentage
Age	< 20 year	0	0
	21 – 25 year	3	3,90
	26 – 30 year	6	7,79

31 – 35 year 5 6,49

36 – 40 year 3 3,90

41 – 45 year 7 9,09

46 – 50 year 11 14,29

> 50 year 42 54,55

Marital Status Sudah Menikah 62 80,52

Belum Menikah 7 9,09

Pernah Menikah 8 10,39

Education SD 14 18,18

SMP 20 25,97

SMA 39 50,65

Diploma 3 1 1,30

Sarjana (S1) 3 3,90

Sex Pria 40 51,95

Wanita 37 48,05

Job TNI 1 1,30

PNS TNI 1 1,30

Keluarga TNI / PNS TNI 2 2,60

PNS Umum 1 1,30

Swasta 23 29,87

Pensiunan TNI / Polri / PNS Kemhan 8 10,39

Pensiunan PNS Non Kemhan 1 1,30

Tidak bekerja 40 51,95

Onset of HD < 1 year 41 53,25

1 - 3 year 26 33,77

3 - 5 year 4 5,19

> 5 year 6 7,79

The results of the respondent characteristics show that the majority of hemodialysis patients in this study are older individuals, which aligns with the literature indicating that the prevalence of chronic kidney disease increases with age (de Boer et al., 2020). This prevalence rises significantly in individuals over 50 years old (Hamadou et al., 2017), with the highest prevalence found in the age group 70-74 years (Nagata et al., 2010) due to risk factors such as obesity, diabetes, hypertension (Stevens et al., 2010), and statin use (Zhang et al., 2009).

The distribution of marital status, dominated by married respondents, reflects the importance of social support from spouses in managing chronic diseases like hemodialysis (Kimmel et al., 2003). High levels of social support from spouses are associated with better marital satisfaction, lower marital stress (Daneker et al., 2001), and lower depression rates (Khaira et al., 2012). Social support from family is positively associated with family adaptability and perceived emotional support from partners (Jiang et al., 2015) and enhances health behavior changes in patients (Noviana & Zahra, 2022).

The varying education levels among hemodialysis patients indicate diverse educational backgrounds. However, the high proportion of respondents with secondary education (junior and senior high school) underscores the need for more intensive educational efforts on kidney disease management and hemodialysis. Lower health literacy can affect understanding and adherence to treatment (Nutbeam, 2000). Intensive education can improve understanding and adherence to treatment (Dsouza et al., 2023). Patients with inadequate health literacy are more likely to struggle with following treatment regimens (Santos et al., 2021). Education, combined with social support, can enhance treatment adherence (Seo & Sim, 2020). Higher health literacy can improve patients' quality of life and adherence to treatment (Rahmawati & Rochmawati, 2022). Interventions designed to

improve health literacy can help patients follow treatment recommendations (Esterman, 2019).

The nearly balanced gender distribution of respondents provides a representative picture of the hemodialysis patient population. However, the dominance of unemployed respondents highlights the significant impact of chronic kidney disease on patients' ability to work and productivity (Saha & Allon, 2017). This also underscores the importance of financial and social support for hemodialysis patients. Patients with chronic kidney disease face substantial financial challenges, limited lifestyles, and dependency, which negatively impact their psychological status. Social and psychological support is crucial to help these patients (Tadesse et al., 2021) and can enhance their psychological well-being (Um-e-Kalsoom et al., 2020). Personalized support from nephrology care and tailored workplace accommodations are essential for supporting the employment sustainability of chronic kidney disease patients (van der Mei et al., 2021). Psychological support, both direct and online, can reduce anxiety and improve treatment adherence in hemodialysis patients. This highlights the importance of psychological interventions to improve treatment outcomes (Marturano et al., 2023).

The varying duration of hemodialysis among patients reflects different stages in the disease progression. The majority of patients who have recently started hemodialysis (<1 year) indicate a potential need for adaptation and adjustment to life with hemodialysis, which requires special support from healthcare providers and families (Finkelstein et al., 2009). This underscores the need for multidimensional support, including from family and healthcare professionals (Lin et al., 2015) and holistic support from family and healthcare providers to help them adjust to their condition (Yousefi & Shahgholian, 2015). Good family support, especially emotional support and understanding, is associated with better adjustment in hemodialysis patients. Patients with strong family support show higher levels of adaptation to life with hemodialysis (Jiang et al., 2015).

Figure 1. Research Path Coefficient

The analysis results using Partial Least Squares Structural Equation Modeling (PLS-SEM) show that healthcare communication has a significant impact on emotional support and family support. The path coefficient between healthcare communication and emotional support is 0.640 ($p < 0.001$), while the path coefficient between healthcare communication and family support is 0.611 ($p < 0.001$). This indicates that effective communication from healthcare providers plays a crucial role in enhancing the emotional and family support perceived by patients.

Moreover, emotional support and family support were found to have positive effects on patients' decisions to undergo hemodialysis. The path coefficient between emotional support and consent decision is 0.034 ($p > 0.05$), indicating an insignificant influence. Conversely, the path coefficient between family support and consent decision is 0.108 ($p < 0.05$), indicating that family support has a significant but small effect on patients' consent decisions. The path coefficient between healthcare communication and consent decision is 0.663 ($p < 0.001$), indicating a very significant and strong influence.

Figure 2. Structural model of research

The above figure illustrates the structural model resulting from the Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis, which examines the relationships between healthcare communication, emotional support from healthcare providers, family support, and consent decisions among hemodialysis patients.

Healthcare communication is measured using four indicators: K1 (providing information about the hemodialysis procedure), K2 (providing information to the family about the hemodialysis procedure), K3 (emotional support from healthcare providers during the hemodialysis process), and K4 (freedom for patients to ask questions and express concerns to healthcare providers), with factor loadings of 0.859, 0.795, 0.807, and 0.780, respectively. These loadings indicate that all indicators contribute well to reflecting healthcare communication. Healthcare communication has a significant impact on healthcare provider support (path coefficient = 0.640, $p < 0.001$) and family support (path

coefficient = 0.611, $p < 0.001$). This highlights the importance of effective communication from healthcare providers in enhancing both perceived healthcare provider support and family support.

Emotional support from healthcare providers is measured using three indicators: E1 (emotional relationship between healthcare providers and patients), E2 (attention from healthcare providers to the patient's family), and E3 (concern from healthcare providers about the patient's worries), with factor loadings of 0.860, 0.914, and 0.612, respectively. Indicator E2 has the highest loading, indicating that it is the strongest indicator in reflecting emotional support from healthcare providers. The influence of emotional support from healthcare providers on consent decisions is not significant (path coefficient = 0.034, $p > 0.05$). This suggests that the support perceived by healthcare providers may not be strong enough to directly influence patients' consent decisions.

Family support is measured using two indicators: DK1 (adequacy of information and family support in the hemodialysis process) and DK2 (the important role of the family in the patient's recovery process), with factor loadings of 0.780 and 0.831, respectively. Both indicators contribute well to reflecting family support. Family support has a significant but small influence on consent decisions (path coefficient = 0.108, $p < 0.05$). This indicates that family support plays a role in patients' decisions, although its influence is not as strong as expected.

Consent decisions are measured using two indicators: KP1 (the decision to undergo hemodialysis is well-informed) and KP2 (family involvement in the decision-making process for hemodialysis), with factor loadings of 0.858 and 0.923, respectively. Indicator KP2 has the highest loading, indicating that it is the strongest indicator in reflecting consent decisions. Healthcare communication has a very significant and strong impact on consent decisions (path coefficient = 0.663, $p < 0.001$). This underscores the critical importance of effective communication from healthcare providers in the patient decision-making process.

The results of this study affirm the importance of effective communication between healthcare providers and patients in medical decision-making. Good communication not

only enhances patients' understanding of their health conditions and treatment options but also contributes to increased emotional and family support. These findings align with previous research showing that effective communication between healthcare providers and patients can improve patient understanding (Epstein & Street, 2011; Street Jr et al., 2009), adherence to therapy (Miller & Robin DiMatteo, 2015), overall health outcomes (Butow & Sharpe, 2013; White et al., 2015) and encourage shared decision-making (Korzh & Tsodikova, 2019). A meta-analysis found that training doctors in communication skills can increase patient adherence by 1.62 times compared to those without such training (Zolnierek & DiMatteo, 2009).

Emotional support from healthcare providers was found to be insignificant in influencing patients' consent decisions, which may be due to other factors such as the patient's health condition, disease severity, or personal preferences not measured in this study. However, the importance of emotional support in managing chronic illness cannot be overlooked, as it has been shown to enhance patients' psychological well-being (Sansom-Daly et al., 2020). Emotional support from healthcare providers and other support systems plays a crucial role in managing chronic diseases, improving treatment adherence, and enhancing patients' quality of life. This support includes education, skill training, and ongoing emotional support (Brownson & Heisler, 2009). Patients with chronic illnesses who rarely receive emotional support are more likely to experience depression and a decline in quality of life (Arabyat & Raisch, 2019), Emotional support and personalized care are vital for patients with terminal illnesses (Wenrich et al., 2003). Psychosocial support provided through group interventions can help chronic disease patients cope with the psychological stress of their diagnosis and treatment (Weis, 2003).

Family support also proved to have a significant but relatively small impact on patients' decisions. This indicates that family support is crucial in helping patients face the challenges of hemodialysis therapy and make appropriate care decisions (Cohen et al., 2007). Family support can help reduce anxiety and motivate patients to adhere to necessary therapy. This finding aligns with research (Lewin & Schaefer, 2017) showing

that family support can improve patient's quality of life and health outcomes. Good family support is associated with higher treatment adherence and helps patients remain positive and meet their physical and psychological needs during treatment (Yaner et al., 2020). Family conferences can enhance patients' and families' understanding of the disease and treatment, providing essential emotional and psychosocial support (Powazki, 2011). Families supporting patients during treatment experience role changes and high levels of anxiety, which continue throughout the treatment. Support from nurses can help families adapt to these changes and prevent them from becoming overly burdened (Ream et al., 2021).

KESIMPULAN DAN SARAN

This study highlights the importance of effective communication between healthcare providers and family support in the medical decision-making process for hemodialysis patients. Healthcare communication plays a crucial role in enhancing perceived support from healthcare providers and families and has a very strong and significant impact on consent decisions. Although emotional support from healthcare providers has a very small influence on consent decisions, family support has a greater, albeit still relatively small, impact.

These results indicate that effective communication with healthcare providers is a key factor in influencing perceived support from both healthcare providers and families, as well as consent decisions. Therefore, efforts to improve the quality of communication between healthcare providers and patients are essential to support better decision-making processes and improve their health outcomes.

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