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Patient perceptions of basic human needs fulfillment in hospitalized care: A study at Banda Aceh Hospital, Indonesia

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Abstract

Nursing care focuses on meeting basic human needs, directly impacting patient satisfaction and healthcare quality. The objective of this study is to assess patients' perceptions of the level of satisfaction they receive with their basic human needs while in a public hospital in Banda Aceh, Indonesia. This quantitative descriptive study was conducted using a cross-sectional design. Sixty-three patients were recruited using a proportional stratified random sampling method. Data were collected using a structured questionnaire and analyzed using descriptive statistics. The results indicated that 82.5% of patients perceived the fulfillment of their basic human needs as "good." The four most positively rated components were "eating and drinking sufficiently," "moving and maintaining position," "choosing appropriate clothing," and "maintaining body temperature within the normal range." The findings show that nurses are crucial in ensuring patients' basic human needs are met by adequately implementing nursing procedures. Healthcare facilities must prioritize meeting patients' fundamental needs by strengthening clinical nurses' authority and enhancing nursing care protocols to improve patient outcomes and satisfaction.

Keywords: Health personnel, hospitalization, motivation, patient satisfaction, perception.

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Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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1. Introduction

Patient care services form the core of hospital operations, encompassing various professional interventions to achieve the best health outcomes for different patient groups. In this context, nursing is vital in meeting the basic needs of individuals with a wide array of health issues, whether they are healthy or facing physical, psychological, or social challenges [1, 2]. Nursing leadership and management play a crucial role in this process, guaranteeing that organized policies, resource distribution, and staff collaboration effectively meet patient needs [3]. Nursing leaders develop care protocols, promote patient-centered practices, and supervise nursing staff to uphold high standards in care delivery [4, 5].

Virginia Henderson defines nursing as helping individuals perform health-related activities that enhance well-being and recovery or, when needed, support a dignified end-of-life experience [6]. Nurses play a vital role in helping patients regain their independence by promoting activities that enhance their recovery. Nonetheless, effective nursing care depends not only on individual nurses; it also requires strong leadership and management within hospitals to execute strategies that improve patient outcomes. Hospital administrators and nursing managers must guarantee that staffing levels, professional development opportunities, and resource allocation adhere to optimal patient care standards [7].

Basic human needs are fundamental for maintaining physiological and psychological homeostasis, essential for life and health [8, 9]. Physiological needs are especially critical, as survival hinges on their fulfillment [10]. These needs encompass adequate oxygenation, proper fluid and nutritional intake, efficient elimination processes, sufficient rest and sleep [11], regular physical activity, body temperature regulation, and the maintenance of sexual health [12, 13]. In line with Henderson's framework, these needs include mobility, posture maintenance, appropriate clothing selection, and personal hygiene practices [14]. Meeting these needs requires a coordinated approach integrating direct nursing interventions with effective leadership oversight to ensure compliance with established care standards [15].

Several factors affect a person's ability to fulfill their basic needs, such as illness, self-perception, family dynamics, and life stages [16]. When patients face a decline in functional capacity due to health issues or injury, their risk of health complications rises [10]. As a result, nursing leaders and hospital administrators should establish and implement policies that improve patient support systems, including organized care models that promote interdisciplinary collaboration [17].

Unmet basic needs may increase stress, causing patients to concentrate more on immediate physiological deficiencies than on their overall health progress [18]. This highlights the necessity for a well-designed nursing care model to provide comprehensive support for hospitalized patients. Observations at a Public Hospital in Banda Aceh reveal potential shortcomings in addressing patients' fundamental needs [3]. Initial evaluations indicate that family members or informal caregivers mostly take on these responsibilities. At the same time, nursing staff focus on medical treatments. This discrepancy raises concerns about the effectiveness of current patient care approaches and the role of nursing management in ensuring thorough care delivery.

Considering these factors, this study intends to examine patients' views on fulfilling their fundamental human needs while hospitalized in a public facility. This research aims to provide valuable insights for enhancing patient-centered care by pinpointing crucial areas for improvement. The focus is on the necessity for nursing leadership and management to formulate policies that strengthen nurses' professional obligations to address patient needs [19]. Additionally, hospital administrators should prioritize strategies that align organizational goals with comprehensive nursing practices, ultimately leading to better patient satisfaction and health outcomes.

2. Materials and Methods

2.1. Study Design, Setting, and Population

This study utilized a descriptive methodology with a cross-sectional design [20]. It was conducted in the class III inpatient room of a public hospital in Banda Aceh, which has 144 patient beds. This hospital was chosen due to its full accreditation by the KARS team, its classification as a class B referral hospital in the Banda Aceh area, and its ability to offer comprehensive care for patients facing various health challenges. The wide range of patient profiles highlights the need for a firm commitment to addressing essential human needs, creating an optimal care setting that caters to the complex health demands of the community.

2.2. Variables

This study employed the foundational framework of the basic human needs theory, initially articulated by Utley et al. [14], to systematically analyze the relevant variables. This research aimed to assess patients' views on meeting their fundamental human needs at Banda Aceh Hospital, focusing mainly on their physiological needs. These physiological needs included various essential elements such as normal breathing, access to sufficient food and water, effective waste elimination, the ability to move and maintain comfort, provisions for adequate sleep and rest, choice of appropriate clothing, regulation of body temperature within normal limits, and upholding proper personal hygiene standards [6]. This thorough evaluation offers essential insights into fulfilling these basic needs within a hospital environment, improving patient care and overall well-being.

2.3. Data Collection, Resource, and Measurement

Data collection occurred between May and June 2019 at the Public Hospital in Banda Aceh, focusing on the inpatient wards. The study incorporated several inclusion criteria for participant selection, which were meticulously established to ensure the validity and reliability of the results. The criteria comprised patients in class III inpatient rooms, individuals willing to participate as respondents, those who had received treatment for at least two days, and patients who were fully conscious and capable of effective communication. A proportional stratified random sampling technique was utilized to improve the

sample's representativeness. This method entailed systematically selecting samples according to specific strata or characteristics, ensuring the sample accurately reflects the diversity of the studied population [14].

2.4. Data Collection Tool

Data for this study was carefully gathered through questionnaires and structured interviews. The questionnaire had two key sections: the first collected demographic details of the respondents, and the second evaluated patients' views on meeting their fundamental human needs. The latter component comprised 38 declarative statements designed using a Likert scale format.

Respondents provided their evaluations by marking a checklist (✓) in the corresponding answer column. Each item on the questionnaire offered five response alternatives: Strongly Agree (assigned a score of 5), Agree (assigned a score of 4), Doubtful (assigned a score of 3), Disagree (assigned a score of 2), and Strongly Disagree (assigned a score of 1). This thoughtful response format created a deeper understanding of how respondents feel and think, making it easier to analyze the gathered data thoroughly.

2.5. Sample Size

The study's sample consisted of sixty-three participants, carefully selected through proportional stratified random sampling. This method guarantees sufficient representation of different subgroups within the population, thereby improving the reliability and validity of the study [21]. The Lameshow formula was employed to ascertain the suitable sample size. It aims to deliver accurate estimates for the sample sizes required for various research designs, facilitating a thoughtful analytical process. Although specific aspects of the Lameshow formula are absent from the search results, it is widely used in healthcare research to determine sample sizes necessary for estimating proportions. This formula considers the chosen confidence level, the population's estimated proportion of the characteristic, and the acceptable margin of error. Utilizing this formula guarantees that the sample size is adequate for making reliable inferences about the population. By implementing these strategies, the study seeks to secure a representative sample that bolsters the validity and reliability of its results [22].

$$n = \frac{N \cdot Z_{(1-\alpha/2)}^2 \cdot P(1-P)}{N(d)^2 + Z_{(1-\alpha/2)}^2 \cdot P(1-P)}$$

$$n = \frac{144(1,96)^2 \cdot 0,5(1-0,5)}{144(0,1)^2 + (1,96)^2 \cdot 0,5(1-0,5)}$$

$$n = \frac{144(3,8416) \cdot 0,5(0,5)}{144(0,01) + (3,8416) \cdot 0,5(0,5)}$$

$$n = \frac{138,2976}{2,4004}$$

$$n = 57 + (10\%) = 63 \text{ respondent}$$

Note:

n = Samples

N = Population

$Z_{(1-\alpha/2)}$ = Standard value for normal distribution

95% is 1,96

d = Degree of accuracy (precision) is 10%

P = The proportion of events, if unknown,

0.5 Is Suggested

2.6. Data Analysis

Data processing consists of systematic steps such as editing, coding, transferring, and tabulating the gathered information. To classify the scores as "Good" or "Poor," a cumulative method is used by adding together the eight individual component scores. The data analysis was performed utilizing univariate analysis techniques to elucidate and delineate the characteristics of each variable under investigation. In this context, the patient's perception regarding the satisfaction of fundamental human needs is classified into the "Good" category when the aggregate score (x) is equal to or greater than 114 ($x \geq 114$). On the other hand, if the total score is below 114 ($x < 114$), it is classified as "Poor." This distinction offers a clear framework for evaluating patient satisfaction according to the established scoring criteria.

2.7. Ethical Consideration

The data were carefully gathered after receiving formal approval through an ethics letter from the Research Ethics Committee at the Faculty of Nursing, Syiah Kuala University. This approval, noted under number 111020519076, guaranteed that all important ethical aspects were handled, protecting the rights and well-being of every study participant.

3. Results

Based on the conducted research, the subsequent results are presented in 1.

Table 1.
Characteristics of participants (N=63).

Characteristics	Frequency	%
Age		
Young Adolescents	5	7.9
Adolescents	13	20.6
Adults	8	12.7
Middle-aged Adults	9	14.3
Young Elderly	13	20.6
Middle Elderly	7	11.1
Late Elderly	8	12.7
Sex		
Male	6	57.1
Female	27	42.9
Marital Status		
Single	38	60.4
Married	20	31.7
Widowed	5	7.9
Education		
Primary	14	22.2
Secondary	37	58.7
Tertiary	12	19.1
Occupation		
Civil servants	1	1.6
Employees	13	20.6
Entrepreneurs	16	25.4
Farmers	6	9.5
Fishers	1	1.6
Unemployment	26	41.3
Salary		
≥ 2.900.000	13	20.6
< 2.900.000	24	38.1
No Salary	26	41.3
Hospitalized day		
< 4 Days	34	54
≥ 4 Days	29	46
Patient's view of meeting basic human needs		
Good	52	82.5
Poor	11	17.5

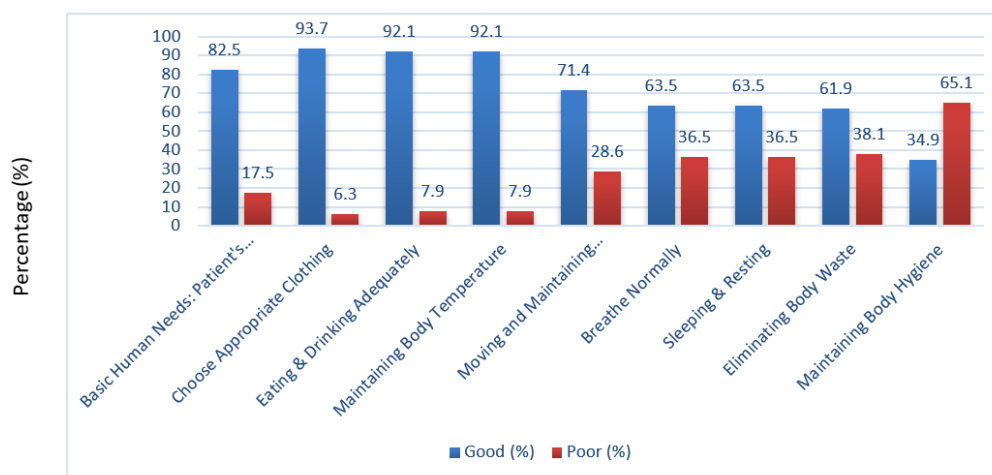
The study participants represented a range of demographics: 7.9% young adolescents, 20.6% adolescents, 12.7% adults, 14.3% middle-aged adults, 20.6% young elderly, 11.1% middle-aged elderly, and 12.7% late elderly. This distribution aligns with previous research suggesting that age influences perceptions of care quality. The gender ratio revealed that 57.1% were male and 42.9% female, corresponding with findings that men generally report greater satisfaction with healthcare services [23]. Regarding marital status, 60.4% were single, 31.7% married, and 7.9% widowed, indicating that marital status can affect health outcomes [24]. The educational background comprised 22.2% with primary education, 58.7% with secondary education, and 19.1% with tertiary education, influencing health literacy and engagement. Occupationally, 1.6% served as civil servants, 20.6% were employees, 25.4% were entrepreneurs, 9.5% were farmers, 1.6% were fishers, and 41.3% were unemployed, highlighting that employment status can impact healthcare access [23]. Income varied, with 20.6% earning at least 2,900,000 IDR, 38.1% earning less, and 41.3% reporting no salary, indicating the role of financial status in healthcare access. Hospital stays varied; 54% were hospitalized for less than four days, while 46% stayed longer. Extended hospitalizations can shape perceptions of care quality [25]. Notably, 82.5% felt their basic needs were satisfied, while 17.5% expressed dissatisfaction, underscoring the significance of nursing care [23]. This highlights the necessity for continuous improvements in hospital services to fulfill the basic needs of all patients.

Table 2.

Distribution of respondents with the statement "Agree" on the four highest components.

Components	Answer	%
Eating and drinking adequately		
The nurse checks my weight and height to determine the right amount of food intake for me	Agree	34.9
The nurse gives fluids to meet my fluid intake (such as IVs, etc)	Strongly Agree	69.8
I feel that the food and drinks provided by the hospital are sufficient and according to my needs	Agree	60.3
The nurse explained about the need to eat and drink what was right for me	Agree	34.9
Moving and maintaining position		
The nurse checks my ability to move and my movement	Agree	54
The nurse assists me in moving to a specific position that is right for me	Agree	57.1
Choose appropriate clothing		
I feel comfortable with the clothes I wear during hospitalization	Agree	65.1
The nurse gave me the freedom to choose the right clothes appropriate according to my beliefs	Agree	57.1
The nurse guarantees my privacy in dressing	Agree	71.4
Maintaining body temperature		
The nurse checks my temperature	Agree	60.3
The water temperature in the shower matches my body temperature	Agree	57.1

The responses agreeing with statements about the essential top-rated components of basic human needs fulfillment highlight key elements of patient care. In eating and drinking, 34.9% agreed that nurses monitored their weight and height for appropriate food intake, and 69.8% strongly agreed that nurses provided fluids, such as IVs, to meet hydration needs. Additionally, 60.3% found the food and drinks adequate, while 34.9% agreed that nurses explained the importance of proper nutrition and hydration. 54% agreed that nurses assessed their mobility for moving and positioning, and 57.1% received assistance to maintain the correct position. When selecting clothing, 65.1% reported feeling comfortable, 57.1% concurred that nurses allowed clothing choices reflecting personal beliefs, and 71.4% felt their privacy was upheld during dressing. Additionally, regarding body temperature, 60.3% agreed that nurses frequently monitored their temperature, while 57.1% deemed the shower water temperature appropriate.

**Figure 1.**

Result for Variable and 8 Components of the Fulfilment of Basic Human Needs.

The collected data reveal that most respondents, 52 individuals or 82.5%, rated their overall experience as "Good" (see Table 1 and Figure 1 for a visual representation). This observation underscores the respondents' notable satisfaction in fulfilling their essential needs. However, it is necessary to distinguish that the respondents' perception of "Good" in this context relates specifically to their basic needs, differing from the general satisfaction ratings across the four observed components detailed in Figure 1.

When assessing individual requirements, the importance of "Eating and Drinking Adequately" achieved an impressive approval rating of 92.1%. This suggests that most respondents believe their nutritional and hydration needs are adequately fulfilled. Conversely, the necessity for "Moving and Maintaining Position" received a respectable approval rate of 71.4%, indicating that although many respondents are content with their mobility, there is potential for enhancement. The importance of "Choosing Appropriate Clothing" received high ratings, with 93.7% of participants expressing satisfaction. In addition, the importance of "Maintaining Body Temperature" also received strong ratings, as 92.1% reported feeling sufficiently

supported in managing their body temperature (see Table 2 and Figure 1 for further details). These findings offer valuable insights into respondents' perceptions of their fundamental needs and underline strengths and areas for improvement in care delivery.

4. Discussion

This study's findings show that 82.5% of patients view the satisfaction of their basic human needs during hospitalization as "Good." This result highlights the effectiveness of healthcare providers, especially nurses, in adequately addressing essential patient needs. Meeting these needs is fundamental to nursing care, as it fosters physiological and psychological stability, promotes life, and aids in recovery. Patients facing health challenges often struggle to meet these needs independently, emphasizing nurses' vital role in preventing complications and enhancing patient wellness.

The results align with previous research indicating that nurses suitably meet patients' fundamental needs, improving their perceptions of hospital care Kurniati and Abidin [26]. Wahyudi and Wahid [8] also noted that age, education level, socio-economic status, and medical diagnosis significantly shape patient perceptions [8]. Moreover, comorbidities such as digestive system diseases (25.4%) and nervous system disorders (12.7%) considerably impact individuals' experiences of meeting their needs. Additionally, family support is highlighted as essential in satisfying patients' basic needs, underscoring the value of collaborative care.

Virginia Henderson's nursing theory emphasizes the importance of physiological needs in patient care [14]. In this study, 63.5% of respondents rated the fulfillment of their breathing needs as "Good." In comparison, 92.1% positively evaluated their experiences of "eating and drinking adequately." Furthermore, 61.9% felt their "body waste elimination needs" were satisfactorily met. However, personal hygiene remains a significant concern, with 65.1% of respondents rating their experiences as "Poor." These results indicate an urgent need for targeted interventions to improve hygiene support, as proper hygiene is essential for preventing infections and maintaining patient dignity [27].

Additionally, effective nutrition management is crucial for meeting patient needs, with 92.1% of respondents rating their experiences of "eating and drinking adequately" as "Good." This finding aligns with Kurniati and Abidin's [26] research, which links proper nutrition management to increased patient satisfaction [26]. Conversely, Berkowitz et al. [28] identified challenges in fulfilling nutritional needs in specific healthcare environments due to resource constraints [28]. Nurses are critical in assessing dietary intake, monitoring fluid levels, and educating patients about suitable nutrition. Future studies should investigate personalized nutrition interventions to boost patient engagement in nutritional health practices.

Mobility is a crucial aspect of fundamental human needs. In this study, 71.4% of respondents reported a "Good" level of fulfillment regarding their ability to move and maintain positions effectively. Regular physical activity supports healthy circulation, ensures proper respiratory function, and enhances overall well-being [2]. Nurses play a key role in assessing patients' mobility, assisting with movements, and educating them on the benefits of physical activity [29]. These findings align with the research by Kurniati and Abidin [26], indicating that nursing interventions aimed at addressing mobility significantly improve patient satisfaction [26]. Future research should consider innovative strategies, such as integrating physical therapy into everyday nursing practices.

Appropriate clothing is essential for maintaining patient dignity and comfort during hospital stays. Notably, 93.7% of respondents expressed a "Good" level of satisfaction with clothing in this setting. Nurses play a crucial role by honoring individual cultural preferences and values. They protect patient privacy by respecting clothing choices, particularly in sensitive situations. Moreover, nurses educate patients about the significance of wearing suitable attire while hospitalized, which enhances their comfort and dignity [13, 14]. Additionally, future research should explore how different cultural and social factors shape patient preferences regarding hospital clothing policies. Such research can illuminate the diverse needs and expectations of patients from various backgrounds, facilitating the development of more customized and respectful clothing policies that consider these differences.

Thermoregulation is another key requirement, with 92.1% of respondents reporting "Good" fulfillment. Managing body temperature effectively prevents complications, especially in at-risk populations, such as those with chronic illnesses [30]. Nurses are crucial in monitoring patient temperatures, creating a comfortable hospital atmosphere, and addressing individual thermoregulation needs [31]. Future investigations should assess possible environmental changes within hospital settings that could enhance patient comfort and alleviate issues related to temperature management. Despite the favorable results presented in this study, certain limitations need careful attention. The limited sample size and specific study setting may restrict the generalizability of these outcomes, as these factors hinder the application of findings to larger populations. Furthermore, reliance on self-reported data introduces the risk of bias, as personal expectations and subjective experiences can significantly skew patient perceptions and reported results. To strengthen the reliability of future research, it is essential to include more significant, more diverse populations and objective measures to validate these initial findings critically [20].

Leadership and management in nursing are essential for enhancing patient care quality in healthcare environments. Effective leadership is more than mere administration; it fosters a supportive and inspiring atmosphere that enables nurses to meet patients' complex proactively and varied needs [19]. This competency is particularly vital in today's healthcare environment, where care is increasingly intricate and requires a holistic approach. Moreover, clearly defined nursing management protocols are crucial for standardizing care delivery. These protocols guarantee consistency in fulfilling patient needs, especially in key areas like hygiene support [27], mobility assistance, medication management, and nutritional care. Strong nursing leadership is vital for creating evidence-based guidelines embodying the best patient care practices. Furthermore, it is instrumental in efficiently allocating human and material resources while encouraging collaboration among healthcare professionals to ensure coordinated care across different specialties [5, 29].

Hospitals need to adopt structured interventions to improve essential care delivery. These interventions must involve regular assessments of care processes and outcomes, which actively incorporate patient feedback, creating a continuous feedback loop for constant quality enhancement. This patient-focused strategy improves the care experience and fosters a more responsive healthcare system [5, 17]. Future studies should explore tech-driven patient care methods, including digital monitoring tools for real-time health metric tracking and collaborative multidisciplinary interventions among healthcare providers [2]. These approaches are crucial for improving patient care quality and the hospitalization experience. Moreover, researching how leadership training affects nursing management could provide essential insights into practical strategies that promote a culture of excellence, resulting in better patient outcomes and greater satisfaction with the healthcare system.

5. Conclusion

According to the study findings, most respondents (52 individuals, 82.5%) view fulfilling basic human needs as "good." The results are reinforced by four key components: firstly, the "adequate food and drink" component stands at 92.1%. Secondly, the "mobility and maintaining a desired position" component is at 71.4%. Next, the "appropriate clothing selection" component rates at 93.7%, followed by the "regulation of body temperature" component, which is also 92.1% in the "Good" category.

Hospitals, as healthcare providers, should prioritize meeting patients' basic human needs by empowering clinical nurses. Furthermore, enhancing nurses' awareness of the significance of these basic needs through integrated training, seminars, and workshops is crucial. Nursing can play a more significant role in the overarching healthcare renewal agenda by redefining nursing practices around these fundamental care principles. Acknowledging the uniqueness and diversity of patient needs is essential, as is understanding how the healthcare system is designed to address these varied needs.

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