

Level of patient participation in self-care among medical/surgical patients at Thika Level 5 Hospital, Kiambu County-Kenya

¹James Wanjohi Kahiga, ²Dr. Nilufar Jivraj, ³Prof. Sherry Oluchina

¹Master's Candidate, School of Nursing, Mount Kenya University

²Senior Lecturer, School of Nursing, Mount Kenya University

³Associate Professor, Jomo Kenyatta University of Agriculture and Technology

Abstract

Patient participation reflects the concept of client involvement in physical aspects of self-care and decision-making. This plays a crucial role in empowering patients and advancing individual health outcomes. The study aimed to investigate the Level of patient participation in self-care among medical/surgical patients. The assessed activities included; toileting, brushing teeth, bathing, mobility/ambulation, dressing, and feeding. A Quantitative cross-sectional research design was used and a sample of 105 respondents was selected using proportionate stratified random sampling. Data was collected utilizing a researcher-administered questionnaire and analyzed using SPSS version 25 software. Majority of the respondents (61%) had low levels of participation in self-care. Majority of the patients (60%) were males and most of them (26.7%) were aged between 18-28 years. The study revealed the need of hospital management to provide the resources for self-care such as assistive devices and also hire adequate health care personnel especially nurses, to take care of the ever-rising patient population. The patients especially females should also be encouraged to participate in self-care.

Date of Submission: 03-04-2023

Date of Acceptance: 14-04-2023

I. Introduction

The level of impairment related to a disease also determines the extent a client can do certain activities relating to their care. According to Nilsson, From, and Lindwall^[1], patient participation reflects the concept of patient learning and caring association established when performing nursing care to clients. It is crucial since it helps avert challenges that accrue when clients feel left out as care recipients. On the other hand, according to WHO and the International Self-Care Foundation (ISF)^[2], self-care relates to what patients do for themselves to establish and maintain wellness and deal with and prevent illness. It mainly encompasses activities associated with nutrition, hygiene, self-medication, and environmental factors. Nevertheless, in reality, a client may either partially or completely perform the expected activities in the context of healthcare service delivery. Therefore, self-care is a fundamental concept in assessing the response patient demonstrate in the face of illness or disease. In South Africa, a study by Mutyambiziet al.^[3] reveals sub-optimal levels of participation in diabetes management self-care activities. According to the authors, there was poor adherence to exercise activities, nutrition, and medication adherence. Interestingly, socioeconomic status played a key role in influencing dietary and safe-care practices. Specifically, a higher socioeconomic status was linked to higher rates of adherence and vice versa. Additionally, the female gender had higher rates of conformity to appropriate self-care practices than their male counterparts. Therefore, there is more to client involvement than the disease comorbid factors. In Sub-Saharan Africa, a study by Kwame and Petrucka^[4], the concept of nurse-patient communication and interaction impacts non-participation or participation in care. Compliance and cooperation among clients are determined by the ability to communicate well with the clients. A scoping review by the two authors revealed that the disparity in participation in care among clients differed in various departments. For example, the antenatal and maternity settings demonstrated some forms of neglecting client concerns and needs by the nursing staff, which impacted their participation as care recipients. However, improving communication strategies can boost the level of patient involvement as they become more aware of the expectations in healthcare settings. In Kenya, a study by Githemo^[5] noted that the traditional paternalistic approach among healthcare workers was a great barrier to patient participation in self-care. The approach considers clients as mere recipients of services rather than key players in meeting their healthcare outcomes. Furthermore, the study cemented the importance of the nursing process in enhancing patient involvement. Therefore, this research work aims to bridge the gap by incorporating the synergy model to study the different elements that inhibit or promote patient participation in self-care.

II. Literature review

The degree of client involvement in self-care and other aspects of health and wellness varies across the globe. According to Hwang *et al.*^[6], data collected among 479 nurses demonstrated a lack of high patient engagement in safety activities. The average scores for client involvement were 2.76 ± 0.46 on a scale of 4, teamwork was recorded at 3.64 ± 0.41 on a scale of 5, patient care competency at 3.61 ± 0.46 , while safety environment was at 3.35 ± 0.57 of 5.0^[6]. The study also revealed that where high participation was experienced, nurses involved had higher scores in teamwork, patient care competency, and their capacity to establish a safety climate. However, advancing the level of client participation in those areas can potentially promote the role of patients in their health and wellness. Therefore, although self-care activities are expected to be an obvious outcome, the nurses' role in promoting or inhibiting the exercise cannot be ignored. Nevertheless, client's capacity to engage in the activities remains the major determinant of their engagement.

A study done among family members and clients can also help paint a picture of the extent of client participation in self-care. A cross-sectional study conducted in Saudi Arabia involving 36 patients, 46 relatives, 36 physicians, and 64 nurses assessed clients' experiences during their encounters with healthcare^[7]. The outcome revealed that 73% of family members and their clients (consumers of healthcare) felt that nurses and doctors involved them in making decisions about care plans. Additionally, 80% perceived themselves as partners in therapy plans. Over one-third of the nurses and doctors assessed linked improved healthcare outcomes to patient engagement. However, about 7% of the healthcare providers did not consider this to have any significance or relevance^[7]. The study also revealed differing perceptions between doctors and nurses with relatives on the subject, especially on the extent involvement and partnership. This implies that client contribution to their care is not fully appreciated by all participants in the spectrum of healthcare delivery.

Another study by Vahdat *et al.*^[8] considers clients taking part in their care as a gesture of recognizing individuality and valuing humanity. Although the authors did not provide a specific level of client involvement, they recommend that clients be regarded as equal partners in their health matters. This would increase patient trust and satisfaction, reduce anxiety and boost the quality of life. Furthermore, when the clients have adequate knowledge, positive beliefs, and emotional connections to their service providers, their capacity to adequately care for themselves is greatly enhanced.

A study by Ringdalet *et al.*^[9] identifies the power imbalance between healthcare providers (HCPs) and patients as an impediment to client participation. The study involved 11 women and nine men from a Swedish hospital setting. The outcome of the thematic analysis conducted showed that the respondents wanted to participate in their care, decision-making, and safety activities. However, HCPs should create an enabling environment by sharing information to empower their clients. An enlightened client stands a better chance to get involved and participation in decision making concerning their care. Nevertheless, the concept of shared decision should be embraced to enable clients feel more involved and participate better in self-care initiatives.

According to a literary analysis of 48 studies by Bombard *et al.*^[10], the level of engagement influences the results of outcome redesigns in different settings. For instance, low-level participation was associated with discrete services of consultative unidirectional feedback, while high-level participation encouraged structural and care process outcomes. 25% of the studies, which formally evaluated this concept found that most encounters shaped positive experiences^[10]. The clients felt more empowered, with high self-esteem, and felt independent. However, some sought to be involved more and did not like it when subjected to predetermined decisions. Ultimately, the goal of patient participation in health and wellness matters cannot be undervalued as it plays a significant role in making clients contribute to their care. Thus, healthcare provider education and policies should be centered on client participation.

The ability to engage in activities of daily living (ADLs) or the number of activities a client does also influences their role in nursing care. A focused review of 15 studies by Ohtake *et al.*^[11] revealed that critical illnesses predispose clients to reduced functionality in body structures and are a genesis for activity limitations. This is primarily based on the conditions' impact on muscular and respiratory functions. The affected patients are unable to sustain short walks and even their performance of instrumental ADLs is diminished. However, significant changes can be seen after the first year of critical illness as patients learn how to adapt to the changes. Ultimately, the number of activities performed and the time spent doing the activities is reduced significantly, with others totally dependent on the care providers.

ADLs provide an important measure of routine patient assessment. According to Edemekong, *et al.*^[12], treatment in healthcare settings should focus on the disease and the functional capabilities that ensure personal care and independent living. In other words, inability to perform expected ADLs should be considered a risk for reduced quality of life. Initial assessments are vital as they help nurses and other healthcare workers identify those that need help. Nevertheless, changes orchestrated by the disease may cause impairments that may result in a significant loss of ADL and assistance should be given accordingly. Moreover, the mental impairment may also impact ADL performance, negatively affecting the quality of life. Another study by Guidet *et al.*^[13] found that frailty induced by aging also contributed to limitations with ADLs. The mega study involved 242 critical care settings sampled across

22 different nations. Patients aged 80 years and above had longer stay in the settings than other age groups. This was attributed to cognitive and physical functional capacity decline among the elderly, which meant they could not meet their ADLs as expected. Thus, the volume of ADLs during hospitalization may differ based on the client's status and the existing comorbidities.

III. Materials and methods

The investigation utilized an analytical quantitative cross-sectional study design. According to Kesmodel^[14], the method is characterized by data collection at one point in time. Cross-sectional design can be either analytical or descriptive^[15]. The latter is used to assess the existing associations between various variables under investigation, which makes it suitable for this study. On the other hand, the former provides estimates on disease prevalence, attitudes, knowledge, and behaviors around health and illness.

Data relating to this study was collected to capture information relating to the subjects admitted at Thika Level 5 at the time without consideration of the changes the variables may experience over time. Thus, cross-sectional design was a great choice for the researcher.

Sampling technique

The study involved patients admitted to the medical/surgical units at Thika level 5 hospital. The units of interest within the facility are the female medical, male medical, male orthopedic, female surgical, and male surgical wards. The study incorporated all eligible clients within these setups. The group include clients from diverse backgrounds as Thika town is metropolitan in nature. The research incorporated clients above the consenting age of 18 years were considered as suitable respondents for the study since they are legally eligible to give consent.

The study utilized Slovin's formula as put by Briandana and Dwityas^[16], which Slovin coined in 1960. The formula obtained a sample size of 105 patients from a population of 142.

The study adopted proportionate stratified random sampling. This method first subdivides the population into different strata with homogenous elements, and then an equal portion of subjects is selected randomly from each sub-group. The information was coded per the units of measure and later analyzed using the SPSS v.25 software. The results were presented in tables, graphs, and histograms accordingly.

IV. Results

Level of Patient Participation in Self-care

Participation was assessed based two items i.e. how often patients participated in decision making regarding their care, and how often they participated in activities relating to self-care. The frequency of participation in the aforementioned items was measured on a Likert scale, and the findings are summarized in table 1.

Table 1
Frequency of Participation in Self-care

Item	Scale							
	Always		Frequently		Sometimes		Never	
	N	%	n	%	n	%	N	%
How often do you participate in decision making regarding your care?	20	19	34	32.4	49	46.7	2	1.9
How often do you participate in activities relating to self-care?	29	19	41	39	42	40	2	1.9

Table 1 shows different frequencies of participation for different participation items. Concerning participation in activities relating to self-care: Participation in decision making regarding patient care, 19% (n=20) always participated, 32.4% (n=34) frequently participated, 46.7% (n=49) sometimes participated while 1.9% (n=2) never participated. The observation is congruent to that of a study by Ringdalet *al.*^[9] who noted that a power imbalance between care providers and clients was a major barrier to clients' involvement in care choices, leading to poor client participation in their care. This finding was different with that of Al-Tanniret *al.*^[7] where majority of the patients and family reported being involved in decision making concerning plans of care. A similar observation was made by Hwang *et al.*^[6], where the average scores for client involvement were 2.76 ± 0.46 .

Lastly, concerning participation in activities relating to self-care, 19% (n=29) always participated, 39% (n=41) frequently participated, 40% (n=42) sometimes participated and 1.9% (n=2) never participated.

The participation frequency for each item was scored on a scale of 1-4 whereby, "always" was scored 4, "frequently" was scored 3, "sometimes" was scored 2 and "never" was scored 1. As for participation in activities of daily living, the mean score was $2.77 \pm 0.82SD$ and the mean score for participation in decision making was $2.69 \pm 0.8SD$. Lastly, the mean score for participation in self-care activities was $2.75 \pm 0.78SD$. These findings mirrored those of Hwang *et al.*^[6] who placed client involvement in decision making at a mean score of 2.76 ± 0.46 .

To determine the level of participation in self-care, the researcher obtained the total scores for each patient based on the two items. The maximum possible score based on this computation would be 8, i.e. (Always (4) multiplied by 2 items) while the minimum possible score would be 2, i.e. (Never (1) multiplied by 2 items). A score of at least 6 out of 8 was considered to be high level of participation, while a score of less than 6 out of 8, was considered to be low level of participation.

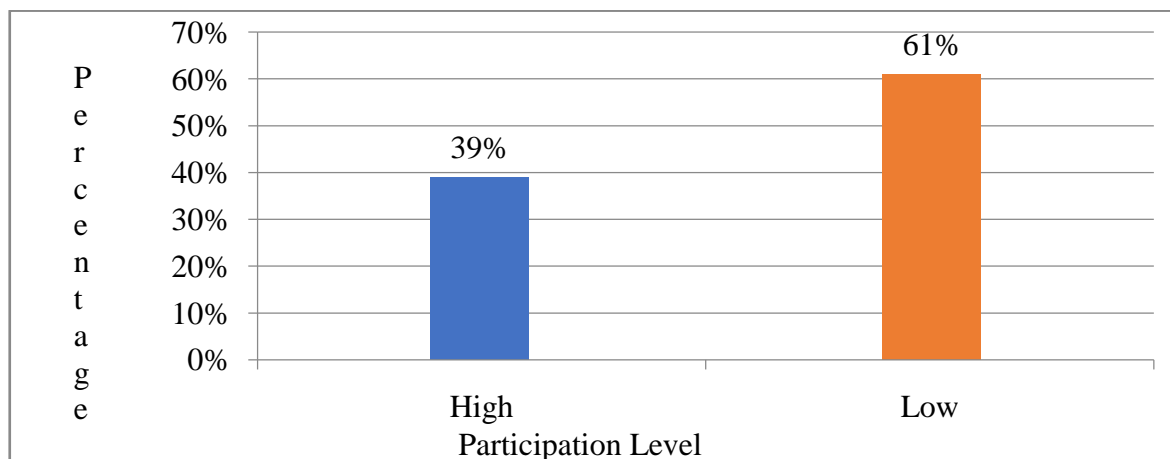


Figure 1: Level of Participation in Self-care

Figure 1 shows that 39% (n=41) reported high levels of participation in self-care while 61% (n=64) reported low levels of participation in self-care. This level of participation was the dependent variable in this study, and all other variables were cross-tabulated against it, during bivariate (chi square) and multivariate (regression) analysis.

Reported Ability to Perform Selected Self-care Activities

The respondents were asked to what extent they could perform bathing, brushing teeth, dressing, toileting, mobility/ambulation and feeding, in the hospital environment. Table 2 showed that, 12.4% (n=13) of the respondents were totally dependent on health care provider for bathing, 55.2% (n=58) were partially dependent, while 32.4% (n=34) could bathe independently. As for brushing teeth, 10.5% (n=11) were totally dependent on health care provider, 33.3% (n=35) were partially dependent, while majority (56.2%, n=59) could brush their teeth independently. As for dressing, 8.6% (n=9) depended totally on health care providers, 46.7% (n=49) were partially dependent, while 44.8% (n=47) could dress up independently. Concerning toileting, 10.5% (n=11) depended totally on health care providers, 44.8% (n=47) were partially dependent, while 44.8% (n=47) performed toileting independently. Concerning mobility/ambulation, 14.3% (n=15) depended totally on health care provider, 41% (n=43) were partially dependent, while 44.8% (n=47) could move independently. Lastly, 6.7% (n=7) of the respondents depended totally on the health care provider for feeding, 28.6% (n=30) were partially dependent, while the majority (64.8%, n=68) were feeding independently.

Table 2
Reported Ability to Perform Self-care Activities

Activity	Performance level					
	Total Dependence (Requires total supervision, direction, and personal assistance)		Partial Dependence (Requires some supervision, direction, and personal assistance)		Independent (No supervision, direction or personal assistance)	
	n	%	N	%	n	%
Bathing	13	12.4	58	55.2	34	32.4
Brushing teeth	11	10.5	35	33.3	59	56.2
Dressing	9	8.6	49	46.7	47	44.8
Toileting	11	10.5	47	44.8	47	44.8
Mobility/Ambulation	15	14.3	43	41	47	44.8
Feeding	7	6.7	30	28.6	68	64.8

V. Conclusions

There were different mean participation scores, out of a maximum possible score of 4 as follows: Participation in decision making was 2.69±0.8SD and the mean score for participation in self-care activities was

2.75±0.78SD. Majority of the respondents (61%) had low levels of participation in self-care. It is clear that there was low level of participation in self-care among the respondents.

Acknowledgement

I wish to thank my able supervisors, Dr. Nilufar Jivraj and Prof. Sherry Oluchina, for their guidance and support in accomplishing this research work. The two scholars provided timely feedback and were always there when I sought help.

References

- [1]. Nilsson M, From I, Lindwall L. The significance of patient participation in nursing care—a concept analysis. *Scandinavian Journal of Caring Sciences*. 2019 Mar;33(1):244-51.
- [2]. International Self-Care Foundation (ISF). What is self-care? Retrieved July 20, 2022, (2020, November 20). from <https://isfglobal.org/what-is-self-care/>
- [3]. Mutyambizi C, Pavlova M, Hongoro C, Groot W. Inequalities and factors associated with adherence to diabetes self-care practices amongst patients at two public hospitals in Gauteng, South Africa. *BMC Endocrine Disorders*. 2020 Dec;20:1-0.-y
- [4]. Kwame A, Petrucka PM. Communication in nurse-patient interaction in healthcare settings in sub-Saharan Africa: A scoping review. *International journal of Africa nursing sciences*. 2020 Jan 1;12:100198.
- [5]. Githemo Grace K, Karani AK, Ogutu M, Gachoka H. Evaluation of patient satisfaction with nursing care at two public hospitals in Kenya: An interventional study. *Nursing & Healthcare International Journal*. 2018;2(4):000151.
- [6]. Hwang JI, Kim SW, Chin HJ. Patient participation in patient safety and its relationships with nurses' patient-centered care competency, teamwork, and safety climate. *Asian nursing research*. 2019 May 1;13(2):130-6.
- [7]. Al-Tannir M, AlGahtani F, Abu-Shaheen A, Al-Tannir S, AlFayyad I. Patient experiences of engagement with care plans and healthcare professionals' perceptions of that engagement. *BMC health services research*. 2017 Dec;17:1-9.
- [8]. Vahdat S, Hamzehgardeshi L, Hessam S, Hamzehgardeshi Z. Patient involvement in health care decision making: a review. *Iranian Red Crescent Medical Journal*. 2014 Jan;16(1).
- [9]. Ringdal M, Chaboyer W, Ulin K, Bucknall T, Oxelmark L. Patient preferences for participation in patient care and safety activities in hospitals. *BMC nursing*. 2017 Dec;16(1):1-8.
- [10]. Bombard Y, Baker GR, Orlando E, Fancott C, Bhatia P, Casalino S, Onate K, Denis JL, Pomey MP. Engaging patients to improve quality of care: a systematic review. *Implementation Science*. 2018 Dec;13:1-22.
- [11]. Ohtake PJ, Lee AC, Scott JC, Hinman RS, Ali NA, Hinkson CR, Needham DM, Shutter L, Smith-Gabai H, Spires MC, Thiele A. Physical impairments associated with post-intensive care syndrome: systematic review based on the World Health Organization's international classification of functioning, disability and health framework. *Physical therapy*. 2018 Aug 1;98(8):631-45.
- [12]. Edemekong PF, Bomgaars DL, Sukumaran S, Levy SB. Activities of daily living. In *StatPearls* [internet] 2021 Sep 26. StatPearls Publishing.
- [13]. Guidet B, De Lange DW, Boumendil A, Leaver S, Watson X, Boulanger C, Szczeklik W, Artigas A, Morandi A, Andersen F, Zafeiridis T. The contribution of frailty, cognition, activity of daily life and comorbidities on outcome in acutely admitted patients over 80 years in European ICUs: the VIP2 study. *Intensive care medicine*. 2020 Jan;46:57-69.
- [14]. Kesmodel US. Cross-sectional studies—what are they good for?. *Acta obstetrica et gynecologica Scandinavica*. 2018 Apr;97(4):388-93.
- [15]. Wang X, Cheng Z. Cross-sectional studies: strengths, weaknesses, and recommendations. *Chest*. 2020 Jul 1;158(1):S65-71.
- [16]. Briandana R, Dwityas NA. Media literacy: An analysis of social media usage among millennials. *International Journal of English Literature and Social Sciences*. 2019;4(2):488-96.

James Wanjohi Kahiga, et. al. "Level of patient participation in self-care among medical/surgical patients at Thika Level 5 Hospital, Kiambu County-Kenya." *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 12(2), 2023, pp. 38-42.