Patient-Related Factors Influencing Their Participation In Self-Care 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


Paper Received Date: 16th March 2023
Paper Acceptance Date: 16th April 2023
Paper Publication Date: 23rd April 2023

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 determinants of patient-related factors influencing their participation in self-care. 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. Majority (66.7%) had a negative perception towards participation in self-care. The main predictors of participation in self-care were severity of illness (t=7.349, p=<0.001), the extent to which patients could bathe themselves (t=-3.071, p=0.003) and availability of staffs in the hospitals to support patients in self-care when need arose (t=2.566, p=0.012). Majority (61.9%) also reported that self-care resources were not available. The revealed that there is for the hospital management should 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.

Index Terms- Nursing, Patient Participation, Self-care

I. INTRODUCTION

Patients constitute a vital element in nursing care across the world. It is important that clients get involved in routine self-care activities to enhance cooperation and decision-making. Generally, clients in healthcare facilities have different needs as well as diseases which affect their ability to perform what can be regarded as routine activities. 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 (2018), 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) (2020), 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. According to Hwang et al. (2019), client involvement in their care is positively associated with the nurses’ teamwork, ability to integrate a patient-centered care approach, and a safe environment. The study revealed that alienating nurses’ competency in these areas could promote patient participation, which was poor, as reflected in the study. According to Oxelmark et al. (2017), clients taking part in their care is a global priority that international bodies such as WHO and other national bodies consider valuable in the spectrum of care recipients. According to the study, caring relationships in healthcare delivery constitute the cornerstone of promoting participation and teamwork in healthcare. Strategies used in the healthcare delivery spectrum also play a significant role in engaging clients in self-care. The strategies touching on the nurse hinders the inclusion of clients in the handover process, while those involving the client may promote or discourage their active role in activities relating to their care (Tobiano et al., 2018). A study by Theys et al. (2019) identifies communication as one of the elements impacting patient participation in self-care. The failure by registered nurses to exploit this avenue is orchestrated by the fear of being labeled unprofessional by relatives and clients. In Nigeria, a study involving 85 respondents revealed that 38.8% and 36.5% strongly agreed and agreed that standard handover reports among nurses impacted the extent of patient participation and the resulting care. Handover reports are also taken causally as routine obligations that must be done at night, morning and evening without evaluating the impact they have on communications in healthcare settings (Nsemo et al., 2018). In Kenya, a study by Githemo (2018) noted that the traditional paternalistic approach among healthcare workers was a great
II. LITERATURE REVIEW

Age significantly determines the extent to which the patient participates in their care. According to Lilleheie et al. (2019), older patients constitute a vulnerable group, especially due to their frailty and comorbidities. An observational study by Erlang et al. (2021) reported that fewer respondents positively acknowledged having participated in their care, which was associated with 23.8% of readmissions within a month. According to the study, the phenomenon was linked to readmissions within 30 days post-discharge. Thus, collaboration to devise mechanisms to promote friendly health systems for the aging population may help bridge the gap. The integrated approach to care recognizes the need to advance client involvement in care due to its attributable merits. A study by Kiselev et al. (2018) involving seven focus groups found that aging people without real medical issues demonstrated a higher drive to engage in shared decisions compared to clients with real medical problems. The revelation of the medical condition impacting them can then be said to affect their perceptions in participating in some activities.

Sex and gender also contribute a vital part in predicting and determining the role played by a client in the context of receiving healthcare services. Although the two terms may differ, the inequalities created may impact other spheres of life. According to the WHO (2022), girls and women face numerous barriers in accessing healthcare services and information, which affect their engagement in self-care. According to Mutyambizi et al. (2020), the female gender has higher rates of conformity to appropriate self-care practices than their male counterparts. For instance, adherence to nutrition, exercise recommendations, and even the desire to contribute to care is seen more among women than men. According to Göttgens et al. (2020), the two elements largely affect illness progression, incidence, and associated care. The major effects are in response to therapy, disease progression, and patient-provider communication, which in turn can influence the need for assistance by clients.

Literacy level also plays a huge role in determining the role clients assume during their hospital stay. According to Palumbo et al. (2019), patient conduct in healthcare systems highly depends on their literacy levels. Specifically, health literacy improves a client’s self-awareness of the health issues at hand and advances their capacity to navigate the expectations in healthcare facilities. Client education levels also impact patients’ attitudes and perceptions about their contribution to their care. An intervention study by An et al. (2017) involving 483 respondents revealed that the attitude and perception scores improved among the intervention group. This implies that patient education had a positive link in the two areas and contributed to advancing client safety in the healthcare environment.

Patient mobility has undeniable merit in the client’s capacity to participate in personal care. According to Kisch et al. (2018), mobility limitations among the elderly decrease their opportunities to be involved socially, which further increases mortality and morbidity. The authors note that about 50% of mobility impairment is orchestrated by dizziness, vertigo, and other issues related to mobility among those aged 60 or more (Kisch et al., 2018). According to Bouça-Machado et al. (2018), diseases such as Parkinson’s disease impact motor control and mobility in the affected clients. The affected individuals present with reduced capacity to move independently or even conduct their self-care. Disease severity is not only a determinant in client participation in care but also constitutes a major factor in the health-seeking behavior of the population. According to Peppa et al. (2017), only clients with extreme severity in symptoms visited health facilities for treatment of flu. This implies that healthcare institutions captured those with severe episodes of the illness. Other problems influencing self-care capacity can be compounded by the impact of the disease on the body. A study by O'Malley et al. (2020) among stroke clients found that a change in the environment brought changes in the client’s ability to address their dental hygiene. The resulting disabilities may lead to permanent reliance on caregivers for regular services as self-care may become increasingly difficult.

Patient perceptions regarding their self-care role also influence their participation in the process. A study conducted by Pourmand et al. (2020) concluded that demonstrating perceived control over client behaviors impacted client intention and conduct. The study revealed that 9.1% of the subjects had acceptable behavior and 19.2% had sufficient self-care knowledge (Pourmand et al., 2020).

Perceived challenges in the context of self-care also influence the extent of client participation in the care. According to Kristensen et al. (2018), clients are prone to experiencing difficulties in adhering to the proposed self-care activities. However, some clients may adopt personalized self-care routines to help advance their well-being.

Various studies have explored the perceived barriers and facilitators to client participation in self-care. According to Kamath et al. (2020), facilitators could be either intrinsic or extrinsic. The former is primarily associated with the patient traits such as help-seeking behaviors and situational awareness. At the same time, the latter is determined by environmental elements, such as family support, financial security, and a caring environment. On the other hand, self-care activities are hindered by a lack of resources, poor collaboration among different healthcare team members, and high patient numbers.

A semi-structured interview revealed that 20 clients assessed wanted to contribute to their safety and personal care by taking part in decision-making processes, sharing relevant information, and knowing their conditions (Ringdal et al., 2017). These factors were considered crucial enablers of client involvement in self-care. The study outcomes also demonstrated that participation of
clients was the fundamental consideration in determining their perceptions on whether they felt safe with the care or they were being ignored. Therefore, promoting the client’s decision-making role empowers them to participate actively in self-care.

III. RESEARCH METHODOLOGY

The investigation utilized an analytical quantitative cross-sectional study design. According to Kesmodel (2018), the method is characterized by data collection at one point in time. Cross-sectional design can be either analytical or descriptive (Wang & Cheng, 2020). 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 (2019), 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

Patient-related Factors Influencing Participation in Self-care

The patient-related factors of interest included socio-demographic characteristics, reported ability to perform activities of daily living, perceived severity of illness, perceived involvement in decision making regarding self-care and general perception towards self-care.

Descriptive Statistics of Other Patients-related Factors

Table 1: Reported Ability to Perform Self-care Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Performance level</th>
<th>Independent (No supervision, direction or personal assistance)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Dependence (Requires supervision, direction, and personal assistance)</td>
<td>Partial Dependence (Requires some supervision, direction, and personal assistance)</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Bathing</td>
<td>13</td>
<td>12.4</td>
</tr>
<tr>
<td>Brushing teeth</td>
<td>11</td>
<td>10.5</td>
</tr>
<tr>
<td>Dressing</td>
<td>9</td>
<td>8.6</td>
</tr>
<tr>
<td>Toileting</td>
<td>11</td>
<td>10.5</td>
</tr>
<tr>
<td>Mobility/Ambulation</td>
<td>15</td>
<td>14.3</td>
</tr>
<tr>
<td>Feeding</td>
<td>7</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Perceived Severity of Illness and Participation in Self-care

The respondents perceived the severity of their illness based on qualifiers such as minor, moderate, major and extreme severity. Figure 1 shows that, 21% (n=22) of the respondents perceived their illness as minor, 41% (n=43) perceived their illness as moderate, 30.5% (n=32) perceived their illness as major, and 7.6% (n=8) perceived their illness as extremely severe.
Perceived Involvement in Decision Making and Participation in Self-care

Perceived involvement was tested on three items, that is, the extent to which patients would categorize participation in self-care decisions, the extent to which healthcare professionals allowed patients to make decisions regarding their care and to what extent patients involved their families in decisions relating to their care. Concerning perceived participation in decisions of self-care, table 2 shows that, 29.5% (n=31) were involved to a great extent, 44.8% (n=47) were involved to some extent, 19% (n=20) were involved to a lesser extent and 6.7% (n=7) were not involved at all. As for perceived extent to which health workers allowed patients to make decision regarding self-care, 27.6% (n=29) felt it was to a great extent, 48.6% (n=51) felt it was to some extent, and 23.8% (n=25) felt it was to a lesser extent. Lastly, as to the perceived extent of family involvement in decision making relating to patient care, 47.6% (n=50) felt that it was to a great extent, 29.5% (n=31) felt that it was to some extent, 19% (n=20) felt that it was to a lesser extent and 3.8% (n=4) felt that family was not involved at all.

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent would you categorize your participation in self-care decisions?</td>
<td>n</td>
</tr>
<tr>
<td>To what extent do the healthcare professionals allow you to make decisions regarding your care?</td>
<td>n</td>
</tr>
<tr>
<td>To what extent have you involved your family in decisions relating to your care?</td>
<td>n</td>
</tr>
</tbody>
</table>

Table 2: Perceived involvement in decision making

Perceptions Towards Self-care and Participation in Self-care

Perceptions towards self-care were tested using a Likert scale, perceived major enablers of participation and perceived major barriers of participation in self-care.

The Likert scale had one item that is, whether or not patients should be allowed to participate in their care during hospitalization.

Figure 2 shows that 1% (n=1) strongly disagreed that patients should be allowed to participate in care during hospitalization, 2.9% (n=3) disagreed, majority (62.9%, n=66) agreed and 33.3% (n=35) strongly agree. These responses were put in a numerical scale where “strongly disagree” was assigned score 1, “disagree” was assigned score 2, “agree” was assigned score 3 and “strongly agree” was assigned score 4. After summing up the scores for each respondent, those who scored ≤3 were considered as having a negative perception while those who scored >3 were considered as having a positive perception towards self-care.
Figure 2: Perception towards self-care

Figure 3 shows that 33.3% (n=35) had a positive perception towards self-care, while the majority (66.7%, n=70) had a negative perception towards self-care.

Table 3 shows that respondents with a positive perception towards participation in self-care were 1.9 times more likely to have high level of participation in self-care, compared to their counterparts with a negative perception (OR=1.905, CI=1.204-3.013). The association between perception and participation in self-care was statistically significant (p<0.05). The finding was in agreement with that of Pourmand et al. (2020) who reported that, patient perceptions regarding their self-care roles influenced their participation in the process. The study concluded that, demonstrating perceived control over client behaviors impacted client intention and conduct. On the contrary, Kristensen et al. (2018) noted that perceptions regarding a disease may change with time, orchestrated by the desire to lead a normal life, which may push the client to overcome perceived limitations caused by the disease. This is probably due to behavior change modeled by long-term projections of living with a condition.

Table 3: Association between perception and participation in self-care

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level of participation</th>
<th>Chi square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Perception</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>n=20, %57.1</td>
<td>n=15, %42.9</td>
</tr>
</tbody>
</table>

Perceived Major Enablers of Participation

Table 4 shows that 35.2% (n=37) of the respondents perceived family support as the major enabler of participation in self-care, 26.7% (n=28) perceived caring environment as the major enabler, 21% (n=22) perceived healthcare staff as the major enabler, 12.4% (n=13) perceived resource availability as the major enabler.
enabler and 4.8% (n=5) perceived communication as the major enabler of participation in self-care. The findings were in agreement with those of Kamath et al. (2020) who reported intrinsic and extrinsic facilitators of self-care such as, help-seeking behaviors of patients, situational awareness, environmental elements such as family support, financial security, and a caring environment.

### Table 4: Perceived major enablers of participation

<table>
<thead>
<tr>
<th>Enablers</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family support</td>
<td>37</td>
<td>35.2</td>
</tr>
<tr>
<td>Caring environment</td>
<td>28</td>
<td>26.7</td>
</tr>
<tr>
<td>Healthcare staff</td>
<td>22</td>
<td>21.0</td>
</tr>
<tr>
<td>Resource availability</td>
<td>13</td>
<td>12.4</td>
</tr>
<tr>
<td>Communication</td>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>105</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

### Perceived Major Barriers of Participation in Self-care

Table 5 shows that 16.2% (n=17) perceived lack of family support as the major barrier of participation in self-care, 14.3% (n=15) perceived lack of caring environment as the major barrier, 18.1% (n=19) perceived healthcare staff as the major barrier, 39% (n=41) perceived lack of resources as the major barrier and 12.4% (n=13) perceived poor communication as the major barrier of participation in self-care.

The findings agreed with those of Kamath et al. (2020) who reported intrinsic and extrinsic barriers of self-care such as, lack of resources, poor collaboration among different healthcare team members, and high patient numbers. Thus, the challenges may impede the exercise, despite the need to promote independence in self-care.

### Table 5: Perceived major barriers of participation in self-care

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of family support</td>
<td>17</td>
<td>16.2</td>
</tr>
<tr>
<td>Lack of caring environment</td>
<td>15</td>
<td>14.3</td>
</tr>
<tr>
<td>Healthcare staff</td>
<td>19</td>
<td>18.1</td>
</tr>
<tr>
<td>Lack of resources</td>
<td>41</td>
<td>39.0</td>
</tr>
<tr>
<td>Poor communication</td>
<td>13</td>
<td>12.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>105</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

V. DISCUSSIONS

The study revealed that there was a strong association between age group and the level of participation in self-care (Cramer’s v=0.281), but the association was not statistically significant (p>0.05). However, these findings were in contrast with those of Kiselev et al., (2018) and Lilleheie et al., (2019), who reported a significant association between age and participation in self-care. In both studies, the care of the elderly was viewed as task oriented instead of inclusive, which left the elderly out of decision-making process, with regard to their care. The outcomes of a study by Guidet et al. (2019) found that frailty induced by advancing age led to limitations in performance of instrumental ADLs. The observation can be explained by physical and cognitive decline capacities of the elderly, especially those aged 80 and above.

It also revealed that, there was a weak association between academic achievement and the level of participation in self-care (Cramer’s v=0.134), and this association was not statistically significant (p>0.05). The findings were different from those of Palumbo et al. (2019) who reported that, literacy levels played a huge role, in determining the roles that clients assumed, during their hospital stay. Moreover, Palumbo et al. (2019) noted that, health literacy as opposed to general literacy was the main influencer of participation in self-care of patients.

Further, the study revealed that patient’s categorization of perceived extent of participation in decision making was strongly associated with participation in self-care (Cramer’s v=0.596), and this association was statistically significant (p<0.05). The study also shows that, the perceived allowance of the patient to make decisions by the health care provider had a strong association with participation in self-care (Cramer’s v=0.453), and this association was statistically significant (p<0.05). Lastly, it was that perceived family involvement in decision making regarding care was strongly association with patient’s participation in self-care (Cramer’s v=0.337), and this association was statistically significant (p<0.05).
These findings agreed with those of Ringdal et al., (2017) who reported that, patients wanted to contribute to their safety and personal care, by taking part in decision-making processes, sharing relevant information, and knowing their conditions which promoted the client’s decision-making role, and empowered them to participate actively in nursing care. A strong association existed between mobility/ambulation and participation in self-care (Cramer’s v=0.488), and this association was statistically significant (p<0.05). This finding was congruent with that of Kisch et al. (2018) whereby, mobility limitations among the elderly decreased their opportunities to be involved socially, which further increased mortality and morbidity. The finding also agreed with that of Bouça-Machado et al. (2018) who reported that diseases such as Parkinson’s impacted motor control and mobility in the affected clients, causing reduced capacity to move independently, or even conduct their ADLs. This observation can be linked to the functional alterations present during illness. A strong association between perceived severity of illness and participation in self-care (Cramer’s v=0.603), and the association was statistically significant (p<0.05). The findings were similar to those of Ohtake et al. (2018), where a review of 15 studies noted that critical illness predisposed patients to reduced functionality, leading to limitations in their self-care activities. Peppa et al. (2017) notes that during flu season, only those with severe symptoms visited health facilities. Thus, it can be argued that, a majority of those admitted for various diseases had limitations in participation of care, due to the accompanying severe symptoms of their respective diseases

VI. CONCLUSION

Majority of the patients (60%) were males and most of them (26.7%) were aged between 18-28 years, and another 26.7% were aged between 29-38 years. As for academic achievements, most respondents (39%) had secondary education. As for level of performance of different self-care activities, majority (67.6%) could not bathe independently. Most respondents (41%) perceived their illness as moderate. As for perceived involvement in decision making regarding self-care, most of the respondents (44.8%) felt that participation in decision making was to some extent, 48.6% felt that healthcare professionals allowed patients to make decisions to some extent and 47.6% felt that family was involved in decision making regarding patient care to a great extent. As for perception towards self-care, majority (66.7%) had a negative perception. Most respondents (35.2%) perceived family support as the major enabler of participation in self-care, while 39% perceived lack of resources as the major barrier of participation in self-care. There was a significant association between sex, reported ability to perform ADLs, perceived severity of illness, perceived involvement in decision making with participation in self-care and perception towards self-care (p<0.05).

There was a significant association between sex, reported ability to perform ADLs, perceived severity of illness, perceived involvement in decision making with participation in self-care and perception towards self-care.

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


AUTHORS

First Author – James Wanjohi Kahiga, Master’s Candidate, School of Nursing, Mount Kenya University

Second Author – Dr. Nilufar Jivraj, Senior Lecturer, School of Nursing, Mount Kenya University

Third Author – Prof. Sherry Oluchina, Associate Professor, Jomo Kenyatta University of Agriculture and Technology