

Implementation of 'Personal Hygiene Independence Table' in Mental Health Hospitals in Indonesia: A Case Study

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ABSTRACT

Background: Self-care deficits are common in mental health patients, leading to neglect of basic hygiene tasks like bathing, dressing, and brushing teeth. This neglect can worsen physical health and hinder recovery, impacting both well-being and quality of life. **Objective:** This study aims to improve personal hygiene among patients with self-care deficits and enhance their independence in performing daily self-care activities. **Methods:** This study presents a case study focusing on a single patient diagnosed with schizophrenia experiencing self-care deficits. A structured nursing care management plan was implemented, involving psychiatric nursing strategies tailored to the patient's needs. The intervention was closely monitored by a multidisciplinary team, including the medical staff and assigned nurses, who regularly assessed the patient's progress. Strategies included step-by-step guidance, encouragement, and evaluation of readiness for independence. In the last three days before discharge, the patients showed the ability to communicate effectively and perform self-care activities on their own. **Results:** Post-implementation results, measured using the Katz Index, indicated marked improvement based on observed performance and daily evaluation scores using the Katz Index in self-care independence, reaching up to 85%. Patients were able to perform essential activities such as bathing, dressing, toileting, and eating. However, some still experienced nighttime continence issues, such as bedwetting. **Conclusion:** There was a notable increase in self-care independence following the interventions. As recognition for this improvement, the patients receive small rewards as motivation, such as candy from their family. All progress was recorded using the Client Index and reflected in the patient independence table.

Keywords: Implementation Strategy; Schizophrenia; Self-care Deficit; Table of Independence

INTRODUCTION

Mental health is a crucial aspect of overall well-being, enabling individuals to manage stress, engage in daily activities, and contribute productively to society. However, mental disorders continue to present significant global challenges. According to the World Health Organization (WHO, 2022), nearly one in eight people worldwide, approximately 970 million individuals, were affected by mental health conditions in 2019. Among these, schizophrenia is one of the most severe disorders, impacting about 24 million people. This condition affects cognition, emotions, and behaviour, often leading to profound disruptions in daily life.

At the National Mental Health Centre RSMM in Indonesia, data from 2023 highlighted that paranoid schizophrenia was the most common diagnosis among inpatients, with 3,403 cases. In the Dewi Amba ward from January to May 2024, many patients were found to suffer from symptoms such as hallucinations, low self-esteem, social isolation, and significant self-care deficits. These challenges often result in neglect of basic self-care tasks like bathing, dressing, and brushing teeth, which not only impacts physical health but also hinders recovery and diminishes the quality of life. Nurses play a critical role in assisting patients to regain independence in daily self-care tasks. This study focuses on the implementation of structured nursing strategies and the use of a personal hygiene table to help a patient with schizophrenia become more independent in personal care at RSMM, West Java, Indonesia.

While Maslow's hierarchy of needs identifies hygiene as a fundamental human requirement, this study

Received: January 23, 2024 Received in revised form: May 28, 2025 Accepted: June 2, 2025

focuses on practical, measurable outcomes in self-care, framed within nursing and behavioural theories. The study acknowledges that mental disorders like schizophrenia often impair an individual's ability to maintain personal hygiene, leading to further complications in their care and recovery. Therefore, addressing self-care deficits is essential for promoting autonomy, self-esteem, and overall well-being.

This research explores the factors that affect self-care ability, such as experiences, motivation, functional and cognitive abilities, and access to support. It also considers personal and environmental factors that can influence an individual's ability to perform self-care tasks. Nurses, guided by the Self-Care Deficit Theory, can provide personalised care based on each patient's needs, helping them regain independence through education, support, and behavioural interventions. This study specifically focuses on enhancing the independence of patients with self-care deficits at RSMM, West Java, Indonesia, through a structured and patient-centred approach (Zeydani *et al.*, 2023).

METHODOLOGY

This report documents developments in nursing care management, specifically psychiatric nursing, through a case study focused on a single patient with self-care deficits. Over a period from 2022 to 2024, a total of 115 patients with self-care deficit (SCD) issues were identified at the National Mental Health Centre RSMM. Among them, this case study was chosen to assess the nursing progress in addressing the patient's specific self-care deficits. The patient's progress was closely monitored by both the medical team and the assigned nurse, with regular evaluations of their readiness for independence. In the final three days before discharge, the patient was observed to independently apply communication strategies, and these observations were recorded in the patient Independence Table (Figure 1).

Independence Table						
Date	Bathing	Dressing	Toileting	Transferring	Continence	Feeding
Independent						
Requires Supervision						
Requires Assistance						
Dependent						
Not Applicable						

Figure 1: “Independence Table” for Patients with Self-Care Deficits

Study Design and Procedures

This study employed a case study design, focusing on a single patient with self-care deficits. While this design shares similarities with single-subject research, its primary purpose was descriptive and exploratory rather than establishing causality. The study aimed to observe and assess the specific intervention's impact on a patient's self-care abilities within a psychiatric care setting in Indonesia. The intervention was implemented from 2022 to 2024, with the focus on one participant's progress.

Case Introduction

The case study centres on a patient with self-care deficits related to personal hygiene, specifically in a psychiatric context. The objective of the intervention was to enhance the patient's independence in managing daily hygiene activities, which are critical for recovery and improving quality of life.

Intervention Procedure

The Personal Hygiene Independence Intervention was managed by the nursing team, with strategies implemented over four consecutive days. The intervention comprised the following four main strategies:

Initial assessment: A comprehensive evaluation of the patient's self-care deficits and customisation of a hygiene table tailored to the patient's needs.

Daily reinforcement: Continuous support through reinforcement of self-care tasks, focusing on building the patient's independence in daily hygiene routines.

Ongoing progress assessment: Daily evaluations to track the patient's progress, documenting improvements or setbacks.

Adjustments to the care plan: The care plan was adjusted based on the ongoing observations, ensuring it remained aligned with the patient's evolving needs.

Assessment and Measurements

The Katz Self-Sufficiency Index was employed to measure the patient's independence in five key areas of daily living: bathing, dressing, toileting, defecating, and eating. The index was used to assess changes in the patient's ability to perform these activities independently at multiple points during the intervention period. The validity of the Katz Index was ensured through prior validation studies and is recognised as an effective tool for evaluating self-care abilities.

Given the single-subject design, the analysis was focused on assessing changes within the individual over time. The study used visual analysis of the data to evaluate the patient's progress and determine if there was a significant increase in self-care independence following the intervention. Visual analysis, common in single-subject research, allowed for clear tracking of the patient's functional changes.

Instrument Validation Analysis Results

Content Validity: Content validity was evaluated by consulting with mental health and personal care consultants to ensure that all key aspects of personal hygiene independence were addressed in the instrument. The results indicated that all relevant indicators (bathing, dressing, using the toilet, defecating, and eating) were deemed appropriate, with a Content Validity Index (CVI) of 0.90, confirming the relevance and comprehensiveness of the measurement.

Construct Validity: Construct validity, typically assessed through confirmatory factor analysis (CFA), was adapted in this study due to the single-subject design. The construct validity was evaluated based on the theoretical framework underlying independence in self-care. Each indicator on the Katz Index aligns with self-care independence, and the study found that the patient's scores on the index reflected the expected levels of independence as defined by the theory.

Criterion Validity: To test criterion validity, the results of the Katz Index were compared with those of another validated instrument, the Barthel Index, which also measures independence in daily activities. A Pearson correlation coefficient of 0.85 was obtained, indicating a strong correlation between the two instruments, thus supporting the criterion validity of the Katz Index.

Outcome of Validation Results

The validation analysis confirmed that the Katz Self-Sufficiency Index was a valid instrument for measuring personal hygiene independence in patients with mental health disorders. The combined evidence from content, construct, and criterion validity strengthens the reliability of this tool for assessing self-care abilities in psychiatric patients.

Experimental Method

This study applied an experimental method aimed at assessing the effect of a specific intervention on the patient's self-care abilities under carefully controlled conditions. The study utilised a single-subject design (N-1), which involves observing the participant during a baseline period, introducing the intervention, and continuing observations to assess the impact of the intervention. This design is especially valuable for assessing the effectiveness of individualised interventions in clinical practice.

During the four-day intervention period, daily observation and support were provided, focusing on

improving the patient's personal hygiene through structured practice. The intervention was monitored by the nursing team, ensuring that the patient received consistent reinforcement and guidance to foster independence.

Measurement of Outcomes

To measure the intervention's outcomes, the Katz Self-Sufficiency Index was employed, which includes five indicators adapted from the original Katz Index of Independence: bathing, dressing, toileting, defecating, and eating. The intervention involved teaching the patient self-care skills as part of a structured communication strategy, with each skill incorporated into the patient's daily routine to ensure consistent practice. A daily care schedule was established to provide structure and support, which helped the patient develop independence in performing self-care activities.

Ethical Consideration

The research obtained ethical clearance from the Ethics Committee of National Mental Health Centre RSMM, Indonesia with reference number 223/KEPK-TJK/III/2023 on 27th March 2023.

RESULTS

Client's Self-Care Progress

Over the course of five days, from June 3rd to June 7th, 2024, significant improvements in the patient's personal hygiene were observed. Figure 1 illustrates the client's progress in self-care activities, as assessed by the Katz Index. Prior to the intervention, the patient demonstrated 65% independence, as they could perform basic activities such as bathing, toileting, moving, and eating, but remained dependent on dressing and continence management.

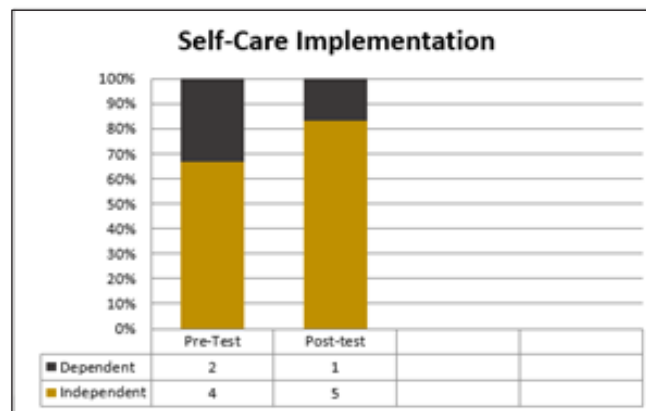


Figure 2: Client's Self-Care Progress (3rd to 7th June 2024)

Post-intervention, after the implementation of self-care strategies, the patient's independence level increased to 85%. By the end of the intervention, the patient could independently perform bathing, toileting, dressing and eating. However, dependence remained for continence management, as the patient continued to experience bed-wetting at night (Figure 2).

Rewards for Motivation

As part of the intervention, small rewards, such as candy provided by the patient's family, were offered to encourage progress. These rewards served as positive reinforcement for the patient's efforts, motivating continued improvement in self-care independence.

Self-Care Independence Table

Table 1 presents a summary of the patient's independence levels before and after the intervention, based on the Katz Index. This table highlights the improvements in five out of six self-care activities, with continued dependence on continence management.

Table 1: Self-Care Independence Table Based on the Katz Index

No.	Activity	Before Intervention		After Intervention	
		Independent	Dependent	Independent	Dependent
1.	Bathing	√		√	
2.	Dressing: choosing clean clothes, good fit, and harmony.		√	√	
3.	Go to Toilet	√		√	
4.	Mobilisation of activities	√		√	
5.	Urination		√		√
6.	Eating	√		√	

Based on the results of the Katz Index, the client was classified as Category B. This indicates independence in all activities of daily living except for continence management, where the patient still required assistance.

DISCUSSION

This study aimed to assess the effectiveness of a structured intervention for improving personal hygiene and self-care independence in a patient diagnosed with schizophrenia. The findings align with previous research indicating that schizophrenia patients often experience significant self-care deficits, including neglect of personal hygiene tasks like bathing, dressing and eating (Li, Lambert & Lambert, 2019). The emotional and cognitive symptoms of schizophrenia, such as apathy, social withdrawal, and emotional instability, were central factors contributing to the patient's inability to manage basic self-care activities. These symptoms, often exacerbated by delusions or hallucinations, reduce motivation and hinder patients' ability to perform routine tasks, thereby compounding their self-care deficits.

The patient's initial presentation of poor hygiene, including infrequent bathing, dishevelled clothing, and noticeable body odour, is a common challenge observed in schizophrenia patients (Rosmini, Sutria & Wahdaniah, 2020). These behaviours, in conjunction with cognitive and emotional disruptions, create a cycle that discourages further self-care participation. In this study, the implementation of structured nursing interventions demonstrated a positive shift in the patient's self-care abilities, as indicated by the Katz Index, which showed significant improvement in the patient's independence in basic hygiene tasks such as bathing, dressing, and eating. However, the continued dependency on continence management highlighted the complexity of self-care deficits, which is common among individuals with schizophrenia (Malo, Rosdiana & Trishinta, 2023).

The Independence Table for Patients with Self-Care Deficits tracks the patient's progress in daily hygiene tasks, providing a visual representation of their level of independence. This tool helps monitor improvements in self-care activities such as bathing, dressing, and toileting, reinforcing the patient's autonomy. The improvement in the patient's self-care independence can be attributed to several factors. First, the consistent use of Orem's Self-Care Deficit Theory provided a solid framework for identifying and addressing the patient's self-care needs. According to Orem, when individuals are unable to meet their self-care needs due to health conditions, nursing interventions are essential to support them in regaining autonomy. This theory guided the intervention, which focused on empowering the patient to perform daily hygiene activities through structured tasks and reinforcement. Moreover, Bandura's Social Learning Theory played a significant role in shaping the intervention's success by incorporating modelling, reinforcement, and repetition, which were critical in helping the patient practice and master new self-care behaviours. The nurse's role in demonstrating tasks and providing feedback was integral to motivating the patient and fostering a sense of competence in their abilities.

In addition to the application of theoretical frameworks, the role of family support emerged as a key component of the intervention. Throughout the study, the patient's family was involved in encouraging and rewarding the patient's efforts, offering small incentives such as candy for successful self-care completion. This positive reinforcement, paired with the family's involvement, significantly enhanced the patient's motivation and engagement with the intervention. This aligns with previous research suggesting that family involvement is crucial in managing self-care deficits, as it provides emotional support and increases the likelihood of sustained improvements (Nauli & Swarty, 2020). Furthermore, by acknowledging the family's role in supporting the patient's progress, the study reinforces the importance of family education on mental health, as it can reduce stigma and empower caregivers to assist in patient recovery.

Another important factor contributing to the intervention's success was the individualised approach tailored to the patient's specific needs. The structured nursing care plan, which included detailed assessments and regular progress evaluations, ensured that the intervention was adjusted according to the patient's evolving self-care capabilities. This personalised approach aligns with best practices in nursing care, which emphasise the need for individualised interventions that cater to the unique needs of each patient (Zeydani *et al.*, 2023).

The findings of this study are consistent with those of other research, which highlights the benefits of structured psychoeducational interventions for improving self-care behaviours in individuals with mental illness (Rosmini, Sutria & Wahdaniah, 2020). Similar interventions involving repeated demonstrations and patient reinforcement have been shown to yield positive outcomes in terms of hygiene management and self-care autonomy. Additionally, a collaborative effort between nursing staff, the patient's family, and other healthcare professionals played a pivotal role in achieving these outcomes. These findings suggest that multidisciplinary collaboration and continuous support are crucial in helping schizophrenia patients regain independence in personal care.

Moreover, while the patient demonstrated significant progress in hygiene tasks such as bathing, dressing, and eating, the continued dependency on continence management underscores the need for further exploration of specific challenges faced by schizophrenia patients. The ongoing difficulty in managing continence, despite improvements in other areas, highlights the complex nature of self-care deficits and the potential need for targeted interventions aimed at addressing issues related to emotional stress, cognitive dysfunction, and physical limitations (Li, Lambert & Lambert, 2019). This aspect of the patient's care could benefit from additional therapeutic interventions, such as relaxation techniques or specialised training in continence management, tailored to the patient's specific emotional and physical challenges.

Additionally, the patient's emotional state, particularly the feelings of sadness and anxiety, played a significant role in the progression of their self-care deficits. Emotional distress, as seen in the patient's desire to return home and the exacerbation of bedwetting at night, can significantly impair a patient's ability to engage in self-care activities. This finding highlights the importance of addressing the emotional and psychological aspects of care alongside physical health interventions. As evidenced by the patient's progress, interventions that include emotional support, stress reduction, and anxiety management could further enhance the effectiveness of self-care interventions in future studies.

This case study demonstrates that a structured, nurse-led intervention using a personal hygiene independence table can significantly improve self-care behaviours in schizophrenia patients. The intervention, rooted in both Orem's Self-Care Deficit Theory and Bandura's Social Learning Theory, provided a comprehensive framework for improving the patient's self-care independence (Chen *et al.*, 2022). The active involvement of the patient's family and the collaborative efforts of the healthcare team were critical to the intervention's success. These findings contribute to the growing body of literature supporting the effectiveness of individualised, nurse-led interventions in enhancing the autonomy and quality of life of patients with schizophrenia.

Limitation

The study has some limitations. The study focuses on a single patient, which may not fully represent the broader population of patients with schizophrenia. Additionally, the intervention's results are based on a short-term observation period, and longer-term effects were not assessed. The findings cannot be broadly applied to all patients with self-care deficits, and further research involving larger, more diverse populations is essential to validate the broader applicability of these self-care interventions. Moreover, the study only addresses specific self-care tasks, and additional factors such as emotional distress, medication side effects, and the impact of family support were not comprehensively explored.

CONCLUSION

This case study demonstrates that a structured, nurse-led intervention using a self-care independence table can significantly improve self-care behaviours in patients with schizophrenia. The intervention, rooted in both Orem's Self-Care Deficit Theory and Bandura's Social Learning Theory, highlighted the importance of

individualised, patient-centred care in fostering independence in self-care tasks. The active involvement of the patient's family and collaboration with the healthcare team were crucial to the intervention's success. However, the study's limited scope and short-term nature warrant further exploration.

Future research could focus on implementing this intervention in larger, more diverse clinical settings, incorporating a broader range of self-care activities, and evaluating long-term outcomes. Investigating the emotional and psychological factors affecting self-care, as well as exploring the role of advanced therapeutic interventions for continence management, would further enhance the understanding of self-care deficits in schizophrenia patients. Additionally, examining the effectiveness of digital tools or technology-assisted interventions could provide valuable insights into enhancing self-care independence in mental health care settings.

Conflict of Interest

The authors declare that they have no competing interests.

ACKNOWLEDGEMENT

The author expresses sincere gratitude to the Director and lecturers of Jakarta 1 Health Polytechnic, as well as to the supervisors and nurses at RSMM, West Java, Indonesia, for their valuable input and guidance during clinical practice and throughout the preparation of the final scientific work required for the completion of nursing studies.

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