

6-step hand washing intervention in family nursing care with self-care deficit

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Abstract

The phenomenon of self-care deficit in the family of Mr. H aged 38 years in Dusun Tebon, Sidoluhur, Godean, Yogyakarta is the focus of this study. The purpose of the study was to understand the 6-step handwashing, the purpose of 6-step handwashing, and the steps of 6-step handwashing. used was a qualitative approach with a descriptive case study design through assessment, diagnosis, planning, implementation and evaluation of family nursing care with interview, observation and documentation techniques. showed that Mr. H's family did not know how to wash their hands in 6 steps, sometimes An.H after traveling never washed their hands in 6 steps. Mr. H's family only washed them with wet wipes and the 6-step handwashing intervention that made Mr. H and An. A's family accustomed can be implemented in daily life. Nursing interventions that can be done for the diagnosis of self-care deficit are one of them is 6-step handwashing, in this study conducted with Mr. H's family is effective in 6-step handwashing successfully increasing the knowledge and practice of 6-step handwashing in Mr. H's family, who now routinely wash their hands in 6 steps correctly. This shows the importance of 6-step handwashing education to improve family health.

Keywords: Self-care deficit; 6-step handwashing intervention

1. Introduction

Self-care deficit is someone who is unable to carry out or complete self-care activities independently, one of which is washing hands (PPNI, 2016). According to (Yendrita et al., 2023) Self-care skills are part of the components of activities carried out by children every day. Basic skills such as eating, dressing and undressing, drinking, bathing, grooming, and using the toilet are included in the components of self-care. Hands are one of the main entry points for pathogens into the body, and washing hands with soap and water is an effective method in reducing the transmission of germ infections (Yendrita et al., 2023). The Handwashing with Soap (CTPS) campaign in Indonesia needs to be continuously improved. The focus of handwashing in the field of education is to instill a habit from an early age, especially in preschool children, because children are a crucial component as agents of change. (Saputra et al., 2020)

According to the latest WHO data from 2011, (Aisyah Noor et al., 2022) approximately 2.2 million people in developing countries, especially children, die annually from various diseases caused by a lack of safe drinking water, poor sanitation, and hygiene. Evidence suggests that adequate sanitation services, safe water supplies, waste disposal systems, and hand hygiene education can reduce diarrheal mortality by 65% and other diseases by 26%. Therefore, it is reasonable that health insurance in Indonesia is also stipulated in Article 28H of the 1945 Constitution and elaborated in Law No. 9 of 1960.

In an effort to improve self-care skills in the community, PHBS policies have been issued at both the Yogyakarta Special Region (DIY) and Regency/City levels. Therefore, the Yogyakarta Special Region Health Office held a meeting on January 23, 2019, to strengthen PHBS policy implementation at the Royal Darmo Hotel Malioboro. The purpose of the meeting was to improve the implementation of self-care in the community, evaluate the implementation of 2018 and plan activities in 2019. The meeting was attended by 30 participants from those responsible for health promotion programs, environmental health, occupational health, and sports in DIY and Regency or City. To improve self-care in the community, collaboration between the DIY Health Office, Regency or City Health Office, cross-program and cross-sector as well as observers or evaluation of activities to determine changes in healthy living behavior in the community is needed.

One contributing factor to a self-care deficit is a lack of motivation and environmental improvements regarding handwashing behavior. However, the surrounding environment, daily lifestyle, and personal

hygiene habits contribute to this. Maintaining hand hygiene is the first line of defense for maintaining personal hygiene. One way to maintain hand hygiene is by washing hands in six steps and using soap. Handwashing with soap has been scientifically proven to prevent the spread of diseases such as diarrhea and upper respiratory tract infections (URTIs). (Lamria & Lumbantoruan, 2021)

The results of a study conducted (WHO (2017) in (Hudju et al., 2022) Proving that the incidence of diarrhea can be reduced by 45% with the behavior of Washing Hands with Soap (CTPS). Basic Health Research Data (Riskesdas, 2018) shows that the prevalence of diarrhea based on the diagnosis of health workers and symptoms by province in 2013-2018 increased from 5% - 7% annually, there are 25.2% of child deaths in Indonesia caused by diarrhea. Based on the Indonesian Health Profile (2017) the incidence of diarrhea outbreaks shows that the CFR (Case Fatality Rate) in 2011 was 0.40% while in 2012-2017 the CFR number of diarrhea cases was still quite high at >1%. Handwashing behavior and knowledge levels are still low, 17% wash their hands with soap and clean water

Based on the results of the study conducted from December 2024 to January 2025 in Tebon Hamlet, Sidoluhur, Godean, Sleman, Yogyakarta, it was found that Mr. H's family did not know how to wash their hands in 6 steps, sometimes An. H after traveling never washed his hands in 6 steps and Mr. H's family only washed them with wet wipes. The purpose of this activity is to evaluate Mr. H's family's recognition of 6-step hand washing and to habituate An. H to always wash his hands after traveling or playing in the home environment. It is hoped that the intervention carried out can improve the understanding of 6-step hand washing and the steps in washing hands. Based on the description above, the author is interested in taking the topic of the problem of self-care deficit and the management of 6-step hand washing.

2. Method

Method used in this study is a qualitative approach with a descriptive case study design, which aims to gain an in-depth understanding of the self-care deficit towards the 6-step handwashing steps in Mr. H's family in Tebon Sidoluhur Godean Hamlet, Yogyakarta. Data collection was carried out through in-depth interviews, participatory observation and documentation techniques focused on understanding the self-care deficit which includes what is 6-step handwashing, the purpose of 6-step handwashing, and 6-step handwashing steps. Interviews were conducted directly with family members as the main source of information to explore experiences, perceptions and family dynamics related to health problems and the adaptation process. Observations were also conducted during daily interactions in the home environment to understand the 6-step handwashing in the family.

The stages of family nursing care follow the nursing cycle, namely assessment, diagnosis, planning, implementation, and evaluation. The subjects of this study were the family of Mr. H, a resident of Tebon Hamlet, Sidoluhur Godean, Yogyakarta, who were unaware of the self-care deficit in the 6-step handwashing method. The tool used in this study was an assessment sheet that included the first stage of exploration, namely general family data, family history and developmental stages, characteristics of the family structure environment, family functions, family stressors and coping, family expectations, and a family physical examination. The next stage was the second stage of exploration, namely the assessment of the five family health tasks. The course of this study was carried out with 7 family visits starting from the first stage of exploration to evaluation. The assessment focused on identifying self-care deficits that affect the 6-step handwashing method. The nursing diagnosis was determined based on the collected data and then a specific and structured intervention plan was designed to improve the self-care deficit in the 6-step handwashing method. The implementation of nursing care was carried out collaboratively by involving all family members. Evaluation was carried out to assess the effectiveness of the intervention and the development of the 6-step handwashing method.

3. Results and Discussion

3.1. Results

3.1.1. Assessment data

Mr. H's family is located in Tebon, Sidoluhur, Godean, Yogyakarta with 6 family members, namely Mr. S as the head of the family aged 65 years, Mrs. P as a wife aged 59 years, Mr. F as a child

aged 28 years, Mr. H as the head of the family aged 34 years, Mrs. F as a wife aged 30 years, An. H as a child aged 3 years. The type of Mr. H's family is *an extended family* (large family) consisting of husband, wife and biological children and also consists of other relatives. Based on what was obtained Mrs. H and Mr. H said that after playing An.h did not want to wash his hands not only that when traveling An.H was not washed his hands only cleaned using wet wipes and Mrs. H did not know the 6 steps of hand washing according to WHO, observation data obtained that An. H's nails were long and reinforced by the treatment that An. H after playing blocks directly so that it was not prioritized to wash his hands. The current stage of family development is the growth and development of toddlers. Based on the interview, Mr. H stated that his family supports and respects each other. Communication in resolving Mr. H's family conflicts is done through discussion and deliberation. Mr. H's family livelihood is self-employed.

3.1.2. Nursing Diagnosis Analysis

Based on the results of the assessment conducted on Mr. H's family, a diagnosis of self-care deficit emerged. The diagnostic assessment was based on the related clinical conditions. The causes and signs of major and minor symptoms. Data supporting the diagnosis were that Mr. H and Mrs. F had never heard of and practiced the 6-step handwashing according to the WHO. Self-care deficit is the behavior of being unable to perform and complete self-care activities.

3.1.3. Intervention

One intervention that can be carried out to diagnose self-care deficits is the 6-step handwashing method. The 6-step handwashing method aims to achieve cleanliness, is part of a religious ritual, and breaks the chain of *E. coli bacteria* entering the human body through the hands to the mouth and digestive system. The 6-step handwashing method carried out by Mr. H's family involved a demonstration using posters and video media played to An. H to encourage him to wash his hands every day.

3.1.4. Implementation

The implementation of the 6-step hand washing given to Mr. H's family was carried out on January 11, 2025 at 16.00 at Mr. H's residence. The implementation of the 6-step hand washing was attended by Mrs. F and An. H. The implementation went smoothly. Mrs. F and An. H were willing to participate in the 6-step hand washing and were able to practice it independently and would practice the 6-step hand washing every time because this activity was very simple and could be done independently at home.

3.1.5. Evaluation

The evaluation was conducted after 5 days after implementation and began evaluating from January 16-19, 2025. The results showed that Mrs. F and An. H routinely washed their hands in 6 steps when doing activities outside the home and after eating. Mrs. F and An. H said they were very lucky and happy because they had updated knowledge and gained valuable experience because they were guided in maximizing their health starting from the smallest things first. Signs that self-care that was less noticed in Mr. H's family has now begun to be noticed and tried in everyday life.

3.2. Discussion

Demonstration for Mr. H's family with a lack of self-care deficit was conducted in December - January starting from the assessment to the evaluation. This study obtained results on self-care deficiencies after the 6-step handwashing method was carried out. The results of this study are in line with research conducted by (Widyastuti et al., 2022) that showed an increase in household knowledge and understanding of PHBS and families were able to wash their hands in 6 steps correctly. Factors that influenced the lack of exposure to information in Mr. H's family were the lack of interest or motivation that did not grow to carry out 6-step handwashing. Research conducted by (Jannah & Zuhroh,

2022) stated that there was an effect of handwashing techniques on preschool children before and after being given health education using the demonstration method with a p-value <0.05.

The impact of not implementing the habit of washing hands which often attacks preschool-aged children is diseases such as diarrhea, ISPA (Upper Respiratory Tract Infection), worms and typhoid fever. (Hartaty & Kurni Menga, 2022). Another consequence of the lack of proper implementation of the 6-step hand washing is that mothers and fathers who do not make it a habit for their children after traveling do not instruct their children to wash their hands first and do not make it a habit for their children in their daily lives. Mrs. F complained that after traveling and after playing, An. H did not want to wash his hands properly first.

4. Conclusion

Based on the assessment conducted on Mr. H's family, it was found that they did not know how to wash their hands in 6 steps and after traveling, Mr. H did not wash his hands first because his mother and father did not make it a habit for their children to wash their hands first. The management experienced by Mr. H's family was carried out using the 6-step hand washing technique with the aim of maintaining the client's hand hygiene. The evaluation results of the implementation of the 6-step hand washing in Mr. H's family understood and could practice the 6-step hand washing technique independently at home. The evaluation was carried out after 5 days of implementation and 4 days of evaluation aimed to improve the hand washing self-care deficit. Therefore, the 6-step hand washing technique is an effective non-pharmacological management to improve the self-care deficit.

Recommendations for further research include socialization and demonstrations of the 6-step handwashing technique for several families who do not yet know the 6-step handwashing technique.

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