SELF-CARE INSTRUMENTS USED IN INDONESIA: SCOPING REVIEW

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ABSTRACT
Self-care is essential in maintaining health, especially in chronic diseases. It is assessed using various instruments influenced by knowledge, motivation, ability, social support, and culture. In Indonesia, suboptimal self-care practices can adversely affect health and productivity**.** Identify and review instruments used in Indonesia to evaluate self-care, with a focus on the scope of self-care domains accommodated by each instrument and their suitability for the local cultural context and nursing practice. Articles were collected from three databases: ScienceDirect, PubMed, and EBSCOhost, using the main keywords "instrument" and "self-care". Inclusion criteria comprised articles published within the last five years (from 2020 to 2024) available in full text, written in English, and open access. The initial search yielded 818 articles. After applying the inclusion and exclusion criteria, 149 articles were selected for further screening, with 107 articles excluded due to issues such as incomplete texts, language barriers, or irrelevance to the topic. A total of 42 articles underwent in-depth review, resulting in the elimination of an additional 32 articles. Finally, 10 articles were included for analysis. A PRISMA flow diagram was used to map the article selection process systematically. A narrative analysis approach was employed to evaluate the characteristics of the self-care instruments, the scope of domains assessed, and their suitability within the cultural context of Indonesia. The final 10 selected articles demonstrated a variety of self-care instruments used across different studies in Indonesia. These instruments assessed various domains of self-care, including physical, psychological, social, and behavioral aspects. Self-care instruments in Indonesia have been widely used to evaluate self-care behaviors that meet the needs of patients. These instruments cover interrelated physical, psychological, social, and behavioral domains. Findings confirm the importance of a comprehensive understanding and integrated approach to support effective nursing care, prevent complications, and improve patient well-being.

Keywords: indonesia; instrument; self-care

INTRODUCTION
Self-care is one of the essential aspects of efforts to guard individuals, health and quality of life, especially in managing chronic diseases such as diabetes, hypertension, and other conditions (Lawless et al., 2023) . Various instruments for measuring self-care have been widely developed and used, designed to measure the ability of individuals to do their own maintenance. In this role, instruments significantly support research, intervention health, and health program evaluation (El-Osta et al., 2023).

Factors that can influence self-care implementation in individuals are knowledge, experience, skills, motivation, habits, functional and cognitive abilities, self-efficacy, support systems, and cultural values. Factors that make this role essential in determining to which the individual can apply practice maintenance effectively and appropriately with their needs. In addition to that, practicing self-care in Indonesia is often influenced by the existing social and cultural norms. For example, society tends to consider that self-maintenance is more intended for women, while men usually ignore the importance of self-maintenance. This can cause an imbalance in the implementation of self-care in society. Self-care not run with good can worsen a person's physical and mental health and reduce quality of life and productivity.

Forgotten self- care or considered trivial, especially among individual with disease chronic, can add problem health that has been there is. Practicing good self-maintenance is very important, but often overlooked amid existing social and economic challenges. To identify and analyze self-care instruments used in Indonesia and evaluate validity and reliability for utilization in the context of health.

METHOD
Research Design
This review uses a scoping review method to map and provide a broad overview of the literature covered. Scoping reviews involve identifying research questions, identifying relevant research using a systematic literature review based on formulated research questions, collecting research results, tabulating results, compiling, analyzing, explaining, and reporting results (Agus et al., 2023) . This review is guided by the main question, " What self-care instruments have been used in Indonesia?"

Data Collection
Search the article in review. This is done through three main databases: ScienceDirect, PubMed, and EBSCOhost. The keywords used include " instruments" and " self-care", which are combined with the keyword Supporter " and others. Selected articles fulfil criteria in the form of complete text, english language, published within the last 5 years, and have open access. This keyword was developed with other keywords, such as "questionnaire OR Instrument AND Self-Care OR Self care AND Indonesian," from MeSH, and combined with AND and OR. The articles used are full-text articles published from 2020 to 2024. The limitation of the last 5 years aims to find out how many self-care instruments have been used in Indonesia in the previous 5 years. The selection of articles uses the prism flow diagram method. This article refers to the discussion related to the use of self-care instruments, with the focus of the study being the use of self-care instruments in Indonesia.

Article selection using the prism flow diagram method refers to the discussion on the use of self-care instruments. The focus of the study is on the use of self-care instruments in Indonesia. Articles that are not entered for review, this is the one that discusses self-care instruments outside Indonesia, with no own access open or no abstract provided. From the search in three databases, a number of articles were obtained, then selected based on title and summary, eliminating 818 irrelevant articles. After identification of duplication, 42 articles were reviewed in-depth, resulting in 10 that met the criteria.

Data extraction and charting information
The guidelines selection article in this research uses PRISMA-Scr, as shown in figure 1. With the help of a librarian, the author developed a search strategy that included various databases and completed the filtering process for the article. This search strategy is reviewed comprehensively, and the eligibility of every article is evaluated at each stage of filtering. The criteria for inclusion cover articles that speak english and focus on the impact of violence in the household ladder and the mother house ladder. At the same time, that criterion excludes article that discusses mothers who do not experience violence in the home, or are not scientific journal articles. After the relevant article is identified, each article is summarized with note-taking information, such as the name of the author, the title of the article, the date of publication, the location of research, the methods used, the design of the research, the objectives of the study, as well as the main summary findings.
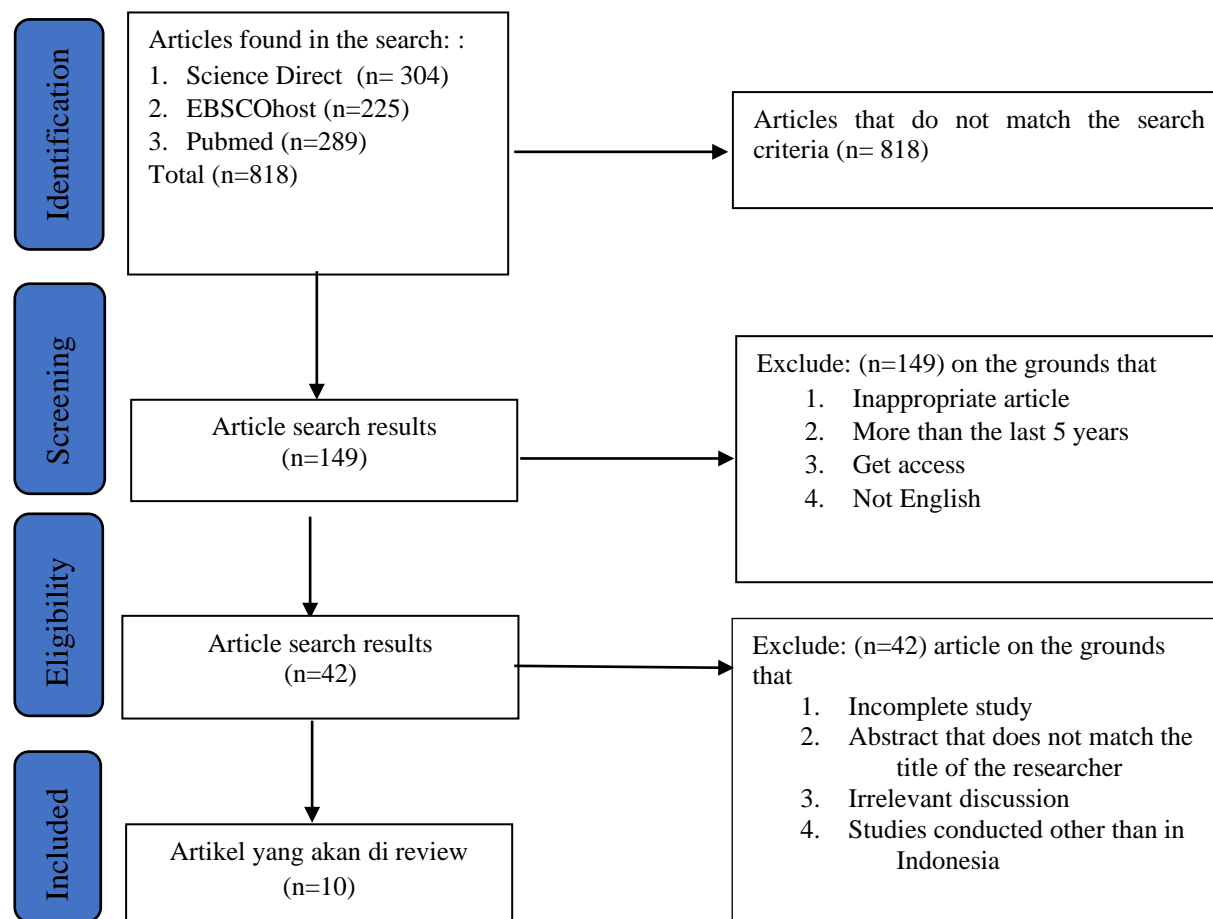
PRISMA Diagram

Figure 1. Flow diagram for database search

RESULT

Table 1.
Article Review

No	Author and Year	Title Study	Objective	Research methods	Instrument	Results
1.	Anita Joeliantina , Dwi Adji Norontoko , Ach. Arfan Adinata , Adivtian Ragayasa , and Irfany Nurul Hamid, 2024. (Joeliantina et al., 2024)	"Self-care of chronic illness prevents the risk of diabetic foot ulcers in patients with diabetes: A cross-sectional study"	This study aims to explain the care model for chronic disease, especially in preventing diabetic foot ulcer (DFU) in patients with diabetes mellitus (DM). This model covers three main components: maintenance foot care, monitoring, and management foot care.	Study This uses a design analysis with a cross-sectional approach. A total of 300 patients with diabetes mellitus from six Health centers in Surabaya, Indonesia, were involved in this study. The sample was chosen randomly, with criteria for inclusion, such as age over 26 years, and criteria for exclusion, such as limitations in reading or cognitive disturbance. Data collected using a	The instruments used are a questionnaire modified from the Self-Care of Diabetes Inventory (SCODI) and Diabetic Foot Management. This questionnaire consists of three main parts: 1. Maintenance foot care with 13 questions. 2. Monitoring foot care with 15 questions. 3. Management of foot care with 30 questions	Research results show that a big part of patients have a low risk of developing diabetic foot ulcers, which is a 40% risk of low and 38% at risk of moderate. However, there are also patients with high risk (8%), patients in remission (5%), and patients with active leg ulcers (10%). Of the three components of foot care, only management of foot care shows a significant connection to DFU risk, with a *p-value = 0.000*. Meanwhile, the maintenance and monitoring of foot care have no significant direct impact. The study also revealed that the behavior maintenance of self-

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				questionnaire, and analysis done with the method of Partial Least Squares (PLS)		patients, especially in matters of foot care , is still not yet adequate.
2.	Eldawati Eldawati , Faridah Mohd Said, and Nur Syazana Umar, 2022. (Eldawati et al., 2022)	"Self-Care in Patients With Hypertension in Indonesia"	This study aims to analyze behavior maintenance, self-related factors, and factors related to hypertension in patients in Indonesia.	Study This used a descriptive cross-sectional design sample of as many as 144 patients with hypertension, taken by convenience sampling at home, sick in Karawang, West Java, Indonesia, from June to July 2021.	Questionnaire SC-HI with 24 items used to measure maintenance self self-patient hypertension in three dimensions : 1. maintenance, 2. management, and 3. Trust self . The score is assessed with a Likert scale.	The average score of maintenance self-patient is 2.43 (SD = 1.26), indicating a level that is not adequate. Dimensions with the highest score are maintenance (mean = 2.86, SD = 2.01), while trust self's score is the lowest (mean = 2.12, SD = 1.96). Factors like type, gender, education level, and hypertension duration significantly contribute to variation in themselves, with an R² of 23.4%. In conclusion, patients with hypertension need education and counseling for increased self-care.
3.	Silvia Elki Putri, Etty Rekawati , and Dwi Nurviyandari Kusuma Wati 2021. (Putri et al., 2021)	"Effectiveness of self-management on adherence to self-care and on health status among elderly people with hypertension."	This study aims to evaluate the effectiveness of intervention management for compliance maintenance and health status of elderly people who suffer from hypertension in Pekanbaru.	Study This uses a design quasi-experimental with pre-test and post-test groups and a control . The sample consists of 134 elderly with hypertension taken through *consecutive sampling* . Intervention management self done through visit House as much as four session during two Sunday	Instruments used is questionnaire the Adherence to Self-Care Questionnaire (modified) consisting of of 27 statements Measure compliance to maintenance self , including 1. Dietary habit , 2. Activity physique , 3. Monitoring blood pressure, 4. Consumption medicine , and 5. Management stress .	The results show that intervention management is self-efficacious in increasing compliance maintenance self (p<0.001) and health status (p<0.001). The main influencing factor on compliance maintenance self and health status is implementation management self, which can increase both by 45.4% after controlling for variables confounding like ethnicity and history.
4.	Riham Saud Alhazmy, Asmaa Hamdi Khalil, dan Hayfa Almutary 2024.(Alhazmy et al., 2024)	"Effects of an instructional WhatsApp group on self-care and HbA1c among female patients with Type 2 diabetes mellitus."	Study This aims to evaluate the effect of using an instructional WhatsApp group to improve maintenance of self-care and reduce HbA1c levels in women with type 2 diabetes .	Use a quasi-experimental design with a pre-test and a post-test. The sample consists of 62 women selected by convenience sampling from a clinic on the Care Road.	The main instrument used is the Diabetes Self Care Scale to evaluate practice maintenance, and HbA1c measurements were performed before and after the intervention . Instructions given through the WhatsApp group for three months. Instrument: This measures seven domains of self-care,	After the intervention , the average HbA1c level decreased from 8.61 ± 1.70 to 7.92 ± 1.60 (p < 0.001). Total score maintenance self increases significantly (t-value = 12.359, p < 0.001). WhatsApp intervention has been proven effective in increasing maintenance self-control and blood sugar levels patients

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					that is : 1. Dietary control (control) pattern eat) – 5 statements 2. Exercise (activity) physical) – 3 statements 3. Blood glucose monitoring (monitoring) blood sugar levels) – 2 statements 4. Medication adherence (compliance) to treatment) – 3 statements 5. Follow-up (compliance) to control to facility health) – 3 statements 6. Foot care (foot care) – 5 statements 7. self -care practices maintenance self, others, such as hygiene, diabetes identification, and prevention of complications) – 7 statements	
5.	Hidayat Sya'diyah , Goddess Full moon (Sya'diyah et al . , 2024)	" Enhancing self-care in elderly patients: the impact of WhatsApp reminder messages at the Heart and Vascular Center "	Study This aims to investigate the effectiveness of message reminders through WhatsApp in increasing patient self-care among elderly patients at the Heart and Vascular Center, Premier Hospital Surabaya	The study uses a quasi-experimental design with group control, treatment, and measurement before and after intervention. The sample consists of 32 patients divided into two groups (16 people each), with the technique taking a simple random sample.	*Self-Care Heart Failure Index (SCHFI)*, which consists of 22 questions, for evaluating 1. Compliance with treatment, 2. Dietary habit , 3. Physical activity and other aspects of self-maintenance. Data analysis using the Wilcoxon and Mann-Whitney tests	WhatsApp's intervention shows significant improvement in care self . In group treatment , the proportion of patients with maintenance self Good increased from 12.5% (pre-test) to 81.25% (post-test), while the group control only increased from 18.75% to 37.5%. The results of the Mann-Whitney test show a significant difference between the group treatment and control with a p-value of 0.013.
6.	Freodisa Meilisa Behuku , Ahmad Guntur Alfianto , and Waifti Amalia, 2023. (Behuku et al., 2023)	"Self-Care of Mental Health Generation Z of Melanesia Race in Indonesia"	This research aims to describe the maintenance of mental health in Generation Z of the Melanesian Race in	Study This uses a design, descriptive quantitative approach, and a survey . A purposive sampling technique was used to select	The instruments used is the " Mindful Self-Care Scale " questionnaire, which consists of 24 questions with six indicators : 1. maintenance physique , 2. Connection	Average maintenance self The mental health of Generation Z of the Melanesian race is 82.13 (score maximum 120), with maintenance physique as the indicator highest (17.56 ± 4.986). Research shows that Generation

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			Indonesia.	169 respondents, Generation Z, from the Melanesian race who live in Papua, East Nusa Tenggara, and Maluku.	supportive, 3. Awareness full, 4. Twelve love self 5. Objective life, 6. relaxation, and structure support. The validity instrument was tested with an I-CVI value = 0.82, and its reliability was measured by Cronbach's alpha of 0.932.	Z is more likely to care about physical and behavioral health, which supports their mental health. Indicators with variance the smallest variance are structure support (8.9 ± 2.234
7.	Hema Malini, Sonia Zhahara, Devia Putri Lenggogeni, and Zifriyanthi Miranda Putri, 2022. (Malini et al., 2022)	" Self-Care and Quality of Life of People with Type 2 Diabetes during the COVID-19: Cross-Sectional Study "	Study This aims to determine the connection between management maintenance self (self-care management) with quality of life in type 2 diabetes mellitus patients during the COVID-19 pandemic.	Study This uses a quantitative method with a cross-sectional design. A sample of as many as 89 respondents was chosen using a total sampling technique at the center's health community. Data was collected using a questionnaire that was validated and analyzed using a Pearson correlation test.	Summary of Diabetes Self-Care Activities (SDSCA): Measuring behavior maintenance self diabetes patients 1. Diet, 2. A physical activity, 3. Treatment, 4. Blood sugar check, and 5. care.	A study finds that there is a significant connection between management maintenance self and quality of life in type 2 diabetes patients (p = 0.000, r = 0.438, direction positive). Aspect management maintenance self is the highest, with compliance treatment (mean: 6.82 days/week), whereas blood sugar monitoring is the lowest (mean: 1.15 days/week). In the dimensions of quality of life, the highest score is in the psychological domain (mean: 53.02), while the lowest is in the social domain (mean: 42.71). This shows that the more Good management and maintenance, the higher the quality of life for patients.
8.	Pandan Enggarwati, Debie Dahlia, dan Riri Maria, 2022.(Enggarwati et al., 2022)	"Social support as a mediator between depressive symptoms and self-care activities in adult patients with type 2 diabetes mellitus."	This study aims to determine the effect of mediation on social support in the connection between depressive symptoms, depression, and self-maintenance in patients with type 2 diabetes.	Study This uses a cross-sectional design with a consecutive sampling technique. Data was collected from 94 respondents in East Jakarta in May–June 2020 using an online questionnaire.	1. Center for Epidemiologic Studies-Depression Scale (CES-D) for measuring depressive symptoms depression. 2. Summary of Diabetes Self-Care Activities (SDSCA) for self-care activities. 3. Duke-UNC Functional Social Support Questionnaire	Symptom depression has a significant negative impact on activity maintenance in patients with type 2 diabetes, while social support mediates this connection, which reduces the impact of depression. Complications of diabetes are a factor, the biggest one that lowers activity maintenance, self-care. Support social proven increase activity maintenance yourself

444

No	Author and Year	Title Study	Objective	Research methods	Instrument	Results
					(DUFSSQ) for social support.	and help reduce the effects of negative depression .
9.	Tentry Fuji Purwanti dan Katmini, 2023.(Purwanti & Katmini, 2023)	"The Impact of Telenursing on Self-Care Management and Quality of Life for Chronic Disease Management Program (PROLANIS) Members with Type 2 Diabetes Mellitus at the Garuda Health Center in Bandung City, Indonesia, in 2022"	This study aims to analyze the influence of telenursing on management, maintenance, self-care, and quality of life of PROLANIS patients with type 2 diabetes mellitus at Garuda Health Center, Bandung.	Study This use design is pre-experimental with one-group pretest-posttest. The sample consists of 45 selected respondents through an accidental sampling technique.	Summary of Diabetes Self-Care Activities (SDSCA): For measuring activity maintenance self, includes 1. Dietary habit, 2. Sport, 3. Blood sugar monitoring, 4. Use a drug, 5. care, and 6. Smoking status.	Studies show significant improvement in management, maintenance, self-care, and quality of life after telenursing intervention (p value = 0.001). Respondents with a quality of life of Good increase from 35.5% to 57.7%, while those who have maintenance self-care of Good increase from 17.7% to 48.8%. Telenursing has been proven effective for increasing the ability to manage self and quality of life for patients with diabetes
10.	Arif Setyo Upoyo, Yunita Sari, Agis Taufik, Akhyarul Anam, dan Ani Kuswati, 2024.(Upoyo et al., 2024)	"The Effect of Online Group Education on Promoting Knowledge, Motivation, Self-Efficacy, Self-Care Behaviors, and Preventing Uncontrolled Blood Pressure in Hypertensive Patients: A Quasi-Experiment Study."	Study This aims to examine the known effect of education in online groups against knowledge, motivation, efficacy, self-behavior maintenance, self-control, and blood pressure control in patients with hypertension.	Study. This method is quasi-experimental, with a pretest and posttest group control design. A total of 96 patients with hypertension were divided into an intervention group (48 participants) and a control group (48 participants).	Instruments used : High Blood Pressure Self-Care Profile (HBP-SCP) For 1. Motivation, 2. Efficacy self, and Behavior maintenance self.	1. There is a significant decline in blood pressure systolic (p < 0.001) and diastolic (p = 0.001) in the intervention group. 2. Improvement was significant in knowledge (p < 0.001), motivation (p < 0.001), efficacy self (p < 0.001), and behavior maintenance self (p < 0.001) in the group intervention. Group online education is effective in increasing control pressure, blood, and behavior maintenance in patients with hypertension.

DISCUSSION
Article review results
Theme 1: Use Instrument Self-Care in Indonesia

Ten articles discuss various types of instrument self-care as well as their application in the context of chronic disease in Indonesia. Studies show that instrument self-care is used to evaluate behavior maintenance in patients with conditions such as diabetes mellitus, hypertension, and heart failure. For supporting patients' quality of life, allowing a comprehensive assessment of self-maintenance dimensions, including maintenance, management, trust self, and quality of life of patients. Validity and adaptation of local instruments. This helps ensure relevance and effectiveness in support of chronic disease management in Indonesia. Research shows that instruments play an important role in diagnosing patients and supporting the development of interventions based on evidence.

(Joeliantina et al., 2024) , (Eldawati et al., 2022) , (Putri et al., 2021) , (Alhazmy et al., 2024) , (Sya'diyah et al., 2024) , (Malini et al., 2022) , (Purwanti & Katmini, 2023) .

Theme 2: Domains in Instruments Self-Care in Indonesia
The self-care domain in the instruments used can be grouped into 14 categories that reflect aspects that are important for self-maintenance. First, management of foot care appears as the main domain, including maintenance, monitoring, and management of the feet (Joeliantina et al., 2024). Furthermore, maintenance and management of self-general includes routine daily management of self as a whole, and behavior maintenance of self. Physical activity and sports are also important aspects, with domains like exercise and movement body (Purwanti & Katmini, 2023) . In line with that , management nutrition and pattern eating , which emphasizes diet regulation and controlling food intake (Putri et al., 2021) , (Alhazmy et al., 2024) , (Sya'diyah et al., 2024) , (Purwanti & Katmini, 2023) .

Monitoring domain health , including monitoring blood pressure and blood sugar, has become an essential component (Putri et al., 2021) , (Alhazmy et al., 2024) , (Purwanti & Katmini, 2023) . Likewise, with compliance to treatment, such as the consumption of medication and regularity in therapy. From the psychological side, management of stress and regulation of emotions, including mindfulness, relaxation, and self-compassion (Putri et al., 2021) , (Behuku et al., 2023) . In addition to that, support social and relational elements become significant in self-care, including connection, supportive and perceptive social support (Behuku et al., 2023) , (Enggarwati et al., 2022) .

Efficacy self and confidence self, namely to what extent the individual believes in their ability as a nurse (Khotibul Umam et al., 2023) , (Upoyo et al., 2024) . Simultaneously with that, internal motivation is the main mover of self-care behavior (Upoyo et al., 2024) . A number of the instrument also assesses psychological symptoms like depression and stress using the CES-D scale. While that, compliance with service health, for example, control routine in Health facilities (Alhazmy et al., 2024) . There are also domains that are included to in category behavior maintenance others, such as cleanliness self and effort prevention complications (Alhazmy et al., 2024) , (Sya'diyah et al., 2024) . Lastly, smoking status is an indicator of behavioral risk (Purwanti & Katmini, 2023) .

Theme 3: Research Methods Article
Method research used in various article covers diverse approaches in accordance with objective research. Cross-sectional design is often used to measure the connection between variables at one point in time, giving a description of behavior maintenance and the factors that influence it. In addition to that, some studies use a quasi-experimental method with a pre-test and post-test design, which allows researchers to evaluate the impact of an intervention, such as education or technology based on WhatsApp, on changing the behavior of maintaining self for patients.

The descriptive quantitative approach is also used in a number of studies to describe patterns or trends in behavior maintenance in specific populations, such as groups of a certain age or with specific health conditions. Some studies utilise analysis path analysis to understand the connection, cause, and effect between variables, for example, the connection between social support, symptoms of depression, and care activities for oneself. Besides that, some studies merge methods, which integrate quantitative and qualitative data to give more insight into comprehensive behavior maintenance. Data collection was carried out through a valid and reliable questionnaire, both online and offline, with techniques such as purposive sampling, convenience sampling, and random sampling. Data analysis using various statistical tests , such as Partial Least Squares (PLS), correlation test, and significance test, among others, to produce meaningful findings.

CONCLUSION

Behavior maintenance self-care is an important component in the management of sustainable health. Studies show that various instruments for self-care are widely used in Indonesia to evaluate aspects of self-maintenance, which reflects the needs of patients in everyday life. Instruments that accommodate various domains that are interconnected, related to good physical, psychological, social, and behavioral aspects, and show conformity with the cultural context as well as local nursing practice. Findings confirm that interventions that take into account education, support social, and trust self can, in a way, significantly increase compliance, quality of life, and welfare of patients. Therefore, understanding comprehensive dimensions of self-care is very crucial in support of adaptive, effective, and patient-centered nursing.

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