COMPREHENSIVE HEALTH CARE e-ISSN : 2722-1563 p-ISSN : 2580-7137

Nursamsi., Said, S., Syam,Y., Hamdana., Alfira,N., Siringoringo,E
Comprehensive Health Care, 6 (2022) 40-45
https://ojs.stikespanritahusada.ac.id/index.php/chc/Index

Evaluation Of Self-Care Management In Tuberculosis Patients: A Literature Review

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Article Info
Article History:
Received : 23 June 2022
Revised : 4 July 2022
Accepted : 21 August 2022

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DOI :
https://doi.org/10.37362/jch.v6i2.889

P- ISSN : 2722-1563
E -ISSN : 2580-7137

ABSTRACT

Background :Self-care management is a response to signs and symptoms that occur in a person, so it always involves evaluating changes both physically and emotionally. These changes are caused by reactions to illness, medication, or the environment. Special care is taken for signs and symptoms of chronic disease. *Objective* : It is hoped that this article can evaluate the factors of self care management in patients with chronic diseases, see the effect of self care management on treatment, healing and prevention of relapse. *Methods* : search through PubMed, Google Scholar, ProQuest, and Wiley with the Critical Appraisal Skills Program/CASP guidelines. *Result* : 5 articles were searched in this discussion. In this article 12 indicators of self-care management are evaluated which are frequently used as instruments, extracted and tabulated. These factors include communication with staff, perceptions of self-care, level of trust, social support, coping behaviors, living habits, access to health services, nutrition and diet, medications, physical activity, and awareness to seek treatment. *Conclusion* : Appropriate and relevant evaluation of self-management skills and abilities is essential not only in gathering baseline data but also in testing interventions. The results of this study provide researchers with a new and better understanding and a range of choices for self-care.

Keywords: Self-care management; Chronic disease, Tuberculosis

INTRODUCTION

The increase in morbidity in tuberculosis is very significant, as evidenced by WHO data showing that tuberculosis sufferers are estimated to have reached one third of the world's population and 35 million of them will die in the 2000-2010 period [1] . Globally, the prevalence of pulmonary tuberculosis is still very high, namely 245 per 100,000 population in 2019 in ASEAN countries while in Indonesia it reaches 321 per 100,000 population. So that pulmonary tuberculosis was declared a global emergency with 6.6 million people positive for pulmonary tuberculosis and more than 6.3 million of whom were new cases and relapse (MDR)/Multi-Drugs Resistant. MDR is caused by self-care with non-adherence to treatment so that it has a long time to recover.

Poor self-care management is the key to the increase in MDR cases lungs. Self-care is a process by which patients can maintain and improve their health [2] . There are several elements of self-care that can be carried out independently by patients including awareness of seeking treatment, medication adherence, cognitive behavior, smoking cessation, activity and exercise, nutrition/diet, lifestyle, perception of self-care, forgetfulness and access to seeking treatment. However, studies developed in foreign countries only look at adherence to medication without looking at self-care from other elements.

Many studies on the development of self-care scales have been developed to assess treatment adherence in improving the quality of life of patients with pulmonary tuberculosis. The importance of adherence in treatment greatly affects dependency on care which cannot be separated from family support, nutrition, knowledge, perceptions, and health workers, in this case nurses [3 4 5.] The main task of nurses is to improve patient self-care, especially patients with chronic diseases. Patients with pulmonary tuberculosis generally experience self-care deficits including the inability to meet basic needs such as dressing, elimination, eating, and barriers to care in maintaining the home [6] . However, nurses still have difficulty in measuring the level of self-care in tuberculosis patients, so this study aims to develop a self-care scale in pulmonary tuberculosis patients.

METHODS

Design Study

This is a systematic circulation with a summary of the main findings on program management interventions self on patients with COPD . This review is based on PRISMA guidelines on writing systematic review *reports* . The authors used the PRISMA guidelines for protocol refinement and study selection. The PRISMA Guidelines are an itemized evidence-based instrument for reporting in systematic assessments and meta-analyses. The aim is to help authors improve the quality of systematic violation reporting which consists of a 30 checklist item and goes through four phases [10] .

Criteria inclusion

In this systematic review, the author determines the criteria for the study to be reviewed, namely: a). *Random control trial* (RCT), b). Written in English , c). Patient type adult 18 ≥ 60 years , . d). There are factors and effects of self-care management.

Information Search

The process used to carry out a systematic review is for the reviewer to search for several published research journal articles through electronic databases. The electronic databases used include: PubMed, PreQuest, and Web Science Direct with a maximum span of the last 10 years.

Search Strategy

The search strategy used in this systematic review is to use several keywords in searches in several databases. Some initial searches were performed to identify terms that include shapes factors about management care self TB patients (tuberculosis lungs) . However, large variations were found in the keywords in each database to describe the results found. Because of these various terms, to ensure that all related studies are retrieved, the authors carry out a broader search term using the auxiliary rich *And, Or and Not* . The keywords included in the search are , *self care* management , chronic disease, pulmonary tuberculosis.

Selection Studies

The process of selecting the reviewed studies consists of 6 steps as shown in diagram 1. From all the search databases obtained, they are combined and then identified duplicates from the same study will be deleted (steps 1 & 2). For step 3 the author conducts *title* and abstract screening where studies that match the inclusion criteria are included while those that do not fit the criteria are excluded. Furthermore, in step 4, feasibility assistance is carried out on the studies obtained where studies that have full text and are free are included while studies that do not has full text, is in non-English language and is paid for it will be excluded. In step 5, the study was synthesized again by looking at the research design, namely quantitative research with intervention research designs instrument , and study with non-intervention design, qualitative study with management care self . And in the end the studies that have been input will then be synthesized.

Assessment Quality

This systematic review uses guidelines to analyze reporting quality among the selected studies. The guideline used is the Critical Appraisal Skills Program tools / CASP. The CASP instrument includes a Randomized Controlled Trial Checklist of 11 questions covering Questions 1–6 related to the internal validity of the study, 7–8 related to the validity of the results and questions 9-11 related to relevance to practice (external

validity). So it can be said that of the 9 studies that In this review, 2 of them have high quality and 7 of them have medium quality. In addition, guidelines are also used to analyze reporting quality by using Quality Assessment to assess the risk of bias from selected studies where the assessment for the risk of bias is low, res i ko bias is high and the risk of bias is unclear.

The title and abstract were published by the reviewer, any discrepancies were resolved in context by the second reviewer. Abstract articles deemed relevant based on the title examined, full text articles that met the requirements and whose eligibility was uncertain were retrieved and reviewed by reviewers 1 and 2. After reviewing the full text articles if eligibility was unclear or there was missing information, the authors were contacted via email.

Data extracted by the researcher, disagreements were resolved by using context by the second reviewer (Moher., 2009) . Where data extraction is unclear or more detail is needed, authors research was contacted via email for completion. one study included were co-authored by the two authors of this systematic awareness, therefore two external independent reviewers completed data extraction and risk of assessment bias a

RESULTS

Procedure search

We identified as many 182 articles from search through (PubMed, Google scholar , ProQuest , and wiley) with the search strategy presented in Figure 1. From the literature the have read the article that is not in accordance or relevant by systematic cleanup of desired/duplicate articles (n= 81) . we are independent To do evaluation from criteria inclusive and exclusion (as many as 77 articles issued because no Fulfill criteria like not RCTs, or a reasonable evaluation process). As much 7 selected articles _ and have criteria eligibility criteria (17 excluded return because article this no worthy and no in accordance with appraisal). Study done in various country namely Ghana, China, Jordan , and St. Louis, M.O. The research method used was a randomized trial (RCT) (n=7) . These research articles were published within a 10 year span final , all samples in this study were adult patients aged 18-60 years . Part big article report about disease chronic by using self-care instruments with certain factors.

Influencing factors management care self

From the results research conducted _ by 7 articles selected regarding maintenance management self with disease chronic stress Several factors can used in develop

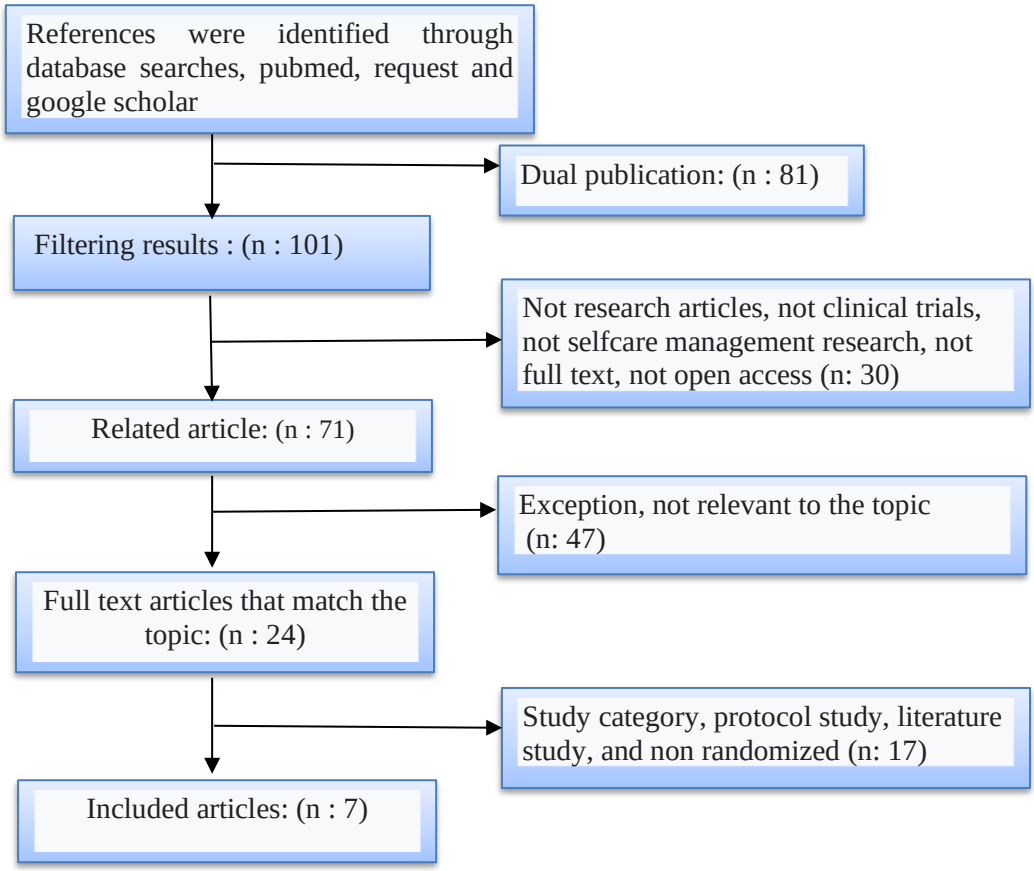
maintenance management instruments self on disease tuberculosis . factors the including : management drink medicine , awareness self look for treatment , habit smoking , exercise and activity , fulfillment nutrition, prevention contagion , insanity functional and cognitive , access / awareness look for care , motivation / support family.

Effect management care self

efficacy Self, Self-efficacy is wrong one effect from self- management two of the 7 selected articles (28.5 %). From the second study the explain that self-efficacy and management care self is important thing _ for from the treatment program disease chronic mainly diabetes . We hope handling with using maintenance tools self this also can applied on care tuberculosis lungs .

behavior health / attitude, whole article used to in all instrument good for intervention nor in tool development for management care self . behavior health / attitude included _ inside it is activity physique like exercise / activity , monitoring and obedience to recommendation doctor . Among them research conducted _ by [27] [28] in evaluate behavior health / attitude for develop instrument management self in obedience drink drug patient tuberculosis lungs .

Figure 1: PRISMA Flow Diagram



Author / Country	Title/ Title	Study design	Research purposes	Methods / Interventions	Self-care instruments/management	Results
(Yin et al., 2012) / China	*Development and validation of medication adherence scale*	Quantitative; validity test with Cronbach Alpha	improving and validating the TB treatment adherence scale (TBMAS)	Study Protocol and Tuberculosis Instrument Development and Validation Questionnaire (TBMAS)	TBMAS validity and reliability	The final result resulted in 30 items included in the TBMAS instrument after exploratory factor analysis. The Crombach alpha test results were 0.87 for all TBMAS, and 0.88, 0.78, 0.73, 0.67, 0.78, 0.51, 0.52 for 9 factors. And the retest reliability test with a result of 0.83 so that it shows a very strong defense with a result of 0.85
(Beckerle & Lavin, 2013) / St. Louis, M.O	*Association of Self-Efficacy and Self-Care With Glycemic Control in Diabetes*	Quantitative Retrospective Distribution	To test how well self-care and self-efficacy measures predict A1C scores	This study used a retrospective cohort design to evaluate the predictive relationship of self-efficacy and self-care behavior at the A1C level. After Institutional Review Board approval was obtained, 60 medical records accessed of persons ≥ 18 years of age with type 1 or type 2 diabetes who were seen sequentially in primary care practices located in urban areas.	Self-Care Inventory (SCI)	The results suggest that the two items can serve as proxies for self-efficacy in general among people with diabetes. The first (item 3) is: Are you sure you can choose the right food to eat when you are hungry? Although the association with A1c was not statistically significant, the responses were close to significance ($P < 0.06$). The second item (item 4) is: How confident do you feel that you can exercise 15-30 minutes, 4-5 times per week? The relationship associated with A1C was statistically significant ($P < 0.016$).
(Mogre, Abanga, Tzelepis, Johnson, & Paul, 2017) / *Ghana*	*Compliance and factors associated with self-care behavior in type 2 diabetes patient in Ghana*	cross-cross-sectional survey	Describe: 1. Ghanaian type 2 diabetes patients' adherence to following self-care behaviors: diet, exercise, SMBG and care foot . 2. Relationship between adherence to self-care behavior and patients' demographic characteristics (including age, sex, education, and religion) 3. Relationship between adherence to	Participants in this cross-sectional study were 2 patients with type 2 diabetes seek treatment from an outpatient diabetes clinic from a hospital Tamale Teaching, West Tamale and Central Hospital are located at Tamale Metropolis Ghana	SNBG self-care adherence	The results showed that the number of years of education played a role important in diabetes self-care behaviors such as diet, exercise and foot care. As well as the results of crombach alpha with a value of $r = 0.198$, p 0.007)

			self-care behavior and Weight is measured by body mass index (BMI) and circumference waist .			
(Linn, Azzolin, & Souza, 2016) / *Brazil*	*Relationship between self-care and hospital readmission of patients with heart failure*	Quantitative	to assess the relationship between hospital self-care and readmission rates of patients with heart failure (ADHF) and test the applicability of the two tools self-care assessment	A longitudinal, quantitative, retrospective study developed in reference cardiology hospital in southern Brazil. 82 were patients included with Media Edad 61 .85 ± 12.33 years, male 57.3%. The media de la read the self-care evaluation meeting el scale of cardiac insufficiency self-care Conducta European scale y el de la Escala on personal care for patients with heart failure con fue is not satisfactory	Self-Care Scale for Heart Failure Patients, Porto Alegre, Rio Grande do Sul, Brazil, 2012	That's to verify each average of 2.57 ± 1.66 care hospitalizations per year in the last decompensated HF. There is a correlation between self-care scores and the number of hospitalizations for decompensated heart failure. education and age associated with self-care of patients with HF
(Guo et al., 2017) China	*Rating from Self Care Agent Scale–Revision (ASAS-R): Reliability and Validity Among the Old Chinese*	Cross-sectional	1. To translate ASAS-R into Chinese. 2. To assess the suspension of the Chinese version of ASAS-R. 3. To test the construct validity of the Chinese version of ASAS-R. **method**	Questionnaire research included demographic variables such as age, gender, height, weight body weight, body mass index (BMI), book status, education level, drinking habits, smoking habits, health insurance, and chronic disease, contact information, and two scales Described below: ASAS-R, which was translated in this study into Chinese, and ESCA, which is used for concurrent validation. ASAS-R. The ASAS-R is a 15-item, three-factor scale, with Factor 1 (having a power for treatment self-care, six items), Factor 2	ASAS_R revised scale	ASAS-R-CHI's Cronbach's alpha was 0.79, and neither item was deleted will increase Cronbach's entire alpha for the scale. item-to-total correlation ranging from r = . 41 and r = . 74, with a mean correlation of r = . 62 (Table 1). Like interitem ranges from r = . 30 for r = . 71. tests repeat the ICC correlation of the total ASAS-R-CHI score was 0.95 (95% CI = [0.92, 0.96]; thing < . 01).

				(develop capacities for self-care, five items), and Factor 3 (lack of energy for self-care, four items; Sousa et al.		
(Wang et al., 2015) Shanghai, China	*Development and testing of a self-management scale for PD patients*	Validity and Reliability Test	to develop a comprehensive and localized self-management scale with good judgment and validity for assessing the effectiveness of self-managed PD patients and interventions	Convenience sampling method was used to select 313 PD patients from seven first-class hospitals in the Jiangsu-Zhejiang-Shanghai area from October 2012 to April 2013.	(SCAD) Self-Care for Adults on Dialysis Devices	Demand analysis: the internal consistency coefficient (cronbach alpha) of the total scale is 0.926. The internal consistency coefficient of the common factors falls in the range of 0.650 – 0.908 and the mid-split coefficient of the total scale is 0.960 with each factor falling in values of 0.640-0.925. Reliability analysis: the test that was retested from the total scale was $r = 0.937$, with each factor located at a value of 0.782-0.837 with a p value <0.001 so it was stated that the scale had a good ending over time.
(Al-Khawaldeh, Al-Hassan, & Froelicher, 2012) / Jordan	Patients with type 2 DM aged ≥ 25 years. Sample (n=223)	Validity and Reliability Test	DSM behavioral characteristics and management power in controlling the effects of glycemic as well as assisting nurses in planning and developing interventions and improving self-care education programs	The questionnaire was developed by researchers based on a literature review. Then conducted interviews and tested the validity and reliability.	DMSES scale	The results of this study show that the power of self-care and self-management behavior can control the increase in glycemic from the domain of diet and use of insulin.

DISCUSSION

Of all related research , steps as well as Interventions appear to vary , however _ information about management care self at each article have similarity in a manner general . Nursing self is an internal process taking natural decision _ in handle good in prevention nor management in disease chronic in 3 elements important care self (monitoring , care and management care self on patient) [29] .

Self-care is a human-regulated need that individuals must be able to consider and carry out self-care or carry out care to maintain life, health, development and well-being [30] . So that has many study good intervention clinical nor maintenance management instrument development self for diseases chronic . kindly general , we can conclude that there is a number of factor management care described self among them that is management drink medicine , awareness look for treatment , habit smoking , activity physique and practice , fulfillment nutrition , protection protection , ability functional and cognitive , access / awareness look for treatment , motivation / support family .

Destination and step - step intervention of 7 management programs care self in article selected research _ rather different , however effect from results management care self very general and abstract . Self-efficacy and health status and quality life is the effects described in a number of article the . Hope from self-efficacy is with see ability somebody in To do specific behavior , while _ expectation convincing results _ about is behavior certain influence results other behavior [31] . Enhancement efficacy self is things that play a role important in realize destination from management self and also is factor important for those who want have will for life healthy and guard health [31] that theory efficacy self lead on ability To do behavior Specific depends on specific reinforcement _ through Support social , recorded that that person has ability tall capable pass challenge and existing threats _ on himself . Besides that is , the research that was done by [32] ; Yin et al., 2012 ; Mogre, Abanga, Tzelepis, Johnson, & Paul, 2017) have show enough *internal consistency* tall *reliability testretest* high , *validity* with *alpha cronbach* high .

maintenance management self expected capable push somebody in increase style life healthy as well as keep it steady stable so health status and quality life is very effect _ important for management self . Occurrence / attitude change behavior health could prevented in various effort like To do activity and practice , communicate in a manner active with doctor / symptoms management and obedience against the doctor 's advice especially in treatment [27] . Health behavior / attitude could effect period long from

management care self patient so that they capable show ability they for manage condition each .

CONCLUSION

We To do review retrospective of the indicators being evaluated from scale results care self . The indicators mentioned in review this very general and important for management care self patient tuberculosis . Next a number of scale that has apply general has depicted on part each . Hopefully application Systematics this will useful in the future in carry out maintenance management programs self .

Saying accept writer say as high as possible to Allah SWT who has give enjoyment so that could help writer complete writing this . Not forget to lecturer always mentor _ give time and knowledge and whole friends in the Faculty of Nursing Masters University Always Hasanuddin _ give Support as well as family beloved on all support . Besides that saying accept love we present this to STIKES Panrita Husada Bulukumba .

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