PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

Title (Provisional)

SELF-CARE PRACTICE AND ASSOCIATED FACTORS AMONG ADULT ASTHMATIC PATIENTS ON FOLLOW UP-CARE AT PUBLIC HOSPITALS IN EAST WALLAGA ZONE, WEST ETHIOPIA: A CROSS-SECTIONAL STUDY, 2025

Authors

Geneti, Demiso; Bayisa, Lammi; Mosisa, Getu

VERSION 1 - REVIEW

Reviewer 1

Name Yadesa, Girma

Affiliation Nursing department, college of medicine and health

science, Diredawa university, Nursing

Date 21-Sep-2024

COI None

The paper is clear, concise and engaging except my concerns attached below as author comments. The authors use precise language and avoid jargon, making the paper accessible to a wide audience. Their choice of research method is appropriate and data analysis is rigorous. The result of the paper is presented by using different data presenting method. Generally the paper is well done. Thank you

Thank you for allowing me to review this manuscript. Overall the manuscript is very good but still I have some concerns and suggestions as sated below.

TITLE: - The title is clear, precise and specific or generally researchable. However, why you missed private hospitals in east wallaga zone where most of the asthmatic patients are getting care?. The title revealed as the study conducted in 2024. However, in your document the study was conducted in 2023. Additionally, different concept analysis done at different time revealed that **self-care** and **self-management** are interchangeably used. Why you select self-care over self-management especially for asthmatic patients?

ABSTRACT: Well done. But it is better if you define asthma self-care rather than self-care as a whole especially in background of your abstract. How you use systematic random sampling without sample frame to select your study participants? Because ,most of the time medication refilling for asthmatic patients is every 2-3 months especially after six month of starting follow-up care and to use systematic random sampling you have to have sample frame. It is also better if you add ways of presenting and reporting your data or finding. Is your finding is high or low? What is the implication of your finding? Why you recommend health education? Is health education affects self-care practice in your study? Please try to recommend only what you identify in your study.

LIMITATION AND STRENGTH

- ✓ In this part you mentioned "cause and effect" as strength of your study. How cross-sectional study used to compare cause and effect?
- ✓ You mentioned being multicenter is the strength. What is the difference between multisite and multi-center?

INTRODUCTION

✓ Well written. You tried to show the gap, importance, status, and related factors of asthma self-care. But still your introduction part deviated to prevalence of asthma rather than self-care of asthma.

METHODS

- ❖ Generally it is well done. But the following are my concern regarding your method
 - ✓ From the total asthmatic patients having follow-up care in each hospital, how many of them were adults? Make it clear.
 - ✓ Do you think that asthma self-care is affected by the level of hospitals? Eg. Primary, General and specialized
 - ✓ When and how do you get participants for data collection? Make it clear
 - ✓ Alcohol drinking, smoking and exercise need operational definitions

RESULT

- ❖ Generally it is well done
 - ✓ What does you mean by psychology of study participants (**Table 3**). Try to correct it

Discussion

Well discussed

✓ While you compare and contrast your study to other studies, the justifications that you state as "due to difference in study settings, sample size, and sampling technique" is not clear. Do you mean that this study has inadequate sample size, wrong sampling technique and inappropriate setting??? Make it clear for readers.

Conclusion and recommendation

- ✓ What does you mean by considerable proportion asthmatic patients? try to make it clear for your reader
- ✓ How you recommend increment of patient's knowledge and attitude.

 Recommendation should be forwarded for concerned body depending on your findings. See it again.
- Generally the paper is well written and contributes body of knowledge for the profession.

Reviewer 2

Name Menezes, Marcelo

Affiliation USP, Internal Medicine

Date 17-Oct-2024

COI None

SELF-CARE PRACTICE AND ASSOCIATED FACTORS AMONG ADULT ASTHMATIC PATIENTS ON FOLLOW UP-CARE AT PUBLIC HOSPITALS IN EAST WALLAGA ZONE, WEST ETHIOPIA, 2024

GENERAL COMMENTS

The subject is very interesting; in my opinion, the data are good, and I believe the paper should be submitted elsewhere after a thorough review by the authors. I sincerely hope my comments help.

The text has very severe language errors that preclude the understanding of many of its sentences. If the authors wish to re-submit it, I strongly recommend a thorough language review.

There are numerous excerpts which are almost or literally the same as the ones in the paper published by Abegaz et al. in 2021, including some language errors. Even tables and figures are very similar, apart from the numbers. Nevertheless, the authors of the two papers are not the same. I understand that the methods are very similar, but it is not reasonable to

have such extensive likeness between two independent papers. In my opinion, the text should be rewritten from scratch, since data are very good.

The section "strengths and limitations of this study" does not inform what it should. It mostly summarizes some aspects of the methods. The first item is the exception: being a multicentered large scale study is indeed a strength.

INTRODUCTION:

The authors do not make clear what are self-care practices. The reader may assume that it comprises a multitude of habits and actions such as healthy nutrition, refraining from smoke etc. "Self-care practice" is not a usual name in asthma literature and it should be better defined. "Self-management plan" or "health literacy" are usual and clearly understood, and I believe they are part of "self-care practices". Nevertheless, the authors fail to explain exactly what it means, which would be crucial. In some portions of the text, it seems that "Self-care practice" and "Self management" are synonymous. Take the text on lines 36-39, in which the authors use "self-care practice" but refer to a paper on self management. I would advise that, if self-care pactice is the same as self-care management, involving action plans etc the authors should make it clear. Unfortunately, it is not in the current version.

The authors fail to convince the reader that self-care practice is a valuable outcome in asthma studies. One may think of it as another independent variable when assessing more relevant outcomes such as hospitalizations, death etc. If it is indeed a good outcome, the authors should provide information that at least hints at that. What is the relevance of self-care practice in asthma management? Does it influence asthma control, deaths, hospitalizations? Why was it chosen as the main outcome?

"Patients' ignorance, misinformation, or lack of understanding about asthma self-care is the main cause of the worldwide challenge in handling asthma" – I do not believe this is a sound statement, especially since the authors pinpoint one issue, claim that it is the culprit worldwide based on a reference that depicts self-care only in Bangladesh. If the authors have other sources to make such a statement, they must be used. The "worldwide challenge in handling asthma" is multifarious.

The authors state that "In Ethiopia, the impact of poor self-care practice among adult asthmatic patients were frequent hospitals visits, and admission to wards, as well as emotional, physical and affecting activities of daily life of patients." There is no reference at this point, and reference 13 (Abegaz, 2021), which pertains to the following sentence, does not provide substance for a cause-effect link.

METHODS

Overall, the Methods section is not very clear

"Finally, every two intervals patient was interviewed (Fig 1)" – Figure 1 does not depict what the authors state on this section. Indeed, I strongly recommend that the authors provide a

diagram to help the reader understand the methodology and findings. Further: Fig. 1should be mentioned in the Results section.

The subsections should be in a different order than the current one, which is very difficult to follow.

"Self-care practices refers to actions or tasks that people take on their own behalf to promote self-care and lessen asthma attacks by using eight items and 32 scores (15)" is an example of a sentence which the reader does not understand: what does "eight items and 32 scores" refer to? Is it a description of the tool used to assess self-care practices? The authors should provide the scores they used as supplemental material.

RESULTS

This section is the clearest of all.

DISCUSSION

Due to issues underscored before, I had some difficulty in drawing conclusions from the results. For instance: "The asthmatic patients who didn't smoke cigarettes were 6.67 times more likely to have good asthma self-care practices when compared to those asthmatic patients who did smoke cigarettes". Why is abstaining from smoking not a self-care practice?

Nevertheless, I think the discussion provides some reasonable statements when it assumes that the study is a snapshot of asthma care in East Wallaga Zone.

VERSION 1 - AUTHOR RESPONSE

Reviewer-1

Thank you for your appreciation and suggestions. We addressed your valuable comments and suggestions accordingly.

Use precise language and avoid jargon, making the paper accessible to a wide audience.

• We rigorously revised the editorial and grammatical issues throughout the document.

Reviewer -2

Thank you for your appreciation and suggestions. We addressed your valuable comments and suggestions accordingly.

Language errors

Thank you

• We rigorously revised the editorial and grammatical issues throughout the document.

Literally the same as the ones in the paper published by Abegaz et al. in 2021.

Thank you.

• Even if the title and some of the literatures are similar to each other due to citations of similar references, they have different context and content. **Examples**

 The current study has new variables like patient attitude towards asthmatic patients, study setting includes primary, general, and specialized hospitals, sample size, and demographic characteristics than the previous study.

The section on "strengths and limitations of this study" does not inform what it should

Thank you for your constructive comment.

• Strengths and limitations of this study are already identified and included in the body of the document.

Introduction

Thank you for reminding us to revise the introduction part.

The authors do not make clear what are self-care practices.

Self-care practices refer to actions, habits, and lifestyle choices that help people promote and maintain their health, prevent disease, and cope with illness. Self-care practice is an action or activity that an individual with asthma is performing and initiating on a daily basis to maintain health, promote health, prevent disease, manage the symptom, and cope with chronic illness with or without health care support. Asthma self-care practices are important for asthma management because they can improve knowledge, reduce hospitalizations, improve quality of life, prevent exacerbations, and be cost-effective.

Asthma self-care is a set of actions that people with asthma can take to manage their condition, reduce symptoms, and improve their quality of life, which includes changing their lifestyle, learning about asthma, and taking prescribed medication.

Self-care has emerged as a multifaceted component in the management of chronic illnesses because it is significantly associated with a spectrum of positive outcomes in these patients.

According to the Middle Range Theory of Self-Care Practice of Chronic Illness, it is defined as a group of behaviors focusing on the promotion of good health and treatment adherence (self-care maintenance), attentiveness to body and symptom recognition (self-care monitoring), and response to signs and symptoms when they occur (self-care management).

Identify self-care from self-management.

• **Self-care and self-management** are valuable in managing long-term conditions by addressing the care needs of elder people, so different scholars used interchangeable.

Self-care: A broad concept that includes activities to care for your mental, emotional, physical, social, behavioral, practical, and psychological needs.

- Self-care can include activities like rest, diet, and exercise. It can also include financial self-care, such as setting a budget and identifying financial goals.
- Self-care concerns the attitudes and decisions taken independently of the interaction with a health professional.

Self-management: is a subcategory that employs techniques and abilities to guide activities towards specific goals. Self-management can be used to help people make decisions about their health and maintain a healthy life.

For example, self-management can also be used in the context of a medical condition, where patients and health professionals work together to manage chronic care.

- Self-management can be mentioned as a self-care subcategory, and its particularity is the collaborative roles played by patients and health professionals, together, for better chronic care.
- So why is author attractive to self-care practice than self-management?

Self-care practice is a valuable outcome in asthma studies?

Thank you.

The author mentioned the self-care practice outcome of this study because,

Self-care practice is affected by different factors like knowledge, practice, sociodemographic characteristics, triggering factors, clinical setting, social support,

medication adherence, patient attitude, behavioral factors, and

So, self-care practice is the main outcome of this study.

"In Ethiopia, the impact of poor self-care practice... paragraph who had no reference?

Thank you for your valuable comment.

• The author tried to revise it and included it in the body of the document.

Method

Why does Figure 1 not depict what the authors state in this section?

Thank you for your constructive comment.

• The author has figure 1 previously in the mother document, and we tried to incorporate it in the body of the document.

• How the diagram helps the reader to easily understand the methodology and findings

of the study

The subsections should be in a different order than the current one, which is very difficult

to follow.

Thank you; we revised it.

"Self-care practices refer to actions or tasks that people take on their own behalf to

promote self-care and lessen asthma attacks by using eight items and 32 scores (15)".

What does "eight items and 32 scores" refer to? Is it a description of the tool used to assess

self-care practices?

Thank you so much for reminding me how to correct it.

• Eight items are tools used to assess self-care practices. Each tool has four scores.

• So, we already corrected and cited it.

• It's already incorporated in the body document.

DISCUSSION

Why is abstaining from smoking not a self-care practice?

Really, we appreciate you giving a nice comment on this variable.

Abstaining from tobacco smoking is a self-care practice.

According to the operational definition of smoking, any asthmatic patient who has a history of cigarette smoking is considered to have poor asthma self-care practices. So, at the time of the data collection period, if respondents have a previous history of smoking or are current smokers, they are considered to have poor self-care practices. Study design is cross-sectional; this data only indicates the presence or absence of smoking history at the point of the given time. This variable indicates asthmatic patients who had a history of cigarette smoking are more likely to have poor asthma self-care practices than those who didn't smoke in the study area.

The supportive citation to this idea is:

According to the Global Initiative for Asthma Strategy 2021 report, abstaining from smoking is considered a self-care practice, especially for an asthmatic patient. Smoking can significantly worsen asthma symptoms and lead to more severe health complications. By choosing to abstain from smoking, the patient is actively managing their health and taking steps to improve their respiratory function and overall well-being. Self-care practices in this context include making lifestyle choices that promote better health outcomes and prevent exacerbations of asthma.

VERSION 2 - REVIEW

Reviewer 1

Name Yadesa, Girma

Affiliation Nursing department, college of medicine and health

science, Diredawa university, Nursing

Date

28-Mar-2025

COI

Submitted on behalf of reviewer.

VERSION 2 - AUTHOR RESPONSE

For reviewer 1

Thank you very much for your constructive and invaluable comments and suggestions regarding our manuscript. We appreciate your feedback and will address your points as outlined below:

1. Please discuss why you selected self-care over self-management for asthmatic patients

The choice to focus on self-care rather than self-management for asthmatic patients can be justified as follows:

"Self-care offers a broader approach to health and well-being than self-management, encompassing a wider range of activities and practices. It extends beyond simply managing symptoms to include lifestyle choices, emotional well-being, and proactive preventive measures. This holistic perspective is crucial for chronic conditions like asthma, where environmental factors, stress levels, and overall health can dramatically influence disease control.

Effective asthma care involves more than just addressing physical symptoms; it necessitates acknowledging the emotional and psychological impact of living with a chronic condition. Self-care practices like stress management techniques, coping strategies, and emotional support systems become essential tools for improving quality of life and mitigating anxiety associated with asthma.

A key component of self-care is its emphasis on prevention, aiming to reduce the frequency and severity of asthma attacks. This proactive approach incorporates lifestyle modifications such as regular exercise, balanced nutrition, and meticulous trigger avoidance – elements that might be less emphasized within the narrower focus of self-management.

Therefore, embracing self-care over self-management provides a more comprehensive framework for understanding how individuals with asthma navigate their condition. It underscores the importance of holistic well-being, personalized approaches, and patient empowerment in effectively managing chronic diseases.

2. Please discuss the implications of your findings within the manuscript?

When discussing the implications of findings related to the focus on self-care for asthmatic patients addressed within the manuscript:

"Our research confirms that asthma is a significant public health concern in the East Wollega Zone. To improve outcomes, public hospitals and their management should prioritize promoting behavioral changes and strengthening self-care practices, focusing on the key triggers that impact asthma control.

The study's findings have substantial implications for both clinical practice and public health policy. Notably, healthcare systems should actively support self-care initiatives, as these can potentially decrease emergency room visits and hospitalizations, thereby reducing the strain on healthcare resources.

Future efforts should concentrate on enabling healthcare providers to develop personalized self-care strategies that consider each patient's unique preferences, individual triggers, and lifestyle factors.

The implications of this study also support policy changes that promote broad self-care initiatives, behavioral change programs, and the integration of self-care principles into public health campaigns focused on asthma awareness and effective management.

Ultimately, these findings contribute to a more comprehensive understanding of how a selfcare approach can fundamentally transform asthma management and lead to improved health outcomes and quality of life for patients

3. Please discuss how asthma self-care is affected by the level of hospitals within the manuscript.

How asthma self-care is affected by the level of hospitals, it's essential to consider the varying resources, expertise, and patient education opportunities available at different types of healthcare facilities

"According to this research indicates that the level of hospital (primary, secondary, tertiary) significantly influences asthma self-care practices, largely due to disparities in resources, expertise, and socioeconomic accessibility.

Socioeconomic Factors: Patients in lower-income areas often rely on primary care facilities, which may have limited resources for asthma education and self-care support.

Resources and Expertise: Tertiary care hospitals generally offer more specialized resources, including advanced diagnostic tools, multidisciplinary teams (pulmonologists, respiratory therapists, educators), and comprehensive educational programs, all contributing to better patient understanding and self-care.

Follow-Up Care: The consistency and quality of follow-up care vary by hospital level, with tertiary hospitals typically providing more structured and comprehensive follow-up, enhancing adherence to self-care regimens.

Community Engagement: Higher-level hospitals are more likely to engage in community outreach, promoting asthma awareness and self-care strategies outside the clinical setting.

Hospital Level & Impact on Self-Care:

Primary Hospitals: Serve as the initial point of contact but may lack resources for in-depth asthma education.

General Hospitals: Hospitals with specialized respiratory or allergy clinics provide more targeted education and multidisciplinary support.

Specialized Hospitals: Offer advanced diagnostics, comprehensive resources for self-management, and specialized programs like workshops and support groups.

These findings highlight the need for targeted interventions to address disparities in access to care and resources across different hospital levels. A comprehensive understanding of how hospital level impacts asthma management is crucial for developing strategies to improve patient outcomes and promote effective self-care practices for all individuals with asthma."

4. Please revise the Conclusion and recommendation section to avoid vague language

Conclusion and reccomondations

This study found that only slightly more than half of asthmatic patients in the East Wollega Zone demonstrated good self-care practices, indicating a need for improvement in patient engagement with recommended self-care behaviors. The research also identified key factors significantly associated with better self-care; the absence of comorbid illnesses, a history of never drinking alcohol, being a non-smoker, and strong social support. These findings underscore the importance of asthma as a public health issue in the region and highlight the need for public hospitals and hospital management to prioritize interventions promoting

behavioral changes, to empower patients to practice better self-care and strengthening self-care practices, particularly by addressing modifiable triggers.

5. What do you mean by considerable proportion of asthmatic patients? Try to make it clear

The term "considerable proportion of asthmatic patients" refers to a significant percentage or number of individuals with asthma who exhibit good asthma selfcare practice among study participants.