

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)

Parents' knowledge, attitude, and practice toward the prevention and treatment of dust mite allergy: A cross-sectional study in Shenyang (China)

Authors

Liu, Si; Zhou, Qianlan; Dai, Bing; Chen, Li; Zhang, Qinzhen; Han, Lina; Li, Xiaowen; Shen, Wenxin; Shan, Lishen

VERSION 1 - REVIEW

Reviewer	1
Name	Divecha , Chhaya A
Affiliation	National University of Science and Technology Oman,
Pediatrics	
Date	01-May-2024
COI	None

It is well written paper signifying on the important need for parental awareness. IT would be great if you plan an intervention based study to improve parental awareness and look for any chnage in KAP in both groups.

Reviewer	2
Name	Werthmann, Derek
Affiliation	Tulane University School of Public Health and Tropical
Medicine	
Date	28-May-2024
COI	None

Abstract: Naming the section "intervention" can be misleading as this wasn't an intervention study based on what is written. Consider a different subtitle for this section.

Introduction: The authors should consider data that is local to the area of study it is possible to get that information. For example lines 24 and 29 in the introduction present

data about the US but does not seem relevant considering that the participants were from Shengjing Hospital.

A major component of the paper seems to be the differences between those caregivers where children are getting treatment and those who are not. The reasoning behind why there is expected differences should be more thoroughly developed in the introduction. The authors themselves state that little is known about KAP of parents toward dust mites especially in China so why are they looking at the two groups.

Material Methods: There are minor issues with language, primarily concerning the use of prepositions that make sentences awkward. EG Line 33 states Shengjing Hospital Affiliated China Medical University. It would be more clear using "with." Also lines 38-45 on page 6 are not clear as written. I believe the authors are trying to state that good practice is defines as 70% of the highest possible score, but it is unclear. These sentences should be rephrased for clarity.

Results: The results would be strengthen with more information about sampling. How many potential participants were asked to take the survey? Refusal rate? Who was asked to participate? The methods section could benefit with the sampling methods as well.

One of the primary objectives of the study is to measure KAP, yet the authors present the results of KAP in supplementary material. Should reconsider including some data in the manuscript in this section.

Discussion: Minor issues with language. For example line 15 on page 14 states " the present study provides clues" which sounds out of place and unscientific. The discussion like the introduction could be strengthened by adding information about the reasoning behind the two groups and the idea of differences between those groups.

Conclusion: Minor language issues some phrases sound awkward.

VERSION 1 - AUTHOR RESPONSE

Reviewer #1

It is well written paper signifying on the important need for parental awareness. IT would be great if you plan an intervention based study to improve parental awareness and look for any chnage in KAP in both groups.

Response: We thank the Reviewer for appreciating our work. Indeed, we are planning an intervention based on our results to improve parental awareness and look for any eventual changes in KAP in both groups. We will publish our results when available.

Reviewer #2

Abstract: Naming the section "intervention" can be misleading as this wasn't an intervention study based on what is written. Consider a different subtitle for this section.

Response: We understand the Reviewer's point. The Journal instructions allow that

section to be removed. The Abstract was revised accordingly.

Introduction: The authors should consider data that is local to the area of study if it is possible to get that information. For example lines 24 and 29 in the introduction present data about the US but does not seem relevant considering that the participants were from Shengjing Hospital.

Response: We thank the Reviewer. We replaced the statistics by Chinese numbers.

A major component of the paper seems to be the differences between those caregivers where children are getting treatment and those who are not. The reasoning behind why there is expected differences should be more thoroughly developed in the introduction. The authors themselves state that little is known about KAP of parents toward dust mites especially in China so why are they looking at the two groups.

Response: We thank the Reviewer for the comment. First, the KAP toward dust mite allergy in the general population in China is mostly unknown. Therefore, even if the children display symptoms of dust mite allergy, many parents will not consult at all or will consult when the symptoms are exacerbated. Some patients testing positive for dust mite allergy will receive desensitization therapy, but many parents will refuse treatments. All parents receive the same information package when their children test positive for dust mite allergy, and the parents are free to consult all sources of information and to ask questions. Nevertheless, differences can be present between those who decide on desensitization therapy and those who refuse. It was hypothesized that differences in KAP could explain, at least in part, the parents' decision. The results support the hypothesis and may provide ideas and directions to guide and educate the parents in the clinic. Nevertheless, although the parents of children receiving desensitization treatment had a higher KAP, there were still many gaps in knowledge, suggesting that we should strengthen the education and management of these patients in addition to drug desensitization treatment. An intervention based on the results of the present study is being developed and will be investigated in a future study.

We revised the Introduction and Discussion accordingly.

Material Methods: There are minor issues with language, primarily concerning the use of prepositions that make sentences awkward. EG Line 33 states Shengjing Hospital Affiliated to China Medical University. It would be more clear using "with." Also lines 38-45 on page 6 are not clear as written. I believe the authors are trying to state that good practice is defined as 70% of the highest possible score, but it is unclear. These sentences should be rephrased for clarity.

Response: We thank the Reviewer. Those sentences were revised.

Results: The results would be strengthened with more information about sampling. How many potential participants were asked to take the survey? Refusal rate? Who was asked to participate? The methods section could benefit with the sampling methods as well.

Response: We thank the Reviewer for the comment. All the patients with dust mite allergy who attended the Pediatric Respiratory Clinic of Shengjing Hospital from September to December 2022 were invited to participate, of whom 189 refused to fill in the questionnaire due to concern about privacy, lack of time, or disinterest. A total of 668 people were surveyed, of which 165 questionnaires were invalid and excluded (135 had missing questions, 27 had contradictory options, and three were filled with all the same options). Therefore, 503 valid questionnaires were included in the analyses: 250 from non-desensitized patients and 253 from desensitized patients. It was clarified in the Methods.

One of the primary objectives of the study is to measure KAP, yet the authors present the results

of KAP in supplementary material. Should reconsider including some data in the manuscript in this section.

Response: We agree with the Reviewer. We reorganized the Results and the Supplementary Materials to include the KAP data in the main text.

Discussion: Minor issues with language. For example line 15 on page 14 states “the present study provides clues” which sounds out of place and unscientific. The discussion like the introduction could be strengthened by adding information about the reasoning behind the two groups and the idea of differences between those groups.

Response: We thank the Reviewer. In the present study, it was hypothesized that differences in KAP could explain, at least in part, the parents’ decision for desensitization therapy for children with dust mite allergy. The results support the hypothesis and may provide ideas and directions to guide and educate the parents in the clinic. Nevertheless, although the parents of children receiving desensitization treatment had a higher KAP, there were still many gaps in knowledge, suggesting that we should strengthen the education and management of these patients in addition to drug desensitization treatment. The present study provides insights for designing teaching brochures, videos, podcasts, or activities to increase the KAP of parents toward dust mites. In particular, the knowledge about the dust mites themselves and the methods to kill them was poor. The practice of minimizing the living habitats of dust mites and using actual means to get rid of them should be emphasized. An intervention based on the results of the present study is being developed and will be investigated in a future study. It was added to the Discussion.

Conclusion: Minor language issues some phrases sound awkward.

Response: We thank the Reviewer. The Conclusion was revised accordingly.

VERSION 2 - REVIEW

Reviewer	2
Name	Werthmann, Derek
Affiliation	Tulane University School of Public Health and Tropical Medicine
Date	24-Oct-2024
COI	

The authors did well in responding to precious comments. There are two minor comments that i have:

1) There are still minor language issues that can be revised for publication.

Ex lines 10-15 : "the KAP toward dust mite allergy in the general population in China is mostly unknown . Therefore, even if the children display symptoms of dust mite allergy, many parents will not consult at all or will consult when the symptoms are exacerbated. "

2) Lines 45-50, I am not sure that the cross-sectional design should be considered a strength for this study as a major limitation of cross-sectional studies is that the temporal relationship is unknown. So in this study we cannot tell if KAP affected the decision to complete the immune therapy or if getting immune therapy affected KAP.

VERSION 2 - AUTHOR RESPONSE

Reviewer #2

The authors did well in responding to precious comments. There are two minor comments that i have:

1) There are still minor language issues that can be revised for publication.

Ex lines 10-15 : "the KAP toward dust mite allergy in the general population in China is mostly unknown . Therefore, even if the children display symptoms of dust mite allergy, many parents will not consult at all or will consult when the symptoms are exacerbated. "

Response: We thank the Reviewer. The statement was revised as "The KAP toward dust mite allergy remains unknown in the general population of China. Therefore, many parents do not consult when their children display dust mite allergy symptoms or delay consultation when the symptoms exacerbate.". Furthermore, the entire manuscript was proofread.

2) Lines 45-50, I am not sure that the cross-sectional design should be considered a strength for this study as a major limitation of cross-sectional studies is that the temporal relationship is unknown. So in this study we cannot tell if KAP affected the decision to complete the immune therapy or if getting immune therapy affected KAP.

Response: We understand the Reviewer's point. The statement was moved to the Limitations, instead, and revised: "3. Cross-Sectional Design: Although the study captured a snapshot of the parental KAP across a broad sample, the temporal relationship is unknown.".