

## CORRESPONDENCE

## Content

Response to "Prevalence of Allergic Disease and Related Allergens in Pakistan in 2007"

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I was very happy to see your quarterly journal. It is indeed an impressive publication which emphasizes and promotes indigenous research and original articles from Pakistan.

I was reading Vol. 25, January-March 2011, and came across an original article entitled "Prevalence of Allergic Disease and Related Allergens in Pakistan in 2007"<sup>1</sup>. I have several comments regarding this article, which I feel should be highlighted, since erroneous papers tend to diminish the credibility of a journal. Certainly, a journal of your caliber should be extremely careful in accepting articles which are scientifically and technically unsound, and factually incorrect.

I will not go into details, but just highlight a few salient points.

1. **References:** The references and facts stated are extremely out-dated and in most cases, have been superseded by newer and different information.

2a. **Epidemiology:** The article quotes the International Study on Allergy and Asthma in Childhood (ISAAC) and also states "There are no studies, in the literature, showing prevalence of allergic diseases in Pakistan". The ISAAC Study which is the world's largest study ever conducted includes one of the biggest data sets of almost 10,000 children from Islamabad, as well as more than 4,000 children from Karachi, conducted in 2001. In addition, in the earlier ISAAC Study in 1997, the Aga Khan Hospital, Karachi studied more than 3,000 children.

2b. In addition, they have themselves quoted the Pakistan Medical Research Council's study on "Prevalence of Allergies in Islamabad", while stating that no previous data are available.

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3a. **Skin Prick Testing:** The study has focused its entire findings on the results of skin prick tests. Before, I detail about the quality of allergen extracts, it is imperative to know how to interpret an allergy skin prick test. In no literature, anywhere in the world, is a result of a wheal size of 2 mm, which they have stated to be a positive result, considered anywhere near positive. In fact, this is can be a normal reaction of the skin to being pricked (false positive).

3b. Also, nowhere in the world is any diagnostic test, be it skin prick or a laboratory parameter, considered to be valid until and unless a positive and a negative control test are included. Unfortunately, physicians and technicians at the National Institute of Health, Islamabad, are unaware of the basic requirements of even performing a skin prick test, leave alone its interpretation.

3c. False positive reactions to a skin prick test are well documented. Up to 30% of patients may exhibit a false positive skin test reaction, and an equal number may exhibit false negative results. Hence interpretation of skin prick tests requires the expertise of a trained allergist, which unfortunately the National Institute of Health, Islamabad, does not possess, and never has possessed since its inception.

4a. **Standardisation of Extracts:** I do not wish to go into great detail about the technicalities, but I find it sufficient to state that the extracts used at the National Institute of Health, Islamabad, are not only totally non-standardised, but totally non-specific, as well. Standardisation procedures are an exacting science, which again, is totally lacking at the NIH, Islamabad.

4b. Ironically, as stated, the National Institute of Health, Islamabad, uses "dust" extracts for testing.

There is no such thing as a "dust" extract. Dust in a composite of several components, depending upon its source, and each and every individual component has to be tested separately. This is undoubtedly one of the biggest forms of quackery being practiced in Pakistan, or perhaps anywhere in the world.

4c. The article also states that extracts of "pollens" were tested. The pollen from each and every single plant on this planet is unique and specific, and must be tested as such. Just as you cannot say "test for a medicine" without specifying the medicine, you cannot test for "pollens" without knowing the actual pollen, its source, its composition, and above all, its allergenicity. Specific extracts of sunflower pollen, for example, give a very large wheal and flare reaction, due to their acid content, but are not allergenic, since they are too large to be inhaled and cause allergy. That is, they give a false positive reaction.

**5. Geographic Distribution of Results:** The National Institute of Health is located in Islamabad. Hence it is expected that a larger proportion of patients would attend from nearby areas, as compared to more distant areas like Sind and Baluchistan provinces. To extrapolate this into the province-wise "distribution" of allergies is nothing but misleading and totally false.

The entire article is fraught with errors, mis-interpretations, mis-representations, and above all, false facts. It also casts a severe doubt on the credibility of the person mentioned as a contributor, being an Allergist/Immunologist at the Albany Medical College, Albany, NY, USA, since any allergist, or any physician with even the slightest training in allergy would be able to see this glaring errors.

I trust that your esteemed journal will refrain from publishing such sub-standard, erroneous, and misleading articles in future. I wish the JPMI goes from strength to strength, and soon attains international indexation and global acclaim.

## REFERENCE

1. Ahmad F, Yousaf F, Asif S. Prevalence of Allergic Disease and Related Allergens in Pakistan in 2007. *J Postgrad Med Inst* 2011;25:14-23.