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Allergies In India: Myths, Misconceptions, and Awareness

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Abstract

Background: Allergies are common ailments worldwide, including in India. Approximately 36% of the Indian population suffers from one or more allergic diseases. Awareness for allergies is thought to be poor in India and myths and misconceptions abound. This study was designed, therefore, to analyze this aspect of allergies in India.

Materials and Methods: 1,104 consecutive patients seen in the clinic over a period of one year were enrolled in this study. Patients having allergic asthma, allergic rhinitis, allergic conjunctivitis, and atopic dermatitis were included. Each patient had to answer a prepared 15-point questionnaire regarding common myths, misconceptions, and awareness of allergic diseases.

Results: The results from this study showed that most patients were unaware of facts regarding common allergic diseases. Myths and misconceptions were found to be prevalent in the majority of Indian patients.

Conclusion: Myths and misconceptions regarding allergic diseases abound in the Indian population and awareness of these ailments is very poor. This can only be corrected through a major awareness programme for allergic diseases in India.

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Introduction

Allergies are a common group of disorders in the world, including India. Allergies affect approximately 36% of the Indian population [1]. Allergic diseases are known to afflict certain organs such as the nose, lungs, skin, and conjunctiva. In India, allergic rhinitis is documented to have the highest incidence of allergic diseases, followed by allergic asthma and then dermal allergies [1].

It is perceived that awareness of allergic diseases is poor in India and that several myths and misconceptions regarding allergies abound in the Indian population.

An extensive survey of the literature did not reveal any published studies on myths, misconceptions, and awareness of allergic diseases. This study was therefore designed to enumerate the common myths and misconceptions and to determine the awareness of allergic diseases in India.

Materials and Methods

1,104 consecutive allergy patients attending the clinic between January 31, 2021, and January 31, 2022, were included in this study. Patients who attended the clinic for complaints other than allergies were excluded. The manifestations warranting inclusion were allergic rhinitis, asthma, conjunctivitis, and atopic dermatitis. Each patient was provided with a questionnaire comprising 15 questions related to common myths, misconceptions and awareness of allergic disease:

1	Allergies are common diseases in India	Yes / No / Don't Know
2	Allergic diseases are hereditary	Yes / No / Don't know
3	Allergic diseases are infectious/contagious diseases	Yes / No / Don't Know
4	Every person is allergic to something or the other	Yes / No / Don't Know
5	Everything under the sun can cause allergic reactions	Yes / No / Don't Know
6	Allergies affect only children	Yes / No / Don't Know
7	Children suffering from allergies get cured when they grow up.	Yes / No / Don't Know
8	If someone does not suffer from allergies in childhood, then will he or she suffer from allergies during adulthood	Yes / No / Don't Know
9	Smoking triggers asthma	Yes / No / Don't Know
10	Hookah is safe	Yes / No / Don't Know
11	Is there any treatment for allergies?	Yes / No / Don't Know
12	Inhalers result in dependence and damage to the lungs	Yes / No / Don't Know
13	Steroids are bad, dangerous, and harmful medicines	Yes / No / Don't Know
14	Have you heard of allergy tests?	Yes / No / Don't Know
15	Have you heard of allergy vaccines?	Yes / No / Don't Know

Children who attended the clinic had their questionnaire answered by the accompanying parent. Since the questionnaire was in English, patients who could not understand English were explained each question in their vernacular language by a clinic attendant and their answers were noted.

Results

The results from this study are tabulated in Tables 1, 2, and 3.

Table 1. Age Groups and Sex Distribution

AGE GROUPS	MALE	FEMALE	TOTAL	% OF TOTAL
6 – 12	55	46	101	9.15
13 – 20	72	94	166	15.0
21 – 30	140	125	265	24.0
31 – 40	142	133	275	24.91
41 – 50	77	64	141	12.77
51 – 60	65	47	112	10.15
Above 60	23	21	44	3.99
Total	574	530	1104	100

Table 3. Patient Responses to Questionnaire

NO	QUESTION	YES		NO		DON'T KNOW	
		NUMBER OF PATIENTS	% OF PATIENTS	NUMBER OF PATIENTS	% OF PATIENTS	NUMBER OF PATIENTS	% OF PATIENTS
1	Allergies are common diseases in India	211	19.1	536	48.6	357	32.3
2	Allergic diseases are hereditary	21	1.9	917	83.1	166	15.0
3	Allergic diseases are infectious/contagious	880	79.7	102	9.2	122	11.1
4	Every person is allergic to something or the other	912	82.6	99	9.0	93	8.4
5	Everything under the sun can cause an allergic reaction	841	76.2	118	10.7	145	13.1
6	Allergies affect only children	793	71.8	217	19.7	94	8.5
7	Children suffering from allergies get cured when they grow up	827	74.9	124	11.2	153	13.9
8	If someone does not suffer from allergies in childhood, then will he suffer from allergies during adulthood	89	8.1	1001	90.7	14	1.2
9	Smoking triggers asthma	966	87.5	113	10.2	25	2.3
10	Hookah is safe	854	77.3	90	8.2	160	14.5
11	Is there any treatment for allergies ?	414	37.5	480	43.5	210	19.0
12	Inhalers result in dependence and damage to the lungs	890	80.6	92	8.3	122	11.1
13	Steroids are bad, dangerous and harmful medicines	1040	94.2	0	0	64	5.8
14	Have you heard of allergy tests ?	241	21.8	776	70.3	87	7.9
15	Have you heard of allergy vaccines ?	35	3.2	931	84.3	138	12.5

Discussion

The results clearly prove that myths and misconceptions about allergic diseases abound in the Indian population and awareness with respect to allergies is very poor. Allergies affect approximately 36% of the Indian population, yet almost 81% of patients included in this study were unaware that these are common problems in India. However, what is contradictory is that more than 82% of patients felt that every individual is allergic to something or the other. Allergies are known to have a heredo-familial transmission [2], a fact that was unknown to 98% of subjects. More than 76% of patients thought that everything under the sun could cause allergic reactions and were unaware that allergens are limited in

number. Surprisingly, 71% of subjects opined that allergies could affect children only and not adults and almost 75% believed that children suffering from allergies get cured when they become adults. Even more surprising was that more than 90% of participants said that those who do not suffer from allergies in childhood will not suffer from allergies in adulthood, a rather major misconception.

A hookah is a contraption in which flavoured tobacco is burnt on coals and the smoke after passing through water is inhaled by an individual through a mouthpiece. The amount of smoke inhaled during a typical hookah session is 90,000 ml. compared with 500 ml. to 600 ml. when smoking a cigarette [3]. Besides, 60 minutes of hookah smoking is equal to smoking approximately 400 cigarettes [4]. What was heartening to note is that more than 87% of patients felt that cigarette smoking triggers asthma. What was disappointing however is that despite all known facts and figures, 77% of subjects said that hookah smoking is safe.

Opinion was divided when patients were questioned whether there are any treatments for allergic diseases. 37% of subjects felt that treatment exists for allergies whereas 43% responded that there are no treatments. A huge problem for medical personnel is the resistance of patients to inhaled medications for asthma. More than 80% of patients opined that inhalers result in dependence on inhaled drugs and also cause damage to the lungs. This serious misconception will require educating the common man and spreading the message of the safety of inhaled medications across society at large. Yet another serious misconception which needs to be corrected is that a massive 94% of patients thought that corticosteroid medications were bad, dangerous, and harmful medicines.

Finally, almost 78% of patients had never heard of “allergy tests” and only 3% were aware that allergen-specific immunotherapy existed.

Conclusion

Serious myths and misconceptions regarding allergies exist in the Indian population and awareness of allergic diseases is poor. A massive education programme will need to be launched to correct these myths and misconceptions and to increase awareness regarding allergic diseases.

References

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3. [^]“Hookahs – CDC and prevention”.
https://cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/hookahs/index.htm

4. [^]“60 minutes of hookah smoking is equal to approximately 400 cigarettes”.

<https://nwu.edu/sites/default/files/downloads/healtheducation/hookah/brochurs.pdf>