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## Original Research Article

## Knowledge, attitude and behaviour study of vitiligo among general population

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## ABSTRACT

**Background:** Vitiligo is an acquired skin disorder caused due to destruction of melanocytes which clinically presents with well defined depigmented macules and patches with or without white hairs. The present study is an attempt to document the prevalent knowledge and attitude in the general public regarding this disease and to identify the determinants of good/poor knowledge and attitude.

**Aim:** To assess Knowledge, attitude and behaviour study of vitiligo among general population attending skin outpatient department (OPD) of Sree Balaji Medical College and Hospital, Chennai.

**Materials and Methods:** This was a cross sectional study, which was conducted at dermatology OPD in Sree Balaji Medical College and Hospital, Chennai 2021 after ethical committee approval. About 80 patients attending OPD were included in study to whom questionnaire was asked and data was collected and analysed.

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## 1. Introduction

Vitiligo is an acquired skin disorder caused due to destruction of melanocytes which clinically presents with well defined depigmented macules and patches with or without white hairs.<sup>1</sup> About 1% of the world's population is estimated to be affected by vitiligo.<sup>2</sup> Vitiligo usually has its onset at 10 to 30 years of age but can occur at any age.<sup>3</sup> Autoimmunity, intrinsic defects of melanocytes, and oxidative stress are considered to be the pathogenesis but is not clearly known, usually it is multifactorial.<sup>4</sup> Numerous studies show that patients with vitiligo feel stigmatized, have low self esteem & suffer a psychosocial burden. There are lot of taboos around the word due the lack of knowledge & attitude regarding this disease. The present study is an attempt to document the prevalent knowledge and attitude in the general public regarding this disease and to identify the determinants of good/poor knowledge and attitude.

## 2. Materials and Methods

A cross-sectional survey was done among the general population visiting DVL OPD @ Sree Balaji medical college & hospital using a self-reported questionnaire from January to February 2021. Individuals who were 18 to 60 years of age were included in the study. Questionnaire was designed in manner that general population can understand & was distributed randomly irrespective of gender. The sample size was calculated using a single population proportion formula considering 60% [19] anticipated sufficient knowledge, a confidence level of 95%, and 5% margin of error giving a total of 80 samples

## 3. Results

Out of total 80 subjects, 79 completed the questionnaires giving 97% response rate.

As illustrated in this table, most of the people recognized that vitiligo is not communicable (63.3%), not connected with lack of hygiene (58.2%) & does not spread by sharing

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things (57%). A good number of responders had knowledge that vitiligo is a hereditary disease (63.3%) & flares up during stress (68.4%) & sun exposure (58.4%). Majority of the responders were aware that treatment is available (82.3%) however most of them were not aware regarding surgical management of vitiligo (70.5 %).Table 1

As shown in Table, most responders would sympathize with patients having vitiligo (69.2 %), would marry (59%) & continue their marital life (60%).Two-third (79.5%) of the respondents came with positive attitude of not staring at vitiligo patients. The study also revealed that more than half of the respondents would be willing to employ a vitiligo patient as employers (57%), would be willing to share foods with vitiligo patients (61.5%), and would eat the food prepared by a vitiligo patient (61.5%). Yet, merely half of the respondents (41.8%) would ask vitiligo patients about their disease. A sizeable respondents still have a negative attitude towards vitiligo patients by avoiding shaking hands with a them (53.8).Table 2

As shown in this table and figure, three – fourth of the responders were well informed to visit the dermatologist (78.8) if they have a skin problem & to immediately (42.3%) consult a doctor if you notice a skin lesion in child. The reason for not consulting a skin doctor among the responder was mostly that they didn't notice the skin lesion (64.9%). Overall the responders gave a positive response. The dependence on alternative medicine is comparatively less.Table 3

Whom should you consult for a skin problem ?

80 responses

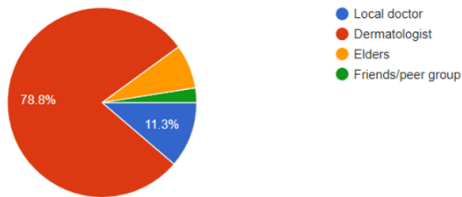


Fig. 1: Whom should you consult for a skin problem?

4. Discussion

The aim of this study is to get a survey about the knowledge, attitude & practices towards vitiligo patients in general population. The result we obtained was interesting merely three fourth of the respondents gave a positive response. They were well aware that vitiligo is not communicable (63.3%), not connected with lack of hygiene (58.2%) & does not spread by sharing things(57%). A good number of responders had knowledge that vitiligo is a hereditary disease (63.3%) & flare up during stress (68.4%) & sun exposure (58.4%). Three-fourths of the responders were aware of the treatment (82.3%). The response we got in

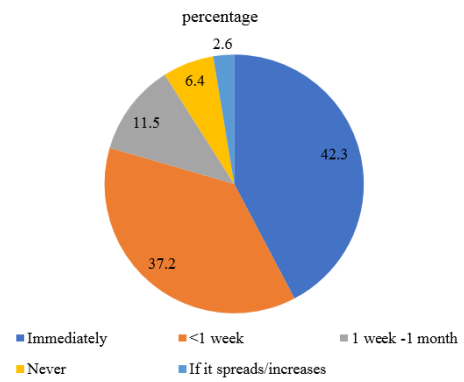


Fig. 2: When will you consult a doctor if you notice a white skin lesion in your child ?

Why did you not consult a skin doctor?

77 responses

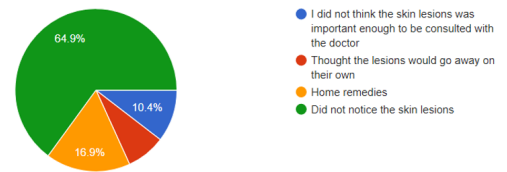


Fig. 3: Why did you not consult a skin doctor?

Which of the following traditional practices have you used in your child?

74 responses

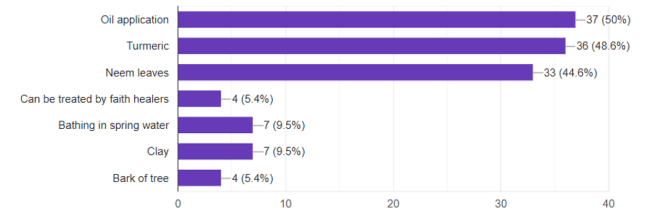


Fig. 4: Which of the following traditional practices have you used in your child?

our study about the knowledge of the responders towards vitiligo is same as a Survey in Mekelle City, Northern Ethiopia.<sup>5</sup> The responder would sympathize with patients with vitiligo (69.2 %), would marry (59%) & continue their marital life (60%). Two-third (79.5%) of the respondents came with positive attitude of not staring at vitiligo patients. The study also revealed that half of the respondents would be willing to employ a vitiligo patient as employers (57%), would be interested to share foods with vitiligo patients (61.5%), and would eat the food prepared by a vitiligo patient (61.5%). Yet, merely half of the respondents (41.8%) would ask vitiligo patients about their disease. A sizeable respondents still have a negative attitude towards vitiligo patients by avoiding shaking hands with a them (53.8). The

**Table 1:** Knowledge about vitiligo

Knowledge question:	Yes(%)	No(%)
Does Vitiligo flare up in stress?	54(68.4)	25(17.7)
Is there a treatment for vitiligo?	65(82.3)	14(31.6)
Vitiligo is a hereditary disease	50(63.3)	29(36.7)
Do you think Vitiligo is communicable?	29(35.9)	50(64.1)
Vitiligo is associated with the habitual intake of certain foods	39(50.6)	40(49.4)
Vitiligo spreads by sharing things	34(43)	45(57)
If one white patch comes will it definitely spread all over the body?	51(65.4)	28(34.6)
Will sun exposure worsen vitiligo?	45(58.4)	34(41.6)
Vitiligo caused by lack of hygiene	33(41.8)	46(58.2)
Vitiligo and leprosy are the same	24(28.6)	55(71.4)
Is surgical option available for Vitiligo?	24(29.5)	55(70.5)

**Table 2:** Attitude about vitiligo

Attitude of the participants :	Yes(%)	No(%)
I would sympathize for a patient having vitiligo	25(30.8)	54(69.2)
I would ask vitiligo patients about their disease	33(41.8)	46(58.2)
I stare at patients with vitiligo	17(20.5)	62(79.5)
I would avoid shaking hands with a vitiligo patient	37(46.2)	42(53.8)
I would eat food prepared by a vitiligo patient	40(52.6)	39(47.4)
I would share food with vitiligo patient	48(61.5)	31(38.5)
As an employer, I would hire a vitiligo patient	45(57)	34(43)
I would marry a vitiligo patient	46(59)	32(41)
I would continue a marital life with vitiligo patient	48(60)	32(40)

**Table 3:** Behaviour among general population towards vitiligo

Behaviour variables	Number	
1. Whom should you consult for a skin problem ?		
General practitioner	9	11.3
Dermatologist	63	78.8
Elders	6	7.5
Friends/peer group	2	2.5
2. When will you consult a doctor if you notice a white skin lesion in your child ?		
Immediately	33	42.3
<1 week	29	37.2
1 week-1 month	9	11.5
Never	5	6.4
If it spreads/increases	2	2.6
3. Why did you not consult a skin doctor?		
I did not think the skin lesions was important enough to be consulted with the doctor	8	10.4
Thought the lesions would go away on their own	6	7.8
Home remedies	13	16.9
Did not notice the skin lesions	50	64.9
4. Which of the following traditional practices have you used in your child?		
Oil application	37	50
Neem leaves	33	44.6
Turmeric	36	48.6
Can be treated by faith healers	4	5.4
Bathing in spring water	7	9.5
Clay	7	9.5
Bark of tree	4	5.4

overall attitude was comparatively poor which resembles same as a hospital-based study conducted by C.M Gupta et al.<sup>6</sup> on knowledge and attitude related to vitiligo among adults visiting a tertiary health facility of central India.

Three – fourth of the responders were well informed to visit the dermatologist (78.8) if they have a skin problem & to immediately (42.3%) consult a doctor if you notice a skin lesion in child. The dependence on alternative medicine is comparatively less. The majority of the participants had good knowledge score, while only had good attitude score.

## 5. Conclusion

There are lot of misconceptions & myths regarding vitiligo prevalent in the studied population. The knowledge scores were better than attitude scores. This study gave us a valuable information about the people's awareness about vitiligo which will help us to overcome these shortcomings through the conduction of awareness program to better educate the general public.

## 6. Source of Funding

No external funding was received to carry out this work.

## 7. Conflict of Interest

None.

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