A clinical and sociodemographic study of vitiligo

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Abstract Background: Vitiligo is a common acquired illness that causes skin depigmentation in a variety of patterns, ranging from microscopic scalloped macules to large macules depigmentation of the skin on the edges to near-total depigmentation of the skin body. Methodology: This was a cross sectional study carried out in the department of Skin and VD department at the tertiary care teaching hospital during the one year period i.e. January 2020 to January 2021 in the patients who were diagnosed as Vitiligo were included in the study in the study period there were 69 patients by taking the informed written consent were included into the study. All the Socio-demo-graphic details were included into the study. All the details were entered into the excel sheet and analyzed by excel software for Windows 10. Result: In our study we have found that the majority of the patients were in the age group of 11-20 were 42.03%, followed by In <10 were 21.74%, 21-30 were 13.04%, 31-40 were 10.14%, 31-40 were 5.80%, 41-50 were 2.90%, 51-60 were also 2.90% and >60 were 1.45% The majority of the patients were Female i.e. 75.36 followed by Male i.e. 24.64. The majority of the patients were Unmarried i.e. 75.36%, followed by Married were 21.74%, And Divorced were 2.90 %. The majority of the patients were Secondary and Higher Secondary education i.e. 55.07% followed by Primary were 24.64%, Un-educated were 17.39%, Graduation and above were 2.90%. Mostly the patients were from Urban residence i.e. 60.87% and Rural were 39.13% The majority of the patients were Hindu by religion i.e. 75.36% and Muslims were 24.64. The majority of the patients were having Progressive were 46.38%, Regressive were 36.23%, Stationary were 17.39%. Majority of the patients were having lesions distributed like Vulgaris i.e. 50.72%, Foacal were 20.29%, Segmental were 15.94%, Universal 7.25% Acral 5.80%. Conclusion: To summarise, vitiligo was more common in younger age groups in our research settings, with females of marriageable age accounting for the majority of cases. In our investigation, we found a wide range of clinical abnormalities Key words: Vitiligo, Alopecia areata, autoimmune thyroiditis, autoimmune thyroiditi, leukoplakia

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INTRODUCTION

Vitiligo is a common acquired illness that causes skin depigmentation in a variety of patterns, ranging from microscopic scalloped macules to large macules depigmentation of the skin on the edges to near-total depigmentation of the skin body. Approximately 1%–2%

of the population is affected regardless of the size of the world's population. The most common races and ethnicities followed in the Indian subcontinent Mexico and Japan are two of the most important countries in the world.^{1,2} The actual cause of vitiligo is unknown, and it is frequently seen as a complex condition with multiple causes. Pathogenesis is a broad term that refers to a variety of processes hypotheses that link autoimmune disease to oxidant, cytotoxic, biochemical-Mechanisms involving antioxidants, viruses, and the nervous system for destroying the function of melanocytes in people who are genetically susceptible the presence of others autoimmune illnesses such as rheumatoid arthritis Thyroiditis, Grave's disease, and Addison's disease are all conditions that affect the thyroid gland. Diabetes, alopecia areata, alopecia areata, alopecia areata, alopecia areata, alopecia are Pernicious anaemia in patients and first-degree relatives points to an autoimmune cause.³ A percentage of up to

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30% is possible Patients with a positive family history have a wide range of symptoms. The percentage varies by area and ranges from 6% to 18% in general, and as high as 40% in one case Indian research^{4,5} Because it does not follow a predictable pattern of inheritance in studies of entire families and both It's possible that it's polygenic or genetic in twins. Autosomal dominant inheritance Variable penetrance gene Factors Poor nutrition, emotional stress, and other factors Autoimmunity, trauma, medicines, and infections are all examples of autoimmunity. Exposure to the sun, pollutants, and sepsis. Toxins are frequently thought to be the source of these symptoms,⁶ Clinically, the usual age of onset is before 20 years of age in nearly half of the cases.⁷ So in our study we have studied the clinical and sociodemography of vitiligo

METHODOLOGY

This was a cross sectional study carried out in the department of Skin and VD department at the tertiary care teaching hospital during the one year period i.e. January 2020 to January 2021 in the patients who were diagnosed as Vitiligo were included in the study in the study period there were 69 patients by taking the informed written consent were included into the study. All the Socio –demo-graphic details were included into the study. All the details were entered into the excel sheet and analyzed by excel software for Windows 10.

RESULT

Table 1: Distribution of the patients as per the a				
	Age group	No.	Percentage (%)	
	<10	15	21.74	
	11-20	29	42.03	
	21-30	9	13.04	
	31-40	7	10.14	
	31-40	4	5.80	
	41-50	2	2.90	
	51-60	2	2.90	
	>60	1	1.45	
	Total	69	100.00	

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The majority of the patients were in the age group of 11-20 were 42.03%, followed by In <10 were 21.74%, 21-30 were 13.04%, 31-40 were 10.14%, 31-40 were 5.80%, 41-50 were 2.90%, 51-60 were also 2.90% and >60 were 1.45%

Table 2:	Distribution	of the	patients	as per	the	Gender

Sex	No.	Percentage (%)
Male	17	24.64
Female	52	75.36

The majority of the patients were Female i.e. 75.36 followed by Male i.e. 24.64.

Table 3: Distribution of the patients as per the Marital status

Marital status	No.	Percentage (%)
Married	15	21.74
Unmarried	52	75.36
Divorced	2	2.90

The majority of the patients were Unmarried i.e. 75.36%, followed by Married were 21.74%, And Divorced were 2.90%.

Table 4: Distribution of the patients as per the Education		
Education	No.	Percentage (%)
Un-educated	12	17.39
Primary	17	24.64
Secondary and Higher Secondary	38	55.07
Graduation and above	2	2.90

The majority of the patients were Secondary and Higher Secondary education i.e. 55.07% followed by Primary were 24.64%, Un-educated were 17.39%, Graduation and above were 2.90%.

Residence	No.	Percentage (%)
Urban	42	60.87
Rural	27	39.13

Mostly the patients were from Urban residence i.e. 60.87% and Rural were 39.13%

Table 6: Distribution of the patients as per the religion		
Religion	No.	Percentage (%)
Hindu	52	75.36
Muslim	17	24.64

The majority of the patients were Hindu by religion i.e. 75.36% and Muslims were 24.64

Table 7: Distribution of	f the patients as per	Clinical Course type
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Clinical Course	No.	Percentage (%)
Progressive	32	46.38
Stationary	12	17.39
Regressive	25	36.23
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The majority of the patients were having Progressive were 46.38%, Regressive were 36.23%, Stationary were 17.39%.

Distribution	n No.	Percentage (%)
Vulgaris	35	50.72
Foacal	14	20.29
Segmental	11	15.94
Universal	5	7.25
Acral	4	5.80

Majority of the patients were having lesions distributed like Vulgaris i.e. 50.72%, Foacal were 20.29%, Segmental were 15.94%, Universal 7.25% Acral 5.80%.

DISCUSSION

Vitiligo is a prevalent pigmentary skin condition that affects one percent of the world's population.^{8,9} Prejudices, ignorance, taboos, a lack of scientific evaluation, and confusion are all widespread. All of these factors combine to make vitiligo and leprosy a social disgrace. Despite the fact that the patient's life expectancy is short, This is unaffected.¹⁰ Vitiligo has a negative connotation. and, in particular, the impacted patients' family Patients are socially outcast, especially young ladies. deemed unsuitable for marriage.¹¹ According to certain dermatological outpatient statistics, the incidence of vitiligo in India ranges from 3% to 4%, while an incidence as high as 8.8% has been documented.¹² The frequency of vitiligo in the Indian states of Gujarat and Rajasthan is quite high, with some even describing it as epidemic proportions.¹³ In our study we have found that The majority of the patients were in the age group of 11-20 were 42.03%, followed by In <10 were 21.74%, 21-30 were 13.04%, 31-40 were 10.14%, 31-40 were 5.80%, 41-50 were 2.90%, 51-60 were also 2.90% and >60 were 1.45% The majority of the patients were Female i.e. 75.36 followed by Male i.e. 24.64 The majority of the patients were Unmarried i.e. 75.36%, followed by Married were 21.74%. And Divorced were 2.90 %. The majority of the patients were Secondary and Higher Secondary education i.e. 55.07% followed by Primary were 24.64%, Uneducated were 17.39%, Graduation and above were 2.90%. Mostly the patients were from Urban residence i.e. 60.87% and Rural were 39.13% The majority of the patients were Hindu by religion i.e. 75.36% and Muslims were 24.64. The majority of the patients were having Progressive were 46.38%, Regressive were 36.23%, Stationary were 17.39%. Majority of the patients were having lesions distributed like Vulgaris i.e. 50.72%, Foacal were 20.29%, Segmental were 15.94%, Universal 7.25% Acral 5.80%. This was similar to Vikram K. Mahajan et al.¹⁴ they found There were 449 men and 496 women (m:f 1:1.1) aged between 2 and 83 years (mean 24.4 years) and having vitiligo for 1 week to 64 years (mean 5.1 years). The majority, 478 (50.6%) patients were aged ≤ 20 years and 248 (26.2%) were children aged ≤ 12 years. The age at the onset was between 6 months and 82 years (mean 20.5 years), and the majority 674 (71.3%) patients had it before 25 years of age. The consultation time was within 5 years in 692 (73.2%) patients. A family history of vitiligo was present in 150 (15.9%) patients. The majority 871 (92.2%) patients had involvement of up to 10% body surface area and vitiligo vulgaris in 562 (59.5%) and focal vitiligo in 117 (18.7%) patients were the most common clinical types.

An association with other systemic disorders was in 124 (13.1%) patients and predominately included thyroid abnormalities and diabetes mellitus.

CONCLUSION

To summarise, vitiligo was more common in younger age groups in our research settings, with females of marriageable age accounting for the majority of cases. In our investigation, we found a wide range of clinical abnormalities.

REFERENCES

- Alikhan A, Felsten LM, Daly M, Petronic-Rosic V. Vitiligo: A comprehensive overview part I. Introduction, epidemiology, quality of life, diagnosis, differential diagnosis, associations, histopathology, etiology, and work-up. J Am Acad Dermatol 2011;65:473-91.
- Krüger C, Schallreuter KU. A review of the worldwide prevalence of vitiligo in children/adolescents and adults. Int J Dermatol 2012;51:1206-12.
- Kutlubay Z, Karakus O, Engin B, Serdaroglu S. Vitiligo as an autoimmune disease. J Turk Acad Dermatol 2012;6:1262.
- 4. Kostovic K, Pasic A. New treatment modalities for vitiligo: Focus on topical immunomodulators. Drugs 2005;65:447-59.
- Behl PN, Agarval A, Srivastava G. Etiopathogenesis of vitiligo: Are we dealing with an environmental disorder? Indian J Dermatol Venereol Leprol 1999;65:161-7.
- Jeon IK, Park CJ, Lee MH, Lee DY, Kang HY, Hann SK, et al. A multicenter collaborative study by the Korean society of vitiligo about patients' occupations and the provoking factors of vitiligo. Ann Dermatol 2014;26:349-56.
- Iacovelli P, Sinagra JL, Vidolin AP, Marenda S, Capitanio B, Leone G, et al. Relevance of thyroiditis and of other autoimmune diseases in children with vitiligo. Dermatology 2005;210:26-30.
- 8. Pinkus H. Vitiligo: What is it? J Invest Dermatol 1959;32:281-4.
- 9. Koronne RV, Sachdevo KG. Vitiligo. Int J Dermatol 1998;27:676-81.
- Nair BKH. Vitiligo: A retrospect. Int J Dermatol 1978;17:755-7.
- Mehta NR, Shaha KC, Theodore C, Vyas V, Patel A. Epidemiological study of vitiligo in Surat area, South Gujarat. Indian J Med Res 1973;61:145-54.
- Valia AK, Dutta PK. IADVL Text book and Atlas of Dermatology. Mumbai: Bhalani Publishing House; 2001. p. 608.
- 13. Behl PN, Kapoor TR, Majumdar M. Epidemiological study of vitiligo. Dermatol Times 1988;9:1-3.
- Mahajan VK, Vashist S, Chauhan PS, Mehta KI, Sharma V, Sharma A. Clinico-epidemiological profile of patients with vitiligo: A retrospective study from a tertiary care center of North India. Indian Dermatol Online J 2019;10:38-44.

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