

KNOWLEDGE AND ATTITUDE TOWARDS PSORIASIS AMONG ADULT SAUDI POPULATION IN MAKKAH AL-MUKARRAMAH, SAUDI ARABIA 2017

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ABSTRACT

Objectives: To assess the awareness and knowledge about Psoriasis in Makkah Al-mukarramah among Saudi adult population. **Subjects and methods:** It is a Cross-sectional descriptive study among the adult Saudi population in Makkah Al-mukarramah male and female above age 20 years. A sample of 2000 participants was included, 850 males (42.5 %) and 1150 females (57.5%). The tool of the study was a self-administered questionnaire, which consists of two parts: First part included questions about demographic characteristics, second part consisted of twenty five statements pertaining to knowledge related to basic facts on psoriasis, triggering factors, treatment aspects and

knowledge related to disease process. **Result:** The study included 2000 participants. Slightly more than half of them (57.5%) were females and majority of them (40.2%) in the age group 20-30 years. Majority of 1159 (57.9%) subjects were aware of the fact that psoriasis is not contagious, only 50.1% of the subjects knew the fact that the disease is not curable and 900 (45%) subjects did not know about psoriatic arthritis. 805 (40.2%) of the subjects were aware that stress aggravates the disease. Majority, 1263 (63.1%) of them were aware of nail psoriasis. 44% of subjects were aware that moisturizers are important to prevent dryness of the skin. 600 (30%) subjects did not know about phototherapy. **Conclusion:** Thought the

general level of knowledge of participants about psoriasis was good, they had number of misconception about it.

KEYWORD: Knowledge, Attitude, psoriasis, Makkah Al-mukarramah.

INTRODUCTION

Background

Psoriasis is a complex, chronic, multifactorial, inflammatory disease that involves hyper proliferation of the keratinocytes in the epidermis, with an increase in the epidermal cell turnover rate.^[1]

Psoriasis can occur at any age, although it most commonly appears for the first time between the ages of 15 and 25years. Approximately one third of people with psoriasis report being diagnosed before age 20. Psoriasis affects both sexes equally.^[2]

Not everyone with psoriasis experiences the same symptoms, which can vary from person to person based on the severity and type of psoriasis. However, common symptoms may include: Raised, red, inflamed lesions, Silvery scaly plaques, Dry skin that may crack and bleed, Itching, burning, or soreness of the skin and Pitted nails or separation from the nail bed.^[3]

There are several types of psoriasis. These include:-

Plaque psoriasis: The most common form, plaque psoriasis causes dry, raised, red skin lesions (plaques) covered with silvery scales. The plaques might be itchy or painful and there may be few or many. They can occur anywhere on the body, including genitals and the soft tissue inside mouth.

Nail psoriasis: Psoriasis can affect fingernails and toenails, causing pitting, abnormal nail growth and discoloration. Psoriatic nails might loosen and separate from the nail bed (onycholysis).

Guttate psoriasis: This type primarily affects young adults and children. It's usually triggered by a bacterial infection such as strep throat. It's marked by small, water-drop-shaped, scaling lesions on the trunk, arms, legs and scalp.

Inverse psoriasis: This mainly affects the skin in the armpits, in the groin, under the breasts and around the genitals. Inverse psoriasis causes smooth patches of red, inflamed skin that worsen with friction and sweating.

Pustular psoriasis: This uncommon form of psoriasis can occur in widespread patches (generalized pustular psoriasis) or in smaller areas on hands, feet or fingertips.

Erythrodermic psoriasis: The least common type of psoriasis, erythrodermic psoriasis can cover the body with a red, peeling rash that can itch or burn intensely.

Psoriatic arthritis: In addition to inflamed, scaly skin, psoriatic arthritis causes swollen, painful joints that are typical of arthritis.^[4]

A variety of factors ranging from emotional stress and trauma to streptococcal infection can cause an episode of psoriasis. Recent research indicates that some abnormality in the immune system is the key cause of psoriasis. As many as 80% of people having flare-ups report a recent emotional trauma. Most doctors believe such external stressors serve as triggers for an inherited defect in immune function. Injured skin and certain drugs can aggravate psoriasis, including certain types of blood pressure medications (like beta-blockers), the anti-malarial medication hydroxychloroquine, and ibuprofen (Advil, Motrin, etc.). Psoriasis tends to run in families, but it may be skip generations; a grandfather and his grandson may be affected.^[5]

A health care professional can usually diagnose psoriasis by history and examination. There are no specific blood tests or diagnostic procedures for psoriasis. The doctor may take a biopsy or scraping and have it examined under a microscope to either rule out other disorders and/or determine what type of psoriasis it is.^[6]

Management of psoriasis may involve topical and systemic medication, phototherapy, stress reduction, climatotherapy, and various adjuncts such as sunshine, moisturizers, salicylic acid, and other keratolytics such as urea.

The most common complications of psoriasis are psychological it affects a person's self-esteem, sociability, and quality of life. Fortunately, psoriasis lesions don't leave permanent scars on the skin, although the lesions may recur. Psoriatic arthritis is a serious complication of psoriasis. This immune disease affects up to 30% of all psoriasis sufferers. Essentially, the same immune activity that affects the skin also attacks the joints. The disease is just as

debilitating as rheumatoid arthritis, and affects the same joints: hands, feet, knees, hips, and spine.^[7]

Although psoriasis is usually benign, it is a lifelong illness with remissions and exacerbations and is sometimes refractory to treatment. It progresses to arthritis in about 10% of cases. About 17-55% of patients experience remissions of varying lengths. Mild psoriasis does not appear to increase risk of death. However, men with severe psoriasis died 3.5 years earlier compared with men without the disease. Women with severe psoriasis died 4.4 years earlier compared with women without the disease.^[1]

Therefore, This study was conducted to assess the awareness and knowledge about Psoriasis in Makkah Al-mukarramah among Saudi adult population.

RESEARCH DESIGN AND METHODS

Study design

A cross sectional descriptive study.

Study population

Conducted among adult Saudi population in Makkah Al-mukarramah male and female above age 20 years.

Sample size

The total number was 2015 participants, 2000 of them fully completed the questionnaire 850 males and 1150 females.

Time period

A Two-week period in November 2017.

Inclusion criteria

Any adult Saudi male or female above 20 years in Makkah Al-mukarramah.

Exclusion criteria

We excluded 15 subjects for missing data, people below age of 20 and non-Saudi participants.

Data collection methods

The questionnaire was distributed to all participants after explaining the aims of the study and obtaining verbal consents from them. All subjects were clearly advised that participation in this study was anonymous, voluntary and their personal information are confidential. A self-administered questionnaire was used. The questionnaire was taken from another similar study.^[8] It consists of two parts. First part included questions about demographic characteristics, second part consisted of twenty five statements pertaining to knowledge related to basic facts on psoriasis (9 items), triggering factors (5 items), treatment aspects (4 items) and knowledge related to disease process (7 items). The study participants were requested to give “Yes, No or do not know” responses.

Data analyses

Statistical Package for Social Sciences (SPSS) for Windows version 16.0 was used for analysis. A chi-square tests (χ^2) analysis was performed for the association and/or the difference between two categorical variables. For all statistical tests done, P-value equal or less than 0.05 was considered statistically significant.

Ethical considerations

Before conduction of the study, all necessary approvals were obtained.

RESULT

Table 1: Socio-demographic characteristics of the study population (N=2000).

Socio-demographic variables	Number	%
Gender		
Male	850	42.5%
Female	1150	57.5%
Age		
20-30 years	803	40.2%
31-40 years	554	27.7%
41-50 years	443	22.1%
> 51 years	200	10%
Education level		
Bachelor degree	1389	69.4%
High school or less	611	30.6%

A total of 2000 participants were included in the current study. Their demographic characteristics are shown in the table (1). The participants were 850 males (42.5 %) and 1150

females (57.5%). About 40.2% of them were in the age group 20-30 years and 27.7% of them were in the age group 31-40 years. It is clear that (69.4%) of them have a bachelor's degree.

Table 2: Distribution of Responses to each of the items of Psoriasis Knowledge Assessment (N=2000).

Sl. No	Statement	Yes	%	No	%	Don't know	%
1	Psoriasis is contagious.	477	23.8	1159	57.9	364	18.3
2	Psoriasis may begin at any age.	965	48.2	213	10.65	822	41.1
3	Psoriasis can affect the entire skin.	1130	56.5	430	21.5	440	22
4	Psoriasis affects both men and women.	1253	62.65	347	17.3	400	20
5	Psoriasis is a curable disease.	780	39	1002	50.1	218	10.9
6	The exact cause of psoriasis is known.	1021	51	598	29.9	381	19.1
7	Psoriasis can be associated with joint pain.	630	31.5	470	23.5	900	45
8	Specific food intake or restrictions may cure psoriasis.	45	2.3	1398	69.9	557	27.8
9	In Psoriasis skin cells are multiplying too slowly.	116	5.8	277	13.9	1607	80.3
10	Injury to the skin may cause psoriasis to appear at that site in persons already having psoriasis.	276	13.8	932	46.6	792	39.6
11	Psoriasis never occurs in the nails.	264	13.2	1263	63.1	473	3.7
12	Certain drugs may increase the severity of psoriasis in persons already having psoriasis.	829	41.5	655	32.7	516	25.8
13	Certain infections may increase the severity of psoriasis in persons already having psoriasis.	1001	50	484	24.3	515	25.7
14	Stress plays no role in Psoriasis.	269	13.5	805	40.2	926	46.3
15	Psoriasis increases in winter.	966	48.3	433	21.7	601	30
16	Having close blood relatives affected with psoriasis determines to great extent whether a person will have psoriasis or not.	879	44	502	25	619	31
17	Psoriasis never occurs in the palms and soles.	689	34.4	586	29.3	725	36.3
18	Psoriasis damage brain.	134	6.7	1666	83.3	200	10
19	Psoriasis is transmitted through sharing food.	347	17.4	1294	64.6	359	18
20	Psoriasis is transmitted among sexual partners.	674	33.7	580	29	746	37.3
21	Photo/light therapy is useful in treating psoriasis.	360	18	1040	52	600	30
22	Oral medications are useful in Psoriasis	840	42	603	30.2	557	27.8
23	Certain drugs which are used to treat Psoriasis may have side effects.	1408	70.4	300	15	292	14.6
24	Psoriasis is seen all over the world.	1659	83	150	7.5	191	9.5
25	Treatment of Psoriasis can include moisturizers.	879	44	321	16	800	40

Knowledge regarding basic facts related to psoriasis

As shown in the table (2), The results of the study suggested that 1159 (57.9%) subjects were aware of the fact that psoriasis is not contagious, 1130 (56.5%) of the subjects knew that psoriasis affects the entire skin, 1253 (62.65%) of them said that psoriasis affects both men and women. Most of the subjects 965 (48.2%) told that psoriasis may begin at any age. But, only 50.1% of the subjects knew the fact that the disease is not curable. Nearly, 900 (45%) subjects did not know about psoriatic arthritis.

Knowledge on triggering factors related to psoriasis

515 (25.7%) of the subjects did not know that infection is one of the triggering factors for those patients who had already affected by the disease. Only, 829 (41.5%) of the subjects were aware that certain drugs induce psoriasis. Further, 932 (46.6%) subjects were not aware that injury triggers psoriasis. 805 (40.2%) of the subjects were aware that stress also aggravates the disease. Overall, the study subjects had inadequate knowledge on triggering factors.

Knowledge regarding disease process related to psoriasis

Nearly, 725 (36.3%) of the subjects did not know that psoriasis affects palms and soles. Majority, 1666 (83.3%) of them agreed the psoriasis not damages the brain. The fact that the disease is not transmitted by sharing food was known to 1294 (64.6%) of the subjects, whereas 674 (33.7%) of them had wrongly understood that psoriasis is a sexually transmitted disease. Majority, 1263 (63.1%) of them were aware of nail psoriasis. Overall, majority of the subjects had many misconceptions regarding the disease process.

Knowledge related to treatment of psoriasis

44% of subjects were aware that moisturizers are important to prevent dryness of the skin. 600 (30%) subjects did not know about phototherapy and 300 (15%) subjects were unaware that certain drugs which are used for the treatment of psoriasis can have side effect.

DISCUSSION

The purpose of this study was to determine the knowledge, idea and attitudes of Saudi adult population in Makkah Al-mukarramah male and female above age 20 years about psoriasis. This result of this study revealed some important lacunae in knowledge and attitude of our population about common skin problems.

In this study, the majority of the respondents (57.9%) considered the nature of the disease not contagious. Similar finding is noted among Community in Almadina Almonawara city, where 49.9% had correct knowledge on the previous nature of the disease.^[9]

The great majority of participants (50.1%) knew that psoriasis is not curable. This finding is consistent with another study under the title of Knowledge and Attitudes towards Psoriasis among non-medical students at Qassim University, Saudi Arabia where (78.5 %) of them believed that psoriasis is not treatable.^[10]

Almost all of the participants (63.1%) in our study aware of nail psoriasis and (31.5%) aware about joint pain with psoriasis. Similar finding is seen in a study in India, where (54%) of them also aware about nail psoriasis and only (40.5%) aware about joint pain with psoriasis.^[8]

A study done in Turkey among the psoriatic patients indicated that 44.1% of patients knew that psoriasis was aggravated by stress. This finding is consistent with our study 40.2% of the subjects were aware that stress also aggravates the disease.^[11]

Surprisingly in this study only (64.6%) and (29%) of participants knew that psoriasis is not transmitted by sharing foods and among sexual partners respectively. On other hand (48.8%), (35.4%) and (36.5%) of non-medical students in Qassim University believed that there is no risk of Sharing food, shake hand with a patient and share workplace or residence with patient respectively.^[10]

Our study reveals lack of awareness of some areas especially on basic facts related to psoriasis 1607 (80.3%) of them did not know about Psoriasis skin cells are abnormally excessive and rapid growth of the epidermal layer of the skin. Skin cells are replaced every 3–5 days in psoriasis rather than the usual 28–30 days.^[2] To improve population knowledge we needs sufficient education from the health care providers regarding the pathophysiology of psoriasis.

Regarding psoriasis treatment 600 (30%) of subjects in our study did not know about phototherapy which is also used for the treatment of psoriasis. While 840 (42%) of subjects were agreed that oral medications are useful in Psoriasis. In contrast, 170 (85%) of subjects in

Indian study, did not know about phototherapy treatment. While 168 (84%) of subjects were agreed that oral medications are useful in Psoriasis.^[11]

In our study most of the participants (83 %) agree with the beliefs that Psoriasis is seen all over the world, that is indicate good knowledge and understanding of the prevalence, incidence and burden of psoriasis worldwide.

CONCLUSIONS

This study showed that the knowledge among the Saudi adult population in Makkah Al-mukarramah about psoriasis was good, although there were some knowledge inadequacies and few minorities of them held some misconception.

There is a need to consider the basic knowledge of the population about psoriasis and to clear the misconceptions regarding the disease by the dermatologist.

Finally, community education is needed to improve the population's knowledge regarding the nature of psoriasis, important risk factors and the best source of health service.

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