Original Article

Determination of knowledge of patients regarding psoriasis

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ABSTRACT

BACKGROUND & OBJECTIVE: Psoriasis, a chronic, non-communicable skin condition, significantly impacts patients' quality of life. This study aimed to assess the knowledge levels among psoriasis patients, categorized into adequate, moderately adequate, and inadequate, to identify educational needs and opportunities for improved patient education.
METHODOLOGY: This cross-sectional study was conducted at the Department of Dermatology, Imran Idrees Hospital, affiliated with Sialkot Medical College, from October 2023 to February 2024. It involved 218 patients aged 16-60 years, diagnosed with psoriasis for over a year. Knowledge levels were assessed using a self-administered questionnaire, with scores ≥ 7 out of 10 considered adequate knowledge.
RESULTS: Out of the participants, 57.8% had inadequate knowledge about psoriasis, 32.6% had moderately adequate knowledge, and only 9.6% had adequate knowledge. The analysis showed no significant differences in knowledge levels across age, gender, duration of disease, education, and economic status (p-value > 0.05).
CONCLUSION: The study revealed a significant gap in the knowledge about psoriasis among patients, emphasizing the obligation for routine patient education and counseling. This approach could improve treatment adherence and outcomes, reducing misconceptions and treatment discontinuation.
KEYWORDS: Psoriasis, Dermatology, Quality of Life, Treatment Adherence and Compliance.

INTRODUCTION

Psoriasis is a chronic, non-communicable, inflammatory skin disease characterized by red, scaly plaques that cause significant discomfort and psychosocial stress in affected individuals. It is a multifactorial autoimmune condition that involves immune system failure, environmental causes, and genetic predisposition [1]. It is indeed very unfortunate that a common skin problem, psoriasis, is often unrecognized and left without treatment. Sometimes, those with psoriasis don't understand their condition appropriately [2]. A lot of psoriasis sufferers are not completely informed about their condition and this knowledge gap can lead to difficulties in treating those who have the disorder. It is worth mentioning that psoriasis can be a serious complicated disease affecting, besides the skin, a person's overall health too. Indeed, it has been quite lately found to have a relation to psoriatic arthritis, heart diseases, metabolic problems, and mental conditions such as depression and anxiety [3].

Knowing about psoriasis is an essential component of controlling the condition efficiently. Understanding better condition of a patient gives them a sense of being more in control which is followed by confidence in symptom management. Besides, it will contribute to better communication with healthcare providers as well as their ability to make correct decisions on treatment protocols [4,5]. When people understand in a personal way what psoriasis is, it brings the courage to them that helps them to fight through the emotional and social problems they experience in their everyday lives. The insight serves as a protection

against the feelings of loneliness or judgment that may be provoked by the visible aspect of the disorder, therefore, fostering an affinity that will make the journey feel familiar instead of alone [6,7,8].

The results of a study in Brazil showed that patients who had psoriasis presented in specialized outpatient clinics were educated about psoriasis in a very satisfactory manner because they were aware that psoriasis is not contagious. Except for the fact that they knew little about the structure and underlying processes of the disease, they did not seem to possess any relevant therapeutic and diagnostic data [9].

A study performed in Egypt about the knowledge of patients regarding psoriasis indicated that about 56.7% recorded a lack of knowledge about their condition [10]. Furthermore, research conducted in Italy uncovered some surprising findings: The awareness of the term psoriasis was only 7.3% among the general population, while around 4.6% were under the misconception that it is a contagious disease [11]. Furthermore, another study in Egypt found that patients' level of self-care practices was positively associated with their level of knowledge about their disease [12].

Despite recognizing the crucial role of patient education, there remains a noticeable void in the literature regarding how much psoriasis patients truly understand about their condition. Gaining insight into the extent of patients' knowledge can help pinpoint areas where educational support is lacking and guide the creation of tailored programs and resources to address these gaps [13, 14].

This study aims to help by determining what psoriasis patients already know about their condition. We are examining various aspects of patient's knowledge about psoriasis, including its underlying causes, the symptoms individuals may experience, available treatment options, and any other health issues that might tag along with it. Through this analysis, we hope to pinpoint areas in which patients might need more assistance comprehending their illness and create a benchmark for evaluating the success of upcoming educational programs.

This effort focuses on the caliber of communication between patients and their healthcare providers as well as patient knowledge. Good communication is key to making sure patients get all the info they need, tailored to their situations. But sometimes, things like limited time during appointments, differences in how much patients understand, and what they think is important compared to what doctors think, can get in the way. The insights gained from this study will contribute to the broader understanding of patient education in dermatology and pave the way for improved patient-centered care and outcomes in psoriasis management.

METHODOLOGY

This cross-sectional study was conducted at the Dermatology Department of Imran Idrees Hospital, affiliated with Sialkot Medical College after obtaining approval from Institutional Review Board (IRB) no.MRC/IRB/23021 over a period of four months, from October 2023 to February 2024. The sample size[10] of 218 participants aged between 16 and 60 years, diagnosed with psoriasis for at least one year, were selected using a non-probability consecutive sampling technique. With a 95% confidence level and a 5% margin of error, considering the expected proportion of patients with an adequate understanding of psoriasis. Informed consent was obtained from all study participants, highlighting the voluntary nature of their participation and the confidentiality of their responses. Those unable to understand the local language or unwilling to participate were excluded.

Data were collected through a self-administered questionnaire developed for this study, aimed at evaluating participants' knowledge about psoriasis, including its causes, symptoms, treatment options, and impact on quality of life. Knowledge levels were quantitatively assessed based on participants' responses. The questionnaire contained 10 questions. Each correct answer carried 1 mark. Knowledge was labeled as adequate if the patient had a score ≥7, moderately adequate if the score was 5-6, and inadequate if the score <5. Using SPSS version 23.0 for statistical analysis, demographic characteristics, and knowledge scores were summarised using descriptive statistics. Numerical variables i-e age and duration of psoriasis have been presented as mean ±SD. Chi-square tests were employed to investigate the relationship between knowledge levels and demographic variables such as age, gender, education, and socioeconomic status, with p ≤ 0.05 indicating statistical significance.

RESULTS

With a mean age of 40.1 years (SD = 11.6 years) among 218 participants, the age distribution is balanced, with 47.2% of individuals lying between the ages of 18 and 39 and 52.8% between 40 and 60. Gender distribution revealed a slight male predominance at 57.3% compared to 42.7% females. Regarding disease duration, the majority (69.3%) had a duration of 12-20 months, with the remaining 30.7% falling between 21-30 months. Educational diversity was observed with 28.9% having a middle school education, 35.3% completing secondary school, and 35.8% being graduates. Economic status showed 41.3% in the lower class, 36.7% in the middle class, and 22.0% in the higher economic class, indicating significant representation across socioeconomic strata.

Table-I: Baseline Characteristics of Study Sample.

Variables	Groups	n (%)
Age (years) Mean±SD (40.1±11.6)	18-39	103 (47.2)
	40-60	115 (52.8)
Gender	Male	125 (57.3)
	Female	93 (42.7)
Duration of disease (months) Mean±SD (18.8±5.1)	12-20	151 (69.3)
	21-30	67 (30.7)
Educational Status	Middle Pass	63 (28.9)
	Matric Pass	77 (35.3)
	Graduate	78 (35.8)
Economic Status	Lower Class	90 (41.3)
	Middle Class	80 (36.7)
	Higher Class	48 (22.0)

Table-II: Frequency of Adequate, Moderately Adequate, and Inadequate Knowledge about Disease in Patients with Psoriasis n=218.

Knowledge	n (%)
Inadequate	126 (57.8)
Moderately Adequate	71 (32.6)
Adequate	21 (9.6)
Total	218 (100.0)

The distribution of knowledge levels about psoriasis among 218 patients. The majority, constituting 57.8%, exhibited inadequate knowledge about the disease, while 32.6% demonstrated moderately adequate knowledge. Only 9.6% of patients displayed adequate knowledge.

Table-III:Frequency of Adequate, Moderately Adequate and Inadequate Knowledge about Disease in Patients with Psoriasis across various Subgroups

variables	Subgroups	n	Inadequate n=126 n(%)	Moderately Adequate n=71 n(%)	Adequate n=21 n(%)	P -value
Age (years)	18-39	103	60 (58.3)	34 (33.0)	9 (8.7)	0.874
	40-60	115	66 (57.4)	37 (32.2)	12 (10.4)	
Gender	Male	125	74 (59.2)	39 (31.2)	12 (9.6)	0.874
	Female	93	52 (55.9)	32 (34.4)	9 (9.7)	
Duration of Disease (months)	12-20	151	87 (57.6)	50 (33.1)	14 (9.3)	0.945
	21-30	67	39 (58.3)	21 (31.3)	7 (10.4)	
Educational Status	Middle Pass	63	38 (60.3)	21 (33.4)	4 (6.3)	0.777
	Matric Pass	77	44 (57.1)	26 (33.8)	7 (9.1)	
	Graduate	78	44 (56.4)	24 (30.8)	10 (12.8)	
Economic Status	Lower Class	90	52 (57.8)	30 (33.3)	8 (8.9)	0.945
	Middle Class	80	46 (57.4)	27 (33.8)	7 (8.8)	
	Upper Class	48	28 (58.3)	14 (29.2)	6 (12.5)	

Chi-square test, the observed difference was insignificant

Among the 218 patients across various subgroups, there were no significant differences in knowledge levels, as indicated by p-values exceeding 0.05. Age groups, including both 18-39 years and 40-60 years, exhibited similar proportions of inadequate, moderately adequate, and adequate knowledge, ranging from 55.9% to 58.3%. Similarly, gender-wise comparisons showed comparable knowledge levels between males and females, with percentages ranging from 55.9% to 59.2%. Additionally, there were no notable disparities observed in knowledge levels across different durations of disease (12-20 months vs. 21-30 months), educational statuses (middle pass, matric pass, and graduate), or economic statuses (lower class, middle class, and upper class).

DISCUSSION

The study sample's baseline characteristics reveal a very uniform distribution across age groups, with a slight majority (52.8%) in the 40-60 years age bracket. The sample was predominantly male (57.3%) and had a varied duration of disease, with most (69.3%) having psoriasis for 12-20 months. These results are consistent with a study that included a total of 1,988 participants, comprising 1,274 men (64.1%) and 714 women (35.9%). The participants had a mean age of 42.6 years with a standard deviation of 12.9 years [1].

In terms of educational status, the participants were evenly distributed among Middle Pass, Matric Pass, and Graduate levels. In a study conducted in Egypt in terms of educational level, 39.5% of the patients had intermediate education, and

34.9% had university education. Additionally, 34.9% of the patients were employed, while 65.1% reported having a monthly income sufficient to cover treatment expenses [7]. Economically, most of the participants in the current study were classified as belonging to the lower (41.3%) and middle (36.7%) classes, with fewer participants (22.0%) from the higher class.

In terms of psoriasis knowledge, the majority of participants (57.8%) were categorized as having inadequate knowledge about the disease, followed by moderately adequate (32.6%) and adequate (9.6%). This distribution highlights a general lack of awareness or understanding of psoriasis among the patients. This significant finding calls for better educational initiatives [11]. However, when breaking down knowledge levels by various subgroups such as age, gender, duration of disease, educational status, and economic status, no statistically significant differences were found.

This lack of statistical significance suggests that demographic factors such as age, gender, and socioeconomic status did not influence the patients' levels of knowledge about psoriasis in this sample. The similarity in knowledge levels across age groups suggests that younger and older patients are equally likely to be uninformed about their condition, which could indicate that information about psoriasis is not being effectively communicated to patients at the point of care or that public health information is not reaching the intended audience effectively.

The lack of significant differences in knowledge based on gender implies that both male and female patients face similar challenges in accessing or understanding information about psoriasis. This consistent trend highlights a fundamental directive for healthcare providers: ensuring that patient education initiatives are comprehensive and tailored to the specific needs of all individuals, irrespective of gender. Our findings are similar to studies showing that personalized healthcare plans are really important for making sure everyone gets the care they need [12,13,14].

However, another study conducted by Mohammad Ibrahim in which the correlation between patients' knowledge, self-care practices, and functional status throughout the program phases (n=43) revealed significant findings. Pre-program, there was a significant negative correlation between knowledge and self-care practice (r = -0.377, p = 0.018) and a highly significant positive correlation between knowledge and functional status (r = 0.584, p < 0.001). One-month post-program, the negative correlation between knowledge and self-care practice remained significant (r = -0.354, p = 0.020), as did the positive correlation between knowledge and functional status (r = 0.371, p = 0.014). Three months post-program, the significant negative correlation between knowledge and self-care practice persisted (r = -0.375, p = 0.013), along with the significant positive correlation between knowledge and functional status (r = 0.323, p = 0.035). These results indicate that increased knowledge consistently correlated with improved functional status but decreased self-care practice across all program phases [7].

Additionally, the duration of someone's illness didn't appear to impact their knowledge level about the disease. This indicates that patients might not necessarily gain more understanding about their condition over time [15]. It suggests that people living with psoriasis might not be getting the ongoing education and support they need, emphasizing the importance of continuous learning beyond the initial diagnosis. These findings are in line with previous research [16, 17, 18].

It appears that higher levels of education do not necessarily correlate with greater knowledge about psoriasis, indicating that educational attainment does not equate to an adequate understanding of the condition. This implies that there is a possibility that the methods and materials used for educating people miss the point or make the aspect to be inclusive of all, particularly those from different educational backgrounds. Modifying learning materials in such a way that they meet the requirements of patients with varying levels of knowledge is key to enabling them to manage and accept the condition in good condition [19, 20]. This finding is consistent with Bubak et al., who found that patients who participated in an educational program experienced significant improvements in their knowledge and self-expertise regarding psoriasis [21].

Finally, the study's findings supported the hypothesis that the participant's economic status wasn't a strong determinant of their amount of knowledge in psoriasis. Therefore, it contends that what counts more is the precarious sense as opposed to the amount of financial resources one has. It emphasizes the significance of a concerted and well-organized patient information approach which makes the disparity in accessibility of professional information and knowledge that is not limited by socioeconomic level [22, 23].

To sum up, there weren't major differences observed among different groups according to age or wealth, but, the interviewing process showed an insufficient level of knowledge about psoriasis of participants. This fact reveals a noticeable gap in patient education. This reveals a necessity to rethink the present ways of training. One needs to be always on the lookout for fresh and improved methods of instruction. On the other side, through this, we can assure the quality of care they receive, be that at home or the hospital, and hence we help them to live healthier lives.

Limitation :

The limitations of this study include the exclusion of participants unable to understand the local language, potentially limiting the generalizability of the findings. Additionally, the cross-sectional design restricts the ability to establish causality, providing only a snapshot of participants' knowledge at one point in time. Moreover, the study participants were all from a single hospital (Imran Idrees Hospital) affiliated with Sialkot Medical College. This could limit the applicability of the findings to other geographic regions or healthcare settings. These limitations suggest a cautious interpretation of the results and highlight areas for future research to improve the reliability and applicability of the findings.

CONCLUSION

The survey's results showed that the majority of those who had psoriasis didn't know enough about the disease as 57.8% of the people revealed this behavior. Surprisingly, the people who shared the most similarities across demographics like their age, gender, years of living with the illness, education level, and income level also knew the least of all of those things. It draws attention to the necessity for the improvement of education programs, the primary objective being to give equal treatment to all psoriasis sufferers, regardless of their origin and race, as well as the money they try to make for a living.

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Authors' Contribution:

Maria Khalid: Substantial contributions to the conception and design of the work.
Rabia Ishfaq : Drafting the work .
Sana Younas: The acquisition and analysis of data for the work.
Komal Shehzad: Interpretation of data for the work.
Hasan Khalid: Reviewing it critically for important intellectual content.
Qurat-Ul-Ain Zulfi: Final approval of the version to be published.