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RESEARCH ARTICLE

A STUDY OF CLINICAL PROFILE AND QUALITY OF LIFE IN PATIENTS WITH SCABIES AT RURAL TERTIARY CARE CENTRE

Salvatore Donald Privitera* and Lance Klusener

Department of Dermatology, University of Catania, Italy

*Corresponding Author e-mail: salvatoreprivitera1982@gmail.com

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ARTICLE DETAILS

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ABSTRACT

Scabies, a highly contagious parasitic skin infestation, is instigated by *Sarcoptes scabiei* mite. This study was performed to evaluate the clinical profile and quality of life in patients with scabies. 132 scabies patients of both genders were assessed using the revised Dermatology Life Quality Questionnaire (mDLQI) for scabies. The clinical features were also recorded. Clinical features of itching were seen in 104 patients, night aggravation in 86 and skin lesion in 78 patients. Family history was present in 80 patients, past history in 28 and secondary infection in 30 patients. The difference was significant ($P < 0.05$). 65% subjects reported not feeling embarrassed, in 63% school work was not at all affected, in 70% playing was not at all affected, 81% were not at all experiencing teasing and in 88% friendship was not at all affected. The difference was significant ($P < 0.05$). Quality of life was affected in scabies patients. Common clinical features were itching, night aggravation and skin lesions.

KEYWORDS

contagious parasitic skin infestation, *Sarcoptes scabiei* mite, scabies, itching, night aggravation, skin lesions

1. INTRODUCTION

Scabies is characterized as a highly contagious parasitic skin infestation, resulting from the *Sarcoptes scabiei* mite. In poorly resourced endemic areas, a 10% prevalence in the overall population and 50% prevalence in children has been estimated, making it one of the leading dermatological concerns in the developing world (Heukelbach and Feldmeier, 2006). In most rural communities of such nations, the ectoparasitosis is endemic with a prevalence rate of up to 10% in the general population and even higher in children (Rajajee, 1990). Scabies can affect both females and males regardless of socioeconomic status and race with the risk of spread increasing in crowded living conditions such as childcare facilities, group homes and prisons (Feldmeier and Heukelbach, 2009).

Additionally, scabies can cause significant morbidity due to secondary infections and post-infective complications including conditions such as acute post-streptococcal glomerulonephritis. Since it is challenging to eradicate scabies, the remaining possibility for reducing disease burden is to limit the resulting physical and mental complications (Feldmeier and Heukelbach, 2009).

Such dermatological diseases can affect a patient's life in numerous ways as exhibited in a research study where most patients reported itching, discomfort, and sleep disturbances. Additionally, it was also demonstrated that skin diseases can lead to embarrassment and psychological complications such as anxiety, depression, and anger consequently leading to social isolation and absenteeism from school and work (Fuller, 2013). Hence, this study was conducted to assess the clinical profile and quality of life in patients with scabies.

2. MATERIALS AND METHODS

This study was performed in the Department of Dermatology among 132 scabies patients of both genders. All participants were well-informed concerning the study and written consent was acquired.

Relevant patient information such as name, gender, age, etc. was documented and a thorough clinical examination was performed for all patients. The Modified Dermatology Life Quality Questionnaire (mDLQI) for scabies was used. The aggregate score was computed by summing each score of the 5 questions stemming in a possible maximum score of 15 and possible minimum score of 0. The higher the score, the higher the impairment of a patient's quality of life. A score within the range of 0-1 depicts little to no effect on patients' quality of life, a range of 2-5 indicates a mild quality of life impairment, a range of 6-10 translates to moderate impairment and lastly, a range of 11-15 demonstrates acute quality of life impairment. The obtained results were subsequently statistically analyzed with a p value less than 0.05 being considered as indicative of significance.

3. RESULTS

Table 1: Distribution of patients

Total- 132		
Gender	Males	Females
Number	54	78

Table 1 indicates that out of 132 patients, males were 54 and females were 78.

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Table 2: Clinical profile of patients

Clinical profile	Number	P value
Itching	104	0.05
Night aggravation	86	
Skin lesions	78	
Family history		
Present	80	0.06
Absent	52	
Past history		
Present	28	0.02
Absent	104	
Secondary infections		
Present	30	0.01
Absent	102	

Table 2, graph 1 shows that clinical features of itching were seen in 104 patients, night aggravation in 86 and skin lesions in 78 patients. Family history was present in 80 patients, past history in 28 and secondary infection in 30 patients. Thus, the difference proved to be significant ($P < 0.05$).

Figure 1: Clinical profile of patients**Table 3: Impairment in the quality of life**

Questions	Very much (%)	Quite a lot (%)	Only a little (%)	Not at all (%)	P value
Feeling embarrassed	2	11	22	65	0.02
Affected school work	0	13	24	63	0.05
Affected playing	1	8	21	70	0.01
Experienced teasing	0	4	15	81	0.02
Affected friendship	0	2	10	88	0.01

Table 3 shows that 65% of subjects were not feeling embarrassed, in 63% school work was not at all affected, in 70% playing was not at all affected, 81% were not at all experiencing teasing and in 88% friendship was not at all affected. The difference proved to be significant ($P < 0.05$).

4. DISCUSSION

Scabies, a contagious dermatological parasitic skin infestation, annually affects an expected 100 million people globally. In developing countries, particularly those with depleted resources, scabies is identified as a significant health issue as it may reach a prevalence rate of 50% among

children and 10% among adults. Scabies is mostly prevalent among individuals residing in developing, tropical countries with poor hygiene, and over-crowding conditions due to scarce water resources, particularly in hostels, prisons, and orphanages due to lack of hygiene (Heukelbach et al, 2005).

An asymptomatic individual infested with mites can also disseminate scabies. Such transmission can arise through skin to-skin interaction, requiring a minimum of 20 minutes. Thus, it can be disseminated rapidly within families that share linen in restricted sleeping areas (McCarthy et al., 2004). It may even spread via sexual contact among adults. Not only is morbidity signified by the extent of clinico-pathological symptom expressions, but additionally from the emotional characteristics of the disease progression. Psychological and physical attributes of morbidity can diminish an individual's quality of life (Hengge et al., 2006). Scabies patients significantly endure social stigma due to its transmission mode being mostly by direct person-to-person interaction and contact. Therefore, it is not challenging to envision that scabies has a substantial undesirable impact on such patient's quality of life (QoL) (Morgan et al., 2013). This study was performed to evaluate the clinical summary and quality of life in patients with scabies.

In this study, out of 132 patients, females were 78 and males were 54. The clinical features were itching seen in 104, night aggravation in 86 and skin lesion in 78 patients. Family history was present in 80, past history in 28 and secondary infection in 30 patients. Nair et al incorporated a total of 102 recently diagnosed scabies patients (Nair et al., 2016). 50.98% of the patients were males. Out of 44.11% patients, people aged between 21-40 years was the age group most frequently affected. Students were frequently affected with 41.17%, then housewives with 20.58%. Papules was the highest lesion commonality as it was identified in 84.3% and 82.3% cases of excoriations. Around 62.5% of children had reported a minimal negligible quality of life effect with a maximum of 51.6% adults reporting as having little quality of life effect.

We found that 65% subjects were not feeling embarrassed, in 63% school work was not at all affected, in 70% playing was not at all affected, 81% were not at all experiencing teasing and in 88% friendship was not at all affected. Chowdhary et al assessed patient's quality of life. Out of one hundred patients, 52% were female (Chowdhry et al., 2020). The 21-40 years age group was significantly affected as a total of 25.7% adult patients experienced mild effects while a total 55.9% of children patients experienced no quality of life effect.

Jin-gang et al in their study there were a hundred successive outpatients requiring scabies in a total of 96 patients (Jin-gang et al., 2010). Around 78 of patients (81.25%), were characterized as treated at the end of the study. The total mean score $\pm$ SD DLQI was 10.09 ± 5.96 . QoL of most of (71.9%) patients were moderately impacted. Out of all the questions, numbers 1 (symptoms), 2 (embarrassment), 7 (work/study) and 9 (sexual difficulties), were reported as having the highest scabies patient impact. Out of all domains, numbers 1 (symptoms and feelings) and 5 (personal relationships), reported higher scores in comparison to other domains. Post treatment there was significant QoL patient progression. There was no significant strong relationship identified between disease-specific traits and QoL.

5. CONCLUSION

Authors conclude that common clinical features were itching, night aggravation and skin lesions. Quality of life was also affected in scabies patients.

REFERENCES

- Chowdhry, S., Sheoran, P., D'souza, P., Yadav, M.K., Rathore, S. 2020. Assessment of the Quality of Life in Patients with Scabies in an Urban Tertiary Care Centre in North India. *Serbian Journal of Dermatology and Venereology*. Jun 1, 12(2): 41-6.
- Feldmeier, H., Heukelbach, J. 2009. Epidermal parasitic skin diseases: a neglected category of poverty-associated plagues. *Bull World Health Organ*, 87(2): 152-9.
- Fuller, L.C. 2013. Epidemiology of scabies. *Curr Opin Infect Dis*, 26(2): 123-6.
- Hengge, U.R., Currie, B.J., Jäger, G., Lupi, O., Schwartz, R.A. 2006. Scabies: a ubiquitous neglected skin disease. *Lancet Infect Dis*, 6(12): 769-79.
- Heukelbach, J., Feldmeier, H. 2006. Scabies. *Lancet*, 367(9524): 1767-74.

- Heukelbach, J., Wilcke, T., Winter, B., Feldmeier, H. 2005. Epidemiology and morbidity of scabies and pediculosis capitis in resource-poor communities in Brazil. *Br J Dermatol*, 153(1): 150-6.
- Jin-gang, A., Sheng-xiang, X., Sheng-bin, X., Jun-min, W., Song-mei, G., Ying-ying, D., Jung-hong, M., Qing-qiang, X., Xiao-peng, W. 2010. Quality of life of patients with scabies. *Journal of the European Academy of Dermatology and Venereology*. Oct, 24(10): 1187-91.
- McCarthy, J.S., Kemp, D.J., Walton, S.F., Currie, B.J. 2004. Scabies: more than just an irritation. *Postgrad Med J*, 80 (945): 382-7.
- Morgan, M.S., Arlian, L.G., Markey, M.P. 2013. *Sarcoptes scabiei* mites modulate gene expression in human skin equivalents. *PLoS One*, 8(8): e71143.
- Nair, P.A., Vora, R.V., Jivani, N.B., Gandhi, S.S. 2016. A study of clinical profile and quality of life in patients with scabies at a rural tertiary care centre. *Journal of clinical and diagnostic research: JCDR*. Oct, 10(10): WC01.
- Rajajee, S. 1990. Post-streptococcal acute glomerulonephritis: A clinical, bacteriological and serological study. *Indian J Pediatr*, 57(6): 775-80.
- Worth, C., Heukelbach, J., Fengler, G., Walter, B., Liesenfeld, O., Feldmeier, H. 2012. Impaired quality of life in adults and children with scabies from an impoverished community in Brazil. *Int J Dermatol*, 51(3): 275-82.