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Original Article

Knowledge, Attitude, and Practices Regarding Scabies Among Health Care Workers in Sarhad Psychiatric Hospital Peshawar, Khyber Pakhtunkhwa

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ABSTRACT:

Scabies is endemic in tropical and subtropical regions of the world. It is a disease of developing and low socioeconomic regions **Objective:** The aim of my study is to assess the knowledge attitude and practices level of health care workers of Sarhad Hospital for Psychiatric diseases Peshawar regarding scabies. **Method:** Study was conducted at Sarhad Hospital, Peshawar. A total of 120 health care workers (HCWs) were enrolled and asked questions related to their knowledge, attitude and practices towards scabies. Data was analyzed through SPSS latest version **Results: T**he respondents were doctors, Nurses, and junior clinical technicians of both sexes. Regarding knowledge, it is assessed that more than 90% health care workers (HCWs) know about scabies, more than 70% knows the sign and symptoms of scabies, more than 60 know the causes. One of the most important things is that less than 30% HCWs know the causative agent of scabies i.e. mite **Conclusion:** The knowledge level of HCWs was satisfactory but the practices were not good enough. It is due to lack of facilities like isolation rooms, trained HCWs about infection control measures and lack of infection control team to implement these practices.

KEYWORDS:

Scabies, Knowledge, Attitude, Practices, Hospital, Nurses, Doctors

INTRODUCTION

Scabies is a neglected parasitic disease in developing countries [1,2] such as Africa, Egypt, Central & South America and Southeast Asia [3-6]. Prevalence rates are high in developing countries with poor resources [7-9]. In developed countries, scabies occurs in sporadic individual cases [10,11]. Hospital acquired scabies is caused by lack of health care facilities, improper training of HCWs and poor knowledge [12]. In a study conducted at 3 military hospitals in Pakistan, the risk factors identified were infrequent bathing, changing of clothes and bedsheets [13]. In a study from Norway, it was observed that outbreak of scabies in nursing homes, health care facilities and hospitals may result from delayed diagnosis and treatment of crusted (Norwegian) scabies in admitted, immunocompromised and elder persons [14,15]. Other risk factors for scabies include congested living areas, poor public health awareness [16], improper sleeping habies, sharing of clothes, towels, unhygienic practices [17].

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Mellan by in 1944 showed that mode of transmission in scabies is through direct skin to skin [18]. In other studies, it was found that the HCWs who are in close contact with patients are at higher risk of getting contracted by scabies [19,20]. Use of half-sleeved coats by HCWs, lack protective measures are also responsible for hospital acquired scabies [21]. In another study conducted at Taiwan Provincial Tainan Hospital, a hospital acquired scabies outbreak was reported. It was attributed to lack of knowledge regarding the symtoms and delayed diagnosis [22]. In another survey conducted in Karachi, it was suggested that an active intervention is required to improve awareness regarding scabies [23]. In another large outbreak of scabies affecting 977 individuals, it was found that the recommendation by Centers for Disease Control and Prevention were in sufficient for patients. Patients were diagnosed on the basis of identification mites through skin scraping [25,26] and dermoscopy [27]. Scabies is a serious, highly transmissible and widespread disease. Health experts have suggested for establishment of special treatment centers in afflicted areas [28] and devising a national policy to combat such outbreaks [29,30].

METHODS

It was a cross-sectional quantitative study, where structured interviews were conducted through questionnaires from health care providers/workers level of knowledge, attitude, and practices regarding scabies, their risk factors, and mode of transmission. The study was conducted at Sarhad Hospital for Psychiatric diseases Peshawar. This is the only Govt. psychiatric hospital in Khyber Pakhtunkhwa situated in Peshawar. The capacity for indoor patients is 140 beds, but the admission rate is much higher than the actual number of beds in the hospital, because of the overcrowding of indoor patients, due to this skin diseases are common like scabies. The total number of HCWs in Sarhad hospital for psychiatric Diseases Peshawar is 120 of which 20 are Doctors, 40 Nurses, and 60 junior clinical technicians. All the HCWs in the hospital were interviewed through a questionnaire. A quantitative questionnaire was developed to assess and analyze the knowledge, attitude, and practices of health care workers regarding scabies transmission. HCWS of both genders were included in the study**.** The administrative staff and supporting staff were excluded**.** The data collected was entered into SPSS latest version and analyzed in the same software. The results were in the form of frequency and percentages. Tables and graphs were drawn to show the results. Questionnaires were kept under lock and key and only the researcher had the access to the original questionnaires. Field editing was done and the researcher ensured that the data collected was of good quality by filling 10 to 15 questionnaires per day.

RESULTS

Respondents were asked regarding the knowledge, attitude and practices about related to scabies. It was observed that 93.3% of the participants had knowledge regarding the different aspects of scabies, 70% knew about the signs and symptoms of scabies, 62.5 % knew about the cause of scabies, 64.2% knew about the treatment protocol of scabies, 66.7% knew about the use pf personnel protective measures from scabies and 45% knew about the prevention strategies for transmission of scabies in hospital (Table 1).

Responses	Frequency	Percent
Knowledge regarding different aspects of scabies		
Yes	112	93.3
No	8	6.7
Awareness of respondents regarding the sign and symptoms of scabies		
Yes	84	70
No	36	30
Knowledge about cause of scabies		
Yes	75	62.5
No	30	25
Don’t know	13	10.8
Knowledge about treatment protocol of scabies		
Yes	77	64.2

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No	29	24.2
Don't Know	10	8.3
Knowledge of HCWs regarding personnel protective measures from scabies		
Yes	80	66.7
No	30	25
Don't know	9	7.5
Knowledge regarding the prevention of transmission of scabies in hospital		
Yes	54	45
No	54	45
Don't know	12	10

Table 1: Knowledge of health care workers regarding scabies

Among 120 respondents, 75.8% perceived that environment is responsible for spread of scabies (Table 2). Regarding practices of HCWs for managing the scabies patients, it was found that 25% were isolating the scabies patients in separate isolation wards to prevent its transmission to other people, 80% were treating the patients with benzyl benzoate lotion and scabicide lotion, 27.5% were educating the patients for awareness and 80% were maintaining a safe environment (Table 3).

Responses	Frequency	Percent
Environment is responsible for spread of scabies		
Yes	91	75.8
No	23	19.2
Don't know	5	4.2

Table 2: Attitude of health care workers regarding scabies

Responses	Frequency	Percent
Isolation of infected patients		
Yes	30	25
No	90	75
Treating the patients with benzyl benzoate lotion and scabicide lotion		
Yes	96	80
No	24	20
Educating patients about scabies		
Yes	33	27.5
No	87	72.5
Maintaining safe environment		
Yes	96	80
No	24	20

Table 3: Practices of health care workers regarding scabies

DISCUSSION

Sarcoptes scabiei, commonly known as scabies, is a parasitic mite that causes intense pruritius (itching), rashes, and lesions. The HCWs were interviewed that have they ever heard about scabies? More than 90% said that they have heard about scabies only less than10 % said no. this is because that this is a neglected disease and very few people pay attention. Asking about sign and symptoms of scabies, 70% of HCWs know the sign and symptoms and 30% don't know. More than 60% know the cause of scabies while more than 35 % were not aware of it. This study is also supported by the study conducted in Karachi among general practitioners. GPs are defined as, any qualified health care provider, practicing allopathic medicine in private sector, except those who have dermatological experience, irrespective of sex and geographical origin and are currently working in Karachi division. A total of 200 qualified GPs participated in the study. There were no refusals, of 200, 198 (99%) GPs

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replied that they routinely came across scabies patients. All the respondents were aware, that skin is the primarily affected organ of the body in scabies. only 36% (72) of GPs had satisfactory awareness [24]. in our study the HCWs were asked the treatment protocol of scabies, more than 60% know the treatment protocol of scabies, while >30% not knows. they were also asked about personnel protective measures from scabies, more than 60% HCW knows the personnel protective measure from scabies while >30% not knows. They were also interviewed about the transmission prevention in hospital, <45% HCW knows that we can prevent the transmission of scabies in hospital while >50% not knows.

In our study the knowledge, attitude and practices level of HCWs was assessed and it was found that more than 90% HCWs know the name of the disease, sign symptoms and causes. Less than 45% thinks that we can't prevent the transmission of scabies in hospital while >50% not knows. This is because that there are no such training programs regarding infectious dermatological diseases like scabies. In this hospital. More than 70% HCWs are not isolating the infected patients, this is also because of lack of infection control measure in the hospital setup, no infection control committee exists, this may be a source of an outbreak in the hospital. that they are not isolating the infected patients, while the studies shows that whenever there is a patient of scabies in the hospital, they isolate him, and follow the infection control measures, while in our setting it is very difficult to isolate because of overcrowding, and less trained staff about infection control measures.

We recommend in the light of study results that, better awareness about scabies among HCWs is required. Trained doctors would not only help in improving case detection, but would also help in passing on the required health education to the patients. This will lead to fewer defaults and failures and improve cure rates.

CONCLUSIONS

Knowedge was observed to be satisfactory in this study, however practices were not up to the standards and needs improvement.

REFERENCES

1. Walton SF, Holt DC, Currie BJ, Kemp DJ. Scabies: new future for a neglected disease. Adv Parasitol. 2004; 57:309-76. doi: 10.1016/S0065-308X (04)57005-7.
2. Orkin M. Today's Scabies. *JAMA.* 1975,233(8):882–885. doi:10.1001/jama.1975.03260080044019
3. Scabies Alert in Western Pacific. World Health. Dec., 1975
4. Srivastava BC. Epidemiological study of scabies and community control. Journal of Communicable Diseases. 1980,12(3):134-138.
5. Orkin M. Scabies: what's new? Curr Probl Dermatol. 1995,22:105-11.
6. Clucas DB, Carville KS, Connors C, Currie BJ, Carapetis JR, et al. Disease burden and health-care clinic attendances for young children in remote aboriginal communities of northern Australia. Bull World Health Organ. 2008,86(4):275-81. doi: 10.2471/blt.07.043034.
7. Pruksachatkunakorn C, Wongthanee A, Kasiwat V. Scabies in Thai orphanages. Pediatr Int. 2003,45(6):724-7. doi: 10.1111/j.1442-200x.2003.01811. x.
8. Taplin D, Arrue C, Walker JG, Roth WI, Rivera A. Eradication of scabies with a single treatment schedule. J Am Acad Dermatol. 1983,9(4):546-50. doi: 10.1016/s0190-9622(83)70167-2.
9. Steer AC, Jenney AW, Kado J, et al. High burden of impetigo and scabies in a tropical country. PLoS Negl Trop Dis. 2009,3(6): e467. doi: 10.1371/journal.pntd.0000467
10. de Beer G, Miller MA, Tremblay L, Monette J. An outbreak of scabies in a long-term care facility: the role of misdiagnosis and the costs associated with control. Infect Control Hosp Epidemiol. 2006,27(5):517-8. doi: 10.1086/504365.
11.Estes SA, Estes J. Therapy of scabies: nursing homes, hospitals, and the homeless. Semin Dermatol. 1993,12(1):26-33.

doi.org/10.54393/pjhs.v1i2.5

12. Vorou R, Remoudaki HD, Maltezou HC. Nosocomial scabies. J Hosp Infect. 2007,65(1):9-14. doi: 10.1016/j.jhin.2006.08.012.
13. Raza N, Qadir SN, Agha H. Risk factors for scabies among male soldiers in Pakistan: case-control study. EMHJ-Eastern Mediterranean Health Journal, 15 (5): 1105-1110,2009. doi.org/10.26719/2009.15.5.1105
14. Scheinfeld N. Controlling scabies in institutional settings: a review of medications, treatment models, and implementation. Am J Clin Dermatol. 2004,5(1):31-7. doi: 10.2165/00128071-200405010-00005.
15. Cordoro KM et al. Scabies. In: Hogan D et al. eds. eMedicine World Medical Library [online]. 2006 (http: www.emedicine.com/derm/topic 382.htm, accessed 13 October 2006).
16. Gulati PV, Singh KP, Braganza C. Role of sociocultural and environmental factors in the cause of scabies. Int J Dermatol. 1977,16(4):281-3. doi: 10.1111/j.1365-4362. 1977.tb04321. x.
17. Stanton B, et al. "Scabies in Urban Bangladesh." The Journal of Tropical Medicine and Hygiene, vol. 90, no. 5, 1987, pp. 219-26.
18.Downs AM, Harvey I, Kennedy CT. The epidemiology of head lice and scabies in the UK. Epidemiol Infect. 1999,122(3):471-7. doi: 10.1017/s0950268899002277.
19. Mellanby K. The development of symptoms, parasitic infection and immunity in human scabies. Parasitology. 1944,35(4): 197-206.doi.org/10.1017/S0031182000021612
20. Juranek DD. Scabies control in institutions. Cutaneous infestations and insect bites. 1985.
21. Obasanjo OO, Wu P, Conlon M, Karanfil LV, Pryor P, et al. An outbreak of scabies in a teaching hospital: lessons learned. Infect Control Hosp Epidemiol. 2001,22(1):13-8. doi: 10.1086/501818.
22. Larrosa A, Cortés-Blanco M, Martínez S, Clerencia C, Urdániz LJ, *et al.* Nosocomial outbreak of scabies in a hospital in Spain. Euro Surveill. 2003,8(10):199-203. doi: 10.2807/esm.08.10.00429-en.
23. Hsueh PR, Lin BH, Hwang CC, Hsieh BL, Liu JC, et al. Nosocomial outbreak of scabies. J Formos Med Assoc. 1992,91(2):228-32.
24. Rathi SK, Rathi HS, Lakhani H, Hansotia MF. Awareness about scabies among general medical practitioners (GPs) of Karachi, Pakistan. J Pak Med Assoc. 2001,51(10):370-2.
25. Obasanjo OO, Wu P, Conlon M, Karanfil LV, Pryor P, et al. An outbreak of scabies in a teaching hospital: lessons learned. Infect Control Hosp Epidemiol. 2001,22(1):13-8. doi: 10.1086/501818.
26. Hengge UR, Currie BJ, Jäger G, Lupi O, Schwartz RA. Scabies: a ubiquitous neglected skin disease. Lancet Infect Dis. 2006,6(12):769-79. doi: 10.1016/S1473-3099(06)70654-5.
27. Heukelbach J, Feldmeier H. Scabies. Lancet. 2006 ,367(9524):1767-74. doi: 10.1016/S0140-6736(06)68772-2.
28. Walton SF, Currie BJ. Problems in diagnosing scabies, a global disease in human and animal populations. Clin Microbiol Rev. 2007,20(2):268-279. doi:10.1128/CMR.00042-06
29. Nair KP. Letter: Scabies eradication: national policy needed. Indian Pediatr. 1973,10(12):749.
30. Scabies Alert in Western Pacific. World Health.1975.cet 1:794, 1972.
31. Lutfiyya, Abdulla M. Baytin: A Jordanian Village. Mouton and Co.The Hagu :142, 1966