EPIDEMIOLOGICAL AND CLINICAL STUDY OF SCABIES IN AL-ANBAR GOVERNORATE

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Abstract
Wide cities of Anbar governorate were included in this study to collect 300 patients which skin diseases for the period of February 2010 to April 2011. From the total collected patients, 140 patients were diagnosed with scabies sarcoptes (46.6%) in the ages between (15-60 years). Scabies is more frequent in female (62.85%) than male (37.14%). The study showed that scabies is more frequent in rural population (57.8%) than urban. The ages of individuals with scabies have been examined and statistical analysis indicated that smaller age groups are more common in scabies. The study involved also the life style and showed that the low social and the low educative level were more prone to infect with scabies. Many other parameters have been studied and illustrated like the presence of animals in the home, the sharing of towels and number family member.

Keywords: Scabies, Rural population, Urban population.

Introduction
Scabies is a contagious 1 skin disease caused by mite Sarcoptes scabiei 2. The symptoms of scabies may differ from patient to other but the most common are itchiness and pimple like rash. Sometimes, tiny little tunnels form in the skin. The symptoms may exist throughout most of body or in select locations like wrists or between fingers. Scabies are produced by the infection of female mites with sarcoptes, with mite burrowing in the skin and putting eggs on it. The allergic reaction of the mites causes the symptoms of scabies 3. The South Australian Ministry of Health pointed out that infection with scabies does not indicate poor hygiene and socioeconomic class 4. Scabies infection affects over 300 million people across the world 5. The disease's symptoms include lesions of continuous scratching and skin redness on mite innovation sires 4-6 weeks after infection and itch, especially at night. This is because the female mite lays eggs and hatches in burrow sites and becomes an adult after a few of days. The mite is little (0.2-0.4mm long) 6. Soft, fine and flippant surfaces such as the axilla, elbows, finger webs, genitalia, flesh, waist and knee are discovered in burrow locations for infestation. 6 Symptoms of skin can last until 12 months after therapy and can still be contagious in people who have completed treatment 7. Permethrin 5 percent Scabicide Cream Preparation is considered the safest and most effective therapy. Apply the lotion to the entire body and remain for 8-14 hours 8. An intense itching and superficial burrows are the characteristic symptoms of scabies disease 9. The body develops the symptoms as a result of the reaction against the presence of mites 10. Typically, the symptoms appear after infestation in two to six weeks for individuals with first time of infection of scabies 11.

Materials and methods
Most of anbar cities were involved in this study and the time that spent in this study was to cover a larger number of cities to make a comprehensive study of scabies. The study was performed in a private dermatological clinic for the period of February 2010 to April 2011. The early diagnosis of scabies was based on the complaints of itching and the sites involved were physically inspected. Each patient's complete body has been evaluated. The leading dermatologist in the private clinic was diagnosed with scabies cases. Patients were then forwarded to the researcher in another room to ask them using the appropriate
questionnaire. There were clearly different levels of itching, as nonexistent, fragile, moderate, or severe, burrowing or erythematous popular vesicular, postural and lesion-related injuries, microscopically and clinically diagnosed for additional family members with the same symptoms.

Results and discussion

The results of diagnosis conducted upon (300) skin disorder patients showed that (140) patients from total number were infected with scabies (46.6%).

The ages of scabies infected patients were between (15-60 years). Scabies is more frequent in female (62.85%) than male (37.14%). The study showed that scabies is more frequent in rural population (57.8%) than urban. The ages of patients with scabies were analyzed in this study and statistical analysis results showed that the small age groups were the more frequent in scabies. The study involved also the life style and showed that the low social and the low educative level were more prone to infect with scabies. Many other parameters have been studied and illustrated like the presence of animals in the home, the sharing of towels and number family member.

The diagnosis findings indicated that out of 300 patients, with varied skin illnesses, 140 patients were identified as scabies (46.6 percent) and the remaining 160 were negative. In age groups (13-29), the wildlife events were the most common. This age group is the most active and the most engaging environment. As ages rise between 13 and 50 patients with scabies, patients reached at least 5.5%. Scabies with women were very frequent (62.85%) in comparison to men (37.14%) (table 1).

<table>
<thead>
<tr>
<th>Disease</th>
<th>Type</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scabies</td>
<td>Freq.</td>
<td>88</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>62.85</td>
<td>37.14</td>
</tr>
<tr>
<td>Non scabies</td>
<td>Freq.</td>
<td>50</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>31.25</td>
<td>68.75</td>
</tr>
<tr>
<td>Total patients</td>
<td>Freq.</td>
<td>138</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>46</td>
<td>54</td>
</tr>
</tbody>
</table>

Table (1): Scabies in a pattern of frequency and percentage for all patients and healthy individuals for gender comparison.

The correlation between age and scabies infestation, which was showed in this study, differs than other study performed in Brazil and agree with the same study in the incident of gender.

The data reveal that amongst rural persons (57.85%) there are higher occurrences of scabies than in urban areas (table2). This might be because of lesser rural health education than urban societies.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Type</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scabies</td>
<td>Freq.</td>
<td>81</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>57.85</td>
<td>42.14</td>
</tr>
<tr>
<td>Non scabies</td>
<td>Freq.</td>
<td>108</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>67.50</td>
<td>32.50</td>
</tr>
<tr>
<td>Total patients</td>
<td>Freq.</td>
<td>189</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>63</td>
<td>37</td>
</tr>
</tbody>
</table>

Table (2): Scabies in a pattern of frequency and percentage for all patients and healthy individuals for rural and urban comparison.
Persons with genetics have been demonstrated to diminish with advances in academia. With control strategies and treatments, education would seem to offer people with higher ability than people who are not educated to understand health and disease frequency. There was a large prevalence of scabies patients in a family association with 10 or more family occurrences in the most serious events. The lifestyle is so important in the transmitting of many dermatological problems, in this study it was shown that 48 scabies patients were participate the towel with other persons. The study also examined the effects of daily showering, presence in the household of animals and neglected people in scabies infestations, which spread throughout the family, and the result showed a significant effect of all parameters, the sharing towel increases the chance of scabies infestation and 48 scabies patients were sharing the towels. Also 133 scabies patients in this study were showering daily (table3)

Table (3): Scabies in a pattern of frequency and percentage for all patients and healthy individuals for sharing towels, daily showering and presence of animals compared with none of these parameters.

From the results of this study, School health workers should be able to identify indications of sickness and provide family and school workers with appropriate guidance to monitor further spread across the school and in the community. Andersen (2004) has noted that training evaluation and illness treatment are more essential disease control measures. Therefore, it is necessary to consider seriously all the characteristics investigated in this article to restrict scabies's spread to the population.

Table (4) Shows logistic regression analysis findings and the importance trend for patients with scabies. The variables influencing sickness infestation were shown to be significantly important in age groups and education levels (P<0.001).

Table (4): Logistic regression analysis results
Animals and neglected individuals (P = 0.0123 and P = 0.0461 respectively) have substantial presence. Gender was shown to be extremely important (p<0.001) and animals and neglected people were significant in the homes correspondingly (P=0.0123 and P=0.10401).

Conclusion:
From the parameters which were used in this study, it was concluded that many factors affect scabies and all of these factors must be taken seriously to limit the spread of this disease. The rural have the largest percentage of scabies compared with urban in addition to lowest level of education in rural; therefore, the education level of rural must be increased to decrease the percentage of scabies infestation.

References
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