Introduction
Leprosy (Hansen’s disease) is caused by *Mycobacterium leprae* which was one of the first bacteria to be incriminated as a cause of human disease.\(^1\) In the time of Christ, it was considered to be a holy curse conferred upon the people due to their wrong doings and the affected unfortunate was totally isolated and discarded. According to some ancient transcripts the patients were confined to huge dungeons or wells and even tortured and stoned to death if they tried to enter the cities. In Pakistan, leprosy is also considered to be a dreadful infection and normal people avoid and break all kinds of links with these patients.\(^2\)

Leprosy is acquired by prolonged contact with patients of lepromatous leprosy who discharge *M. leprae* in large numbers in nasal secretions and from skin lesions.\(^3\) Despite its low communicability leprosy remains endemic...
among an estimated 10 to 15 million people living in poor tropical countries.\(^3\) In Pakistan the situation of leprosy in fairly accurately known and its prevalence is estimated to be 0.05/10,000 with an incidence of 0.3/100,000. In Sindh its prevalence and incidence is estimated as 0.05% and 0.3%, respectively.\(^2\) In Larkana region detection of new cases indicates that the transmission in still taking place in and around the adjoining districts that shows the endemicity of the disease in the region.\(^4\)

Clinical spectrum of the illness varies from mild and limited cutaneous disease to very severe one with extensive nerve and systemic involvement.\(^1\) If infection is not treated at early stage it may progress to its severe and complicated form, therefore, only recognition and prompt therapeutic interpretation is important step to halt the disease at its early stages and protect the patients from its later complications.\(^5\)\(^6\)

General practitioners working in the endemic areas of the disease are frontline health service providers of our population, therefore sufficient knowledge of leprosy regarding its presentation, clinical features and further workup is essential for them to effectively participate in disease control program.\(^7\) As there is a deficiency of data regarding awareness of leprosy among general practitioners working in endemic areas of the disease, this study was conducted with an aim to assess the level of knowledge regarding symptoms, source of infection, cure and social acceptance of leprosy patients among general practitioners working in endemic areas of leprosy in Larkana region Sindh, Pakistan.

**Subjects and methods**

250 general practitioners working at different sites in endemic areas of leprosy in Larkana region were included in the study. These practitioners, irrespective of sex and seniority of practice, were assessed for knowledge of awareness regarding the disease leprosy. For this survey questionnaires were distributed to them requiring information regarding the awareness of symptoms, source of infection, cure of the disease and social acceptance for leprosy patients in their society. The properly filled questionnaires forms were scrutinized and included in the study.

**Results**

A total of 250 questionnaires were distributed among general practitioners. 225 properly filled questionnaires were scrutinized and included in the study. Among them 225 practitioners, only 172 (76.4%) had enough knowledge about the symptoms of leprosy while 53 (23.5%) practitioners were unaware of the symptoms. 133 (77.3%) practitioners had enough knowledge of symptoms as well as knowledge regarding the source of the disease. Regarding the cure of the disease, 60 of 133 (45.1%) practitioners out of these, knew the proper cure while remaining 73 (54.8%) were unsure about the disease cure. 21 (35%) practitioners out of 60, who knew the proper cure showed acceptance for leprosy patients like having cup of tea with them or working in same environment or keeping them as helpers while 39 (65%) rejected them socially (Table 1).

<table>
<thead>
<tr>
<th>No. of respondents</th>
<th>Awareness</th>
<th>Unawareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms (n=225)</td>
<td>172 (76.4%)</td>
<td>53 (23.5%)</td>
</tr>
<tr>
<td>Source of infection (n=172)</td>
<td>133 (77.3%)</td>
<td>39 (22.6%)</td>
</tr>
<tr>
<td>Cure of disease (n=133)</td>
<td>60 (45.1%)</td>
<td>73 (54.8%)</td>
</tr>
<tr>
<td>Social acceptance (n=60)</td>
<td>21 (35%)</td>
<td>39 (65%)</td>
</tr>
</tbody>
</table>
Discussion

Leprosy with myriad modes of presentation and long incubation period is usually misdiagnosed and receives inadequate treatment by medical practitioners in the endemic areas. General practitioners are the first contact point for these patients when the disease in still in its initial stages. To prevent the disease complications with resultant stigma it is important that our general practitioners be able to suspect and diagnose the disease and subsequently refer there patients to concerned specialists for proper management and followup. For this the practitioners are expected to have sufficient knowledge, skills and correct attitude for leprosy patients.

Various studies have been conducted in this regard throughout the world. Scant data are available from Pakistan and no such study has been done in endemic areas of Larkana region. To assess the awareness about leprosy in general practitioners, this study was planned. The results obtained showed that the majority of the practitioners were aware about the symptoms and source of leprosy infection. However, a marked number of these practitioners was not sure about the disease being curable. Relatively small number of these practitioners (35%) accepted leprosy patients socially being as a helper or working in same environment. It is, therefore, important that leprosy awareness through educational seminars on the source of infection, disease manifestations, management of clinical cause and social acceptance of the patients should be created. Leprosy is not a fatal disease but patients with suspected skin lesions not responding to the casual treatment should be referred immediately to specialized units for proper examination management and rehabilitation.

In conclusion, being a disease with diverse clinical presentations and limited knowledge of the medical personnel about leprosy, the disease is being misdiagnosed and mistreated. Even with the control of leprosy bacillus, the disease itself has not been conquered. Leprosy awareness should be created not only in medical practitioners but also in public and patients. More efforts are required to combat irrational fears still largely associated with leprosy. Therefore, in this millennium leprosy should be given the same status as other infections disease.

References

11. Bajaj DR, Matlani BR, Soomro FR et al. Knowledge, attitude and practices regarding


---

**32nd PAD Conference 2013**

13-15th December, 2013

*Venue:* Sheraton Karachi Hotel, Karachi

*Theme:* Aesthetics and Dermatology

*Organizing Chairman:* Dr. Manzoor H. Memon

*E-mail:* 32pad conference2013@gmail.com

*Website:* www.pad.org.pk

*Ph:* 0333-3614284