

Understanding Health Seeking Behavior Regarding Leprosy Patient

**Md. Yeamin Ali¹, Md. Fakrul Islam², Md. Redwanur Rahman¹, Md. Liton Hossen³,
Jebunnesa Islam⁴, Mahfuza Khanom Sheema¹, Akib Javed⁴, Mst. Rupali Akhtar⁵**

¹Institute of Environmental Science, University of Rajshahi, Rajshahi, Bangladesh

²Department of Social Work, University of Rajshahi, Rajshahi, Bangladesh

³Department of Anthropology, University of Rajshahi, Rajshahi, Bangladesh

⁴Department of Geography and Environmental Studies, University of Rajshahi, Rajshahi, Bangladesh

⁵Department of Political Science, University of Rajshahi, Rajshahi, Bangladesh

Email address:

yeaminiesru@gmail.com (M. Y. Ali), hiraharati@yahoo.com (M. F. Islam), redwan_rahman@lycos.com (M. R. Rahman),
litananthro.ru@gmail.com (M. L. Hossen), jebunnesa7@yahoo.com (J. Islam), mahfuzasheemaict@gmail.com (M. K. Sheema),
akib.jr@gmail.com (A. Javed), akhtarrupali@gmail.com (M. R. Akhtar)

To cite this article:

Md. Yeamin Ali, Md. Fakrul Islam, Md. Redwanur Rahman, Md. Liton Hossen, Jebunnesa Islam, Mahfuza Khanom Sheema, Akib Javed, Mst. Rupali Akhtar. Understanding Health Seeking Behavior Regarding Leprosy Patient. *American Journal of Health Research*. Vol. 3, No. 6, 2015, pp. 356-361. doi: 10.11648/j.ajhr.20150306.17

Abstract: The study aims at understand the health seeking behavior of leprosy patient and make a batter policy regarding leprosy treatment. People's perception and culture have great link with health seeking behaviors. Also socio-culture, economic and belief regarding diseases has dominant influence in health seeking behaviors. Socio-cultural behaviors are much related with health seeking behaviors of leprosy. In case of leprosy, their surrounding people have great influence in what kind of treatment they take. Leprosy patient health seeking behaviors influence by their awareness, a consciousness, belief, socio-culture condition and economic condition. Those the entire thing is related with culture. Research shows that 45% patient take salve (Ointment) at first step and they think that it is a skin disease. Limited knowledge, sharing, confusing about cure, wrong belief about diseases are the main factor to treatment. Also economic class is the significant factor for treatment. Lower class people's economic condition has too much impact on health seeking behavior. If we make conscious about leprosy in our country or society, then the entire leprosy patient will be cure. So, we should think about health seeking behavior those of patient for recurring from the disease. Most of the respondents recognize leprosy after medical test.

Keyword: Leprosy, Health Seeking Behaviors, Treatment, Socio-culture

1. Introduction

Leprosy is an infectious disease caused by the slow growing bacillus, *Mycobacterium leprae*. It is most probably spread as a droplet infection. Like many other infections, leprosy can be treated using multidrug within six to twelve months [1]. Leprosy can affect people of any age or sex, including infants.

Leprosy is a chronic infection caused by the bacteria *Mycobacterium leprae* and *Mycobacterium lepromatosis* [2]. Initially, infections are without symptoms and typically remain this way from 5 to as long as 20 years. Symptoms that develop include granulomas of the nerves, respiratory tract, skin, and eyes [3]. Health seeking behavior is a recent popular concept,

which tries to understand the cause behind delayed treatment process [4]. It is also important issue in medical Anthropology. What kind of treatment one individual will take totally depend on health seeking behavior. If we want to make a healthy country we should understood the health seeking behavior of the patients. Lack of knowledge on health seeking behavior will hamper healthcare facility. Most of the people of our country go to quack because they are not conscious about proper treatment. Though, in this part of the globe leprosy is decreasing [5], but like Bangladesh some countries has still getting more than thousand new cases each year. Bangladesh ranks fourth in the world as a leprosy-burdened country after India, Brazil and Indonesia, according to official records [6]. So it is necessary to study about leprosy.

Leprosy usually starts as a patch on the skin, but it can also attacks the nerves and damage them. If you do not treat leprosy this nerve damage can bad to problems in the face, hands, and feet. But if you take care of people with leprosy, most permanent damage can be prevented. Globally in 2012, the number of cases of leprosy was 180,000. In 2011, the approximate number of new cases diagnosed was 220,000 [7].

Still, Bangladesh has significant amount of leprosy patient. That's why it is necessary to understand the health seeking behavior of leprosy patient in Bangladesh. In 2012, 71% of new cases of leprosy patients were detected in South-East Asian region among the globe. Bangladesh is among the six country of this region, which has more than 1000 count of new detection of leprosy patient annually [3]. In 2012, 3688 new leprosy cases detected in Bangladesh [6], which is 2.38 per 100,000 population. It was 3970 in 2011, 4183 in 2010 and 5238 in 2009.

The study tries to know about the health seeking behavior of leprosy patients. The purpose of the paper is to find out the knowledge and awareness of leprosy patient about their health seeking behavior, to reveal the belief system regarding leprosy treatment, to look for economic factors for health seeking behavior regarding leprosy and to see the socio-culture factor for health seeking behavior of leprosy.

2. Methodology

Rajshahi division, located in the north-west of the country, is one of the oldest and historically important areas of Bangladesh (Figure 1). An estimated population of 853,000 people [8] with total area of 96.69 km [2] (37.33 sq. miles) lying beside northern banks of the river Padma. A quality treatment facility developed over decades in the city. Patients from surrounding district come to Rajshahi for quality health care service.

The study is explorative and to some extent descriptive in nature that enforces to adopt mixed with qualitative and

quantitative data as well as secondary and primary data. The primary data were collected from a structured questionnaires, interviews, focus group discussion and observation. The secondary data were collected from different sources. The questionnaire survey was conducted based on purposive sampling which includes 100 respondents. The primary data were analyzed using various statistical software.

In this study, researchers tried to understand the health seeking behaviors of leprosy patient. We collected information of leprosy patient with the help of Damien Foundation. Damien Foundation is one of the important organizations in Bangladesh that works with leprosy patient. In Rajshahi medical college hospital, Damien Foundation conducts their work with Bangladesh government with name of DOTS Corner. We completed our study with leprosy patient with the help of DOTS Corner in Rajshahi.

3. Result and Discussion

In Rajshahi division (present day both Rangpur and Rajshahi division), in 2011, total 1704 newly leprosy patient detected, which was 1966 in 2010 and 2453 in 2009. Rajshahi district has total 2595197 populations [8]. On an average, 38.5 new leprosy patients were detected at Rajshahi in 2001-08 period. The new leprosy cases were decreasing significantly after 2004 [4].

In 2014, 156 leprosy patients were under treatment in Rajshahi district, which was 187 in 2013 and 234 in 2012.

3.1. Patient Awareness and Consciousness About Leprosy

3.1.1. Nobody Knows About Leprosy

Most of the cases patient thinks that it is a skin disease. At the first time they never think that it is leprosy. After medical test, they are able to know that she/he is affected by leprosy. Before knowing about leprosy, they take different kind of treatment.

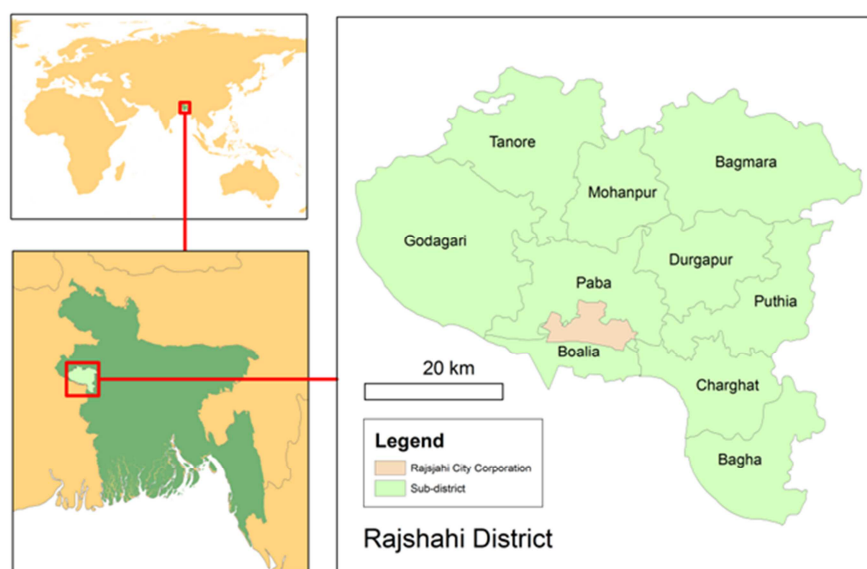


Figure 1. Study area of Rajshahi District, Bangladesh.

In our study, Husna Ara Begum age 34, in Rajshahi District. They have two girls and one boy. Suddenly Husna Ara found some white spots on his face. She just thinks that those are the normal spots. She was using different creams and medicines from quack. They didn't recognize that those are the leprosy. Suddenly her girl attacked by pneumonia that why her girl admitted in the Rajshahi Hospital. In the Rajshahi Hospital one doctor of DOTS corner watch those spot of Husna Ara. The doctor said Husna Ara to come DOTS corner. And some time later, she goes DOTS corner and the doctor completes some test. After testing, Husna Ara came to know that she got leprosy.

3.1.2. Limited Knowledge

Knowledge gap is hampering the health seeking behavior on leprosy patient. While around one third of the leprosy patient delayed to take proper treatment in Lusaka of Zambia, there we found that patients delayed on average six month in study area [10]. People never like to share anything. They didn't like to share about the information of leprosy. Sometime, they learn when they recognized that he/she is attacked by leprosy. They learn something from the medical center or DOTS corner. They do not know the symptoms of leprosy and how to recognize it in primary stage.

3.1.3. Patient Confused About Curability of Leprosy

Leprosy patient under medication are often confused about the curability. They are just taking medicine because it free. When they taking medicine long time and their position remain stable and they think that it will not cure. They have a dilemma that it will cure or not.

In other study, Ariful Islam is 15. One day Mr. Islam having rice with his parent. His mother noticed that, He can't able to grasp rice fully because he's having some crack in Right hand finger. Sometime later, they knew that it is leprosy. Doctor gave medicine for one year. Mr. Islam completed medicine one year. But, at present time doctor stops giving medicine to Mr. Islam. Now, his father didn't know that it will cure or not.

3.1.4. Seeking for Different Kind of Treatment of Leprosy

When the person did not know about leprosy they take different kind of treatment. Before recognizing, they take this kind of treatment.

Table 1 shows that, almost half of the total patients depend on salve (Ointment). Another one third patients took

homeopathy treatment. Only 5% leprosy patients go to regular medical hospital.

Table 1. Different kind of treatment for leprosy.

Treatment	Number (N=100)
Salve (Ointment)	45(45%)
Indigenous physician (herbal treatment and Falk spiritual treatment)	5(5%)
Homeopathy	35(35%)
Both homieo and Kabiraj (Traditional treatment)	10(10%)
Medical Hospital	5(5%)
Total	100%

3.1.5. Fear of Stigma

Stigma is common in chronic health condition like leprosy [11]. Often we found that, leprosy patients didn't disclose about their disease because of stigma. They always try to hide about leprosy. Patients experience anxiety and try to avoid social contact on this issue. Most of them try treatment secretly.

Moreover, we found a patient, Asifa Banu age 28 live in Guripara, Boalia thana in Rajshahi. Asifa knows form DOTS corner that she is attacked by leprosy. But she didn't say about it in the village. Because, she thinks that people will never take it easily. So, she was taking treatment secretly. But some of neighbors know that Asifa have some spots on her body. One day, suddenly, Atikul mother found some white spot in Atikul's body and Atikul's mother asked Asifa what kind of treatment she takes but Asifa said nothing about it. Atikul mother makes gossiping about it with another neighbor. One of the neighbors said that, she should take Asifa in medical college hospital. Later, Atikul's mother went to that place of Medical Hospital. Finally, they knew about DOTS Corner and leprosy.

The table 2 shows that, those who didn't know about leprosy suffer too much on health seeking behavior. 68% respondents those who were unknown to leprosy have too much impact on treatment and 28% respondents have much impact. The patients those who has limited knowledge 72% of them said that has too much impact on treatment. Patients who believed in prejudice about leprosy have too much impact on 75% patients. Finally, patients those who fear stigma, 63% respondents have much impact and 34% respondents have little impact on leprosy treatment.

Table 2. Factors related to health seeking behavior for leprosy.

Degree of Impact for treatment (Based on Likert Scale [12])	Factors				
	Nobody know about leprosy	Limited knowledge/Lack of health education	Confusion about cure	Prejudice about disease	Fear of stigma
Too Much	68	72	30	75	63
Much	28	20	29	19	34
A little	2	0	33	3	0
Very Little	0	5	5	1	0
No Comment	2	3	2	2	3

3.2. Belief Systems Regarding Leprosy

3.2.1. Local Belief or Local Name of Leprosy

Leprosy has a local dialect. Most of the people of Rajshahi called *Shaik Daoud*. Locally, *Shaik Daoud* means they touched (shaik) by Hindu (Traditional Religion) people.

They firstly belief that if they touch the spots by Hindu people it will recover. But it didn't recover because it is leprosy. It need to MDT (Multi Drug Treatment) to recover.

3.2.2. Some Person Believe That It Transmits Generation to Generation (Hereditary)

Some of the respondents believe that, leprosy transmits generation to generation. They said that it would continue from one generation to another. Menara Begum is 28 and her husband Shohag Hossain live in Guripara in Boalia thana in Rajshahi. Menara's son Atikur was attacked by leprosy she known it from DOTS corner. Mennara said that, Atikur Grandfather has leprosy. That time she did not understand because she didn't know leprosy that time. At present, he can remember that Atikur's grandfather died for leprosy. She said that long time before there was dispute between Atikur grandfather and Kinman. Once upon a time, Kinman attacked

Atikur's grandfather for land dispute and Atikur grandfather broke his hand but he didn't feel it. Because, he has no sense in his hand. Atikur mother told, that's why Atikur attacked by leprosy. And she believe that it transmits generation to generation (Hereditary).

3.2.3. Relation with Super - Natural Power

One of the respondents said that it is related with jinn (an invisible spirit mentioned in the holy Quran and believed by Muslims to inhabit the earth) and monster (petni). After coming or attacking this monster (petni) they are attracted by leprosy. Patan Buri aged 42 lived in Guripara in boalia Thana in Rajshahi. She said that he attacked by gen. One day suddenly she attacked by leprosy. She said that one day something different or bad air came in her house. She said that something still is belonging to her house. He wants to said that leprosy is caused for supernatural power.

3.2.4. Punishments for Sin

Some respondents believe that, it is the punishment for their earlier sin. They also think that medical hospital has nothing to do with it. That's why they didn't like to go medical hospital for proper treatment.



Figure 2. Images of leprosy patient.

Table 3. Belief effect on health seeking behavior regarding leprosy.

Effect on Health seeking behavior (Based on Likert Scale [12])	Superstitions		
	Punishment for sin	Related with supernatural power	Transmitted generation to generation
Too Much	40	63	30
Much	30	34	40
A little	15	1	18
Very Little	12	0	9
No Comment	3	2	3

Superstitions have strong impact on health seeking behavior on leprosy patients. 40% patients believe that, leprosy is a result of their sin and has too much impact on health seeking behavior. 63% respondents believe that, it is too much related with supernatural power. Patients also thought that leprosy transmitted generation to generation, which have too much influence on 30% and much influence on 40% on health seeking behavior.

3.3. Socio-cultural Factors for Health Seeking Behavior of Leprosy

3.3.1. Social and Cultural Influence

Man live in society. They are not out of society. They always think about society and people of the society. If people attacked by leprosy, they never like to disclose about their disease. Because the society people never take leprosy as a good thing, that thing always influences the health seeking behaviors of leprosy.

In our research area, we found some short of different scenario. Some place man help to take treatment. And some place makes a distance with them. Some time they cut-off relation with them. Lilufa Begum age 38, lived in Mirzapur, Binodpur bazar, Rajshahi, His husband name is Faruk. They have two daughters. Their conjugal live was going very well. She has some spots on her face, when his husband knew that those are leprosy. His husband cut off relation with her. Now she is living with two daughters.

3.3.2. Treatment Influences by Suggestion of Society Member

In our society what kind of treatment we will take always depends on society member. Our society member gives some short of suggestion for taking treatment.

Table 4. Effect of society member on treatment.

Suggestion	Number (N=100)
Suggestion for medical hospital	5 (5%)
Suggestion for salve (Ointment)	50(50%)
Homeopathy	35(35%)
Indigenous physician (Herbal treatment)	10 (10%)
Total	100%

The table 4 shows that, at first step most of patient took salve (Ointment), because they thought, it's a skin disease. At least half of the patients thought like so. 35% patients took homeopathy and 10% patients went to Indigenous physician (Herbal treatment) for treatment.

3.3.3. Different Health Seeking Behaviors for Male and Female

The most of the respondents are poor. What kind of health care women will take depend on male decision such as father, husband or brothers? Habib Mondol 52 in age lives in Mirzpur, Binodpur, Rajshahi. His wife name is Romesa Begum age 42. Romesa found some spots in her skin. At the first time she said to her husband. His husband first time provides some salve (Ointment). After using three month, it remains same. So she said to her husband again. That time he provides some homeopathy medicine. After some time later Habib mondal Brother's son said that it should be leprosy, you should go medical college. Now they take treatment from medical hospital.

Table 5. Socio-cultural factors influence in health seeking behavior.

Effect on Health seeking behavior (Based on Likert Scale [12])	Socioeconomic factors		
	Social & Cultural	Religion	Economic
Too Much	60	32	88
Much	29	33	8
A little	6	15	2
Very Little	2	11	1
No Comment	3	11	1

So, that's why, we can say that different health seeking behaviors for male and women.

It is known from other respondents that, socio-economic factors have great impact on health seeking behavior. 60% respondents said that, social-cultural factors have too much impact. 32% respondents said religious superstitions have too much influence on health seeking behavior. Correspondingly 15% and 11% patients said, that have a little and very little impact on health seeking behavior. 10% patients remain silent on influence of religious belief. The table 5 shows that, because of economic factors 88% patients have too much impact on health seeking behavior.

3.4. Economic Factors for Health Seeking Behaviors Regarding Leprosy

Economic factors are found influential regarding health seeking behavior on leprosy treatment in the study area. We found cost of the healthcare is primary concern prior to treatment.

During the field work it's found that, rich people take quicker treatment in comparison to poor people. They go to quickly qualified doctor and those who poor taking treatment from Homeopathy and Kobiraj (Traditional treatment). They go for healthcare center at very last.

We also found that, most of the patients used to take other than medical treatment like homeopathy, Kobiraji etc., because, they were unconscious about leprosy. After recognizing leprosy, they get admitted "DOTS Corner" under Rajshahi medical college and take a free treatment from Damien Foundation and Bangladeshi government.

Table 6. Financial conditions impact on treatment regarding leprosy.

Degree of Impact for Treatment (Based on Likert Scale [12])	Economic class			
	Upper class	Middle class	Working class	Lower class
Too Much	15	50	79	80
Much	14	30	15	13
A little	30	15	4	5
Very Little	40	1	1	1
No Comment	1	3	1	1

The table 6 shows that, economic class is considerable thing relating health seeking behavior of leprosy patient. Upper class people have least impact and lower and working class have strong degree of impact for treatment. From upper class patients 30% have little impact and 40% have very little impact on treatment. Almost halve portion of middle class patient said that, they have too much impact on taking treatment. Among the economic class, 79% working class have too much impact on economic factor regarding treatment. On the other hand in every 4 out of 5 patients from lower economic class have too much degree of impact for treatment.

3.5. Side-effects After Taking Treatment

When a leprosy patient taking MDT from any medical hospital center. They face different kind of problem. But some person has no problem when they take MDT.

Table 7. Patient conditions after treatment.

Side-effect	Number (N=100)
Losing eye power	10 (10%)
Headache	15 (15%)
White skin became black	15 (15%)
Allergy	10 (10%)
New spot in skin	5 (5%)
No problem	45 (45%)
Total	100%

Table 7 shows that, about 10% patients respectively said that, they lose their eye's power and face allergic symptom after taking MDT. 15% respondent respectively face headache and white skin became black. And Only 45% respondent said that they have no side-effect.

4. Conclusions

Health seeking behaviors are not just an isolated event. It is result of mixed awareness, knowledge, social- cultural, economic and belief factors. All these factors influence the health seeking behavior of leprosy patient. Unconsciousness of leprosy of the study is one of the major influential factors regarding health seeking behavior. After identified as a leprosy patient they perceive differently about their disease. Before taking treatment, they always consider their economic condition. Health seeking behaviors of leprosy differ from society to society. As a last step, they went to healthcare center for treatment. We must think that how people take treatment when we are discussing their healthcare facility. If we make them conscious and try to teach people about different kind of disease then people feel comfortable about their disease. Then, our people can able to take right decision health care. So, by understanding the health seeking behavior of leprosy, we can able to provide better treatment on leprosy in locally and globally.

References

- [1] WHO "Leprosy Fact sheet N°101", May 2015 <http://www.who.int/mediacentre/factsheets/fs101/en/> accessed in 30 October 2015
- [2] "New Leprosy Bacterium: Scientists Use Genetic Fingerprint To Nail 'Killing Organism'". Science Daily. 2008-11-28. Retrieved 2010-01-31.
- [3] WHO position paper "Weekly epidemiological record" Global leprosy update. 2014, vol. 36, issue 90, pp 463-72.
- [4] N. Cornally, & G. McCarthy, Help-seeking behaviour: A concept analysis. International journal of nursing practice, 2011, vol. 17, pp 280-288.
- [5] Kulkarni, GS (2008). Textbook of Orthopedics and Trauma, 2nd edn, Jaypee Brothers Publishers. p. 779. ISBN 9788184482423. New Delhi, India.
- [6] WHO Technical Report Series "WHO Expert Committee on Leprosy" Eighth report. 2012, pp 4-10.
- [7] K. Suzuki, A. Takeshi, A. Kawashima, A. Yoshihara, R. R. Yotsu, and N. Ishii, Current status of leprosy: epidemiology, basic science and clinical perspectives, The Journal of dermatology, 2012, vol. 39, pp 121-129.
- [8] BBS (2011), Population and housing census, 2011, Bangladesh Bureau of Statistics.
- [9] M.A. Haque, L.S. Sharmin, A.S. Ekram, & I. Mahmood, Epidemiological Trends of Leprosy in Rajshahi District. TAJ: Journal of Teachers Association, 2009, vol. 22, pp 88-92.
- [10] P. Godfrey-Faussett, H. Kaunda, J. Kamanga, S. Van Beers, M. Van Cleeff, R. Kumwenda-Phiri, and V. Tihon, Why do patients with a cough delay seeking care at Lusaka urban health centres? A health systems research approach, The International Journal of Tuberculosis and Lung Disease, 2002, vol. 6, pp 796-805.
- [11] W.H.V. Brakel, Measuring health-related stigma—a literature review, Psychology, health & medicine, 2006, vol. 11, pp 307-334.
- [12] E. Allen and C. A. Seaman (2007), Likert Scales and Data Analyses, Quality Progress, 40(7), 2007, 64-65.