

EFFECTS OF LEPROSY TO ITS CARRIER AND HOUSEHOLD MEMEBERS AT BARANGAY UNGAP, SULTAN KUDARAT, MAGUINDANO

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Abstract: The study determines the current situation of the respondents in classifying and identifying the burdens they feel and encounter whilst having the diseases and/or living with infected clients. The researchers can comprehend the effects in terms of physical, social, mental and emotional aspects that relates from day to day living of the respondents. Because of the stigma attached to it and long term treatment, they are experiencing difficulties and low self-esteem even the household members. There are some changes on their health status and psycho-social status, being judged and were not able to do or enjoy life normally because of suffering from disease.

The study found out that the four aspects mentioned above of the respondents were profoundly affected, though the study shows there's no one inflicted violence against them. Still, words are far more hurting than actions. They naturally felt burdens such as jealousy, feeling ashamed of the disease and discomfort. Ways of approach in alleviation of burdens through treatment and prevention was escalated.

The researcher recommends the following: Early detection of disease, regular check-up, proper hygiene/cleanliness, nutrition, avoid contact with untreated patients and seeking knowledge especially health education should be intensified. As the famous quote of Ralph Waldo Emerson goes "The First wealth is Health".

Keywords: Leprosy, Proper hygiene, Mycobacterium leprae, Cotabato Sanitarium, Sultan Kudarat, Maguindanao.

1. INTRODUCTION

Hansen's disease (also known as leprosy) is an infection caused by mycobacterium leprae. These bacteria grow very slowly, and it may take up to 20 years to develop signs of the infection. Early diagnosis and treatment usually prevent disability that can result from the disease, and the people with Hansen's disease can continue to work and lead an active life. Once treatment has started, the person is no longer contagious. However, it is very important to finish the entire course of treatment as directed by the doctor.

There were 211,009 new cases registered globally in 2017, according to official figures from 159 countries from the 6 WHO regions (WHO 2019).

The Philippines has the highest incidence of leprosy of any country in the region – about 1, 700 new cases have been identified in each of the last three years, although that rate is half what it was a decade ago – and is largely responsible for the region being behind the rest of the world in achieving the 1 in 10,000 benchmark. To address the problem, the Philippine Government in 2016 launched the National Leprosy Control Programme (NLCP), a multi – agency effort involving the DOH, WHO, and a number of private sector and NGO partners with the goal of "a leprosy-free Philippines by 2022". (IPS 2019).

In Mindanao, there are reported leprosy cases last 2017 in Davao City, Zamboanga and last 2014 there is 2 soldiers reported to be positive in leprosy at North Cotabato. In Cotabato Sanitarium Hospital there are only several patients who are still undergoing treatment. A lot of treated patients did not go back to their native homes and had their own family and settled at Barangay Ungap, Sultan Kudarat Maguindanao.

A carrier and their family members are facing tremendous distress, indignities and in some instances were removed from their communities. Understanding the effects of the disease helps not only the people infected but also the society. Thus, the researchers desire to know and understand what the effects of the disease in patients and their household members in order to help them improve their condition in terms of different aspects as such; physical, social, mental and emotional and removal of stigma attached to it.

2. METHODS

The researchers utilized the Descriptive method using quantitative approach in gathering information. It will include questionnaire with different parts to be filled up by the respondents and actual interview for evaluation. The study was conducted at Cotabato Sanitarium Hospital where the patients were confined and at Barangay Ungap, Sultan Kudarat Maguindanao where the household member respondents reside.

3. RESULTS

This chapter presents the findings in tabular form, analysis and interpretation of data.

Profile of the Participants

The profile of the participants includes the age, sex and civil status of 2 sets of respondents namely, the infected individuals with leprosy and their household members. These profile characteristics were included in the study to distinguish the participants and support the result of the study.

Table 1.a Frequency and Percentage Distribution of the Profile of the Participants Infected with Leprosy

Profile of the Participants	f	%
Age		
36 – 42 years old	6	20.0
43 – 49 years old	12	40.0
50 years old and above	12	40.0
Mean Age: 48.2 or 48 years old		
Sex		
Male	10	33.3
Female	20	66.7
Civil Status		
Single	2	6.7
Married	18	60.0
Separated	0	0.0
Widowed	10	33.3
Total	30	100

Table 1.a shows that out of the 30 treated participants, most of them are between 43 – 49 years old and 50 years old and above with both age groups at 40% each while others are in the age bracket of 36 – 42 years old at 20%. They have a mean age of 48.2 or 48 years old. With the fear of being ostracized by their own community if they go back.

Results finds that the majority (66.7%) of the respondents are female while the rest are male at 33.3%.

To summarize, Women are vulnerable by nature, Most of them were confined at Cotabato Sanitarium Hospital at a young age and choose to stay and build their homes with the support of government and hospital. In the study of (van't Noordende, W.H van Brakel, Banstola & Dhakal 2016) most of the women who were interviewed indicated that being married is important in their community and to themselves also. Sexual relationship, an important part of marriage, seemed to be of mixed importance.

Many (60%) of them are married, some of them found their loved ones at the time they were confined, followed by those who are widowed at 33.3%, where their civil status varied from the time they were diagnosed that is why there a few single at 6.7%.

(CDC 2017) stated that Hansen's disease for any adult around the world is very low. That's because more than 95% of all people have natural immunity to the disease. Same goes with the study of (Sakar MD, Rashmi 2016) stated that leprosy in women is an important issue for the affected patient, their family members, and society. Traditional beliefs, the low status

assigned to women, and women's limited mobility, illiteracy, and poor knowledge of leprosy have been suggested as important socio-cultural factors responsible for underreporting of cases of women affected with leprosy.

Table 1.b Frequency and Percentage Distribution of the Profile of the Household Members

Profile of the Participants		f	%
Age			
Below 13 years old		2	4.0
13 – 19 years old		3	6.0
20 – 27 years old		2	4.0
28 – 35 years old		5	10.0
36 – 42 years old		15	30.0
43 – 49 years old		11	22.0
50 years old and above		12	24.0
Mean Age: 40.4 or 40 years old			
Sex			
Male		17	34.0
Female		33	66.0
Civil Status			
Single		15	30.0
Married		16	32.0
Separated		8	16.0
Widowed		11	22.0
Total		50	100

Table 1.b reveals that out of the 50 household members of the treated individuals, many of them are in the age bracket of 36 – 42 years old at 30% followed by those between the ages 50 years old and above at 24% and 43 – 49 years old at 22%. They have a mean age of 40.4 or 40 years old.

Majority (66%) of them are female while the rest are male at 34%.

Many of them are married and found their partners while staying in the hospital with (32%) followed by those who are single at 30%, widowed at 22% and a few are separated at 16%.

Since the results shows that majority are women 66%, in (Sakar MD, Rashmi 2016) study stated that leprosy in women is an important issue for the affected patient, their family members, and society. Traditional beliefs, the low status assigned to women, and women's limited mobility, illiteracy, and poor knowledge of leprosy have been suggested as important socio-cultural factors responsible for underreporting of cases of women affected with leprosy.

In relation to that, (S. Darvin Scott 2018) portrays that Leprosy can occur at any age, but in developing countries, the age-specific incidence of leprosy peaks in children younger than 10 years, who account for 20% of leprosy cases. Leprosy is very rare in infants; however, they are at a relatively high risk of acquiring leprosy from mother, especially in cases of lepromatous leprosy or mid borderline leprosy.

Effects of leprosy on the infected individual

The effects of leprosy on the infected individual were subdivided into 4 domains in terms of their physical, social, mental and emotional aspect. These were included in the study to measure the effects and perception of the respondents with having this kind of disease.

Table 2.a Effects of Leprosy on the Infected Individual in terms of Physical Aspect

Effects of Leprosy on Physical Aspect	YES		NO	
	f	%	f	%
I Experienced the following signs and symptoms...				
1. Skin lesions with reduced sense of sensation	27	90.0	3	10.0
2. The appearance of skin lesions that are lighter than the normal skin and remain for weeks and months	17	56.7	13	43.3
3. Enlargement of nerves especially in the elbows and knees	9	30.0	21	70.0
4. Enlarged legs and arms	2	6.7	28	93.3
5. Stuffy nose and nosebleeds	3	10.0	27	90.0

6. Eye problems	8	26.7	22	73.3
7. Curling or the fingers and thumb	15	50.0	15	50.0
8. Ulcers on the soles of feet	11	36.7	19	63.3
9. Numbness in the hands, feet and legs and arms known as “glove and stocking anesthesia”	22	73.3	8	26.7
10. Injuries and burns because of skin lesions	21	70.0	9	30.0

Table 2.a shows the effects of leprosy on the infected individuals in terms of physical aspect. It is revealed that 5 of the given signs and symptoms were most experienced by participants with leprosy such as having skin lesions with reduced sense of sensation (with 90% Yes responses), numbness in the hands, feet and legs and arms known as “glove and stocking anesthesia” (with 73.3% Yes), injuries and burns because of skin lesions (with 70% Yes), the appearance of skin lesions that are lighter than the normal skin and remain for weeks and months (56.7% Yes) and curling of the fingers and thumb (50% Yes responses).

The summary of this table revealed that those with higher Yes responses were mostly experienced by the respondents. The research of (Medscape 2018) stated that Cardinal signs of Leprosy Includes skin lesions with reduced sense of touch or sensation. However, it was also found out that majority of them did not experience other signs and symptoms like having enlarged legs and arms (with 93% No responses), stuffy nose and nosebleeds (with 90% No responses), eye problems (with 73.3% No) and ulcers on the soles and feet (with 63.3% No Responses).

Moreover, according to (Medical News Today 2018), leprosy can present differently in different people with the condition.

The problem is not only in terms of medical treatment but also extends to social, economic, cultural and psychological areas. Effects of social stigma towards families pose a problem for the family and affect the behavior of the family towards family members who suffer from leprosy. Furthermore, this results in the loss of family support to people with leprosy exiling or hiding them until the cessation of with leprosy treatment process as this disease is identified with emerges physical disability. Moreover, this will aggravate the process of early detection in patients with leprosy, their self-stigma, disability and their quality of life and all members of the family. (Hargono, Hadi, Suwandi, Yusuf, Nasrudin 2018).

Table 2.b Effects of Leprosy on the Infected Individual in terms of Social Aspect

Effects of Leprosy on Social Aspect	YES		NO	
	f	%	f	%
I am experiencing or have experienced...				
1. Hanging out with your friends just like before when you still don't have this kind of disease	12	40.0	18	60.0
2. Being afraid to go out to do regular chores	13	43.3	17	56.7
3. Being bullied because of the appearance	9	30.0	21	70.0
4. There is someone who stands to protect you from bullying	9	30.0	21	70.0
5. Difficulty in finding job suitable for your situation	12	40.0	18	60.0
6. Outcasted by the community you live in	16	53.3	14	46.7
7. Denying that you have the disease or one of your family members has	13	43.3	17	56.7
8. Affects marital status and family relationship	18	60.0	12	40.0
9. Hiding and secluding yourself from others	14	46.7	16	53.3
10. There are some people-initiated violence against you	3	10.0	27	90.0

Table 2.b reveals the effects of leprosy on the infected individuals in terms of social aspect. It is revealed that only 2 of the given statements were most experienced by participants with leprosy such as the disease having effects on their marital status and family relationship (with 60% Yes responses) and being outcasted by the community they live in (with 53.3% Yes responses).

However, it was also found out that majority of them did not experience having people initiating violence against them (with 93.3% No responses), being bullied because of the appearance and having someone who stands to protect them from bullying (both with 70%) and having difficulty in finding job suitable for their situation (with 60% No).

It implies that with the higher responses of the respondents it agrees with the statement of (Lepra 2019) that due to misunderstanding, lack of information and incorrect beliefs, people affected by leprosy can experience severer discrimination and prejudice when they show symptoms or when the diagnosis is confirmed).

Marital status and family relationships were affected as (Aiken 2018) stated and cited, in some places in the world, legal discrimination against people affected by leprosy is far reaching and courts themselves historically played a role in exacerbating entrenched stigma around leprosy. For example, in one 1913 case in India, during which the matter for discussion was what kind of leprosy was ground for divorce, one judge stated “deformity and unfitness for social intercourse arising from the virulent and disgusting nature of the disease would appear to be what has been accepted in both the texts and the decisions as the most satisfactory test.” This appalling line has been widely cited and relied upon subsequent courts, including as recently as 1974.

In the research of (van’t Noordende, W.H van Brakel, Banstola & Dhakal 2016) Most of the women who were interviewed indicated that being married is important in their community and to themselves also. Sexual relationship, an important part of marriage, seemed to be of mixed importance (van’t Noordende, W.H van Brakel, Banstola & Dhakal 2016) Mo et al. Women affected by leprosy seem to face most problems when first diagnosed or while receiving treatment. Many women faced additional problems related to fear of the disease, negative attitudes and discrimination on account of leprosy. Knowledge on the cause and transmission of leprosy was still lacking among leprosy-affected women and their community members.

Table 2.c Effects of Leprosy on the Infected Individual in terms of Mental Aspect

Effects of Leprosy on Mental Aspect	YES		NO	
	f	%	f	%
I am experiencing or have experienced...				
1. Afraid of the leprosy itself	27	90.0	3	10.0
2. The disease is from the evil spirit	11	36.7	19	63.3
3. Being depressed because of the disease	18	60.0	12	40.0
4. Being discriminated having this disease	13	43.3	17	56.7
5. Because of stress the symptoms are worsening	16	53.3	14	46.7
6. Moody and always angry	15	50.0	15	50.0
7. Been losing confidence in yourself	18	60.0	12	40.0
8. Experiencing nightmares because of trauma because of the disease	14	46.7	16	53.3
9. Not wanting to talk or think about the disease	22	73.3	8	26.7
10. Cannot Concentrate or focus	13	43.3	17	56.7

Table 2.c determines the effects of leprosy on the infected individuals in terms of mental aspect. It is revealed that 6 of the given statements were most experienced by participants with leprosy such as being afraid of the leprosy itself (with 90% Yes responses), not wanting to talk or think about the disease (with 73.3% Yes), being depressed because of the disease and losing confidence in yourself (both with 60% Yes), stressed (with 53.3% Yes) as well as moody and always angry (with 50% Yes responses).

However, it was also found out that majority of them did not think that the disease is coming from the evil spirit (with 63.7% No responses), being discriminated having this disease and could not concentrate or focus on things (both with 56.7% No) as well as experiencing nightmares because of trauma due to thinking about the disease (with 53.3% No responses).

Based on the results, respondents felt and were experiencing stress and being afraid of the disease itself because (Hagono, Hadi, Suwandi, Yusuf, Nasrudin 2018) states in their study that the problem is not only in terms of medical treatment but also extends to social, economic and psychological areas. Effects of social stigma towards families pose a problem for the family and affect the behavior of the family towards family members who suffer from leprosy.

Given the long history of stigma in leprosy, any attempt to eradicate or reduce stigma will require strong multifaceted approaches that will permeate psychological and social layers of the human mind and result in necessary health seeking behaviours. It has become fashionable to combine stigma in leprosy with that in other diseases, such as HIV, mental illness or tuberculosis, and generate common platforms for its eradication. The origins and manifestations as well as beliefs on stigma vary for each of the stigmatized diseases; success in achieving reduction or elimination of stigma must

be tailored and customized to specific diseases. Stigma and discrimination with regards to any disease are undesirable and sharing of experiences across several health events might have some benefits. (Unnasch 2015).

Table 2.d Effects of Leprosy on the Infected Individual in terms of Emotional Aspect

Effects of Leprosy on Emotional Aspect	YES		NO	
	f	%	f	%
I am experiencing or have experienced...				
1. Constantly isolating yourself from others	23	76.7	7	23.3
2. Considering ending your life when you were diagnosed with the disease	9	30.0	21	70.0
3. Feeling of being disabled because of losing sensation	18	60.0	12	40.0
4. Family Problems concerning divorce. (If Married)	13	43.3	17	56.7
5. Restricted to go or visit places you want	17	56.7	13	43.3
6. Being jealous of others	20	66.7	10	33.3
7. Fear and doubt of the disease that cannot be treated	19	63.3	11	36.7
8. Feeling ashamed of the disease	22	73.3	8	26.7
9. Sadness and grief because you have a changed life now	23	76.7	7	23.3
10. Feeling of guilt because you were not aware, or you take for granted the disease.	17	56.7	13	43.3

Table 2.d shows the effects of leprosy on the infected individuals in terms of emotional aspect. It is revealed that 8 of the given statements were most experienced by majority of the participants such as constantly isolating themselves from others and sadness and grief because they have a changed life now (both with 76.7% Yes responses), feeling ashamed of the disease (with 73.3% Yes), Being jealous of others (with 66.7% Yes), experienced fear and doubt of the disease that it cannot be treated (with 63.3% Yes), feeling of being disabled because of losing sensation (with 60% Yes) and having been restricted to go or visit places they want (with 56.7 Yes responses).

However, it was also found out that majority of them did not experienced considering ending their life when diagnosed with the disease (with 70% No responses) and having family problems such as divorce for those married individuals (with 56.7% No responses).

The study reveals that majority of the respondents were emotionally affected and mostly did not meet the forms of patient's comfort. The remorse of patients they were not aware, and they've taken for granted the disease. They don't feel at ease because of restrictions, fear, jealousy, sadness and grief and being ashamed of the disease.

It relates to Katharine Kalcoba's Theory of comfort where she states that patient's comfort exists in three forms: relief, ease and transcendence.

Experiences of the Household Member with the Infected Individual

The experiences of the household members with the infected individuals were subdivided into 2 domains in terms of their health status and psycho-social status. These were included in the study to identify and understand the different aspects of burdens the family members are going through.

Table 3.a Experiences of the Household Member with the Infected Individual in terms of Health Status

Experiences in terms of Health Status	YES		NO	
	f	%	f	%
1. Body is feeling weak / still weak	11	22.0	39	78.0
2. Having the feeling of discomfort	26	52.0	24	48.0
3. Other injuries remains hindrance for day to day living	5	10.0	45	90.0
4. There is recurrent signs like rashes	2	4.0	48	96.0
5. Presence of skin lesions	3	6.0	47	94.0
6. Presence of numbness in the hands and feet	3	6.0	47	94.0
7. The disability such as curling of the fingers and feet stays the same even if already treated	1	2.0	49	98.0
8. Health still interferes in doing variety of activities such as; climbing stairs, walking and buying groceries	8	16.0	42	84.0
9. The status of the eye remains poor	6	12.0	44	88.0
10. Afraid to get pregnant that the disease might pass through the baby	11	22.0	39	78.0

Table 3.a identifies the experiences of the household members with the infected individuals in terms of health status. It is revealed that only 1 of the given statements were most experienced by majority of the family members like the having the feeling of discomfort (with 52% Yes responses).

However, it was also found out that majority of them did not experience curling of the fingers and feet (with 98% No responses), recurrent signs like rashes (with 96% No), presence of skin lesions and numbness in the hands and feet (both with 94% No) and other injuries remains hindrance for day to day living (with 90% No responses).

In summary, though other stated questions show lower rate with No responses, the experiences of household member leaves big impact to their status. Having the feeling of discomfort with higher response (52 %) shows that it did not met the comfort which Katharine Kalcoba states in her Theory of Comfort, that it comes in three forms: relief, ease and transcendence.

Table 3.b Experiences of the Household Member with the Infected Individual in terms of Psycho-Social Status

Experiences in terms of Psycho-Social Status	YES		NO	
	f	%	f	%
1. There is separation of utensils at the house	6	12.0	44	88.0
2. Disgusted to an individual with disease	13	26.0	37	74.0
3. Ashamed of having a family member with disease	20	40.0	30	60.0
4. Protecting the infected individual from being bullied	24	48.0	26	52.0
5. Encouraging them to stand and fight against the disease	20	40.0	30	60.0
6. Motivating self to endure the situation	27	54.0	23	46.0
7. Felt sad and rejected by other family members	13	26.0	37	74.0
8. There is changes between the relationship of the couple; cold and unhappy	8	16.0	42	84.0
9. Feeling frightened that you might get infected through sexual intercourse with your partner	9	18.0	41	82.0
10. Afraid of being discriminated because of having a family member with or has the disease	8	16.0	42	84.0

Table 3.b reveals the experiences of the household members with the infected individuals in terms of psycho-social status. It is revealed that only 1 of the given statements were most experienced by majority of the family members and it is motivating self to endure the situation (with 54% Yes responses).

However, it was also found out that majority of them did not let their family members experience a separation of utensils at the house (with 88% No responses), changes between the relationship of the couple becoming cold and unhappy and the fear of being discriminated because of having a family member with or has the disease (both with 84% No) and feeling frightened that they might get infected through sexual intercourse with their partner (with 82% No responses).

In summary, the table reveals that in the experiences of household members just 54% of motivating self to endure the situation is the way to keep their psycho-social status. It can be related to Abraham Maslow's hierarchy of needs in his paper "A theory of Human Motivation" that used to study human intrinsically partake in behavioral motivation in which he used the terms physiologic, safety, belonging and love, social needs or esteem and self-actualization to describe the pattern through which human generally move.

Approach to Alleviate the Burdens

The proper approach to alleviate the burdens was subdivided into two domains in terms of their awareness of approach in treatment and in prevention. Their responses were also presented separately per group of participants. These were done to distinguish the participants' awareness and support the result of the study.

Table 4.a Awareness of the Infected Individuals to the Proper Approach to Alleviate the Burdens in terms of Treatment

Approach in terms of Treatment	AWARE		NOT AWARE	
	f	%	f	%
1. Leprosy is curable. It can be cured if treatment is completed	26	86.7	4	13.3
2. There is a treatment for leprosy called Multi Drug Therapy	24	80.0	6	20.0

3. Treatment usually lasts between 1 to 2 years.	23	76.7	7	23.3
4. Antibiotics cannot treat the nerve damage	12	40.0	18	60.0
5. As soon as patient starts the treatment, it is no longer contagious	17	56.7	13	43.3
6. Incubation period varies from 1 to 20 years	23	76.7	7	23.3
7. Skin Smear for Acid Fast Bacilli to determine if you are positive or negative	30	100.0	0	0.0
8. Darkening and severe itching of the skin are one of the side effects of MDT	23	76.7	7	23.3
9. Red color urine due to the antibiotic under MDT that only lasts for a few hours	20	66.7	10	33.3
10. Receive treatment recommendation by your doctor	25	83.3	5	16.7

Table 4.a presents the awareness of the infected individuals to the proper approach to alleviate the burdens in terms of treatment. It is revealed that majority of infected individuals are mostly aware of 9 of the given statements such as Skin Smear for Acid Fast Bacilli to determine if you are positive or negative (with 100% Yes responses), that leprosy is curable and can be cured if treatment is completed (with 86% Yes), receive treatment recommendation by their doctor (with 83.3% Yes), there is a treatment for leprosy called Multi Drug Therapy (with 80% Yes), the treatment usually lasts between 1 to 2 years, incubation period varies from 1 to 20 years and that darkening and severe itching of the skin are one of the side effects of MDT (each with 76.7% Yes responses), that red color urine is due to the antibiotic under MDT that only lasts for a few hour (66.7% Yes) and they are aware that as soon as patient starts the treatment, it is no longer contagious (with 56.7% Yes responses).

However, it was also found out that majority of them are not aware that antibiotics cannot treat the nerve damage (with 60% No responses).

Supporting the results, (WHO 2019) studies shows and recommended MDT (Multi Drug Therapy) in 1981, the recommended MDT regimen consists of medicines; dapsone, rifampicin and clofazimine. The treatment lasts for six months for paucibacillary and 12 months for multi-bacillary cases. MDT kills the pathogens and cures the patient. The discoloration caused by clofazimine usually does not cause any serious problems, except for the fact that it may be cosmetically unacceptable to some patients. The accompanying ichthyosis may predispose to a certain dermatitis, especially in dry climatic conditions. This can be reduced by moistening the skin, followed by regular application of Vaseline or vegetable oils and avoidance of unnecessary exposure to bright sunlight. The discoloration of clofazimine also is completely reversible. It starts to appear by the third month of MDT and reaches its maximum intensity by the end of the first year. After discontinuation of MDT, the discoloration starts to diminish noticeably in six months and skin returns to its normal color at the end of one year after stopping MDT. (WHO 2019 et al) Rifampicin is given once a month. No toxic effects have been reported in the case of monthly administration. The urine maybe colored slightly reddish for a few hours after its intake, this should be explained to the patient while starting MDT. This drug is very safe in the dosage used in MDT and side effects are rare. The main side effect is allergic reaction, causing itchy skin rashes and exfoliative dermatitis. Patients known to be allergic to any of sulpha drugs should not be given dapsone.

Table 4.b Awareness of the Household Members to the Proper Approach to Alleviate the Burdens in terms of Treatment

Approach in terms of Treatment	AWARE		NOT AWARE	
	f	%	f	%
1. Leprosy is curable. It can be cured if treatment is completed	46	92.0	4	8.0
2. There is a treatment for leprosy called Multi Drug Therapy	45	90.0	5	10.0
3. Treatment usually lasts between 1 to 2 years.	39	78.0	11	22.0
4. Antibiotics cannot treat the nerve damage	29	58.0	21	42.0
5. As soon as patient starts the treatment, it is no longer contagious	37	74.0	13	26.0
6. Incubation period varies from 1 to 20 years	41	82.0	9	18.0
7. Skin Smear for Acid Fast Bacilli to determine if you are positive or negative	41	82.0	9	18.0
8. Darkening and severe itching of the skin are one of the side effects of MDT	38	76.0	12	24.0
9. Red color urine due to the antibiotic under MDT that only lasts for a few hours	34	68.0	16	32.0
10. Receive treatment recommendation by your doctor	40	80.0	10	20.0

Table 4.b discusses the awareness of the household members to the proper approach to alleviate the burdens in terms of treatment. It is revealed that most of the household members with a treated individual are very aware of the 10 given statements with the most responses such as that leprosy is curable and can be cured if treatment is completed (with 92% Yes responses), there is a treatment for leprosy called Multi Drug Therapy (with 90% Yes), that incubation period varies from 1 to 20 years and Skin Smear for Acid Fast Bacilli is used to determine if you are positive or negative (both with 82% Yes) and that the patient should receive treatment recommendation by their doctor (with 80% Yes responses).

The same with the infected individuals, the household members are also aware of the treatment which can alleviate burdens, in (Lepra 2019) explained that Leprosy sometimes causes nodules, or lumps, on the skin. A skin smear taken from a nodule will show a large number of leprosy bacilli. The test is useful to confirm very infectious cases when it is difficult to be sure about the diagnosis. Many patients will have a negative skin smear. If the laboratory technician can see leprosy bacilli, it means that the patient is heavily infected. Other conditions can look like leprosy, so it's important not to diagnose just by looking skin patches.

According to (CDC 2017) You may also be at risk if you are in prolonged contact with people who have untreated Hansen's disease. If they have not been treated, you could get the bacteria that cause Hansen's disease. However, as soon as patient start treatment, they are no longer able to spread the disease.

Table 4.c Awareness of the Infected Individuals to the Proper Approach to Alleviate the Burdens in terms of Prevention

Approach in terms of Prevention	AWARE		NOT AWARE	
	f	%	f	%
1. Prevention of contact with droplets from nasal and other secretions from untreated patients is currently the most effective way to avoid the disease.	29	96.7	1	3.3
2. If leprosy is recognized in its early stage, it can be treated easily, and it will not cause any disabilities.	25	83.3	5	16.7
3. You cannot get leprosy from a casual contact with a person who has the illness like; shaking hands, hugging or sitting next to each other at a meal.	25	83.3	5	16.7
4. It is not passed on to Mother to her unborn baby during pregnancy	16	53.3	14	46.7
5. It is not spread through sexual contact	18	60.0	12	40.0
6. Practicing personal hygiene is also a key to prevention	24	80.0	6	20.0
7. Practicing cleanliness of Environment	26	86.7	4	13.3
8. Maintaining healthy living by good nutrition	26	86.7	4	13.3
9. Having enough rest and exercise	24	80.0	6	20.0
10. There is an Information, Education, Communication materials available in the Health Centers highlighting the disease	27	90.0	3	10.0

Table 4.c shows the awareness of the infected individuals to the proper approach to alleviate the burdens in terms of prevention. It is revealed that most of the infected individuals are very aware of the 10 given statements with the most responses such as that prevention of contact with droplets from nasal and other secretions from untreated patients is currently the most effective way to avoid the disease (with 96.7% Yes responses), there is an Information, Education, Communication materials available in the Health Centers highlighting the disease (with 90% Yes), one should practice cleanliness of environment and maintain healthy living by good nutrition (with 86.7% Yes), that if leprosy is recognized in its early stage, it can be treated easily and it will not cause any disabilities as well as one cannot get leprosy from a casual contact with a person who has the illness like; shaking hands, hugging or sitting next to each other at a meal (both with 83.3% Yes responses) and that practicing personal hygiene is also a key to prevention as well as having enough rest and exercise (both with 80% Yes responses). The least prevention they are aware of is that it is not passed on to Mother to her unborn baby during pregnancy (with only 53.3% Yes responses).

In summary of the positive yes responses of the patients, that means the formulation of strategies proves that it is not hopeless. (PAHO 2019) The Global Leprosy Strategy outlines three overarching pillars to ensure a world with zero disease, zero transmission, and zero disability and zero stigmas related to leprosy. These pillars focus on strengthening

government ownership, coordination and partnership; stopping leprosy and its complications; and ending discrimination and promoting inclusion.

The Global Leprosy Strategy also calls for a variety measures to address discrimination towards those affected by leprosy. These include ensuring that people with leprosy, as well as their communities, are empowered to participate actively in leprosy services; that those with leprosy have better access to social and financial support services; that community-based rehabilitation for people with leprosy-related disabilities is promoted; and that discriminatory laws are abolished, and policies implemented to facilitate the inclusion of people affected by leprosy.

It is known exactly how Hansen's disease spreads between people. Scientists currently think it may happen when a person with Hansen's disease coughs or sneezes, and a healthy person breathes in the droplets containing the bacteria. Prolonged close contact with someone with untreated leprosy over many months is needed to catch the disease. You cannot get leprosy from a casual contact with a person who has Hansen's disease like shaking hands or hugging, sitting next to each other on a bus, sitting together at a meal. Hansen's disease is also not passed from a mother to her unborn baby during pregnancy and it is also not spread through sexual contact (CDC 2017).

Table 4.d Awareness of the Household Members to the Proper Approach to Alleviate the Burdens in terms of Prevention

Approach in terms of Prevention	AWARE		NOT AWARE	
	f	%	f	%
1. Prevention of contact with droplets from nasal and other secretions from untreated patients is currently the most effective way to avoid the disease.	40	80.0	10	20.0
2. If leprosy is recognized in its early stage, it can be treated easily, and it will not cause any disabilities.	44	88.0	6	12.0
3. You cannot get leprosy from a casual contact with a person who has the illness like; shaking hands, hugging or sitting next to each other at a meal.	38	76.0	12	24.0
4. It is not passed on to Mother to her unborn baby during pregnancy	33	66.0	17	34.0
5. It is not spread through sexual contact	36	72.0	14	28.0
6. Practicing personal hygiene is also a key to prevention	44	88.0	6	12.0
7. Practicing cleanliness of Environment	45	90.0	5	10.0
8. Maintaining healthy living by good nutrition	45	90.0	5	10.0
9. Having enough rest and exercise	42	84.0	8	16.0
10. There is an Information, Education, Communication materials available in the Health Centers highlighting the disease	42	84.0	8	16.0

Table 4.d reveals the awareness of the household members to the proper approach to alleviate the burdens in terms of prevention. It is revealed that most of the household members with an infected individual are very aware of the 10 given statements with the most responses such as that one should practice cleanliness of environment and maintain healthy living by good nutrition (both with 90% Yes responses), that if leprosy is recognized in its early stage, it can be treated easily and it will not cause any disabilities and that practicing personal hygiene is also a key to prevention (both with 88% Yes), having enough rest and exercise as well as knowing that there is an Information, Education, Communication materials available in the Health Centers highlighting the disease (both with 84% Yes) and that prevention of contact with droplets from nasal and other secretions from untreated patients is currently the most effective way to avoid the disease (with 80% Yes responses). The least prevention they are aware of is also that of it not passed on to Mother to her unborn baby during pregnancy (with only 66% Yes responses).

The fear of the respondents has gotten them build curiosity and awareness, for that prevention is better than cure. While, (Hurif 2018) states Nutrition and leprosy have long been known as a disease of poverty as most of the countries where leprosy is still endemic are underdeveloped or developing and leprosy itself along with its disabilities and stigma further pushes them toward poverty. Poverty is considered an important risk factor for leprosy susceptibility, although nutritional deficiencies may be the major contributing factor yet the mechanisms a positive association between food shortage or food insecurity and leprosy, and it was diversity or nutrition of people living in high-prevalence communities can be tried as one of the measure to control the transmission of leprosy. According to (Gimovsky, AC, Macri CJ 2013), The infant

has potentially high risk of contracting leprosy from the mother by skin-to-skin contact or droplet transmission, particularly if she has not received treatment.

It is known exactly how Hansen's disease spreads between people. Scientists currently think it may happen when a person with Hansen's disease coughs or sneezes, and a healthy person breathes in the droplets containing the bacteria. Prolonged close contact with someone with untreated leprosy over many months is needed to catch the disease. You cannot get leprosy from a casual contact with a person who has Hansen's disease like shaking hands or hugging, sitting next to each other on a bus, sitting together at a meal. Hansen's disease is also not passed from a mother to her unborn baby during pregnancy and it is also not spread through sexual contact (CDC 2017).

Table 5 Significant Difference Between the Demographic Profile of the Respondents and Effects of Leprosy to Its Carriers

Table 5 presents the significant difference on the effects of leprosy to its carriers when grouped according to their profile.

To determine the significant difference on the effects of leprosy to its carriers in terms of physical, social, mental, and emotional aspect when grouped according to their profile in terms of age, sex and civil status, the One-Way Analysis of Variance (ANOVA) was used to interpret.

Effects of Leprosy in terms of Physical Aspect and Profile of the Respondents in terms of:	F – value	p-value	Decision	Significance
Age	2.730	.038	Reject Ho, Accept Ha	Significant
Sex	2.186	.082	Accept Ho	Not Significant
Civil Status	1.575	.199	Accept Ho	Not Significant
Overall	2.163	.106	Accept Ho	Not Significant

Effects of Leprosy in terms of Social Aspect and Profile of the Respondents in terms of:	F – value	p-value	Decision	Significance
Age	1.026	.441	Accept Ho	Not Significant
Sex	1.886	.121	Accept Ho	Not Significant
Civil Status	.779	.611	Accept Ho	Not Significant
Overall	1.230	.391	Accept Ho	Not Significant

Effects of Leprosy in terms of Mental Aspect and Profile of the Respondents in terms of:	F – value	p-value	Decision	Significance
Age	1.800	.138	Accept Ho	Not Significant
Sex	.901	.523	Accept Ho	Not Significant
Civil Status	2.617	.003	Reject Ho, Accept Ha	Significant
Overall	1.772	.221	Accept Ho	Not Significant

Effects of Leprosy in terms of Emotional Aspect and Profile of the Respondents in terms of:	F – value	p-value	Decision	Significance
Age	1.335	.281	Accept Ho	Not Significant
Sex	2.276	.066	Accept Ho	Not Significant
Civil Status	.678	.689	Accept Ho	Not Significant
Overall	1.429	.345	Accept Ho	Not Significant

The overall F-value between effects of leprosy in terms of physical aspect and profile of the respondents is 2.163 with a p-value of .106, between effects of leprosy in terms of social aspect and profile of the respondents is 1.230 with a p-value of .391, between effects of leprosy in terms of mental aspect and profile of the respondents is 1.772 with a p-value of .221 and between effects of leprosy in terms of emotional aspect and profile of the respondents is 1.429 with a p-value of .345.

Since the p-values are less than .05 between the effects of leprosy in terms of physical aspect and profile of the respondents in terms of age and between the effects of leprosy in terms of mental aspect and profile of the respondents in terms of civil status, then the null hypothesis that there is no significant difference between the demographic profile of the respondents on their physical and mental aspects is rejected and that the alternative hypothesis that there is a significant difference between the demographic profile of the respondents on their physical and mental aspects is accepted.

Therefore, there is a significant difference between the demographic profile of the respondents on their physical aspect in terms of age and mental aspects in terms of civil status.

However, since the p-values are more than .05 between the effects of leprosy in terms of social and emotional aspects and profile of the respondents in terms of age, sex and civil status, then the null hypothesis that there is no significant difference between the demographic profile of the respondents on their social and emotional aspects is accepted.

Therefore, there is no significant difference between the demographic profile of the respondents on their social and emotional aspects.

4. DISCUSSION

This chapter presents the brief discussion of the findings of the study.

Profile of the Respondents

In terms of the profile of the participants infected with leprosy, many are between ages of 43 – 49 years old and 50 years old and above with a mean age of 48 years old, female and are married.

In terms of the profile of the household members, many of them are in the age bracket of 36 – 42 years old with a mean age of 40 years old, female and are also married.

The respondents vary on those ages because according to (S. Darvin Scott 2018) Leprosy can occur at any age, but in developing countries, the age-specific incidence of leprosy peaks in children younger than 10 years, who account for 20% of leprosy cases. Leprosy is very rare in infants; however, they are at a relatively high risk of acquiring leprosy from mother, especially in cases of lepromatous leprosy or mi borderline leprosy. It can be related to what (Z. Ozturk & A. Tatliparmak 2016) says that Leprosy can be exacerbated during pregnancy, and without treatment it can permanently damage the skin, nerves, limbs and eyes. Therefore, it is important to treat leprosy during pregnancy. Anti-leprosy drugs are excreted into human milk but there is no report of adverse effects except for skin discoloration of the infant due to clofazimine. Multidrug therapy for leprosy patients should be continued unchanged during pregnancy and breastfeeding.

Countries that are reported more than 1,000 new cases of Hansen's disease to WHO between 2011 and 2015 are Africa: Democratic Republic of Congo, Ethiopia, Madagascar, Mozambique, Nigeria, United Republic of Tanzania. Asia: Bangladesh, India, Indonesia, Myanmar, Philippines, Nepal, Sri Lanka. Americas: Brazil. You may also be at risk if you are in prolonged contact with people who have untreated Hansen's disease. If they have not been treated, you could get the bacteria that cause Hansen's disease. However, as soon as patient start treatment, they are no longer able to spread the disease (CDC 2017).

Effects of Leprosy on the Infected Individual

Physical aspect. The symptoms most experienced by participants with leprosy were having skin lesions with reduced sense of sensation, numbness in the hands, feet and legs and arms known as "glove and stocking anesthesia", injuries and burns because of skin lesions, the appearance of skin lesions that are lighter than the normal skin and remain for weeks and months and curling of the fingers and thumb. However, it was also found out that majority of them did not experience having enlarged legs and arms, stuffy nose and nosebleeds, eye problems and ulcers on the soles of feet.

The (Medical News Today 2018) stated that the symptoms of leprosy can present differently in different people with the condition. The main symptoms include: the appearance of skin lesions that are lighter than the normal skin and remain for weeks or months, patches of skin with decreased sensation, such as touch, pain, heat, muscle weakness, numbness in the hands, feet, legs and arms, known as "glove and stocking anaesthesia". Eye problems and enlarged nerves especially in the elbows or knees, stuffy nose and nosebleeds, curling of the fingers and thumb caused by paralysis of small muscles in the hand and ulcers on the soles of the feet. (Medscape 2018) emphasizes the Cardinal signs includes, hypoesthesia (reduce sense of touch or sensation), skin lesions and peripheral neuropathy.

Social aspect. The statements most experienced by participants with leprosy are that of the disease having effects on their marital status and family relationship and being outcasted by the community they live in. However, it was also found out that majority of them did not experience having people initiating violence against them, being bullied because of the appearance and having someone who stands to protect them from bullying and having difficulty in finding job suitable for their situation. But because there is always a stigma that accompanies the situation, (Hargono, Hadi, Suwandi, Yusuf, Nasrudin 2018) they asserted that the problem is not only in terms of medical treatment but also extends to social, economic, cultural and psychological areas. Effects of social stigma towards families pose a problem for the family and affect the behavior of the family towards family members who suffer from leprosy. Furthermore, this results in the loss of family support to people with leprosy exiling or hiding them until the cessation of with leprosy treatment process as this disease is identified with emerges physical disability. Moreover, this will aggravate the process of early detection in patients with leprosy, their self-stigma, disability and their quality of life and all members of the family.

Mental aspect. The statements most experienced by participants with leprosy are that of being afraid of the leprosy itself, not wanting to talk or think about the disease, being depressed because of the disease and losing confidence in yourself, stressed as well as moody and always angry. However, it was also found out that majority of them did not think of the disease is coming from the evil spirit, being discriminated having this disease and could not concentrate or focus on things as well as experiencing nightmares because of trauma due to thinking about the disease.

On the notes of S. Sernittirong and W.H Van Brakel 2014, the fear of transmission is evidently one of the main reported causes for people in a community. This fear is enhanced by the visible signs that make people want to keep a safe distance and specially to take care of their children, considered most vulnerable to infectious, stay away from a patient. Fear has always been reported to be based on prevailing inaccurate beliefs. In Brazil, traditional notions that leprosy is an incurable, disabling and highly contagious disease widely prevail and lead to unnecessary fears and stigmatization of patients. A villager in Thailand believes that once the person with leprosy was deformed, there was no cure and that the patient cannot return to normal state. In Nepal, it was commonly believed that touch or close contact was the main cause of transmission. In the same country, people also believed that transmission could occur through food, water, air, feces, and patient's excreta, such as urine, sweat, pus from ulcers, semen and vaginal fluid.

Emotional aspect. The statements most experienced by participants with leprosy are that of constantly isolating themselves from others and sadness and grief because they have a changed life now, feeling ashamed of the disease, being jealous of others, experienced fear and doubt of the disease that it cannot be treated, feeling of being disabled because of losing sensation and having been restricted to go or visit places they want. However, it was also found out that majority of them did not experienced considering ending their life when diagnosed with the disease and having family problems such as divorce from those married individuals.

(Unnasch 2015) given the long history of stigma in leprosy, any attempt to eradicate or reduce stigma will require strong multifaceted approaches that will permeate psychological and social layers of the human mind and result in necessary health seeking behaviours. It has become fashionable to combine stigma in leprosy with that in other diseases, such as HIV, mental illness or tuberculosis, and generate common platforms for its eradication. The origins and manifestations as well as beliefs on stigma vary for each of the stigmatized diseases; success in achieving reduction or elimination of stigma must be tailored and customized to specific diseases. Stigma and discrimination with regards to any disease are undesirable and sharing of experiences across several health events might have some benefits.

According to (Lepra 2019) they found out from their studies that due to misunderstanding, lack of information and incorrect beliefs, people affected by leprosy can experience severe discrimination and prejudice when they show symptoms or when the diagnosis is confirmed.

Experiences of the Household Member with the Infected Individual

With regards to health status, most of the family members experienced having the feeling of discomfort. However, it was also found out that majority of them did not experience curling of the fingers and feet, recurrent signs like rashes, presence of skin lesions and numbness in the hands and feet and other injuries remains hindrance for day to day living.

In terms of psycho-social status, majority of the family members mostly experienced motivating self to endure the situation. However, it was also found out that majority of them did not let their family members experience a separation of utensils at the house, changes between the relationship of the couple becoming cold and unhappy and the fear of being

discriminated because of having a family member with or has the disease and feeling frightened that they might get infected through sexual intercourse with their partner.

It differs in countries or different clients who experienced it because (Aiken 2018) reported that in some places in the world, legal discrimination against people affected by leprosy is far reaching and courts themselves have historically played a role in exacerbating entrenched stigma around leprosy. For example, in one 1913 case in India, during which the matter for discussion was what kind of leprosy was ground for divorce, one judge stated “deformity and unfitness for social intercourse arising from the virulent and disgusting nature of the disease would appear to be what has been accepted in both the texts and the decisions as the most satisfactory test.” This appalling line has been widely cited and relied upon subsequent courts, including as recently as 1974. It has been circulating in that country for how many decades. Apparently, on the notes of S. Sernittirong and W.H Van Brakel 2014, it stated that in Nepal, it was commonly believed that touch or close contact was the main cause of transmission. In the same country, people also believed that transmission could occur through food, water, air, feces, and patient’s excreta, such as urine, sweat, pus from ulcers, semen and vaginal fluid.

Approach to Alleviate the Burdens

Majority of infected individuals as well as the household members are very aware of the proper approach to alleviate the burdens in terms of treatment such as Skin Smear for Acid Fast Bacilli to determine if you are positive or negative, that leprosy is curable and can be cured if treatment is completed, receive treatment recommendation by their doctor, there is a treatment for leprosy called Multi Drug Therapy, the treatment usually lasts between 1 to 2 years, incubation period varies from 1 to 20 years and that darkening and severe itching of the skin are one of the side effects of MDT, that red color urine is due to the antibiotic under MDT that only lasts for a few hour and they are aware that as soon as patient starts the treatment, it is no longer contagious.

However, it was revealed that majority of them (both for the treated individuals and household members) are not aware that antibiotics cannot treat the nerve damage.

Most of infected individuals as well its household members are very aware of the proper approach to alleviate the burdens in terms of prevention such as that prevention of contact with droplets from nasal and other secretions from untreated patients is currently the most effective way to avoid the disease, there is an Information, Education, Communication materials available in the Health Centers highlighting the disease, one should practice cleanliness of environment and maintain healthy living by good nutrition, that if leprosy is recognized in its early stage, it can be treated easily and it will not cause any disabilities as well as one cannot get leprosy from a casual contact with a person who has the illness like; shaking hands, hugging or sitting next to each other at a meal and that practicing personal hygiene is also a key to prevention as well as having enough rest and exercise.

According to the explanation of a doctor from (Lepra 2019). Leprosy sometimes causes nodules, or lumps, on the skin. A skin smear taken from a nodule will show a large number of leprosy bacilli. The test is useful to confirm very infectious cases when it is difficult to be sure about the diagnosis. Many patients will have a negative skin smear. If the laboratory technician can see leprosy bacilli, it means that the patient is heavily infected. Other conditions can look like leprosy, so it’s important not to diagnose just by looking skin patches. (Saunderson 2013) states that there is good evidence that leprosy transmitted from person to person in the course of normal social interaction. Moet et al. showed that the risk of infection was highest in household contacts of index cases, lower in neighbors and social contacts, and lowest in people with no known contact with a person with leprosy. (Hurif 2018) also says that nutrition and leprosy have long been known as a disease of poverty as most of the countries where leprosy is still endemic are underdeveloped or developing and leprosy itself along with its disabilities and stigma further pushes them toward poverty. Poverty is considered an important risk factor for leprosy susceptibility, although nutritional deficiencies may be the major contributing factor yet the mechanisms a positive association between food shortage or food insecurity and leprosy, and it was diversity or nutrition of people living in high-prevalence communities can be tried as one of the measure to control the transmission of leprosy.

The least prevention they are aware of is that it is not passed on to Mother to her unborn baby during pregnancy. However, it was also found out that majority of them (both for the treated individuals and household members) are less aware of the preventive approach of leprosy not being passed on to Mother to her unborn baby during pregnancy.

But (CDC 2017) reported that in Hansen's disease is also not passed from a mother to her unborn baby during pregnancy and it is also not spread through sexual contact.

In study of (Duncan 2012), Women undergo physiological immunosuppression from ovulation until menstruation and in pregnancy until 6 weeks postpartum. This affects the course of leprosy in the mother. Leprosy, in turn can affect the baby's health. In a cohort study, relapse, reactivation, and new leprosy peaked in the third trimester, dropping sharply after parturition. Incidence of first time ENL (Erythema Nodosum Leprosum) peaked in the first trimester, and again in the third trimester, remaining high for 6 months postpartum. First time reversal Reaction started abruptly at 6 weeks postpartum and remained high for the first year after childbirth. New nerve occurred in almost half of all women during pregnancy and lactation. Women of reproductive age should therefore be followed up annually after completion of treatment. M. Leprae can cross the placenta, maternal leprosy affects fetal growth and well-being.

It is known exactly how Hansen's disease spreads between people. Scientists currently think it may happen when a person with Hansen's disease coughs or sneezes, and a healthy person breathes in the droplets containing the bacteria. Prolonged close contact with someone with untreated leprosy over many months is needed to catch the disease. You cannot get leprosy from a casual contact with a person who has Hansen's disease like shaking hands or hugging, sitting next to each other on a bus, sitting together at a meal. Hansen's disease is also not passed from a mother to her unborn baby during pregnancy and it is also not spread through sexual contact (CDC 2017).

Significant Difference between the Demographic Profile of the Respondents and Effects of Leprosy to Its Carriers

There is a significant difference between the demographic profile of the respondents on their physical aspect in terms of age (many are between 43 – 49 years old and 50 years old and above) and mental aspects in terms of civil status (most are married).

In studies of (S. Darwin Scott 2018) Leprosy can occur at any age, but in developing countries, the age-specific incidence of leprosy peaks in children younger than 10 years, who account for 20% of leprosy cases. Leprosy is very rare in infants; however, they are at a relatively high risk of acquiring leprosy from mother, especially in cases of lepromatous leprosy or mid borderline leprosy. That is why (PAHO 2019) wanted to strengthen the Global Leprosy Strategy and calls for a variety measures to address discrimination towards those affected by leprosy. These include ensuring that people with leprosy, as well as their communities, are empowered to participate actively in leprosy services; that those with leprosy have better access to social and financial support services; that community-based rehabilitation for people with leprosy-related disabilities is promoted; and that discriminatory laws are abolished, and policies implemented to facilitate the inclusion of people affected by leprosy. Countries that are reported more than 1,000 new cases of Hansen's disease to WHO between 2011 and 2015 are Africa: Democratic Republic of Congo, Ethiopia, Madagascar, Mozambique, Nigeria, United Republic of Tanzania. Asia: Bangladesh, India, Indonesia, Myanmar, Philippines, Nepal, Sri Lanka. Americas: Brazil. You may also be at risk if you are in prolonged contact with people who have untreated Hansen's disease. If they have not been treated, you could get the bacteria that cause Hansen's disease. However, as soon as patient start treatment, they are no longer able to spread the disease (CDC 2017).

The research of (van't Noordende, W.H van Brakel, Banstola & Dhakal 2016) states that most of the women who were interviewed indicated that being married is important in their community and to themselves also. Sexual relationship, an important part of marriage, seemed to be of mixed importance (van't Noordende, W.H van Brakel, Banstola & Dhakal 2016) Mo et al. Women affected by leprosy seem to face most problems when first diagnosed or while receiving treatment. Many women faced additional problems related to fear of the disease, negative attitudes and discrimination on account of leprosy. Knowledge on the cause and transmission of leprosy was still lacking among leprosy-affected women and their community members.

5. MAJOR FINDINGS OF THE STUDY

Based on the data presented, analyzed and interpreted, the following are the major findings of the study:

1. The profile of the participants infected with leprosy, many are between ages of 43 – 49 years old and 50 years old and above with a mean age of 48 years old, female and are married.

About the profile of the household members, many of them are in the age bracket of 36 – 42 years old with a mean age of 40 years old, female and are also married.

2. In terms of physical aspect, the symptoms most experienced by participants with leprosy were having skin lesions with reduced sense of sensation, numbness in the hands, feet and legs and arms known as “glove and stocking anesthesia”, injuries and burns because of skin lesions, the appearance of skin lesions that are lighter than the normal skin and remain for weeks and months and curling of the fingers and thumb. However, it was also found out that majority of them did not experience having enlarged legs and arms, stuffy nose and nosebleeds, eye problems and ulcers on the soles of feet.

On social aspect, the statements most experienced by participants with leprosy are that of the disease having effects on their marital status and family relationship and being outcasted by the community they live in. However, it was also found out that majority of them did not experience having people initiating violence against them, being bullied because of the appearance and having someone who stands to protect them from bullying and having difficulty in finding job suitable for their situation.

Regarding mental aspect, the statements most experienced by participants with leprosy are that of being afraid of the leprosy itself, not wanting to talk or think about the disease, being depressed because of the disease and losing confidence in yourself, stressed as well as moody and always angry. However, it was also found out that majority of them did not the thought of the disease is coming from the evil spirit, being discriminated having this disease and could not concentrate or focus on things as well as experiencing nightmares because of trauma due to thinking about the disease.

With emotional aspect, the statements most experienced by participants with leprosy are that of constantly isolating themselves from others and sadness and grief because they have a changed life now, feeling ashamed of the disease, being jealous of others, experienced fear and doubt of the disease that it cannot be treated, feeling of being disabled because of losing sensation and having been restricted to go or visit places they want. However, it was also found out that majority of them did not experienced considering ending their life when diagnosed with the disease and having family problems such as divorce from those married individuals.

3. About health status, most of the family members experienced having the feeling of discomfort. However, it was also found out that majority of them did not experience curling of the fingers and feet, recurrent signs like rashes, presence of skin lesions and numbness in the hands and feet and other injuries remains hindrance for day to day living.

For the psycho-social status, majority of the family members experienced motivating self to endure the situation. However, it was also found out that majority of them did not let their family members experience a separation of utensils at the house, changes between the relationship of the couple becoming cold and unhappy and the fear of being discriminated because of having a family member with or has the disease and feeling frightened that they might get infected through sexual intercourse with their partner.

4. In treatment, majority of infected individuals are mostly aware such as Skin Smear for Acid Fast Bacilli to determine if you are positive or negative, that leprosy is curable and can be cured if treatment is completed, receive treatment recommendation by their doctor, there is a treatment for leprosy called Multi Drug Therapy.

The treatment usually lasts between 1 to 2 years, incubation period varies from 1 to 20 years and that darkening and severe itching of the skin are one of the side effects of MDT, that red color urine is due to the antibiotic under MDT that only lasts for a few hour and they are aware that as soon as patient starts the treatment, it is no longer contagious. However, it was also found out that majority of them are not aware that antibiotics cannot treat the nerve damage.

Most of the household members with a treated individual are very aware of the proper approach to alleviate the burdens in terms of treatment with the most saying that leprosy is curable and can be cured if treatment is completed, there is a treatment for leprosy called Multi Drug Therapy, that incubation period varies from 1 to 20 years and Skin Smear for Acid Fast Bacilli is used to determine if you are positive or negative and that the patient should receive treatment recommendation by their doctor. The least treatment they are aware of is also that of antibiotics cannot treat the nerve damage.

Regarding prevention, most of the infected individuals are very aware of proper approach to alleviate burdens such as that prevention of contact with droplets from nasal and other secretions from untreated patients is currently the most effective way to avoid the disease. There are an Information, Education, Communication materials available in the Health Centers highlighting the disease, one should practice cleanliness of environment and maintain healthy living by good nutrition,

that if leprosy is recognized in its early stage, it can be treated easily and it will not cause any disabilities as well as one cannot get leprosy from a casual contact with a person who has the illness like; shaking hands, hugging or sitting next to each other at a meal and that practicing personal hygiene is also a key to prevention as well as having enough rest and exercise. The least prevention they are aware of is that it is not passed from the Mother to her unborn baby during pregnancy.

5. There is a significant difference between the demographic profile of the respondents on their physical aspect in terms of age and mental aspects in terms of civil status.

However, there is no significant difference between the demographic profile of the respondents on their social and emotional aspects.

6. CONCLUSION

Based on the findings of the study, the researchers conclude that being diagnosed and treated with a disease such as leprosy have a great effect not only on the patient but to the household members who are living with him/her. The study also turned out that infected individuals are emotionally affected the most when it comes to dealing with this disease followed by changes in their mental outlook, physical condition and social perspective. Fortunately for the respondents, their household members accept their family member who has leprosy. Majority of them are only having feelings of discomfort and that they motivate themselves to endure the situation which shows their love, support and loyalty to their loved ones who are confined in the Cotabato Sanitarium Hospital.

It is also good assessment that most of infected individuals as well its household members are very aware of the proper approach to alleviate the burdens of leprosy in terms of treatment and prevention which will help in faster treatment and medical compliance of the patients and less contamination for the caretakers. The study also revealed that the effects of leprosy in terms of physical aspect are significantly distinguished within the age groups that are older and that the effects on the mental outlook of the patients are significant among married persons.

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