

## 3.3 Lymphatic Filariasis: Neither There is a Cure, nor Easy Treatment

### Background

Khunga, Jagir, Pipal, Chaksi villages in Salyantar in ward no. 1 of Tri-pura Sundari rural municipality of Dadhing district is home to people from the Darai and Kumal communities. And major people in majority of the houses here are found with grossly enlarged limbs. Whether it the working women or men, even those around 25 to 30 years of age have their legs or hands swollen, and with big sores in the same legs or hands for lack of treatment. Then they are unable to do any household chores. Even with very feeble limbs and in a state of disability, these people are deprived from the disability identity card. In absence of the ID card, they are then deprived of the social benefits provided by the government. In terms of distance, Salyantar is 30 kilometers north of the district headquarters. People from the Darai and Kumal communities who live in the aforementioned villages work in the fields throughout the year but the produce from that labour is sufficient for them to survive only for three to six months. For the remaining period, they have no option than to do daily-wage labour to run the family. Some go to various cities in India for labour.

There is a primary health centre a distant above from the Darai and Kumal settlements. The health centre that pro-

vides medical facilities also boasts of treatment of Filariasis. But the people suffering from the disease hardly visit the health centre. Why? 'The doctors examine people suffering from other diseases properly and also give them medicines, but when you say you are suffering from elephantiasis then they observe you from a distance and recommend medicines, and not behave properly'- is what many patients complain.

The government has been providing many health services free of cost but people suffering from elephantiasis infection have not been able to benefit from it. Even though, Dadhing is regarded as a moderate district by the Health Ministry in terms of rate of Filariasis infection and transfer.

This community is in a pitiable condition even from the perspective of education. The number of people who have passed the Secondary School Examinations are very few. As they have to still struggle to make ends meet, education cannot become a priority for them. There is also scarcity of drinking water in the settlements. When drinking water itself is scarce then taking a bath and sanitation is something that is quite at a distance. This is also building ground for the disease.

Not only in Salyantar, Filariasis, commonly known as Filariasis has become a problem in other places as well, including Maidi, Kewalpur and Benighat. People carrying this disease suffer more in compared to people with other kinds of disease. Reason-as there is problem with mobility they are unaware about the initiatives being taken for them and about the state-provided services.

### **Filariasis and Context of Nepal**

The government targets to eliminate Filariasis by 2020. But achieving the target looks difficult given the data of low attraction towards consumption of medicines. People taking medicines against Filariasis have not cross 50 per cent even in Kathmandu valley.<sup>1</sup> The latest survey however shows that the rate of Filariasis parasitic infection is low in Kathmandu and Bhaktapur, according to the Epidemiology and Disease Control Division. The situation in the rural parts of Lalitpur is above the state of elimination. The rate of infection is very high in the tarai districts. The Filariasis infection in Bardia in western Tarai was found to be 40 per cent. On an average, the parasitic infection in the country is 13 per cent. Dhading however is moderate in terms of vulnerability.

### **Filariasis**

Filariasis is caused by infection of thread-like parasitic worms (Wucheria, Bancrofti, Brugia and Brugia Timori). The adult parasite is eight to ten centimeters long. This parasite is in the lymph node. This disease is transmitted by the infected female mosquitoes of the Culex species. Filariasis that is caused by three types of parasites is found to have caused in Nepal through the infection of the Wucheria Bancrofti parasite. This disease can be fully cured if medication

is done before the disease is evident from the outside but once the symptoms are evident then it's not curable. This disease is infected in any part or limb of the body. Then if limb continues inflammation it is called Filariasis.<sup>2</sup>

### **Who is Vulnerable?**

People of any age may be contracted with the Filariasis disease. Since this is transmitted through mosquito bite, the children are more vulnerable to it. But the symptoms of the disease in children may be evident only when they become adults.

### **Objective of the Study**

Filariasis is transmitted by a female mosquito called Culex. It is transmitted only when the same mosquito bites the person with the infection first and then bite another person. It cannot be diagnosed in the beginning of the infection and can be known only through a blood examination. When the infected person goes through a state of inflammation of the limbs and sexual organs then it cannot be fully cured but only stopped at the same condition through medication. The objectives of the study of elephantiasis are as follows:

- To know about the state of the Filariasis disease in the district.
- To find out which territory is affected by this problem.
- To find out the state of its epidemic in particular ethnic groups or those with poor financial situation
- To find out the reason behind the infection of Filariasis.
- To facilitate easy medical treatment.
- To provide those who have suffered disability for lack of cure of the disease with the disability identity card to access state benefits.

1. Naya Patrika, March 12, 2015, What is the vulnerability to Elephantiasis in Nepal? Bhisma Kafley

2. <https://en.wikipedia.org/wiki/Filariasis>

- To raise awareness about the disease.
- To take initiative for social rehabilitation.
- To advocate with the local level government to introduce plans to bring them into the mainstream of development.
- To help wipe out the disease-carrying mosquitoes.

### **Rationale of the Study**

The state of health of the Kumal and Darai communities, who are deprived of the opportunities provided by the state, is in a pitiable condition. The problem has been exuberated for lack of expenses for medical treatment. There is a very poor economic condition as they have limited land of their own and work as agriculture workers in others' farm. The local government has also not been able to do anything substantial for them. As a result, it is essential to establish their rights, exert pressure on the local government to run programmes for them, run awareness-oriented programmes in the village, increase their access to health services, and urge the government to run special programmes for them. For this, collaboration and joint initiative of all is appropriate. They do not have to live a life of dejection and insult just because they carry a particular disease. And they will also be provided with the disability identity card, which they are entitled to. And on the basis of this, even though limited, the atmosphere will be favourable for them to enjoy state benefits.

### **Limitation of the Study**

This study has been carried out with a basis on matters related with the Filariasis disease seen in the Darai and Kumal communities in Salyantar, ward no. 1 of Tripurasundari rural municipality, Dhading district. Discussion was also held in various blocks in the village

in course of the study while their family situation has also been analysed.

### **Methodology**

- Onsite study/observation
- Interview/meeting with the survivors
- Interview/meeting with the health workers
- Interview/meeting with people's representatives
- Study of reports available from the Disease Control Division, Ministry of Health
- Discussion with experts
- Study of reports of various agencies
- Study of dissertation related to Filariasis

### **Elephantiasis: Impact and Symptoms**

This disease is not evident soon after the parasite of Filariasis enters the human body. Once infected, it is never cured in a lifetime. This parasite lives in the human body in a concealed state for around six years. After the entry of the parasite into the body, if the person takes medicine against Filariasis then the person suffers minor impact like fever, nausea and vomiting. The fallaria parasite produces hundreds of thousand micro fallaria that would be reaching to the blood. These remain alive for one to two years. This parasite travels from the lymph node to the blood at night and become inactive during the day.

After some time of the entry of the fallaria virus into the body, symptoms like increased asthma, inflammation of the nerves, shivering, eosinophilia in the blood, blood marks in the limbs, dry cough for a long period, inflammation of the women's sexual organs and breasts, inflammation of the nerves around the men's testicle and accumulation of fluid around the testicle is seen.

Filariasis leads to speedy or shaking fever in the humans. During this

period, the person suffers from body or headache and vomiting. There is fever spell of two to three days. The swollen lymph node starts increased with the fever. Hydrocele or inflammation of the testicles, inflammation of the limbs like that of an elephant, swollen hands, and inflammation of the vagina or breasts are its symptoms. The people suffering from this disease urinate milk-like urine. This is because of the mixing of the lymph in the urine, according to health workers. According to WHO, the lungs also suffer inflammation during this period. Cough, increased asthma and blood in sputum may also be seen. With severe asthma, the patient will be unable to work.

#### Signs and Symptoms of Filariasis

- Fever, coldness and shivering body.
- Inflammation of the lymph nodes, redness and pain, and blue and black marks in the limbs.
- Increased size of lumps.
- Inflammation veins around the genitals of men.
- Swollen genitals, lumps and Hydrocele
- Inflamed vagina and breasts, lumps in the breast
- Inflamed limbs
- Red or white coloured urine<sup>3</sup>

#### The State of Filariasis in Nepal

The filariasis is a very old disease prevalent since centuries in Nepal. This is regarded to be around 4000 years old disease. The disease gradually began spreading with the increasing the population density, migration, poverty, illiteracy, lack of health services and environmental imbalance in the country. And the number of people suffering from the disease is also on the rise, as per the data. Likewise, it is also evidence from the data received

from health institutions across of country of people coming for diagnosis and treatment of the disease.

Likewise, as per the immunochromatographic epidemiological mapping carried out in 2001, 2005/2006 and 2012 and the data received from the integrated health management information system, a total of 63 districts of the country are affected by this disease. As filariasis has already been established as one of the major health problems of Nepal, it is estimated that of the 9 per cent of the total population are affected with the disease.<sup>4</sup> This disease is found in almost all geographical regions including the plains, the hills, towns and valley where mosquitoes are found.

#### Diagnosis of Filariasis

Filariasis can be diagnosed as follows:

- From the signs and symptoms of the disease
- Testing of the blood extracted during the night for microfilaria.
- Testing of the fluid from the Hydrocele or the urine for microfilaria.
- Through the blood or immunochromatographic test.

Measures to save filariasis patients from prolonged disease, disability and deformation.

- The following treatment measures can be adopted if the Filariasis patient is seen with inflamed limbs or lump/pain in any other organ:
- Wash the organs/parts affected by the disease with soap water twice a day and wipe it with a soft cloth to keep it dry.
- Keep the organs affected by the disease, especially the limbs in a higher position during sleep or at other times.

3. Ibid

4. Filariasis disease prevention programme, Training and Programme Operation Guidelines for Health Workers, 2075

- Do normal exercise daily. This will help to bring the lymph nodes into motion.
- Keep the nails clean.
- Use comfortable shoes or slippers.
- Use antiseptic or antibiotic ointment in case of sores. But oral antibiotics can be used as per the advice of health workers if the sore is large.
- In case of increase in pain, use pain killer medicine and keep the affected limbs in cold water.
- Go to the nearest health centre in case of fever.

### **Initiatives to Control Filariasis in Salyantar, Dhading**

Dal Bahadur Rai is 70 years old and he has been suffering from Filariasis since the past 40 years. He has his legs inflamed. Earlier, he was not aware of going to the health centre. He used a shaman. He tried with many faith healers but to no avail.

When the disease first appeared there was no health post in Salyantar. Since the drug was not available here, I went to the Anppipal Health Centre in Gorkha. They gave me oral medicine. However, I came to know later that the medicine would not cure the disease but only stop from growing further. Then I also went to Dhading Hospital. Lately, the government has been providing regular capsules at our doorsteps. But I could not undergo regular treatment because I had to work every day to survive. As a result, I suffered. Now I am forced with walk with inflamed legs. I cannot work, but was denied a disability identity card. Even the health authorities cheated us, the benefits announced by the government was also not given to us.

Seti Darai, 58, had her legs inflamed after being infected with Filariasis 17 years ago. But people suggested her to visit a faith healer, arguing that it was a result of having many children. A mother

of seven kids, she was told that the infection was a result of lack of care after child birth. But she had suffered Filariasis and hence was not cured. The inflammation never subsided. She was also not able to get the anti-Filariasis tablets distributed in the village every year. Hence, the problem worsened and she was not able to work. Following this she went to the health centre but was denied medicines. She is now become like a person with disability, forced to walk with inflamed legs. She complains of the rural municipality of not hearing her woes.

On the other hand, only few people from the so-called high caste—Brahmin and Chettri are infected with the disease. It is not that they are not infected with the disease but they have the means and reasons to undergo treatment for the same. But people from marginalized ethnic groups do not share the problem out of shame and also not come out of the house for treatment.

### **Conclusion and Recommendations**

Dhading district spreads from the Himalayas to the lower land in the north-south. Salyantar also located in the same district lies in the foothills with weather similar to the plains of the country. As a result, there is good source of food with flat land for farming. They have very limited land under their ownership and hence it is not sufficient to feed themselves. Water is scarce and people have to walk for two to four hours to reach the Trishuli or Daraundi river for drinking water. As a result, the people here spend a lot of time in the morning fetching water. Due to insufficient food, the people who are able to work go to the highway, brick kilns and other places for daily wage labour. There are many elderly and children in the village. And people suffering from Filariasis face social stigma because of their inflamed limbs and since they cannot work, they are also limited within the village.

As the government has not paid attention to providing them with the state benefits, they have been suffering.

The number of people with inflamed limbs as a result of filariasis in Khunga village of Salyantar is more than 40, according to the villagers. Nobody has the accurate data of the village. The disease has been seen in Salyantar area in ward no. 1 and 2 of Tripura Sundari rural municipality and data collection should be carried out. But no work has been done in that regard so far, say ward no. 1 chair Bhoj Bahadur Rijal and ward no. 2 chair Krishna Khatri.

The *Culex* species of mosquito can be easily identified and it is active during the night, and spread infection of Filariasis. The local government needs to take the initiative to control it but that is not the case. Since the health committee at the rural municipality level has also not sought any suggestion, we have no choice than to only provide treatment to those who come to the health centre, says Dr Dhundi Poudel at the Salyantar Health Post. The villagers also claim that this problem can be addressed only after controlling mosquitoes and providing safe treatment to those already infected with the disease.

As filariasis is diagnosed only through blood examination, the blood for examination has to be extracted during sleep and around midnight. But since the villagers find it difficult to allow extraction of blood at midnight, it has been difficult to ascertain how many people are suffering from the disease. As a result, we will work with a plan with support from the government to eliminate the Filariasis disease, says Chairperson of Tripurasundari rural municipality Shambhu Thapa.

Dr Sunil Regmi at the Salyantar Primary Health Centre says that the disease can be controlled through public awareness and attention of sanitation.

In the recent years, new infections have not been reported. However, there are not tools in the primary health centre to diagnose this disease. As a result, drugs are administered to the people who are suspected of being infected with the disease. There is a need to motivate the villagers for public awareness. Especially, pig farmed in almost every homes in the area are fed with human faeces as feed. This needs to be stopped and attention paid to sanitation.

People have not developed a habit of washing their hands and hence eat soon after coming back from the fields. Along with the kids, the elders too are not paying attention to hygiene, which is creating a problem. The problem with washing of hands is also due to lack of drinking water in the village. This problem has to be addressed by the local level government. However, many projects remain incomplete. But with the installation of a new government in the local level, initiatives have been taken to resolve the problem of drinking water, says rural municipality chair Mr Thapa. Community awareness should no longer be carried out in the traditional manner, but in a way that the community understands it well.

The people who have suffered disability as a result of Filariasis needs to be provided with the disability identity card. They cannot work. And when the limbs are not functionally well, it is difficult to get work in the society too. And there is problem of food and clothing due to poverty. Attention from the local level government would facilitate their access to the state services. The rural municipality should also develop and enforce a plan for their livelihood. As there is no easy access to treatment for Filariasis at the district level and the village level, the government should provide essential drugs, skilled human resources and equipment for easy treatment in the affected areas. The village level government should de-

velop an integrated plan for the health sector and run programmes with a focus on areas that are vulnerable to Filariasis.

The programme initiated by the Government of Nepal in the fiscal year 2016/17 from Dhading and Kanchanpur to teach Filariasis patients to take care of their infected limbs has been expanded to 12 districts by the fiscal year 2017/18. However, the people in Salyantar say that nobody has come to the village with such information and they are not treated well even if they go to the primary health centre. As a result, this programme should be implemented to ensure that the Filariasis patients experience it in person. As the government has already announced free surgery of Hydrocele in 2015, this programme also needs to be made accessible to the patients. As people are not willing to take the anti- Filariasis drug, the community needs to be made aware about its impact and importance.



### Reference Materials

1. Reports from District Health Office, Dhading
2. Government of Nepal, Disease Control Division, Reports of Elephantiasis Disease Control Programme and Training materials
3. Health Profile of the Tripurasundari rural municipality Office
4. Information from Salyantar primary health centre
5. World Health Organisation report
6. Quality of life of people living with lymphoedema: A cross sectional community based study in selected districts of Nepal (Adhikari RK, Sherechand JB, Mishra SR, Ranabhat K and Wagle RR)
7. Naya Patrika, March 12, 2016, What is the risk of elephantiasis in Nepal? Bhisma Kafley.
8. <http://election.gov.np/election/np/bbvr>