



NSS-LED SURVEY, AWARENESS AND SOCIAL MONITORING WORK FOR FILARIASIS PREVENTION: A STUDY OF SOCIAL POVERTY IN RURAL AND URBAN AREAS

Dr. Shyam Mishra¹, Dr. Jaya Bharti^{2*}, Sandeep Verma³

¹Assistant Professor, Vidya Mandir Degree College Farrukhabad (Affiliated to C.S.J.M. University Kanpur)
(Program Co-Ordinator NSS, C.S.J.M. University Kanpur) | ORCID: 0009-0001-1261-6457

²Assistant Professor, Department of Psychology, CSJM University, Kanpur, India,
ORCID: 0000-0003-3225-1317

³Assistant Professor, Department of Psychology, K.S. Saket P.G. College (Affiliated to Dr. Rammanohar Lohia Avadh University)
Ayodhya, India

*Corresponding Author

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ABSTRACT

Lymphatic filariasis remains a significant public health problem in many rural areas of India due to limited awareness, misconceptions, and inadequate preventive practices. The National Service Scheme (NSS) provides a vital platform for community-based health interventions through student participation. The present study aimed to assess the impact of an NSS-led survey followed by an awareness drive on filariasis prevention in an adopted village.

A survey-based qualitative research design was adopted for the study. Data were collected from 100 villagers using a semi-structured interview schedule focusing on awareness, knowledge, attitudes, and preventive practices related to filariasis. Following the baseline survey, NSS volunteers conducted an awareness drive through health talks, interpersonal communication, and distribution of informational materials. The qualitative responses were organized into themes and sub-themes, and results were presented using frequency and percentage analysis.

The findings revealed that while a majority of respondents had heard about filariasis, substantial gaps existed in knowledge regarding its causes, transmission, and government prevention programmes. Awareness about Mass Drug Administration (MDA) was notably low. Post-awareness intervention, a significant improvement was observed in participants' understanding of mosquito-borne transmission and preventive measures. Increased acceptance of mosquito control practices and positive attitudes toward prevention were also reported.

The study concludes that NSS-led surveys combined with structured awareness drives are effective in enhancing community knowledge and promoting preventive behaviors against filariasis. Such student-led initiatives can play a crucial role in strengthening grassroots-level public health interventions and supporting national filariasis elimination efforts.

KEYWORDS: Lymphatic Filariasis, NSS, Community Survey, Awareness Programme, Prevention, Rural Health

INTRODUCTION

Lymphatic filariasis is one of the most prevalent neglected tropical diseases and remains a major public health challenge in India, particularly in rural and semi-urban regions where environmental and socio-economic conditions favor mosquito breeding. The disease is caused by parasitic filarial worms, primarily *Wuchereria bancrofti*, which are transmitted to humans through the bite of infected mosquitoes. Chronic manifestations such as lymphoedema, elephantiasis, and hydrocele result in long-term physical disability, psychological distress, social stigma, and economic loss (World Health Organization [WHO], 2017).

Despite the implementation of the National Programme for Elimination of Lymphatic Filariasis (NPELF) and nationwide Mass Drug Administration (MDA) campaigns, elimination remains challenging in many endemic regions. Studies by Ramaiah et al. (2000) and Sabesan, Vanamail, and Raju (2012) reported that inadequate community awareness, misconceptions about disease transmission, and poor compliance with MDA are major obstacles to effective filariasis control in India. Similarly, Babu and Nayak (2003) highlighted that fear of side effects and lack of trust in health programmes significantly reduce community participation.

Community knowledge, attitudes, and practices play a decisive role in the success of filariasis prevention programmes. Research conducted by Kumar et al. (2016) found that although awareness of filariasis existed among rural populations, detailed knowledge about mosquito transmission and preventive measures was limited. Patil et al. (2018) further observed that poor sanitation and inadequate mosquito control practices contributed to sustained transmission in endemic villages.



In this context, community-based health education has been identified as a key strategy for improving preventive behaviors. Das et al. (2014) demonstrated that structured awareness programmes significantly improved knowledge and acceptance of preventive measures related to filariasis. Similarly, Singh and Prakash (2019) reported positive changes in community attitudes and increased compliance with MDA following localized health education interventions.

The National Service Scheme (NSS), a flagship programme of the Government of India, plays a crucial role in bridging the gap between higher education institutions and community health needs. NSS emphasizes experiential learning through community service and encourages students to participate actively in health promotion activities. Studies by Sharma and Joshi (2015) and Kumar & Gupta (2020) have shown that NSS-led health awareness campaigns effectively enhance community knowledge, promote healthy practices, and foster sustainable behavior change, particularly in rural settings.

The concept of an NSS-adopted village provides a continuous and structured framework for implementing health interventions and evaluating their impact over time. Regular interaction between NSS volunteers and villagers helps in identifying local beliefs, misconceptions, and barriers to prevention. Survey-based approaches, as emphasized by Reddy et al. (2021), allow for evidence-based planning of awareness programmes tailored to community needs.

The present study was conducted to assess the impact of an NSS-led survey followed by a structured awareness drive on knowledge, attitudes, and preventive practices related to lymphatic filariasis among residents of an adopted village. By integrating community surveys with targeted health education, the study seeks to contribute to existing literature by highlighting the role of NSS in strengthening grassroots-level filariasis prevention and supporting national elimination efforts.

METHODOLOGY

Research Design: The present study adopted a survey-based qualitative research design to assess the impact of an NSS-led survey and awareness drive on community knowledge, attitudes, and preventive practices related to lymphatic filariasis. A qualitative approach was considered appropriate as it allows an in-depth understanding of villagers' perceptions, beliefs, misconceptions, and lived experiences associated with the disease. The design also facilitated comparison between baseline awareness levels and post-intervention understanding following the awareness drive conducted by NSS volunteers. The survey data were collected during three one-day NSS camps, as well as on additional days, organized by NSS Unit-II in the adopted village/area/basti. All data collection and awareness activities were conducted under the guidance and supervision of the Programme Officer, NSS Unit-II, the Programme Co-ordinator, NSS, C.S.J.M. University, Kanpur, and the third author of this manuscript. Their supervision ensured methodological rigor, active community participation, and effective implementation of the survey and awareness drives.

Study Area: The study was conducted in an NSS-adopted village in Kanpur, which serves as a focal area for continuous community engagement and social development activities undertaken by National Service Scheme volunteers. The village was selected due to its socio-economic vulnerability, limited access to health information, and reported prevalence of mosquito-borne diseases. Regular interaction between NSS volunteers and villagers provided a supportive environment for data collection and implementation of health education activities.

Sample: The sample consisted of 100 villagers, selected using purposive sampling technique. This method was employed to ensure the inclusion of respondents from diverse socio-demographic backgrounds, including different age groups, genders, and occupational categories. Only adult residents who were willing to participate and had been residing in the village for a considerable period were included in the study. This approach helped in obtaining relevant and reliable information regarding community awareness and preventive practices related to filariasis.

Data Collection: Data were collected through a door-to-door survey conducted by trained NSS volunteers using a semi-structured interview schedule. The interview schedule was designed to capture qualitative information on key aspects of filariasis, including general awareness of the disease, modes of transmission, common symptoms, preventive measures, and attitudes toward treatment, mosquito control, and government health programmes such as Mass Drug Administration (MDA). The semi-structured format allowed flexibility for respondents to express their views freely while ensuring consistency across interviews.

Following the baseline survey, an awareness drive was organized as an intervention. This included health talks, interactive discussions, distribution of informational pamphlets, and demonstrations of mosquito control measures such as elimination of stagnant water and use of protective methods. The awareness activities were conducted in simple and locally understandable language to enhance comprehension and participation among villagers.



Data Analysis: The qualitative data obtained from the interviews were systematically reviewed and organized into themes and sub-themes related to knowledge, attitudes, and preventive practices. Responses under each theme were analyzed to identify common patterns and gaps in awareness. For better interpretation and presentation of findings, the frequency and percentage of responses corresponding to each theme were calculated. This thematic and descriptive analysis helped in assessing changes in awareness and attitudes following the NSS-led intervention and in drawing meaningful conclusions regarding the effectiveness of survey-based awareness programmes.

Results: The analysis of qualitative data obtained from the survey of 100 villagers revealed important insights into community awareness, knowledge, attitudes, and practices related to lymphatic filariasis. Based on thematic analysis of responses, ten major themes emerged, reflecting varying levels of awareness, misconceptions, preventive behavior, and the perceived impact of the NSS-led awareness drive. The results highlight both existing knowledge gaps and positive behavioral tendencies within the community, as well as the effectiveness of student-led health education interventions.

To systematically present these findings, the identified themes, along with their corresponding sub-themes, frequencies, and percentages, are summarized in Table 1. The table provides a comprehensive overview of the distribution of responses across key dimensions such as awareness of filariasis, knowledge of its causes and transmission, preventive practices, treatment-seeking behavior, and the impact of the NSS awareness programme.

Table 1: Themes, Sub-Themes, Frequency and Percentage (N = 100)

Theme	Sub-Theme	Frequency	Percentage
1. Awareness of Filariasis	Had heard about filaria	68	68%
	Had never heard	32	32%
2. Knowledge of Cause	Mosquito bite	54	54%
	Dirty water/food	30	30%
	No idea	16	16%
3. Knowledge of Symptoms	Swelling of legs/arms	61	61%
	Fever and pain	23	23%
	Do not know	16	16%
4. Mode of Transmission	Through mosquitoes	52	52%
	Through contact	28	28%
	Don't know	20	20%
5. Prevention Knowledge	Use of mosquito nets	66	66%
	Clean surroundings	58	58%
	Taking medicine	34	34%
6. Attitude Towards Prevention	Believe it can be prevented	72	72%
	Believe it cannot be prevented	28	28%
7. Practice of Mosquito Control	Uses nets/repellents	63	63%
	Does not use	37	37%
8. Awareness of Government Programme	Aware of MDA	41	41%
	Not aware	59	59%
9. Treatment Seeking Behavior	Will go to hospital	70	70%
	Home remedies	30	30%
10. Impact of NSS Awareness Drive	Knowledge improved	78	78%
	No change	22	22%

The findings show that although a majority of villagers had heard about filariasis, there were significant misconceptions about its causes and transmission. Awareness about government-run Mass Drug Administration (MDA) was particularly low. After the NSS-led awareness drive, most participants reported improved understanding about mosquito-borne transmission and prevention methods. The intervention helped in correcting myths and encouraged healthier practices such as use of mosquito nets and maintaining cleanliness.



1. Awareness of Filariasis: The findings indicate that while a majority of respondents (68%) had heard about filariasis, a considerable proportion of the population (32%) remained completely unaware of the disease. This partial awareness reflects the uneven reach of public health messaging in socially and economically vulnerable communities. The lack of awareness among nearly one-third of respondents suggests that information dissemination regarding neglected tropical diseases has not penetrated uniformly, particularly among populations affected by social poverty. Such gaps in basic awareness can delay early detection, reduce preventive action, and increase disease burden, thereby reinforcing the cycle of ill health and socio-economic disadvantage.

2. Knowledge of Cause: Although 54% of respondents correctly identified mosquito bites as the cause of filariasis, a substantial number attributed the disease to incorrect causes such as dirty water or food (30%), while 16% had no knowledge at all. These misconceptions reflect limited scientific understanding and highlight the persistence of traditional beliefs and misinformation. Misattribution of disease causation can negatively influence preventive behaviors, as individuals may focus on irrelevant factors while neglecting mosquito control measures. This finding underscores the importance of targeted health education that clearly explains the biological basis of disease transmission in simple and culturally appropriate terms.

3. Knowledge of Symptoms: The majority of respondents (61%) associated filariasis with visible symptoms such as swelling of the legs or arms, indicating awareness primarily of advanced or chronic stages of the disease. However, fewer respondents recognized early symptoms such as fever and pain (23%), while 16% were unaware of any symptoms. This suggests that community knowledge is largely limited to severe manifestations, which may lead to delayed treatment-seeking behavior. Early-stage symptoms often go unnoticed or are misinterpreted, increasing the risk of progression to chronic disability. This highlights the need for awareness programmes emphasizing early detection and timely medical intervention.

4. Mode of Transmission: Only 52% of participants correctly identified mosquitoes as the mode of transmission, whereas 28% believed the disease spreads through physical contact and 20% were uncertain. Such misconceptions can contribute to unnecessary social stigma and fear of affected individuals, further marginalizing patients. Incorrect beliefs about transmission also weaken preventive efforts, as individuals may fail to adopt effective mosquito control measures. The findings indicate a critical need for focused education on transmission pathways to reduce stigma, correct myths, and promote scientifically informed preventive practices.

5. Prevention Knowledge: Knowledge regarding preventive strategies showed mixed results. While a relatively high proportion of respondents mentioned the use of mosquito nets (66%) and maintenance of clean surroundings (58%), awareness about preventive medication was notably lower (34%). This imbalance suggests that while general preventive concepts are somewhat understood, specific knowledge about chemoprophylaxis and organized prevention programmes remains inadequate. Limited understanding of preventive medication directly affects participation in Mass Drug Administration campaigns, thereby undermining national elimination efforts. Strengthening awareness about the role and safety of preventive drugs is therefore essential.

6. Attitude Towards Prevention A positive attitude toward prevention was observed among 72% of respondents, who believed that filariasis can be prevented. This optimistic outlook provides a strong foundation for behavior change and community participation in prevention programmes. However, the remaining 28% who believed prevention is not possible reflect a sense of fatalism often associated with chronic diseases in disadvantaged communities. Such beliefs may discourage individuals from adopting preventive behaviors or engaging with health services. Addressing these attitudes through sustained motivational communication is crucial for long-term disease control.

7. Practice of Mosquito Control: Although 63% of respondents reported using mosquito nets or repellents, a significant 37% did not engage in any mosquito control practices. This gap between knowledge and practice highlights the influence of socio-economic constraints, accessibility issues, and behavioral inertia. Even when individuals are aware of preventive measures, factors such as cost, availability, and perceived inconvenience may limit consistent adoption. This finding emphasizes the importance of integrating behavioral change communication with practical support, such as subsidized mosquito control tools and community-based vector control initiatives.

8. Awareness of Government Programme: Awareness of government-led initiatives was relatively low, with only 41% of respondents being aware of the Mass Drug Administration programme. The lack of awareness among 59% of participants points to insufficient communication and outreach at the grassroots level. Poor awareness of MDA significantly reduces coverage and compliance, which are critical for interrupting disease transmission. This result highlights the need for stronger collaboration between health departments, local leaders, and NSS volunteers to improve visibility, trust, and understanding of government health programmes.



9. Treatment Seeking Behavior: Encouragingly, 70% of respondents expressed willingness to seek treatment from hospitals or health centers, indicating growing trust in formal healthcare systems. However, reliance on home remedies by 30% of respondents suggests the continued influence of traditional practices and possible barriers such as distance, cost, or fear of medical procedures. Delayed or inappropriate treatment can worsen disease outcomes and contribute to ongoing transmission. These findings highlight the importance of strengthening primary healthcare accessibility and reinforcing messages about the benefits of early medical treatment.

10. Impact of NSS Awareness Drive: The most significant finding of the study is that 78% of respondents reported improved knowledge following the NSS-led awareness drive. This demonstrates the effectiveness of student-led surveys and community-based health education in enhancing understanding and promoting positive attitudes. The remaining 22% who reported no change suggest the need for repeated and more personalized interventions for hard-to-reach groups. Overall, the results affirm the crucial role of NSS as a bridge between academic institutions and communities, particularly in addressing health issues rooted in social poverty in both rural and urban contexts.

DISCUSSION

The present study examined the impact of an NSS-led survey, awareness, and social monitoring work on filariasis prevention in a socially and economically vulnerable rural–urban context. The findings provide empirical support for the effectiveness of community-based, student-led health interventions and are consistent with earlier national and international research on neglected tropical diseases and health awareness programmes.

The moderate level of general awareness of filariasis observed in the study aligns with findings reported by Ramaiah et al. (2000) and Kumar et al. (2016), who noted that while many rural populations have heard of filariasis, detailed understanding remains limited. Similarly, Sabesan, Vanamail, and Raju (2012) emphasized that awareness alone does not translate into correct knowledge or preventive behavior, a pattern also evident in the present study.

Misconceptions regarding the causes of filariasis, such as attributing it to dirty water or food, were also reported by Babu and Nayak (2003) and Patil et al. (2018), who highlighted that incorrect beliefs significantly weaken disease control efforts. According to WHO (2017), misunderstanding disease causation is a major barrier to effective vector control, reinforcing the importance of targeted educational interventions like those undertaken by NSS volunteers.

Knowledge of symptoms in the present study was largely confined to advanced manifestations such as limb swelling, which mirrors findings by Addiss et al. (2010) and Gyapong et al. (2011), who observed that communities often recognize filariasis only at chronic stages. Michael and Bundy (1997) further argued that lack of awareness about early symptoms contributes to delayed treatment-seeking and increased disability, a concern reflected in the current results.

Regarding transmission, the belief that filariasis spreads through physical contact echoes observations by Perera et al. (2007) and Bandyopadhyay (1996), who documented stigma and social exclusion arising from misinformation. Stanton et al. (2015) emphasized that correcting transmission-related myths is essential not only for prevention but also for reducing social stigma, particularly in poverty-affected communities.

Preventive knowledge related to mosquito control was relatively higher compared to awareness of preventive medication. This finding is consistent with studies by Das et al. (2014) and Singh and Prakash (2019), who found that while environmental and personal protective measures are commonly understood, awareness about Mass Drug Administration (MDA) remains low. Reddy et al. (2021) similarly reported that inadequate knowledge of MDA significantly affects drug compliance and programme success.

The generally positive attitude toward prevention identified in this study supports the observations of Kumar and Gupta (2020), who found that favorable attitudes can act as a catalyst for behavior change when supported by continuous awareness efforts. However, fatalistic beliefs among a section of respondents are consistent with findings by MacGregor (2000) and Parker and Aggleton (2003), who linked such attitudes to prolonged exposure to poverty, limited education, and chronic disease burden.

The gap between knowledge and actual mosquito control practices reflects socio-economic constraints also highlighted by Amalraj and Pani (2007) and Hotez et al. (2014). These researchers emphasized that preventive behaviors are strongly influenced by affordability, availability of resources, and sustained motivation, particularly in marginalized populations.



Low awareness of government programmes such as MDA corroborates findings by Nandha et al. (2013) and Krishna Kumari et al. (2020), who stressed that insufficient grassroots-level communication undermines national filariasis elimination goals. WHO (2020) reiterated that community engagement and local participation are critical determinants of programme success.

Treatment-seeking behavior favoring formal healthcare institutions in the present study aligns with observations by Bloom, Standing, and Lloyd (2008), indicating increasing trust in institutional healthcare. However, continued reliance on home remedies, as reported by Sudharsanam et al. (2012), suggests that cultural practices and accessibility barriers persist.

Most importantly, the significant improvement in knowledge following the NSS-led awareness drive supports evidence from Sharma and Joshi (2015), Verma et al. (2018), and Singh et al. (2021), all of whom documented the effectiveness of student-led community interventions. Freire (1970) also emphasized that participatory education approaches empower communities and promote sustainable behavioral change—an outcome clearly reflected in the present study.

Overall, the findings reinforce the argument that NSS-led surveys, awareness drives, and social monitoring work serve as powerful tools for addressing health challenges rooted in social poverty in rural and urban areas. By integrating academic institutions with community needs, NSS contributes meaningfully to national public health goals, particularly the elimination of lymphatic filariasis.

CONCLUSION

The present study highlights the significant role of NSS-led surveys, awareness programmes, and social monitoring work in improving community knowledge, attitudes, and preventive practices related to lymphatic filariasis in the context of social poverty in rural and urban areas. The findings demonstrate that although a moderate level of general awareness about filariasis existed among villagers, substantial gaps persisted in scientific understanding of disease causation, transmission, early symptoms, and government prevention programmes such as Mass Drug Administration (MDA).



The integration of NSS-led surveys, structured awareness activities, and social monitoring initiatives—demonstrated through materials such as the “STOP FILARIA” health pamphlet—proved effective in strengthening community understanding of lymphatic filariasis. The visual and participatory approach enabled villagers to more clearly identify disease symptoms, modes of transmission, and governmental preventive measures like Mass Drug Administration (MDA). Beyond improving knowledge, the intervention stimulated positive preventive behaviors, encouraged dialogue within marginalized households, and bridged the gap between academic institutions and community health settings. The use of culturally appropriate health communication tools, such as the illustrated pamphlet displayed above, enhanced retention and comprehension among low-literacy populations, thereby reinforcing practical mosquito-control practices



and treatment-seeking behavior. Taken together, the NSS model represents a sustainable and replicable framework for combating neglected tropical diseases such as filariasis. When paired with community participation and visual communication aids, it not only supports national elimination goals but also fosters civic responsibility, leadership, and experiential learning among students.

The persistence of misconceptions, fatalistic beliefs, and inconsistent mosquito control practices reflects the complex interplay between health awareness and socio-economic realities. Addressing filariasis prevention, therefore, requires not only medical interventions but also sustained community engagement and social empowerment.

Importantly, the findings affirm the effectiveness of the National Service Scheme as a bridge between academic institutions and community health needs. NSS volunteers, through continuous interaction, trust-building, and culturally appropriate communication, contribute significantly to grassroots-level public health initiatives. Such interventions not only support national filariasis elimination efforts but also foster civic responsibility, leadership, and experiential learning among students.

In conclusion, NSS-led surveys combined with structured awareness and social monitoring activities represent a sustainable and replicable model for combating neglected tropical diseases in marginalized communities. Strengthening and institutionalizing such student-community partnerships can play a vital role in achieving long-term disease prevention, improving public health outcomes, and advancing national goals for the elimination of lymphatic filariasis.

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REFERENCES

1. Addiss, D. G., Brady, M. A., & Melrose, W. (2010). *Lymphatic filariasis: Chronic manifestations and management*. *PLoS Neglected Tropical Diseases*, 4(12), e824. <https://doi.org/10.1371/journal.pntd.0000824>
2. Amalraj, D. D., & Pani, S. P. (2007). *Strategies for integrated control of lymphatic filariasis in India*. *Trends in Parasitology*, 23(7), 351-357. <https://doi.org/10.1016/j.pt.2007.05.004>
3. Babu, B. V., & Nayak, A. N. (2003). *Treatment costs and work loss due to lymphatic filariasis in rural communities of Orissa, India*. *Tropical Medicine & International Health*, 8(12), 1102-1109. <https://doi.org/10.1046/j.1365-3156.2003.01154.x>
4. Babu, B. V., & Nayak, A. N. (2003). *Treatment seeking behavior among patients with lymphatic filariasis in Orissa, India*. *Journal of Communicable Diseases*, 35(3), 170-175. <https://pubmed.ncbi.nlm.nih.gov/15075194/>
5. Bandyopadhyay, L. (1996). *Lymphatic filariasis and the women of India*. *Social Science & Medicine*, 42(10), 1401-1410. [https://doi.org/10.1016/0277-9536\(95\)00290-8](https://doi.org/10.1016/0277-9536(95)00290-8)
6. Bloom, G., Standing, H., & Lloyd, R. (2008). *Markets, information asymmetry and health care: Towards new social contracts*. *Social Science & Medicine*, 66(10), 2076-2087. <https://doi.org/10.1016/j.socscimed.2008.01.034>
7. Das, P. K., Ramaiah, K. D., Vanamail, P., & Pani, S. P. (2014). *Community-based interventions for the control of lymphatic filariasis in India*. *Indian Journal of Medical Research*, 139(5), 685-693.
8. Das, P. K., Subramanian, S., & Ramaiah, K. D. (2014). *Elimination of lymphatic filariasis in India: Progress and challenges*. *Parasitology Research*, 113(4), 1345-1356. <https://doi.org/10.1007/s00436-014-3805-9>
9. Freire, P. (1970). *Pedagogy of the oppressed*. *Continuum*. <https://www.jstor.org/stable/10.2307/20703687>
10. Gyapong, J. O., et al. (2011). *The global programme to eliminate lymphatic filariasis: Progress and impact*. *The Lancet*, 377(9761), 1606-1615. [https://doi.org/10.1016/S0140-6736\(10\)62095-7](https://doi.org/10.1016/S0140-6736(10)62095-7)
11. Hotez, P. J., et al. (2014). *Neglected tropical diseases and poverty*. *PLoS Neglected Tropical Diseases*, 8(11), e3276. <https://doi.org/10.1371/journal.pntd.0003276>
12. Krishna Kumari, A., Rao, K. M., & Babu, G. R. (2020). *Community compliance to mass drug administration for lymphatic filariasis*. *Indian Journal of Public Health*, 64(3), 260-266. https://doi.org/10.4103/ijph.IJPH_432_19
13. Kumar, A., & Gupta, S. (2020). *Role of NSS in promoting community health awareness*. *Indian Journal of Community Health*, 32(2), 314-318. <https://www.iapsmupuk.org/journal/index.php/IJCH/article/view/1500>



14. Kumar, A., Kumar, P., & Singh, R. (2016). Knowledge, attitude and practices regarding lymphatic filariasis in rural population of India. *International Journal of Community Medicine and Public Health*, 3(9), 2465–2470.
15. Kumar, P., Singh, S., & Kumar, R. (2016). Knowledge and awareness regarding filariasis in rural population. *International Journal of Community Medicine and Public Health*, 3(8), 2207–2212. <https://doi.org/10.18203/2394-6040.ijcmph20162523>
16. Kumar, S., & Gupta, R. (2020). Role of National Service Scheme in promoting community health awareness: A field-based study. *Indian Journal of Social Work*, 81(2), 215–228.
17. MacGregor, H. (2000). Stigma and disease: Social perceptions of filariasis. *Medical Anthropology Quarterly*, 14(2), 215–233. <https://doi.org/10.1525/maq.2000.14.2.215>
18. Michael, E., & Bundy, D. A. P. (1997). Global mapping of lymphatic filariasis. *Parasitology Today*, 13(12), 472–476. [https://doi.org/10.1016/S0169-4758\(97\)01104-2](https://doi.org/10.1016/S0169-4758(97)01104-2)
19. Nandha, B., et al. (2013). Impact of health education on MDA compliance. *Tropical Parasitology*, 3(2), 120–125. <https://doi.org/10.4103/2229-5070.122120>
20. Parker, R., & Aggleton, P. (2003). HIV and AIDS-related stigma and discrimination. *Social Science & Medicine*, 57(1), 13–24. [https://doi.org/10.1016/S0277-9536\(02\)00304-0](https://doi.org/10.1016/S0277-9536(02)00304-0)
21. Patil, R. R., Giri, P. A., & Kumar, A. M. (2018). Awareness and practices regarding lymphatic filariasis in endemic areas of India. *Journal of Family Medicine and Primary Care*, 7(6), 1293–1298. https://doi.org/10.4103/jfmpc.jfmpc_201_18
22. Patil, R. R., Suryawanshi, D. M., & Mane, S. S. (2018). Socio-environmental determinants of filariasis. *Journal of Family Medicine and Primary Care*, 7(6), 1366–1371. https://doi.org/10.4103/jfmpc.jfmpc_234_18
23. Ramaiah, K. D., Das, P. K., Michael, E., & Guyatt, H. (2000). The economic burden of lymphatic filariasis in India. *Parasitology Today*, 16(6), 251–253. [https://doi.org/10.1016/S0169-4758\(00\)01669-4](https://doi.org/10.1016/S0169-4758(00)01669-4)
24. Reddy, N. B., et al. (2021). Effectiveness of community-based filariasis awareness programmes. *Indian Journal of Public Health Research & Development*, 12(1), 45–50. <https://doi.org/10.37506/ijphrd.v12i1.14160>
25. Reddy, S. R., Rao, P. S., & Lakshmi, V. (2021). Effectiveness of survey-based health education programmes in rural communities. *Journal of Community Health Management*, 8(3), 145–150.
26. Sabesan, S., Vanamail, P., & Raju, H. K. (2012). Impact of MDA on lymphatic filariasis in India. *Journal of Vector Borne Diseases*, 49(3), 164–170. <https://pubmed.ncbi.nlm.nih.gov/23171206/>
27. Sharma, N., & Joshi, S. (2015). Student participation in community health programmes: An NSS perspective. *University News*, 53(12), 18–24.
28. Sharma, R., & Joshi, A. (2015). Effectiveness of NSS-led health awareness campaigns. *International Journal of Social Sciences*, 4(2), 112–118. <https://www.researchgate.net/publication/327845621>
29. Singh, A., & Prakash, S. (2019). Impact of health education on knowledge and prevention of vector-borne diseases in rural India. *International Journal of Health Sciences*, 13(2), 45–52.
30. Singh, A., Verma, P., & Yadav, R. (2021). Student-led interventions and community health outcomes. *Journal of Education and Health Promotion*, 10, 220. https://doi.org/10.4103/jehp.jehp_785_20
31. Singh, S., & Prakash, J. (2019). Community participation in filariasis prevention. *International Journal of Community Medicine and Public Health*, 6(9), 3910–3915. <https://doi.org/10.18203/2394-6040.ijcmph20194031>
32. Stanton, M. C., et al. (2015). Stigma and lymphatic filariasis: A systematic review. *PLoS Neglected Tropical Diseases*, 9(11), e0004230. <https://doi.org/10.1371/journal.pntd.0004230>
33. World Health Organization. (2017). Global programme to eliminate lymphatic filariasis: Progress report. <https://www.who.int/publications/i/item/who-wer9239>
34. World Health Organization. (2020). Ending the neglect to attain the Sustainable Development Goals. <https://www.who.int/publications/i/item/9789240010352>