ADDRESSING MENTAL HEALTH OF LEPROSY AFFECTED

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What is mental health?

Mental health is "A state of wellbeing in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2014).

Prevalence of mental well-being issues among the leprosy affected

The leprosy affected are found to have a higher prevalence of mental well-being issues compared to the general community. Almost 50% of the persons affected by leprosy may suffer from depression.

Reasons of high prevalence of mental well-being issues among the leprosy affected

The life of the leprosy affected particularly with disability is full of miseries; often the living is worse than death. They are usually very poor with almost no voice. He may have ulcers in his feet which are oozing and smelling; limbs may be paralyzed; unable to move or even take his food without assistance/ assisted device; unable to work or not given a job; highly discriminated; the children often denied equal opportunities of education, employment, get married, and settling in life.

Potential solutions

- Acknowledgement of the problem We need to understand and acknowledge the problem. Tools like the Warwick-Edinburgh Mental Wellbeing, and Patient Health Questionnaire 9 items can help us identify and measure the problem.

- Address the causes of mental distress The situation of each person is different; there needs to a mechanism to understand the cause of mental distress. Often poverty with no or very limited means to survive besides the social rejection is the cause.

- Access to support Besides the access to psychiatric care; the person should have access to psychological and socioeconomic care. In fact; the latter may be more important.

IMPACT, SUSTAINABILITY, AND LESSONS LEARNED OF THE LEPROSY POST-EXPOSURE PROPHYLAXIS (LPEP) PROGRAM THREE YEARS AFTER COMPLETION OF THE PROGRAM

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Introduction: The largest multi-country study on implementing SDR-PEP in routine leprosy control was the Leprosy Post-Exposure Prophylaxis (LPEP) Program, 2015 to 2019. The LPEP Program explored the feasibility and impact of routine contact screening and SDR-PEP administration.

Objectives: To assess the impact and sustainability and document the lessons learned of the LPEP Program in Brazil, Cambodia, India, Indonesia, Nepal, Myanmar, Tanzania and Sri Lanka after the program.

Methods: We used a mixed-methods approach. We aimed to include at least one person working for an NGO and one working for the government in each country involved in LPEP. Participants were interviewed and asked to gather existing data of the main leprosy indicators in the LPEP areas before, during and after LPEP. Framework analysis was used for the qualitative data. For the quantitative data, (changes in) coverage in 2014 and 2021 were calculated, and new case detection rates were compared.

Preliminary results: Data collection is ongoing (May 2022). Participants identified several challenges related to integrating the LPEP activities into the routine program, including: (1) lack of structural funding for the activities; (2) difficulties in obtaining rifampicin; (3) lack of (trained) health staff, and (4) COVID-19. Facilitators of the approach, according to the participants, include: (1) government ownership and (financial) support; (2) targets and guidelines for SDR-PEP implementation; (3) community ownership, and (4) endorsement of the approach by international stakeholders, like WHO. Participants emphasized the importance of including persons affected by leprosy at all stages, advocacy, and of sharing experiences between stakeholders from different countries.

INITIATIVE TO TACKLE URBAN LEPROSY PROBLEMS IN WEST BENGAL

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Introduction: Leprosy is a major problem in urban areas of West Bengal, India. Current health services are provided primarily in tertiary hospitals. Those who are suspected of leprosy are diagnosed at a late state through self-reporting, with poor treatment compliance. To tackle these problems, a model for early case detection and treatment was developed.

Objectives: To develop a model in urban areas for early case detection and treatment.

Methodology: Mapping of existing public health facilities in urban areas was undertaken. Under the National Urban Health Mission (NUHM), the state government has established urban primary health centers (UPHC) and appointed medical officers (MOs) and general health care (GHC) staff. The frontline workers (FLW) previously working for immunization-related activities are given responsibility to look after 1000 population to provide primary health care services. A decision was taken to include the leprosy programme under the NUHM, and relevant stakeholders were sensitized on active case detection and treatment at state and district levels. FLW were trained to identify suspect signs, and they referred those with suspect signs of leprosy for confirmation and treatment at UPHC.

Results: More than 400 Medical officers, over 10,000 front line workers and 500 supervisors were trained across 250 UPHC and are providing leprosy services in 127 urban bodies. The treatment completion rates (TCR), which used to be 78% in 2017-18 has increased to 96% in 2021-2022, while the Grade 2 disability (G2D) percentage among new cases has reduced from more than 10% in 2017-2018 to 1% in 2021-2022.

Limitations: None

Conclusion: The model has been in place for more than 2 years and it had addressed several leprosy-related issues in urban areas, such as late detection, poor treatment compliance, and centralized service delivery. A strong coordination needs to be developed at different levels.

IDENTIFYING CLUSTERS OF LEPROSY PATIENTS IN INDIA: A COMPARISON OF METHODS

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Introduction: Preventive interventions with post-exposure prophylaxis (PEP) are needed in leprosy high-endemic areas to interrupt the transmission of *M. leprae*. Program managers intend to use Geographic Information Systems (GIS) to target preventive interventions considering efficient use of public health resources. Statistical GIS analyses are commonly used to identify clusters of disease, but do not account for the local context. Therefore, a contextualized approach is needed.

Objective: This study proposes a contextualized spatial approach that includes expert consultation to identify clusters and compare it with a standard statistical approach.

Patients/material and methods: We included all leprosy patients registered from 2014 to 2020 at the health centers in two districts in Uttar Pradesh State, India (n = 3,855). Our contextualized approach included expert consultation determining criteria and definition for the identification of clusters using DBSCAN, followed by creating cluster maps considering natural boundaries and the local context. We compared this approach with the commonly used Local Moran's I statistic that identifies high-risk villages.

Results: In the contextualized approach, 374 clusters with 75% of the cases in clusters were identified in district one and 512 with 57% of the cases in clusters in district two. If 100 individuals per leprosy case will be targeted for PEP, 33% and 11% of the total cluster population would receive PEP, respectively. In the statistical approach, we identified more clusters in district one and fewer clusters in district two (508 and 193), lower proportions of cases in clusters (66% and 43%) and lower proportions of population targeted for PEP.

Limitations: We didn't differentiate between rural and urban settings or correct for population densities and used the same DBSCAN parameters (Minpt of 2 and maximum distance of 500 m).

Conclusion: A contextualized spatial approach could identify clusters in high-endemic districts more precisely than a standard statistical

Keywords: Spatial analysis, Clusters, Contextualized approach, Local Moran's I, Post-exposure prophylaxis, India

DETERMINING A CLUSTER SIZE TO TARGET ACTIVE CASE DETECTION IN TWO DISTRICTS, UTTAR PRADESH (INDIA)

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Introduction: India is the most leprosy endemic country in the world where more than 50% of all new cases are detected annually. To reduce this number, active case finding, and preventive interventions need to be implemented for the people at increased risk of developing leprosy which is where leprosy cases are clustered. Geospatial technology is a useful method to identify these clusters and has been used extensively.

Objective: To develop a method to identify clusters of leprosy cases and define a cluster that would optimise the efficiency of the approach.

Methods: The geographic coordinates of leprosy cases registered at primary health centres from 2014 to 2018 were recorded. Density-Based Spatial Clustering algorithm was used with ten different combinations of cluster using 2 and 3 cases and distances of 300 to 700 m to identify clusters. The efficiency of the cluster size was determined by calculating the proportion of cases registered in 2019 and 2020 and the population to be examined to find one case.

Results: The proportion of cases in clusters increases with increasing distance parameter. Clusters defined by a combination of 2 cases within 500 m covered 67% cases in one district and 72% cases in the other. These clusters cover 6-8% of the area of the districts and contain 37-47% of newly cases in 2019 and 2020. This combination targets for screening around 200,000 individuals who have a high risk of developing the leprosy in each district.

Limitations: Updated village-wise population data is unavailable. Therefore, the calculation of the figures is based on projected data.

Conclusion: This approach can be utilized to inform the field-level planning at the district, state, or national levels. The approach depends on local circumstances. A different combination of parameters appeared to define the most appropriate cluster size for leprosy studies in other countries.

CHANGING PERCEPTION AND IMPROVING KNOWLEDGE OF LEPROSY: AN INTERVENTION STUDY IN CHANDAULI AND FATEHPUR DISTRICTS OF UTTAR PRADESH, INDIA

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Introduction: Since ancient times leprosy is perceived negatively, resulting in stigmatization. Visible impairments, religious and cultural beliefs, fear and lack of knowledge of leprosy are the main causes of this negative perception.

Objectives: The objective is to evaluate interventions to change perceptions and improve knowledge of leprosy of contacts of index cases and community members in Chandauli and Fatehpur districts, Uttar Pradesh.

Material and methods: A pre-post mixed methods intervention study was conducted in two districts. Based on six steps of quality intervention development (6SQuID), two interventions were designed: (a) posters that provide information on leprosy and challenged misconceptions (b) meetings with persons affected by leprosy, community members and stakeholders. Mixed methods design containing in-depth interviews, focus group discussions, and questionnaire containing a knowledge measure (KAP), Explanatory Model Interview Catalogue community stigma scale (EMIC-CSS) and Stigma Distance Scale (SDS) were used to

assess impact of interventions. Quantitative data were analysed using stepwise multivariate regression, and qualitative data were analysed using open, inductive coding.

Results: 1067 participants were included in Survey 1 (pre-intervention) and 843 participants in Survey 2 (post-intervention). In Survey 1, 13% of participants had adequate knowledge of leprosy versus 53% in Survey 2. Responses showed stigmatizing community attitudes in 86% (Survey 1) and 61% (Survey 2) of participants and negative personal attitudes in 37% (Survey 1) and 19% (Survey 2). The number of posters seen was associated with KAP, EMIC-CSS and SDS scores in Survey 2 ($p<0.001$). The interventions were effective in increasing knowledge of all participant groups, and in changing community and personal attitudes of contacts and community members.

Limitations: A randomized controlled design was not feasible. The observed changes may not be entirely attributable to the interventions.

Conclusion: Contextualized posters and community meetings were effective in changing the perception of leprosy and in increasing leprosy-related knowledge.

Keywords: Leprosy, Perception, Stigmatization, Contacts, Community meetings, Contextualized posters

STIGMA EXPERIENCE, MENTAL WELLBEING, DEPRESSION AND SOCIAL PARTICIPATION AMONG PERSONS WITH DISABILITY DUE TO LEPROSY AND LYMPHATIC FILARIASIS IN NORTH INDIA

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Introduction: A large study was undertaken in Jaunpur District, Uttar Pradesh, and Bokaro District, Jharkhand, India, to establish the prevalence and geographic distribution of persons with disability due to leprosy and lymphatic filariasis (LF). The severity of impairments was also established. Over 11,000 persons were enumerated and mapped between September and December 2021.

Objectives: The study reported here investigated the extent to which women and men with LF- or leprosy-related disability perceive and experience stigma and the extent to which their mental wellbeing and social participation are affected.

Methods: A random sample of over 400 persons was interviewed regarding stigma perception and experience (SARI Stigma Scale), mental wellbeing (WEMWBS), signs of depression (PHQ-9) and social participation (Participation Scale Short Simplified).

Results: 201 persons with leprosy-related and 240 with LF-related disability were interviewed, of whom 51% were women. A community reference sample was also included (n=98). The level of stigma experience was high; the mean SARI score was 16.4 (95% CI 14.2-18.7) among leprosy-affected and 10.2 (8.7-11.7) among LF-affected respondents. 45% and 50% had low mental wellbeing, respectively. Signs of moderate to severe depression were reported by 39% and 38%, respectively, while 41% in both NTD groups reported moderate or severe participation restrictions. In the community group, only 14% had low mental wellbeing, 14% moderate depression (none moderately severe or severe) and 6% moderate or severe participation restriction.

Limitations: Analysis of qualitative data is still in progress so only quantitative data are presented.

Conclusion: The study enumerated over 11,000 persons with leprosy- or LF-related disability in the two study districts. In a representative sample, stigma experience was high, up to 50% had low mental wellbeing, over one third had signs of moderate to severe depression and 40% moderate to severe problems with social and work participation in both NTD groups.

Keywords: Leprosy, Lymphatic filariasis, Disability, Stigma, Mental health, Social participation

LESSONS LEARNED FROM AN AUTOMATED PHONE CALLS AND SHORT MESSAGE SERVICE (SMS) CAMPAIGN THROUGH INTERACTIVE VOICE RESPONSE SYSTEM (IVRS) TO DISSEMINATE AWARENESS ABOUT LEPROSY IN CHANDAULI AND FATEHPUR DISTRICTS OF UTTAR PRADESH, INDIA

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Introduction: Lack of adequate knowledge about leprosy among the mass is a key challenges in early case detection and treatment, as people having suspected signs and symptoms of leprosy do not visit health facilities for diagnosis and confirmation.

Objectives: To describe lessons learned from automated phone calls and short message service (SMS) campaigns to improve perceptions of leprosy.

Methods: An Interactive Voice Response System (IVRS) consisting of automated phone calls and SMS that used mobile phone-based platform was used. Five types of automated calls in the form of dialogues and five types of text messages related to symptoms, cause, mode of transmission including inclusion of persons affected, preventive therapy, and treatment of leprosy were developed and sent to mobile phone subscribers in Chandauli and Fatehpur districts, Uttar Pradesh. The messages were disseminated to subscribers from May to September 2020, through IVRS. In January to February 2021, the intervention was followed up through real time caller-based telephone interviews.

Results: SMS messages reached a total of 28,855 phone subscribers. Among this group, 25% of them picked up automated calls, 72% of whom listened to the call content. A total of 1,218 subscribers, selected randomly from among those who received the SMS and/or calls, were followed up through telephonic interviews. Of the 1,218 participants, 203 (17%) remembered receiving either SMS or an automated call, however only a minority of them seemed to remember anything of the content of the messages.

Limitation: There was a gap of over 4 months between the end of intervention and follow-up interviews, thus the recall rate was low.

Conclusions: SMS and automated calls reached out to a large population as majority (around 80%) of rural population uses mobile phones. For subscribers to remember the content, it may be necessary to have a sustained delivery of messages.

DISABILITY INCLUSIVE DEVELOPMENT: A POWERFUL, EMPOWERING AND OWNERSHIP MODEL FOR PERSONS AFFECTED BY LEPROSY AND DISABILITIES

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Introduction: Persons affected by leprosy and related disabilities suffer from discrimination, exclusion and multi-dimensional poverty. An Indian NGO's path-breaking approaches and actions, as a model of disability inclusive development (DID), have shown inspiring successes.

Objectives: This paper explores and shares how the NGO effectively engaged with persons with leprosy, disabilities and other stakeholders in a leprosy endemic and aspirational district of a backward state, that brought local ownership, beneficiary-led leadership and access.

Patients / material and methods: The paper draws on the data and information from the various sources like the programme planning documents, implementation reports; monitoring, evaluation and learning resources; observation and interaction with the different stakeholders.

Results: The DID project has brought benefits for 250000 persons including 4641 persons with disabilities and 1543 persons affected by leprosy in last 6 years. Implementing NGO's empowerment and facilitation including institutionalisation of individuals, and collectivisation of collectives are reflected in 356 local organisations formed by persons with disabilities who have been taking their own actions on selfcare, self-help and self-reliance. Positive changes are in terms of reduced stigma; improved perception, practices, participation, awareness and voice of the beneficiaries. The project beneficiaries have been demanding and accessing better services of the government's social welfare schemes; 3750 PWDs have received assistive and protective devices. The SHGs of PWDs now have INR 61,47,549/- through savings, internal lending and investment.

Limitations: This paper has been developed on the basis of monitoring data.

Conclusion: The DID model offers important experiential learnings on life, livelihood, and leadership; it strengthens socio-economic and community-based rehabilitation, dignity, equity, sustainability and identity. Sensitisation of multi-stakeholders are leading to inclusive processes. Expansion and deepening of DID needs everybody's appreciation, action and compassion. While the persons with disabilities are eager to excel, are others able to enable those who are differently able?

Keywords: Persons with disabilities; leprosy; stigma; discrimination; exclusion and multi-dimensional poverty; disability inclusive development;

PERSONS WITH LEPROSY & DISABILITIES : A STORY OF REVIVAL OF THEIR SELF-HELP GROUP

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Introduction: Formation and maintenance of Self-help groups (SHGs) is an important intervention for supporting the persons with disabilities (PWD) including those with leprosy. This study narrates how one closed-down SHG was revived leading to changes and inspiration.

Objective: To make the SHG functional again.

Patients / material and methods: The Khwaja Nawaz Divyanga SHG was formed in 2017 in Semra village of the Chandauli district in Uttar Pradesh; it was dissolved in 2020. Meetings were conducted in 2021 with the SHG members; it was realized that the PWDs used to deposit Rs 50/- monthly, but there were no benefits

With revival attempts; the members were made aware on relevance of SHGs. There was also advocacy, and liasioning media activities. As there was no cooperation from National Rural Livelihood Mission; other government departments and media were contacted and the issue was brought to their notice. The meetings of political leaders, district officials, PWDs and media demanded NRLM to enroll the SHG.

Results: Ultimately the group was registered with NRLM and started receiving financial support. NRLM attended the second meeting and actually enrolled two SHGs. The two SHGs received INR 250,000/- as financial support. This activated the SHGs.

The Khwaja Nawaz SHG members got the maximum benefit from which it all started. A PWD due to leprosy got a job that earns him more than INR 10000 per month; livelihood is changing his life. Other members got benefitted by social welfare benefits.

Limitations: The formation and maintenance of SHGs requires good amount of handholding by an external agency which is not always available.

Conclusion: The revival of this SHG was possible due to the collective effort of the stakeholders led by a catalyst ; with its key guidance and mentoring for financial management and linkage .

Keywords: SHG, NRLM, Revive

PRELIMINARY OUTCOMES OF THE PEP++ RANDOMISED CONTROLLED TRIAL TESTING AN ENHANCED CHEMOPROPHYLAXIS REGIMEN TO INTERRUPT THE TRANSMISSION OF LEPROSY IN FIVE LEPROSY ENDEMIC COUNTRIES

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Introduction: New post-exposure prophylaxis initiatives are needed to interrupt the transmission of leprosy, particularly for household contacts and blood relations of index cases. This study tests the effectiveness of a more robust preventive regimen (PEP++), combining rifampicin (600mg, adult dosage) and clarithromycin (500mg) in three doses, four weeks apart. It will be administered to ≈ 225,000 closest contacts of index patients, those at highest risk of harbouring *M. leprae* infection and manifesting the disease. The trial began in two endemic areas of Brazil in 2020 and is planned to begin in India, Indonesia, Nepal and Bangladesh shortly.

Objectives: This trial has the specific objectives to, by 2025: a) reduce the number of new cases of leprosy in project areas by 50% compared with the 2019 baseline; and b) demonstrate increased efficacy of the enhanced PEP++ regimen compared to single-dose rifampicin (SDR-PEP).

Methods: The study uses a cluster-randomised controlled trial design. The randomisation units are sub-district geographical divisions specific to each country. In the intervention areas, all close contacts listed by leprosy patients receive the PEP++ regimen after being screened for leprosy and tuberculosis. In the control

areas, the same number of close contacts will be given SDR-PEP. All contacts will be re-examined after a two-year period to check for leprosy disease onset.

Results: Study enrolment to date is 660 contacts in Brazil following several inception delays; the remaining countries are starting recruitment. After the two-year follow-up period, trial data will be analysed to determine the efficacy of the new chemoprophylaxis regimen.

Limitations: Because of the randomisation method, blinded outcome assessment was not considered possible.

Conclusions: It is anticipated that the combination of antibiotics in the PEP++ regimen will demonstrate increased efficacy compared with SDR-PEP. It would then be available for roll-out as a replicable tool.

Keywords: Post-exposure prophylaxis, Preventive regimen, Randomised controlled trial

IMPACT OF BASIC PSYCHOLOGICAL SUPPORT ON STIGMA AND MENTAL WELLBEING OF PERSONS WITH DISABILITIES DUE TO LEPROSY AND LYMPHATIC FILARIASIS

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Introduction: Persons with disabilities due to leprosy and lymphatic filariasis are known to suffer from stigma and discrimination; many of them have poor mental wellbeing. However, there is limited evidence of a community-based intervention for addressing the issue.

Objective: To provide proof of concept that basic psychological support can reduce stigma experience and improve mental wellbeing and participation among persons with LF or leprosy related disabilities.

Methods: The WHO Psychological First Aid (PFA) toolkit for Ebola was adapted for use with chronic conditions such as NTDs. The adaptation was done by the study team in consultation with global experts. The adapted version is called Basic Psychological Support for persons affected by NTDs (BPS-N). BPS-N was provided through 15 peer supporters to 87 persons with disabilities due to leprosy and lymphatic filariasis. Standard scales were used to measure stigma (SARI Stigma Scale), mental wellbeing (Warwick-Edinburg Mental Wellbeing Scale (WEMWBS)), depression (Patient Health Questionnaire 9 item (PHQ-9)) and participation (Participation Scale Short Simplified (PSSS)) of the clients before and after the intervention.

Results: After 3 months of intervention, the mean of level of stigma decreased from 30.3 to 24 ($p < 0.001$); high mental wellbeing increased from 0% to 13.3% ($p < 0.001$); moderate to severe depression decreased from 88% to 47% ($p < 0.001$). There was no significant change in participation restrictions (87% vs 92% ($p = 0.497$)).

Limitations: The study was carried out with a limited number of clients.

Conclusion: The study provides the proof of concept that the BPS-N intervention administered by peer supporters can achieve substantial improvements in levels of stigma, mental wellbeing and depression in persons with disabilities due to leprosy or LF. However, this was based on a pre- and post-intervention design and needs to be tested in a randomized controlled trial.

Keywords: Mental wellbeing, Peer support, Basic psychological support, Disability, Leprosy, Lymphatic filariasis

COMBINED SELFCARE APPROACH FOR PREVENTION AND MANAGEMENT OF DISABILITY DUE TO LEPROSY AND LYMPHATIC FILARIASIS_ A PILOT MODEL TO ADDRESS THE TWO DISEASES

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Introduction: Leprosy and lymphatic filariasis (LF) are two most common diseases causing disability which affects the physical, mental, social and financial status of the person affected. Self-care (SC) helps in preventing and ameliorating the disability among persons affected. The self-care camps for persons affected by either leprosy or LF are organized at one place at the same time - thus combined selfcare.

Objective: To train the persons affected by leprosy and LF on self-care practices and build capacity of General Health Care (GHC) staff across 61 blocks of 6 districts in Uttar Pradesh and Bihar.

Material and methods: The list of registered persons affected by leprosy and LF were collected and shared with respective GHC staff for inviting the persons affected for attending SC camps at health facility. Assessment of disability of each person was conducted & documented. They were trained on SC for two days with demonstration of practices. The GHC staff were also trained on selfcare. Review meetings were organized every month for initial 3 months, then every 3 months and progress made were recorded. Master trainers on SC were identified and developed.

Results: 232 master trainers were developed and total 1883 beneficiaries including 1291 persons affected by LF were trained. 85 % of 638 persons affected having ulcers reported healing while 75% of 1291 lymphoedematous cases reported their swelling reduced. Total 1614 GHC staff and 2781 ASHA including representatives of Disability People Organization (DPO) and Panchayat Raj Institutions (PRI) were trained on SC.

Limitations: None

Conclusion: SC if practiced properly can improve the condition of disability among persons affected by leprosy and LF.

Keywords: Leprosy, Filariasis, Combined, Selfcare, Disability, Ulcer

SELF-CARE PROGRAM FOR PERSONS WITH DISABILITY DUE TO LEPROSY: HOW A SCALE-UP ON SELF -CARE IN LEPROSY WAS ACHIEVED IN BIHAR

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Introduction: People affected by leprosy are at increased risk of ulcers from peripheral nerve damage that in turn can lead to visible impairments, stigmatisation and socio-economic marginalisation. Health care providers suggest that patients should be trained on self-care (SC) to manage their condition to improve outcomes and reduce reliance on public health services.

Objective: To scale up leprosy self-care in Bihar through enabling and empowering persons with disability due to leprosy, for practising self-care

Methods and material: The initiatives to train persons with disability due to leprosy and GHC staff on SC practices was taken up across five districts of Bihar in 2008. Relevant government officials, GHC staff and Accredited Social Health Activist (ASHA) were trained on SC protocols and practices, with provision of logistic support and SC kits. The positive outcome of the processes adopted were disseminated at several forums with participation of government officials, media and International Federation of Anti-Leprosy Associations (ILEP) agencies. Advocacy meetings with government officials were held for adoption of SC as an effective approach to prevent and manage disabilities due to leprosy.

Result: In 2015, Bihar government adopted SC as a policy by integrating it under Disability Prevention and Medical Rehabilitation (DPMR) and rolled it out across all 38 districts. In the process of scaling up, technical

support is provided to government functionaries on training, supervision and monitoring of SC practices. It is assumed that stigma and discrimination might had reduced in family and community of persons with disability due to demonstration of SC practices by GHC staff and ASHA to them. It has helped in improving their mental well-being and mainstreaming themselves in society.

Limitations: None

Conclusion: Scale up of leprosy SC was possible due to collective efforts of beneficiaries belonging to underserved districts, government officials and stakeholders led by NLR

Keywords: Disability prevention, Self-care, Ulcer care .

A COMPARISON OF PERCEPTIONS AND KNOWLEDGE OF LEPROSY BETWEEN LEPROSY ENDEMIC DISTRICTS IN FOUR LEPROSY-ENDEMIC COUNTRIES

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Introduction: Sufficient knowledge of early clinical leprosy presentation and leprosy services and low levels of stigma are essential for early detection of leprosy. This study is part of the PEP++ project.

Objectives: This study seeks to compare the nature and extent of leprosy-related stigma between endemic districts in Bangladesh, India, Indonesia, and Nepal.

Methods: The study used a cross-sectional design with a mixed-methods approach. We assessed knowledge, attitudes, and practices with the KAP measure, and stigma with the Explanatory Model Interview Catalogue community stigma scale (EMIC-CSS) and the Social Distance Scale (SDS). In addition, semi-structured interviews and focus group discussions were conducted. The quantitative data were analysed using stepwise multivariate regression. The qualitative data were analysed using open, inductive coding. Data were collected in two endemic districts each in Bangladesh, India, Indonesia, and Nepal.

Results: Over 1,600 participants were included in the questionnaire interviews - approximately 420 participants (100 persons affected by leprosy, 100 contacts, 170 community members and 50 health workers) in each of the five countries included in the study. In addition, in each country at least 24 in-depth interviews and three in focus group discussions were conducted. Most participants were from rural areas. One in five participants had adequate knowledge of leprosy, and one in four participants had poor knowledge regarding

leprosy. Data collection is currently ongoing (May 2022). When all data have been collected, mean SDS and mean EMIC-CSS scores as well as determinants of negative perceptions will also be compared.

Limitations: Not all data have been collected at present (May 2022). A limitation of this study is its cross-sectional design, which prevented us from making more definitive causal inferences.

Conclusions: Understanding how perceptions and knowledge of leprosy differ in endemic countries can help us develop contextualised educational and behavioural change interventions.

Keywords: Perception, Stigma, Comparison, Knowledge, Mixed methods, Attitudes

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EFFECTIVENESS OF LIFE SKILLS EDUCATION FOR ADOLESCENT STUDENTS IN LEPROSY COLONIES OF WEST BARDHAMAN, WEST BENGAL

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Introduction: Adolescents often face a number of crisis, dilemmas and challenges as the child moves from dependency to autonomy, while they undergo physiological and physiological changes. An immediate and effective response from a responsible system of education is required for adolescents to tackle these challenges.

Objective: To assess the effectiveness of life skill education (LSE) for adolescent students from leprosy colonies of West Bardhaman, West Bengal

Material and methods: Total 100 adolescent of both genders aged 14 to 20 years were randomly selected from five leprosy colonies for assessing their knowledge on adolescence and LSE related concepts and issues

etc. and for imparting LSE. Total 10 LSE sessions were imparted to them using ice-breaking, brain storming activities and discussions sessions. Pre and post tests were conducted using semi- structured questionnaire.

Results: Pre-test revealed that 5 adolescents had some knowledge on LSE, 75 had no knowledge on life skills and 25 were unsure of their responses. After imparting LSE sessions, there was significant changes as the post-test result showed that 71 adolescents had gained the knowledge, 12 had no knowledge on life-skills, and 17 were unsure of their responses. Pre -test showing that 95 adolescents did not have any knowledge on life skills was a matter of serious concern, revealing that knowledge gained on LSE in schools were not optimal and adequate. It was found that few adolescents are very inquisitive to learn about life skills and they could relate the skills imparted to their daily life experiences.

Limitation: There is a need to impart LSE to a greater number of adolescents, however few of them could be covered.

Conclusion: LSE was effective in enhancing relevant knowledge and skills of adolescents. It is a good solution for empowering and equipping them with life skills to become a productive member of society.

Keywords: LSE- Life Skills Education,