

REHABILITATION

RE01

SURVEY OF DISABILITY RATES IN 28,674 PERSONS AFFECTED BY LEPROSY IN JIANGSU PROVINCE, P.R. OF CHINA

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A survey of impairments and disability was carried out in Jiangsu Province at the end of 1996 to provide data useful for planning a provincial rehabilitation programme. Findings showed that the disability rate (WHO grades 1-3) was 61.42% overall with very significant differences related to sex, leprosy classification, literacy and occupation. Experience gained during the survey showed that the disability rate influenced the patients' capability of work and activities of daily living. Impairment and disability sometimes commenced during or after treatment, but most frequently before start of treatment. The proportion of new cases who were detected within two years of observing the first signs of leprosy was in inverse proportion to the grade II disability rate among those patients. The authors emphasise the importance of early detection and treatment of leprosy and neuritis and of self-care training for those with nerve function impairment. Study findings illustrate the fact that the earlier that impairment prevention and rehabilitation measures are instituted the better. Involvement of the whole of society in programmes of leprosy rehabilitation is important and welcomed.

Key words: Leprosy Disability Prevention Rehabilitation

RE02

RELEVANCE TO FUTURE PLANNING OF LESSONS LEARNED DURING THE CHINA NATIONAL REHABILITATION PROJECT

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A national, China Leprosy Rehabilitation Project, undertaken in 2 stages during the years 1990-1998, is described. This was a collaboration project between the Ministry of Health of P.R. of China, The Leprosy Mission International and other ILEP organisations. Numbers of cases involved totaled 13,000 in stage 1 from 1990-1993 and 27,959 in stage 2 from 1995-1998. The first project objective was to improve and complete the management and supervision systems in preparation for future national projects. Specific objectives related to preservation of nerve function, prevention and overcoming of secondary impairments and improvement of function. Management experience is described in areas such as:

- selection of cases out of large numbers having nerve dysfunction;
- use of measurable indicators and design of evaluation forms;
- the importance of on the job, skill and problem-solving training;
- the importance of effective, in-depth, staff-patient communication if patients' self-care is to be related to their individual circumstances.

Benefits of this project could usefully be extended to thousands of leprosy affected persons living outside the current project areas. The paper outlines some management lessons learned from project experiences and their relevance to forward planning of activities designed to minimise impairments and thus their effects on lives of leprosy-affected persons and their families and communities.

RE03

A SCALE TO ASSESS ACTIVITIES OF DAILY LIVING IN PERSONS AFFECTED BY LEPROSY

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PURPOSE: To describe the development of a scale to assess difficulty in activities of daily living experienced by people in rural areas of developing countries, such as Nepal.

METHOD: Staff experienced in working with leprosy affected people were consulted about activities of daily living they thought should be included in an assessment. A 68-question survey questionnaire was made, sampling five domains of the Disability (D) classification of the International Classification of Impairments, Disabilities and Handicaps (ICIDH, WHO, 1980). Basic on a survey using this questionnaire, some questions were omitted and a few new ones were added. These were rearranged into a new questionnaire. This new questionnaire was translated and back-translated to check the understanding of the wording. Criterion validity was checked by comparing the sum score of the scale with a sum score given by a panel of experienced staff in a sample of 37 patients. Intra and inter-interviewer reliability was assessed on 29 patients using weighted kappa statistics. Stability over a period of a week was evaluated in a similar way. Considering the results of these studies, several questions showing weak reliability or stability were omitted.

RESULTS: Of the original 68 questions, 38 were included in second draft of the instrument. Five questions were added to assess difficulty in relationships, one question about the use of assistive devices and two about occupation and employment. The sum score of the scale against the expert score gave a Spearman correlation coefficient of 0.72. Intra- and inter-interviewer reliability testing gave kappa values of 0.77 (95%CI 0.73-0.81) and 0.61 (95%CI 0.56-0.67), respectively. The stability test resulted in a kappa of 0.76 (95%CI 0.70-0.82). Four questions that gave very poor results were omitted from the final draft of the instrument.

CONCLUSION: A questionnaire-based scale was developed to assess difficulty experienced in activities of daily living in persons affected by leprosy living in rural areas of a developing country - the Green Pastures Activity Scale. The assessment, based on the D-classification of the ICIDH, performed well during validity and reliability testing. The GPAS consists of 34 activity questions, 5 relationship questions, and 3 questions on the use of assistive devices, occupation and employment. It can be used in needs assessment for rehabilitation and for objective-oriented evaluation of the success of rehabilitation interventions, such as surgery, and physio and occupational therapy.

RE04

USE OF THE EYES, HANDS, FEET (EHF) SCORE AS AN IMPAIRMENT SEVERITY SCORE IN LEPROSY

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PURPOSE: To discuss the concepts of 'classification' and 'severity grading' in relation to impairment in leprosy, and to describe the use of an impairment sum score, the Eyes, Hands, Feet (EHF) score, as an indicator of the severity and the evolution of impairment over time.

METHODS: The use of an impairment sum score, the EHF score, is illustrated using data on impairment at diagnosis and after a two-year interval from MB patients released from MDT in the Western Region of Nepal. The WHO 1988 'disability' grading scale (0-2, for both eyes, hands and feet - six sites) was used as a measure of impairment. For the analysis the WHO grades for the six sites were summed to form an Eyes, Hands, Feet (EHF) score (minimum 0, maximum 12). The sensitivity to change over time of the EHF score was compared with that of the 'method of maximum grades'.

RESULTS: Using the 'method of maximum grades', 509/706 patients (72%) appeared not to have changed in impairment status versus only 399 (57%) with the EHF score. Improvement or deterioration of impairment status was missed in 113 patients (16%). In 216/706 patients (31%), the changes detected with the EHF score were bigger than those revealed by the method of maximum grades.

CONCLUSIONS: The six components of the WHO impairment grading may be added up to form a E(yes)H(ands)F(eet) sum score of impairment. This score can be used to monitor changes in impairment status in individual or groups of patients. It should be recorded and reported at least at diagnosis and release from treatment. Reporting could be done as the 'proportion of patients with improved EHF score', 'stable EHF score' and 'EHF score worse', and 'proportion of patients without impairment', 'proportion with WHO grade 1' and 'proportion with WHO grade 2'.

RE05

AN ICIDH-BASED SURVEY OF DISABILITY IN PERSONS AFFECTED BY LEPROSY

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PURPOSE: To describe the results of a survey aimed at describing disability in people affected by leprosy.

METHOD: A survey was carried out using a questionnaire containing 74 questions on activities of daily living. Two hundred and sixty-nine persons affected by leprosy were interviewed.

RESULTS: The prevalence of different types of impairment in this sample ranged from 7.6% (foot drop) to 36% (weakness little finger abduction). The most commonly affected indoor activities were shaving (25%), cutting nails (22%) and tying a knot (18%). Among the outdoor activities, running, ploughing, threshing and milking a cow or buffalo were the most commonly affected (26-34%).

CONCLUSIONS: Disability as defined in the 'International Classification of Impairments, Disabilities and Handicaps' (ICIDH) has received little attention in the field of leprosy. This survey shows that 1) experiencing more severe difficulties with activities of daily life (ADL) is a common problem in persons with chronic impairments due to leprosy, and 2) the level of difficulty can be assessed and measured.

As disability is a main outcome of interest in rehabilitation, we recommend that efforts should be made to include an ADL assessment as a standard activity for monitoring and evaluation of rehabilitation, both for individuals and on programme level. Knowledge of the disability status of a person will be valuable in needs-assessment for rehabilitation interventions and in clinical decision making regarding surgical and other treatment.

RE06

RAPID APPRAISAL IN ASSESSMENT OF THE FACTORS RELATED TO LEPROSY REHABILITATION - A PRELIMINARY REPORT

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To determine the knowledge and attitudes of key persons directly involved in leprosy rehabilitation at basic levels and to explore the possible factors having influence on leprosy rehabilitation, a sectional study, using rapid appraisal approach i.e. an interview with interviewer-administered questionnaire, was conducted for 39 leprosy disabled patients, 35 rural doctors, 10 paramedical workers at township level and 37 village heads in which the disabled individuals due to leprosy live within 10 days.

Results: The willingness for leprosy disability rehabilitation was not associated with the demographic characteristics of the disabled patients. The disabled, rural doctors and paramedical workers were lack of basic knowledge on leprosy and disability due to this disease. There still was some stigma reflecting in the refusal of some village heads (49%) to contact with the disabled people affected by leprosy. 41% of the disabled, 69% of rural doctors, 80% of paramedical workers and 81% of the heads of villages did not correctly recognized who would have the responsibility for leprosy rehabilitation.

The authors concluded and recommended: 1) for very individualized needs and attitudes towards leprosy rehabilitation among leprosy disabled persons, the methodology to be used in leprosy rehabilitation programmes must be different from that utilized in current vertical leprosy control programme; 2) most leprosy disabled patients are cured of aged people (80% of them >50 years) with permanent peripheral nerve damage in varying degrees and needs of life-long care, a model of community-based rehabilitation approach should be considered; 3) training of medical staff at basic levels, especially at village and township levels would be very crucial in the success of the rehabilitation project; and 4) for the purpose of creating a favorable social environment to develop and implement rehabilitation programme, motivation and involvement of the heads of villages in disability rehabilitation must be very important.

RE07

COPING PATTERNS AMONG LEPROSY AND NON-LEPROSY DISABLED CASES

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Some times identically disabled persons exhibit differential adaptation when faced with the functional demands of mobility, personal hygiene, household work etc. This reflects the relative success or failure of different patterns of coping. Hence this study intends to examine the coping mechanisms of the study cases and suggest interventions.

The experimental group in the study comprises of leprosy cases and the control group of non-leprosy disabled cases. Basing on both physical

and functional ability the study cases were classified into four broad groups.

The population of the study is composed of 100 leprosy cases and 100 non-leprosy disabled cases. Direct personal interview method using structured schedule complemented with observations was used for data collections. Some case studies were also conducted. About 50 significant others and 40 health workers were informally interviewed to study their perceptions.

The study reveals the relative success and failure of different coping mechanism among both the leprosy and non-leprosy disabled cases. The suggested intervention to enhance coping mechanisms will be discussed in detail at the time of presentation of this paper.

*The Study is based on Ph.D. Thesis.

RE08

A SOCIOLOGICAL STUDY OF REHABILITATION AMONG LEPROSY AND NON-LEPROSY DISABLED CASES

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Rehabilitation must not only deal with physical restoration but also with the psycho-social and economic effects induced by the disease and disability. Hence in this study Rehabilitation was studied from physical, social, psychological and economic perspectives. The study attempts to understand the interplay of various factors associated with leprosy and non-leprosy disabled cases which are shaping the rehabilitation process.

The experimental group in the study comprises of leprosy cases and the control group of non-leprosy disabled cases. The respondents were classified into four broad groups basing on the extent of rehabilitation

The sample of the study was composed of 100 leprosy cases and 100 non-leprosy disabled cases. Direct personal interview method using structured schedule complemented with observations was used for data collection. Some case studies were also conducted. About 50 significant others and 40 health workers were informally interviewed to study their perceptions.

The study reveals the process of rehabilitation in the context and framework of disability. The conclusions of the study would help to formulate rehabilitation programme basing on the magnitude of the rehabilitation problem and will be discussed in detail at the time of presentation of this paper.

* The study is based on Ph.D. Thesis.

RE09

STAGES IN THE REHABILITATION OF THE LEPROSY HANDICAPPED

(AS ORGANISED BY POONA DISTRICT LEPROSY COMMITTEE)

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Leprosy Rehabilitation is a challenging process. Poona District Leprosy Committee has been working on this for last several years and has demonstrated the following stages in the Rehabilitation process.

- i) Individual Rehabilitation: 177 patients
- ii) Intensive Group Rehabilitation- CBR: 122 patients
- iii) Intensive Group Rehabilitation- CBR: 200 patients (eg. Powerloom)
- iv) Industrial Socio-Economic Rehabilitation 400 patients - Advanced CBR
- v) Co-operative society: 100 patients

All these stages are discussed in detail in the text of the paper and will be demonstrated by coloured transparencies and with

the help of video clippings (VHS format of PAL/Secan/System) from the film "Mehta Co-operative Rehabilitation Model".

This has led to not only Rehabilitation of individual patient but of the entire family which has been brought back into the mainstream of 'Normal' society. The success of the programme is emphasised as it is working for last 18 years and could well serve as a model not only for other leprosy centres but also for those working in the field of other handicapped.

RE10

CARE-AFTER-CURE PROGRAMS TOWARDS A WORLD WITHOUT LEPROSY

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Concepts on Care After Cure (CAC) are not necessarily unique to leprosy and have been practiced in several chronic diseases. However CAC programme for leprosy are in some ways different and should adopt realistic strategies, taking into account both the physical and socio economic ravages of the disease. Since 1987, we have experimented with CAC programmes in our control areas. In this paper our experiences in the Chittoor District of Andhra Pradesh are shared as we prepare towards a world where leprosy and its potential damage are contained.

Spread over 512 sq. kms. the study area has a population of approx. 150,000 where leprosy control activities were carried out since 1979. A total of 3284 patients have been registered and treated for leprosy. Barring those who had died or left the area, 1382 persons were followed up so far. Of these 280 had Grade 2 deformities due to leprosy and the others had varying degrees of general and leprosy related complaints.

The programme consisted of 3 clearly defined activities: health education to empower families and individuals to care for themselves; Institutional provision of curative / reconstructive services for management and prevention of disability and socio economic rehabilitation. Specific inputs that were required and their impact are presented and discussed.

RE11

PREVENTION OF DISABILITY AND REHABILITATION FOR THE LEPROSY AFFECTED IN CHINA.

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A Chinese, National Leprosy Rehabilitation Project was undertaken between 1990 and 1998 by the Ministry of Health in collaboration with The Leprosy Mission International and other ILEP organisations. This involved pilot experiments in activities to prevent and overcome impairments and to serve as examples for further development of rehabilitation work in China and in Asia. More than 50% of the 299,000 accumulated leprosy cases alive at the end of 1996 had nerve function impairment affecting face, hands or feet.

This paper describes the two stages of the project, the second taking place from 1995-98 in support of 27,959 leprosy affected persons in 14 provinces. Project principles, objectives and activities are outlined together with the roles of the Ministry of Health and the National Centre for Leprosy Control in project organisation. The Ministry initiated disability prevention activities and delegated responsibility for implementation to the National Centre. The Centre organised surveys to identify needs, planned project activities and trained national and provincial leprosy staff. The Centre rehabilitation team, together with Leprosy Mission International experts, was responsible for ongoing technical project supervision. Sasakawa Foundation

supported provincial and national training programmes. Improvements made in stage two are described. Outcomes are summarised in this paper and detailed in other papers. The importance of continuation of disability prevention and leprosy rehabilitation activities in China is emphasised.

RE12

COMMUNITY BASED REHABILITATION OF LEPROSY PATIENTS IN GHANA

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In the past two decades, institutionalised rehabilitation of leprosy patients in Ghana has been discouraged, and therefore leprosy patients have been treated and rehabilitated within or close to their communities. Only a few old and often severely disabled patients are permanently cared for in sheltered institutions.

Ghana has an extended family system which offers considerable social support to all non-self-sufficient people (children, elderly, sick and disabled people) within their communities.

For disabled people, including leprosy patients, this "natural welfare system" is supported by multi-sectorial teams which include health, social, and community development workers and educators, who provide a holistic rehabilitation programme at all levels.

RE13

IDENTIFYING TARGET GROUPS FOR SOCIO-ECONOMIC DEVELOPMENT IN LEPROSY

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As leprosy is eliminated as a Public Health Problem throughout much of the world, emphasis will increasingly need to be placed on the social aspects of the disease. Most countries faced with the problems of leprosy have focussed their efforts on medical and control aspects, but socio-economic issues have not received adequate attention.

When at least some data are available on physical disability the data on social and economic disabilities of leprosy affected persons is not available.

As per the studies made in the field of rehabilitation, the leprosy affected persons have been divided into six categories for the purpose of socio-economic assistance.

The study describes the application of the methodology to select the eligible individuals for social and economic rehabilitation. The authors conducted a sample study for categorizing the leprosy affected persons. A total number of 33,000 leprosy affected persons were assessed and eligible persons have been identified.

This methodology could be applied in any region for starting social and economic action for leprosy affected persons.

RE14

PREVENTION AND CORRECTION OF CLAW HAND BY SPLINT APPLICATION.

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In present study, 126 leprosy cases with different type of claw hand deformity were selected from the rural area of Kheda District. These patients which were selected for study were under treatment, RFT & RFC. Different varieties of splints like Adductor Band, Loops, Gutter Splints were given. Ink impression in graph book was taken for each patient. Regularity of splint application was followed & final follow up with ink impression was done after 3 months duration. Angle measurement was done for few patients. Result will be discussed in details, during presentation.

RE15

FIRST BRAZILIAN ELECTROMYOGRAPHY (EMG) NETWORK BETWEEN HANSEN'S DISEASE (HD) REHABILITATION CENTERS

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The Nerve Conduction Studies (NCS) are applied world-wide as the choice method to assess the Peripheral Neuropathies. It's specially used in HD to evaluate the severity of nerve injury, to determine the characteristics of the lesion, to make the foresight of the outcome, and on these basis to elaborate the therapeutic decision. Nevertheless this method is not available to overall patients, other simple and useful methods are applied. There are not sufficient doctors to make NCS, even in HD Rehabilitation Centers, where researches about treatment monitoring protocols must be developed. In order to improve the HD Rehabilitation Centers on this subject, we have looked for a system to be managed by a technician and supervised by a doctor at a distance. There is already this system, and we have found out it in Sweden, in the Department of Clinic Neurophysiology, University Hospital Uppsala. The author shows the experience of the First Brazilian EMG network.

RE16

EVOLUTION OF NERVE DAMAGE IN LEPROSY - AN INTEGRATED VIEW OF TWO DECADES

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Systematic and concerted efforts in understanding the process of nerve damage in leprosy have been undertaken by a multidisciplinary team at The Foundation in the last two decades. The observations have had important implications in the basic neurological sciences as well as in understanding of mechanisms of pathophysiology, immunology, and microbiology of the disease. Furthermore the studies have helped to devise tests for monitoring of chemotherapy and clinical relapses, understanding precipitation of debilitating reactions, immunological and regenerative potential of peripheral nerves and highlighting the role of persistor organisms in recurrence of leprosy.

The important findings and their implications will be presented in the poster.

RE17

SOCIO-ECONOMIC REHABILITATION OF PEOPLE WITH LEPROSY TOWARDS A WORLDWIDE LEPROSY BY THE YEAR 2000 A.D. AND BEYOND WITHOUT

In many diseases, rehabilitation is an after-thought. When a patient is cured, then we think about getting him back to his home, work Community e.t.c.

In Leprosy rehabilitation is an integral part of the programme of prevention as well of As treatment and of final restoration to national Social relationships.

Being a crippling and disabling disease, leprosy is second to poliomyelitis in developing countries. Affected persons are disturbed and find it difficult to live in Communities like those not afflicted by the disease

Without effective rehabilitation, Leprosy Control is a failure because patients will not be willing to expose themselves for treatment unless they can see that others who have done so have been able to return to a meaningful existence.

Without effective rehabilitation measures, medical treatment may also be a failure because patients who are rendered free from mycobacterium Leprae can never be called cured if they are left with blindness and crippling deformities and disabilities as a sequel of the disease

To realise the dream of eliminating/eradicating leprosy by the year 2000 A.D. will be possible if and only if the problem of rehabilitation (Social/and economic) of leprosy persons is effectively addressed

RE18

MASTER PLAN FOR A SOCIO ECONOMIC REHABILITATION OF THE DISPLACED LEPROSY AFFECTED PERSONS IN INDIA - A PROPOSAL.

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In a country like INDIA considering the size of the leprosy problem, the Socio economic rehabilitation is indeed a formidable challenge. Different voluntary organisations are involved in different aspects along with the services offered by the Government. It is necessary to workout an integrated Rehabilitation plan with a well co-ordinated networking arrangement with the existing programme of the Government as well as that of the voluntary agency.

It is estimated that 30% of the 800,000 leprosy affected persons who require attention are found to be displaced and out of this 25% of them are already availing help from the existing facilities of the Government and Voluntary organisations. This will work out to a total of 180,000 persons needing rehabilitation interventions.

As a methodology it is planned to provide loans, educational assistance, Aids and Appliances and Offer training, counselling, motivation and help them to market the product after assessing their needs and aptitudes.

For implementing the programme the country can be divided in to 4 regions (East, West, North and South) and identify 20 nodal agencies in each region. These nodal agencies can be identified out of the active units of the Governments or Voluntary organisations existing in the region. The programme will be phased out for 5 years.

The budget for implementing the programme will come to around Rs. 3,040/- (US \$80) per patient which is inclusive of organisational expenses.

RE19

SOCIAL-ECONOMIC REHABILITATION OF LEPROSY - AN ANALYSIS REPORT

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Dongguan city had once been a high leprosy epidemic area. The total number of registered leprosy patients was 3 990. Out of them, 3,650 were cured patients. For solving the living problems of those homeless cured patients, in 1965 the local government built a welfare facility with an area of 500 hectares including a building area of 30 000 square meters. Three hundred and thirty six (222 males and 114 females) live in this facility at present with an average age of 61 years. One hundred and ninety eight of them are disabled (more than WHO grade II) people. Through 30 years of construction, a social-economic rehabilitation community of leprosy has built up with the support of the government. In view of the market needs and the characteristics of the residents, up to now 44 chicken farms have been built up producing 500 000 chickens and 4 000 000 chicks annually. The production income increases year by year reaching 1 135 000 Chinese yuan in 1996. Vocational training of the residents and inviting technical staffs for guidance have been carried out in order to raise production efficiency continuously. "Distribution according to work" system has been developed on the basis of ensuring the basic living expenses. The residents' income increased gradually and steadily. The residents' rights have been respected and quite a number of them already returned back to the society. One hundred and eighty residents have married. In addition, residents are provided with medical care and rehabilitation help providing them protective shoes and artificial limbs if needed. The authors pointed out that the mentioned example could be a way of cutting the government's financial burden and benefiting the society, the patients and their families.

RE20

GRIP-AIDS TO IMPROVE ORAL HEALTH IN HIGHLY DISABLED LEPROSY PATIENTS

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Leprosy patients with grossly mutilated hands experience tremendous difficulties to maintain dental hygiene. In a study of 120 patients of different types of leprosy, 40% were found to have significant orodental changes (Sharma N.K et al, 1996). We believe that even patients with severe handicaps could be helped to prevent serious sequelae by innovative adaptations like grip-aids.

The WHO theme of 1994 viz. "Oral Health for Healthy Life" stressed the need for "inexpensive and culturally acceptable" methods for offering dental care which synchronised with our observations on araldite ("M-Seal") grip-aids on tooth brushes. We provided grip-aids on tooth brushes and distributed tooth paste containing fluorides to 20 leprosy patients with hand deformities in order to restore and maintain oral health.

All patients were subjected for clinical examination for dental problems by a qualified dentist. Initially 15 out of 20 patients had dental caries with partial resorption of the calcified structure of the tooth caused by dental plaque. Two patients had acute pulpitis caused by odontogenic infection and three patients had gingivitis. After a mean follow-up period of one year, it was observed that the grip-aid had prevented the formation of dental plaque and protected the tooth against development of caries in 16 (80%) patients. The grip-aid had also helped in increased frequency of brushing in all the patients. We believe that for restoration of dignity of deformed patients and establishing human relations in the society, this simple device may be helpful by improving the oral hygiene.

RE21

L'USAGE DE BOTTE DE UNNA ÉLASTIQUE DANS LE TRAITEMENT D'ULCÈRE PLANTER EN PACIENTS LÉPREUX: MANAUS-AM-BRÉSIL.

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La perte de la sensibilité est usuellement le premier symptôme de déficit neural dans la lèpre, avec la diminution de la sensation de la température et

douleur en arrivant avant, une perte de la sensation de sensibilité et pression. Aux pieds, la sensation de douleur protège pas seulement contre les objets pointus, mais aussi contre les effets d'excessive pression en les aires de la région planter, bien que, la perte de la sensibilité soit minimum, les pressions exercées dans les régions planters peuvent porter à la nécrose aseptiques du gras tissu en laissant cette aire assez susceptible à traumatisme, l'ulcération et l'infection. En ces atteintes répétées sont avec beaucoup de fréquence, les majeures causes de mutilations observées en membres inférieures de patients lépreux avec déficit neural.

En cet'étude prospectif, fait avec l'usage de la Botte de Unna Élastique, materiel à la base de bandage élastique, en contenant l'ozido de zinc que n'endurce pas, l'acacia, la glycérine, l'huile de castor, et le pretolato blanche, usuellement indiqué en ulcères veineux de la jambe et d'œdème lymphatique et cet'étude là a été usagé au traitement de patients lépreux avec l'ulcère planter et les résultats ont été animateurs.

Cet'étude a reçu le support financier du laboratoire "CONVATEC".

RE22

A PRELIMINARY REPORT OF COMMUNITY BASED REHABILITATION IN URBAN AND RURAL AREA

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In view of World heading towards leprosy elimination the concept of Community Based Rehabilitation has replaced the institutional rehabilitation for leprosy patients. The pilot study was undertaken to find out the feasibility of Community Based Rehabilitation in slum of Mumbai and rural area of Raigad district of Maharashtra State. After examination of 8135 persons in the slum of Mumbai 65 disabled persons (Rate 7.9/1000) were detected of which 11 were leprosy patients (Rate 1.3/1000). In rural area after examination of 4342 persons 28 disabled persons were detected (Rate 6.4/1000) of which 8 were leprosy patients (Rate 1.8/1000). It seems that the general disability rate and leprosy disability rate in slums of Mumbai and in the rural area is practically the same.

It is further noticed that disability rate is higher in males, more unemployment in disabled persons in rural area, polio is major cause for disability and disability due to accident is more in urban area.

With the help of community leaders, the introduction of these disabled persons to the institutes having facilities of training, job placement and financial assistance to their business is initiated which is giving positive response. The details of same will be presented.

RE23

ACTIVITIES OF HANDA ASSOCIATION IN GUANGZHOU FOR 1996-1997

Libe Yang, Ruth C. Winslow and Xin Tang

Guangdong HANDA Rehabilitation and Welfare Association

Guangdong HANDA Rehabilitation and Welfare Association (abbreviated as HANDA) was Established on August 19, 1996.

HANDA received 1,400,000 RMB (about US\$ 170,000) from 10 charity organizations and 53 individuals of the world in the past two years.

The activities of HANDA in the past two years are as follows:

1. A Swallow Sewing School for training people affected by HD. Thirty-five persons affected by HD graduated from the school and obtained jobs.
2. Two fish farms for people affected by HD to develop their economy and become more self-sufficient.
3. A Chinese medicine herb farm for people affected by HD to make money to improve their living situation.
4. Two orchards for people affected by HD.
5. A chicken farm.
6. Eye operations for people with HD who had eye diseases. There were 34 visual impaired people regained their vision.
7. Seven hundred and nineteen spectacles given to people with HD for protecting their eyes.

8. Helped people with HD to treat their own planta ulcers. About 30% planta ulcers had been cured.

9. Six hundred and nineteen pairs of shoes given to people with HD who had foot trouble.

10. Made 250 new clothes for people with HD at three villages.

11. Gave scholarship, 25,000 RMB (about US\$ 3,000) worth, to 45 children of people with HD to attend school.

12. Sent 4 people recovered from HD to work at shoe factory.

13. Sent 6 people recovered from HD to attend three international meetings on rehabilitation of HD in Brazil, Korea and Spain.

RE24

KIVUVU:
MORE A REFUGE THAN A REHABILITATION CENTER

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Kivuvu Rehabilitation Center is located in Bas-Congo Province, Democratic Republic of Congo.

Previously used as "Leprosy Hospital", Kivuvu had no choice but to be transformed into a rehabilitation Center for almost 10 years, after Primary health care and Integration became national health policy in the country.

As a rehabilitation center, mostly Kivuvu takes care of severe ulcers, reactions and foot wear needs. Some projects, as mill, beans and onion fields, are managed in order to assist admitted patients.

20 patients were almost permanent in the center during the year 1996, among them 14 with severe ulcers needing strict bed rest, and 6 with less severe lesions staying around in the village. During that year, the average of stay period in the center was 3 months.

From different surveys done, it appears that most of the RFT patients (Released from treatment), would prefer to stay at the center rather than going back in their villages where they live abandoned by relatives and friends.

That raises the problem of leprosy stigma that is still high among the population, remaining a big obstacle for leprosy integration both in the public health system, and in the society. Good health education, self-care group initiatives, and also health workers motivation remain the key for real integration.

SURGERY

SU01

OUTCOMES OF RECONSTRUCTIVE SURGERY IN
LEPROSY - A FUNCTIONAL, SOCIO-ECONOMIC AND
REHABILITATION PERSPECTIVE.

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Sonepur district with a population of 500,000 had prevalence rate of 228/10,000 and deformity rate of 7%. In the past 3 years over 200 patients from this district have had reconstructive surgery for hands and feet following completion of MDT. Most patients are from a rural background and engaged in agriculture. A study was undertaken to assess the outcomes of deformity correction on the individual, family and society. The thrust was to assess the effects of deformity correction on function, cosmesis, work performance, earning level, personality, attitude, confidence and expectations. The impact on the family, relationships, social barriers and changes in acceptance was assessed. An effort was made through village discussions to determine the impact that deformity correction has had in making the disease socially acceptable. Most clients returned to their original occupation and to their own homes. Motivation was an important factor in the individual's final rehabilitation. Nearly all surgical failures (8%) had poor motivation and did not adhere to post operative programme. The factors influencing the outcome of surgical reconstruction along with the impact of deformity correction on the individual and the socio-economic aspects will be presented.

SU02

LONG-TERM FOLLOW UP OF JOINT STABILIZATION PROCEDURES IN THE TREATMENT
OF DEFORMED FEET IN LEPROSY

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Joint arthrodesis has been proved very effective in correcting leprosy deformed feet and in treating leprosy sole ulcers as well, and consequently can prevent some patients from suffering due to amputation. Foot joint stabilization procedures were performed in 41 feet (24 of them with sole ulcers) of 36 patients. Triple arthrodesis was done in 12 feet, ankle arthrodesis in 27 and pantalar in 2. Satisfactory immediate results of the procedure were observed in 37 but the remaining 4 not in success. The former 37 feet were followed up for a period of 2-12 years, 35 (94.6%) among them

more than 10 years. It was found that the walking ability of all 37 feet improved, sole ulcers occurred in 15 feet less than 10 years and only one amputation was done 20 years after doing joint stabilization procedures were performed respectively. Correction of deformed feet in leprosy by joint stabilization procedures has helped the patient to retain and use his own limb with its advantages for more than 10 years in average at least. The time of use for the operated limbs will definitely be prolonged if the patients could persist in doing self care.

SU03

Title : RECONSTRUCTIVE SURGERY OF DEFORMITIES
IN HANSEN'S DISEASE IN THE CAMPS. AN
EVALUATION AND LONG TERM FOLLOW UP.

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Abstract : Deformities are quite common in Leprosy patients. Very few centres are available for reconstructive surgery which may be quite faraway from the place of residence of the patients. A novel method of reconstructive surgery on a camp basis at a near place to the patients was undertaken. Chandrapur a district in Maharashtra was considered after a rapport with the district leprosy officer. He was advised to examine and collect the cases of deformities at his district hospital. A team of surgeons from central leprosy teaching and research institute along with local orthopaedic surgeons a camp was held during 1992, 1993 and 1994. All the patients were examined and correctable deformities like claw fingers, drop foot and lateral claw were selected for surgery. The surgical camp was held in two days in an year. The patients were given preoperative and postoperative exercises awareness by the physiotherapist. A total of 79 cases were operated in 3 years. After surgery the patients were sent home and called for regular follow up which was done by the local orthopaedic surgeons. The physiotherapist visited their houses to give and advise postoperative exercises. The expert team examined the operated cases when they went for the next year for surgery. 48 claw finger, 10 drop foot and 12 lagoptalmias corrections were carried out in these years. Correction was satisfactory in 203 of patients. Complications were mainly due to non cooperative patients, who did not come for followup regularly. Therefore it is ideal to conduct reconstructive surgery in leprosy patients in the camps with the cooperation of experts and local organisations. More over the patients stays in his house and the hardship of travelling and staying in leprosy hospitals is prevented.

SU04

LEPROSY AFFECTS FACIAL NERVES IN A SCATTERED WAY
FROM THE MAIN TRUNK TO ALL PERIPHERAL BRANCHES

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