EDITORIAL

Dear Readers,

Greetings from the Research & Training Domain of The Leprosy Mission Trust India (TLMTI)!

We are pleased to bring you this issue of the Research & Training Newsletter which features mainly the 19th International Leprosy Congress. Held in Beijing from September 19th to 21st, we had been looking forward to it for the last three years. Those who were not at the congress will get an interesting overview in the comprehensive report on the important issues presented and discussed at the Congress from Dr Ruth Butlin. A brief report about TLM India's participation at the congress gives some details about the number of delegates and presentations from TLMTI. We thank God for the recognition we received for our work in the form of awards for best presentation in two specific categories. The challenge remains for us to have all the papers that were presented at the ILC written up and published in peer reviewed journals so that others can share our findings, and also because otherwise they are not recognised as evidence. You can read the abstracts of the two award-winning papers on pages 4-5.

Training activities have also been going on in full swing. This year we had planned to train all the nurses in TLMTI, and achieved this goal in September. The training covered leprosy as well as newer topics such as NTDs & WASH, CBR, Advocacy and research. This training was done despite not having a separate budget allocated for training. You will find a short report and photographs on page 4.

Happy reading!

Annamma S. John
Editor & Head (Research & Training)

A BRIEF REPORT OF TLMTI’S PARTICIPATION IN THE 19TH INTERNATIONAL LEPROSY CONGRESS AT BEIJING

The Leprosy Mission Trust India had a considerable presence at the 19th International Leprosy Congress held at Beijing from the 19th to 21st September, 2016. As on previous occasions, there was a large number of scientists, leprologists and field workers present and eager to share their experiences. The programme was filled with interesting topics on familiar subjects as well as urgent new issues, such as the implementation of UMDT (Uniform MDT) and the LPEP (Leprosy Post Exposure Prophylaxis) Trial.

The Team from TLM India comprised 28 people, including Mr. Victor Parasipallu from Brighter Future, which is one of our partners, and Mr. Pavan Sahu, a person affected by leprosy and community leader from Chattisgarh who collaborates with us on our projects and has been a research partner in our ‘Bench to Basti’ project.

TLMTI had 79 accepted abstracts at the Congress submitted by 65 staff members, which in itself is really encouraging because a number of staff members conducted individual projects and wrote them up as abstracts. Unfortunately everyone who had submitted abstracts could not be sponsored. Through the efforts of the Executive Director we were able to fund 28 people to attend the congress. TLMTI staff had 25 posters and 23 oral presentations on a wide range of topics.
Two staff members form TLMTI – Pankaj Gupta and Senthil Kumar – were awarded prizes for best poster in the categories ‘Disability and Impairment’ and ‘Social Science’. The titles of their posters were ‘Footwear for people with anaesthetic feet – are options available?’ and ‘Changes in Social participation and disability level among leprosy affected persons before and after completion of multidrug therapy’, respectively.

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**THE 19TH INTERNATIONAL LEPROSY CONGRESS**

*An inspiring three days*

For those of us lucky enough to go to Beijing for the International Leprosy Congress, it was three days of feasting on new ideas, new understandings and new discoveries in the field of leprosy, with the added joy of making new acquaintances amongst the hundreds of delegates (every one of whom had an interest in some aspect of the disease – whether from an epidemiological, clinical, immunological, social, psychological, therapeutic or bacteriological angle).

TLM was well represented by participants, and by papers! In particular there was a large and active contingent from TLM India.

It is impossible to give a comprehensive report in a short article such as this but I would like to draw attention to several key issues which were repeatedly raised during the congress and which closely concern us in our work for TLM; the choice is partly determined by which papers I myself saw/heard.

**The new WHO strategy:** “accelerating towards a leprosy-free world”. Dr Cooreman spoke of the WHO’s problems (many countries do not report their leprosy statistics…), as well as its plans. He described the 3 pillars of the strategy: strengthen government ownership, coordination, and partnerships; stop leprosy and its complications; stop discrimination and promote inclusion. He said the operational manual targeted at programme managers would soon be available in a ‘menu’ format to allow people to choose the items according to their local epidemiological situation, so we must look out for that publication. One significant comment he made: “any strategy is
only as good as its implementation”! Tanya Wood spoke on behalf of ILEP about the new strategy saying that NGOs’ role was to connect policy with practice. She stressed the importance of reporting gender-disaggregated data. We need to note all the new indicators proposed in the WHO strategy and generate good quality data from TLM projects, for example on disability grades specifically amongst children (not just %DG2 at diagnosis, but also %DG1, and both at RFT!)

The possibility of introducing a “uniform” MDT Regimen (which would mean a shorter MDT regimen for MB cases and more drugs for PB cases): evidence so far available on the long term outcomes of “UMDT” is meagre, but what little there is seems to suggest that the 6m regimen of 3 drugs may be adequate for MB cases. Dr Joseph Kawuma asked “what would UMDT contribute to leprosy control?” and after a thoughtful review suggested that the new uniform regimen might be viable, equally efficacious though shorter (for MB cases) and it might promote integration as it is more convenient to use… but there might be exceptional cases who needed a different regimen (defining and identifying these is an unresolved issue). In contrast, Dr Narasimha Rao presented a helpful paper entitled ‘Re-examining the evidence for UMDT’ and concluded that there was no valid reason to introduce it at present. Within a year or two all the evidence will have been collated and considered by experts to allow a rational decision to be made.

The feasibility of offering prophylaxis to contacts of newly diagnosed cases: papers on chemoprophylaxis and on immunoprophylaxis were presented at the congress, including the reports on pilot studies of introducing single-dose rifampicin (SDR) prophylaxis for contacts under routine working conditions in integrated national programme (“LPEP”). Although it is clear that under research conditions in high prevalence areas use of SDR has some benefit, we will need to wait longer for enough evidence to accumulate on the question of whether this is an appropriate intervention to recommend as part of a national leprosy control strategy (cost effectiveness as well as safety and impact need to be considered). No one reported any revolutionary new findings regarding a vaccine for prophylaxis.

The management of nerve function impairment: several TLM centres were involved in the TENLEP trials, so it was interesting to hear what they had found! But (sadly, perhaps) both trials gave negative results: those receiving a course of prednisolone for subclinical nerve function impairment did not do better that the controls receiving placebo, and the 32 week prednisolone course for new clinical nerve function impairment was no better than the 20 week course. Even negative results are useful, and we should heed these findings. Dr David Scollard gave an excellent presentation on “understanding pathology of nerve injury” in which he stressed the persistence of _M leprae_ specifically within nerves, but mentioned most of the bacteria are already dead. The discussion session on ‘Clinical problems in leprosy’ moderated by Dr Ben Naafs featured many good questions and some useful answers from the floor, but also pointed out gaps in the evidence base, like in relation to nerve decompression and regarding steroid courses for children with reaction/neuritis.

Many other interesting topics were covered in various oral and poster presentations. I expect the abstracts will become available on the ILC website. We really hope that most of the good work presented briefly at the congress will soon be submitted to peer-reviewed journals so that it becomes available for all to read, to quote from and to utilise in their own professional field.

Results of scientific studies are wasted unless they are utilised by others, so let me encourage readers who were there to apply in their own workplaces what they learnt at the ILC. And to readers who were not able to be there, may I say ‘consider writing up some study you are doing, so that you can present it at the next ILC in Manila in 2019 and hear for yourself what others are doing’?

C Ruth Butlin
This year, four workshops were conducted for Nurses working at the TLMTI Hospitals. The objective of the training was to provide a short refresher in leprosy and POID, as well as an orientation in new topics such as NTDs & WASH, Diabetes, Advocacy, CBR and research as our hospitals get more involved in additional activities. All Nurses (Hospital auxiliary, ANM, GNM, B sc& P C B Sc Nursing) from all TLMTI Centers attended the Workshop in different batches. The total number trained was 121. The trainings were conducted in Miraj, Naini, Purulia and Salur between June and September. Dr Suresh Verghese, Training and Sr Irudaya Purna, Nursing Coordinator, were the main facilitators, supported at each centre by the staff of that centre augmented by external experts.

The training was participatory and practically oriented. There was an enthusiastic response from the participants who in their feedback appreciated the opportunity to refresh their knowledge and learn new topics, and enjoyed the sharing of experiences and meeting staff from different centres.

**ABSTRACTS**

**Active screening for close contacts of highly infectious leprosy affected person to interrupt the transmission of leprosy (ILC4.4-001)**

Senthil Kumar Ramasamy, Archana Kumar, Kaushal Masih

**Objective of the study:** To assess the implementation of healthy contact examination of all new cases attending in a referral centre at Champa (Chhattisgarh).

**Methodology:** Bethesda Leprosy Mission Hospital is one of the referral centers of Janjir-Champa district which is situated in the center of Chhattisgarh, one of the endemic states of India. This study was concluded at this hospital among all newly diagnosed and patients under treatment who were highly smear positive (Bacterial Index 4) during April 2012 - December 2015)

The need for physical examination of the family was
explained clearly to the patients, and the patients requested to bring their family (those sharing the same house) to the hospital on their subsequent visit. When they came they were examined under the supervision of medical officer, by the physiotherapist and laboratory technician. The individual forms were filled with demographic and clinical details for both the registered patients and their contact family members. The filled forms were entering in excel data for analysis.

**Result:** 312 leprosy affected persons with Bacterial index over 4+ were included in this study till the date of December, 2015. Their ages ranged from 12 to 75 years. From 312 cases 194 (62%) were newly diagnosed for leprosy, 118 (38%) were under treatment. Their disability scoring according to World Health Organization were Grade ‘0’, 155 (50%), Grade ‘1’, 101 (32%) persons and Grade ‘2’, in 56 (18%) persons. All were motivated and requested to bring their family members to hospital for screening. The 312 leprosy patients reported having 1207 close contacts. Of these 1207 contact 624 contacts came to hospital and were screened for signs of leprosy, of these 624, 98 (8.1%) persons have been found to have cardinal signs of leprosy. Among these 98 cases 66 persons were classified as multibacillary (MB) and 32 were diagnosed as paucibacillary (PB).

**Conclusion:** The result will provide evidence to show the usefulness of healthy contact examination and the correlation between high bacterial index and the risk to healthy contacts compared to the generic public.

### Footwear for people with anesthetic feet: are options available? (ILC5.2-205)

Pankaj Gupta, Rajeev Nathan, Stephan Levi

**Objective:** To determine the characteristics that patients seek in MCR footwear.

**Methodology:** Data was collected through the interview from the patients who had plantar anesthesia and were using MCR sandals for a period of minimum of six months. A total of seventy two patients were interviewed who reported at The Leprosy Mission hospital during January 2015 to December 2015. The main focus of the interview was to find out the characteristics which person affected by leprosy seeks in MCR footwear. A total of seventy two persons who were using MCR footwear were interviewed.

**Results:** Out of the total seventy two persons who were interviewed sixty eight (68) of the patients said that they want closed footwear for winters and the sandals. All the females said that they want footwear without back strap and front strap. Forty seven patients said that they prefer to have insole in their regular footwear rather than using MCR footwear. Seven patients were of the opinion that MCR footwear is a good option for prevention of ulcer and protecting the foot and MCR footwear are better than normally available soft footwear in market. Thirty five (35) patients said that they want MCR footwear in more colors and design apart from available range. Fifty two (52) patients were of the opinion that putting MCR insole inside the footwear in good choice.

**Conclusion:** From the study it can be concluded that patients knew the importance of MCR footwear and were using the footwear on regular basis for prevention of ulcer but they wanted MCR footwear to be available is more colors and designs.