Role of community volunteers in Patient-centered Community- based MDR-TB care in Yangon Region, Myanmar

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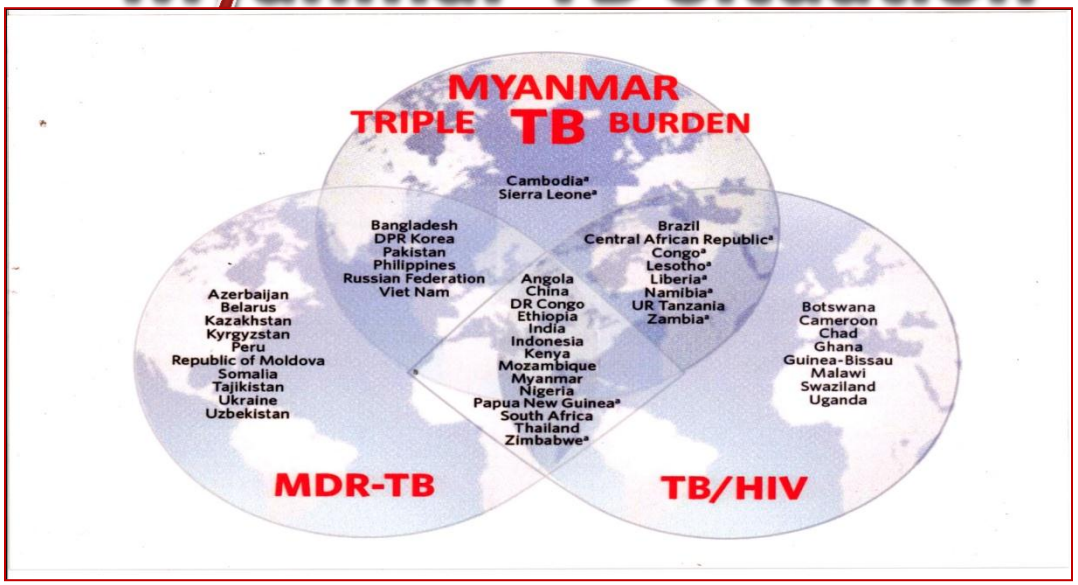
Introduction

- MDR-TB
  - *a global public health problem – (2015- significant detection treatment gap) – Poor TSR (52% Globally, 49% SEAR)
  - *Management- costly treatment & complex in nature
  - *impt. to maintain the quality of care over the long periods (20-24 months) of treatment & frequent monitoring for S/E
- Community based MDR-TB care
  - *WHO has recommended 2011
  - *Providing MDRTB care to patients' homes increases access and promotes equity.
  - *A recent meta-analysis has shown that community-based

  (also called ambulatory or decentralized) MDR-TB care appears to be more likely than centralized care to lead to treatment success and is either cost-neutral or cost-effective[4].

Myanmar TB Situation



- the 30 high MDR-TB burden countries with estimated prevalence of 5% among new cases and 27.1% among retreatment cases(5)
- implemented CBMDRTB care since 2013 integrating to primary health care and utilizing basic health staffs at the township levels.
- Due to the increased burden on the BHS, in Yangon Region, which is the region with the highest numbers of MDR-TB cases, the care model was expanded to add a standardized package of treatment and patient support through community volunteers since 2014.

- However, the assessment on the involvement of community volunteers has not been done yet.

Objective

- To elaborate role of community volunteers in community based MDRTB care and treatment support

Methodology

Study design

- Cross-sectional descriptive study including secondary data review and qualitative study design was conducted.

Study setting

- Three local Non-Governmental organizations (LNGOs) which are providing community based MDR-TB care and treatment support to MDR TB patients at 37 townships out of 44 townships in Yangon during 2015 and 2016.

Study period

- Data collection was conducted from September 2017 to November 2017.

Study population

1) MDR-TB patients under the care and support of community based MDR-TB care and treatment support,
2) Volunteers trained by three LNGOs for the provision of community based MDRTB care and treatment support,
3) Volunteers supervisor from three Local NGOs.

Ethical consideration

- The ethical approval to conduct this study was obtained from the Ethics Review Committee of Department of Medical Research.
- The consent of participation was taken from participants before interviews.

  Audio recordings were done after getting consent.

Results

Recruitment of volunteers and volunteers' supervisors

- **Volunteers**
  - recruited by the suggestion of TMO & basic health staff
  - selected by the recommendation of the midwives because they were helping them in other health related activities, such as immunization programmes and larva control
  - had to attend the advocacy meetings and the trainings organized by each organization.

- **volunteer supervisor**

*recruited amongst the community volunteers

*special training for Volunteer supervisors using Community Coordinator (Community Supervisor guide)

Table 1: Background characteristics of trained volunteers for community based MDRTB care by local NGOs in 37 Townships in Yangon (n=864)

Characteristics of volunteers	Number	Percentage
Organization		
• LNGO-1	269	31.1
• LNGO-2	300	34.7
• LNGO-3	295	34.1
Age (years)		
• 17-24	166	19.2
• 25-35	224	25.9
• 36-45	228	26.4
• 46-66	246	28.5
Education		
• Graduated	103	11.9
• Undergraduate	59	6.8
• High School	617	71.4
• Middle School	68	7.9
• Primary School	17	2.0

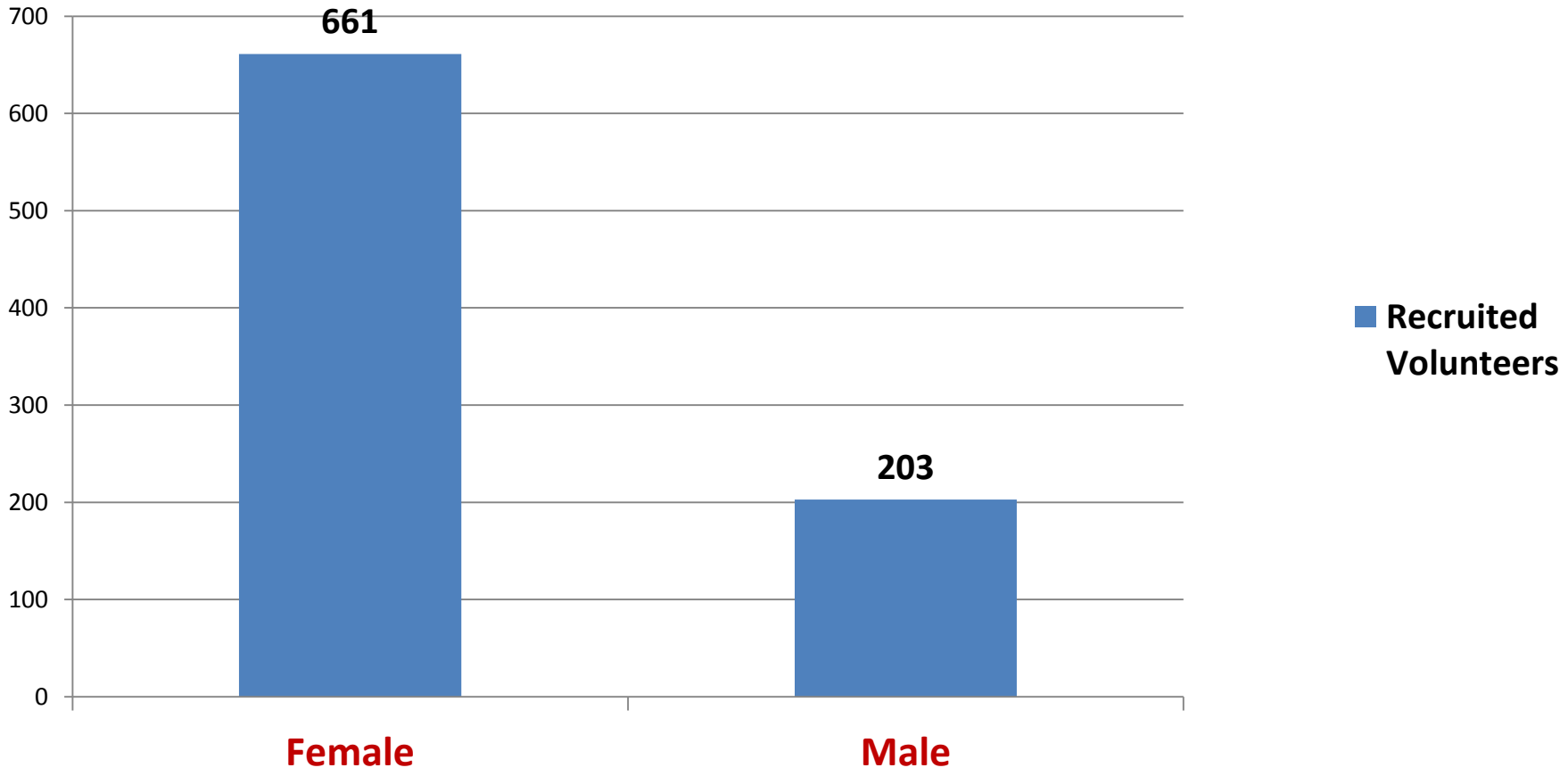


Figure 1: Number of recruited volunteers for community based MDRTB care by gender(n=864)

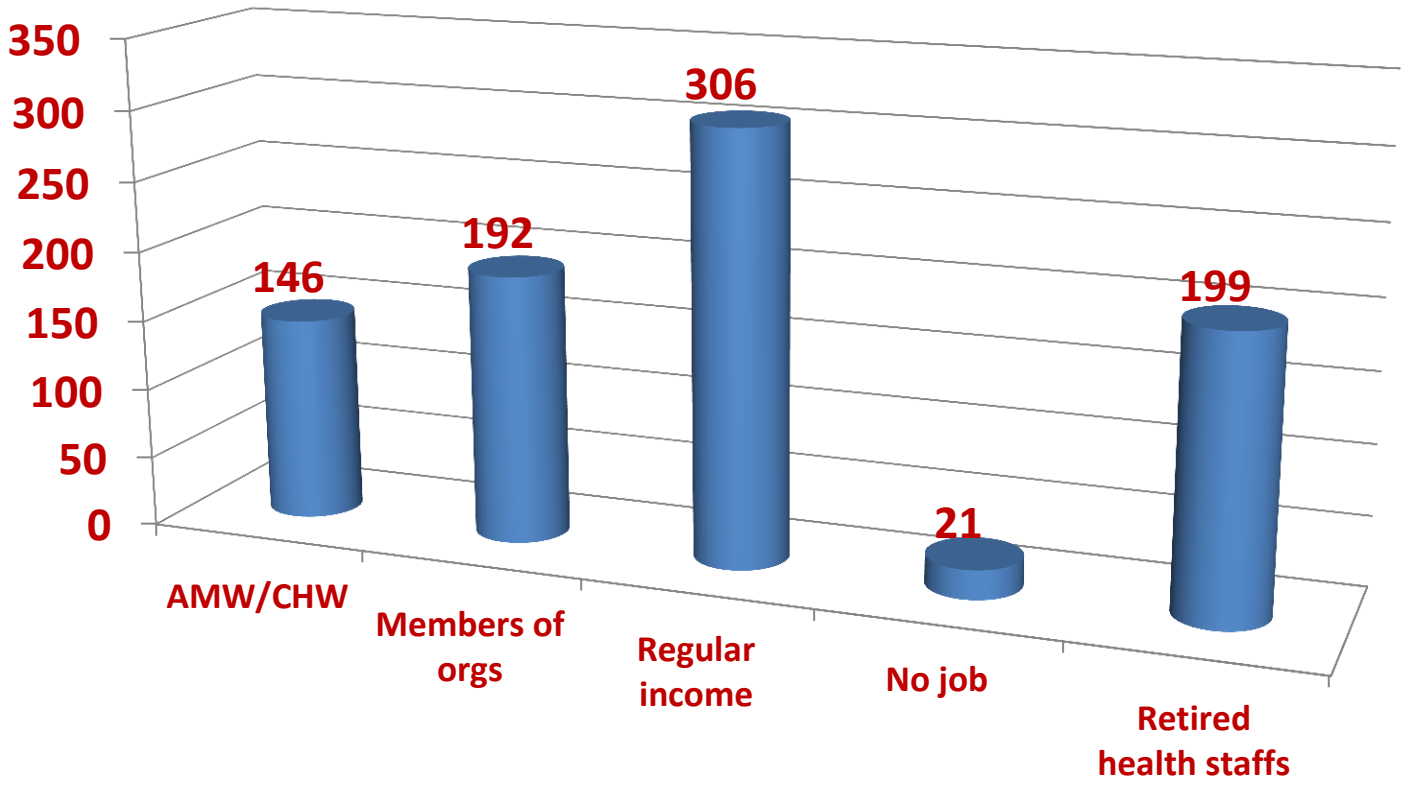


Figure 2: Number of recruited volunteers for community based MDRTB care by jobs (n=864)

Reasons for attrition

8% of volunteers were inactive

The main reasons for attrition of volunteers

- getting paid jobs,
- moving to another places,
- health related issues.

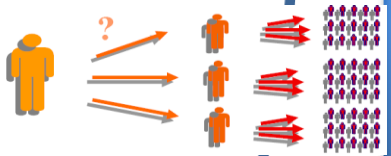
Functions of Community volunteers in Community-based MDR-TB care and treatment support

Providing Evening DOT to MDR-TB patients

Social supports for MDR-TB pts.

Health Education and Adherence counseling to MDR-TB patients and close contacts

Side-effect monitoring of MDR-TB



Home-based Infection Control

Assisting in Nutritional Support

Household Contact Tracing and Referral

Functions of volunteers' supervisors

• Monitor and supervise the activities of volunteers randomly for the evening DOTS (right dose, right time, right drug, right recording), and counseling, health education
• Coordinating between health staffs from township health departments, MDRTB patients, and LNGOs
• Organizing monthly meetings with volunteers
• Sharing of information to MDRTB patients and volunteers on monthly nutritional and transportation allowance support
• Sharing the tasks of volunteers for evening DOTS when volunteers are on leaves
• Attending monthly coordinating meeting with LNGO
• Attending quarterly coordinating meeting with THD, BHS, NTP and LNGO.
• Collecting, validating and verifying the reporting forms from community volunteers and submit to the LNGOs

Success of community-based MDRTB care projects by local non-governmental organizations in 37 Townships*

	LNGO1	LNGO2	LNGO 3	Total
Total number of MDRTB patients (enrolled in 2015 and 2016)	558	814	681	**2053**
Number of MDRTB patients under the care of CB MDRTB	510 (92%)	590 (72%)	554 (81%)	**1654 (81%)**
Number of contacts of MDR TB patients referred by volunteers	179	95	304	**578**
Number of cases who are diagnosed as DSTB among contact referral cases	36	4	8	**48 (8%)**
Number of cases who are diagnosed as DRTB among contact referral cases	8	0	6	**14 (2%)**

Roles of Volunteers

- **Health education and adherence counseling** activity of volunteers was crucial for treatment adherence and completion
- Health education provided through volunteers was more effective because he/she stays in that community and gets more opportunity to deliver health messages not only to MDR TB patients but also to the family members and general community.

HE ပေးမယ်ဆိုလည်း ဒီပြည်သူလူထုထဲက လူကပဲ ပြည်သူလူထုထဲကို ပြန်စိမ့်ဝင်ပြီးပေးတာ ထိရောက်တယ်ဆရာ။ ဥပမာ သူတို့က ဆေးတိုက်ချိန်မှ မဟုတ်ဘူး။ ဈေးသွားသွား၊ ရပ်ကွက် ဓမ္မာရုံမှာ ကိစ္စရှိလို့ ဥပုသ်ပဲ သွားစောင့်စောင့် လူစုမိလို့ရှိရင် HE ပေးတာမျိုး၊ ဒီ MDRTB ဆိုတာ ဘာလဲ။ ဘာကို ခေါ်တာလဲ။ ဘာလုပ်ရတာလဲ အဲ့ကနေ အစချီပြီး ပြောတာ အဲ့လို ပြောတာလေးတွေရှိတယ်။ (KII with volunteer's supervisor)

- Some volunteer's supervisors highlighted **evening DOT** by volunteers was necessary and supportive to assist BHS who were overburden with several tasks.
- They also mentioned BHS appreciated roles of volunteers for CB MDR TB.

ကျမတို့ အမြင်ပြောမယ်ဆိုရင်တော့ ဒီညနေပိုင်း ဆေးတိုက်တဲ့ အလုပ်က လိုကိုလိုအပ်တယ်၊ ဘာဖြစ်လို့လဲဆိုတော့ အပိုင်ဆရာမ တွေကလည်း အလုပ်အရမ်းများတယ်။ ဆရာမတွေမှာ တာဝန်တွေ တအားပိုတယ်။ ပိုတဲ့အခါကျတော့ ဆရာမတွေအနေနဲ့လည်း မနက်ပိုင်းပေါ့ သူတို့ရဲ့ တခြား ကာကွယ်ဆေးထိုးတွေ ဘာတွေနဲ့ သူတို့ရဲ့အလုပ်တွေ အရမ်းများတဲ့အခါ ကျမတို့ အဖွဲ့စည်းတွေ ခုလို ..ကျမတို့အနေနဲ့လည်း သူတို့မရောက်နိုင်တဲ့ လူနာအိမ်တွေကိုဆို ကျမတို့ ကလည်း သတင်း အချက်လက်ပို့ပေးနေတဲ့အတွက် သူတို့ (ဆရာမတွေ) အရမ်းဝမ်းသာတယ်။ (KII with volunteer's supervisor)

Challenges

- Previously, a weak coordination between volunteers and Basic Health Staff
- Main challenge was building trust
- However, after sometimes, BHS realized that volunteers are assisting their workload by visiting MDR- TB patients' homes and monitoring side effects of drugs.

Discussions

- **1st study done in Myanmar**
- **Low rate of attrition was found**

The possible reasons

- related to the recruitment process
- Recruited volunteers were previously retired health staffs, community health volunteers, auxiliary midwives, and members of organizations (MRCS, MMCWA, MWAF)
- involved in health related activities as well as social activities at their townships before
- lesser chance of drop-outs or attrition rate

Discussion cont.

- **Volunteers are supportive to basic health staffs not only in providing MDR-TB care, but also at other health related activities.**

The possible reasons

  - most of the recruited people were already working closely with basic health staffs

- A global qualitative study reported that community-based and patient-centered MDR-TB care are preferable among health care providers and patients themselves because it is safe, conducive to recovery, facilitating psychosocial support and allowing more free time and earning potential for patients and caretakers.

Discussion cont.

- Health Education to the MDR-TB patients as well to their close contacts is reported as the most effective services by community volunteers.
  - patients can have more frankly, transparent and effective communication to ask about their diseases.
- Considerable numbers of close contacts were referred for further investigations for diagnosis of TB and MDR-TB. Out of the referred cases, **8%** and **2%** detected as DSTB and DR-TB respectively.

  It reflects the important role of community volunteers referring the risk contacts of MDR-TB.

Discussion cont.

- There are 20% of MDRTB patients who refused to receive care from volunteers.
  - occupation of some patient (eg. Doctor) want to take self medication and, Company/office staff prefer BHS wearing uniform
  - no trained volunteers closed to MDR-TB patient's residence
  - some patients totally refuse to take MDRTB treatment.

- According to a study done in China, the possible reasons to refuse MDR-TB treatment included out-migration for work, concerns about work and studies and belief they were cured after undergoing drug-sensitive TB treatment.

Conclusions

- Community volunteers play important role in community based MDR-TB care.
- Challenges which need to be addressed
- Sustainability of community based MDR-TB care projects should be considered

Recommendations

- Frequent refresher trainings for volunteers
- Recruiting more volunteers at the townships with highest cases of MDR-TB.
- Implementing effective tracking system for volunteers and MDR-TB patients at the townships where migrant population is dominant.
- Further insight study among inactive volunteers to understand their perspectives towards community based MDR-TB care, and those MDR-TB patients who refuse to receive supportive care from community volunteers.

Thank you

for your Attention