

ABSTRACT

Background: Multi-drug-resistant Tuberculosis (MDR-TB) is one of the emerging and global crises worldwide. Though global prevalence and incidence of TB is in declining mode; Bangladesh is still in the list of 30 high Tuberculosis (TB) burden countries. Even having *successful* DOTs program and National Tuberculosis Control program (NTP), TB is in the top chart of national public health concerns due to MDR-TB as cases are gone under delayed detection and under reported. Thus, the gaps and barriers persisting in the NTP from the community point of view should be unblinded through proper investigations regarding timely diagnosis with the limited resource. This study helped to find out the barriers in the community level to maximize the MDR-TB case detection as well as notify the appropriate authority for designing the NTP more authentic way with best implementation channel.

Objectives: This study aimed to assess the community perception about gaps and barrier which suppress the timely MDR-TB case finding under NTP. It has also explored the community knowledge and preference to dig up the needs and query to improve the social support and health care seeking behavior which is one of the lights to the proper implementation way by assessing which one fit most in the NTP in Bangladesh.

Method: The research was conducted in two different hospitals and household level from both rural and urban setting in Bangladesh. Study design was mixed method where qualitative part used Focus group discussions (FGDs), In depth Interviews (IDIs) and Key Informants Interviews (KIIs) and quantitative part used semi structured questionnaire. Both simple random and purposive sampling method were used. MDR-TB patients, care giver of them, community health workers, Community leaders and program officer for TB from government and Non-government organizations (NGOs) from the study area were the respondents for this study.



Results: All the targeted study population were positive about the NTP, but the barriers were found in coverage and information dissemination of the program. Level of knowledge regarding MDR-TB is very poor among the community people, though who knows about the disease, are enough concern about that and maintain themselves properly to get cured or prevented from further infection; but still importance of timely detection and available facilities are not satisfactory. Stigma induced constrains and economic crisis speaks louder than the priority and consequence of timely detected MDR-TB. So, some major barriers in the way of detection of timely MDR-TB under NTP was low educational rate, least information regarding the issue, unsatisfactory quality of CHWs services, less availability of gene Xpert machine, few manpower in this sector, lack of motivation of the health care provider, insufficient financial support for the patients , social acceptability.

Conclusion: This study has explored various community factors which create barriers for timely detection of MDR-TB under NTP with some additional information from the health care providers side. In a nutshell, we can comment that NTP needs to take re-strategic plan focusing on community involvement by removing social stigma related factors, economic supports with intensive follow-up and rewarding approaches for the providers aspects by acknowledging monetary skim for better implementation of the program.

Keywords: Barriers, MDR-TB, Delayed Detection, NTP, Community, Bangladesh.

CONTENTS

COVER PAGE	1
APPROVAL SHEET	2
TABLE OF CONTENTS	3
LIST OF FIGURES, TABLES, AND PICTURE.....	5
LIST OF ABBREVIATIONS.....	6
ABSTRACT	8
CHAPTER I. INTRODUCTION	10
A. Background	10
B. Relevance	15
C. Problem Statement	16
D. Research Objective	17
E. Research Impact	17
F. Originality	18
CHAPTER II. LITERATURE REVIEW	20
A. Literature Review	20
B. Theoretical Framework	27
C. Conceptual Framework	28
D. Research Questions	28
CHAPTER III. RESEARCH METHOD	29
A. Research Type and Design	29
B. Research Settings and Time	29
C. Intervention	31
D. Research Subjects	31



E.	Identification of Research Variables	38
F.	Operational Definition of Variables	39
G.	Data Collection and Research Instrument.....	40
H.	Data Analysis Plan	42
I.	Research Ethics	46
J.	Research Limitations.....	46
K.	Research Steps.....	47
CHAPTER IV: RESEARCH RESULTS AND DISCUSSION.....		48
A.	Result.....	48
B.	Discussion.....	77
CHAPTER V: CONCLUSION AND RECOMMENDATION.....		84
A.	Conclusion.....	84
B.	Recommendation.....	85
REFERENCE.....		88
APPENDIX		92
Ethical documents and consent form		92
Questionnaire guideline.....		95
Guideline for Focus Group Discussion Guide.....		98
In-depth Interview Guide.....		100
Key informant Interview.....		105

LIST OF FIGURES AND TABLES

Table 1: Country situation of global burden of TB.....	12
Table 2: Performance of GeneXpert Machines in detecting DR-TB.....	14
Table 3: Originality of research.....	18
Table 4: Summary of population.....	32/33
Table 5: Sample size.....	35
Table 6: Showing the factors related to research variable.....	38
Table 7: Operational definition of research variables.....	39
Table 8: Demographic and Social Status of quantitative respondents.....	49
Table 9: Frequency Distribution of Knowledge of TB/MDR-TB infection.....	50
Table 10: Knowledge, participation and Gap in NTP with two categories by gender.....	53
Table 11: Knowledge, participation and Gap in NTP with three categories by gender.....	54
Table 12: Knowledge, participation and Gap in NTP with two categories by age.....	55
Table 13: Knowledge, participation and Gap in NTP with three categories by age.....	57
Table 14: Knowledge, participation and Gap in NTP with two categories by education level.....	58
Table 15: Knowledge, participation and Gap in NTP with three categories by education level.....	60
Table 16: Showing suggested recommendation from the study.....	85
Figure 1: TB case distribution in Bangladesh.....	13
Figure 2: Global TB incidence in 2017.....	21
Figure 3: Risk factors for MDR-TB.....	21
Figure 4: Global incidence of MDR-TB.....	22
Figure 5: Case detected by DST among incidence of MDR-TB	23
Figure 6: List of high TB burden countries.....	24
Figure 7: Theoretical Framework.....	27
Figure 8: Conceptual framework.....	28
Figure 9: Location of Bangladesh in the globe.....	30
Figure 10: Study area.....	31
Figure 11: Data analysis styte.....	44

LIST OF ABBREVIATIONS

BMRC	Bangladesh Medical Research Council
BRAC	Bangladesh Rural Advancement Committee
CDH	Chest diseases hospital
CFR	Case Fatality Rate
CHW	Community Health Worker
CNR	Case Notification Rate
COL	Community Opinion Leader
c-PMDT	Community based programmatic management of drug resistance TB
DALY	Disability Adjusted Life Years
DF	Damien Foundation
DGHS	Directorate General of Health Service
DOTS	Directly Observed Treatment Short course
DR	Drug Resistance
DST	Drug Susceptibility Test
FGDs	Focused Group Discussions
GBD	Global Burden of Disease
IDIs	In depth interviews
INGO	International Non-Governmental Organization
IR	Implementation Research
KIIs	Key Informant Interviews
MDR	Multi Drug Resistant
NGO	Non-Governmental Organization



Barriers of Multi-drugs resistant Tuberculosis (MDR- TB) detection in National Tuberculosis control Program (NTP) in Bangladesh: The Voice of Community

Flowra, Mahfuza Talukder, Dr. Yodi Mahendradhata, MSc, PhD and Prof. Dr. Ari Probandari, MPH, Ph.D

Universitas Gadjah Mada, 2020 | Diunduh dari <http://etd.repository.ugm.ac.id/>

UNIVERSITAS
GADJAH MADA
NIDCH

NIDCH	National Institute of Chest Diseases Hospital
NTP	National Tuberculosis control Program
OPD	Out-Patient Department
PTB	Pulmonary Tuberculosis
RR-TB	Rifampicin resistant Tuberculosis
SDGs	Sustainable Development Goals
TB	Tuberculosis
TDR	Tropical Disease Research
UN	United Nations
USAID	United States Agency for International Development
WHO	World Health Organization
XDR	Extensively drug resistant