

ORIGINAL ARTICLE

Challenges in Sputum Collection among Tuberculosis Suspects and Drug Distribution to Tuberculosis Patients among Health-care Providers (ANM/ASHA) in Rural and Urban Field Practice Area of SSIMS and RC, Davangere – A Qualitative Study

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ABSTRACT

Introduction: Tuberculosis (TB) continues to cause a large burden of disease in the world. Both diagnosis delay and non-completion of treatment are two central behavioral challenges in the National TB Elimination Program. **Objective:** The objective of the study was to determine challenges faced during sputum collection and drug distribution by the health-care providers (ANM/ASHA) at rural and urban field practice area of SSIMS and RC, Davangere. **Materials and Methods:** Four focus group discussions (FGDs) were conducted: Two groups with ANM's and ASHA's each from rural and urban field practice area of SSIMS and RC in Davangere during July and August 2018, respectively. Each group consisted of six participants, and a total of 24 health-care providers participated. The sample was stratified by professional role (ANM and ASHA) and by geographical area (urban and rural) to explore and compare views regarding challenges faced during sputum collection and drug distribution by different professional groups working in different settings. FGDs were video recorded and transcribed, and a second researcher took notes recording group dynamics. **Results:** Most of the ASHA and ANM knew about the guidelines for sputum collection and also would instruct the patient regarding sputum collection. However, still many of them had faced difficulty in collecting sputum. Every ANM reported no difficulties in procuring anti-TB drugs from the main store and patient did not collect drugs regularly. **Conclusion:** Most of the ANM and ASHA workers reported difficulty in sputum collection and drug distribution which implies subsequent reinforcement to be done by health-care providers to TB patients to complete their treatment.

Key words: Challenges, Drug distribution, Health-care providers, Knowledge, Sputum collection, Tuberculosis

INTRODUCTION

As per the global tuberculosis (TB)-2017 report, the incidence of TB in India was 2,800,000 which accounts for about one-fourth of the world's TB cases.^[1] TB continues to cause a major burden of disease in the world, where approximately 2 million people are killed per year.^[1] Two components have received attention which mainly depends on behavior which are delay in diagnosis and incomplete treatment. Patients are expected to seek care immediately and complete the treatment. Health-care providers are expected to perform their duty successfully which includes sputum smear examination, treatment initiation, and monitoring drug compliance regularly. Successful detection of

TB and treatment completion, both require specific behaviors from patients and health-care providers.^[2]

The key strategies of National Strategic Plan 2017–2025 for TB elimination are active TB case finding, addressing social determinants and community engagement.^[3]

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The directly observed therapy (DOT) providers or the treatment supporters are mainly the ANM, ASHA, or the family member of TB patients whose involvement and active participation cannot be underestimated for the success of the TB control program.^[4-6] With this background, the problems faced by the ANM or ASHA for effective surveillance, case detection, drug adherence, and drug distribution need to be addressed and tackled. Hence, the current study is undertaken to assess the challenges in sputum collection among TB suspects and drug distribution to TB patients among health-care providers (ANM/ASHA).

MATERIALS AND METHODS

Study Design

Qualitative study – focus group discussion (FGD).

Study Population

This study was conducted among health-care providers (ANM and ASHA) working in rural and urban area.

Study Procedure

Four FGDs were conducted: Two groups with ANM's and ASHA's each from rural and urban field practice area of SSIMS and RC in Davangere during July and August 2018. Each group consisted of six participants, and a total of 24 health care workers participated. The sample was stratified by professional role (ANM and ASHA) and by geographical area (urban and rural) to explore and compare views regarding challenges faced during sputum collection and drug distribution by different professional groups working in different settings. It was conducted using a topic guide developed and validated by experts in the field.

All participants were made to sit in the form of a circle. The objectives were explained and they were all requested to stay for the entire discussion. After obtaining the permission to record the proceedings, the discussion was started based on the topic guide. All the participants were encouraged to interact with each other. All FGDs were video recorded and transcribed, and a second researcher took notes recording group dynamics.

Study Period

Four FGDs was conducted in July and August 2018.

Consent

A written informed written consent was obtained from each health care worker.

Data Collection Tools Used

A topic guide developed and validated by experts which consisted of questions regarding challenges faced during sputum collection and drug distribution among TB patients was used.

Institutional Ethics Committee Clearance

Ethics approval was obtained from the Institutional Ethics Committee (IEC), SSIMS and RC, Davangere.

Analysis of Data

The qualitative study will generate themes centered around challenges faced during sputum collection and drug distribution among health-care providers.

RESULTS

The following are the findings from the FGD done among ASHA/ANM regarding challenges in sputum collection and drug distribution. Each finding from the discussion is grouped under headings as in the topic guide.

Barriers in Sputum Collection

Majority participants felt difficulty in collecting sputum as there is high stigma, patients are reluctant to give sputum samples particularly in the community.

An ASHA worker opined difficulty in carrying patient's sputum samples as she feels it as very unhygienic and sometimes nauseating more so during active case finding survey period.

All ASHA workers demanded support to them in transporting sputum samples or else to arrange an alternative means of transport.

An ASHA from PHC said "I was not allowed to enter the patient house in the village to collect sputum because of high stigma and they even rejected saying not to visit house often."

Another ASHA worker mentioned, "I have so much of other programs related work and sometimes collecting sputum sample becomes a burden on me though I am not getting paid for this work fairly."

Difficulties Faced for Sputum Collection in Younger Children

All the participants described certain difficulties faced for sputum collection in younger children such as inadequate sample production and sample containing of saliva. An ASHA worker from rural area said, "So many times I have

received the sample full of saliva from children and so we were asked to get another sample from PHC.”

An ANM said, “I have referred the children to district hospital to get their sputum tested.”

Barriers in Drug Collection and Distribution

Both ANM and ASHA workers mentioned that they regularly get the Anti TB drugs from the main store and they do not face any difficulty in distributing the drugs but patients refuse to take the medicines because of side effects.

An ANM said, “I often see that once the patient is getting better, after few days of taking medicines, he/she stops coming to hospital to collect the medicines then I have to send ASHA worker to home or else I will only have to visit their home to counsel them to take the medicines.”

Caretakers Role in Drug Administration

All participants believed that family members play a major role in treatment completion, especially wife play a major role when the husband gets affected with TB.

“I usually counsel the wife if her husband is having TB, and I ask her to come to the hospital to collect the medicines as most of the time if husband is alcoholic then it is very difficult to give him medicines directly.” – ANM.

Attitude Toward Incentives

ASHA workers mentioned that there is no incentive provided for sputum collection and they receive incentives only for treatment completion.

An ASHA worker replied that “Once patient got transferred after 4 months of treatment and 2 months was remaining and I had given drugs for 4 months and another ASHA from the place where the patient was transferred distributed drugs for remaining 2 months and she received the incentives instead of me which was very unfair.”

DISCUSSION

This descriptive qualitative study explored the challenges faced by health care workers (ANM and ASHA) in collecting sputum samples and distributing drugs.

Participants described that they feel difficulty in collecting sputum as there is high stigma, patients are reluctant to give sputum samples, also ASHA workers mentioned that it is an extra burden to them, they demanded support to collect and transport sputum samples.

In target communities, workers were sometimes shouted at, ignored, or harassed and had to endure extreme weather conditions.^[7]

As described by the ASHA worker issues related to acceptability of ASHA workers as treatment supporters should be addressed because due to high stigma, they are not readily accepted by the patients and their family members.^[8]

Barriers in Drug Collection and Distribution

Both ANM and ASHA workers mentioned that they regularly get the anti-TB drugs from the main store and they do not face any difficulty in distributing the drugs but patients refuse to take the medicines because of side effects.

In other study, health workers mentioned that it is highly difficult for them because patient does not come to receive drugs because of loss of work, travelling time and even though they get medicines free of cost, they do not have money for traveling and for female patients, it is very difficult to come and collect the medicines by leaving their children at home.^[7]

“When we go to the patients’ house, we beg them to get treatment. That is right, we beg them to get treatment, but when they get treatment, they get drug side effects that make them stop taking the drugs. That is the main reason that they gave up” (male TB staff at health center).^[7]

Caretaker Role

As reported by ASHA worker, caretaker role is very important especially wives play a major role if their husbands are TB patients. Similarly, a study done in Thailand^[9] showed the importance of family members in directly observed treatment, short-course (DOTS) treatment.

The most frequently mentioned reason for choosing an initial provider was advice from household or community members. The opinion of household and community members is quite influential in regard to care seeking behavior.^[10]

Incentives

ASHA workers mentioned that there are not any incentives for sputum collection which might be one of the reasons for having less interest in collecting sputum samples and they receive incentives only for treatment completion.

“We should have more volunteers help us than now but they require a higher incentive to encourage them to work actively. For example, when we asked them to help us sometimes they said they had no time. If we had more money, they said they would have time for us.” (Health worker).^[11]

Singh *et al.*, in their study, stated that the poor motivation of ASHA workers is because of the perception that lack of monetary incentives.^[6]

In a study conducted by Pandey *et al.*,^[12] poor accountability related to honorarium disbursement, lack of support system, poor quality of training, poor communication skills, and stigma are the main barriers faced by ASHA workers.

The major challenges faced by the health care workers as reported by themselves were poor attitude of some health workers (mentioned 8 times), patients who default (mentioned 7 times), and fear of being infected with TB (mentioned 6 times). The other issues which providers felt should be improved on were understaffing (mentioned 5 times), patients who do not keep appointment (mentioned 5 times), long waiting time to receive laboratory results, inadequate knowledge on TB, limited space for TB work, and fear of the CB-DOTS program not working as expected.^[13]

Similarly, a cross-sectional study carried out in Ghana also pointed out those attitudes of health care workers toward TB patients and health staff's own fear of TB were some of the major problems hindering TB work and accelerating stigma.^[14]

CONCLUSION

Most of the ANM and ASHA workers reported difficulty in sputum collection as there is high stigma among patients to give sputum samples. According to them, caretakers have a major role in helping TB patients to complete their treatment.

Recommendations

Innovations addressing the barriers to improve the services provided by ASHA and ANM workers are required. Giving incentives for case detection for sputum collection may increase the work efficiency. Regarding transfer of the patients from one DOT center to the other should be taken care and all health workers who have worked for that patient should be given equal incentives that will encourage the health workers.

Declarations

I/We, the undersigned author(s) of the manuscript hereby declare the above manuscript which is submitted in AOBH is not consideration elsewhere. The manuscript is NOT published already in part or whole in any journal or magazine for private or public circulation.

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CONFLICTS OF INTEREST

None declared.

ETHICAL APPROVAL

Approved.

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