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APPENDIX

Appendix A

Qualitative study

Guidelines for focus group discussions

- **Introduction:** Introduce name of the facilitators and participants.
- **Objective of the study:** To elicit perception, etiology, symptoms, belief, stigma, treatment seeking behavior, treatment practices among various groups.
- **Length of the Discussion.** The discussion session lasted approximately 1 and 1/2 hours.
- **Incentives:** Individuals taking part in a discussion session was compensated for their participation. Some cash amount (300-500 Nepalese currency) was provided for taking part in the discussion.
- **Confidentiality:** Participants were assured of confidentiality and the possibility to withdraw at any time.
- **Tape recorder.** The sessions were tape recorded.
- **Refreshments.** Refreshment was served during the discussion.

FGD 1, Key questions: Tuberculosis patients both for men and women
<ul style="list-style-type: none"> • Is there a gender difference in perception about TB? (Probe: how and why?) • Are there any differences in interpretation of cause of TB between men and women? (Probe: how and why?) • Who does normally make decision for care if somebody gets sick in the family? What is a gender role in the family? • Is there a gender difference in seeking care? Why? • In your opinion, how your group can do in reducing the gender gaps in health seeking behavior in TB?

FGD 2, Key questions: Community members

- Believes one sex is inferior to another. What is your opinion?
- Believes being a man/woman prevents them for discussing health problem. What is your opinion? (Probe: why?)
- Being a man/woman they need permission to go to health facilities. What is your opinion? (Probe: why?)
- Is there a gender difference in knowledge about TB? (Probe: how and why?)
- Is there a difference in delay help seeking behavior between men and women? Why?
- In your opinion, how the community group can do in reducing the gender gaps in health seeking behavior in TB?

FGD 3, Key questions: private practitioners

- Do you think there is gender difference in help seeking behavior?
- More female/male tends to seek care in private sector than public sector. What is your opinion? Why?
- Is there a gender difference in delay presenting to seek care? (how and why?)
- Why do the patients seek care in private sector even though DOTS treatment is free in public sector? Any gender differences in this? (Probe: how and why?)
- In your opinion, how your group can do in reducing the gender gaps in health seeking behavior in TB?

FGD 4, Key questions: DOTS providers

- There is gender difference in accessing DOTS services. What is your opinion?
- There is gender difference in concealment of TB diagnosis. What is your opinion? Why?
- Being a man/woman they need companion to go to DOTS centre. What is your opinion?
- Why do the patients seek care in private sector even though DOTS treatment is free in public sector?
- In your opinion, how the NTP or government can do in reducing the gender gaps in health seeking behavior in TB?

Quantitative study

QUESTIONNAIRES

Gender differences in delays in initiating directly observed treatment among new sputum smear-positive pulmonary tuberculosis patients in Nepal

The main objective of this study is to investigate gender differences in delays in initiating DOTS treatment among smear positive pulmonary in Nepal. Face to face interview was carried using structured pre-tested questionnaires by trained interviewers. The right of the participants to decline to participate or to reply specific questions was respected. The confidentiality was maintained throughout the study.

Date of interview: dd/mm/yy: _____

Name of interviewer: _____

Name of the DOTS centre: _____

Part I: Diagnosis and treatment information:

The following information was obtained from TB laboratory register, TB register, referral note, TB treatment card, and TB patient card.

1. Name of the patients: _____
2. Address: _____
3. Sex: 1= Male 2= Female
4. Age: _____ years old
5. Weight: _____ kilograms
6. Name of the diagnosis centre: _____ Address _____
7. Date of first sputum sample submitted: _____ (dd/mm/yy)
8. Date of second sputum sample submitted: _____ (dd/mm/yy)
9. Date of third sputum sample submitted: _____ (dd/mm/yy)
10. Result of sputum smear examination:

Date of examination	Sputum sample	Result
	First	
	Second	
	Third	

11. Date of registration for TB treatment: _____ (dd/mm/yy)
 12. TB registration number: _____
 13. Date of treatment initiation: _____ (dd/mm/yy)
 14. HIV status: () 1 = Positive () 2 = Unknown

Part II: Socio-demographic and socio-economic

Socio-demographic factors:

1. What is your marital status?
 () 1 = Unmarried () 2 = Married
 () 3 = Widowed () 4 = Divorced
2. How many members in your household? _____
3. How many children in your family (under 15 years old) _____
4. How many rooms have you used in your home? _____
5. Are you local inhabitants? (if yes, go to question No. 7)
 () 1 = yes () 2 = no
6. If no, what is the reason staying here >
 () 1 = For work () 2 = for study (student)
 () 3 = Displaced due to political conflict

Socio-economic factors:

7. What is your highest educational status?
 () 1 = Illiterate () 2 = Primary (1-5 grade)
 () 3 = Lower secondary (6-8 grade) () 4 = Secondary (9-10 grade)
 () 5 = Higher secondary and more () 6 = Simple read and write
8. What is your main occupation?
 () 1 = Farmer () 2 = Daily laborer
 () 3 = Housewife () 4 = Government service
 () 5 = Private service () 6 = Student
 () 7 = Merchant () 8 = No work
 () 9 = Others (specify) _____
9. Who is main income earner in your household?
 () 1 = self () 2 = Others, mention _____
10. How much do you earn per month? _____, NRS
11. What is your annual household income? _____, NRS

18. If yes, how did you suspect them as the TB symptoms?
- () 1 = Self () 2 = friends
- () 3 = family members () 4 = former TB patients
- () = newspaper () 5 = radio
- () 6 = television () 7 = Health provider
- () 9 = No idea () 8 = others specify _____
19. How long after onset of symptoms did you start recognized that your illness might require special attention? Days _____, or, Months _____, or, Year _____

Decision-making

20. Which symptom(s) made you take decision for help seeking? (check > one)
- () 1 = Cough () 2 = Chest Pain
- () 3 = Coughing up blood () 4 = Fever
- () 5 = Weight loss () 5 = Loss of appetite
- () 6 = Night sweats () 7 = Weakness
- () 8 = others (specify) _____
21. Did you decide yourself to seek help?
- () 1 = Yes () 2 = No

If yes, go to question number 23

22. If no, who was/were the decision maker in your household to seek help for you?
- () 1 = Father () 3 = Father In-Law
- () 2 = Mother () 5 = Husband
- () 4 = Mother-in-law () 7 = Daughter
- () 6 = Son () 9 = others (specify) _____
- () 8 = Wife
23. How long after onset of symptoms did you make decision for help seeking?
- Days _____, or Months _____, or Years _____

27. Did any of the following cause you to delay seeking DOTS treatment? (Check more than one)
- () 1 = DOTS center too far () 2 = Lack of money
 () 3 = Lack of awareness of DOTS services () 4 = Could not go alone
 () 5 = Fear of isolation () 6 = Don't like to label as TB
 () 7 = Blockade of road () 8 = Unfriendly health worker
 () 9 = Treatment from private providers () 10 = Busy with work
 () 11 = taking care of children () 12 = Busy with housework
 () 13 = No
28. Did any of the following sources of information help you decide to visit DOTS Centre? (Check more than one)
- () 1 = Television () 2 = Radio
 () 3 = Former/current TB patient () 4 = Friends
 () 5 = Family members () 6 = Pharmacy
 () 7 = Traditional healers () 8 = Private doctor
 () 9 = Newspaper () 10 = Public health facility
 () 11 = Others (specify) _____
29. Did you able to work after onset of TB symptoms and during help seeking?
 () 1 = Yes () 2 = No, mention Days _____, Month _____
30. How much money did you earn every day if you could work? _____ NRs
31. Did you borrow money in order to visit health provider?
 () 1 = Yes () 2 = No
32. If yes, how much did you borrow? _____ NRs. from whom _____
33. Did you sell any of your belongs or assets in order to obtain medical care?
 () 1 = Yes () 2 = No
34. How much money you spend for;
- Lodging _____ NRs.,
 Food _____ NRs.
 Additional food _____ NRs,
 Travel cost _____ NRs.
 Total expenditure _____ NRs.

35. Did someone accompany with you for TB diagnosis and treatment?
 () 1 = yes, mention relation to him/her _____ () 2 = No
 If no, go to question number 37
36. Expenditure of accompanied person
 Lodging ____ NRs., Food ____ NRs. Additional food ____ NRs, travel cost ____
 Total expenditure _____

Socio-cultural factors (Stigma)

37. What is your feeling with the following questions?

	<i>Questions</i>	<i>Yes</i>	<i>No</i>
a.	Do you feel ashamed for having TB?		
b.	Do you feel it necessary to hide TB diagnosis from others?		
c.	Do you think, TB is caused as sinful act?		
d.	Do you think TB is a heredity disease?		
e.	Do you prefer to live isolated since you got TB diagnosis?		
f.	Do you have any problem in the relationship with your spouse after getting TB?		
g.	Is there any problem to get married with cured TB?		
h.	Are the people around you want to talk with you as before?		
i.	Do the family members hesitate in mixing with you?		
j.	Do your family members find fault with you frequently?		
k.	Are you prevented using common articles of daily use?		
l.	Are you allowed to sleep in the same place as before ?		
m.	Do the community people allow you to participate in the community events like before?		

Psycho-social factors

Knowledge about TB and its treatment

38. Do you know what type of illness you have?
 () 1 = Yes () 2 = No () 3 = Not sure

39. What is the most important symptom of TB? (Check only one)
- 1 = Fever in the evening and night sweat 2 = Chest pain
- 3 = Cough with blood 4 = Loss of weight
- 5 = Loss of appetite 6 = Cough for 2 weeks/more
40. What is the cause of TB? (Check only one)
- 1 = Smoking 2 = Alcohol drinking
- 3 = Heredity 4 = Hard work
- 5 = Bacteria 6 = Cold
- 7 = Poor diet 8 = Witch
- 9 = Don't know 10 = others (specify) _____
41. How does TB transmit? (Check only one)
- 1 = Inherited 2 = sharing same utensils
- 3 = Contact with a TB patients 4 = Hand shaking
- 5 = Don't know 6 = Others (specify) _____
42. What is the most important method of TB diagnosis? (Check only one)
- 1 = Chest X-ray 2 = Sputum examination
- 3 = Blood examination 4 = Stool examination
- 5 = Others (specify) _____ 6 = Don't know
43. Is TB a curable disease?
- 1 = Yes 2 = No 3 = Not sure
44. What is the most important benefit of DOTS? (Check only one)
- 1 = DOTS can completely cure the TB disease
- 2 = DOTS can make good relationship with health staff
- 3 = DOTS treatment is free
- 4 = Don't know

53. How did you travel to the DOTS centre where you come daily for treatment?
 1 = On foot 2 = Own vehicle
 3 = Bus 4 = Bicycle/motorcycle
 5 = Three wheelers (Tempo) 6 = Others (specify) _____
54. How far is the DOTS center from your home? _____ km
55. How long is the travel from your home to DOTS Centre (one way)? min __ hrs
56. How much you pay for traveling cost per visit? _____ NRs

Availability of services

57. Did you meet the health staff in your first visit to diagnostic centre?
 1 = Yes 2 = No
58. Did you get health education from the health staff regarding how to produce the good quality of sputum for test in your first visit to diagnostic centre?
 1 = Yes 2 = No
59. Did you start DOTS treatment on your first visit to DOTS center after TB diagnosis?
 1 = Yes 2 = No

Behavioral factors:

60. Have you ever smoked tobacco regularly (at least once per day)? If no, skip to question number 66
 1 = Yes 2 = No
61. If yes, what type of tobacco do you smoke?
 1 = Pipe 2 = Cigar
 3 = Cigarette 4 = Bidi
 5 = Others (specify) _____
62. On average, over the whole time that you have smoked, how many cigarettes did you smoke, on average, each day? _____
63. At what age did you first start smoking regularly? _____
64. Do you smoke now?
 1 = Yes 2 = No
65. If no, at what age did you stop? _____

66. Have you ever drunk alcohol regularly (at least once per day)? If no, skip to question number 72
() 1 = Yes () 2 = No
67. If yes, what type of alcohol do you drink?
() 1 = Homemade (local whisky) () 2 = Whisky
() 3 = Beer () 4 = Homemade (Jand)
() 5 = Others (specify) _____
68. At what age did you first start drinking regularly? _____
69. On average, over the whole time that you have drunk, how many times did you drink, on average, each day? _____
70. Do you drink now?
() 1 = Yes () 2 = No
71. If no, at what age did you stop? _____
72. What is your main fuel for cooking and heating? Check only one.
() 1 = Kerosene () 2 = Electricity
() 3 = Wood () 4 = Coal
() 5 = Gas () 6 = Dust of wood (Bhusechula)
() 7 = Others (specify) _____
73. Does your stove have a chimney?
() 1 = Yes () 2 = No

Questionnaire

Assessing health system related factors

Human resources:

1. **Number of staff** providing DOTS services _____
2. Number of **Male staff** _____, Number of **Female staff** _____
3. Number of **Trained staff** on DOTS _____, and number of **Untrained staff** _____
4. Workload in the **OPD** per day _____
5. Workload in the **laboratory** per day _____
6. Workload in the **DOTS clinic** per day _____

Accessibility:

7. Diagnosis cost per visit NRs. _____, and treatment cost per visit NRs. _____
8. Opening time of DOTS centre _____ hours, and closing time _____ hours

Follow up NTP DOTS policies (Diagnosis, Treatment, Recording, drug supply, supervision, and monitoring):

9. Correctly evaluate suspected cases (history taking)? () 1 = Yes () 2 = No
10. Refer suspect patients or collect sputum samples and send them to a laboratory for examination? () 1 = Yes () 2 = No
11. Number of smear examination per TB suspect investigated (within the consecutive 2 days) _____
12. Is each patient on the correct regimen? () 1 = Yes () 2 = No
13. Does each patient put on treatment on same day of diagnosis?
() 1 = Yes () 2 = No
14. Is each patient taking the drugs under direct observation?
() 1 = Yes () 2 = No
15. Are sputum examination results recorded completely in Laboratory register?
() 1 = Yes () 2 = No
16. Are sputum examination results recorded completely in sputum request form?
() 1 = Yes () 2 = No
17. Are sputum examination results recorded completely in TB Treatment Card?
() 1 = Yes () 2 = No

18. Is every patient who has a TB Treatment Card registered in the TB Register?
 1 = Yes 2 = No
19. Are treatment information recorded completely in TB Treatment Card and Patient Identity Card? 1 = Yes 2 = No
20. Does the DOTS Centre receive regular uninterrupted drug supply with adequate buffer stock? 1 = Yes 2 = No
21. Does the DOTS Centre receive regular supervisory visits by the district supervisor? 1 = Yes 2 = No
22. Whether supervisory visits result in corrective actions to solve the problem identified? 1 = Yes 2 = No
23. Does the DOTS Centre hold quarterly monitoring meeting?
 1 = Yes 2 = No
24. Whether the discussion is held on the proportion of male to female?
 1 = Yes 2 = No

Public-Private Partnership:

25. Whether coordination meeting with private medical system takes place?
 1 = Yes 2 = No
26. Is referral mechanism developed between DOTS Centre and Private sector?
 1 = Yes 2 = No

Coordination, counseling and advocacy:

27. Does the DOTS centre hold regular staff meeting?
 1 = Yes 2 = No
28. Does cross checking mechanism take place to verify the cases between laboratory and DOTS clinic? 1 = Yes 2 = No
29. Whether the primary defaulter tracing mechanism existing and functioning?
 1 = Yes 2 = No
30. Whether the contact tracing mechanism existing and functioning?
 1 = Yes 2 = No
31. Is every suspected TB patient counseled regarding sputum examination and production of quality sputum? 1 = Yes 2 = No
32. Is every TB case counseled regarding the importance of DOTS therapy?
 1 = Yes 2 = No

33. Frequency of educational sessions held at DOTS Centre _____
34. Number of staff who have been trained in communicating with TB patients
_____ male and female _____
35. Number of activities to dissemination of TB educational messages through
mass media per year _____
36. Number of advocacy fact sheets and other publications produced or received
per year _____
37. Number of meeting held with community people to encourage their
participation in the DOTS programme per year _____
38. Is there any formal coordination committee at DOTS centre level involved
from community representatives? () 1 = Yes () 2 = No

Logistic supplies

39. An adequate supply of drugs? () 1 = Yes () 2 = No
40. An adequate supply of needles, syringes? () 1 = Yes () 2 = No
41. An adequate supply of sputum containers? () 1 = Yes () 2 = No
42. An adequate supply glass slides? () 1 = Yes () 2 = No
43. An adequate supply of TB Treatment Cards, TB Identity Cards, Request for
Sputum Examination Forms and Referral/transfer forms?
() 1 = Yes () 2 = No
44. Well functioning microscope? () 1 = Yes () 2 = No
45. Adequate drinking water? () 1 = Yes () 2 = No

Behavior of the staff

46. Know what to do when they suspect a patient may have TB?
() 1 = Yes () 2 = No
47. Understand the importance of examining contacts of TB patients?
() 1 = Yes () 2 = No
48. Trace patients who default? () 1 = Yes () 2 = No
49. Know what health education they should provide for patients?
() 1 = Yes () 2 = No
50. Know how to complete the TB Treatment Card, the Request for Sputum
Examination Form and the referral/transfer Form?
51. () 1 = Yes () 2 = No

Mr. Tara Singh Bam

Profile

Public health worker, trained in Thailand, with 10 years experience in Programme Management (at district and national levels) for Primary Health Care services and TB control in Nepal. 33 yrs old, born in Nepal email: tara_bam@yahoo.com

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June 2004 – March 2007,	Ph.D. Candidate , College of Public Health, Chulalongkorn University, Thailand
2003	Master in Primary Health Care (PHC) – Mahidol University, Thailand
2001	Master in Public Administration – Tribhuwan University, Nepal
1997	Bachelor of Education - Tribhuwan University, Nepal.

Publications

1. Bam TS, Enarson, DA, Hinderakar, SG, Chapman, RS (2007). High success rate of TB treatment among Bhutanese refugees in Nepal. *Int J Tuberc Lung Dis* 11 (1):54-58.
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