

Health care seeking among individuals with cough and tuberculosis: a population-based study from rural India

G. Fochsen,* K. Deshpande,† V. Diwan,† A. Mishra,† V. K. Diwan,* A. Thorson*

* Division of International Health (IHCAR), Department of Public Health Sciences, Karolinska Institute, Stockholm, Sweden; † Department of Community Medicine, R D Gardi Medical College, Ujjain, Madhya Pradesh, India

SUMMARY

SETTING: Ujjain district, Madhya Pradesh, India.

OBJECTIVE: To describe and compare health care seeking among men and women with cough of >3 weeks, with special focus on the utilisation of private and public health care.

DESIGN: A population-based cross-sectional survey including 45 719 individuals aged ≥15 years.

RESULTS: The prevalence of cough was respectively 2.8% and 1.2% among men and women. The majority of men and women reported seeking health care for their symptoms (69% vs. 71%), but only 23% visited a public provider at some point during their illness. A similar health care seeking pattern was found for patients diagnosed

with tuberculosis (TB) in our survey. No significant differences in health care seeking were found between men and women. Only 13% of those seeking care reported having had a sputum smear examination since the onset of cough. Factors associated with sputum examination were history of TB, haemoptysis and visiting a public provider. **CONCLUSION:** The low utilisation of public health care services and the few sputum examinations reported in this rural Indian setting illustrate the need for improved diagnostic practices as well as involvement of private providers in TB control activities.

KEY WORDS: cough; TB; health care seeking; gender; India

INDIA is one of the 22 countries with the highest burden of tuberculosis (TB), and alone accounts for nearly one third of the global TB burden.¹ In line with the recommended DOTS strategy, India's Revised National Tuberculosis Control Programme (RNTCP) relies on passive case detection using sputum smear microscopy as the principal method of diagnosing pulmonary tuberculosis (PTB) among suspects (i.e., individuals with cough of more than 3 weeks). Despite increased coverage of the RNTCP, only 54% of sputum smear-positive cases in India are detected.¹

A large proportion of TB suspects and patients are managed in the private health care sector without being notified.² Studies of health care seeking behaviour indicate that TB suspects and patients reportedly prefer seeking care within this sector because of its availability and perceived quality of care,^{3,4} although diagnosis and treatment of TB has proved inadequate.⁵⁻⁷ Evidence also suggests differences between men and women in access to adequate TB care. Studies from low-income countries have shown that female patients are more likely to seek health care from private and/or untrained health care providers,^{8,9} are less likely

to undergo sputum smear examination if presenting with respiratory symptoms at health care facilities,⁹⁻¹¹ and are diagnosed later than men due to health care system delays.^{8,12,13} However, these findings are not unequivocal. A retrospective study based on a comparison between TB prevalence data and notification rates from 14 countries indicated that prevalent cases of men and women were similar to notified cases, suggesting that differences in TB incidence rather than impaired access to health care were the explanation for gender differences in notification rates.¹⁴ A study from a rural district in South India showed that women utilised public health care more than did men. The male/female ratio of smear-positive cases in this setting was lower in the public health facilities than in a community-based prevalence survey (4.1 vs. 6.5), indicating that women were more likely to be notified to the RNTCP than men.¹⁵

The aim of the present study was to describe and compare health care seeking among men and women with cough of more than 3 weeks in a rural population of India, with special focus on the utilisation of private and public health care.

Correspondence to: Grethe Fochsen, Division of International Health (IHCAR), Department of Public Health Sciences, Karolinska Institute, Nobels väg 9, 171 77 Stockholm, Sweden. Tel: (+46) 8 524 83 341. Fax: (+46) 8 3115 90. e-mail: Grethe.Fochsen@ki.se

Article submitted 28 November 2005. Final version accepted 2 May 2006.

[A version in French of this article is available from the Editorial Office in Paris and from the Union website www.ijatld.org]

METHODS

Study setting

The present study was conducted in Ujjain district, Madhya Pradesh. The total population in the district is 1.7 million (source: Census of India, 2001), of which 60% live in rural areas. The RNTCP was implemented in 2003, and is provided through the district TB centre and the primary health care institutions. There is also a large, poorly regulated private health care sector in the district, which provides a substantial proportion of the TB care. Medical insurance coverage is limited, and most of the expenses are paid for out-of-pocket by patients.¹⁶

Study population

The study was carried out during February–August 2004 within a demographic surveillance site (DSS)—Palwa Field Laboratory—established in 1999, and run by R D Gardi Medical College and Ujjain Charitable Trust Hospital. The site covers 60 villages, representing 14 858 households, with a total population of 71 306. The villages were selected from three development blocks (administrative units) based on their proximity to a rural health care centre run by R D Gardi Medical College. The villages were located at a mean distance of 11 km from the centre. The study population consisted of all persons aged ≥ 15 years in the DSS ($n = 45\,719$).

Data collection

During the baseline survey of the DSS, trained male village health workers identified persons with cough of >3 weeks by interviewing the household representatives, 70% of whom were men. Individuals aged ≥ 15 years who reported cough of >3 weeks at the time of the interview were invited to the out-patient clinic at the medical college for investigations and interviews. They were asked to undergo chest X-ray (CXR) and to provide three sputum samples for acid-fast bacilli (AFB) and mycobacterial culture. Individuals with a positive smear and/or culture were diagnosed as pulmonary tuberculosis (PTB) cases ($n = 50$). They are hereafter referred to as TB patients. A pre-tested structured questionnaire was used to obtain information on the various health care actions taken by the individual because of cough.

Of the 941 symptomatic cases identified, 297 (189 men and 108 women) did not return to the out-patient clinic for further investigations and interviews, and were visited at home. The main reasons reported for not coming to the hospital or providing samples were lack of expectoration or subsiding of cough. Comparison between drop-outs and individuals attending the out-patient clinic showed that the former were younger ($P = 0.01$), and were more likely to be women ($P = 0.001$). No differences were found in caste, literacy or income.

Definition of variables

Health care actions were divided into public providers, private providers, medical store (pharmacies) and self-medication. Public health care providers were defined as providers working in a governmental health care facility. Private health care providers were defined as persons practising in any medical system outside government employment, including practitioners without medical qualifications or official training.

Statistical analysis

Comparisons were performed using χ^2 tests for categorical variables and Student's *t*-test for continuous variables. Logistic regression analyses were used to assess the impact of socio-economic, demographic and clinical factors on any type of treatment sought, visiting a public provider, and performance of sputum smear examination during the disease period. The outcomes were first analysed in relation to each variable separately, and variables that proved statistically significant at $P < 0.25$ were further studied in logistic regression. The results are presented as adjusted odds ratios (aOR) with 95% confidence intervals (CI).

Ethical approval

Ethical approval was received from R D Gardi Medical College, India, and Karolinska Institute, Sweden.

RESULTS

Cough prevalence

Background information on study population, individuals with cough and TB patients is presented in Table 1. A total of 666 men and 275 women reported having had a cough of >3 weeks, corresponding to a prevalence of 2.8% and 1.2%, respectively. Of the 941 symptomatic cases identified in the study, 477 (72%) men and 167 (61%) women came for TB investigations and interviews. Among these, the median duration of cough was 40 weeks for women and 28 weeks for men ($P = 0.5$). Significantly more women than men reported fever (43% vs. 28%; $P = 0.001$), whereas men more often reported sputum expectoration (91% vs. 82%; $P = 0.001$); 15.7% of the cough patients reported a history of TB.

Health care seeking behaviour

Of 644 interviewed, 118 (71%) women and 327 (69%) men reported using any type of health care, including self-treatment, for their symptoms. Results of a logistic regression including sex, age, marital status, caste, history of TB, duration of cough in weeks, fever and haemoptysis as independent variables, showed that a history of TB (aOR 2.7, 95%CI 1.4–5.1), increased duration of cough (aOR 1.05, 95%CI 1.03–1.07) and fever (aOR 1.8, 95%CI 1.2–2.7) were significantly associated with seeking any type of health care.

Table 1 Socio-demographic characteristics of the total population, individuals with cough and TB patients in the Palwa Field Laboratory

Variables	Total population (<i>n</i> = 45 719)*		Individuals with cough (<i>n</i> = 941) [†]		TB patients (<i>n</i> = 50)	
	Male (<i>n</i> = 23 632) <i>n</i> (%)	Female (<i>n</i> = 22 087) <i>n</i> (%)	Male (<i>n</i> = 666) <i>n</i> (%)	Female (<i>n</i> = 275) <i>n</i> (%)	Male (<i>n</i> = 42) <i>n</i> (%)	Female (<i>n</i> = 8) <i>n</i> (%)
Age, years						
15–24	6 606 (28)	5 802 (26)	27 (4)	24 (9)	1 (2)	2 (25)
25–34	5 430 (23)	5 611 (25)	73 (11)	42 (15)	12 (29)	3 (38)
35–44	4 942 (21)	4 378 (20)	111 (17)	45 (16)	9 (21)	2 (25)
45–54	2 982 (13)	2 466 (11)	125 (19)	55 (20)	6 (14)	1 (13)
55–64	1 807 (8)	1 850 (8)	122 (18)	44 (16)	5 (12)	0 (0)
≥65	1 865 (8)	1 980 (9)	208 (31)	65 (24)	9 (21)	0 (0)
Marital status						
Married	18 152 (77)	17 823 (81)	590 (89)	198 (72)	37 (88)	7 (88)
Not married	2 449 (10)	3 080 (14)	74 (11)	75 (27)	5 (12)	1 (13)
Literacy						
Yes	15 441 (65)	5 269 (24)	332 (50)	37 (13)	18 (43)	0 (0)
No	8 018 (34)	16 656 (75)	328 (49)	236 (86)	24 (57)	8 (100)
Caste [‡]						
Scheduled caste	6 291 (27)	5 953 (27)	192 (29)	76 (28)	13 (31)	4 (50)
Scheduled tribe	1 282 (5)	1 141 (5)	37 (6)	13 (5)	3 (7)	1 (13)
Backward caste	9 101 (39)	8 517 (39)	248 (37)	105 (38)	16 (38)	2 (25)
Other caste	6 958 (29)	6 476 (29)	186 (28)	78 (28)	10 (24)	1 (13)
Income (median, INR [§])	2 570	2 500	2390	2000	1600	1430
Smoking (yes)	6 944 (29)	154 (0.7)	282 (42)	1 (0.4)	22 (52)	0 (0)

* Missing values for total population: marital status (*n* = 4215), literacy (*n* = 335).

[†] Missing values for individuals with cough: marital status (*n* = 4), literacy (*n* = 8) and caste (*n* = 6).

[‡] These are the categories used by the government and the constitution in India. The scheduled castes, scheduled tribes, and backward castes are entitled to affirmative action to increase their representation in education, government jobs and political bodies.

[§] Based on annual income (i.e., the total sum of the reported annual household income divided by the number of family members in the household). (45 Indian Rupees = 1 US\$.)

TB = tuberculosis; INR = Indian Rupees

Health care seeking among the 50 TB patients diagnosed in our survey was similar to that of the cough cases. The majority (67%) took some kind of health care action, and 67% of those seeking health care consulted a private provider first. No significant differences were found between men and women.

Of the 445 individuals who had sought health care, the majority of men (64%) and women (72%) consulted a private provider first (Table 2). Faith in the provider, proximity to home and low cost were reported as reasons for choosing the first health care provider. Of those who first consulted a private provider, 127 (43%) took at least one more health care action. The majority (*n* = 96, 76%) visited a private provider again, whereas 29 (23%) patients consulted a public provider. Of those who first went to a public

provider, 52 (46%) continued seeking health care, but only 11 (21%) returned to a public provider. The majority (78%) shifted to a private provider.

Sixty seven per cent of all respondents seeking health care reported that they were not satisfied with the treatment from their first health care action, with no differences by type of provider (public/private). Lack of symptom relief was the main reason for not being satisfied. Unsatisfied respondents were more likely to take at least one more health care action than satisfied respondents (49% vs. 37%, *P* = 0.02).

A total of 147 individuals (23%) visited a public provider at some time during their period of illness. In logistic regression analysis, history of TB (aOR 3.0, 95% CI 1.8–4.9) was associated with visiting a public provider after controlling for age, sex, marital status and duration of cough.

Table 2 Health care actions among women and men with cough of >3 weeks

Provider	Health care action 1		Health care action 2		Health care action 3	
	Female (<i>n</i> = 118) <i>n</i> (%)	Male (<i>n</i> = 327) <i>n</i> (%)	Female (<i>n</i> = 55) <i>n</i> (%)	Male (<i>n</i> = 144) <i>n</i> (%)	Female (<i>n</i> = 21) <i>n</i> (%)	Male (<i>n</i> = 46) <i>n</i> (%)
Public	26 (22)	87 (27)	11 (20)	20 (14)	5 (24)	9 (20)
Private	85 (72)	209 (64)	40 (73)	104 (72)	14 (67)	30 (65)
Self-treatment/medical store	7 (6)	31 (9)	4 (7)	20 (14)	2 (10)	7 (15)

TB examination

Of the 445 individuals seeking health care, 13% reported having had a sputum smear examination, and 31% had had a CXR since the onset of cough. Public providers performed TB examinations more frequently than private providers; 27% of all visits to a public provider, as compared with 5% of the visits to a private provider, resulted in a sputum smear examination ($P = 0.000$). The corresponding numbers for CXRs were 39% and 24%, respectively. Patients with cough who first consulted a public provider were more likely to submit a sputum sample than those who initially visited a private provider (27% vs. 3%, $P = 0.000$). No significant differences were found between men and women.

Table 3 shows the aOR for performance of sputum examination based on logistic regression. Haemoptysis, history of TB and having visited a public provider were factors significantly associated with having had a sputum smear examination.

No significant associations were found between the socio-economic status of the individuals with cough and seeking any type of health care, seeking public provider or performance of sputum examination.

Table 3 Multivariate analysis of factors influencing sputum smear examination among people with cough symptoms seeking health care ($n = 445$)

Variable*	Total	Sputum smear examination	
		<i>n</i> (%)	aOR [†] (95%CI)
Sex			
Female	118	16 (14)	1.2 (0.5–2.9)
Male	327	44 (13)	1
Age, years			
15–24	20	4 (20)	1.2 (0.2–8.3)
25–34	51	7 (14)	0.7 (0.2–2.8)
35–44	77	10 (13)	1.4 (0.5–4.3)
45–54	77	17 (22)	2.1 (0.8–5.9)
55–64	81	11 (14)	1.1 (0.4–3.4)
≥65	139	11 (8)	1
Literacy			
Yes	183	30 (16)	2.0 (0.9–4.3)
No	256	29 (11)	1
Haemoptysis			
Yes	77	20 (26)	2.6 (1.2–5.8)
No	368	40 (11)	1
Duration of cough, weeks			1.0 (0.99–1.01)
History of TB			
Yes	88	41 (47)	11.2 (5.5–22.7)
No	357	19 (5)	1
TB [‡]			
Yes	33	11 (33)	2.3 (0.8–6.7)
No	412	49 (12)	1
Visiting public provider			
Yes	147	44 (30)	5.4 (2.7–11.1)
No	298	16 (5)	1

* Sex and age have been included as basic variables.

[†] aOR are shown for variables with $P < 0.25$ from the bivariate analyses.

[‡] According to the diagnosis performed in this survey.

aOR = adjusted odds ratio; CI = confidence interval; TB = tuberculosis.

DISCUSSION

Our results highlight aspects of health care seeking behaviour that have important implications for TB control. The majority of cough cases had a strong preference for private providers. Only one quarter went to a public provider first, and a major shift was observed from public to private health services after the first visit. This suggests that the public health care services fail not only to attract patients but also to keep them. The underlying reason for this shift was not explored in this study, but previous studies regarding public health care services have depicted problems with travel distance to the facilities, inconvenient opening hours, long waiting times and poor reception by staff.^{17,18} However, individuals with a previous history of TB in our study were more likely to visit a public provider during the course of their illness. This finding may reflect their awareness about TB and the availability of free diagnostic and treatment services at public health care facilities.

In contrast to previous research in Asian countries,^{8–10} we found no evidence of differences in health care seeking between men and women. Our finding also differs from Indian studies that indicate that women use public health facilities more often than men.^{15,19} However, one limitation of this study was a significantly higher drop-out rate among female cough patients. The major reason for drop-out was subsiding of cough and lack of sputum expectoration, and this potential bias should thus be limited.

The majority of the cough cases sought health care, but very few reported having had a sputum investigation done. Earlier studies have described poor diagnostic and treatment practices, especially among private providers.^{4,20} Consequently, delays to diagnosis have been related to the health system when private or unqualified providers were consulted first.²¹ In this study, the probability of receiving a sputum smear examination was significantly greater if seeking care from a public provider, but still only 27% of the visits resulted in a sputum smear examination. This implies that diagnostic tests for suspect TB patients are not routinely performed at the public health care facilities. Monitoring sputum examinations among TB suspects is a useful indicator of how the RNTCP functions, and our finding illustrates that it takes time to build up a well-functioning programme with full access to TB care and investigations.

One explanation for the poor diagnostic performance may be related to health care providers' failure to recognise TB suspects. A study from primary health care institutions in India showed that staff involved in case finding and case holding were often overburdened with work, and lacked ongoing support and training.²² In a qualitative study from China, health care staff experienced difficulties in recognising TB-related symptoms, and prolonged cough was seen as a

sign of bronchitis rather than of TB.²³ As indicated by this study, only severe symptoms such as haemoptysis increased the likelihood of having a sputum examination done. Further, women reported a higher prevalence of fever but less sputum expectoration than men. Similar gender differences in symptoms have been reported from Vietnam, where the absence of typical TB symptoms was associated with longer delays to diagnosis among both men and women.²⁴

Collaboration between the private and public sectors is sparse, despite the widespread use of private providers. In Ujjain district, it has been estimated that there is one private provider per 600 inhabitants in rural areas, of which the majority have no formal medical training.¹⁶ This can be compared to the rural public health care centres, which normally cater for 6000 people. Collaboration projects between the public and private sectors in TB control in India have shown promising results, with improved case notification;²⁵ however, challenges remain in terms of distrust between private and public providers, lack of training and information, as well as poor incentives and regulatory mechanisms.² Furthermore, peripheral microscopic centres have increased in number but are still poorly equipped and understaffed, especially in rural areas. In Ujjain, for example, only nine licensed laboratories are available, and all of them are situated in the urban areas. Before incorporating private laboratories, extensive training of laboratory technicians and provision of diagnostic equipment meeting the standards of the RNTCP are necessary.

In conclusion, this study highlights some important aspects of TB control in a rural area where the RNTCP was recently established. The utilisation of public health care services was low, and sputum investigations were rarely performed by both private and public health care providers. Individuals with a history of TB were more likely to visit public providers, suggesting that choice of health care is influenced by knowledge and awareness of available TB care services. These findings highlight the need for better diagnostic practices as well as the involvement of the numerous and easily accessible private providers into the TB control activities.

Acknowledgements

The authors would like to thank all those who participated in this study within the demographic surveillance site in Ujjain district (Palwa Field Laboratory). The study was financially supported by Sida/SAREC.

References

- 1 World Health Organization. Global tuberculosis control: surveillance, planning, financing. WHO report 2005. Geneva, Switzerland: WHO, 2005.
- 2 Uplekar M, Pathania V, Raviglione M. Private practitioners and public health: weak links in tuberculosis control. *Lancet* 2001; 358: 912–916.
- 3 Nair D M, George A, Chacko K T. Tuberculosis in Bombay: new insights from poor urban patients. *Health Policy Plan* 1997; 12: 77–85.
- 4 Uplekar M, Juvekar S, Morankar S, Rangan S, Nunn P. Tuberculosis patients and practitioners in private clinics in India. *Int J Tuberc Lung Dis* 1998; 2: 324–329.
- 5 Anandhi C L, Nagaraj V K, Kumar R. Knowledge and practice pattern of non-allopathic indigenous medical practitioners regarding tuberculosis in a rural area of India. *Int J Tuberc Lung Dis* 2002; 6: 553–555.
- 6 Prasad R, Nautiyal R G, Mukherji P K, Jain A, Singh K, Ahuja R C. Treatment of new pulmonary tuberculosis patients: what do allopathic doctors do in India? *Int J Tuberc Lung Dis* 2002; 6: 895–902.
- 7 Singla N, Sharma P P, Singla R, Jain R C. Survey of knowledge, attitudes and practices for tuberculosis among general practitioners in Delhi, India. *Int J Tuberc Lung Dis* 1998; 2: 384–389.
- 8 Yamasaki-Nakagawa M, Ozasa K, Yamada N, et al. Gender differences in delays to diagnosis and health care seeking behaviour in a rural area of Nepal. *Int J Tuberc Lung Dis* 2001; 5: 24–31.
- 9 Thorson A, Hoa N P, Long N H. Health seeking behaviour of individuals with a cough of more than 3 weeks. *Lancet* 2000; 356: 1823–1824.
- 10 Begum V, de Colombani P, Das Gupta S, et al. Tuberculosis and patient gender in Bangladesh: sex differences in diagnosis and treatment outcome. *Int J Tuberc Lung Dis* 2001; 5: 604–610.
- 11 Boeree M J, Harries A D, Godschalk P, et al. Gender differences in relation to sputum submission and smear-positive pulmonary tuberculosis in Malawi. *Int J Tuberc Lung Dis* 2000; 4: 882–884.
- 12 Long N H, Johansson E, Lönnroth K, Eriksson B, Winkvist A, Diwan V K. Longer delays in tuberculosis diagnosis among women in Vietnam. *Int J Tuberc Lung Dis* 1999; 3: 388–393.
- 13 Pronyk P M, Makhubele M B, Hargreaves J R, Tollman S M, Hausler H P. Assessing health seeking behaviour among tuberculosis patients in rural South Africa. *Int J Tuberc Lung Dis* 2001; 5: 619–627.
- 14 Borgdorff M W, Nagelkerke N J D, Dye C, Nunn P. Gender and tuberculosis: a comparison of prevalence surveys with notification data to explore sex differences in case detection. *Int J Tuberc Lung Dis* 2000; 4: 123–132.
- 15 Balasubramanian R, Garg R, Santha T, et al. Gender disparities in tuberculosis: report from a rural DOTS programme in south India. *Int J Tuberc Lung Dis* 2004; 8: 323–332.
- 16 Deshpande K, RaviShankar, Diwan V, Lönnroth K, Mahadik V K, Chandorkar R K. Spatial pattern of private health care provision in Ujjain, India: a provider survey processed and analyzed with a Geographical Information System. *Health Policy* 2004; 68: 211–222.
- 17 Sudha G, Nirupa C, Rajasakthivel M, et al. Factors influencing the care-seeking behaviour of chest symptomatics: a community-based study involving rural and urban population in Tamil Nadu, South India. *Trop Med Int Health* 2003; 8: 336–341.
- 18 Jaiswal A, Singh V, Ogden J A, et al. Adherence to tuberculosis treatment: lessons from the urban setting of Delhi, India. *Trop Med Int Health* 2003; 8: 625–633.
- 19 Santha T, Garg R, Frieden T R, et al. Are community surveys to detect tuberculosis in high prevalence areas useful? Results of a comparative study from Tiruvallur District, South India. *Int J Tuberc Lung Dis* 2003; 7: 258–265.
- 20 Lönnroth K, Tran T U, Thuong L M, Quy H T, Diwan V. Can I afford free treatment?: Perceived consequences of health care provider choices among people with tuberculosis in Ho Chi Minh City, Vietnam. *Soc Sci Med* 2001; 52: 935–948.
- 21 Rajeswari R, Chandrasekaran V, Suhadev M, Sivasubramanian S, Sudha G, Renu G. Factors associated with patient and health system delays in the diagnosis of tuberculosis in South India. *Int J Tuberc Lung Dis* 2002; 6: 789–795.
- 22 Nair V, Thankappan K, Sarma P, Vasan R. Changing role of

- grass-root level health workers in Kerala, India. *Health Pol Plan* 2001; 16: 171–179.
- 23 Xu B, Fochsen G, Thorson A, Kemp J, Jiang Q W. Perceptions and experiences of health care seeking and access to TB care—a qualitative study in Rural Jiangsu Province, China. *Health Policy* 2004; 69: 139–149.
- 24 Long N H, Diwan V K, Winkvist A. Differences in symptoms suggesting pulmonary tuberculosis among men and women. *J Clin Epidemiol* 2002; 55: 115–120.
- 25 Dewan P K, Lal S S, Lönnroth K, et al. Improving tuberculosis control through public-private collaboration in India: literature review. *BMJ* 2006; 332: 574–578.

R É S U M É

CONTEXTE : District d'Ujjain, Madhya Pradesh, Inde.
OBJECTIF : Décrire et comparer le recours aux soins de santé chez les hommes et les femmes se plaignant de toux depuis >3 semaines, avec un intérêt particulier pour l'utilisation des soins de santé privés ou publics.
SCHEMA : Enquête transversale basée sur la population comportant 45 719 individus âgés de ≥ 15 ans.
RÉSULTATS : La prévalence de la toux a été de 2,8% chez les hommes et de 1,2% chez les femmes. La majorité des hommes et des femmes ont signalé un recours aux soins de santé pour leurs symptômes (69% vs. 71%), mais 23% seulement ont recouru à un pourvoyeur public de soins à un moment quelconque de leur maladie. Un recours similaire aux soins de santé a été observé dans notre enquête chez les patients où la tuberculose

(TB) avait été diagnostiquée. On n'a observé aucune différence significative dans le recours aux soins de santé entre les hommes et les femmes. Seulement 13% de ceux recourant aux soins ont signalé avoir eu un examen de frottis d'expectoration depuis le début de la toux. Les facteurs associés à un examen d'expectoration ont été des antécédents de TB, une hémoptysie et le fait de recourir à un pourvoyeur public de soins.

CONCLUSION : La faible utilisation des services publics de soins de santé et le petit nombre d'examens d'expectoration signalés dans ce contexte rural en Inde illustrent la nécessité d'améliorer les pratiques de diagnostic ainsi que l'implication des pourvoyeurs de soins privés dans les activités de lutte antituberculeuse.

R E S U M E N

MARCO DE REFERENCIA : Distrito de Ujjain, en Madhya Pradesh, India.
OBJETIVOS : Describir y comparar la actitud de búsqueda de atención de salud en los hombres y mujeres con tos de >3 semanas de duración, con especial énfasis en la utilización del sistema público o privado de atención sanitaria.
MÉTODO : Estudio transversal con base poblacional que incluyó 45 719 individuos ≥ 15 años de edad.
RESULTADOS : La prevalencia de tos fue de 2,8% en los hombres y de 1,2% en las mujeres. La mayoría de hombres y mujeres refirieron haber buscado atención de salud a causa de sus síntomas (69% hombres, 71% mujeres), pero sólo el 23% acudió a un proveedor del sector público en algún momento de su enfermedad. En este estudio se encontró un modelo equivalente de búsqueda de atención

de salud en pacientes con diagnóstico de tuberculosis (TB). No se observaron diferencias significativas en la actitud de búsqueda de atención entre hombres y mujeres. Sólo el 13% de las personas que buscaron atención refirió haber tenido un examen del esputo desde el comienzo de sus síntomas. Los factores relacionados con la práctica de un examen de esputo fueron antecedente de TB, hemoptisis y consulta a un proveedor de atención del sector público.

CONCLUSIÓN : El grado de utilización de los servicios públicos de salud y la baja tasa de exámenes del esputo notificados en este ambiente rural de India, traduce la necesidad de perfeccionar las prácticas diagnósticas y de involucrar a los proveedores privados de atención de salud en las actividades de lucha contra la TB.