

BELIEFS AND ATTITUDES ABOUT LEPROSY OF NON-LEPROSY PATIENTS IN A REVERSELY INTEGRATED HOSPITAL

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ABSTRACT

Beliefs and attitudes of non leprosy patients in a Nigerian hospital were assessed from 119 volunteer subjects using a questionnaire. Attitude score averaged 43.6 ± 22.7 ranging from 0 to 100. Attitudes were poor in 37.8% of respondents, fair in 31.1%, and good in 31.1%. Beliefs averaged 53.6 ± 20.7 (0 to 100). Beliefs were poor in 17.7%, fair in 33.6% and good in 48.7% of respondents. Attitudes correlated with beliefs significantly ($r = 0.37$; $P = 0.00$). Difference in beliefs of out-patients and ward patients was significant ($t=3.19$; $P = 0.00$). Duration of stay did not affect beliefs ($r = 0.11$; $P = 0.23$) or attitudes ($r = 0.00$; $P = 0.96$). Beliefs and attitudes were fairly good with no reluctance to attend the hospital because of stigma. Prejudices however exist about sharing facilities closely with leprosy affected persons. Targeted enlightenment programmes for non-leprosy patients are needed to improve beliefs and attitudes about leprosy.

INTRODUCTION

“Reverse integration”, means bringing other health care services into existing leprosy services. Reverse integration of eye care into leprosy services have been reported at Mangu, Nigeria, with a number of advantages (1). A comprehensive description of the process of transformation of a leprosy hospital in Nepal into a rehabilitation centre has also been documented (2).

The process of reverse integration of other services into a leprosy hospital at NKST Rehabilitation Hospital, Mkar in Nigeria has also been reported with a lot of attendant advantages (3). These advantages include accessibility of specialised services; affordability of specialised services; extended application of expert knowledge and skills; reduction in cost of training workers for leprosy work; integration of persons affected by leprosy; comprehensive health care for leprosy affected persons; springboard for other programmes among others. Though this hospital has fully integrated other services into its leprosy work, a

separate ward is maintained for persons affected by leprosy. Most of the time, the hospital runs into problems of accommodation for patients and suggestions have been made to treat leprosy and non leprosy patients in the same ward; it is however not certain how the other patients feel about sharing the same facilities with the leprosy affected persons. This study was designed to assess the attitudes and beliefs of non leprosy patients attending or admitted in the hospital about leprosy.

METHOD

Subjects

Subjects for this study consisted of 119 volunteers with various conditions admitted or attending various clinics in the hospital. Only those who could express their opinion were included in the study. All patients below the age of fourteen were excluded from the study as well as those who had subnormal levels of consciousness. The subjects' socio-demographic data are presented in Table 1.

Table 1. Socio-demographic characteristics of respondents (n=119)

Age	Mean (x)	38.1	
	Standard deviation (SD)	14.04	
	Range	14 - 85	
Sex	Male	80	(67.2%)
	Female	39	(32.8%)
Tribe	Tiv	71	(59.7%)
	Yoruba	2	(1.7%)
	Hausa	5	(4.2%)
	Ibo	7	(5.8%)
	Others	34	(28.6%)

Religion	Christianity	114	(95.8%)
	Islam	4	(3.4%)
	Others	1	(0.8%)
Address in hospital	Out patient clinic	45	(37.8%)
	Ward	74	(62.2%)
Diagnostic category	Orthopaedic	83	(69.7%)
	Neurologic	21	(17.7%)
	Others	15	(12.6%)

Materials

The instrument used in this study was a questionnaire adapted from a previous study that assessed knowledge and attitude of Nigerian physiotherapy students about leprosy (4). The questionnaire consisted of three major parts. Part 1 elicited sociodemographic information such as age, sex, ethnicity and religious affiliation and diagnosis of subjects. Part 2 contained ten items that evaluated the subjects' attitudes towards people affected by leprosy and willingness to share facilities with people affected by leprosy. Part 3 evaluated the subjects beliefs about leprosy and consisted of ten items about cause, transmission, and management.

Procedure

The test instrument was administered to all volunteers individually in the wards and out patient clinics by physiotherapy students who were on clinical posting to the hospital at the time of the study. The students introduced the questionnaire to the patients and provided specific instructions on how to complete it. The patients were told to answer the items in the questionnaire as honestly and as accurately as possible, without anybody's influence. No time limit was imposed, but majority of the patients completed the questionnaire within 15 - 20 minutes. For patients who could not read or write, the students read out the questions and recorded the responses.

Data Analysis

Each respondent's responses to items on the questionnaire were obtained. The number of positive responses on the items designed to evaluate attitudes, was determined. Each positive attitude attracted ten marks. Negative or no response attracted zero mark. The total marks scored by each respondent were summed up to obtain a percentage score for attitudes. Similarly, the number of correct responses on the items designed to evaluate their beliefs was determined. Each correct response attracted ten marks. Wrong or no response attracted zero mark. The marks scored by each respondent were also summed up to obtain a percentage score for beliefs. Attitudes and beliefs scores were classified into three categories thus; 0 to 40 **poor**, 40 to 60 **fair** and 60 to 100 **good** (4).

Descriptive statistics of range, mean and standard deviation were used to describe appropriate variables. Frequency count was done for appropriate socio-demographic variables; particular responses to individual questions and percentages were determined. Pearson correlation test was used to test relationships between beliefs and attitude of the respondents. It was also used to test the relationships between beliefs, attitudes and duration of stay. Independent student t -test was used to test for differences in beliefs and attitudes of patients attending out – patient clinics and those admitted on the wards. Analysis of variance (ANOVA) was used to determine relationship between beliefs, attitudes and patients' diagnosis. Level of significance in this study was set at 0.01. The data was analysed using the Statistical Package for Social Sciences [SPSS] version 15.0.

RESULTS

Attitude

Mean score for attitudes was 43.6 ± 22.7 ranging from 0 to 100. Forty five of the patients (37.8%) showed poor attitudes about leprosy, 37 patients (31.1%) showed fair attitudes while 37 (31.1%) showed good attitudes about leprosy (Table 2). Seventy eight (65.5%) of the patients were aware that the hospital had leprosy affected persons before deciding to access the services. Seventy three (61.3%) of them would not agree to be admitted in the leprosy ward and 50.4% would not allow leprosy affected persons to be admitted in their ward. One hundred (84.0%) of the respondents felt the hospital should maintain a separate

site for leprosy affected persons and 72.3% agreed that coming to the hospital has changed their attitude towards leprosy for better. Details of responses to specific questions on attitudes are shown in table 3.

Table 2. Categorisation of attitudes and beliefs scores of respondents (n=119)

Scores	Category	Attitudes	Beliefs
0 – 40	Poor	45 (37.8%)	21 (17.7%)
40 – 50	Fair	37 (31.1%)	40 (33.6%)
60 – 100	Good	37 (31.1%)	58 (48.7%)

Table 3. Distribution of responses to specific questions on attitudes (n=119)

	Yes	No	No response
Have you ever seen a person affected by leprosy before coming to this hospital?	89 (74.8%)	30 (52.2%)	-
Were you aware that this hospital had leprosy affected persons before coming here?	78 (65.5%)	40 (33.6%)	1 (0.8%)
Do you think it is possible for you to have leprosy?	34 (28.6%)	83 (69.7%)	2 (1.7%)
If beds were filled up in other wards, would you agree to be admitted in the leprosy ward?	45 (37.8%)	73 (61.3%)	1 (0.8%)
If beds were filled up in the leprosy ward, would you allow the leprosy affected persons to be admitted in your ward?	58 (48.7%)	60 (50.4%)	1 (0.8%)

Would you eat with a person affected by leprosy?	50 (42.0%)	69 (58.0%)	-
Would you marry a lady/man who has leprosy?	26 (21.6%)	91 (76.5%)	2 (1.7%)
Do you think leprosy affected person should be treated in all conventional hospitals?	39 (32.8%)	77 (64.7%)	3 (2.5%)
Do you think this hospital should maintain a separate site for leprosy patients?	100 (84.0%)	19 (16.0%)	-
Has being to this hospital changed your attitude towards leprosy for better?	86 (72.3%)	30 (64.7%)	3 (2.5%)

Beliefs

Mean score for beliefs was 53.6 ± 20.7 ranging from 0 to 100. Twenty one of the respondents (17.7%) showed poor beliefs about leprosy, 40 (33.6%) showed fair beliefs while 58 (48.7%) showed good beliefs about leprosy (Table 2). Ninety three (78.2%) believed that leprosy is not caused by evil spirits, but 54.6% believed that can be transmitted through sharing clothes. One hundred and three (86.6%) respondents believed that leprosy affected persons are given a separate ward to prevent them from infecting other patients. Mean score for beliefs of patients attending out-patient clinics was 61.1 ± 18 and mean score of patients admitted on the wards was 49.1 ± 20.9 . Details of responses to specific questions on beliefs are shown in Table 4.

Correlations and differences

There was a significant relationship between beliefs and attitudes of the respondents ($r = 0.37$; $P = 0.00$) There were no significant relationships between duration of stay and beliefs about leprosy ($r = 0.11$; $P = 0.23$) or attitudes ($r = 0.00$; $P = 0.96$). There were no significant relationships between patient's condition and beliefs about leprosy ($f = 0.36$; $P = 0.70$) nor attitudes ($f = 0.90$; $P = 0.41$). There was a significant difference between the

beliefs of patients attending out-patient clinics and those admitted in the wards ($t=3.19$; $P = 0.00$). There was no significant difference between the attitudes of patients attending out-patient clinics and those admitted in the wards ($t=1.74$; $P = 0.08$).

DISCUSSION

Only 17.7% and 37.8% of the respondents showed poor beliefs and attitudes respectively. With an average score of 53.6 ± 20.7 and 43.6 ± 22.7 , the beliefs and attitudes of non-leprosy respondents in this study can be described as fairly good. Many (65%) of them were aware that the hospital admits leprosy affected persons before deciding to access the services. This does not show reluctance to attend the hospital because to stigma against leprosy. This conforms to the experience in Nepal where they did not encounter any evidence of reluctance to attend and use the facilities offered by a reversely integrated hospital because of stigma against leprosy (2).

The central issue in this study is the willingness to share facilities with the leprosy affected persons. Many (61.3%) of the respondents would not agree to be admitted in the leprosy ward and 50.0% would not allow leprosy affected persons to be admitted in their ward. Sharing the same rooms with leprosy affected persons may mean using beds and beddings that have been used by them, and 54.6% of the respondents believed that leprosy can be transmitted by sharing of clothes. The hospital should not take the readiness of non-leprosy patients to come to the hospital for granted and “over interpret” it to mean readiness to share facilities. Any decision to mix leprosy and non-leprosy patients in the same ward should be treaded with caution.

A significant correlation was found between beliefs and attitudes of the respondents. It has been shown that knowledge or beliefs about leprosy influences attitudes (5). Length of stay in the hospital did not appear to have any impact on the beliefs and attitudes of the respondents, however whether the subjects were admitted in the hospital or attending on out-patient basis, had impact on their beliefs. Those attending on out patient showed better beliefs about leprosy. Most people who attend out-patient clinics live within nearby communities. It is probable that their beliefs might have been influenced by the numerous campaigns the hospital has been conducting over the years to churches, schools and communities around it to reduce stigma about leprosy.

A majority of the respondents (86.6%) believed that leprosy affected persons are given a separate ward to prevent them from infecting other patients, therefore many of them (84.0%) were of the view that the hospital should maintain a separate site for leprosy affected persons. This shows that the respondents have concerns about the possibility of catching the leprosy infection while in the hospital. Though 72.3% accepted that being to the hospital changed their attitudes towards leprosy for better and 52.9% admitted becoming more enlightened about leprosy, the hospital has no programme to address prejudices of those patients against leprosy. Patients are therefore left to work on their prejudices from informal observations and interactions with people in the hospital. This may lead to misleading interpretations of the arrangement for care in the hospital. There is need for specifically targeted enlightenment programmes for non-leprosy patients to improve their beliefs about leprosy and attitudes towards persons affected by leprosy, especially with respect to interpersonal relationship while in the hospital.

CONCLUSION

The beliefs and attitudes of non-leprosy respondents in this study can be described as fairly good. There is no reluctance to attend the hospital due to stigma against leprosy. Prejudices however exist with regards to sharing facilities at a personal level with the leprosy affected persons. Decisions to mix leprosy and non-leprosy patients in the same ward should be treaded with caution. There is also need for specifically targeted enlightenment programmes for non-leprosy patients to improve their beliefs about leprosy and attitudes towards persons affected by leprosy.

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