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Original Article

Perceptions of Persons Affected by Leprosy About the Causes of the Disease: A tool to Design Effective Health Education Campaigns for Colony Dwellers

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Leprosy is an ancient disease that has been described in many literatures and it is associated with stigma and discrimination. Many people have different beliefs about the causes of Leprosy. Health education is one of the ways to correct common misconceptions and myths about Leprosy. Determination of the perceptions of colony dwellers about the causes of Leprosy will be a great help in designing an effective health education campaign to limit the spread of leprosy among the colony dwellers. Primary objective of this study was to inquire about the perceptions of persons affected by leprosy (PALs) residing in the BHS leprosy colony, Ogbomoso about the causes of leprosy which may be helpful in designing effective health education campaigns that address the common misconceptions and myths about leprosy among colony dwellers. This cross-sectional descriptive study was conducted at the BHS leprosy colony. There were 34 PALs in the BHS leprosy colony but only the 29 PALs who consented to the study were included. An interviewer-administered questionnaire was used to obtain sociodemographic information, including the duration of the illness, the time the treatment was commenced, and perceived causes of Leprosy. The majority (62.1%) of the study participants belong to the age group 51-70. Almost one-half were married (44.8%) and more than one-half were female (51.7%). Almost one-third of the PALs (27.6%) had a negative perception about the causes of leprosy while only 13.8% had a positive perception of the causes of leprosy. To conclude, the positive perception of the causes of leprosy among the PALs residing in the BHS leprosy colony is very poor. This information would be useful to guide the development of culturally sensitive campaigns that emphasize the true causes of leprosy. The health education campaign needs to focus on colony dwellers' education, dispelling myths, and promoting early detection and treatment. Considering the small sample size of participants from one colony only it will not be appropriate to extrapolate the findings to other settings.

Key Words: Perception, Causes, Leprosy, Persons Affected by Leprosy, Ogbomoso, Nigeria

Introduction

Leprosy is an ancient disease that has been described in many literatures and it is associated with stigma and discrimination. Many persons

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affected by leprosy (PALs) have been confined to the leprosy colonies because of the stigma and deformities associated with the disease. Scenario has changed after wide use of multi-drug treatment and the elimination of leprosy as a public health problem (prevalence less than 1/10,000) was achieved globally in 2000 and most countries by 2010. The disease is still much present, and occurs in more than 120 countries, with more than 200,000 new cases every year (Chagas et al 2021). Although the colonies are becoming less relevant with the passage of time, we need to understand and address the issues of leprosy colonies wherever still present.

Many people have different beliefs about the cause of leprosy and these beliefs are based on their culture, religion, level of education, or personal experience. Some believe that leprosy is a curse or punishment from God because of sin and they believe that praying or performing rituals is the only way to cure the disease. Some people believe that evil forces inflict Leprosy and can only be treated by traditional healers. These beliefs influence how people perceive or cope with the disease and how they seek help for the treatment of leprosy (LMI 2023).

It has been established that *Mycobacterium leprae* is the causative organism for Leprosy. This organism has an affinity for skin, peripheral nerve, and mucosa lining of the respiratory tract. If the infection is left untreated it can cause permanent and progressive deformities which can reduce the quality of life of the person (Lastoria & Abreu 2024, Suzuki et al 2012). The mode of transmission of the bacteria is through droplets from the nose and mouth of untreated infected people. Prolonged, close contact over months with someone with untreated leprosy is needed to catch the disease. However, the commencement of treatment stops the transmission of the disease and prevents the development of complications (WHO 2023).

Leprosy can be treated with a combination of antibiotics, known as multidrug therapy (MDT). MDT can cure infection and prevent the development of complications, but it cannot reverse the nerve damage or deformities that have already occurred (Khanna et al 2021). Therefore, early diagnosis and prompt treatment are one of the ways to prevent the spread of the disease in the community. One of the reasons why patients present late for treatment or refuse treatment is their perception of the causes of Leprosy. This perception also affects the type of treatment they receive.

Colony dwellers have a high risk of developing Leprosy compared to those living in the community. The colony dwellers, especially the children of the PALs usually learn the common misconceptions and myths from their parents. This usually affects their perception of the causes and spread of the disease. Health education is one of the ways to correct common misconceptions and myths about Leprosy (Singh et al 2012). Since these misconceptions are usually influenced by culture, religion, level of education, and personal experience, it is better to determine the perceptions of the PALs about the causes of Leprosy and use the findings to design an effective health education campaign for the colony dwellers. Hansen's disease has been stigmatized for centuries and misconceptions about its cause contribute to discrimination, social exclusion, and delayed treatment. By understanding the perceptions of affected individuals, we can address misinformation and promote accurate knowledge, leading to better health outcomes. This information can guide the development of culturally sensitive campaigns that emphasize accurate information.

Thus, the main objective of this study is to determine the perceptions of PALs residing in the BHS leprosy colony, Ogbomoso about the causes of leprosy so that such information would help in

designing effective health education campaigns that address the common misconceptions and myths about leprosy among colony dwellers.

Methods and Materials

Study design

This is an exploratory descriptive study that was carried out from March to May 2023.

Study area

The study was carried out in the BHS colony in Ogbomoso, Nigeria. It was established in 1930 and was named "Ago Ireti" (meaning, Camp of Hope). It was renamed Baptist Health Service (BHS) in 1947 to eliminate the stigma associated with the disease. The settlement is being managed by the Bowen University Teaching Hospital and supported by the Damien Foundation Belgium. The criteria for securing an apartment in the camp include a diagnosis of Leprosy and readiness to take the drugs for the treatment of Leprosy. The Baptist Health Service housed PALs, their spouses, their children and caregivers. This study area was selected because it is one of the few leprosy colonies that received support from Damien Foundation Belgium and a Teaching Hospital. The colony also received referrals from southwestern Nigeria.

Study population

The study population consists of only the Persons Affected by Leprosy (PALs) residing in the BHS leprosy colony (BHSLC). While the total population residing in the BHSLC is 59 comprising of 25 not affected by leprosy viz. 17 children (below the age of 18), 5 spouses and 3 caregivers, the study population accounts for 34 PALS.

Inclusion criteria

PALs residing in BHS leprosy colony who consented to the study were included in the study.

Exclusion criteria

Very sick PALs at the time of the study and those who did not consent to the study were excluded.

Sample size

The sample size for the study was 29 PALs. Out of the 34-study population, all the available PALs that could give consent for the study were recruited, which formed a total sample of 29 PALs consisting of 14 males and 15 females.

Process of recruiting the respondents

Ethical approval was obtained from the Research and Ethical Committee of Bowen University Teaching Hospital. The consent form was read out and explained to the PALs individually. After ensuring that the PALs understood the information, verbal consent was obtained from PALs who were willing to take part in the study. Illiteracy and hand deformity precluded verbal consent. Five PALs were excluded: Two who were very sick at the time of the study and three who declined consent without stating their reasons.

Study tools

An interviewer-administered questionnaire was used to obtain information from the PALs.

Data collected

The socio-demographic information obtained included age, gender, marital status, occupation, level of education, and disease-related data viz. duration of the illness, time before the treatment was commenced, and perceived causes of leprosy.

Data analysis

Completed copies of the questionnaire were collated and entered in the Statistical Package for Social Science (SPSS) version 26. Data analysis was subsequently done to generate frequency and crosstab tables. All the participants who knew the true cause of leprosy were classified as having positive perception while those who did not know the cause or gave the wrong causes were classified as having negative perception.

Results

Findings of this study are summarized in Tables 1 to 6 and described in the following paragraphs.

1. **Sociodemographic characteristics of study participants by gender:**

As shown in the following Table-1, nearly half of the male participants (50.1%) belong to the age group 61-70. One third of the female-5/15 (33.3%) participants belonged to the age group 31-50. More than one-half (57.2%) of the males were married and almost one-

Table 1 : Sociodemographic characteristics of study participants by gender.

		Male		Female		Total	
		N=14	%	N=15	%	N=29	%
Age Range (Years)	31-50	3	21.4	5	33.3	8	27.6
	51-60	3	21.4	4	26.7	7	24.2
	61-70	7	50.1	4	26.7	11	37.9
	71-90	1	7.1	2	13.3	3	10.3
Marital status	Never married	3	21.4	2	13.3	5	17.2
	Married	8	57.2	5	33.3	13	44.8
	Divorced	3	21.4	1	6.7	4	13.8
	Widow/Widower	0	0.0	7	46.7	7	24.2
Occupation	Unemployed	1	7.1	6	40.0	7	24.1
	Farmer (cultivating the land of own or on lease)	8	57.2	4	26.7	12	41.4
	Retired Gardner	1	7.1	0	0.0	1	3.4
	Trading Petty shop, shoe making, helper/ cleaner in the hospital	4	28.6	5	33.3	9	31.1
Level of Education	Not educated (illiterate)	6	42.9	12	80.0	18	62.1
	Completed Primary school	4	28.6	2	13.3	6	20.7
	Completed Secondary school	4	28.5	1	6.7	5	17.2
Duration of stay in the Colony (years)	1-15	3	21.4	4	26.7	7	24.2
	16-35	8	57.2	11	73.3	19	65.5
	36-55	3	21.4	0	0.0	3	10.3
Status of respondent in the family	Head	13	92.9	0	0.0	13	44.8
	Spouse	0	0.0	13	86.7	13	44.8
	Children (unmarried members of the family)	1	7.1	2	13.3	3	10.4
Monthly Family Income (Naira- NGN)	1,000-10,000	2	14.3	6	40.0	8	27.6
	11,000-20,000	2	14.3	4	26.7	6	20.7
	21,000-30,000	9	64.3	4	26.7	13	44.8
	31,000-40,000	1	7.1	1	6.6	2	6.9

half of the female were widows/widowers (46.7%). Many of the males (57.2%) were farmers who make use of the large expanse of land available at the BHS leprosy colony for their farming activities while 40.0% of the females were unemployed. A few of them with limited disability were employed by the Bowen University Teaching Hospital, Ogbomoso as gardeners to take care of BHS leprosy colony.

The unemployed and other PALs receive monthly stipends of five thousand naira from the Ogbomoso South Local Government where the centre is located. Some religious organizations, social clubs and community members do support them financially.

Less than one-half (42.9) of the males were not educated and the overwhelming majority (80.0%) of the females were not educated. Comparatively greater proportion (64.3%)

Table 2 : Disease-related profile of the participants analyzed by gender.

		Male		Female		Total	
		N=14	%	N=15	%	N=29	%
Type of Leprosy	Multibacillary (MB)	11	78.6	14	93.3	25	86.2
	Paucibacillary (PB)	3	21.4	1	6.7	4	13.8
Deformity levels as per WHO grades	Grade 1	3	21.4	1	6.7	4	13.8
	Grade 2	11	78.6	14	93.3	25	86.2
Deformity levels as per EHF score	4	3	21.5	1	6.7	4	13.8
	5	0	0.0	2	13.3	2	6.9
	6	5	35.7	6	40.0	11	37.9
	7	3	21.5	5	33.3	8	27.7
	8	1	7.1	0	0.0	1	3.4
	10	1	7.1	1	6.7	2	6.9
	12	1	7.1	0	0.0	1	3.4
When the disease started/ symptoms were noticed	1-30 Years	5	35.7	10	66.7	15	51.7
	31-60 Years	8	57.2	5	33.3	13	44.8
	61-90 Years	1	7.1	0	0.0	1	3.5
When diagnosed/ treatment started (Years)	1-20 years back	4	28.6	7	46.7	11	37.9
	21-40 years back	8	57.1	8	53.3	16	55.2
	41-60 years back	2	14.3	0	0.0	2	6.9
When treatment is completed/ declared RFT	1-20 years back	3	75.0	8	32.0	11	37.9
	21-40 years back	0	0.0	16	64.0	16	55.2
	41-60 years back	1	25.0	1	4.0	2	6.9

of males found to be generating income ranging from ₦21000-30000 per month and heads of households (92.9%); whereas as an important proportion (40.0%) of women are confined to less than ₦10000 monthly income and females staying through 16-35 years in the colony (73.3%) followed by (57.2%) of males.

2. Disease profile of the study participants by gender:

As shown in Table-2, most of the participants had multibacillary leprosy (86.2%) on aggregate, but the proportion of MB cases among males was 78.6% against 93.3% of females. Among the female participants (93.3%) had WHO grade 2 deformity and male participants 78.6% had WHO grade 2 deformities. Among male participants, 35.7% had an EHF score of 6 while among females 40.0% had an EHF score of 6. More than one-half of the males (57.2%) developed the disease 31-60 years ago and most of the females (66.7%) developed the disease 1-30 years ago. Most of the males (57.1%) and females (53.3%) started their treatment 21-40 years back. Overwhelming majority of the males (75.0%) completed their treatment 1-20 years ago while 64.0% of the females completed their treatment 21-40 years back.

3. Perceptions about the causes of leprosy:

Qualitative and quantitative profile of perceived causes of leprosy, their relationship with socio-demographical characteristics and disease related factors are summarized in Tables 3 to 6**.**

Table 3 : Qualitative profile of perceptions about the causes of leprosy.

Causes	Native cultural understanding of these terms according to the perceptions of the respondents
Hereditary	The children can inherit the disease from the parent.
Germs	The disease can be caused by organisms in the air that cannot be seen by the naked eye.
Diabolical	The disease can occur because of an attack from an evil spirit.
Chemical	The disease can occur because of coming in contact with chemicals e.g. agrochemicals.

Table 4 : Categories of perceived causes of leprosy.

Perceptions About Causes	Positive Perception N=4 (%)	Negative Perception N=8 (%)	Neutral N=17(%)	Total (%)
Germs	4(100.0)	-	-	4(13.8)
Hereditary	-	1(12.5)	-	1(34.5)
Diabolical	-	6(75.0)	-	6(20.7)
Chemical	-	1(12.5)	-	1(34.5)
No idea/Not Known	-	-	17(100.0)	17(58.5)
Total	**4**	**8**	**17**	**29**
%	**13.8**	**27.6**	**58.6**	**100.0**

Table 5 : Profile of perceptions about the causes of leprosy versus sociodemographic characteristics of study participants.

		Positive perceptions		Negative perceptions		Neutral		Total	
		N=4	%	N=8	%	N=17	%	N=29	%
Gender	Male	2	50.0	4	50.0	8	47.1	14	48.3
	Female	2	50.0	4	50.0	9	52.9	15	51.7
Age Range (Years)	31-50	2	50.0	1	12.5	5	29.4	8	27.6
	51-60	1	25.0	3	37.5	3	17.6	7	24.1
	61-70	1	25.0	3	37.5	7	41.2	11	37.9
	71-90	0	0.0	1	12.5	2	11.8	3	10.3
Marital status	Never married	1	25.0	0	0.0	4	23.5	5	17.2
	Married	2	50.0	2	25.0	9	52.9	13	44.8
	Divorced	0	0.0	4	50.0	0	0.0	4	13.8
	Widow/Widower	1	25.0	2	25.0	4	23.5	7	24.1
Occupation	Unemployed	1	25.0	1	12.5	5	29.4	7	24.1
	Farmer (cultivating the land owned or on lease)	1	25.0	4	50.0	7	41.2	12	41.4
	Retired Gardner	0	0.0	0	0.0	1	5.9	1	3.4
	Trading Petty shop, shoe making, helper/ cleaner in the hospital	2	50.0	3	37.5	4	23.5	9	31.0
Level of Education	Not educated (illiterate)	1	25.0	5	62.5	12	70.6	18	62.1
	Completed Primary school	2	50.0	2	25.0	2	11.8	6	20.7
	Completed Secondary school	1	25.0	1	12.5	3	17.6	5	17.2
Duration of stay in the Colony (years)	1-15	1	25.0	2	25.0	4	23.5	7	24.2
	16-35	2	50.0	5	62.5	12	70.6	19	65.5
	36-55	1	25.0	1	12.5	1	5.9	3	10.3
Status of respondent in the family	Head	1	25.0	4	50.0	8	47.1	13	44.8
	Spouse	2	50.0	4	50.0	7	41.2	13	44.8
	Children (31< years)	1	25.0	0	0.0	2	11.8	3	10.3
Monthly Family Income (Naira- NGN)	1,000-10,000	1	25.0	1	12.5	6	35.3	8	27.6
	11,000-20,000	1	25.0	1	12.5	4	23.5	6	20.7
	21,000-30,000	2	50.0	6	75.0	5	29.4	13	44.8
	31,000-40,000	0	0.0	0	0.0	2	11.8	2	6.9

Table 6 : Profile of perceptions about the causes of leprosy against Disease related factors.

Variables		Positive		Negative		Neutral		Total	
		N=4	%	N=8	%	N=17	%	N=29	%
Type of Leprosy	Multibacillary (MB)	3	75.0	7	87.5	15	88.2	25	86.2
	Paucibacillary (PB)	1	25.0	1	12.5	2	11.8	4	13.8
Deformity levels as per WHO grades	Grade 1	1	25.0	1	12.5	2	11.8	4	13.8
	Grade 2	3	75.0	7	87.5	15	88.2	25	86.2
Deformity levels as per EHF score	4	1	25.0	1	12.5	2	11.8	4	13.8
	5	0	0.0	2	25.0	0	0.0	2	6.9
	6	1	25.0	4	50.0	6	35.3	11	37.9
	7	2	50.0	0	0.0	6	35.3	8	27.6
	8	0	0.0	1	12.5	0	0.0	1	3.4
	10	0	0.0	0	0.0	2	11.8	2	6.9
	12	0	0.0	0	0.0	1	5.9	1	3.4
When disease started/ symptoms were noticed	1-30 Years	3	75.0	3	37.5	9	52.9	15	51.7
	31-60 Years	1	25.0	5	62.5	7	41.2	13	44.8
	61-90 Years	0	0.0	0	0.0	1	5.9	1	3.4
When diagnosed/ treatment started (Years)	1-20 years back	3	75.0	3	37.5	5	29.4	11	37.9
	21-40 years back	0	0.0	5	62.5	11	64.7	16	55.2
	41-60 years back	1	25.0	0	0.0	1	5.9	2	6.9
When treatment completed/ declared RFT	1-20 years back	2	50.0	2	25.0	5	29.4	9	31.0
	21-40 years back	1	25.0	6	75.0	11	64.7	18	62.1
		1	25.0	0	0.0	1	5.9	2	6.9

(i) Qualitative Profile of perceptions about the causes of leprosy: There have been four types of causes (hereditary, germs, diabolical and chemical) mentioned by the respondents, which have been explained in the Table 3.

(ii) Quantitative profile of perceptions about the causes of leprosy: The four perceptions have been categorized into 3 groups viz. Positive, Negative and Neutral by the investigators, as shown in Table 4, that more than one-half of the PALs (58.6%) did not know/have no idea about the cause of leprosy while only 13.8% attributed the cause to germs and among (27.6%) negative perception meaning by misconceptions are found. Among PALs with a negative perception, diabolical causes were the leading perceived cause of leprosy.

(iii) Profile of perceptions about the causes of leprosy against Sociodemographic Characteristics of study participants: Observations summarized in Table 5, show the frequency of individuals with positive responses/negative responses (misconceptions) as well as total ignorance about the causes of leprosy, among different sociodemographic categories. Those with positive and negative perceptions had an equal proportion of male (50.0%) and female (50.0%) participants while those with neutral perceptions 47.1% were male and 52.9% were female. One-half (50.0%) of those who had positive perceptions belonged to the age group 31-50 and 41.2% of those who had neutral perceptions belonged to the age group 61-70. The majority (50.0%) of those who had a positive perception were married and 50.0% of those who had a negative perception were divorced. One-half (50.0%) of those with negative perceptions and 41.2% of those with neutral perceptions were farmers. Half (50.0%) of those who had a positive perception completed primary school while 62.5% of those who had a negative perception were not educated. One-half (50.0%) of those who had positive perception and 62.5% of those with negative perception have spent 16-35 years in BHS leprosy colony. Among those who had positive perceptions 50.0% of them were spouses and 47.1% of those who had neutral perceptions were heads of the family. Many participants (50.0%) who had a positive perception and 75.0% who had a negative perception earned 21,000 to 30,000 naira monthly.

(iv) Profile of perceptions about the causes of leprosy against Disease related factors.

Table 6 shows that among the participants who had positive perception the following variables had a higher proportion: Multibacillary (75.0%), WHO grade 2 (75.0%), EHF score 7 (50.0%), when disease started 1-30 years (75.0%), commenced treatment 1-20 years (75.0%) completed treatment 1-20 (50.0%) while among the participants who had negative perception the following variables had a higher proportion: Multibacillary (87.5%), WHO grade 2 (87.5%), EHF score 6 (50.0%), when disease started 31-60 years (62.5%), commenced treatment 21-40 years (62.5%) completed treatment 21-40 (75.0%).

Discussion

The age of the PALs who participated in the study ranged from 31 to 90 years and the mean age was 59.97±11.9 years. This finding is not surprising because most PALs who are confined to the leprosy colony are PALs with obvious deformities and these deformities usually set in during adulthood. This finding is different from what Singh et al (Singh et al 2012) reported in their study from Chandigarh, India. Their participant's ages ranged from 27 to 59 years, with a mean age of 38.61±8.95 years. The difference may be because their participants included those residing in the leprosy colony and those residing in the community.

The female population (51.7%) was more than that of the male (48.3%) population, though the difference was not much. This may not be unconnected with the fact that female tends to seek medical help faster than men when they are sick. This finding is at variance with what Singh et al (Singh et al 2012) found in their study in Chandigarh, India. They discovered that male

subjects constituted major proportion (69.0%) of their study population.

Most of our participants had multibacillary leprosy (86.2%) and this is not surprising because multibacillary leprosy is known to cause more nerve damage than paucibacillary and the majority of PALs that reside in colonies are those who have obvious deformities. Most of them also had WHO grade 2 (86.2%) while 37.9% had EHF score 6. This is not unexpected because most of them had multibacillary leprosy which is associated with more deformities.

The majority (58.6%) of our participants had neutral perceptions about the cause of Leprosy. They did not know what caused leprosy. This finding may not be unconnected with a high level of illiteracy among the study population because illiteracy is a major obstacle to understanding health information. There is a need to make use of indigenous languages when passing health information to PALs and people in society. This finding is much lower than what Noordende et al (van 't Noordende et al 2019) found in Fatehpur district, northern India where the overwhelming majority (82.0%) of their participants who were PALs did not know the cause of the disease.

Diabolical causes (75.0%) are the leading perceived causes among 27.6% of the participants who had negative perceptions about the cause of leprosy. This may not be unconnected to the culture of the PALs residing in the camp. Many of them have been taught and have believed that leprosy was caused by diabolical means. Some of them believe that the disease is a spiritual attack from their enemies especially when they are not on good terms or have disagreements on some issues. Some even believe that leprosy can occur following stepping on a charm placed in one's house or place of work. This finding is slightly higher than what was found in India (van 't Noordende et al 2019) where 64.9% of the participants attributed the disease to supernatural causes.

This belief is usually transferred from parents to their children or from the elders to the younger ones. There is therefore urgent need to design a health education campaign that will help to put an end to the spread of this wrong belief. This belief is one of the reasons why most PALs don't present themselves for treatment on time thereby spreading the disease to healthy people and making the eradication a difficult task.

Germs are the perceived cause among 13.8% of the participants who had positive perceptions about the cause of leprosy. This is the true cause of leprosy and the low level of knowledge of the true cause of leprosy found in this study is worrisome. A lot of work thus needs to be done in educating such PALs as well as healthy people in society about the true cause of leprosy. The PALs need to be educated at the point of commencement of treatment about the causes and mode of prevention of leprosy and keep reinforcing it at every clinic contact.

Heredity (12.5%) was reported to be a perceived cause of leprosy among 27.6% of the participants who had negative perceptions about the cause of leprosy. They must have noticed or known a family where more than one member of the family has leprosy. The PALs need to be properly educated that the only way the disease can spread among family members is through prolonged, close contact with an untreated infected member. Early diagnosis, prompt treatment, and post-exposure prophylaxis can put an end to the spread of the disease in the family. Reasonably effective vaccines (like Mw or MIP) available from other countries like India could be considered for long term herd immunity in selected population settings.

The female participants had the highest proportion of participants who had a negative perception of the causes of leprosy. This finding should be of more concern to everyone because mothers are the teachers at home and the children may learn things that will make them develop negative perceptions of them. This will eventually make the control of the spread of leprosy difficult among the colony dwellers. The female participants were also found to have the highest proportion of participants who had multibacillary leprosy and WHO grade 2 deformities.

PALs' perceptions about the causes of leprosy to design Health Education campaigns to educate healthy community members may be one of the limitations of the study. Further, the small sample size from one colony also limits the capacity to draw conclusions applicable to other settings in Nigeria and or other countries especially in the changed scenario after MDT.

Conclusions and way forward

The positive perception of Leprosy among the PALs residing in the BHS leprosy colony is very poor (13.8%). This should guide the development of culturally sensitive campaigns that emphasize the true causes of leprosy. The health education campaign should focus on colony dwellers' education, dispelling myths, and promoting early detection and treatment. Since there is no universally acceptable vaccine against the disease, early diagnosis, and prompt treatment remain the way to eradicate the disease and social participation/ rehabilitation of PALs. It would be important to estimate the quantum of inputs to provide health education to the neutrals (who have no idea) and those who have negative perceptions to remove the misconceptions.

Recommendations

1. There is a need to develop targeted educational materials that explain that leprosy is caused by the bacterium *Mycobacterium leprae* in simple and local languages.
2. Educate the people that early detection and treatment with multidrug therapy (MDT) can cure leprosy and prevent complications and disabilities.
3. There is a need to involve community leaders, religious institutions, and schools in health education campaigns.

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