

# THE FACE OF DISABILITY IN NIGERIA: A DISABILITY SURVEY IN KOGI AND NIGER STATES

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## ABSTRACT

*The Leprosy Mission Nigeria conducted a disability survey in Kogi and Niger States of Nigeria in 2005, investigating the demographic characteristics of people with disabilities, including gender, age, religion, marital, educational, occupational, employment and economic status, understanding of disability and health-seeking behaviour.*

*Information was gathered from a convenience sample of participants, across 30 randomly selected towns and villages in the two states. Twelve trained bilingual research assistants were used, to translate the English language questionnaire verbally into the local language of each participant.*

*From the 1093 respondents studied, the most common disabilities involved vision (37%), mobility (32%) or hearing (15%). A third of these were less than 21 years of age and had no occupation, and 72% were Muslim. Over half of them had no education, 20% had primary, 8% secondary, 2% tertiary and 18% had Islamic education. Common occupations were begging (16%), studying (14%), farming (11%) and trading (8%). The majority were unemployed (61%) due to their disability. Over 70% were not able to access disability specific health services and 37% had an assistive device. Services accessed included health - mainstream (90%), traditional (61%) and counselling (58%); and other - rehabilitation (30%), assistive device provision (24%), welfare (22%), special education (15%), vocational training (10%) and economic empowerment (4%).*

*These results are comparable with findings in other studies. Disability affects a person's ability to participate in education, work, family life and religion, influences health-seeking behaviour and contributes to poverty.*

*Key words: Disability survey, people with disabilities*

## INTRODUCTION

An estimated 10% of any population is likely to be disabled, and up to one in five of the world's poorest have a disability (1,2). With a population of over 140 million, Nigeria has approximately 14 million people with disabilities (3).

Disability is both a cause and a consequence of poverty (4,5,6), reducing access to education, employment, opportunities and resources. Poor people without disabilities can develop them, due to inadequate nutrition, unclean environments, disease, inefficient health services and poor infrastructure (7,8,9,10). Untreated and chronic diseases affect increasing numbers of people in developing countries (11,12), resulting in physical and functional disability (9,10,13,14).

Preventable disease, congenital malformation, birth related incidents, physical injury and psychological dysfunction all produce disability. In 2004, the infant mortality rate in Nigeria was 101 deaths per 1000 live births, and the under-5 mortality rate was 197 per 1000 live births (15,16). Most neonatal deaths in developing countries result from infections, pre-term delivery and asphyxia, and disabilities for survivors can include cerebral palsy, spina bifida, congenital deformities and encephalitis (9,17,18). At least six preventable diseases of childhood - measles, poliomyelitis, diphtheria, tetanus, tuberculosis and whooping cough - can cause visual, auditory, physical and intellectual disability (4,19,20). Yet in November 2003, when suspicions regarding contamination led to the temporary cessation of polio vaccinations, Nigeria reported 217 new polio cases (21,22).

Two thirds of the world's 278 million individuals with hearing impairments live in developing countries (23), where the prevalence rates for bilateral hearing impairment at birth range from 2-4 per 1,000 live births (24). In sub-Saharan Africa, which includes Nigeria, higher rates of diseases that may affect hearing (eg. malnutrition, chronic otitis media, and meningitis) exist (25,26), and access to immunisation against measles, mumps and rubella - causes of childhood deafness - is impeded by poverty (13). Deaf people tend to be marginalised, live in isolation, and cannot hear public health messages (25).

In Nigeria, mental illness is highly stigmatised (27) and symptoms are hidden or denied. Nigeria has fewer than 100 psychiatrists for its population and less than 1% of sufferers have access to psychiatric support or treatment (27). A recent national survey of 5,000 randomly selected participants, found 23% had experienced a psychiatric episode but only 8% received any treatment (28).

## **METHOD**

The Leprosy Mission Nigeria (TLMN), implemented this survey as a component of a health systems research program conducted by the Koninklijk Instituut voor

de Tropen (KIT) in The Netherlands. TLMN provided the funding, vehicles, materials and equipment. Ethics approval was obtained through KIT. Prior to survey commencement, written consent and approval to conduct the survey were obtained from the two State Ministries of Health and Social Welfare, the ten Local Government Area (LGA) Authorities, and the community and religious leaders in the selected towns.

Kogi and Niger are two of eight states where TLMN assists in 21 and 25 LGAs respectively. The survey included people with disabilities from urban and rural areas who resided in ten LGAs (five from each state) – the two LGAs containing state capitals and four other randomly selected LGAs per state. In the randomly selected LGAs, the main town was selected, along with two other randomly selected villages, resulting in 30 towns and villages.

A questionnaire in English was used to collect information from the participants, as English is Nigeria's national language. Bilingual research assistants were used, to interpret the questions to each participant unable to speak English. The term "disability" was used, rather than "impairment", because words describing disability existed in all the languages. The 29 item survey contained 26 quantitative questions about personal, socio-demographic and disability-related information, and three qualitative, open-ended questions about the non-use of health services and factors that would make community participation easier or harder.

A total of 12 research assistants (six per state) were recruited from among the Tuberculosis and Leprosy Supervisors who were local government employees. The criteria for their selection were their experience as health workers, understanding of disability issues and bilingual skills. Research assistants were trained for five days, which included interview techniques, the use of data collection tools (for reliability and validity), implementation of the survey pre-test and finalisation of data collection materials and logistics.

Announcements were made in each town and village, two weeks before survey commencement. Village elders, town criers and leaders of disabled people's organisations gathered people with disabilities at a central meeting place on the survey days. In the towns, people with disabilities were interviewed on a 'first come, first serve' basis, as there were too many to survey. In villages with fewer people with disabilities, snowball or chain sampling was used to find respondents who were house-bound.

There was no payment for participation, which may have influenced the decision of some to participate. A signature or equivalent consent was gained from each participant or the carer, after explanation about the purpose of the survey, use of the material gathered and confidentiality of the information collected.

Data collection occurred over a period of four weeks in 2005. Pairs of research assistants spent two days each, in their allocated towns and villages, conducting interviews and cross-checking the accuracy of questionnaire completion. The questionnaires were numbered serially according to state and town, and contained information identifying the research assistant and the person who transferred the data to the Epi Info 2003 database. Accuracy of data entry was checked by the double entry of 8% (87) randomly selected questionnaires. This revealed the majority of computer entry errors, which were primarily made on more complex data questions, and were easily corrected.

A number of statistical tests were used to analyse the quantitative data. These included frequencies of all the variables, stratification by gender and state, and cross tabling of variables. Relative risk and risk difference calculations were used to identify associations between variables. The 95% confidence intervals were calculated for every relative risk and risk difference.

The three qualitative questions collectively produced 38 different reasons for not using health services, and 120 different factors that influenced participation or non-participation in the community. These responses were summarised into 9 and 14 thematic categories respectively, which were cross tabulated with other relevant variables.

There were a number of limitations in the survey, resulting from questionnaire formation, sampling methods, interview techniques and data processing. The interpretation of questionnaires into the different languages increased the possibility of misinterpretation and loss of key information. Flaws in questionnaire development (eg. not using WHO age groupings) meant results were not comparable with other population data. The study sample was not representative of the populations of the two states, as participants were conveniently selected in each village. Survey advertising may have been too brief. Sampling differed between larger and smaller towns. Participation in the survey was voluntary and with no payment. Interviews were conducted on working days, excluding those unable to leave their places of employment to participate. Other restrictions to participation included cultural and religious practices, which may have

influenced the number of women 'allowed' to participate in the survey, transport costs to get to the interview, type and severity of disability, and the need to rely on others to communicate.

## RESULTS

The study interviewed 1093 people with disabilities. The majority of these (68%) responded themselves. Others who spoke on behalf of the person with the disability included the carer (27%), head of household (3%) or some other relative (2%).

Respondents selected their disability from nine definitions provided in the questionnaire which included the following impairments - visual, hearing, communication, body movement, mobility, daily life inability, intellectual / developmental, learning and mental / emotional. Those who selected a single impairment made up 61% of the sample. The other 39% selected from between two and seven of the disability options. The least frequently mentioned disabilities were intellectual (5%), learning (4%), psychiatric (2%) and unspecified others (3%).

This survey found that 37% had visual, 30% had mobility, 15% had hearing and 9% had mental or learning disabilities. There were 673 men (62%) and 420 women (38%). Their ages ranged from zero to above 80 years, and a third were 20 years or younger. Muslims comprised 72%, Christians 26% and Animists 2% of the sample population; and 51% were married, 3% divorced, 6% widowed, and 40% unmarried.

Both Muslim and Animistic cultures allow polygamy in Nigeria. In this study, those with two to four wives totalled 13% of married men. Almost 38% had one to five children, 17% had between six to ten children, and 4% had from 11 to 25 children. Of those married, 92 (8.4%) had a spouse with a disability, and 23 (2%) had a child with a disability.

**Table 1. Education, Occupation and Income of People with Disabilities**

Variables	Kogi				Niger				All	
	Male N = 337 100%		Female N = 206 100%		Male N = 336 100%		Female N = 214 100%		N = 1093	100%
<b>Education</b>										
None (no schooling)	171	50.7	116	56.3	123	36.6	133	62.1	543	49.8
Islamic (primary - sec)	29	8.6	1	0.5	114	33.9	51	23.9	195	17.8
Nursery (pre-Grade 1)	3	0.9	3	1.5	5	1.5	2	0.9	13	1.2
Primary (Grades 1-6)	85	25.2	55	26.7	48	14.3	18	8.4	206	18.9
Secondary (Grades 7-12)	33	9.8	23	11.2	23	6.8	8	3.7	87	7.9
Tertiary (University)	7	2.1	6	2.8	9	2.7	1	0.5	23	2.1
Vocational Training (Aged 15+)	7	2.1	2	1	4	1.2	0	0	13	1.2
School for Handicapped (primary - sec)	2	0.6	0	0	7	2.1	1	0.5	10	0.9
Other (not specified)	0	0	0	0	3	0.9	0	0	3	0.2
<b>Occupation</b>										
None	104	30.9	69	33.5	90	26.7	74	34.6	337	30.9
Begging	52	15.4	8	3.9	78	23.2	40	18.7	178	16.3
Student	47	13.8	38	18.4	43	12.8	20	9.3	148	13.6
Farming	66	19.6	10	4.9	39	11.6	1	0.5	116	10.7
Petty Trading	5	1.5	34	16.5	12	3.6	34	15.9	85	7.7
Civil Service	31	9.2	11	5.3	24	7.1	4	1.9	70	6.5
Housewife	0	0	23	11.2	0	0	28	13.1	51	4.6
Other (not specified)	8	2.4	5	2.4	16	4.8	7	3.3	36	3.3
Business	6	1.8	5	2.4	20	6	2	0.9	33	3
Tailoring	3	0.9	3	1.5	3	0.9	2	0.9	11	1
Carpenter	8	2.4	0	0	1	0.3	0	0	9	0.8
Labourer	1	0.3	0	0	5	1.5	2	0.9	8	0.7
Mechanic	5	1.5	0	0	2	0.6	0	0	7	0.6
Blacksmith	1	0.3	0	0	3	0.9	0	0	4	0.3
<b>Average Monthly Income (Naira – N)</b>										
Nothing (N 0)	125	37.1	101	49	104	31	86	40.2	416	38
N 1 – 2,000	73	21.6	52	25.2	78	23.3	80	37.4	283	26
N 2,001 – 5,000	75	22.2	37	17.8	67	19.7	32	14.9	211	19.4
N 5,001 – 8,000	35	10.4	9	4.5	32	9.5	6	2.7	82	7.5
N 8,001 – 10,000	8	2.4	2	1	20	6	1	0.5	31	2.8
N 10,001 – 15,000	9	2.7	2	1	14	4.2	4	1.9	29	2.6
N 15,001 – 20,000	1	0.3	2	1	11	3.3	1	0.5	15	1.3
N 20,001 +	11	3.3	1	0.5	10	3	4	1.9	26	2.4

Almost 50% of the sample had no education. The most common forms of schooling were either primary (19%) or Islamic education (18%). Across the states, 12% of males and 6% of females attended primary school, and 10% of the population surveyed reached secondary or tertiary levels.

Occupation referred to the type of job held by most participants, regardless of whether it was salaried, self-generated income, or unpaid. Of the sample, 31% said they had no occupation, and another 34% had an occupation with no formal or regular income. This included beggars (16%), students (14%) housewives (5%), and seasonal farmers (11%). Women were less likely to have an occupation than men, in both states.

Employment referred to earning an income. The majority (61%) of people with disabilities interviewed were either not working (55%) or were currently unemployed (6%). In both states, a higher percentage of women (66%) than men (48%) had never worked in paid employment. Of those who did work, 32% were self-employed. The majority currently unemployed blamed disability for their lack of work (43%). The rest were either retired (29%), made redundant (14%) or were accident victims (8%). The vast majority of those unemployed were men.

Participants' economic status was determined by their average monthly income. The majority of respondents (38%) said they had zero income each month. Another 26% reported 2,000 Naira (N) or less (US\$15), 19% earned between N 2,001-5,000, 7% earned between N 5,001-8,000 and the remaining 9% of people with disabilities earned over N 8,000 (US\$38) as their average monthly income. Food was the first item purchased by the 677 participants with an income. The second priority was either clothing (36%), education (7%), health and rehabilitation (4.6%) or a personal carer (4.3%).

The participants' understanding of their disability, including age of onset and beliefs about its cause, was also surveyed. Almost a quarter (23%) did not know the cause of their disability. Over 50% could give a logical reason for their disability - disease and sickness (44%), pregnancy and birth (6%), ageing (1%), accident (13%) and unspecified other causes (3%). A number of people believed in a supernatural cause for their disability (10%) including sin, a curse by God, witchcraft and a result of eating certain foods.

**Table 2. Health Services Used**

Variables	Kogi				Niger				All	
	Male		Female		Male		Female		N	% 1093
	N	% 1093	N	% 1093	N	% 1093	N	% 1093		
General Health Services	325	29.7	197	18	298	27.2	169	15.4	989	90.5
Counselling for Parent / Family	237	21.7	134	12.2	270	24.7	180	16.4	821	75
Traditional / Faith Healer	206	18.8	123	11.2	180	16.5	160	14.6	669	61.2
Counselling for PWD	215	19.7	124	11.3	157	14.3	133	12.1	629	57.5
Basic Amenities / Infrastructure	302	27.6	183	16.7	11	1	18	1.6	514	47
Medical Rehab.	126	11.5	70	6.4	91	8.3	45	4.1	332	30.3
Assistive Device Provision	134	12.2	50	4.6	60	5.5	16	1.5	260	23.8
Welfare Services	74	6.7	45	4.1	84	7.7	28	2.6	231	22
Special Education	72	6.6	48	4.4	35	3.2	13	1.2	168	15.4
Vocational Training	59	5.4	25	2.3	17	1.6	9	0.8	110	10
Economic Empowerment	15	1.4	8	0.7	14	1.3	6	0.5	43	3.9

The most common services accessed were general health (90%), traditional healers (60%), counselling (57%) and basic amenities and infrastructure (eg. water, electricity, roads) which facilitate better access to health (50%). Respondents in Kogi state accessed and used health services and basic amenities up to three and ten times more than those in Niger state.

The least-used health services included medical rehabilitation (30%), assistive devices (24%), welfare services (22%), special education (15%), vocational training (10%) and economic empowerment (4%). For all services (except for basic amenities), the percentage of women using services was lower than men.

The most common reasons given for not using services apart from traditional healers, were ignorance about the service or its high cost. Almost 63% of participants reported not having an assistive device, and another 19% could only obtain a locally made walking stick (used as a cane by many with visual disabilities). Eye glasses were obtained by 6%, and crutches by 3% of participants. The remaining 9% accessed an assortment of other devices. For the 30% (N = 352) of interviewees with mobility disabilities, 73 pieces of equipment were reported -



38 crutches, 11 walking frames, 10 wheelchairs, 8 special pairs of shoes, 3 calipers, 2 artificial limbs, and 1 tricycle.

The three most common areas that assist respondents to participate in their communities were their acceptance and integration (22%), government assistance (13%), and assistive devices (12%). The three most common factors that make participation in the community harder were no support for integration (19%), lack of government assistance (18%), and having a disability (16%).

## DISCUSSION

The more vulnerable amongst people with disabilities include ethnic minorities, the aged, women, children, refugees and the displaced (21,29). Most are concerned with survival from 'hand to mouth', in an ongoing disability-poverty cycle (4,8,30,31). Disabled women are more likely to be uneducated, lack access to health services, and be victims of discrimination and abuse (30). This survey revealed similar relationships for women, with lower levels of education, occupation, employment and finances than men. Women with intellectual disabilities were more disadvantaged than others.

A weakness of the survey was that the disability categories were ambiguous, with some being impairment and others being function oriented. This caused some confusion when respondents self-selected their disability categories. Some questions were complex and numerous, making survey completion difficult. Wiman estimated that of all disabilities in a developing country, 40% were mobility, 30% were mental or learning, 15% were visual and 10% were hearing and speech (16). In contrast, this survey found that 37% had visual, 30% had mobility, 15% had hearing and 9% had mental or learning disabilities.

In Nigeria, arranged marriages are common, and a person with disability often faces stigma and discrimination in this process. The survey revealed that people with psychiatric, intellectual, communication and movement disabilities, were more likely to be unmarried. The cultural practice of polygamy also brings additional responsibilities and stress for men with disabilities, who must treat each of their wives equally. In the survey, those with more than one wife most commonly had visual disabilities and were more likely to have an occupation, be employed and have a higher income.

Access to education is an equal right for all children, breaks down barriers and facilitates social integration (30). Exclusion from education affects life

opportunities, access to training, employment and income generation, prevents the achievement of economic and social independence and increases vulnerability to poverty. In this survey, 50% of participants had access to education in Nigeria where primary education is free.

Occupational empowerment and employment are other key factors that promote inclusion. In Nigeria, 70% of the population earn below US \$1 a day (15, 32). With 64% of the survey population earning approximately US \$15 per month, and another 20% earning between US \$15 - \$38 per month, the majority of people with disabilities fall within this low socio-economic grouping. The 16% earning more than US \$38 a month comprised primarily people with visual disabilities. Similarly Olusanya found that disabled people with vocational training earned less than US \$35 a month (9).

In the study, 90% of people with disabilities reported access to mainstream health systems and 61% to traditional healers. The quality of both these services is questionable, as in 2000, WHO ranked Nigeria's health care system performance as 187 out of 191 worldwide (30). Spending income on health or a carer were low priorities for participants. This reflects a level of ignorance about health status, limited education, inadequate health information provision, lack of legislation to enhance access to services (16) and differing religious and cultural attitudes to health.

Assistive devices like hearing aids, wheelchairs, hand-powered tricycles, walking frames, artificial limbs, calipers, specialised footwear, back braces and neck collars, were noticeably lacking. In the survey, 76% reported no access to such equipment. This highlights the significant lack of basic equipment necessary to improve the quality of life of people with disabilities.

## CONCLUSION

The most common disabilities affected vision, mobility and hearing. Less than 30% received primary, secondary or tertiary education. Most were living in poverty with minimal income and resources. Begging was the commonest occupation, and 84% earned less than US \$38 a month. Over 70% were unable to access disability specific health services, and 37% reported having an assistive device. The results of this survey are comparative with the findings of other literature and studies on the relationships between disability, developing countries and poverty, identifying significant relationships between type of

disability, gender, age, education, occupation, employment and economic status.

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