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Socio-demographic characteristics of a semi-urban community in northern Nigeria

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Abstract

Introduction: *In between censuses*, which are usually conducted decennially, data on population can be obtained from time to time through small-scale intensive community survey that may provide some information for decision-making. This survey was conducted with a view to providing some valid, reliable socio-demographic information in semi-urban community in Northern Nigeria.

Methodology: A cross-sectional community based descriptive study design was used to study the total population of Layin Zomo, a semi-urban settlement in Zaria, Nigeria. Following a household listing, socio-demographic information was collected from households.

Result: The total population was 3, 213, of these 51.4% were males while 48.6% were females. The average household size was 8. The median age was 15.2years and the dependency ratio was 0.93. The major occupation was farming. The adult literacy rate was 63% for males and 47.9% for females while the school enrolment rate was 93.4% for males and 93.9% for females.

Conclusion: The study revealed that more frequent ad-hoc small-scale intensive surveys are needed to obtain valid, reliable demographic information for planning health intervention programmes and allocation of scarce resources to relevant sectors.

Introduction

In most developing countries, Nigeria inclusive, census is not done every ten years because of a variety of reasons: lack of planning on the part of government, lack of funds to conduct such activity or political intrigues.[1] Since independence in 1960, Nigeria has had only two accepted censuses in 1963 and 1991.[2] The absence of regular census information has been a major constraint to health planning, especially at local levels where the population dynamics, with the rising incidence of internal displacement of people because of conflicts, differences in fertility behaviour and migratory patterns present problems when trying to make population estimates and inferences from the census data. Increasingly, local data is required for micro-planning of health programmes like the national immunization days campaigns for polio eradication. As part of the teaching of medical students in making community diagnosis and planning health interventions, head counts are carried out as part of the community diagnosis effort. Such data on population at a local level tend to be more reliable because they are usually obtained from small-scale intensive studies and are thus better suited for the micro-plans. The demographic data obtained from a semi-urban community, Layin Zomo on the outskirts of Zaria in Northwest Nigeria during the community diagnosis exercise for medical students in 2004 are presented. The socio-demographic characteristics of the community are presented and compared with national estimates.

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Methodology

The study was conducted in Layin Zomo, a semi-urban farming community on the outskirts of Zaria, located in Sabon Gari Local Government Area of Kaduna State in Northern Nigeria. The inhabitants are predominantly Hausa Moslems whose main occupation is subsistence farming. The community has two public primary schools, and there is no health facility. The nearest public health facility to the settlement is a primary health care clinic

located about 5 kilometers away, while the Ahmadu Bello University Teaching Hospital is 10 kilometers away; however, there exists a patent medicine store.

The survey, which was cross-sectional and descriptive in design, was part of a community diagnosis undertaken within a four-week period in the months of July and August 2004. Mapping of the community, house numbering and household listing was undertaken. Household heads were interviewed using structured, closed-ended, interviewer – administered questionnaire to collect information on socio-demographic variables of all members of the household living in the house at the time of the survey. The data were coded, and analysed using Epi Info 2002 software package, statistical methods used included frequency counts and tables.

Results

There were a total of 691 households listed with a total population of 3213, giving an average of 4.6people/household. There were more males than females in the population with a male: female ratio of 1.05 to 1.The age and sex structure of the population is shown in figure 1. The population is a young one: the median age is 15.2 years and children aged under fives are 17.9 %(576) while children aged less than 15 years make up 46.7% of the total population. Only 2.4% (77) are aged above 60 years. . Overall, infants constituted 4.3 % (140), women of reproductive age 22.9% (737) and the school aged children 28.5 %(916) of the total population. The dependency ratio was 0.93.

The predominant ethnic group was Hausa and they constituted 71.4% of the total population, while Fulanis, Igbos and Yorubas, the other major ethnic groups in the country were only 2.4%, 1.8% and 4.9% respectively. Majority (82.8%) were Moslems while Christians were only 17.0%. Subsistence farming was the main occupation of the males practiced by 47.2% of them while only 11.1% were employed in the public service; the remainder was artisans, students or traders. Half of the women were full time housewives, 10.6 % were farmers, 17.7% traders, 5.9% artisans, 7.8% civil servants and 8.6% were still attending school, (Table 1).

The proportion of the adult population that had had some formal education was 63% for men and 47.9% for females. The school enrolment was found to be high with 93.4% of the boys and 93.4% of the girls aged 5 to 14 years enrolled in primary schools (Table 1).

There was gender disparity in the illiteracy rates with a higher proportion of the adult females 57.1% with no formal education compared to 37% males and only 35.1% of females had had education beyond primary schools compared to 31% with Quranic education, with almost same sex distribution.

The crude birth rate was 55.5 per 1,000 and the total fertility rate was 6.4 children/woman. The, crude death rate was 9.3 per 1,000 people, and the infant mortality rate was 45 per 1,000 live births. (Table 2). As shown in Table 2 the fertility indices were higher and the mortality indices lower than the national figures

Discussion

The population pyramid of Layin Zomo is typical of that of a developing country that shows a very young population. This structure is comparable to the population structure of Nigeria from the 1991 census. As found in the 1991 census, there was an excess of males in the 0 -4 age group with a male female ratio of 105:100.[3] The population of the study area is a fast-growing one with a high rate of natural increase of 4.8%,this means that in about 15years the population will double. This value is in contrast to the national figure of 2.8%.[4] The proportion of infants, under fives, women in the reproductive age group and under 15 year olds are usually estimated for planning health interventions. The under-fives are estimated for immunization and polio campaigns respectively. The national estimates are under-fives make 20% of the total population, this compares with 17.9% of the population of Layin Zomo. The women of reproductive age make up 22.9% of the study population which also compares with the national average of 22%. This information is important for maternal health planning and estimation of tetanus toxoids needs. It could also be use in establishing programmes to reduce maternal mortality especially in this part of the country where maternal mortality is high.[5]

Thirty percent of both males and females aged 15 years and above are farmers; this is far below the 60% engaged in agriculture according to a survey by Federal Office of Statistics on agricultural sample census[6]. This could be due to the proximity of the village to Zaria, high cost of agricultural materials like fertilizer and the pesticides and engagement in other forms of occupation like trading.

Surprisingly, the school enrolment rate for primary school is high (93.4%) with almost equal proportion for both females (93.9%) and males (93.4%). This equal proportional rate of school enrolment in this study is atypical as the norm has always been differential school enrolment in favour of boys and major problems of girl-child discrimination in the locality and zone. Conversely, as expected there were more adult males than females that had had some Western education. This is quite different as

the overall, gross national school enrolment rate for boys is higher than that of girls, with values ranging Education in 1996 reveal that in Kaduna State the school enrollment rate is lower than national average with 66% boys enrolled as compared to 54% girls enrolled[7]. The possible reason for this high equal sex school enrollment rate could be due to the presence of two public schools in the community, and the proximity of the community to a number of schools. The other explanation could be that the discriminatory practice in favour of boys is no longer practiced.

between 75-91% for boys and 59.1-77% for girls[7]. Analysis of a secondary data by Federal Ministry of

Table 1: Socio-demographic characteristics

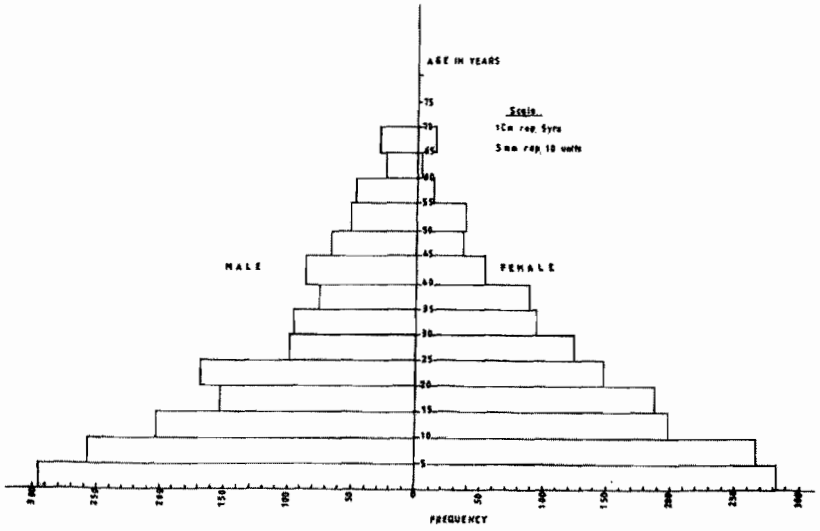
	Female	Male
	N=1546	**N=1667**
Religion	%	%
Islam	82.9	82.7
Christianity	16.9	17.2
Others	0.2	0.1
Total	100.0	100.0
Occupation (15 years and above)	**N=734**	**N=872**
	%	%
	10.6	47.2
Farming	17.4	18.3
Trading	7.8	11.1
Civil servant	49.4	-
House wife	5.9	9.6
Artisan	8.6	13.6
Student	100.0	100.0
Total		
Ethnic group	**N=3213**	%
Hausa	2293	71.4
Fulani	77	2.4
Yoruba	158	4.9
Igbo	59	1.8
Bajju	69	2.1
Kataf	31	1.0
Others	526	16.4
Total	3213	100.0
Education (15 years and above)	**N=716**	**N=987**
	%	%
None	22.3	10.1
Quranic	29.7	31.6
Adult Literacy education	-	3.4
Some primary	12.7	10.7
Complete primary	19.0	14.0
Some secondary	9.6	14.5
Complete secondary/higher	6.6	20.4
Total	100.0	100.0
School enrollment (children 5-14years)	Girls 93.9%	Boys 93.4%

The fertility indices were much higher than the national figures. This is expected as there is an aversion to use of contraceptives in the area and because of the very low status of the women, early marriage is the norm and fertility is only aborted by menopause. The mortality indices are much lower than the national estimates; the infant mortality rate is 50% less than the national figure while the crude death rate was 28.5% less than the national figure. The small sample size may be a factor, others may be perhaps due to underreporting especially of infant deaths as anecdotal evidence suggests that infant deaths before naming ceremony are usually considered still births and thus not counted as deaths in the community. A possible explanation may be a real decline in mortality in the community because of perhaps better utilization of health services as the community is in close proximity to many health facilities including the teaching hospital.

Table 2: Demographic indicators

Indicators	Layin Zomo	Nigerian Demographic and Health Survey (NDHS), 2003
Population	3213	-
Crude birth rate (per 1,000)	55.4	41.7
Crude death rate (per 1,000)	9.3	13
Total fertility rate	6.4	5.7
Infant mortality rate (per 1,000)	45	90
Dependency ratio	0.93	-
Sex ratio	1:1	1.1

Figure 1: Population pyramid of Layin Zomo, July 2004



Conclusion

The study revealed that more frequent ad-hoc small-scale intensive surveys could be used to obtain valid reliable demographic information of a community. The information so generated can be used to bridge the gap that exists as a result of infrequent and inconsistent national census in the country. The data could also be used for proper planning, allocation of scarce resources to relevant sectors and for health intervention programmes e.g. national immunization days exercise (NIDs) for polio eradication.

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