THE IMPACT OF URBANIZATION ON THE HEALTH OF URBAN NIGERIANS

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INTRODUCTION

In Nigeria, as in most developing nations, sufficient attention have not been focused on the effect of the man-made environments on human health. This is evident by the limited number of researches conducted on such issues. As observed by Tipple and Helen (1986), subjects like urbanization and the epidemiology of mosquito-born diseases, infant mortality, water supply and disease prevention or problems associated with the general health care delivery all point to the growing scale of disease problems of cities in the developing nations. Yet, many of the planning problems associated with them are rendered intractable by the inadequacies and inaccuracies of available medical records, especially the hospital based records (Iyun, 1984). The urban areas of the developing nations are nevertheless experiencing a disproportionate growth in numbers and aerial expansion with all the associated problems of planning implicit in such uncontrolled or unco-ordinated growth.

One of such problems usually overlooked in the process of city growth is that of the social services delivery. An increasing number of most developing nations' financial outlay and manpower resources are being devoted to the provision of services to the public especially those in the urban areas. The quantity, quality, frequency and effectiveness of distribution of these services in meeting the needs of the people have a powerful effect on the quality of life that urban people experience.

There are essentially three distinct groupings of the main populace. These are : tertiary services which provide direct and rather immediate benefits to the recipient like the barber's shops, repair services and other domestic services; the quarternary services which help to maintain a division of labour by providing the essential services of transportation, administration, communication and commerce and; the quinary services which are the most basic services since they are the ones that improve or change the essential character of the recipient. An example of this is health care (Rootc and Hatt,

1953, p. 365 as quoted in Greca, 1977). Urban health care delivery systems are receiving greater attention today than ever before not only because health care is an all encompassing, essential, cradle, to grave service but also because it is being challenged as a service that mainly serves the more affluent urban population and not the city or the nation as a whole (Greca, 1972).

There are a wide range of conceptual analyses concerning the social services delivery system. In its broad concept, there are four main levels of analyses. The first level or stage is to decide what type and level of services to be provided and the method of provision. The second stage is to know much of the available resources (financial, manpower, etc.) to commit. This, in turn, will depend on service coverage and type of need - whether attributed, compensatory, diagnostic or means tested-need. The third and fourth stages relate to the method of implementation and monitoring.

Health care delivery, especially to the increasingly larger populace in the developing nations in becoming increasing difficult, inequitable and attracting larger share of the social services sectors financial allocations. Yet, as the urban populace grows due to in-migration or urbanization and high urban population growth, facilities are overstretched health manpower resources become inadequate and the situation seems to deteriorate despite genuine efforts to mitigate the extenuating circumstances. This paper presents in part, a research report concluded early in 1986 on the impact of urbanization on the health care of urban Nigerians in terms of availability and accessibility. The paper in addition draws from other researches of relevance to buttress its arguments.

THE DATA

The data on which this paper is drawn is a part of a larger data set collected in 1985 for the study or urban growth and urban management in Nigeria. The data for this section of the study are mainly from secondary sources. The types of information sought were the population growth of each of the three cities overtime vis-a-vis that of the state in which they are located- and the impact of population growth on the rate of city expansions or areal growth, and on some socio-economic indications such as health. In addition, actual fieldwork was carried out in each of the three cities to collect, correct and possibly update the available information on each indicator for each of the cities. The statistics division of each of the state's Ministry of Finance and/or Economic Planning usually have a stock of published information on each of the socio-economic indicators. In many instances, the data compiled on the indicators were still with the government printer awaiting publication. Data on some indicators running up to six years have been held up at the government press for lack of funds to buy necessary printing materials. This has significantly affected the currency of the information that ought to have been used in this analysis. Thisalso explains why there is no uniformity in the type and year of data collected for the three cities, thus preventing rigorous inter-city comparisons among the identified indicators.

Since these data are secondary, they should be interpreted with caution. Accurate information on and about population are rare to come by in Nigeria. This is because

nobody seems to know how many Nigerians there are. Where they live and work are matters of conjecture. Since 1963, no census figures have been officially accepted, hence, most population figures are projected from the 1963 census. In addition, unpublished information extracted from reluctant public officials in the different cities sometimes do not tally with the available published data. However, where up-to-date published data exist, some consistency have been observed over time in the growth and sectoral increases of the various socio-economic indices.

POPULATION GROWTH AND URBANIZATION

There are usually three components of urban growth. An urban area can grow through natural population increase; upgrading of some developed rural areas to urban status; and migration ((Population Reports, 1983). Migration, which involves movement of people from outside into a city is the form of city growth referred to as urbanization.

Available evidence suggests that in some of the largest and fastest growing cities of the developing world, among which is Lagos, Nigeria, migration has accounted for up to two-thirds of urban growth. This contrasts sharply with the form of city growth in some developed nations (France and Japan for example) where the most important source of city growth is natural increase (Table 1). But migration is of two types - internal and international. International migration has never played any significant role in the urban growth process in Nigeria. In the 1963 census for example, Olusanya (1981) observed that only 1O1.461 non-Nigerians (O.2 %) lived in Nigeria out of which about half (52.8O9) lived in the urban centres. Thus, non-Nigerians living in urban areas accounted for O.5% of the estimated 1O.691.664 Nigerians living in towns in 1963. A relatively more recent evidence confirms this view. In 1982, there were between one or two million foreigners in Nigeria constituting about 3 to 6 percent of the total work force (U.N., 1982). Thus, since international migration and natural increase contributed minimally to Nigeria's urban growth, internal migration, especially rural-urban migration must be the crucial factor in urban growth and the urbanization process.

City and	Country	Years	Average Annual Growth Rate %	Percentage Due to Natural Increase	Percentage Due to Net Migration
Lagos	Nigeria	1960-75	8.6	41	59
Yaounde	Cameroon	1964-69	8,7	38	62
Dar-as-Salaam	Tanzania	1967-75	6,8	36	63
Jakarta	Indonesia	1971-76	4,0	66	34
Maniila	Philippines	1960-70	4,1	55	42
Seoul	South Korea	1960-70	7,8	22	73
Bogot	Columbia	1964-73	5,4	44	56
Mexico City	Mexico	1960-70	5,4	57	43
Baghdad	Iraq	1965-70	7,5	54	46
Amman	Jordan	1971	10,5	33	67
Paris	France	1962-68	NA	59	41
Tokyo	Japan	1970-75	NA	70	30

Table 1 - Contribution of migration and natural increases to urban growth in selected countries - Source : U.N., New York, 1982

One of the measures of the extent of urbanization is the percentage of the total population living in urban areas of various sizes. In this regard, urbanization in Nigeria predates colonial adventurism. In the 19th century for example, Mabogunje (1968) noted that there were over fifteen towns with population of over 20.000 inhabitants in the south-western part of Nigeria (Table 2). Others were found in the central part of Northern Nigeria. Most of these owed their origin to the emergence of centralized kingdoms and inter-regional, and international trade. New towns serving as administrative centres sprang up during the colonial days along the main transport networks.

By 1952/53, the number of such towns had increased to about twenty-eight (see Table 3). As table 3 clearly shows by 1952, altogether there were about forty-two urban centres in Nigeria with populations of 20.000 and more inhabitants each, the south-western part was and is still the most urbanized. Of this number seven centres had populations over 100.000 with six of them from the south-western part of the country. By the 1963 population there were a total of about 182 urban centres each with a population of over 20.000. Of this number, 24 had population of 100.000 and above, again with majority (15) of them from the south-western part of the country. These pre-colonial and colonial urban systems have, to a large extent, been preserved in post-colonial times. Many of these towns have become centres of commerce, industry, education and administration. They have thus attracted a large number of people seeking various opportunities concentrated in these cities.

Town	Population	Year	Author
Ibadan	120.000	1891	Millson
Abeokut	100.000	1861	Campbell
Ilorin	70.000	1856	Powen
Iwo	60.000	1890	Moloney
Oshogbo	60.000	1890	Moloney
Ede	50.000	1890	Moloney
Lagos	40.000	1864	Freeman
Oyo	40.000	1878	J.Johnson
Ijaiye	30.000	1867	Maser
Ogbomosho	30.000	1883	Chausse
Ijeby-Ode	35.000	1890	Moloney
Oke-Odan	24.000	1863	Nicholson
Epe	20.000	1877	Braithwaits
Koso	20.000	1825	Clapperton
Iseyin	20.000	1856	Bowen
Ado	20.000	1879	Faulkner

Table 2 - Estimates of the population of Yoruba towns in the nineteenth century : towns with population over 20.000 - Source : Mabogunje, A.L. (1968), p. 91

Centre	Population 1952	1963	Centre	Population 1952	1963
Ibadan	459.156	627.379	Ede	44.808	1134.440
Lagos	267.407	665.246	Kaduna	44.540	149.910
Ogbomosho	139.535	319.881	Ilorin	40.994	208.546
Kano	127.204	295.432	Gusau	40.201	69.231
Osogbo	122.728	208.966	Akure	38.853	71.106
Ife	110.790	130.050	Jos	38.527	90.401
Iwo	100.006	158.583	Ondo	36.233	74.343
Abeokuta	84.451	187.292	Ikere Ekiti	35.584	107.216
Onitsha	76.921	163.032	Sapele	33.638	61.007
Oyo	72.133	112.349	Owo	30.662	80.413
Ilesha	72.029	165.822	Shagamu	30.099	51.371
Port-Harcourt	71.634	179.563	Kumo	29.075	64.878
Enugu	62.764	138.459	Awka	28.524	62.761
Aba	57.787	131.965	Ijebu Ode	27.558	68.543
Maiduguri	56.740	139.965	Ilora	26.122	21.665
Zaria	53.974	166.170	Ikirun	26.005	79.516
Benin	53.753	100.694	Ila	25.745	114.688
Katsina	52.672	90.538	Ado Ekiti	24.646	157.519
Sokoto	51.986	89.817	Ijebu	24.166	43.180
Iseyin	49.680	95.220	Ikire	20.118	54.022
Calabar	46.905	76.418	Fiditi	23.636	27.130

Table 3 : Growth of some Nigerian urban centres 1952-1963
Source : Nigerian Census Reports, 1952 and 1963

It is not surprising to note therefore that an increasing number and percentage of Nigerians have continued to flock the cities in search of jobs, educational opportunities and even political favours. Thus, while the urban population of Nigeria was 4.8 percent (or a tenth of the total population) in 1952 and the number of towns more than doubled. The decade between 1953-2 and 1963 was the most dramatic. For example, if 1921 urban population stood as the base year (Table 4), then the total urban population in 1931 was only half as much as that of 1921. By 1952, the urban population of 1921 had multiplied itself almost four times and by 1962, it has multiplied itself twelve times (Olusanya, 1981). In 1963 therefore, 19 percent of Nigerians lived in towns while 23.2 lived in cities of 2O.OOO and above in 1972.

Year	Total Population ('OOO)	Towns	Total urban pop. ('OOO)	Urban population as perc.of total population	Index of Urbanization 19210100
1921	18.720	16	390	4.8	100
1931	20.056	24	1343	6.7	151
1952-3	30.402	55	3207	10.5	360
1963	55.670	183	10701	19.2	1202

Table 4 - Growth of urban population 1921-63
Source : 1.1. Ekanem, (1972), p. 4O

Owing to the use of various methodologies in the collection of demographic data and the selection of various parameters, there are various, sometimes contradictory, figures of urbanization and urban growth. Whatever the rate of urban growth chosen to project and estimate the urbanization process, the conclusions are the same and this is that there has been a steady growth in the urbanization of the Nigerian population and that the cities or urban areas themselves have equally ben expanding at a phenomenal rate. As evident from Table 5, most towns have phenomenal growth rate between 1963 and 1975. The projections for 1982 and 1984 also confirm the same trend (see Table 6).

The rapid rate of uncontrolled and unplanned urbanization in Nigeria (as is in all other developing countries) has brought with it complex urban problems in the form of competition for land, long journeys to work, traffic difficulties (congestion), acute shortage of housing, rapid growth os slums and the accompanying health hazards, qualitative and quantitative depopulation of the rural areas, high incidences of crimes of all types, to mention a few (Onibokun, 1973). The high rate of population increase and the uncrontrolled rural-urban migration lead to the explosive growth of our cities but unfortunately, there is no corresponding and commensurable change in the rate of economic development, social change and technological advancement (until very recently). As Onibokun pointed out : rural-urban migration is a menace and overcrowding within the cities is a common problem. Today, the hearts of our cities are like islands of poverty in seas of relative affluence as it does not require professional skill in environmental perception to not the difference between the residential, environmental and the overall physical structure of the central parts of Lagos and Ibadan for example, and their surburbs. Majority of the urban dwellers live in the unkempt and often squald hearts of the cities, under conditions that are at times sub-human, sharing substandard houses in areas, which, by any standard, are slums. (Onibokun, 1973, 52).

Thus, as Nigerians become increasingly urbanized, the condition of the urban physical environments are getting worse with its attendant health problems. For example, in a nationwide survey of the urban environmental factors or conditions in 4O urban areas in Nigeria in 1983, PAI Associates found that only 37.8 percent of towns could be described as clean while 17.3 percent were considered dirty. About 6.8 percent were

regarded as stinking (Table 7). This is not surprising since only 7.39 percent of all the towns had central sewage for the disposal of waster water while 49.5 percent dispose of their waste water in open spaces, (Table 8) a nesting place for malaria and other health-risk insects. As if this is not enough, a large number of the people in urban areas of Nigeria dispose of their excreta in pit latrines which are usually not covered or well kept. Many urbanites still exhibit their rural habits of using open spaces for the disposal of human excreta (Table 9). With these problems arising in part from high population density due to rapid urbanization and in part through the non-availability of services and its non-maintenance one cannot expect urban Nigerians to be in good health conditions.

	1952(a)	1963(a)	Percentage growth	1975(b)	Percentage growth rate
Aba	57.787	131.965	43.7	171.000	77.1
Abeokuta	84.451	187.292	45.0	253.000	74.0
Ado-Ekiti	24.646	157.519	15.6	213.000	73.7
Benin	53.753	100.694	53.3	136.000	74.0
Calabar	46.905	76.418	61.3	103.000	74.1
Enugu	62.764	138.459	45.3	187.000	74.0
Ilorin	40.994	208.545	19.6	282.000	73.9
Ibadan	459.156	627.379	73.1	847.000	74.0
Ife	110.790	130.050	85.1	176.000	73.8
Ede	44.808	134.440	33.3	182.000	73.9
Lagos	267.407	665.246	40.1	1476.837	45.0
Kano	127.204	295.432	43.0	397.000	74.4
Oshogbo	122.728	208.966	58.7	282.000	74.1
Onitsha	76.921	163.032	47.1	220.000	74.1
Ilesha	72.029	167.822	42.9	224.000	74.9
Port-Harcourt	71.634	179.563	39.9	242.000	74.1
Kaduna	44.540	149.910	29.7	202.000	74.2
Jos	38.527	90.402	42.6	129.870	69.6

Table 5 - The growth of some Nigerian urban centres 1952 - 1975
Source : Computed from (a) Iyanga, op.cit. (1982) (b) U.N. Demographic Year Book, 1978

City	Population 1972	Population 1982	Population 1984
Lagos	1.568.650	4.068.574	4.485.607
Ibadan	1.479.359	3.836.987	4.230.278
Ogbomosho	496.231	808.339	891.194
Kano	578.338	1.500.056	1.653.812
Oshogbo	324.169	528.057	582.185
Ile-Ife	201.747	328.636	362.321
Iwo	246.010	400.729	441.815
Abeokuta	290.546	623.686	689.819
Onitsha	252.912	111.982	454.210
Oyo	174.287	283.906	313.006
Ilesha	257.240	419.032	461.983
Port Harcourt	351.513	911.731	1.005.183
Enugu	326.482	846.789	933.585
Aba	203.225	331.045	364.977
Maiduguri	273.995	710.672	783.201
Zaria	257.780	419.912	462.953
Benin City	197.119	511.274	563.680
Katsina	140.452	228.790	252.241
Sokoto	175.826	455.046	502.791
Iseyin	147.715	240.621	265.285
Calabar	149.596	388.012	427.783
Ede	208.727	340.008	374.859
Kaduna	353.488	916.835	1.010.811
Ilorin	408.250	1.058.892	1.167.428
Akure	110.307	237.544	261.892
Jos	176.971	459.016	506.065
Ikere-Ekiti	166.824	270.935	298.706
Ila	177.915	289.817	319.523
Ado-Ekiti	244.359	398.051	438.851
Minna	93.059	200.402	220.943

Table 6 - Projected population of some Nigeria cities, 1972 - 1982 and 1984
Source : Onibokun, et. al, (1985), p. 9

Towns	Percentage			
	Clean	Dirty	Stinking	Fairly alright
1. Akure	44.0	22.0	14.0	20.0
2. Sokoto	33.3	10.0	2.0	54.7
3. Yola	14.6	26.8	19.5	39.0
4. Potiskum	10.0	30.0	17.5	42.5
5. Zaria	33.3	30.3	3.0	33.3
6. Ilora	16.0	5.0	0.0	84.0
7. Nnewi	21.2	15.2	5.8	57.7
8. Enugu	23.3	18.3	10.0	48.3
9. Sapele	45.0	18.3	8.3	28.3
10.Okitipupa	79.5	5.0	2.0	13.5
11.Oshogbo	47.5	7.5	10.0	35.0
12.New Bussa	60.5	6.0	3.0	30.5
13.Gusau	26.2	31.0	2.4	40.5
14.Makurdi	37.5	21.9	3.1	37.5
15.Jos	2.0	17.1	4.9	56.1
16.Kano	45.0	15.0	10.0	25.0
17.Port Harcour	35.0	20.0	1.2	33.0
18.Aba	22.5	20.0	17.0	40.5
19.Bonny	35.0	22.5	0.0	42.5
20.Owerri	28.2	18.0	10.3	43.6
21.Forcados	32.7	18.4	0.0	49.0
22.Burutu	21.2	42.4	0.0	36.4
23.Calabar	32.5	15.0	8.0	44.5
24.Ukpilla	25.0	32.5	0.0	42.5
25.Uyo	65.0	10.0	5.0	20.0
26.Uzere	27.6	6.9	1.0	64.5
27.Ughelli	25.6	33.3	2.6	38.5
28.Oleh	60.0	2.5	0.0	37.5
29.Olumuro	62.5	12.5	0.0	25.0
30.Warri	36.7	10.3	15.0	37.9
31.Benin	43.4	11.3	17.5	27.8
32.Lagos	28.8	32.3	11.9	27.0
33.Ibadan	29.5	21.5	15.0	34.0
34.Sagamu	33.3	13.3	10.0	43.3
35.Onitsha	35.1	13.9	12.0	39.0
36.Nkalagu	48.8	22.0	0.0	40.5
37.Suleja	45.8	6.5	7.2	0.0
38.Lapai	62.0	4.5	3.2	30.3
39.Kontagora	0.0	15.5	4.5	45.0
40.Asaba	40.0	7.7	15.4	36.9
	37.8	17.3	6.8	38.1

Table 7 - Condition of surrounding environment
Source : PAI Associates, 1983

Towns	Disposal System Percent				
	Sewers	Septic Tank	Pit-Latrines	Dung Hill	Pail System
1. Akure	0.0	0.0	100.0	0.0	0.0
2. Okitipupa	0.0	4O.5	59.5	0.0	0.0
3. Oshogbo	0.0	32.5	27.5	42.5	0.0
4. Sokoto	14.3	71.4	14.3	0.0	0.0
5. New Bussa	0.0	27.5	70.0	0.0	0.0
6. Gusau	0.0	14.3	100.0	47.6	26.2
7. Makurdi	3.1	25.0	68.8	46.9	0.0
8. Yola	0.0	32.5	52.5	10.0	5.0
9. Potiskum	0.0	16.7	57.1	14.3	14.3
1O.Jos	0.0	48.8	51.2	34.1	2.4
11.Kano	0.0	17.5	70.0	22.5	0.0
12.Zaria	0.0	45.5	48.5	9.1	0.0
13.Port Harcour	0.0	42.5	0.0	0.0	57.5
14.Aba	0.0	80.0	12.5	0.0	7.5
15.Bonny	10.4	22.5	17.5	0.0	30.0
16.Owerri	0.0	92.3	5.1	0.0	2.6
17.Forcados	2.0	44.9	4.1	46.9	0.0
18.Burutu	3.0	27.3	21.2	9.1	39.4
19.Calabar	2.5	55.0	40.0	5.0	17.5
2O.Ukpilla	12.5	2.5	67.5	0.0	0.0
21.Uyo	2.5	80.0	15.	2.5	2.5
22.Uzere	0.0	13.8	44.8	0.0	0.0
23.Ughelli	0.0	43.6	28.2	2.6	25.6
24.Oleh	0.0	22.5	65.0	15.0	2.5
25.Olimoro	2.5	5.0	72.5	20.0	0.0
26.Warri	6.9	62.1	24.1	0.0	3.4
27.Benin	13.9	27.8	61.1	0.0	0.0
28.Lagos	1.9	21.2	38.5	7.7	38.5
29.Ibadan	8.0	52.0	36.0	0.0	2.0
3O.Ilora	0.0	9.4	28.1	59.4	0.0
31.Sagamu	0.0	16.7	80.0	0.0	0.0
32.Onitsha	0.0	72.5	13.7	2.0	21.6
33.Nnewi	2.0	6.7	91.8	4.1	0.0
34.Enugu	17.5	62.5	15.0	0.0	5.0
35.Nkalagu	2.4	12.2	58.5	9.8	14.6
36.Suleja	3.3	13.3	70.0	13.3	0.0
37.Lapai	3.2	96.8	0.0	0.0	0.0
38.Kontagora	5.6	61.1	25.0	0.0	16.7
39.Sapele	0.0	78.3	11.7	0.0	6.7
40.Asaba	0.0	0.0	0.0	0.0	0.0
	5.8	37.4	41.7	10.6	8.5

Figures may add up to more than 1OO% across to multiple use of disposal systems by households.

Table 8 - Type of exreta disposal system used in household

Source : PAI Associates, 1983

Towns	Emptying Places Percents					
	Central Sewage	PIT	Stream of river	Gutter	Open pond	Open spaces
1. Akure	0.0	2.5	0.0	10.0	5.0	82.5
2. Okitipupa	2.7	32.4	2.7	54.1	0.0	45.9
3. Oshogb	2.5	2.5	0.0	77.5	0.0	57.5
4. Sokoto	28.6	14.3	0.0	21.4	14.2	21.4
5. New Bussa	0.0	7.5	0.0	100.0	0.0	80.0
6. Gusau	4.8	61.9	14.3	88.1	33.3	64.3
7. Makurdi	0.0	31.3	3.1	71.9	0.0	87.5
8. Yola	0.0	12.5	0.0	80.0	0.0	25.0
9. Potiskum	0.0	40.5	0.0	52.4	4.8	4.8
10.Jos	0.0	19.5	19.5	82.9	0.0	48.8
11.Kano	0.0	25.0	0.0	82.5	0.0	30.0
12.Zaria	0.0	39.4	3.0	48.5	3.0	30.3
13.P/Harcourt	22.5	7.5	12.5	37.5	0.0	20.0
14.Aba	7.5	17.5	2.5	62.5	0.0	45.0
15.Bonny	2.5	17.5	42.5	15.0	0.0	72.5
16.Owerri	2.6	25.6	5.1	69.2	10.3	51.3
17.Forcados	2.0	2.0	26.5	6.1	6.1	69.4
18.Burutu	0.0	15.2	12.1	27.3	0.0	81.8
19.Calabar	20.0	20.0	0.0	52.5	7.5	65.0
20.Ukpilla	15.0	2.5	0.0	2.5	5.0	70.0
21.Uyo	10.0	67.5	0.0	5.0	0.0	12.5
22.Uzere	0.0	20.7	0.0	3.4	0.0	93.1
23.Ughelli	0.0	20.5	2.6	41.0	5.1	41.0
24.Oleh	0.0	0.0	0.0	0.0	0.0	100.0
25.Olumoro	0.0	47.5	0.0	0.0	0.0	52.5
26.Warri	0.0	6.9	10.3	58.6	0.0	62.1
27.Benin	25.0	44.4	0.0	19.4	0.0	19.4
28.Lagos	9.6	5.8	3.8	75.0	0.0	11.5
29.Ibadan	14.0	6.0	20.0	64.0	2.0	10.0
30.Ilora	0.0	3.1	0.0	40.6	6.3	50.0
31.Sagamu	0.0	30.0	0.0	33.3	3.3	36.7
32.Onitsha	0.0	0.0	0.0	92.2	2.0	37.3
33.Nnewi	0.0	0.0	0.0	10.2	0.0	87.8
34.Enugu	27.5	35.0	10.0	22.5	2.5	2.5
35.Suleja	3.3	23.3	16.7	50.0	0.0	6.7
36.Nkalagu	41.4	9.8	0.0	51.2	0.0	63.4
37.Lapai	0.0	0.0	0.0	0.0	3.2	96.8
38.Kontagora	47.2	11.1	2.8	25.0	5.6	47.2
39.Sapele	1.7	75.0	0.0	18.3	0.0	3.3
40.Asaba	0.0	0.0	76.9	0.0	0.0	92.3
	7.37	20.1	7.2	41.3	3.0	49.5

Figures may add to more than 100% across due to utilisation of more than one emptying place by some households

Table 9 - Where waste water used in house is emptied - Source : PAI Associates, 1983

Health facilities become overcrowded and inadequate shortly after they are built with the resultant effects on accessibility and quality. The third plan would seem to have recognised this oversight but the significant increase in budgetary allocation might not have been of much help. At the beginning of the Fourth Plan, for instance, it was estimated that only about 35 percent of Nigerians have access to and use any form of modern health care faciilties.

Other health indicators tend to corroborate the non-availibility or in accessibility of health care services to the majority of Nigerians. Life expectancy, for example, is expected to rise with per capital income, hence the old saying that economic development is good medicine. However, the persistently low life expectancy in Nigeria despite its oil wealth (about 44 years in the Second Plan and 46 in the Third Plan period, and 49 in 1984) shows that the relationship between economic development and better health (life expectancy) is neither simple nor linear (World Bank, 1980, World Population Data Sheet, 1984). By 1980-81, infant mortality was between 20/1000 in the urban and 150/1000 in the rural areas. Child mortality was equally high while material mortality rate was about 2.4/1000 (Fourth Development Plan, p. 272).

By inference, it would seem that most of the capital projects in health have been concentrated in the urban centres where only 20 percent of the population thus have difficulty in gaining access to qualitative medical care facilities. Such a situation cannot ensure a judicious use of capital allocation to this sector.

Significant progress have been made in the areas of facilities and especially health manpower to partially justify the capital allocation to this sector. At the beginning of the first plan period, there were 39.680 Nigerians to one doctor, 7.560 to a registered nurse, 20.710 to a registered midwife and 2.440 people have to struggle for one hospital bed (Table 5). This has improved to 13.890, 3.770, 4.930 and 1.360 beds respectively by the middle of the Third Plan. This trend has consistently improved over each of the successive plans with the noticeable difference of 1979 for some health personnel. Many of the health personnel would however prefer to stay in the urban centres with modern services like water, electricity, etc. where tehy could have their own private practices. The majority of the populace are therefore not significantly affected by whatever achievements the health sector would have made.

It is in recognition of the failures and limitations of previous plans that the fourth plan now proposes and is currently experimenting with the three-tier service system called the Comprehensive Health Care System. There are the Primary or Basic Health Care to be delivered in health centres clinics, etc.; patients will be referred to the Secondary Health Care delivered in hospitals while serious or specialised cases will be referred to tertiary or specialist hospitals. The goal is to have health care services accessible to 80 percent of the populace by 1985 instead of 35 percent in 1980 and 100 percent in the year 2000. For this, a sum of over three billion naira has been earmarked.

THE HEALTH OF URBAN NIGERIANS
AN APPRAISAL GENERAL OBSERVATION

In Nigeria, the health of the populace, like education is regarded as a basic neef, engine or agents of development and as a basic human right. It is assumed that majority of Nigerians are unable to pay for adequate health services. The failure of the government to provide such preventive and curative medical services as may be required means a denial of a basic need and rights while limiting access to these services to the rich few in the society. Yet, the average Nigerian, through the countries varied socio-political development, has come to acquire some sets of values and beliefs among which is that health care must be provided free of charge or at heavily subsidized cost. These are some of the reasons why the health subsector, like education, has become a priviledged subsector and the largest social enterprise in Nigeria.

It is not surprising therefore that the health sector has attracted generous financial allocation as shown in Table 1O from a paltry sum of (# 1O.O million) about N 6O million (SFEM rate) in the first national development plan (1962-68), the health sector financial allocation increased more than ten fold during the third plan to N 6O6 million and to N 3.O8 billion during the fourth plan. The various regional and latter state governments followed this pattern of financial allocations.

Three appraisal criteria could be used to appraise the health sector especially in the light of the financial allocations to the sector. These factors or criteria are availability, accessibility and quality of health care delivery, services to the populace. Using these criteria, the health programmes undertaken during the first two plan periods did not sufficiently take into account the nature and magnitude of the health problems being occasioned by rapid population growth, better education and increasing appreciation of health needs. It was not surprising that it is thus apparent from the above analyses of the health sector that the urban sector or areas have been greatly favoured in the allocation of health care facilities, in the opportunity of access to these facilities and also to health care parsonnel. These facts are even more vivid in the available evidences of the three cities used as case studies in this reported research. Again as will be revealed in this section, not all the urban areas of Nigeria are favoured. Only the federal and state capitals are favoured in the location of medical facilities, in the postings of medical personnel and in the availability of drugs and dressings. This is not surprising since these capitals usually have the largest population in each state and are usually the seat of governments.

Sequences	Plan period	Total public Expenditure (on all Sectors)	Total public Expenture on Education	Total public Expenditure on Health
1st Post !Independence Plan	1962 - 68	N 2.2 b. (#1217.OO for all sources)	# 45.65m.	#1O.13Om.
2nd " " "	197O - 74	N 2 b.	N138.893m.	N 53.81m.
3rd " " "	1975 - 8O	Initially N3O billion Revised N 43 b.	N 3.2 b.	N6O6.39Om
4th " " "	1981 - 85	Projected 82b.Estimated N7O.O5b	N 7.6 b.	N 3.O8b.

Table 1O - Capital allocation to (education and) health in successive national development plans - Source : Federal Government of Nigeria, Federal Ministry of Economic Developments, First, (1962-68) Second (197O-74), Third (1975-8O) and Fourth Development Plans (198O-85), Lagos.

URBAN AREAS AND HEALTH INDICATORS

The distribution of health manpower and institutions in all states of the federation is overtly in favour of the capital cities, the three cities under study inclusive. For example, out of the 76 hospitals in Anambra State in 1977, 21 (or 28 percent) were located in Enugu. In 1979, 2O of the 41 hospitals and nursinghomes in Oyo State were located in Ibadan while ten other local government areas had no single hospital. The situation is the same for dispensaries, maternity and child welfare clinics.

With respect to the actual indices of the quality of health of the populace like population per hospital, number of people per hospital bed, doctors per population and others, it could be said that compared with their rural hinterlands, the three cities are in vantage positions. For example in 1979, while the population to hospital ratio in Oyo State was 184.OOO to 1, that of Ibadan was only 44.324 to 1. In addition while population per hospital bed in Ibadan in 1979 was only 576 to 1, the State average was 2.46O people to one hospital bed. Population to hospital bed in Enugu in 1977 was 188 to 1 and in Kaduna in 1975 it was 256 to 1.

In order to actually reveal to impact of population on these health indices and since no uniform data exist on all three cities, Table 11 shows at a glance the impact of population on the quality of health being received by the people of Enugu over time. Between 1977 and 1984, a span of seven years, the population of the town increased by about 27 per

cent from 324.866 in 1977 to 446.O4O in 1984. The number of hospitals has however, more than doubled within the same period. The effect of this is a reduction in the number of people per hospital bed, a phenomenon that could be interpreted to mean that the urban populace of Enugu has greater access to medical attention and facilities over time. Their health problems and conditions would also be deemed to have improved over time.

However, while the number of people per hospital has shown remarkable improvement over time, the number of people per hospital bed has risen from 189 in 1977 to 252 in 1984. This is not surprising since the rate of expansion of hospital beds is not commensurate whit population and hospital expansion. For example, while the city's population grew by 27 percent and the number of hospitals increased by 53 percent within the period, the rate of increase of hospital bed was only 2.77 percent. The reason for this is not far fetched. Enugu exhibits an interesting peculiarity among the three cities. While health facilities are mostly provided by government agencies in Kaduna and Ibadan, about 43 percent of all medical institutions in Enugu are owned by private individuals and missionaries. Many of such medical institutions do not operate as full-fledged hospitals but as clinics, hence, the slow rate of hospital bed expansion.

Medical personnel are also concentrated in the three cities. For example, while the state-wide population to doctor ratio in Oyo State in 1979 was 12.822 to 1, that of Ibadan was 2.15O to 1. The same could be said of the other two cities.

It could be inferred that although the health situations in each of the three cities under study are far from being satisfactory, each of these cities has the best in quantity and quality of what the state has to ofer in terms of medical facilities. It could be said that medical facilities are responding to the cities expanding population.

ASSOCIATED HEALTH FACTORS

While the aforementation health indicators may be responding to the urbanization processes, there are some associated health factors whose availability regularity of supply and use and accessibility to urban residents are crucial to the health of urban populace and may actually negate whatever gains the urbanites might have attained in their health sector. Two of these factors which are considered very vital to health are solid waste removal and water supply.

Solid Waste Removal

One of the most serious environmental problems facing the urban centers in Nigeria is that of solid waste removal. A visit to any Nigerian city shows a prevailence of uncontrolled heaps of refuse in open spaces, stream channels, road sides and market places. As the population of a city grows, so also does it solid waste problems assumes increasing complexity. The magnitude of the problems have caused problems for many urban administrators and research institutes who in firm have commissioned some research studies to determine the magnitude of the problem. (Mclaren, 197O;

Oluwande, 1974; Egunjobi, 1983; PAI, 1982, NISER and IDRC, 1986). These researches show that : urban residents in Nigeria generate between .37 and .66 kg of solid waster per capital per day; residential land use contributes the bulk of the wastes generated in most cities; magnitude of solid waste generation and their characteristics differ between urban residential neighbourhoods according to or in accordance with the different socio-economic characteristics of the residents; that solid waste generation is higher or larger in wet season due to the availability of maize husks and vergetable stalks and; the absence of an effective and durable institutional machinery for refuse collection and disposal.

The rapid pace of urbanization and pattern of city development are about the most potent factors in these observed problems of solid waste management. We are howeyer concerned about the impact of these problems on the health of the urban populace. With the core areas of the cities generating the largest share of refuse but with poor vehicular accessibility this inhibiting easy and timely removal of refuse, various types of diseases afflict the urban resident which hamper their productive capabilities. As the diets of the urban populace changes from leaf-wrapped foods to tinned foods and with the problem of evacuation comes the high incidence of malaria. Empty tins filled (with water during the rainy season, the collection of water in ponds around the house and a generally filthy environment is a breeding ground for all types of parasitic diseases which hamper the health of urban Nigerians. As Iyun observed :

"The health statistics in Nigeria for instance indicate that well over 5O percent of mobidity conditions are constituted by infectious and parasitic diseases with malaria taking the lead. Hospital data indicate the great significance of childrens diseases with diarrhoea taking the lead. On the other hand, the reported killer diseases are mostly diseases of poverty but promoted by high population growth rates" (Iyun, 1986, p. 16)."

Disease	N° of Cases	% of Total
1. Measles	11 075	23.99
2. Malaria	9 827	21.28
3. Pneumonia	8.400	18.19
4. Meningitis	4.604	9.97
5. Tetanus	4.594	9.95
6. Tuberculosis	2.550	5.52
7. Dysentery	2.271	4.92
8. Infective Hepatitis	713	1.54
9. Whooping Cough	720	1.56
10. Chicken pox	570	1.23
11. Cholera	260	0.56
12. Typhoid	258	0.56
13. Food Poisoning	189	0.40
14. Leprosy	140	0.30

Table 11 - Reported killer-diseases in Nigeria 1973 to 1982
Source : Federal Ministry of Health, 1982

These observation are ably supported by Table (11). Since most of these reported cases are from the hospitals and hospitals are mainly found in the urban areas, these figures could be taken as showing the urban -type diseases. Despite the presence of preventive vaccines for these identified diseases its high incidences among populace might be a reflection of population crowding and thus the easy spread of such diseases or ignorance. It could be inferred, therefore, that high population growth and crowding has often depressed the health status of most urban Nigerians.

Water Supply

As is the case with solid waste removal, safe drinking water is important in the control of many diseases. This is particularly well-established for diseases such as diarrhoea, cholera, typhoid and paratyphoid fever, infectious hepatitis, amoebic and bacillary dysentry (Hofkes, (ed.) 1983). Health risk diseases associated with water are many and can take diverse forms as revealed in (Table 12). It is not surprising therefore that over 8O percent of all diseases in the world are associated with unsafe water. When an urban populace therefore suffers from acute shortage of water and are thereby driven to unclean or polluted sources of water, the health implications are very grave. The larger the population of a city, the more acute its water problem is likely to be in a developing nation.

Although Nigeria is blessed with an abundance supply of water sources, the problems which successive governments since independence have been battling with is how to provide, safe potable water to the generality of Nigerians especially the ever increasing urban populace. However, owing to lack of foresight, planning without hard data, political and administrative intervention and financial constraints most water schemes designed for most urban areas of Nigeria usually become underdesigned and overstreched as soon as they are commissioned.

Group	Diseases
Diseases transmitted by water (water-borne diseases) Water acts only as a passive vehicle for the infecting agent All of these diseases depend also on poor sanitation	Cholera Typhoid, Bacillary dysentery Infectious hepatitis Leptospirosis, Giardiasis Gastro enteritis
Diseases due to lack of water (water-washed diseases) Lack of adequate quantity of water and poor personal hygiene create conditions favourable for their spread The intestinal infections in this group also depend on lack of proper human waste disposal	Scabies, Skin sepsis and ulcers Yaws Leprosy, Lice and typhus Trachoma, Conjunctivitis Bacillary dysentery Amoebic dysentery Salmonellosis, Entervirus diarrhoeas Paratyphoid fever, Ascariasis Trichuriasis, Whipworm (Enterobius) Hookworm (Ankylostoma)
Diseases caused by infected agents fecting agents spreaded by contact with or ingestion of water (Water-based diseases) An essential part of the infecting agent agent takes place in a auatic animal. Some are also affected by waste disposal	Schistosomiasis (urinary & rectal) Dracunculosis (guinea worm) Bilharziosis Philariosis Onchocercosis Treadworm
Diseases transmitted by insects which live close to water Infections are spread by mosquitos, flies insects that breed in water or bite near it. These are especially active and agressive near stagnant open water. Unaffected by disposal (diarrhoea)	Yellow Fever Mosquito Dengue + Dengue Hemorrhagic fever Mosquito West-Nile and Rift Valley fever Mosquito Arbovirus Mosquito Encephalitides Mosquito Bancroftian, Filariasis Mosquito Malaria, Mosquito Onchocercosis Simulium fly Sleeping sickness Tsetse fly
Diseases caused by infecting agents. Mostly contracted by eating uncooked fish and other food (Faecal-disposal diseases)	Clonorchiasis Fish Diphyllobothriasis Fish Fasciolopsiasis Edible plant Paragonimiasis Crayfish

Table 12 - Diseases related to deficiences in water supply and/orn sanitation
Source : Hofkes (ed.); 1983, p. 10

Most urban houses are encouraged to have house potable water connections although this varies from neighbourhood to neighbourhood depending to the nature of accessibility. This has become necessary (and a departure from public stand pipes policy of the colonial era) as a cost - recovery strategy for most urban water supplies. Connection with the main water line does not however guarantee water supply where core areas of most urban areas (the most crowded and in need of water for sanitary purposes to prevent epidemics) have never been supplied with tap-water. Newer areas of the cities almost always have regular supply but not the unplaned core and suburban slums inhabited by illiterates and semi-illiterate low income people. It is amazing, however, that their water demand to meet the basic necessities of life and maintain a decent level of health is very low (less than 12 kerosine tins per day). However since majority are poor, they cannot afford to purchase the N 5OO - N 1OOO 5OO gallons water tanks for water storage if and when water flows in pipes. They could neither afford to purchase water from water vendors nor dig bore holes costing between N 1O - 3O.OOO each.

Majority of urban dwellers have to rely on urban streams, ponds, rivers and rain water water supply from these sources are very regular. However, the quality of water from these other sources are suspect. This fear is confirmed by the high incidences of water-borne diseases in the sampled cities. Although guinea worm is almost existent and incidences of diarrhoea is very low over 6O percent of urban residents in the core areas of the three cities (Ibadan, Enugu and Kaduna) and over 5O percent of residents in the intermediate areas of the cities have dysentry. The percentages are higher for cholera and typhoid fever as shown in Table 2O. The urban residents have come to realize the importance of clean water for their health and economic development and are therefore willing to pay more for the water they get if it will be clean and regular.

CONCLUSION

Nigeria has experienced rapid urbanization which has led to the rapid and massive agglomeration of people and activities. As urbanization progresses, the conditions of urban living increasingly became intolerable. This has been attested to by the various components of urban living such as overcrowded housing units and generally unsanitary environments which in turn have been part cause and part consequence of the various types of diseases currently ravaging the urban areas of Nigeria. These conditions have been aggravated by : the inability of the various urban governments to promptly and effectively evacuate solid wastes which continue to pile up as soon as they are evacuated because of the density of urban living; the non-availability and where available, the non-accessibility to safe and potable drinking water which has in turn driven urban residents to the use of unsanitary water sources and thus the prevalence of water-borne diseases among urban residents.

Although this paper has observed that : the health sector has been a priviledged subsector among the social services sector in Nigeria; that substantial financial outlay has been allocated to the sector; that the urban residents have had a good but disproportionate

share of health facilities when compared with the rural hinterland, and although it could be concluded that the health of the urban residents have been improving in line with the urbanization process, it is also true that the health status of an average urban resident in Nigeria is far from satisfactory. Like his rural counterpart without access to pipe borne water, urban residents still suffer from debilitating water-related diseases which are sometimes communicable.

It seems, therefore, that the continued good health of the urban populace in Nigeria do not lie exclusively with a generous infusion of money into the health sector. A great deal of attention must be paid to the preventive aspect of public health. The most potent tool to achieve this is through public enlightenement through the public address systems and through the activities of the various non-governmental voluntary agencies. This is why the current policy on Primary Health Care with its strong emphasis on the preventive aspect is very much welcomed. If the people are well educated about the influences of their actions on their health and by inference, on their vitality and ability to earn further incomes, they will be more careful.

Greater attention should be paid to the provision of potable water for the urban residents if the incidences of water-related communicable diseases must be reduced. Presently, water supply is erratic and in most cases non existent in many parts of Nigeria's large metropolises. The health consequences have been noted. The same could be said about the delay in evacuating the rapidly growing heaps of domestic solid wastes which litter the streets of urban areas. Not only do they impede traffic flows, they pose serious health dangers to the urban residents as noted above.

It seems apparent therefore that one has to look beyond the available statistics of doctor per population or population per bed and other surrogate measures of health to be able to truely gauge or assess the health of urban Nigerians. When these health indicators are used, it would seem as if the health conditions are improving when these evidences are however analyzed in the content of contemporary urban living, it could be observed that the health of urban Nigerians has not very much improved. Suggestions have been made as to how these conditions that militate against urban health can be improved. With a firm determination and belief in public/sanitary health, with careful planning and judicious spending of health-sector funds, the health of urban Nigerians should be greatly improved before the end of the century.

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