THE SPATIAL DISTRIBUTION OF HEALTH SERVICES IN THE URBAN CENTRES OF KENYA

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INTRODUCTION

The recent history of Africa has been largely influenced by European colonial powers whose history has affected the socio-economic institutions, structures socio-philosophies and perceptions of African societies both from within and without. Kenya like other former colonies has not been immune to the diverse forms of domination through conquest and her institutions have been shaped accordingly. The thrust of colonial domination was to mold systems in the colonies which were appropriate to the socio-economic patterns arising out to the particular development situation of the relevant colonising power (Kenya, 1945).

For example, the traditional Western health precept is predicated on the availability and utilization of sophisticated hospital based equipment. This is because since more than 75% of the Western society has been urbanized for more than a century, the centres of health Care-Hospitals - have been largely based in urban centres. Thus trends in hospital development, equipment sophistication and the centralization of care have followed the socio-economic development and conditions of these countries. In contrast, in most of the Less Developed Countries (LDCS) where the population is scattered, less 25% of the population is urban. Many of these countries, unfortunately have tended to copy both the philosophy and the development priorities of the developed world even.

The provision of health care in most of these countries was formally oriented for the benefit of the former rulers. Hospitals were built in the centres of non-African settlement. Even today more than two decades after independence, most of the high quality social services especially hospitals and schools are still found and still being expanded mainly in the urban centres, where their availability does not necessarily mean their accessibility to the potential users who form the majority of the urban poor and low income groups (Obudho and Mhlanga, 1986).

This paper examines the spatial distribution of health services in the urban centres of Kenya with emphasis on their utilization in terms of accessibility to both urban and rural populations. The major factors that determines the location and utilizations of these health facilities are outlined and suggestions are made on some possible policy implications especially within the framework of the recently declared strategy of the District Focus for Rural Development (Cohen and Hook, 1986).

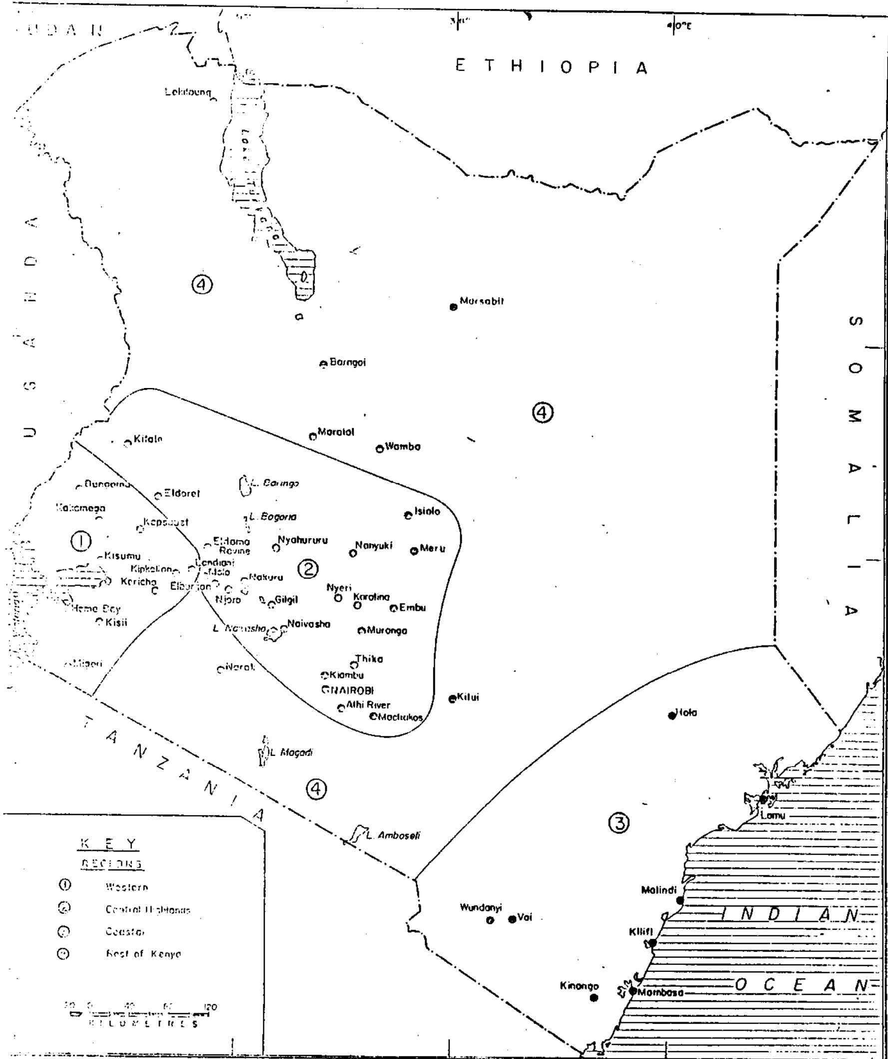
The first part of the paper provides a brief overview of the urbanization process in the country, examination of the evolution of the health care system is made. The third section focuses on the determinants of health service utilization in the urban centres. Some of the possible, shortcomings of the system as it operates now and highlights of possible solutions are given in the last section. Size, Distribution of Urbanization Process.

The population distribution in Kenya may also be examined in terms of settlements, both rural and urban (figure 1). The dominant pattern of settlement in the country is the dispersed homestead in the rural areas. Between the scattered homestead and the large urban settlements, there are invisible towns or periodic markets and the intermediate urban centres. The problems of dispersed nature of the rural settlements and the unbalanced nature of Kenya is the basis for the current national urban policies. In Kenya the attempt has been in the form of streamlining the policies to promote rural industrialization and to make districts the focus of rural development as means of bridging the gap between the rural hinterlands and the urban centres by stimulating the growth of small and intermediate urban centres.

The urbanization in Kenya has a long history in the coastal region, but a short history in the interior parts of the country. The interior parts of Kenya were not urbanized until during the colonial period. The urban pattern which exists today predominatly reflects the development of British colonization and trade rather than the traditional African population and agricultural pattern (Obudho, 1982 and 1983).

Using the official definition of an urban place as any settlement of 2.OOO or more persons, it is appropriate to analyze the spatial distribution of urbanization in the nation (Blacker, 1962).Table 1 : represents the size of rural and urban population, their rates of growth, and the actual share of total population from the years 1948, 1962 and 1979. The rate of population growth in Kenya is about 3,4% per annum during 1948-79. Between the period 1979 and 1986, it has increased to 3,9% per annum, to become one of the highest in the world. The rate of urbanization is higher than the population increase. Although Kenya is predominatly rural, there is tendency of increasing urbanization. The annual rate of growth of urbanization is increasing faster than the ruralization process. The annual rate of increased urban population was O,2% during 1948-62, and O,5% during 1969-72. In general, the annual growth urbanization has always been consistently higher than the ruralization.

Figure 1 - Kenya urban geographic regions



Year	Rural Popul. in thousands	Urban Popul. in thousands	Total	Annual rate of growth		
				rural	urban	total
1948	5.130	276	5.4O6	3.2	6.6	3.4
1962	7.956	671	8.636	3.1	7.1	3.4
1969	9.861	1.082	10.943	2.8	7.9	3.4
1979	13.018	2.309	15.327			

Table 1 - Kenya : rural and urban population

Source : Based on data from Republic of Kenya, Central Bureau of Statistics, Kenya Population Census 1948, 1962, 1969 and 1979 - Nairobi.

The rapid rate of urbanization in Kenya is primarily the result of accelerating rural to urban migration drift but also the result of natural rate of increase. This change in urbanization is also the result of general population change in Kenya which is expected to bring the total population of the country from the current 20 million in 1986 to 37 million in the year 2000. Based on current projections the population of Nairobi, Mombasa and Kisumu will be 2.8 million, 2 million and 500.000 by the year 2000.

Table 2 represents the growth of Kenya's population since shortly before independence. The overall rate of population growth in Kenya has been increasing since 1962. This has been matched by an even faster acceleration of urban growth, reaching 7.9% over the decade, and the share of the urban population which increased from 8.7% in 1962 to 15% in 1979 (Obudho, 1985).

Years	Total population	Urban population Total	Urban as percentage	Number of Urban Centers
1979	15.322.000	2.307.000	15.0%	90
1969	10.943.000	1.080.000	9.9%	47
1962	8.636.000	748.000	3.7%	34

Table 2 - Kenya : population 1962 - 1969

Intercensal Growth Rates : 1969 - 79 3.4% 7.9% ; 1962 - 69 3.3% 5.4%
Source : Based on 1962, 1969 and 1979 population census

The growth of urban population can also be visualized by looking into the number of urban centres in different size groups over space and time. At the time of the first Kenya population census in 1948, there were 17 towns with an aggregate population of 276.24O as shown on Table 3. The urban population was proportionately small (5.2 percent of the total) and dis-proportionately concentrated in Nairobi and Mombasa (83.O percent of the total urban population) with the majority of urban dwellers being non-African racial groups such as Europeans, Asians and Arabs. By 1962 population

census, the number of towns had doubled to 34 and the urban population had increased to 670.950 people with an annual urban growth of 6.6% per annum. This represented an urbanization level of 7.7% During 1948 - 1962, the intermediate urban centres recorded the highest increase. The growth of towns both in number and population accelerated after independence when the Africans were allowed to migrate to the urban areas without any legal and administrative restrictions. According to the 1969 and 1979 population censuses, there were 48 and 91 urban centres, respectively (Table 3). During 1962 - 1969 intercensal period, the urban population doubled. The population grew from 670.950 in 1962 to 1.082.437 in 1969; growing at the rate of 7.1% per annum. In 1969 this represented 9.9 percent of the total population.

The last population census indicated 90 urban centres with an urban population of 2.238.800. The level of urbanization had risen to 14.6 percent representing more than a doubling of total urban population in just about 10 years. The urban population grew at the rate of 7.9 percent per annum during the 1969-79 intercensal period. During the 1962 - 1979 censal period, the increase in the number of towns took place in all size groups but the highest increase of 13.9% per annum was in 20.000 - 99.999 size group followed by size 10.000 to 19.999 inhabitants, with 7.1 percent per annum. The third recorded highest increase was on the size groups of 2.000 to 4.999 underscoring the importance of trading centres and periodic markets or invisible towns in Kenya's spatial structure. The size groups of towns with population over 100.000 people and between 2.000 to 4.999 inhabitants grew almost at the rate of 5.6 and 5.7 percent per annum, respectively, showing both the slowing down of the growth of primacy in Kenya and also the increasing importance of the small urban centres.

The spatial distribution of population in the urban centres over time is shown in Table 4, and 5. Table 4 shows the population of 16 urban centres, which according to the 1979 census had a population of 20.000 or more- and Table 5 shows the annual growth rates and population shares in total urban population or 11 urban centres in Kenya. Although these data are not very conclusive because of the changes in boundaries of some of the towns, it gives an overall pattern of urbanization over time. The two urban centres of Nairobi and Mombasa together accounted for 70 to 74 of urban population during the 1948, 1962 and 1969 censuses and only about 50.7% according to the 1979 population census. The rate of annual increase of all urban centres of Nairobi, Mombasa, Nakuru, Thika, Malindi, and Nanyunki (Table 4). These urban centres whose annual increases were below 10% are the ones whose percent share of urban population over the years has been the highest. High rates of increase were recorded in Kisumu (16.8%), Nyeri (13.6%), Kericho (4%) and Eldoret (10.7%). The population of other towns grew by 15.6% per annum, while their share of urban population increased from 5.3% in 1948 to 28.9% in 1979 or doubling in the last decade.

However, these figures are deceptive because of expanded municipal boundaries during this period. After adjusting for these changes, the pattern of urban growth looks somewhat different : Kitale (7.9%), Eldoret (7.3%), Nakuru (6.2%), Thika (5.9%), Kakamega (5.8%), Nyeri (4.7%), and Kisumu (3.2%) (Table 4). Boundary expansion in Machakos and Meru was so great that apparent growth rates are meaningless. The

number of Kenya towns with populations of 10.000 or more has increased to 24. The intercensal annual rates of growth certainly were influenced by boundary changes in the case of Kisumu, Meru, Eldoret, Nyeri, Kisii, Kericho and Bungoma (Table 6). Rapid urbanization in Kenya must be recognized as a source of many development problems that will continue to tax the meager socio-economic infrastructure available to the urban centres. The 1979 census figure shows that urban growth in Kenya is not highly polarized towards Nairobi. This is because the rural-urban migration in Kenya has been focused on the intermediate centres.

The degree of urbanization in Kenya varies by natural resources endownments, and proximity to central transportation networks. The analysis of Table 7 shows that the level of urbanization in Western Province is low in relation to the total population. The Province in 1979 accounted for 12.0% of the total population but had only 4.6% of the urban population. Rift Valley Province, the largest province in Kenya and with the most contact of ecological zones, had 21.1% of the total population and a relatively high level of urbanization (15.3%), compared to Western and Nyanza Provinces (Obudho and Walter, 1976). Central Province, with high agricultural potential and a relatively high level of agricultural development, had 15.3% of the total production of Kenya and accounted for 5.4% of the urban population. Eastern Province, like Rift Valley Province, is large and accounted for 17.7% of the total population, with 9.2% of the urban population. The Coast Province, with relatively low agricultural potential, had 8.7% of the total population; but next to Nairobi, it is the most urbanized province in the nation. Its share of urban population was 17.8%. This high level of urban population can be explained by the fact that the municipality of Mombasa alone accounted for 83.1% of the urban population in the Province.

North Eastern Province, with the least agricultural potential and with nomadic or semi-nomadic inhabitants, is also the least populated province. Its share of total population and urbanization (1979) was 2.4% and 2.9% respectively. Nevertheless, North-Eastern Province had the highest rate of urban growth between 1969 and 1979. The province had no urban population 1969, however, by 1979 the province accounted for 8 urban towns with a total population of 67.617. One of the major reasons is that the government has developed few selected centres and provided services which lessened the need for the nomads to move from place to place searching for those services. If the urban population of Nairobi and Mombasa is excluded from Western Province, Central and Coast Provinces are under urbanized relative to their population base (Nderi, 1977, pp. 100 - 117 and Ominde, 1979, pp. 46 - 74).

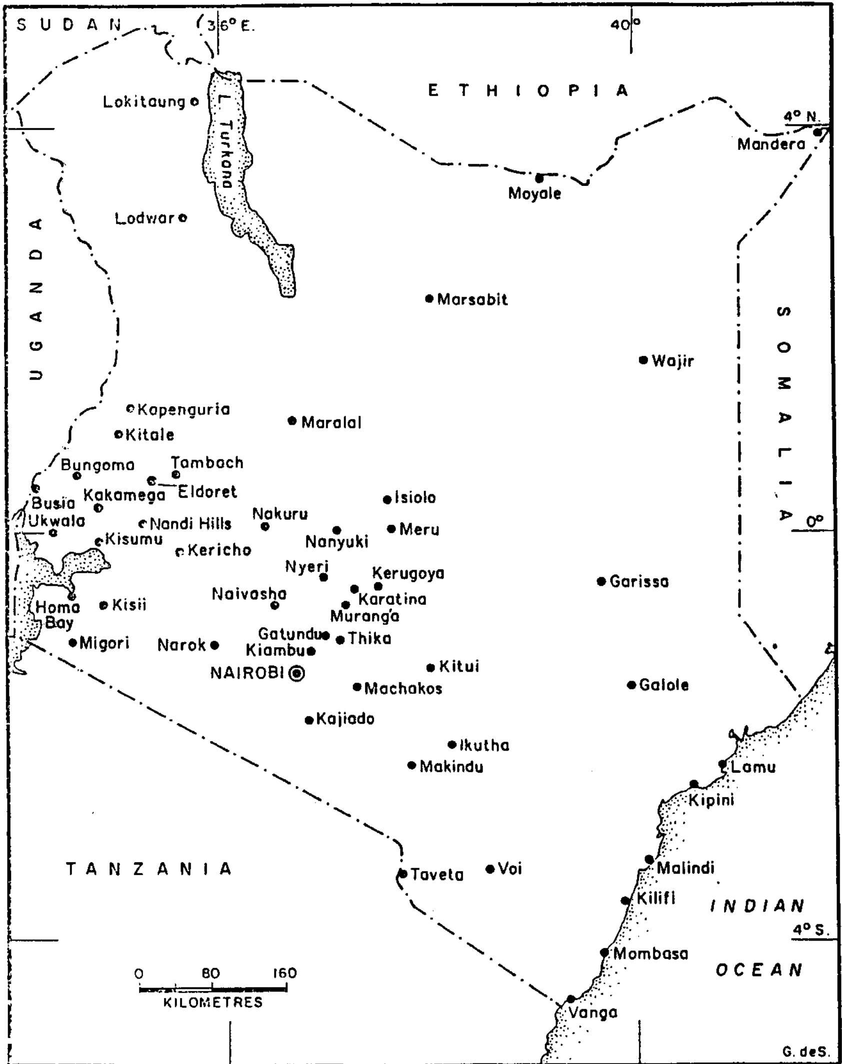
The significance of the change in the urban systems may be better appreciated by analyzing the urban population at the last decade in detail. According to table 8, 51.0 percent of the total urban population of settlements of 5.000 or more people was accounted for by Nairobi. In fact, Nairobi and Mombasa had 76 percent of the total population. Based on total urban population, in 1979 Nairobi only accounted for 37.6 percent of the population and together with Mombasa they accounted for 53% of the total population. In 1969, the proportion of the population of centres of 5.000 people which were accomodated in towns of 30.000 or more was 84.0 percent. By 1979, the share had declined to 80.0 percent.

However, the towns of 10.000 or more the share remained the same at 93.0 percent. Figure 2 shows the vertical and horizontal changes outlined and the ranking of the four major towns in the towns. There has been a major spread of the Kenyan urbanization away from Nairobi, Mombasa and Kisumu. One of the most important changes has been the reversal of the role of Nakuru and Kisumu underlining the emergence of Kisumu as third largest town in Kenya but also important growth point in Western Kenya. This change in the trend of urbanization can be more generally represented in figure 3. Considering the urban centres of 2.000 or more, the 1979 census data show that 35.8 percent of the total population lived in towns of 500.000 or more and 5O.5 in towns of 200.000. This represented just over half of the total urban population for towns of 2.000 or more. The major cities of 100.000 or more people (Nairobi, Mombasa, and Kisumu) accounted for 60.0 percent of the total population of 2.000 or more. At the time of census, therefore fourth of the total urban population were in towns of 30.000 or more namely, Nairobi, Mombasa, Kisumu, Nakuru, Machakos, Meru, Eldoret, Thika, Nyeri, Kakamega and Kisii. Some 88.4 percent were to be found in centres of 20.000 or more (Table 5).

A comparison the two sets of urban growth projections shows : one based on the 1969 census and the other based on the 1979 census. Based on the 1969 census projections, the physical Planning Department in the Ministry of Lands and Settlements predicted that Kenya's urban population in the year 2OOO would approximate the range of 8.6 million, representing 28% of a total population of 31 million with an average urban growth rate of 6.5% per annum (Kenya, 198O, pp. 37 - 4O). Based on the 1969 - 1979, intercensal growth rate, for example, the population of Nairobi would be estimated at 2.3 million, with an urban population share of 27%.

Given the current rate of urbanization in the country it is expected that Kenya by the year 2OOO will have an estimated urban population of 9 million which will be about 25% of total population. As will be shown in this paper, in relation to health services, the maldistribution of resources within and between these centres continues to be one of the major policy measures for both now and the future.

Figure 3 - Selected urban centres in Kenya



Population	Centres	Total Populat.	Cumulative	% Cum.	% Total
500.000 +	Nairobi	834.500	834.500	35.83	35.83
200.000-499.999	Mombasa	341.500	1.176.000	11.66	50.49
100.000-199.999	Kisumu	150.400	1.326.400	6.46	59.95
50.000-99.999	Nakuru	92.600		3.98	60.93
	Machakos	84.300		3.62	64.55
	Meru	72.400		3.11	67.66
	Eldoret	50.200	1.625.900	2.16	69.82
30.000-49.999	Thika	41.300		1.77	71.59
	Nyeri	35.800		1.54	73.13
	Kakamega	31.800		1.37	74.50
	Kisii	30.700	1.765.500	1.32	75.82
20.000-29.999	Kericho	29.600		1.27	77.09
	Kitale	28.400		1.22	78.31
	Bungoma	25.100		1.08	79.39
	Busia	25.000		1.07	80.46
	Malindi	23.000	1.896.900	1.00	81.46
10.000-19.999	Nanyuki	19.100		0.82	82.28
	Webuye	17.600		0.76	83.04
	Embu	16.200		0.70	84.44
	Murang'a	15.300		0.66	85.10
	Garissa	14.100		0.61	85.54
	Narok	13.500		0.58	86.12
	Isiolo	11.400		0.49	86.61
	Nyahururu	11.200		0.48	87.09
	Naivasha	11.200		0.48	87.57
	Maralal	10.200		0.44	88.01
	Athi Riv.	10.000	2.048.700	0.43	88.44
5.000-9.999	22 Centres	156.000	2.203.000	6.71	95.15
2.000-4.999	41 Centres	125.800	2.238.800	5.40	100.5

Table 4 - Centres with population of over 2.000 - 1979 Census (Provisional)

Source : Based on Data from 1970 Population Census

	1979 (actual)		2000 (Based on 69-79 Growth Rates)		2000 (Based on 62-69 Growth Rate)	
	Popul.	% share of Urb. popul.	Popul.	% share of Urb. popul.	Popul.	%share of Urb popul.
Nairobi	828	36%	2.300	27%	3.500	41%
Mombasa	341	15%	700	8%	1.100	13%
Other Existing Centre	1.138	49%	5.100	59%	3.500	41%
New Urban	—	—	500	6%	500	6%
Total	2.307	100%	8.600	100%	8.600	100%
Percentage of populat. living in urban areas		15%		28%		28%

Table 5 - Urban growth projections to year 2000 (in 000'S)

(a) Assumed growth rate : Nairobi, 5,0%; Mombasa, 3,3%; Other centres : 7,4%
(b) As given in «Human Settlements in Kenya», pp. 88-95. The estimates shown are an average of the high and low projections for the major cities and genrally assume some diminuation of the 1962-69 growth rates.

Source : The World Bank, Kenya : Economic Development and Urbanization Policy Volume II Maint Report (Washington, M.C., IBR & D, 1982), p. 95

A number of factors are associated with this rapid expansion of urban population. First is the high rate of rural-urban migration flows which in turn results from the rapid increase in rural population. 8O% of Kenya's population is rural where fertility rates are high. For example the average completed family size has been estimated at more than 8 children. Moreover, more than half of this population i.e. 54% according to 1979 census, is under the age of 15 years. Thus most of these young people leave school at young ages but finding no viable Economic Opportunities in the already congested rural areas, most of them treck to the urban areas (Muganzi, 1978, Ominde, 1975 and 1986).

Rapid urbanization in the country is also attributed to natural rate of increase of population in the centres. According to the latest census and survey reports, the average urban total fertility rate is 6. Though there is some variation, this figure is considered too high for an urban area.

Equally important in the expansion of the urban process in Kenya are the extensive urban boundary changes which have brought large number of population in the urban centres. The inclusion of these people means over stretching the utilization of the limited urban

resources since most people will now claim the right to them. Most affected are such important facilities as health, schools, and other infrastructural services.

Before we focus on the distribution of the health services in the urban centres, a brief overview of the evolution of the existing health system is pertinent. As already pointed out, the development of the present health care system is closely related to the developmental framework and policies persued and implimented by the former colonial government. The historical fact that the best of the services were developed and preserved for the Europeans is best demonstrated here. The available evidence has it that health services, like schools, were provided separately for Europeans, Asians and Africans, in that order.

Hospitals were provided for in the urban areas and those settled by the non-African population. In the settlement areas, the governement hospitals were supplemented by private missionary hospitals located in the areas. The Asians also put up hospitals mainly in the urban areas to serve their community only. The health services for the Africans consisted of widespread health centres and clinics in the rural areas. They provided only curative services to the population which was directly involved in the production of food and services meant for the benefit of the white population. Also in the name of christianity, the missionaries set up widespread hospitals and dispensaries that now stand out as landmark of their symbol.

Medical facilities were also provided throughout the country in the regional administrative centres specifically to benefit the government officers who were in turn expected to effectively over - see the Africans contribution to the economy through tax collection and agricultural production. These are presently the provincial and district hospitals found in the district and provincial centres and which serve not only the resident urban population but also the whole population within the administrative area.

It is important to stress here that the government policy which has continued into the post independence era still emphasizes on more urban based hospitals and improvement and expansion of the existing ones.

Current Distribution of Health Services

The distribution and utilization of the medical services in the country can be examined at three levels. First, there is the government operated health care system which consists basically of hospitals providing mostly curative services. Most of these hospitals are based in the regional centres which also houses the government administrative machinery. They infact perpetuate the system as left by the former colonial rulers (Hartwig, 1975, Family Health Institute, 1978).

The second level of medical services consists basically of urban based and operated private complex hospitals as well as private individually run clinics and nursing homes. These are expensive hospitals whose services are mostly consumed by the rich and those others who can afford.

The third level of medical provision consists of the rural based hospitals and health centers operated and run by the missionaries. The government also provides curative services to the rural population through numerous Health Centres and Dispensaries.

The missionary health care system in the country has followed the denominational pattern of acceptance and establishment. Most of the hospitals were built where the people were willing to accept the new religion. Thus in the post independence period, the missionary health care system has been largely static facility based in the rural areas. However, the facilities are equipped and staffed better than comparable government service points. The focus of the system is the provision of basic curative services required in the rural and often in accessible areas, at a small fees.

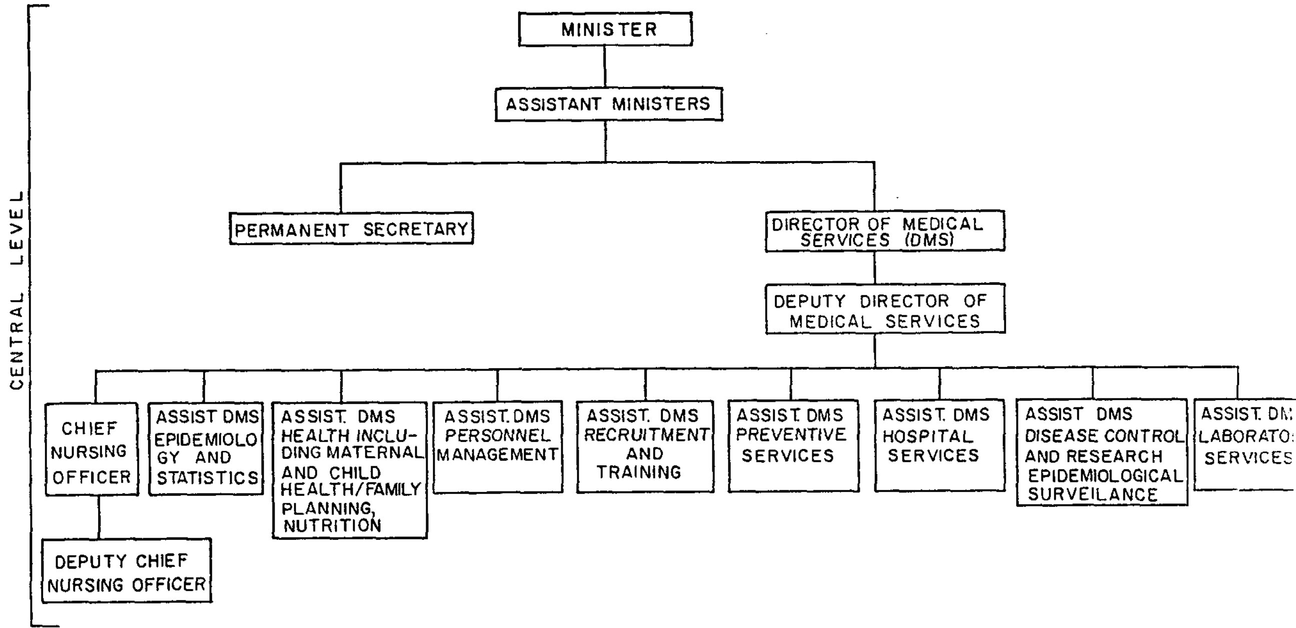
It suffice here to add that due to their efficiency, many urban based people even prefer travelling long distances to tap these services, than those provided by the government which are inadequate and those by the private clinics which are very expensive. The missionary hospital, in this regard serves a very important link between the urban and the rural areas.

For the purposes of this paper we shall focus on the first two categories of medical services, i.e. the government and private which are found and utilized in the urban centres.

The government health care system forms a strong hierarchical set up right from the rural health centre to the district and provincial hospitals and finally to Nairobi which acts as the national referral centre for all kinds of diseases and services. This hierarchy of the health care system is shown in figures 4 and 5. The centralized administrative nature of the system should be emphasised here since in terms of policy formulation and implementation all the decisions must trickle down from Nairobi to the health centre in a remote village, which is very inefficient and ineffective way.

Nairobi is not only the capital city for the country but it is also the country's major centre for administrative, socio-economic and political activities. In terms of health services, it houses Kenyatta National Hospital which is the national referral centre. As an extra province in the country, it has the responsibility of providing its residents with the required social amentities, health included. In playing the two roles, the city despite having large numers of other private hospitals, is indeed hard-pressed in the provision of adequate medical services to the residents. This basically due to the expensive nature of the private medical facilities and the pressure put on the available facilities as Kenyatta National Hospital as will be shown later.

The provincial and district urban based hospitals are supposed to serve both the urban and rural population within the dermacated administrative areas. The hospitals actually act as referral centres to the dispensaries and health centres within the district. Nevertheless most of health centres are so inadequately ill equipped that most people prefer travelling to the central hospitals.



Source: Molly Kisanje. Some Aspects of Population Growth and Health Services in Kenya: An Alternative Study for Health Care Delivery (Nairobi : University of Nairobi, Population Studies Centre, 1985)

Figure 4 - Chart of the ministry of health showing the administrative hierarchy

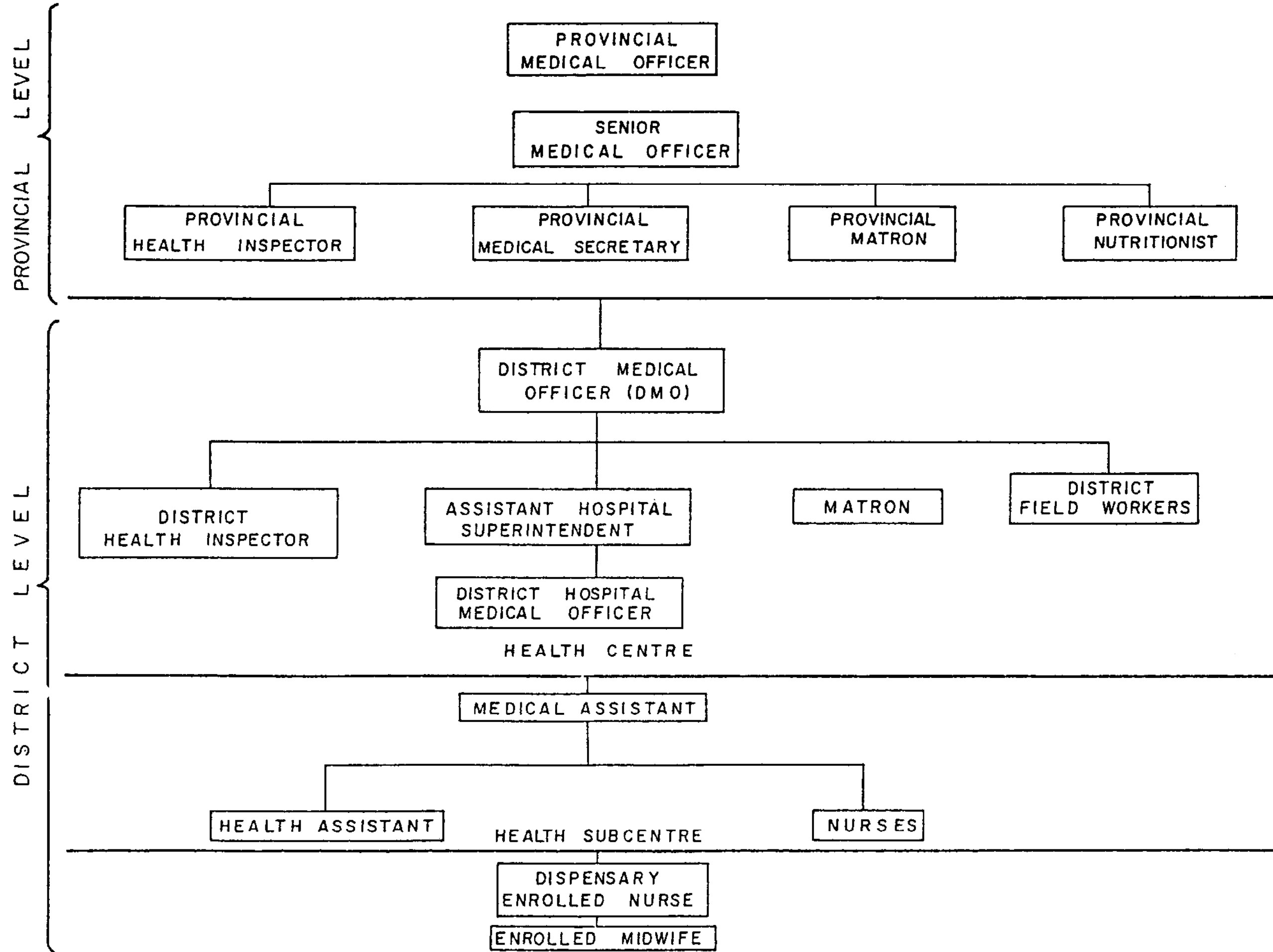


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Figure 5 - Chart of the provincial and district administrative hierarchy

It has been estimated that each hospital serves on average more than 68.OOO people. This proportion, however, varies from hospital to hospital in the districts and provinces. The increased use of these urban hospitals by the rural population has often led to shortage of most of the vital items including drugs, beds, etc... common characteristics of most of the pro''incial and district hospitals. This is made worse by the hierarchical nature of the system which introduces a lot of delay, in terms of supplies. Thus many of the urban residents composed mainly of civil servants usually resort to the private medical facilities though a little expensive.

The linkage between the district, provincial and the national hospital must be emphasised here. Most people whether urban or rural who utilize the hospital services usually move from one level to the other until possibly they reach Kenyatta National Hospital in cases of serious illness. This is because each level is supposed to provide better services than the lower ones. This is no doubt that the medical set up in the country is closely tied to the urban system. It would seem most of the hospitals serve as filters allowing those who cannot be cured at that level to pass on to the next one.

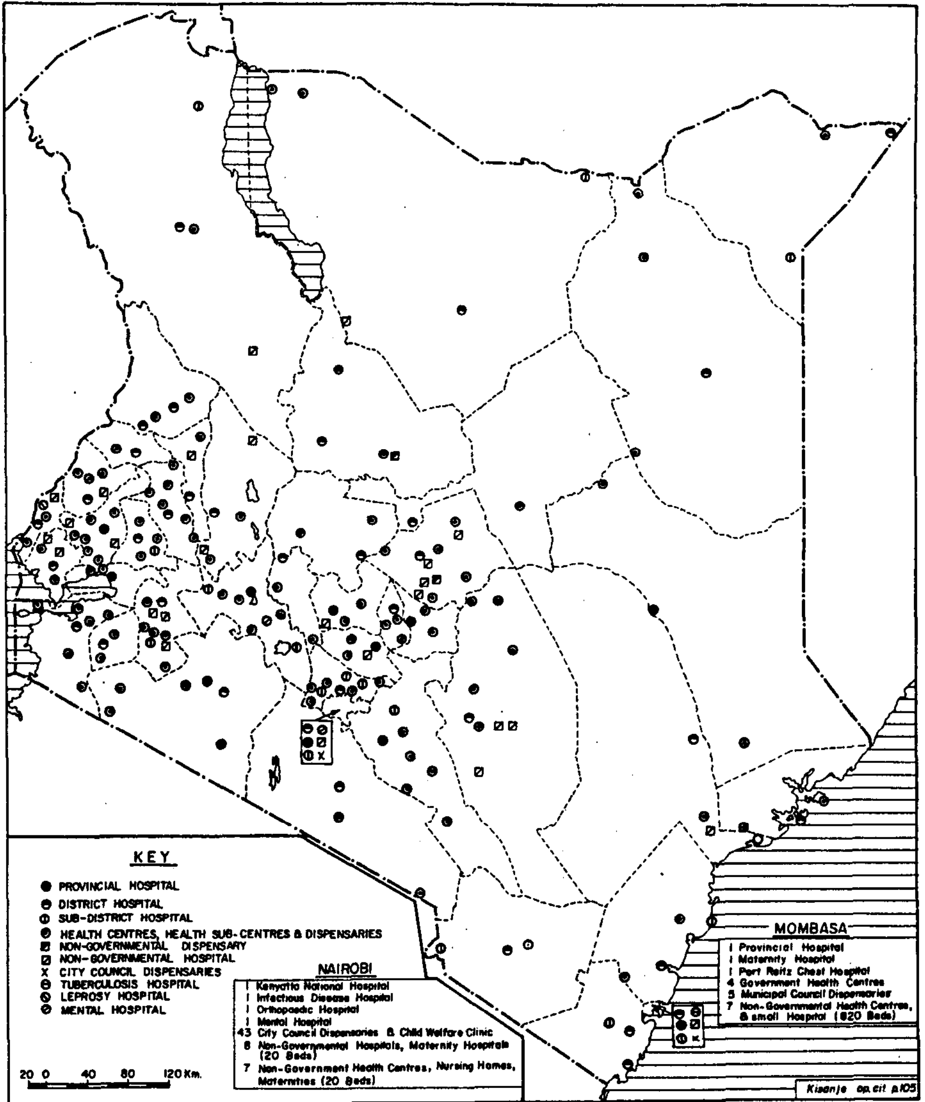
As already pointed out, the privately operated hospitals are found mainly in the urban areas. That this is so, is purely a historical factor. This sector consists of two levels.

First these are the large scale and complex metropolitan hospital services operated on the rules of the market place. The genesis of these hospitals is related to the historical racial segregation system propagated by the colonial government. Accordingly hospitals had been set up to serve separately the Europeans, the Asians and the other communities. The system flourished after independence because there was and still is a market among the African elite. These hospitals were and still are to be found in the major cities especially Nairobi, Mombasa, Kisumu and Nakuru (Figure 6).

The second level consists of a host of private clinics of varying sizes and capability usually owned by one or more doctors, most of whom are general practitioners. The thrust of the practice is curative medicine mostly in all major and medium urban settings where the market is large. Relatively, few people can afford the service of private doctors especially the specialised cadre. In most, the majority of the urban dwellers are poor with low income and the best they can do is maximise the use of the available governement offered services, which in turn means unpresented pressure on those resources.

As under the economic and socio-political structure of colonial times, the private sector tends to operate on a business basis. Characteristically, specialization is a growing tendency and is considered to be a necessary achievement in some hospitals. The doctors specialization requires specialised diagnostic and curative equipment. Consequently the holding of exceptional centres of excellence is already a reality and the norm. Surprisingly the government health man power development system in which specialists are produced at the expense of the public, inadvertently serves the goals of the private sector. In this way, the quest for equitable distribution of the quantity and quality of care cannot be met in this manner.

Figure 6 - Kenya medical facilities



Analysis

In the fore-going sections, we have stated that the distribution of the medical health care system in the country is closely tied to the urbanization process and pattern historically. The colonial developmental structures which gave emphasis on the welfare of the Europeans in large metropolitan centres have only gradually been changed in the post independence period. Both the urban and health care system are hierarchically interdependent.

One important aspect of the health care system is the emphasis put on the curative aspects at the expense of preventive measures. The emphasis was and is still on building and improvement of hospitals, aimed at curing diseases which could have been prevented in the first place. Most of the hospitals are largely urban based. These two factors imply that most people from the rural areas must come to the urban centres for treatment. Not only that, they must also compete with urban residents for these limited resources. The implication of the above set up is that while most people in the urban centres might have access to these health facilities, including the private operated ones, the utilization of such facilities is hampered by the competitions, as stated above. In order to capture the market gap between the two groups, i.e. the urban and rural, most private clinics are found located in these medium towns, since the rural people will come anyway and finding no alternative may result to their services.

According to available evidence, nearly three quarters of the total physicians are concentrated in the urban centres (table 11) although this is more so for the two major towns, Nairobi and Mombasa. This means most people will have to travel to an urban centre for treatment. Doctors are not found in Health Centres and dispensaries in the rural areas (Mburu, 1981 and 1982).

Furthermore, the concentration of private clinics and hospitals and doctors in the urban centres is perpetuated by the freedom given the doctors to determine the location of their private businesses. This freedom is even reflected in the maldistribution of physicians in the cities and could be seen as a handicap in serving population effectively (Figure 6).

Most physicians prefer working or stationing their private business in the urban centres for a number of reasons. Availability of services and facilities, especially communication and supplies. There is also the potential economic gain. Moreover no incentives are given to doctors to work in the rural areas unless they are in private capacity. Even so the type of training they go through is western oriented with emphasis on curative medicine and specialization in given areas.

Thus to maximise their area of specialization, most doctors prefer either to work in urban based hospitals or if in private business station themselves in urban centres where their services will most be required and sell highly. This departure into private business by government trained doctors, even further reduces their accessibility to the ordinary citizen for whom they were originally meant to help or serve.

Province	Physicians Number	%
Nairobi	583	44.1
Coast	132	10.0
Eastern	103	7.8
Central	141	10.7
Rift Valley	145	11.0
Nyanza	118	8.9
Western	81	6.1
North Eastern	18	1.4
Total	1.321	100.0

Table 6 - Physicians working in urban-based health institutions

Source : Ministry of Health, Nairobi

The case of Nairobi as the capital City, national referral centre as well as provincial city needs some emphasis. With an estimated population of 1.5 million people (C.B.S., 1985) who are ever on the increase, the pressure put on the available facilities is tremendous. Nairobi claims more than 4O% of the total number of doctors in the country. This is because it has the largest number of private hospitals in the country, houses the Kenyatta National Hospital which serves the whole national, and has the largest number of privately owned and operated clinics and nursing homes. The bed occupancy at Kenyatta for exemple, in any given twenty four hours is 1OO% such that unless it is absolutely necessary, most people will use the floor or share beds (Kenya, 1974 and 1979).

The availability of all those doctors and other medical facilities does not imply accessibility and utilization by the residents. Three quarters of Nairobi's population fall in the low income bracket where the available income, basically salary, is spent on housing, school fees, food and clothing. Both the private doctors and the hospitals are expensive, therefore inaccessible. Unless paid for by the company, which is rare for most low-grade workers, most people end up in Kenyatta making it even worse. For example, sometimes it takes more than two days for one to see a doctor although he will see him in the end anyway. Some of the private hospitals charge more than KSh. 5OO a day, even more. But most of the average workers earn between 5OO - 8OO.

Conclusions

It would not be far fetched to conclude that for most cases, since the existing health care system is largely determined by historical development framework which was externally oriented. Although attempts have been made to provide health care to the people, nevertheless most have remained on the periphery of the system. This is partly because no drastic changes have been taken towards the structural change of the health care system.

Major hindrances to the formulation of more effective health system would appear to be value system of the elite groups and agencies and the structures these produce. Attempts to solve priority problems among the largest proportions of the population leave much to be desired. In conflict between political necessity and economic reality, many problems have been avoided rather than solved. The problems do not disappear, they grow and magnify. The challenge in modern health care practice is to design systems that are not only fair and just to all but efficient and effective, itself not a small challenge.

The health care system in the country is highly centralised with major decisions made far away in the headquarters. The system places much emphasis on the curative than preventive services. Most of the hospitals supposed to serve the rural population are concentrated in the urban centres. It seems the policy of basing health facilities in the district and provincial headquarters in the hope of services trickling down to the village is a long gone colonial hangover. The dispensaries which are meant to reach the village population are inadequately equipped to do so. Most people trek to the urban centres to see a doctor.

The above reality is far from the government good intentions stated in the official documents (Kenya, 1974 and 1978). The rapid urbanization through rural-urban migration and boundary changes must be matched with appropriate structural changes in the provision of health services in the urban as well as rural areas.

Apparently, the government is well aware of this. Their awareness is reflected in the recently declared policy of the District focus for rural Development. The districts are expected to be self sufficient in the long run. If properly and effectively implemented, this will not only reduce the rural-urban on the delays in the bureaucratic tendencies of the present structures.

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