

REACHING THE PEOPLE: SOME ISSUES IN THE UTILIZATION OF SELECTED HOSPITALS IN ADDIS ABABA

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ABSTRACT

In Ethiopia, as in many countries, health care resources (institutions, manpower and money) are concentrated in a few major cities, and especially in hospital services. Such concentration increases the difficulties of providing accessibility to adequate medical care for the majority of the population as well as of developing a functional referral system. The study reviewed medical records and interviewed outpatients at eight of the thirteen civilian hospitals in Addis Ababa to determine who used the hospitals and how well the referral system worked. The data showed that between 70% and 76% of the outpatients attending these hospitals were from Addis Ababa itself and a further 14% were from Shoo Administrative Region. Numbers of referral were also low, despite the fact that hospitals in the capital are intended to be referral institutions. On the other hand, Addis Ababa health facilities absorb 33% of the country's recurrent health budget, 28% of the hospital beds, 51% of all physicians and 58% of all medical specialists. Contrary to the principles of primary health care, the hospitals are not reaching out to the people, rather, the people are trying to reach the hospitals. If this situation continues, achievement of "Health for All by the Year 2000" will be in question.

INTRODUCTION

The achievement of the social goal of "Health for All by the Year 2000", by means of the Primary Health Care (PHC) approach, requires among other things a more equitable distribution of and better accessibility to health care resources. However, in many countries at present health care institutions and manpower are concentrated in a few major cities. Ethiopia is no exception to this; Table 1 shows the high concentration of hospitals and health manpower in the capital Addis Ababa (1). Addis Ababa hospitals absorb most of the talent and resources of the health care system under the implicit assumption that hospital treatment is a better way of dealing with health problems. This assumption is however, being challenged by the primary health care approach, which requires -in principle -hospitals to become supporting institutions rather than the main focus of health care activities (2). Additionally, the proper functioning of a hospital system or any of its resources is dependent not only upon the adequacy of its resources but, more importantly, on the relationship of the hospital to the prevailing need for medical and health care. A well endowed hospital which is not effectively and fully linked in a two-way system of referral and support to this need for care will not be able to use its resources to the fullest effect. In such a situation, it is not uncommon to find highly qualified staff attending to minor illnesses and high -cost beds and technology being inappropriately utilized at the same time as out-patient clinics are grossly overcrowded. To avoid this, it is necessary to have a properly functioning system of primary health care closely supported by all levels of the national health care system (3). In Ethiopia, hospitals are divided into

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TABLE 1: Distribution of Health Resources, 1974 E.C.¹

Type	Total in Ethiopia	Total in Addis Ababa	
		Number	Percent
All health personnel	10664	2674	25.21
All physicians	504	258	51.2
All medical specialists	298	174	58.4
Hospital beds	10993	3041	27.7
Recurrent budget	78.3 million (birr) ²	24.9 million (birr) ²	33.0
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Note 1: Ethiopian calendar = 1981/82 Gregorian calendar

Note 2: 1 birr = approximately U.S.\$0.50.

three categories; central referral hospitals, which includes specialized hospitals in Addis Ababa; regional hospitals and medium/rural hospitals (I). The majority of hospitals in Addis Ababa are classified as central referral hospitals and, as such, their services should extend beyond their immediate catchment areas. Although very little is known about who exactly utilizes or benefits from the hospitals, it is believed that the hospitals play a significant role in providing services to people coming from very distant areas. This survey was conducted to test that belief and to suggest some ways of improving coverage and utilization by providing answers to the following questions:

1. What is the coverage of hospital services in terms of distance and utilization ?
2. Who is being served (age, sex, economic status, referral status etc.)?
3. What type of services are provided (curative, preventive etc.)?

In this paper only coverage of services and referral status are discussed; the authors hope to discuss the other questions in a later paper.

METHODS

The data were collected as part of a Ministry of Health survey conducted in eight of the thirteen civilian hospitals in Addis Ababa. Both general hospitals -Saint Paul's, Menelik II, Zewditu Memorial and Black

Lion, the main Addis Ababa University teaching hospital -and specialized hospitals - ALERT - All Africa Leprosy and Rehabilitation Training Centre, Amanuel Mental Hospital, Ethio-Swedish Pediatric Clinic, and

Ghandi Memorial Hospital (maternity) were included to provide a representative mix. No attempt was made to study the different specialized services within hospitals separately. Information was collected by statistical clerk trainees; they were closely supervised and the information gathered Was checked Two methods of data collection were used.

1. Patient Interviews: The statistical clerks interviewed all patients waiting for examinations in the outpatient

department every other day for two weeks, a total of six days in all, during Meskerem 1973 (Ethiopian calendar = September 1980 Gregorian calendar). Patients were asked about their utilization of traditional medicine, previous outpatient attendance, age, sex, etc. as well as their place of residence.

2. Medical Records Review: The statistical clerks also reviewed the medical records of outpatients in seven of the eight hospitals. Menelik Hospital was excluded from this part of the study because its recording system was inadequate. Ten percent of the medical records in four months of 1972 (Ethiopian calendar = 1979-80 (Gregorian calendar) were sampled, the middle month of each quarter being selected.

In both methods, a patient's address was classified as Addis Ababa or Shoa Administrative Region (the region in which Addis Ababa is located) or other administrative regions. The medical records review was

retrospective and it was therefore not possible to be completely sure of the accuracy of the records; however, a large enough number of outpatients were interviewed and, as will be seen below, the result of the two methods were sufficiently similar that the medical records can be considered reliable.

RESULTS

Interviews

Interviews were conducted with 5076 outpatients in the eight hospitals. Of these patients, 70.3% came from Addis Ababa, 16.6% from Shoa Administrative Region, and 13.1% from the twelve other administrative regions. The mental hospital, Amanuel, showed a somewhat different pattern in that only 48% of its outpatients gave Addis Ababa as their address. If Amanuel Hospital is excluded, 72.~!o of the outpatients attending the other seven hospitals came from Addis Ababa. The numbers and percentage distributions of outpatients interviewed at the eight hospitals are given in Table 2.

Medical Records Review

Medical records for 7218 outpatients were reviewed in seven hospitals. The medical records showed that 76.7% of the outpatients that attended the hospitals came from Addis Ababa, 11.4% from Shoa Administrative Region and the remaining 11:9% from the other administrative regions (Table 3). Again, the data from Amanuel Mental Hospital was quite different with 42.8% of its outpatients listed in the medical records sample coming from Addis Ababa. Excluding Amanuel Hospital, 79.7% of the outpatients at the other six hospitals came from Addis Ababa.

Referral of Outpatients

The study also assessed the referral status of outpatients, i.e. whether the person had decided on his own to come to a particular hospital or whether he had been referred by a health care institution at some level. For this assessment (shown in Table 4) only data from the interviews were used because the medical records did not include information on referral. Ghandi Hospital was omitted because the interviewers did not ask patients there if they had been referred. Overall, of the 4684 patients interviewed, 459 or 9.8% had been referred. This total was divided as follows: 7.1% (232 of 3275) of the outpatients from Addis Ababa were referred, as were 11.4% (90 of 787) of those from Shoa Administrative Region and 22.0% (137 of 622) of those from other regions. ALERT,

TABLE 2: Distribution of Outpatients -Interviews (1973 E.C.)¹

Hospitals	Address of Outpatients					
	Addis Ababa		Shoa Region		Other Region	
	Number	Percent	Number	Percent	Number	Percent
Alert	257	78.1	31	9.4	41	12.5
Amanueal	195	48.0	85	20.9	126	31.0
Black Lion	719	71.3	161	16.0	128	12.7
Ethio-Swedish	533	86.7	50	8.1	32	5.2
Ghandi	292	74.5	58	14.8	42	10.7
Menelik	625	56.7	286	26.0	191	17.3
Saint Paul's	479	70.9	132	19.5	65	9.6
Zewditu	467	85.2	42	7.7	39	7.1
TOTAL	3567	70.3	845	16.6	664	13.1

Note 1 :Interviewing was done in Meskarem 1973 Ethiopian calendar which equals September 1980 Gregorian calendar.

TABLE 3: Distribution of Outpatients -Medical Records (1972 E.C.)¹

Hospitals	Address of Outpatients					
	Addis Ababa		Shoa Region		Other Region	
	Number	Percent	Number	Percent	Number	Percent
Alert	410	77.7	47	8.9	71	13.4
Amanueal	164	42.8	64	16.7	155	40.5
Black Lion	1707	77.4	275	12.5	223	10.1
Ethio-Swedish	1147	88.2	92	7.1	62	4.7
Ghandi	479	81.5	73	12.4	36	6.1
Saint Paul's	886	65.0	224	16.4	254	18.6
Zewditu	742	87.4	49	5.8	58	6.8
TOTAL	5535	76.7	824	11.4	859	11.9

Note 1: Ethiopian calendar = 1979-80 Gregorian calendar.

TABLE 4: Distribution of Outpatients by Referral Pattern

Hospitals	Residence of Out patients								
	Addis Ababa			Shoa Region			Other Regions		
	Total Patients	Number Referred	Percent Referred	Total Patients	Number Referred	Percent Referred	Total Patients	Number Referred	Percent Referred
Alert	257	33	12.8	31	7	22.6	41	8	19.5
Amanueal	195	61	31.3	85	32	37.6	126	56	44.4
Black Lion	719	101	14.1	161	29	18.0	128	40	31.3
Ethio-Swedish	533	10	1.9	50	6	12.0	32	8	25.0
Ghandi	625	16	2.6	286	8	2.8	191	13	6.8

Menelik	479	9	1.9	132	5	3.8	65	6	9.2
Saint Paul's	467	2	0.4	42	3	7.1	39	6	15.4
Zewditu	3275	232	7.1	787	90	11.4	622	137	22.0

TOTAL REFERRAL

Hospitals	Total patients	Number Referred	Percent Referred
Alert	329	48	14.6
Amanuel	406	149	36.7
Black Lion	1008	170	16.9
Ethio-Swedish	615	24	3.9
Menelik	1102	37	3.4
Saint Paul's	676	20	3.0
Zewditu	548	11	2.0
TOTAL	4684	459	9.8

Amanuel and Black Lion hospitals had the highest proportions of referred outpatients. For example, 12.8% (33 of 257) of ALERT's outpatients who gave Addis Ababa as their address were referred, as were 31.3% (61 of 195) of Amanuel's and 14.1% (101 of 719) of Black Lion's. Amanuel Hospital had 37.6% (32 of 85) of its outpatients from Shoa referred; ALERT was second with 22 referred (although a very small number in total 7 of 31) and Black Lion third, with 100/0 (29 of 61). Black Lion had 128 outpatients from other regions of whom 40 (31.3%) were referred, Amanuel had 56 out of 126 (44.4%) referred, ALERT, 8 of 4 (19.5%) and the Ethio-Swedish Pediatric Clinic, 8 of 32 (25%).

DISCUSSION

The writers would like to stress that this study makes no attempt to provide information on all the factors that influence the utilization of services in Addis Ababa hospitals. Only two issues were considered: location, i.e. the home addresses of outpatients, and referral, that is, what proportion of the total outpatient attendance at selected hospitals in Addis Ababa came through the existing referral system.

The data in Tables 2 and 3 show that over 70% (interviews) and 76% (medical records), respectively, of the outpatients attending Addis Ababa hospitals are from within the city itself. The next highest attendance rate (14%) is by outpatients coming from Shoa Administrative Region and only came from the rest of the country. Both methods used in the study reveal that the overall numbers of people from outside Addis Ababa seeking treatment from Addis Ababa hospitals is insignificant and that attendance rates become lower and lower the further away people live. These findings agree with the findings of Maurice King that "in a developing country distance is a critical determinant of medical care, and it is widely realized that only those close to a medical unit can derive that full benefit from its services"(4).

An exception to these findings is the attendance rates observed at a particular kind of specialized medical care unit, i.e. Amanuel Mental Hospital. Both study methods showed proportionately high

attendance (52% and 57.2%, respectively) for Shoa Administrative Region and the other regions of the country combined. One might expect these results to be even higher were it not for the distances and the costs of travel involved.

As seen in Table 1, Addis Ababa's health facilities use 33% of the recurrent health budget, 27.7% of the hospital beds, 51.2% of all physicians and 58.4% of all medical specialists in the country. In contrast, the population of Addis Ababa is only 3.8% of the total population of Ethiopia and that of Shoa (excluding Addis Ababa) only another 16% (5). Given the concentration of health resources and the relatively small proportion of the overall population, and despite the difficulties involved in travel, it could be assumed that Addis Ababa hospitals should handle a large proportion of the cases that have to be referred from other health institutions. The true picture is different. The general hospitals -Zewditu, Saint Paul's and Menelik II have only 2%, 3% and 3.4%, respectively, of their outpatients referred to them, and one of the specialist hospitals, the Ethio-Swedish Pediatric Clinic, has only slightly more -3.9%.

On the other hand, Black Lion, ALERT and Amanuel receive relatively higher proportions of referred cases from Addis Ababa, Shoa and the other administrative regions, 16.9%, 14.6% and 36.7%, respectively. This is because Amanuel and ALERT are specialized hospitals to which there are few alternatives and Black Lion is the only fairly well organized hospital which provides medical, surgical, obstetrical and gynecological services, as well as a number of sub-speciality services, due to its being a training centre. At this point, Black Lion is functioning relatively better as a central referral hospital than are any of the other non-specialized hospitals although numbers of referrals remain limited.

Although a detailed study on the relationship between numbers of referred cases and the distance and difficulty of traveling is necessary for statistical validity, the findings of the present study indicate clearly that referred outpatients as a percentage of total outpatients increases with distance. Black Lion shows this especially clearly; -14.1% of its outpatients from Addis Ababa are referrals as compared to 18% of its outpatients from Shoa and 30.3% of those from other regions.

CONCLUSIONS

The study revealed that the hospitals in Addis Ababa provide services mostly to the nearby population. It also demonstrated that although major resources go into the so called referral hospitals in Addis Ababa, the existing referral system does not fulfill its intended function. In fact, the hospitals do not reach out to the people; rather, it is the people who try to reach the hospitals. In the primary health care approach, however,

the accessibility of services has to be measured not only by how they function at the community level but also by the degree to which more complex problems can be solved, and people requiring more complex care be treated, at higher levels of the health care system. Primary health care that is fully and universally accessible is thus a means to ensure that the whole health care system is used in a rational way (6). One sensible way of achieving this is to institute a strong referral process at the different levels of the system. This does not necessarily mean increasing the resources of Addis Ababa hospitals, but rather strengthening and expanding the health services outside of Addis Ababa so that they may serve the whole of the populations of their areas. To do this, it will be necessary to produce the required number of health personnel, improve management,

secure community involvement and use appropriate technology among other measures. Without such development, achievement of the social goal of "Health for All by the Year 2000" will be in question.

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