

## Original article

# Assessment of the user characteristics of the out-patient service of Jimma Hospital

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**Abstract:** A survey to assess users' characteristics of the out-patient (OPD) Service of Jimma Hospital (South West Ethiopia) was undertaken during 1-15 August 1993. A total of 1256 patients who reported to OPD services during the day and night, including emergency hours, were interviewed using a structured questionnaire to examine socio-demographic factors, reasons for hospital visit and others. Among the 1256 interviewed 76.6% were from Jimma town and 12.7% were referred from other health institutions, 52.9% were females; 63.5% were married; 7.3% have a family size of > 10 and 74.5% patients travelled for less than one hour while 2.6% travelled more than 12 hours to reach the Hospital. It was also found out that 11.8%, 49.3% and 11.8% sought medical help within 24 hours, 1-7 weeks and 12 weeks, respectively. Age, sex and inefficient referral system were found to have significant effect on the utilization of the OPD services of Jimma Hospital. [Ethiop. I. Health Dev. 1996;10(2):111-115]

## Introduction

The achievement of the global goal of health for all by the year 2000 by means of the primary health care (PJIC) approach requires, among other things, equitable distribution and better acceptability of health care resources(1,2).

In Ethiopia, as in many other developing countries, health care resources are concentrated in major cities (especially hospitals); worsening the problem of accessibility and adequate medical care(3). Hospitals do absorb most of the talents and this has got an impact on usage behaviour of attendants of the existing service. Eventhough people have access to hospitals, they are not able to use the available resources because of constraints like lack of money etc. (3), thus making the use rate lower. This has a great impact on proper utilization of health institutions as can be seen from the present allocation (of resources and the resulting absence of care for those who already have physical access.

The proper functioning of a hospital system depends not only on the adequacy of its resources but more importantly on the efficiently linked two way referral system with lower level health institution (4, 5). This

would enable a hospital system to give the necessary support & care and use its resources effectively. Otherwise, highly qualified staff would be attending minor illnesses and the available technology would be inappropriately utilized and the out-patient services grossly overcrowded (6, 7, 10).

The present unsatisfactory pattern of allocation of resources and the resulting absence of care even for those who already have reasonably adequate physical access would create a two tier system: one for those with access to an expensive high technology system and the other for the rest of the population. As Tanahashi(7) and MOH Ethiopia(1,6) noted in the Primary Health Care review, in order to alleviate the discrepancy it is necessary to have a properly functioning system of PHC,

closely supported by all levels of national health care system. Okubagzi(4) also indicated in the Gondar study that the actual utilization of OPD service by patients can possibly indicate the status of service consumption and provision at large. Therefore, this study was undertaken to determine the user characteristics of Jimma Hospital OPD as a baseline. Though it is not exhaustive or sufficiently representative it could initiate further research .

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## **Methods**

The population in this cross-sectional study consisted of 1256 out patient service users who reported during 1-15 August 1993, at Jimma Hospital (South West Ethiopia), a teaching hospital found in Jimma Zone with a population of about 2, 7 million. Health services of the Zone are delivered by one hospital, one health centre, six health stations and 35 community health posts that are not sufficient enough to serve the majority of rural population (89% ). The hospital offers comprehensive general and specialized health care services and is currently staffed by physicians and other specialists providing general curative outpatient and inpatient services, on average, the hospital serves 2310 new and 4065 repeat patients per month(8) , The hospital is the only institution that renders specialized service in the Jimma zone.

The information for this study was collected using a structured questionnaire. Interviews were conducted with patients who responded after providing their consent. For those patients who were seriously ill, the questionnaire was modified and the interview was conducted with the persons accompanying the patients to the hospital and who were usually persons from the patients' homes. His or her natural mother, stepmother, or tutor were interviewed in the case of children. Those patients who were critically ill and not accompanied by relatives, and all those reported to the hospital for delivery services and those who reported for the second time for medical or other appointment' within the study period, were excluded from the study. The variables collected included age, sex, occupation, period of illness, reason for hospital visit and other socioeconomic variables. For convenience, travelling time was recorded by the time taken to walk to the hospital (estimated 1 hour walk = 6 km.) and income was enquired and recorded in Ethiopian Birr (1 US = 6.25 Birr). The patients were interviewed by eight senior medical students who were made familiar to the data collection instrument, and were supervised by the investigators. The data were compiled and analyzed using descriptive techniques and statistical significance of differences between groups were tested by the Chi-square test.

## **Results**

A total of 1256 OPD patients were interviewed. The majority of these (47.6%) were within the age group of 5-14 (26.4%) and 15-24 (21.2%) years, respectively, (Table 1). More females (52.9%) than males (47.1%) were found to utilize the services but the difference is not statistically significant. ( $p > 0.05$ ).

Their income ranged from < 100 Birr (18.3%) to > 500 Birr (1.7%) per month while 44.5% and 1.7% earned 100 -300 and > 500 Birr monthly, respectively. Also, 76.6% of the patients were from Jimma town, 9.8% were out of Jimma town but within the Jimma Zone, and 13.6% were outside of Jimma Zone (Table 2).

Travelling (walking) time of patients to the hospital was determined and 74.5% have travelled less than one hour while 2.6% travelled greater than 12 hours (Table 2). The majority (88.2%) sought medical advice within one to 84 days of the first sign and symptom, while 11.8% sought medical help within 24 hours. Prior to arrival to the hospital 69.3% and 7.7 % had received treatment from government health institutions (health centres health stations) and others (drug vender shops, traditional healers) respectively (Table 2). The frequency distribution of the reasons to attend the hospital OPD service at the time of the study shows 81.4% said that their illness could be treated at a hospital level while 3.8% and 2.1% reported lack of nearby health institution and incompetent health personnel, respectively, (Table 2). Table 1: Age-sex distribution of hospital service users, Jimma Hospital, 1993

Age Group	Sex		Total
	Male	Female	
0-4	112(8.9)	126(10.0)	238(18.9)
5-14	144(11.5)	187(14.9)	331(26.4)
15-24	132(10.5)	134(10.7)	266(21.2)
25-34	69(5.5)	82(6.5)	151(12.0)
35-44	60(4.8)	59(4.7)	119(9.5)
45-54	60(4.8)	59(4.7)	119(9.5)
>64	15(1.2)	17(1.4)	32(2.5)
Total	592(47.1)	664(52.9)	1256(100)

Table 2: distribution of service users by monthly income, residence and time taken to reach the hospital, Jimma Hospital, 1993.

Income in Birr	Number	%
Income in Birr		
Less than Birr	126	18.3
101-300	306	44.5
301-500	109	15.9
>500	12	1.7
Unknown	134	19.5
Total	687	100.0
Residence		
Jimma Town	962	76.6
Outside the town but with in Jimma Zone	123	9.8
Out side Jimma Zone	171	13.6
Total	256	100.0
<b>Time (hours)</b>		
Less than 1	936	74.5

1-6	241	19.2
7-12	46	3.7
>12	33	2.6
Total	1256	100.0

Table 3: OPD service users by duration of sickness, place of prior treatment and reason for attendance, Jimma Hospital, 1993.

<b>Duration</b>	<b>Number</b>	<b>%</b>
Within 24 hours	148	11.8
1-7 days	620	49.3
1-4 weeks	245	19.5
5-12 wks	95	7.6
>12 wks	148	11.8
Total	1256	100.0
<b>Place of treatment</b>		
Health Station	363	28.9
Health Centre	447	35.6
Hospital	61	4.9
Drug Vender Shop	86	6.8
Traditional Healer	11	0.9
No treatment received	288	22.9
Total	1256	100.0
<b>Reason</b>		
Illness only treated at hospital level	1023	81.4
Near health institutions not competent	26	2.1
Referral	156	12.7
No health inst. near residence	48	3.8
Total	1253	100.0

## Discussion

The study was undertaken within a short period of time and has many limitations like, lack of seasonality, short duration of observation, etc. , but it strengthened an earlier similar study in Gondar (4) which indicated that the number of service attendance is lower during the farming or rainy season than other seasons. Earlier reports the Ministry of Health(1,6) showed high prevalence of disease (33% ) and attendance in the age group 0-4, but in this study only 18.9% of children under five years of age found to use the OPD service. Okubagzi's report (4), indicates the need to intensify health care services for this age group, as also was indicated in other reports (9, 10).

The majority (53% ) of patients were females unlike in the other reports made by MOH(6) and Okubagzi(4). This difference could be explained by the high proportion of females utilizing the service and/or as indicated in a WHO report(11) females are the one's who consume more health services because of prevalent pregnancy and delivery-related health problems. This needs further study. Students consumed 40.4% of the OPD service, which could be explained by their better awareness about health and disease among student population.

Patients with-unknown income (19.5%) and those with income of less than 100 Birr (18.3%) together are the next higher users of the OPD service to the income group of 100- 300 Birr (44.5%). This finding is similar to other studies done in Gondar and elsewhere (4,3).

Most of the health services (76.6%) are utilized by those patients from Jimma town, the self referred cases who overcrowded the hospital, which is a norm in other parts of the country ( 12, 17) .Eventhough there are about 57 health institutions (health centers and health stations) in this Zone(8), only 12.1% hospital service users were referred from health stations with incomplete referral papers, indicating the need to strengthen the referral and information system as it has been stressed by others (12, 13, 14,15, 16). The majority (88.2 % ) of patients reported to the hospital after more than one week of illness. This delay in seeking early medical help could be because of wrong perceptions towards health institutions and/or lack of health awareness as reported elsewhere (6, 7), or trial of other medical sources (Table 3) and/or long travelling distance, (Table 2).

The findings of this study have highlighted that the medical care of Jimma Hospital did not go much beyond Jimma town. The integrated under-five child health services appear under-utilized and the referral system needs to be strengthened or reorganized. Not benefiting from the available health care services could with other factors, lead to a poor health status, a poor quality of life and a reduced life expectancy. This very often depends on the health care service management and personnel who are expected to provide equitable and comprehensive health care to all, which is a basis for the global goal "Health for all by the year 2000" Eventhough our study is generalised and not exhaustive, due to shortage of observation time, there is a need to strengthen the present health care, particularly the referral system, to attract more clients. A rough forecast of the future of health care from the point of view of components of service delivery, the service offered, financing (payment), method of service delivery, consumers served, results achieved, etc. should be assessed and strengthened.

Finally we recommend more similar research in different seasons of the year to determine the characteristics of the users of the health services provided, service acceptance and satisfaction.

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