

Research Article

The Utilization of Health Services among Poor Households with User Fee Payment Waiver Certificate in Gamo Gofa Zone, Southern Ethiopia

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ABSTRACT

Introduction: The introduction of user fees for health care in low income countries often try to remedy inequalities in healthcare utilization by putting in place safety nets in the form of exemptions and waivers. Examining the performance of such mechanisms contributes to understanding the efforts of closing the gap between the haves and the have-nots in the use of health services.

Methods: Community based cross-sectional study was conducted in 633 randomly selected households in five districts of Gamo Gofa *Zone* (an administrative structure between region and district). Data collected using an interviewer-administered questionnaire developed after reviewing relevant literatures; especially South Nations, Nationalities and peoples' regional health bureau, health care financing check-list. Multivariable logistic regression analysis was performed. P-value less than 0.05 and 95% confidence intervals were used to determine association between dependent and independent variables.

Results: More than half (59.6%) of fee-waiver-certified households have utilized health service from government health service organizations. Shortage of drugs and procedures (therapeutic and diagnostic) at the public health facility [AOR=2.58 (95% CI: 1.18, 5.63)], referral to a higher level [AOR=5.95, 95% CI: 2.63, 13.46] and households cost of transportation and other non-medical costs [AOR=5.27 (95% CI: 2.33-11.95)] and were significantly associated with not utilizing health services' by those households included in user fee payment waiver scheme.

Conclusion: More than one third of the beneficiaries did not utilize their exemption for health services use in public health facilities. They fail to use this opportunity as a result of shortage of drugs and procedures in public health facility, challenge of high non-medical costs, and limited applicability of poverty certificate.

Keywords: Waiver; Health services; Gamo Gofa; Ethiopia

Introduction

In response to shortage in public financial resource for government health services, low income countries around the world have adopted formal or informal systems of user fees for health care [1]. User fees were introduced in many African countries during the 1980s with the assumption that, it would increase needed funds for health facilities to improve access to quality health services. However, the introduction of user fees is frequently followed by concerns about access to health services by the poor [2,3].

More than three decades since user fee introduction, it is usually argued that "user fees have done more harm than good" [4]. It is said that user fees adversely affect demand for health services while generating little revenue. The poor and other vulnerable groups who need health care are affected by the shortcomings of high reliance on user fees and other out-of-pocket expenditures on health which are both impoverishing and provide a financial barrier to needed care [4,5]. Governments often try to remedy inequalities in healthcare by putting in place safety nets in the form of exemptions and waivers in the user fee system. However, utilization of health service by waiver beneficiaries is usually very hard to those countries that have adopted waiver scheme [6,7].

The Federal Democratic Republic of Ethiopia (FDRE) approved a healthcare financing reform strategy in 1998. User fee payment waiver schemes which was one of the components of health care financing strategy was designed to entitle citizens who can present evidences ascertaining the fact that they cannot afford to pay for health services [8-10]. Implementation manuals, proclamations, and regulations regarding fee waiver serves have been developed and distributed using the national proclamation, the latter which assures the poor to access all packages of health care base on need and not the ability to pay [9-11].

However, the implementation manual and the regulation are incomprehensive in terms of health services and failed to address the referral linkages. The main objective of this study, therefore, was to explore the utilization of health services among poor households granted with user fee payment waiver certificate in Gamo Gofa *Zone*, Southern Ethiopia. The study tried to answer two specific questions: (1): Do the poor with user fee waiver certificates in Gamo Gofa *Zone*, Southern Ethiopia, access all the exempted healthcare services? (2) What are the factors that determine the utilization of health services among the poor who have already been granted a poverty certificate?

Methods

Study design and setting

A community-based cross-sectional study was conducted in Gamo Gofa *Zone* one of the 15 *zones* District in South Nations, Nationalities and Peoples Region (SNNPR) with a total population of 1.8 million. Its capital city is Arbaminch located 505 km south of Addis Ababa, the capital city of Ethiopia. The *Zone* is sub-divided into 15 districts and 2 town administrations. There are 3 public hospitals and 68 health centers in the *Zone*.

Study participants

Five districts were randomly selected out of the 15 districts in Gamo Gofa zone. Two rural *kebeles* (the lowest level of government structure which is responsible for the district administration) in each selected district were randomly selected. Accordingly, a total of 10 *kebeles* were included in the study. The list of beneficiaries (households having poverty certificate) in each of the selected *kebeles* were obtained from their respective district health office.

Census was conducted prior to the actual data collection in line with the beneficiary list from the district health offices to identify those households which had at least one sick individual during the previous one year before the study. From the census result, a second list of beneficiaries (the sampling frame) containing those households that had poverty certificate and with at least one sick individual during the last one year was prepared for each of the *kebeles*.

The sample size was calculated using single population proportion formula with the following assumptions; $Z\alpha/2=1.96$, margin of error=5% and proportion of beneficiaries of free health care at a public health facility=25% [12]. The final sample size was determined to be 633 after multiplying the product with a factor of 2 to compensate for the design effect and adding 10% for possible non-response. Then, proportional amount of participants were allocated to each of the 10 *kebeles* and the households to be included in the study were identified from the sampling frame using simple random sampling.

Data collection tools and procedures

Interviewer administered questionnaire was prepared after review of relevant literatures and the health care financing supervision checklist of SNNPR Health Bureau. The tool was initially prepared in English and translated into the local languages (Amharic and Goffigna). The tool was pretested on 5% of the sample among households of a *kebele* not included in this study. During the pretest clarity, length, consistency and skip patterns of the questionnaire were checked and corrected, as appropriate. The respondents were preferably head of households. Whenever the heads were unavailable, spouses were interviewed.

Data analysis

After data collection, each questionnaire was checked for completeness, entered, cleaned and analyzed using SPSS version 16.0. Descriptive statistics such as frequency distribution and cross tabulation were generated. All variables with p-value less than 0.25 in bivariate analysis were considered as candidates for multiple logistic regressions analysis. Multivariable logistic regression analysis was done to identify significant predictors. Significant independent predictors were declared at 95% confidence level and P-value of less than 0.05 and adjusted odds ratio was used for interpretation.

Ethical considerations

Ethical clearance was obtained from the Jimma University College of Public Health and Medical Sciences Ethical Review Board. Also permission was obtained from SNNPR Health Bureau, Gamo Gofa *Zone* administration, and the district administration. Verbal consent was obtained from the respondents prior to interview. Finally, all the data obtained in the course of the study were confidentially stored.

Results

Characteristics of the study participants

A total of 633 households were included in the study. Most of the households (88.3%) were from rural areas. Of the total respondents, 331 (52.3%) were females and 248 (39.2%) of the respondents were above 50 years. 285 (45.0%) of the responders in this study were protestants and 364 (57.5%) were Gofas by ethnicity. Regarding educational status, 449 (70.9%) respondents cannot read and write and 138 (21.8%) attended grade 1-6. Out of the total households, 405 (64%) had family size less than five with the family size ranging from one to ten. 325 (51.3%) of the respondents were farmers and 146 (23.1%) were house wife (Table 1).

Health care seeking behavior

All the studied households had at least one member ill during the reference period. Out of the 633 households 546 (86.3%) had at least one person who visited health institutions during the reference period. The remaining 87 (13.7%) households did not have any member who visited a health institution during that period. From those who failed to visit health institution at the time of illness 44 (50%) mentioned non-medical costs (like transportation, pocket money for food and all lodging cost) as a reason for not seeking health care while distance was a factor for another 30%. Moreover the remaining 20% didn't seek the service because of previously made miss treatment (8%), fear of social stigma (9%) and they dislike modern treatment (3%).

Health services utilization among patients who visited health facilities

The study findings showed that out of the 546 households which had at least a member who visited a health institution, 452 (82.8%) received the health services they sought. The remaining 94 (17.2%) did not obtain the health services because of different reasons (Table 2).

Of the 452 respondents who received health service, 75 (16.6%) users made some sort of payment for the health services

Table 1: Socio-demographic characteristics of fee waiver beneficiary households in Gamo Gofa Zone, Southern Ethiopia, 2012.

Characteristics	Category	Frequency and Percent (%)	
Sex	Female	321	52.3
	Male	312	47.7
Age (in years)	15-24	37	5.8
	25-50	228	36
	>50	248	39
	Do not know age	120	19
Religion	Protestant	285	45
	Orthodox	282	44.5
	Catholic	35	5.5
	Muslim	31	4.9
Educational status	Beyond grade 12	11	1.7
	Grade 7-12	35	5.5
	Grade 1-6	138	21.8
	Cannot read and write	449	70.9
Marital status	Married	374	59.1
	Widowed	90	14.2
	Divorced	69	10.9
	Single	68	10.7
	Separated	32	5.1
Family size	5 or more	228	36
	Less than 5	405	64
Ethnic group	Goffa	364	57.5
	Gammo	190	30
	Others*	79	12.5
Occupation	Farmer	325	51.3
	Housewife	146	23.1
	Daily laborer	82	13.3
	Merchants	56	8.8
	Other**	24	3.4
Living area	Rural	560	88.5
	Urban	73	11.5

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Table 2: Reasons for not receiving health services at health institutions on the day of visit among waiver beneficiary households in Gamo Gofa zone, Southern Ethiopia, 2012.

Reason for not receive health services	Frequency (%)
Unavailability of drugs and procedures	38 (40.4)
Referral to higher level health institutions	49 (52.1)
Fear of social stigma	5 (5.3)
Difficult bureaucracy at the health facility	2 (2.2)
Total	94

despite having the poverty certificate. Shortage of drug and referral to other health facilities were the most common reasons for making payment. During the absence of drug in the facility they were forced to buy the necessary drug from private drug stores. Moreover, since poverty certificate is valid in few facilities, the users are less likely to be served free in the existing referral linkage. The majority 253 (56.0%) paid from out-of-pocket, while 16 (21.3%) were supported financially by relatives. In general, 377 (59.6%) of the beneficiaries of fee waiver policy received free health services in Gamo Gofa *Zone* during the reference period.

Factor associated with use of free health services

Bivariate logistic regression analysis was conducted to identify candidate variables for the final multiple logistic mode at p-value less than 0.25. Variables like respondents age, marital status, shortage of drugs and procedures, previous encounter of mistreatment as a 'free patient', high non-medical cost, poverty certificate restriction to a single health institution and family size have met the criteria and identified as candidate variables for the final model.

Multiple logistic regression analysis revealed that shortage of drugs and procedures (absence of both diagnostic and therapeutic), high non-medical costs, and referral to a higher level were predictors of use of fee waiver for health service.

Accordingly, beneficiaries who visited a health institution that encountered with shortage of drugs and procedures during the time of visitation were 2.58 times more likely to be unable to use waived health services than those who visit health institution at which drugs and procedures were available [AOR=2.58, 95% CI: 1.18-5.63]. Similarly, beneficiaries who were referred to other health institutions were nearly 6 times more likely to not use waived health services than those who were not referred [AOR=5.95, 95% CI: 2.33, 11.95].

Majority of the respondents encountered the challenge of high non-medical costs. Households that reported the challenge of high non-medical cost while using free health care were over 5 times more likely to not utilize fee waiver health services than households that did not encountered this challenge [AOR=5.27, 95% CI: 2.33, 11.95] (Table 3).

Discussion

The study findings showed that socio-demographic, socioeconomic and behavioral characteristics were the determinants of using fee waiver for health services. The study tried to find the utilization of health service among waiver beneficiaries [13-17].

It was revealed that 59.6% of participants with poverty certificate utilized health services for free. This is higher compared to the findings reported from Tanzania (26%) and Zambia (10%) [2,18]. This may partly be explained by the difference in the waiver policy the countries are implementing. While Ethiopia is implementing direct targeting the other two countries follow characteristic targeting mechanism.

One in ten of the respondents made payment for health services despite having poverty certificate. The reason for payment includes shortage of drugs and absence of both diagnostic and therapeutic procedures in accordance with the agreement signed with health institutions usually resulting in referral to other health institution. Moreover, waiver patients

Table 3: Reported barriers for the use of fee waiver for health services in Gamo Gofa zone, Southern Ethiopia, 2012.

Barriers	Number (%)
Unavailable drugs and procedures	220 (24)
Poverty certificate is valid only in few health facilities	182 (20)
Non-medical costs (mainly transportation and food)	180 (20)
New family members cannot use the certificate	62 (7)
Social stigma	50 (5)
Difficult bureaucracy at the health facility	41 (4)
Previous encounter of mistreatment as a 'free patient'	148 (16)
Health institutions are very far (distance)	39 (4)

Table 4: Predictors of health services' utilization among fee waiver beneficiary households in Gamo Gofa Zone, South Ethiopia, 2012.

Variables		Received free health care		Crude OR (95% CI)	Adjusted OR (95.0% CI)
		Yes	No		
Age	15-25*	90	45	1.00	1.00
	26-50	156	75	0.34 (0.14,0.86)	0.94 (0.24, 3.65)
	>50	131	136	0.72 (0.41,1.28)	1.51 (0.37, 6.06)
Marital status	Married	256	126	0.21 (0.02,1.61	0.7 (0.21, 2.25)
	Unmarried	75	89	0.11 (0.15,0.96)	1.94 (0.34, 10.83)
	Divorced	25	17	0.59 (0.059,6.06)	1.27 (0.43, 3.80)
	Widowed	15	13	0.15 (0.018,1.18)	1.06 (0.12, 9.26)
	Separated*	6	11	1.00	1.00
Shortage of drugs and procedures	Yes	223	219	6.88 (3.99,11.85)	2.58 (1.18,5.63)
	No*	161	37	1.00	1.00
Previous encounter of mistreatment	Yes	186	237	19.47 (8.85,42.81)	94 (0.16, 5.52)
	No*	191	19	1.00	1.00
High non-medical costs	Yes	251	233	11.85 (6.68,21.02)	5.27 (2.33,11.95)
	No*	126	23	1.00	1.00
Referred to a higher level	Yes	327	163	5.96 (3.44,10.33)	5.95 (2.63,13.46)
	No*	50	93	1.00	1.00
Family size	<5	224	67	1.78 (1.01,3.11)	2.00 (0.74, 5.39)
	5 and more*	153	189	1.00	1.00

*reference category

preferred paying for health services because they perceived better quality of paid health services, fearing social stigma and previous experience of mistreatment by service providers. Similarly, a community based assessment on equity implications of health sector user fees in Tanzania showed that the majority (74%) of the households with free healthcare card do not have access to a health facility [18]. The barriers for use of health services were unaffordable costs of transport, differential treatment of paying and waiver, limited availability of drugs and medical procedures in the public health facilities that forced waiver patients to purchase drugs from private vendor and the fear of social stigma.

Shortage of drugs and absence of diagnostic and therapeutic procedures were found to be potent predictors of use of fee waiver for health service. Similar findings were reported by a study conducted in Tanzania [18]. This relates to the fact that the signatory health centers have relatively lower capacity to purchase drugs and deliver limited packages of health service. Thus they refer many patients to other higher health facilities which oblige the waiver patients to pay for health services.

Majority of households in this study reported the challenge of high non-medical costs while using fee waiver for health services. Following a similar finding a study from Kenya recommended that the poor should not only be waived for user fees but also be reimbursed for their access costs to health care including transportation, lodging, food costs, and opportunity costs [2,19]. The situation in the current study is even more serious since the poverty certificates are valid only in a single health facility which may preclude the use of services from a nearby health facility. The effect of non-medical costs on the use of waived health services was found to be greater for households with larger family size. The study findings indicated that households having a family size of five and more had lower possibility of utilizing waived health services than households having family size less than five.

All the findings presented in this report have to be interpreted with due consideration of the possibility of recall bias since respondents were required to remember events which happened during a period of one year.

Conclusion

In this study, nearly two third of the beneficiaries possessing poverty certificate utilized free health services at public health facilities. District administrations conclude reimbursement agreement with one health facility in the district as a result the applicability of poverty certificate is restricted (limited) to a single government health facility in each district. Shortage of drugs and procedures in public health facility, the challenge of high non-medical costs, and referral to a higher level facility highly influence the utilization of health services by people with fee waiver certificates.

Establishing follow-up mechanisms to ensure the use of health services by the poor is required even after granting waiver certificates. Policy makers should revisit the restriction of the contract agreement by the district administration to a single health facility. This will enable the beneficiaries to use health services in an alternative health facility when shortage of drugs and medical procedures is encountered in health facility. Moreover, households could visit nearby health facilities thereby reducing the non-medical cost incurred which was found to be a significant barrier in this study.

Competing Interests

The authors declare that they have no competing interests.

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