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 have 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)] 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; $Z_{A/2}$=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%) of the 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
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.

| 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)               |
|                          | Protestant | 285 (45)                  |
|                          | Orthodox   | 282 (44.5)                |
| Religion                 | Catholic   | 35 (5.5)                  |
|                          | Muslim     | 31 (4.9)                  |
|                          | 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)                 |
|                          | Single     | 68 (10.7)                 |
|                          | Separated  | 32 (5.1)                  |
| Family size              | Less than 5| 405 (64)                  |
|                          | 5 or more  | 228 (36)                  |
| Ethnic group             | Goffa      | 364 (57.5)                |
|                          | Gammo      | 190 (30)                  |
|                          | Others*    | 79 (12.5)                 |
|                          | Farmer     | 325 (51.3)                |
|                          | Housewife  | 146 (23.1)                |
| Occupation               | Daily laborer | 82 (13.3)            |
|                          | Merchants  | 56 (8.8)                  |
|                          | Other**    | 24 (3.4)                  |
|                          | Rural      | 560 (88.5)                |
| Living area              | Rural      | 73 (11.5)                 |
|                          | Urban      | 73 (11.5)                 |

Table 1: Socio-demographic characteristics of fee 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             |

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.

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).

| 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 3: Reported barriers for the use of fee waiver for health services in Gamo Gofa zone, Southern 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)    |
| 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

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

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 procedures (absence of both diagnostic and therapeutic) usually resulting in referral to other health institution. Moreover, waiver patients...
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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**References**

1. Steinhardt LC, Peters DH (2010) Targeting accuracy and impact of a community-identified waiver card scheme for primary care user fees in Afghanistan. BMC. 9:28.
2. Bitran R, Giedion U (2003) Waivers and exemptions for health services in developing countries. Washington DC, World Bank.
3. George WK, Francis K (2002) Exemptions and waivers from cost sharing: Ineffective safety nets in decentralized districts in Uganda. Health Policy Plan. 17:64-71.
4. Carla Y (1993) Willis Abt Associates Inc.Means testing in districts in Uganda. Health Policy Plan. 17:64-71.
5. Witter S (2005) An unnecessary evil? User fees for healthcare in low-income countries, save the children -UK.
6. Fairbank A (2008) Improving quality of service and adjusting user fees at Ethiopian government health facilities.
7. Gwatkin D (2005) For whom to buy? Are free government health services the best way to reach the poor? Spending Wisely: Buying Health Services for the Poor. A Preker, J. Langenbrunner. Washington DC, World Bank.
8. FMOH (2010) Health Sector Development Plan (HSDP) Mid Term Review, 2005 EFY (2013 GC). Addis Ababa, Ethiopia.
9. Barnett I, Tefera B (2010) “Poor households’ experiences and perception of user fees for healthcare: A mixed-method study from Ethiopia”, Young Lives, University of Oxford, UK working Paper No. 59.
10. Russell S, Abdella K (2002) Too poor to be sick: Coping with the costs of illness in East Hararghe, Ethiopia. London, Save the Children UK.
11. Abt Associates Inc. (2011) An assessment the implementation of fee waiver system in SNNPR region.
12. Damene HM, Gimono W (2011) Understanding barriers to health service utilization in SNNPR, Ethiopia, Addis Ababa Ethiopia.

13. FMOH, HCF Secretariat, health finance team, ESHE Project (2003) Targeting health service in Ethiopia: A proposal for improving fee waiver and exemption systems, Addis Ababa.

14. FMOH (1998) Health care and financing strategy Federal Ministry of Health Central Printing Press. Addis Ababa, Ethiopia.

15. Ensuring Financial sustainability under HSDP by health finance team, ESHE (JSI project March 2001).

16. (2004) The southern nations nationalities and peoples region state health service delivery administration and management proclamation no 84/2004.

17. (2005) The southern nations nationalities and peoples region state health service delivery administration and management regulation no 46/2005.

18. Leontien L, Michael M, Patricia S (2004) Equity implication of health sector user fees in Tanzania.

19. Barbara M, Alice S, Edson A, Christine K (2008) Freeing up Healthcare, a guide to removing user fees, London, Save the Children UK.

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