# Users' satisfaction towards the Health Equity Fund: a case study at Nong District Hospital, Savannakhet, Lao PDR

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### **Abstract**

Users' satisfaction towards the Health Equity Fund: a case study at Nong District Hospital, Savannakhet, Lao PDR

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The Health Equity Fund is a social assistance scheme for the poor whose income is lower than the poverty eradication target in Lao PDR and unable to enroll in any kind of health insurance. Health Equity Fund (HEF) is a fund which implements the government's policy in helping poor population to access to health care services. It is a non-profit fund with tax exemption. The objective of this study was to identify the level of users' satisfaction towards the HEF at Nong District, Savannakhet Province, Lao PDR. The key elements of satisfaction were concerned with curative service, food allowance, transportation, and copayment. A structured questionnaire was applied to collect data from 336 patients who ever used health care service at health center or district hospital. The findings revealed that patient's satisfaction (out of 5 score) towards curative service was at the high level ( $\bar{x}=4.19$ , SD = 0.35), but low for transportation ( $\bar{x}=1.75$ , SD = 0.48), food allowance ( $\bar{x}=1.72$ , SD = 0.46), and co-payment ( $\bar{x}=1.75$ , SD = 0.49). In conclusion, patient satisfaction level was high for curative service. From these results, there was a suggestion that HEF had to improve service satisfaction for transportation, food allowance, and co-payment.

Keywords: Health Equity Fund, satisfaction, Lao PDR

# **Background and Rational**

he Lao People's Democratic Republic is a land located in South-East Asia. The country covers 236, 800 square kilometers. For their livelihoods, people

in the highland areas depend on cultivation of upland rice and gathering of non-timber forest products, while those in lowland areas along the Mekong River depend predominantly on paddy rice. (1) In 2007, the Ministry of Health, working together through the World

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Bank funded Health Services Improvement Project (HSIP), initiated the National Guidelines for Health Equity Fund. The Guidelines recommended the implementation and management of HEF designed to meet the needs of ethnic minorities and remote districts. The first HEF scheme was initiated through the MOH under the HSIP to increase collaboration between the non-government organizations currently providing HEF services. (2)

The Government has recognized the importance of health financing issues, including equity, and started implementing social protection schemes. There are social insurance scheme for the public sector, covering only civil servants, soldiers, and social insurance scheme for the private sector. The Social Security Scheme (SSS) is responsible for the social insurance scheme of private sector including state-owned enterprises. Beside this, there are some medical insurance systems for the informal and non-salaried sector providing health-care benefits, namely the Community-Based Health Insurance Scheme (CBHI) and Health Equity Fund (HEF). CBHI is progressively being expanded. HEF is being piloted to mitigate the often-catastrophic impact of illness in a family and compensate the health-care facilities for services provided to the low income. (3)

The HEF is a social assistance scheme for the poor whose income is lower than the cut-off point established for poverty eradication in Lao PDR. HEF is responsible to pay for all health care expenses of contracted health facilities (health centers, district hospitals, provincial hospitals) and non-contracted health facilities, specialized hospitals, central hospitals to cover 1) consultation and treatment fees for outpa-

tients and inpatients (documentation fee, drugs, medical supplies, laboratory tests, room charges and labor), 2) health promotion and disease prevention which are not given free of charge by vertical programs, and 3) physical rehabilitation fees at health facilities. HEF is also responsible to pay for food allowance and transport of hospitalized beneficiary and one attendant at a rate of 20,000 kip/person/day and the standard transportation fee including the ambulance fee. However, patients have to pay a 5,000 kip copayment at health center and district hospital when they go and use service. (4)

Utilization of public health facilities had been very low, with a nationwide 2001-2006 average attendance rate of only 0.2 curative contacts per inhabitant per year (as reported at the National Health Conference in August 2007). Inequalities in access to services were evident in poorer districts, and in highland areas. Low population densities and limited physical access make the provision of health services difficult and expensive. (2)

Savannahket Province is one of the provinces of Laos, the population of this largest province was 969,700 as of the 2015 census, spread over 15 districts. The ethnic minority groups residing in the province include Lao Loum, Phu Tai, Tai Dam, Katang, Mongkong, Vali, Lavi, Souei, Kapo, Kaleung and Ta Oi. However, in the 2000 census, only three ethnic groups were listed: Lao Loum (Lowland Lao), Phu Tai, and Bru, only Lao Loum was recognized by the provincial government, were diverse people with various dialects and cultures. Nong district is the latest district and poor district of Savannakhet Province and the main health insurance covering the population is

Health Equity Fund (HEF). Nong District Hospital is located in Savannakhet Province that was the only one district hospital, where HEF scheme has been operating since 2012, that covered all villages in the district. The objective of this study aimed to investigate member satisfaction towards Health Equity Fund offered by the district hospital in Nong district, Savannakhet Province, Lao PDR.

# Methodology

This study was a questionnaire survey. Questionnaire was developed by using the findings from literature review, including theories, concepts, and approaches about satisfaction, particularly curative service, transportation, and food allowance and copayment were critically investigated and summarized into patterns. The questionnaire consisted of three parts including personal information, member satisfaction, and suggestion by respondent.

The validity was checked by Index of Congruence (IOC). After the completion of questionnaire development, a set of questionnaire in English was submitted to 3 reviewers who were experts in the field of health care systems and health financing. To facilitate full understandings of the respondents to questions asked, the questionnaire was translated into Lao language and then was submitted to three Lao teachers who are experts in Lao language to check its content validity. Only items that were approved by the experts were selected. Other suggestions including rephrasing of some items were revised and reordered based on the experts' comments. Reliability check was conducted with 30 members of HEF, who ever used the health care services at Nong Dis-

trict Hospital. After the questionnaire was pilot studied with 30 respondents, the results were analyzed by Cronbach's Alpha method. The internal consistency reliability coefficient of Cronbach's Alpha method for this instrument that included 34 items in the questionnaire was found to be 0.89, meeting the acceptable reliability level of higher than > 0.7.

The data were collected from the scheme members who ever used health care services at Nong District Hospital, Savannakhet Province. Almost all residents in Nong district were covered by Health Equity Fund (HEF). There were 25,051 members of HEF, however, only 366 members were selected using Krejcie and Morgan's formula. Then the sample was selected based on proportion of population in each of 10 villages. Nong District Hospital was selected as the place for data collection. The period of data collection was three weeks starting from 20 April 2015 to 8 May 2015.

Descriptive statistics (mean, standard deviation) was used to provide an overview of the data and the level of satisfaction. The level of satisfaction was interpreted as following: score 4.21 - 5.00 was the highest level of member satisfaction; 3.41 - 4.20 high level; 2.61 - 3.40 medium level; 1.81 - 2.60 low level; and 1.00 - 1.80 the lowest level.

## Results

General information about respondents includes: sex, age, and qualification of patients who used health care services in the six health centers and district hospital at Nong district, which shown in Table 1. The results revealed that most respondents were female (65.85%), below primary school (94.81%), and



Table 1 Respondents classified by demographic factors

<b>Demographic factors</b>	Number	Percentage
Sex		
Male	125	34.15
Female	241	65.85
Qualification		
Secondary school	5	1.37
Primary school	14	3.83
Below primary school	347	94.81
Age		
15-24 years	33	9.02
25-54 years	250	68.31
55-64 years	61	16.67
65+ years	22	6.01
Total	366	100.00

between 25-54 years old (68.31%).

Table 2 shows the users' satisfaction level on curative services of health care system. The average satisfaction level on curative services was found to be high ( $\bar{\mathbf{x}} = 4.19$ , SD = 0.35). The users' satisfaction level was analyzed on various factors. The members were highly satisfied with the doctors' explanation on the reason for the medical test ( $\bar{\mathbf{x}} = 4.12$ , S.D. = 0.87), their diagnoses to arrive to a conclusion ( $\bar{\mathbf{x}} = 4.03$ , SD = 0.90), careful listening on what patients told them  $(\bar{\mathbf{x}} = 4.17, SD = 0.92)$ , permitting patients complaining on their illness ( $\bar{\mathbf{x}} = 4.14$ , SD = 0.78), need based access to the specialists ( $\bar{x} = 4.26$ , SD = 0.75), the perfectness of the medical care ( $\bar{x} = 4.25$ , SD = 0.66), offering curative services without any financial hardship ( $\bar{\mathbf{x}} = 4.24$ , SD = 0.74), the gentle behavior of the doctors ( $\bar{\mathbf{x}} = 4.42$ , SD = 0.64), the overall medical care satisfaction ( $\bar{\mathbf{x}} = 4.17$ , SD = 0.74) and the prompt of the medical care when needed ( $\bar{\mathbf{x}} = 4.11$ , SD = 0.97).

Table 3 shows the satisfaction level of the users on transportation services during their medical care. The results clearly show that the members were highly dissatisfied on the transportation services of the health care system. The overall satisfaction was found to be very low ( $\bar{\mathbf{x}} = 1.78$ , SD = 0.48). The detailed item considered while analyzing the transportation services gave a very low satisfaction such as the availability of ambulance services ( $\bar{x} = 1.78$ , SD = 0.74), getting transportation allowance during the hospital stay ( $\bar{\mathbf{x}}$ = 1.76, SD = 0.67), the satisfactory transportation allowance ( $\bar{\mathbf{x}} = 1.76$ , SD = 0.69), enough allowance to meet the expenditures ( $\bar{\mathbf{x}} = 1.73$ , SD = 0.66), availability of other transport facilities to reach the health center without any hurdle ( $\bar{\mathbf{x}} = 1.75$ , SD = 0.66), provision of transport facility upon request ( $\bar{\mathbf{x}} = 1.72$ , SD = 0.69), time consumption in filling the documents to avail the transport facility ( $\bar{\mathbf{x}} = 1.80$ , SD = 0.70), getting the transport facility all the times when needed  $(\bar{\mathbf{x}} = 1.75, SD = 0.72)$ , time taken while filling the forms to get transport allowance ( $\bar{\mathbf{x}} = 1.75$ , SD = 0.67).

Table 4 illustrates the satisfaction level of the users on the food allowance of the scheme. It was found with a lowest level of satisfaction on an average during the study ( $\bar{\mathbf{x}} = 1.72$ , SD = 0.46). Based on the analysis of the detailed items of food allowance, the members were highly dissatisfied on the amount of food allowance ( $\bar{\mathbf{x}} = 1.71$ , SD = 0.74), getting food allowance on every stay in the hospital ( $\bar{\mathbf{x}} = 1.73$ , SD = 0.72), the money received as food allowance was enough to meet the needs ( $\bar{\mathbf{x}} = 1.75$ , SD = 0.73), the process of filling forms to get the food allowance ( $\bar{\mathbf{x}} = 1.77$ , SD = 0.68), receiving food allowance on time

Table 2 Satisfaction on curative service

Curative	5	4	3	2	1	x	SD	Level of satisfaction
Doctors are good about explaining the reason	129	186	17	33	1	4.12	0.87	High
for medical test.								
The doctors do everything needed to arrive at	110	201	10	45	0	4.03	0.90	High
a diagnosis.								
Doctors listen what I tell them.	156	148	36	21	5	4.17	0.92	High
I could complain all my related illness to	119	203	25	16	3	4.14	0.78	High
the doctors.								
I have easy access to the medical specialist I need.	149	177	25	15	0	4.26	0.75	Highest
The medical care received was just about perfect.	128	211	18	9	0	4.25	0.66	Highest
I feel confident that I can get the medical care	140	184	34	5	3	4.24	0.74	Highest
I need without being set back financially.								
The doctors treated me with dignity and respect.	179	166	17	3	1	4.42	0.64	Highest
I am very satisfied with the medical care I receive.	124	191	44	4	3	4.17	0.74	High
I could get appointment for medical care right away.	155	132	50	23	6	4.11	0.97	High
Total						4.19	0.35	High

Note: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree

Table 3 Satisfaction on transportation benefit

Transportation	5	4	3	2	1	χ̄	SD	Level of satisfaction
The ambulance is available when I need it.	3	5	7	213	128	1.78	0.74	Lowest
I received the fee for transportation during I my stay	3	7	10	122	224	1.76	0.67	Lowest
at the hospital.								
I am satisfied when I got money for transportation.	2	0	12	215	127	1.76	0.69	Lowest
The transportation fee given is enough for me.	3	5	13	216	129	1.73	0.66	Lowest
Transportation enabled me to access hospital without	1	9	14	217	125	1.75	0.66	Lowest
undue effort.								
I am satisfied with transportation provided when making	4	8	4	216	134	1.72	0.69	Lowest
an appointment or obtaining needed health.								
It took a few steps to sign or fingerprint every time	4	9	11	227	115	1.80	0.70	Lowest
when I got transportation.								
I get transportation before I go back home.	4	8	13	207	134	1.75	0.72	Lowest
There are few documents to fill out before getting	2	1	4	224	125	1.75	0.67	Lowest
transportation fee.								
Total						1.75	0.48	Lowest

Note: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree



Table 4 Satisfaction on food allowance benefit

Food allowance	5	4	3	2	1	χ̄	SD	Level of satisfaction
I am satisfied with food allowances provided.	7	7	1	209	142	1.71	0.74	Lowest
I got food allowances every time when I stayed at	3	11	9	206	137	1.73	0.72	Lowest
the hospital.								
The food allowance is enough for me.	4	11	6	214	131	1.75	0.73	Lowest
There are few documents to fill out before getting	2	11	8	226	119	1.77	0.68	Lowest
food allowances.								
I get food allowance before I go back home.	0	11	5	216	134	1.71	0.64	Lowest
I am satisfied with food allowance provided.	4	5	5	215	137	1.70	0.67	Lowest
It takes a few steps to sign or fingerprint every time	4	6	7	216	133	1.72	0.68	Lowest
when I get food allowance.								
Total						1.72	0.46	Lowest

Note: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree

Table 5 Satisfaction on co-payment benefit

Co-payment	5	4	3	2	1	χ̄	SD	Level of satisfaction
I pay money when I go to hospital.	3	18	9	213	123	1.81	0.77	Low
I am willing to pay it.	1	9	8	215	133	1.72	0.65	Lowest
I know that I pay it for what.	4	10	12	214	126	1.78	0.73	Lowest
I have money enough to pay for it.	1	9	10	215	131	1.73	0.65	Lowest
I receive reimbursement for copayment after having	2	11	14	203	136	1.74	0.71	Lowest
paid cash.								
I feel confident that I get the medicine I need without	2	10	10	211	133	1.73	0.69	Lowest
being set back financially.								
I feel less concerned about paying for any treatment	2	16	10	206	132	1.77	0.74	Lowest
at the hospital.								
There is no problem to cover the cost of medical visit.	2	13	14	208	129	1.77	0.72	Lowest
Total						1.75	0.49	Lowest

Note: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree

( $\bar{\mathbf{x}}$ =1.71, SD = 0.64), the food allowance was satisfactory ( $\bar{\mathbf{x}}$ =1.70, SD = 0.67) and the procedure to be followed to get the food allowance ( $\bar{\mathbf{x}}$ =1.72, SD = 0.68).

Table 5 depicts the users' satisfaction level on

the co-payment method. This study found that the members were highly dissatisfied on an average on this method of co-payment ( $\bar{\mathbf{x}}=1.75,\,\mathrm{SD}=0.49$ ). The level of satisfaction was analyzed by considering vari-

ous factors from the members' viewpoint. The table shows that they were highly dissatisfied on paying money when they went to district hospitals ( $\bar{\mathbf{x}} = 1.81$ , SD = 0.77), their willingness to pay the co-payment for the health care service during their visits to the hospitals ( $\bar{\mathbf{x}} = 1.72$ , SD = 0.65), awareness on the reason to pay for the service as co-payment ( $\bar{\mathbf{x}} = 1.78$ , SD = 0.73), their ability to pay the co-payment without any hardship ( $\bar{\mathbf{x}} = 1.73$ , SD = 0.65), proper receipt of co-payment from the authorities ( $\bar{\mathbf{x}} = 1.74$ , SD = 0.71), getting required health care without any financial hardship ( $\bar{\mathbf{x}} = 1.73$ , SD = 0.69), readiness to pay for the treatments in the hospitals ( $\bar{\mathbf{x}} = 1.77$ , SD = 0.74), and their ability to bear the cost of medical treatment ( $\bar{\mathbf{x}} = 1.77$ , SD = 0.72).

### Discussion

There were 25,061 beneficiaries covered under Health Equity Fund (HEF) in the Nong District of Savannakhet Province. The survey from 366 respondents showed a majority of them is female (65.85%), age between 25-45 years old (68.31%), and holding below primary school (94.81%). The results indicated a high level of users' satisfaction towards curative service ( $\bar{\mathbf{x}}$ =4.19, SD = 0.35). There were several reasons leading to this high level of satisfaction such as, they had easy access to medical specialist when they needed and the medical care received was just perfect. They felt that the doctors treated them with dignity and respect.

On the contrary, the results shown that level of satisfaction with transportation was very low ( $\bar{\mathbf{x}}$ =1.76, SD= 0.52). Distance to health center or hospital, was also determined by the quality of road and the avail-

ability of various means of transportation. The greater distance to health center or district hospital means higher cost of transportation and loss of time. The high level of dissatisfaction is also due to various other reasons such as: the way to health center being far away from villages, not convenient as there is no tarmac road, lack of ambulance services, no frequent public services as well as private. Earlier the patients used to get transportation allowance under HEF scheme and could afford the cost of transportation especially in emergencies, but the scheme has stopped giving the transportation allowance which is also one of the reasons for low level of satisfaction. Another challenging alternative to reduce transportation problem is the establishment of a good road network, increase medical outreach and mobile health clinics as suggested in rural Ghana. (6) Relatively, the impact of transportation barriers on health care access for rural residents was much more than urban residents even in developed country. (7) Rural patients reported more problems with transportation and had a higher burden of travel for health care when measured by distance and time travelled. (8)

Users' satisfaction on food allowance was at the lowest level ( $\bar{\mathbf{x}}$ =1.70, SD= 0.49). Food allowance is important for patient and their care taker when they are hospitalized, the current food allowance given under HEF is often not enough for them. Earlier the patients are given food allowance even in the regional health centers but now the food allowance is given for the patients only at district hospitals. Now people started bringing food from their home to the health centers and hospitals as they cannot afford taking expensive food outside the hospital. This may be the



prime reason of lowest level satisfaction on food allowance under HEF scheme.

Users' satisfaction on co-payment was also at the lowest level with =1.75, SD= 0.49. Co-payment is a minimal amount of payment as a fixed fee irrespective of total cost of treatment to be paid by the patients when they seek health facility of any kind. Though it is so minimal in quantity, there are some patients who cannot even afford such a fee. This co-payment has been introduced by the HEF scheme to avoid the over utilization of the health facility at free of cost. But in reality some patients who are in need of medical care and cannot pay the co-payment face the problem. This needs to be solved by some means so that the needy patients may not suffer due to co-payment.

Many studies on users' satisfaction with medical care services focused on determinants of level of satisfaction. Patient's age may have diverse effects on satisfaction level. Some research found that women were more satisfied with medical care than men. But this study, with full limitations that all participants were poor with low level of education expressed their level of satisfaction even when interviewed at hospital (but not on medical care). The low level of satisfaction is usually related to low socioeconomic status. 13

# Limitation

Limitation of this study was the one-sided survey with no comparison groups, we collected data from only poor people who ever used health care services at Nong District Hospital. Moreover, the convenient sampling of this study is another major sam-

pling bias. The research faced challenges in collecting the data. The majority of the population in Nong district speaks different languages from the Laos central language. Many of them do not even understand the central language. However, the researcher asked help from local people and staff of health centers to make them understand the questionnaire and gave answers accordingly.

### Conclusion

The findings clearly show that the members of Health Equity Fund were highly satisfied with curative services but totally dissatisfied with the other services like transportation, co-payment and food allowance. The findings of the research may be brought to the concern of respective authorities so as to take corrective measures to avoid these kinds of low satisfaction levels. The transportation facilities to the health centers may be improved by increasing the free ambulance services, co-payment method may be reconsidered and an alternative way may be found to avoid such member dissatisfaction. These kinds of changes may improve the level of member satisfaction and make the HEF scheme to be more successful.

The policy recommendation from this study suggests improvements on the issues of transportation, food allowance and co-payment, since the low level of satisfaction and the co-payment for the poor may create barrier in access to needed service.

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