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**“Out-of-Pocket Expenditure”, Abolition User Fees and the Quality
of Health Services Provided by Public Health Centers IVs in
Uganda: A Case of Health Centre IVs in Rujumbura Health Sub
District; Rukungiri**

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“Out-of-Pocket Expenditure”, Abolition User Fees and the Quality of Health Services Provided by Public Health Centers IVs in Uganda: A Case of Health Centre IVs in Rujumbura Health Sub District; Rukungiri

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Abstract

Purpose: The study intended to investigate inadequate health financing as challenge in Uganda, the study population included residents of Rujumbura Health sub district in Rukungiri who have lived in the place for a period exceeding fifteen years, being served by Bugangari and Buhunga Health center IVs. The study was guided by the following specific objectives; to establish whether there is no longer “out of pocket expenditure” in public health centers IVs in Uganda; To establish the effect of “out-of-pocket expenditure” on the quality of health services provided by public health centers IVs in Uganda. to establish the effects of abolishing user fees on the quality of health services provided by public health centers IVs in Uganda.

Methodology: It was a cross-sectional study, which was inclined to quantitative approaches

Findings: The study findings indicated that there is a positive relationship with out of pocket expenditure and the quality of health services provided however, results in the model summary concludes that ‘out of pocket expenditure explain 38.9% of the changes in quality of health services and the remaining 61.1% may be explained by other factors consistent with the overall effect of abolishing “out of pocket” expenditure in the study area.

Recommendations: The policy implication emerged from this study indicates that the quality of health services will be at optimum if users’ fees are in order to foster further improvement rather than abolishing user fees in health center IVs at a reasonable amount which is affordable by citizen. Especially by adopting private and user free wings. More Qualified medical officers should be deployed at these levels to increase on the image of health center IVs, purposely to increase the confidence and trust by patients to medical officers when they are being treated. A policy on out of pocket expenditure is crucial in improving on cost efficiency and to protect “patients “New technology” in the hospital should be adopted in these health center IVs to improve on the corporate images of these health facilities and also to provide appropriate diagnosis and prescription. Information on hospital rules, regulations and procedures should be provided and can easily be accessible at the hospital and even before. Further studies should be carried out to establish the optimum adequate out of packet expenditure to be charged to the patients at respective health facilities in the country for particular illness and consultation

Keywords: *Out-of-Pocket Expenditure; Cost Efficiency New Technology*

1.0 INTRODUCTION

Cost sharing or user fees was an approach used by public sector health services in developing countries to recover some costs of service (Burnham et al.2004), following world bank's 1987 Reform Agenda. Out-of-pocket (OOP) payments continue to be the major source of health financing in low and middle income countries (O'Donnell et al., 2008) However, the impact of cost-sharing on health care demand is well documented in developed countries, evidence from developing countries is rare. This paper intends to bridge gap on the impact of abolition of user fees in a developing country; Uganda

Uganda has undergone several health sector reforms including among others; Decentralization policy and Autonomy of health services; where Districts introduced cost sharing and generated revenue for Health services (Government of Uganda 1997). The user fees were expected to provide incentives to health workers as top ups and also be used to buy medicines to avoid stock outs. There was evidence that the supply of medicines and the quality of services improved after introducing cost sharing in public hospitals and health centers (World Health Organization 2005). Rukungiri and Soroti District had well-established user fee schemes, characterized by organized implementation, close supervision and community participation in scheme management (Nabyonga et al 2005). Accordingly, the well-implemented scheme marked improvement in health facility utilization (World health organization (WHO)/Rukungiri district 2001). However, in 2001, the Government of Uganda abolished user fees at public health centers and hospitals and introduced a dual system comprising a private wing for those who can afford to pay and a free wing who are not in position to pay (Ministry of Finance Planning and Economic Development 2004). The decision was taken based on concerns that ill-health and high costs related to accessing services were hindrances to poverty eradication (MOFPED, 2004). The expectation of abolishing cost sharing was that more people would use public health services and that out of pocket expenditure for health care would reduce especially among the poor, and that, Government would continue to increase investment in health sector (Nabyonga et al 2011).

Despite these reforms, Uganda still spends USD 33 per capita on health, much lower than the regional average (Ministry of health 2012). The outcome of which is poor quality of services resulting from shortage of drugs and other supplies (Nabyonga et al 2011). The low quality care and stock-outs of essential medicine could as well be the outcome of underfunding of health services in Uganda (Ministry of Health, 2012). It is against this background that the aim of this paper is to find answers to the following questions; what is health financing structure after abolition of user fees in public health centers and hospitals; does "out of pocket expenditure" still exist in Ugandan health centers and hospitals after a long time of its abolishment? And finally; does "out of pocket expenditure" have an effect on the quality and utilization after some reduction in poverty levels in Uganda? The answers to these questions are important for enhancing and improving health care quality in Uganda. Consequently, this study has important policy implications to the health sector; Government; private health providers and all stake holders.

Problem Statement

Funding of health sector in Uganda is below the recommended USD 48 per capita for a minimum health package (Parliamentary health committee, 2012). This has led to inadequate health workers, with a ratio of Doctor to Patient; 1: 24,725 and a Nurse/Midwife; 1: 11,000. Health Center facilities in the Districts are not fully functional and at times, un-functional leading to congestion in referral hospitals much as some of them are underfunded, to the extent that some health facilities and

equipment are dilapidated due to limited budget for maintenance (Ministry of health 2011). In addition, the health systems assessment (2011) revealed that 65% of the households in lowest social economic brackets face monthly catastrophes of expenditure on pharmaceutical drug stock-outs. Deliveries in Health facilities remain low at about 32%; stock-out for essential medicine remains as 73% at any one time in the month (Nyende; Guloba and Wokadala 2010). Consequently, the inadequate health financing is still a challenge in Uganda, which needs to be investigated.

Objectives of the study

The general objective of the study is to establish the effect of “out-of-pocket expenditure” on the quality of health services provided by public health centers IVs in Uganda

This is guided by the following specific objectives:

- a) To establish whether there is no longer “out of pocket expenditure” in public health centers IVs in Uganda.
- b) To establish the effect of “out-of-pocket expenditure” on the quality of health services provided by public health centers IVs in Uganda.
- c) To establish the effects of abolishing user fees on the quality of health services provided by public health centers IVs in Uganda.

Research Hypothesis

The study based on the following key hypothesis as shown below:

Key Hypothesis

H₀: “Out-of-pockets expenditure” has no effect on the quality of health services in public health centers IVs in Uganda

H₁: Out-of-pockets expenditure has no effect on the quality of health services in public health centers IVs in Uganda

Significance of the Study

The policy change was focused on removal of direct costs/user fees in public health centers and hospitals in Uganda in order to increase utilization of health services; however, there is limited evidence (World health organization, 2008). Some studies indicate increased utilizations and others slight decrease (Morestin and Ridde 2009). Fees continue to be charged in Private Hospitals and clinics, (Profit hospitals and Non-profit making hospital) but still, the poor greatly increased, in utilizing private health services while the non-poor tended to stay away from public health facilities after abolition of user fees and preferred private hospitals (Morestin and Ridde 2009). Consequently, the purpose of this paper is to find out whether the free care health services are really free in public health centers IVs in Uganda.

2.0 LITERATURE REVIEW

The study was based on Transactional leadership theory which is based on the idea that managers give employees something they want in exchange for getting something they want. It posits that workers are not self-motivated and require structure, instruction and monitoring in order to complete tasks correctly and on time.

Cost sharing or user fees was an approach used by public sector health services in developing countries to recover some costs of service (Burnham et al.2004), following world bank's 1987 Reform Agenda. several studies indicated that the introduction of user fees increased the quality, and utilization of health services in public health centers and hospitals by the poor and suggesting that user fees do not reduce access for the poor (James et al, 2006). Earlier on, Soucat et al (1997) analyzed health seeking behaviour in Benin, where the results indicated increased utilization of both preventive and curative care following introduction of user fees due to improvement in quality (through drug availability). Similarly, in Guinea, Soucat et al (1997), observed an increase in both preventive and curative care after introducing user fees due to improvement in quality. Litvack et al (1993) carried out a study in Cameroon and the results indicated that introduction of user fees led to increase in utilization of health services by the poor and also improvement in quality in form of drug availability. In the study carried out in Cambodia, Barber et al (2004) indicated that after replacing informal payments with fixed user fees, there was increased utilization of inpatients and surgical care consistent with Akashi et al (2004) who indicated that utilization increased following user fees introduction in Cambodia. In Niger, Diop et al (1995) indicated that utilization increased after the introduction of user fees, when combined with an annual tax, though studies of Chawla and Ellis (2000) indicated that user fees had a negligible negative impact on utilization of healthcare.

On the other hand, the introduction of user fees led to decrease in accessibility and ultimately decrease in utilization. In Burkina-Faso, studies carried out by Ridde (2003) revealed that after introduction of user fees, there was a fall in utilization of curative care, where a decrease of 15.4% was recorded by primary-level health and welfare centers that were charging fees while an increase of 30.5% for those not charging user fees. In china studies by Liu and mills (2002) indicated that introduction of user fees improved public sector productivity in general but worsened allocation efficiency in terms of over provision of unnecessary services. In addition, the results indicated a reduction in preventive health care up take. Contrary to studies carried out in Cambodia by Akashi et al 2004 and Barber et al 2004, studies by Jacob and Price (2004) indicated that user fees did not generally affect the overall utilization of health services in Cambodia, but affected adversely the poor, creating a "medical poverty trap". Studies in Democratic republic of Congo by Haddad and Fournier (1995) revealed that the introduction of user fees led to a reduction of health service by 40% in 1987-91, although there was improvement in quality trough availability of drugs staff skills and better medical equipment. Studies by Collins et al (1996) in Kenya showed that the introduction of user fees had a negative effect on utilization consistent with Mbugua et al (1995) whose studies showed a negative effect with effective exemption mechanism. In Zimbabwe, studies by Zigora et al (1996) indicated that utilization of health services declined due to the introduction of user fees. Similarly, studies carried out in Tanzania by Hussein and Mujinja (1997) showed that the utilization of outpatients fell by over 50% in government –owned district hospital while the number remained constant for private facilities, where out of pocket expenditure was mandatory.

In some other countries the results showed that the rich and educated benefited more compared to the poor. For example, in Nigeria, studies by Uzochukwu et al (2004), indicated that there was an increase in utilization of malaria services after the introduction of user fees caused by improved quality, that is through training health workers and availability of Drugs

In Uganda, studies by Kipp et al (2001) indicated that utilization of outpatient services fell after the introduction of user fees though there was no universal drop. However, the results further showed that there was some increase in facilities located in remote areas due to better drug supply and other community projects.

However, towards the achievement of Millennium development goals, abolition of user fees became a global and national agenda for several countries (Burnham et al 2004; Deininger and Mpuga 2004; Nabyonga et al, 2005 and Xu et al 2005). Basing on millennium development goals, a number of organizations and initiatives advocated for the removal of user fees. Consequently, several countries advocated for the removal of user fees basing on the adverse effects the user fees had on access for basic health services (James *et al.*2006). However, in Madagascar, the availability of drugs during the period when user fees were in force compared to the time when user fees were abolished, forced Madagascar to reintroduce user fees in public hospitals. Numerous studies have analyzed the impact of user fees abolition and came up with contradicting results.

This study was intended to find out whether the abolition of user fees had an impact on health service delivery in Uganda given that when it was in existence some districts like Rukungiri were performing better than expected

Study Population

The study population included residents of Rujumbura Health sub district in Rukungiri who have lived in the place for a period exceeding fifteen years, being served by Bugangari and Buhanga Health centre IVs.

Scope of the Study

The study focused on establishing the structure of “out of pocket expenditure” after abolishing user fees in public health centers and hospitals in Uganda. Specifically, the study intends to focus on Bugangari and Buhanga Health Centre IVs in Rukungiri. This is mainly because Rukungiri had well-established user fee schemes in Uganda (Nabyonga et al, 2005). The study further intended to establish the structure of “out-of-pockets expenditure” that exists in health financing structures of public health centers in Uganda. The study intended to establish whether the abolition of out-of- pocket expenditure had an effect on the quality and utilization of health services in Rukungiri District Local Government after 12 years following its removal in Uganda at large. The focus was on direct costs associated with health services such as consultation fee; specialized health services and cost of drugs and medicine over a period of 15 years from 2000-2014.

Data Collection Procedures and Methods

Primary and Secondary data was collected. Primary data was collected by the use of interview guides and focus group discussion (FGD). The interview guides were used on key informants such as; health workers; district political leaders and administrators; health management committee members while community views were sought through focus group discussions for both users and non- users of public health facilities. Secondary data was collected from health centers IVs records such as; financial statements; patients register; stock cards for essential drugs and medicine; human resource records and Asset register.

Sample Size and Sampling Methods

The purpose of the study to truck people’s health care cost behavior in the community of Rukungiri district local government and not mere representativeness. Consequently, the selection of respondents focused on people with knowledge on village’s demographic characteristics such as; women and men, elderly, disabled and the youth who are above 18 years. Economic levels of respondents will be captured to establish economic and poverty levels. Snowball sampling will be used until super saturated information from sample size is reached

Performance Measurement Variables

Utilization of health services will be measured by the number of visits recorded in the two health centers IVs for both inpatients and out patients consistent with Masiye et al (2008); Nabyonga et al (2008); Morestin and Ridde (2008) and Nakakaawa (2011).

Health service quality was measured basing on a conceptual framework of service quality in health care adopted from Panchapakesan et al 2009. The components include; Infrastructure; Personnel quality; Process of clinical care; Administrative procedure; Safety measures corporate image; social responsibility and trustworthiness of the health center (Othman and Yao 2014). The quality was measured using a five –point Likert scales, where “1” indicates; “very low” level of health services and “5” very high level of health service. The opinions from the respondents were sought for the two periods before and after abolition of user fees in public health centers.

‘Out of pocket expenditure’ is a proxy for customer satisfaction (Othman and Yao, 2014). Consequently, assessing “out of pocket expenditure” on health service quality will be by evaluating the trade-off “get” versus “Give-up” (Zeithaml,1988). The satisfaction of “out-of pocket expenditure” will be measured using a five –point Likert scales, which will be associated with costs and ease of consulting health workers.

Study Findings

Distribution by the Name of the Health Facility

The name of the health facilities where data was collected from was distributed as indicated in Table 1

Table 1: Name of the Health Facility

Name of the Health Facility	Frequency	Percent
Buyangari health Centre iv	61	41.8
Buhunga health Centre iv	85	58.2
Total	146	100.0

The results in Table 1 indicate that most of the data was collected from Buhunga health Centre IV which was represented by 58.2% while Buyangari health Centre IV was represented by 41.8% This indicates that Buhunga health Centre IV had more population who were accessing services from the health Centre compared to the ones from Buhunga health Centre IV and therefore the facilities seemed to be inadequate compared to Buyangari much as they are all health Centre IV. The implication is that health facilities should be facilitated according number of patients they serve

Gender Distribution

The gender of the respondents was distributed as indicated in Table 2

Table 2: Gender of the Study Participants

Gender	Frequency	Percent
Male	85	58.2
Female	61	41.8
Total	146	100.0

The results in Table 2 indicate that 58.2% of the respondents were male and their counter parts the female were 41.8%. This could imply that men actively visit health facilities when they fall sick. Consequently, health structures should be developed according to gender equity

Participants Who Sought Health Services from the Health Centre

The number of times respondents sought health services from the health Centre IVs in Rukungiri was distributed as indicated in Table 3

Table 3: Number of Times Participants Sought Health Services from the Health Centre in a Year

Item	Frequency	Percent
Once a year	16	11.0
Twice a year	43	29.5
4 times a year	35	24.0
More than four times a year	52	35.6
Total	146	100.0

The results in Table 3 indicate that most of the participants had sought health services more than four times a year 35.6%, followed by those who had sought the service for twice a year 29.5%. Those who had sought the services for four times in a year accounted for 24% while and the least group indicated that they had sought the service for at least once a year were 11%.

These implication is that residents regularly visit health facilities when they fall sick for treatment and therefore availability of health facilities in the area is crucial for their survival and health standards.

Out-Of- Pocket Expenditure

With the introduction of user fees in health center IVs, the results in Table 4 indicate that the majority; 96% used to pay user fees whenever they visited the health facility for a service willingly.

Table 4: Payment of User Fee in Health Centre IVs in Rukungiri

Item	Frequency	Percent
Yes	141	96.6
No	5	3.4
Total	146	100.0

The implication is that the residents in the area had the capacity to pay for their medical treatment, whether willingly or not since there was no other alternative then.

Benefits of Out-of- Pocket Expenditure

When user-fees were introduced in health facilities improvement in service delivery was noted as shown in Table 5

Table 5: Infrastructure When the User Fee Was Being Charged

Infrastructure	Mean	Std. Dev
Good house –keeping (cleanliness)	3.96	0.17
Timely and hygiene food supplied to wards	3.48	0.91
Level of availability of life-support facilities to manage acute health conditions	3.42	0.81
Level of availability of medical equipment in proper working conditions	3.34	0.81
Level of availability of required drugs in time	3.33	0.80
Infection-free environment/treatment provided by health center during my stay	2.92	0.81
Overall Mean for Infrastructure	3.41	

The findings in Table 5 are showing that when the user fee was being charged, there was good housekeeping -cleanliness with over all Mean of 3.96) with a standard deviation of approximately one. A standard deviation of close to 1.0 shows agreement which indicates that the services provided met their expectations, thus “value for money.”

The results are also reflected in other variables measured as shown in Table 5 and other services related to infrastructure were meeting the standards expected. The results indicate that; there is timely and hygiene food supply in the ward together with good house –keeping.

However, the level of availability of life-support facilities to manage acute health conditions, were slightly above average with a mean of 3.42. The implication is that much as there was out- of- pocket expenditure, emergency and critical conditions of patients were moderately managed.

With the introduction of user fees, still the Level of availability of medical equipment in proper working conditions were still good with mean value 3.34 and a standard deviation of 0.81, thus an indication of “no value for money”

The Level of availability of required drugs in time was graded at 3.33 with a standard deviation of 0.80 which indicates a bad situation in the hospital much as the user fees were introduced.

The results on Infection-free environment/treatment provided by health center contradicts with good housekeeping (cleanliness) when the mean was 2.92 and a standard deviation of 0.81. the results are less than 3.5 indicating that their disagreement with good infrastructure in the health Centers and also the overall mean was below 3.5 (Mean=3.41); a matter which needs further investigation.

Health Workers’ Quality When the User Fee Was in Force in Health Centre IVs in Rukungiri

The study focused on the quality of health workers when user fees were charge and the results are shown in the fourth coming paragraph.

Table 6: Health Workers' Quality When the User Fee Was Being Charged

Health Workers Quality	Mean	Std. Dev
Politeness shown by hospital administrative staff	3.32	0.83
Level of availability of Doctors when needed	3.36	0.89
Level of availability of Nurses when needed	3.38	0.87
Nurses' care and responsiveness	3.41	0.76
Doctors' friendly and caring attitude with understanding of feelings and needs	3.66	0.98
Overall Mean for Health Workers Quality	3.42	

The results in Table 6 indicate that the quality of health workers was relatively low as per quality indicators. Politeness shown by hospital administrative staff during the period of user fees had a mean of 3.32 below the average of 3.5. The level of availability of Doctors when needed was equally low with an average of 3.36. The implication of this is that the facility had very few Doctors or those who are available are not enough to accommodate the demand at health Centre IVs in Rukungiri District, which was also observable with Nurses and their responsiveness.

The implication is that much as there was out-of-pocket expenditure, the output was not equivalent to their input as user fees and expectation is concerned.

Table 7: Process of Clinical Care When the User Fee Was Being Charged

Process of Clinical Care	Mean	Std. Dev
Feedback information provided in time	3.83	0.14
Information on the health of patient is always provided	3.51	0.81
No Delay of scheduled admission for surgery	3.5	0.73
Information on treatment procedures is always provided	3.45	0.8
Pre-operation advice given by doctors	3.4	0.78
Post-operation advice given by the Hospital	3.35	0.8
Medical tests done in time	3.29	0.72
Overall mean for Process of Clinical Care	3.47	

The results in Table 7 indicate that by the time the user fee was being charged, the feedback information on the health of patient was always provided in time with an average of 3.83 and there was always no delay of scheduled admission for surgery since on average was 3.5.

The results indicated that during user fees period in health Centre IVs; Information on treatment procedures is always provided by health works evidenced by an average of 3.45. The implication is that health workers were always guiding their patience for minimizing delays for treatment.

Relatedly, pre-operation advice given was always given by doctors though at relatively lower rate of 3.4 which is below the average. The same applies to post-operation advice given by the Hospital with an average of 3.35. This is in agreement which indicated that there might be few Health workers at health Centre IVs to accommodate all the demands of patients.

The results on Medical tests being done in time, indicate a lower average of 3.29 which is below expectation. This is in agreement with the results which showed that Level of availability of medical equipment in proper working conditions was as well low to the tune of 3.34.

The implication is that health Centre IVs should be armed with medical equipment for imaging and laboratories for proper diagnosis

The overall process of medical care during user fees payment was relatively low and below average

Table 8: Administrative Procedure When the User Fee Was Being Charged

Administrative Procedure	Mean	Std. Dev
Ease of getting diagnostic tests done	3.31	0.81
Level of bill payments to be made	3.92	0.48
Simplified procedures for hospital discharge	3.26	0.82
Information on hospital rules, regulations and procedures provided	3.26	0.94
Support to patient by attendants (Side Bed nursing)	3.19	0.82
Overall mean for Administrative Procedure	3.39	

The results in Table 8 indicate that it was not easy to get diagnostic tests done evidenced by a lower average of 3.31 which was below expected output. this concur with the results that showed low levels of availability of medical equipment in proper working conditions was as well low to the tune of 3.34.

These health Centre IVs in Rukungiri District had high levels Level of bill payments as indicated in Table 8 with the highest average of 3.92 though with a lower standard deviation of 0.48. The implication of lower standard deviation close to 0 indicates that there might have been some disagreement by the study participants that needed further probing.

The results further indicate that there were no simplified procedures in health Centre IVs for patients' discharge, evidenced with an average of 3.26. The implication is that with User fees, if not cleared, it was hard for patients to be discharged

The results indicate that there was no clear Information on hospital rules, regulations and procedures to be followed by patients given that it was hard for them to be discharged confirmed by an average of 3.36 with a high standard deviation of 0.94, the implication is that there was almost total consensus on the issue raised.

Support to patient by attendants (Side Bed nursing) was minimal with an average of 3.19 with a standard deviation of 0.82, assign of total agreement. In general, the results indicated that the overall mean was below 3.5 (Mean=3.39) implying that there was some dissatisfied with administrative procures during User fees period in health Centre IVs in Rukungiri district

Table 9: Safety Measures When the User Fee Was Being Charged

Safety Measures	Mean	Std. Dev
Adequate hygiene care provided; providing gloves to attendants	3.27	0.76
Response to allergic reaction to Drugs by doctors and remedial action taken	3.47	0.88
Provision of wheel chairs and beds to patients	3.31	0.92
Provision of handrails to patients	3.25	0.99
Overall mean for Safety Measures	3.32	

The results in Table 9 indicate that on average, the overall mean was below 3.5 (Mean =3.32) indicating that there were some inadequate safety measures put in place during the period when

there were out-of-expenditure costs from the patients. Relatedly the results in Table 9 indicated inadequate hygiene care provided to health workers and attendants such as gloves.

The results indicate that there was a problem of providing of wheel chairs and beds to patients, with average of 3.31, with a standard deviation of 0.92 which portrays consensus. The implication is that there is lack of enough equipment in health Centre IVs, a matter that needs some intervention despite of user fees being charged to patients during user fees period. Providing o handrails to patients during the period was also hard.

Table 10: Corporate Image When the User Fee Was Being Charged

Corporate Image	Mean	Std. Dev
Reputation enjoyed by Hospital	3.19	0.89
New technology in the hospital; scan;	3.06	0.98
Honesty in service provision	3.14	0.92
Ethical practices followed	3.21	0.87
Overall mean for Corporate Image	3.15	

The results in Table 10 indicate that on average, there was no good corporate image of the health Centre IVs in Rukungiri District when the user fee was introduced and implemented with a Mean=3.15. The results were confirmed with low reputation of the health Centre IVs with an average of 3.19 and a standard deviation of 0.89 that showed total agreement.

This was coupled minimum New technology in the hospital; scan, to boost better diagnostic approaches which was confirmed with a lower average of 3.06 and a standard deviation close to one; a suggested of consensus. Given that there was minimum advanced technology with new adequate equipment, there was low honesty with the service provided as indicted by the results of 3.14 with a standard deviation close to one which was below the expected. Similarly, according to the results Ethical practices followed seemed to be doubted with an average of 3.21.

Table 11: Social Responsibility during User Fee Period

Social Responsibility	Mean	Std. Dev
Ambulances freely provided	3.03	0.90
Free medical treatment to the needy patients	3.06	0.85
After service delivery to inpatients is done	3.35	0.84
Overall Mean for Social Responsibility	3.15	

The results in Table 11 indicate that on average, there was low levels of social responsibility with a Mean of 3.15 below the average. This was confirmed by other measurement variables used such as free medical services to people who seemed to be” needy.” The results indicated that such services were minimal at all the health Centre IVs in Rukungiri were the study was carried out with an average of 3.06 and a standard deviation of 0.85

The findings also indicated that the level of Ambulances freely provided, after service delivery to inpatients is done were below the average. This could be possible given the facilities available and health workers at duty station

Table 12: Trustworthiness of the Health Centre When the User Fee Was Being Charged

Trustworthiness of the Health Center	Mean	Std. Deviation
Maintenance of patient privacy and confidentiality	3.32	0.83
Confidence in Doctors who treats	3.47	0.80
Confidence in nurses	3.52	0.80
Credibility of the health center	3.24	0.82
Overall mean for Trustworthiness of the Health Center	3.39	

The results in Table 12, indicated that the Overall mean for Trustworthiness of the health center is relatively below average, with a Mean of 3.39. Though there is some trust and confidence with Doctors and Nurses who provide health services.

On the issue of integrity of the health center the results indicated an average of 3.24 with a standard deviation of 0.84 is a contradiction with confidence and trust with health providers, this could be lack of new technology and equipment plus other facilities in these health Centre IVs in Rukungiri district

Table 13 demonstrates the effect of “out-of-pocket expenditure” on variables of the health quality provided by public health centers IVs in Uganda

Table 13: Correlation Matrix

Variables	1	2	3	4	5	6	7	8	9	10
Infrastructure-1	1									
Health workers quality-2	.142	1								
Process of Clinical Care-3	.134	.237**	1							
Administrative Procedure-4	.002	.006	.166*	1						
Safety measures-5	.052	.036	.181*	.150*	1					
Corporate Image-6	.191**	.093	.290**	.164*	.321**	1				
Social Responsibility-7	.264**	.163*	.158*	.120	.116	.477**	1			
Trustworthiness of the health center-8	.242**	.150*	.113	.085	.005	.152*	.353**	1		
Quality of health service -9	.458**	.435**	.554**	.497**	.511**	.616**	.590**	.438**	1	
Out-of pocket Expenditure-10	.213**	.114	.244**	.645**	.192**	.470**	.322**	.290**	.626**	1

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The results in Table 13 indicate that there is a positive significant relationship between out of expenditure and quality of health services provided by public health centers IV in Uganda ($r=.626$, $p<.01$). This implies that any positive change in out- pocket expenditure will result in to a positive change on quality of health services

Thus we reject H_0 which stated that “Out-of-pockets expenditure” has no effect on the quality of health services in public health centers IVs in Uganda” and accept the alternative H_1 which stated that “Out-of-pockets expenditure has an effect on the quality of health services in public health centers IVs in Uganda” given that there is a positive relationship is positive of 0.626 which is significant

Further analysis was done by using regression analysis to test the contributory effect of out-of-pocket expenditure on the quality of health services provided, the results of which are shown in the following paragraphs and tables

Table 14: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.626 ^a	.392	.389	.29097

a. Predictors: (Constant), Out-of-pocket Expenditure

The results in the model summary indicate that out of pocket expenditure explain 38.9% (Adjusted R Square=.389) of the changes in quality of health services. This further implies that the remaining 61.1% is explained by other variables not considered in this study

Table 15: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.197	1	10.197	120.443	.000 ^b
	Residual	15.832	187	.085		
	Total	26.029	188			

a. Dependent Variable: Quality of health service

b. Predictors: (Constant), Out-of-pocket Expenditure

Table 15 indicates that the null hypothesis for the F test in the ANOVA analysis is that the model has no explanatory power. Since the p-value 0.000 is less than 0.01 level of significance, we reject the null hypothesis and conclude that the model has explanatory power suggesting that Out-of-pocket Expenditure explain quality of health services. The F-value of 120.443 (p=0.000) further indicates that the specified model in this study fits well the data.

Table 16: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.545	.170		9.067	.000
	Out-of-pocket Expenditure	.526	.048	.626	10.975	.000

a. Dependent Variable: Quality of health service

The results in Table 16 indicate that there is a confirmed positive significant relationship between out of pocket expenditure and quality of health services (Beta=.626, p<.01). This implies that a unit increase in out of pocket expenditure will result into 0.626 units increase in quality of health services

The Effects of Abolishing User Fees on Utilizations of Health Services in Public Health Centers IVs in Uganda

The study focused on the current status when a user fee was abolished after the introduced a dual system comprising a private wing for those who can afford to pay and a free wing who are not in position to pay. The results are shown in the fourth coming paragraphs

Table 17: The Status of Infrastructure after Abolishing the User Fee

Infrastructure	Mean	Std. Dev
Infection-free environment/treatment provided by health center during my stay	3.08	0.86
Level of availability of required drugs in time	3.42	0.82
Level of availability of medical equipment in proper working conditions	3.43	0.81
Timely and hygiene food supplied to wards	3.56	0.91
Level of availability of life-support facilities to manage urgent health conditions	3.46	0.80
Good house –keeping (cleanliness)	3.75	0.72
Overall mean for infrastructure	3.5	

The results in Table 17 indicate that after abolishing the user fees, the level of infrastructure had an overall average of 3.5. Compared to 3.41 when the user fees were in force. The implication is that there might have been some improvement; this could be as a result of government intervention in form of funding. The results on the level of availability of life-support facilities to manage urgent health conditions remained the same before and after abolition of user fees. It was confirmed when the average remained at almost the same range of 3.42 and a standard deviation 0.81, which indicated consensus for all participants

The results indicate that there was some improvement in Timely and hygiene food supplied to wards with a mean of 3.56 and a standard deviation of 0.91 compared to the period when user fees were in place. This is equally the same on Good house –keeping (cleanliness with an average of 3.75 and a standard deviation of 0.72). However, Infection-free environment/treatment provided together with Level of availability of required drugs in time and level of availability of medical equipment in proper working conditions by health center after user fees abolition slightly improved as indicated by respective means in Table 17.

The study analyzed the quality of health workers after abolishing user fees in health center IVs using several performance indicators and the results are shown in Table 18

Table 18: Status of Health Workers' Quality after Abolishing the User Fee

Health workers quality	Mean	Std. Dev
Politeness shown by hospital administrative staff	3.36	0.80
Level of availability of Doctors when needed	3.78	0.86
Level of availability of Nurses when needed	3.42	0.86
Nurses' care and responsiveness	3.45	0.75
Doctors' friendly and caring attitude with understanding of feelings and needs	3.72	2.98
Overall mean for health workers quality	3.54	

The results in Table 18 indicate that after abolishing the user fee, the health workers' quality improved as compared to when it was during the user fees period. The overall results indicated improved health workers' quality with a Mean=3.54. The results were in agreement with other performance indicators such as; "Level of availability of Doctors when needed" plus "Doctors'

friendly and caring attitude with understanding of feelings and needs” together with Nurses’ care and responsiveness”. Nonetheless there is need for improvement in areas of Politeness shown by hospital administrative staff and Level of availability of Nurses when needed since the respondents were below the average of 3.5; a matter which needs further investigation.

Table 19: Position of the Process of Clinical Care after Abolishing the User Fee

Process of Clinical Care	Mean	Std. Deviation
Pre-operation advice given by doctors	3.47	0.78
Post-operation advice given by the Hospital	3.47	0.78
Delay of scheduled admission for surgery	3.56	0.73
Medical tests done in time	3.35	0.77
Feedback information provided in time	3.87	0.73
Information on treatment procedures is always provided	3.51	0.76
Information on the health of patient is always provided	3.58	0.79
Overall Mean for Process of Clinical Care	3.54	

The results in Table 19 indicate that on average after abolishing the user fee, the process of clinical care improved with overall Mean of 3.54., confirmed by distinctive performance variable such as; ‘Pre-operation advice given by doctors’; ‘Post-operation advice given by the Hospital’; ‘Delay of scheduled admission for surgery’; ‘Feedback information provided in time’; ‘Information on treatment procedures is always provided’ and ‘Information on the health of patient is always provided’. All the variables had an average, above 3.5 indicating that participants /patients were satisfied with the clinical care process in the health Centre IVs surveyed.

Table 20: Position of Administrative Procedure after Abolishing the User Fee

Administrative Procedure	Mean	Std. Deviation
Ease of getting diagnostic tests done	3.38	0.82
Level of bill payments to be made	3.99	0.46
Simplified procedures for hospital discharge	3.32	0.80
Information on hospital rules, regulations and procedures provided	3.32	0.90
Support to patient attendants(Side Bed nursing)	3.22	0.85
Overall Mean for Administrative Procedure	3.50	

The results in Table 21 indicated that the administration procedure after abolishing the user fee improved overall mean of 3.5 compared to the period when user fees were in force that had average of 3.39. Most of the performance indicators indicated some slight improvement such as: ‘Ease of getting diagnostic tests done’; ‘simplified procedures for hospital discharge’; ‘Information on hospital rules’; ‘regulations and procedures provided’ and ‘Support to patient attendants (Side Bed nursing)’.

Level of bill payments to be made was far above the average with a mean of 3.99 slightly higher than when the user fees were in force. The implication is that with the introduction of dual system which involved both out of pocket expenditure and free service, patients continued to utilize services on the private wing which involves payments in health Centre IVs where the survey was carried out. The study also focused on the safety measures put in place after abolishing user fees in Health Centre IVs. The results are shown in Table 22

Table 22: Status of Safety Measures after Abolishing the User Fee

Safety Measures	Mean	Std. Deviation
Adequate hygiene care provided; providing gloves to attendants	3.32	0.74
Response to allergic reaction to Drugs by doctors and remedial action taken	3.53	2.86
Provision of wheel chairs and beds to patients	3.34	0.88
Provision of handrails to patients	3.28	0.94
Overall Mean for Safety Measures	3.37	

The results in Table 22 indicate that safety measures slightly improved much as it was below expectation. The overall mean is 3.37, compared to 3.32 during user fees period, but still remained below 3.5 the implication is that the patients are still at risk when they visit health centers for treatment so are health workers and executing their duties.

However, after abolition of user fees in health Centre IVs the Response to “allergic reaction to lack of Drugs by doctors and remedial action taken;” improved from an average of 3.47 to 3.53. The implication is that health workers are accountable to the community and are responsible public servants.

Table 23: The Status of Corporate Image after Abolishing the User Fee

Corporate Image	Mean	Std. Deviation
Reputation enjoyed by Hospital	3.25	0.88
New technology in the hospital; scan;	3.17	0.96
Honesty in service provision	3.23	0.91
Ethical practices followed	3.29	0.86
Overall Mean for Corporate Image	3.24	

The results in Table 23 indicate that there is a slight change in Corporate Image of the health Centre IVs much as it’s still below the average from an overall average of 3.15 to 3.24. The overall implication is that corporate image has not improved despite of abolishing user fees in Health Centre IVs. There is need to improve on infrastructure and equipment with new technology to capture the needs and trust of patients which will promote honesty in services provided

Table 24: The Status of Social Responsibility after Abolishing the User Fee

Social Responsibility	Mean	Std. Deviation
Ambulances freely provided	3.14	0.92
Free medical treatment to the needy patients	3.13	0.82
After service delivery to inpatients is done	3.37	0.85
Overall Mean for Social Responsibility	3.21	

The results in Table 24 indicate slight change in social responsibility among the health Centre IVs surveyed, with all performance indicators below average and overall mean of 3.21. The implication is that there are no facilities to promote and provide these free services as it should be. More funds should be provided to these Health Centre IVs for then to provide such free services to the community.

Table 25: Trustworthiness of the Health Centre after Abolishing the User Fee

Trustworthiness Of The Health Centre	Mean	Std. Deviation
Maintenance Of Patient Privacy And Confidentiality	3.34	0.81
Confidence In Doctors Who Treats	3.47	0.80
Confidence In Nurses	3.54	0.80
Credibility Of The Health Center	3.28	0.84
Overall Mean For Trustworthiness Of The Health Center	3.41	

The results in Table 25 indicate that on average the Trustworthiness of the health Centre is still low with an overall mean of 3.41 which was below 3.5. This is in concur with other performance indicators measured apart from ‘confidence of nurses’; that exhibited an average of 3.54 with a standard deviation of 0.80. The level of confidence the patients have in of nurses has not changed compared to the period when user fees was in force. The implication is that the interaction between healthcare providers and patients is at the center of the treatment process. An effective interaction requires the confidence of healthcare professionals. Achieving Professional confidence has no starting and ending point, rather it is a dynamic process which depends on circumstances, Professional confidence could have been achieved in the studentship area and developed through working in clinical practices; since they might be receiving different training

Table 26: Effects of Abolishing ‘Out-of-Pocket Expenditure

Effects of Out-of-Pocket Expenditure Abolition	Mean	Std. Deviation
Ease of consulting health staff	3.95	0.90
Reasonable waiting time to see the Doctor (consultation)	3.90	0.96
Clear admission processes	3.87	0.99
Clear out-patients procedures	3.89	0.89
Prompt response to emergence cases	3.93	1.01
Prompt assessment of health conditions	3.81	0.89
Reliable medical advice given	3.98	0.90
Accurate prescription given	3.76	0.81
Fruitfulness of medical treatment received	4.11	0.87
Patient Satisfaction	3.92	0.89
Overall Mean Of Effects	3.91	

The results in Table 26 indicate that there are positive effects of abolishing the user fee based on the overall mean of 3.91 which is above the acceptable level of agreement of 3.5. the results further indicated that improvements were noticed in Ease of consulting health staff, Reasonable waiting time to see the Doctor (consultation), Clear admission processes, Clear out-patient’s procedures, Prompt response to emergence cases, Prompt assessment of health conditions, Reliable medical advice given, Accurate prescription given, Fruitfulness of medical treatment received and Patient Satisfaction. This is because based on the findings in Table 26 respondents indicated that there was a positive response in the areas indicated as on average they were above

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study concludes that there is a positive relationship with out of pocket expenditure and the quality of health services provided however, results in the model summary concludes that ‘out of pocket expenditure explain 38.9% of the changes in quality of health services and the remaining 61.1% may be explained by other factors consistent with the overall effect of abolishing “out of pocket” expenditure in the study area.

Policy Implications and Recommendation

The policy implication emerged from this study include the following

There was mixed results that should the positive and negative effects of out-of-pocket expenditure on the quality of health services rendered, therefore an optimum amount should be established that will be implement in order to foster further improvement rather than abolishing user fees in health center IVs.

More Qualified medical officers should be deployed at these levels to increase on the image of health center IVs, which will build and increase the confidence and trust by patients to medical officers when they are being treated

A policy on out of pocket expenditure is crucial to improve on cost efficiency and also to protect patients

Recommendation and Further Studies

New technology in the hospital should be adopted in these health center IVs to improve on the corporate images of these health facilities and also to provide appropriate diagnosis and prescription.

Information on hospital rules, regulations and procedures should be provided and can easily be accessible at the hospital and even before

Further studies should be carried out to establish the optimum adequate out of packet expenditure to be charged to the patients at respective health facilities in the country for particular illness and consultation

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