Equity Shortfalls & Failure of The Welfare State: Community Willingness to Pay for Health Care at Government Facilities in Jehlum (Pakistan)

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Background: The question of willingness to pay is very crucial in planning for services. In Pakistan, the long-term issues of sustainability of health systems particularly, allocation of finances have routinely been addressed by planners with insufficient data and unclear goals. This study was conducted with the objectives to determine the demand for health care services in the community; at first level care facilities and community level and determine the willingness of the community (Willingness to pay) to participate in cost sharing mechanisms for provision of primary health care in fee for service and prepayment mechanisms. **Methods:** A cross sectional stratified household interview survey of 600 households was carried out in urban and rural areas of district Jehlum, to address the financial sustainability of government health care interventions at the community level and to explore the question of willingness to pay for health care and their ability to participate in the cost sharing mechanisms. **Results:** In response to willingness to pay at a Government facility to obtain health care 437 (72.7%) of the households expressed their willingness to pay for health care. In 72% of the cases, cost was not considered as a barrier in seeking care and only 19% of the cases considered cost as a partial barrier; the rest said that cost prohibited seeking care. A majority across all strata is willing to pay for consultation and medicines at public sector facilities, although the responses from the low income groups exhibit a slight decrease in the willingness to pay. The willingness to pay is marginally affected by income, place of residence and/or cost of the treatment incurred. **Conclusion:** The findings of this study suggest that the community is willing to pay for health care at the public sector facilities if payment can ensure provision of essential curative services and medications at improved quality levels.

Key Words: Health Expenditures, Equity, Cost sharing, Health Services Needs and Demands

INTRODUCTION

A welfare state strives to guarantee to its citizens health care. The emergence of the New World Order, riding on the crest of the wave of market economy changed many of the realities that were previously taken as granted. In a uni-polar world dominated by the market forces, the real politics has changed and the time has come for the lesser-developed nations to review the current state of affairs and carefully plot out the future courses of action available.[1] Up to the early 1980's, in the less developed countries, health care used to be donor driven with the UN family and International Donors playing a major role. The policies and interventions in the health care arena were under the control of health professionals with a view to achieve the ultimate objectives of providing health care. The "effectiveness of interventions" played a major role in determining the flow of funds. This scenario changed with the emergence of the Bretton Woods institutions in the late eighties as a major player in health sector financing. The 1993 World Development report[2] is a major policy document, which has decisively transformed the time-honored traditions and beliefs of health care. Issues of efficiency and performance were brought to the forefront by the economists at the IMF and World Bank.[3] The World Health Organization has followed it up with a Health Systems Performance report[4], and a report by the commission on Macroeconomics and Health which shifts the focus of discussion from egalitarian provision of all services to all the population to a more pragmatic approach of equitable distribution of possible services. The major shift is from "health professionals" providing "effective" solutions to health care problems to "economists" planning "efficient" solutions.[5] The methodology of Burden of Disease, in

priority setting, has revolutionized the historic traditions of identification of interventions first and then putting them high on the priority list.

These developments have added further burden on the already under performing health systems like Pakistan. The question of sustainability of health care service provision is a burning issue in the policy making and health care financing arena. In Pakistan, the long-term issues of sustainability of health systems particularly, human resource development and allocation of finances have routinely been addressed by planners with the short-term gains in mind and the result is that in the WHO 2000 report, Pakistan ranks quite low in health systems performance indicators.

The question of resource distribution, compounded with the desire to provide health care for all, is challenging in all countries whether they are developed or less developed. In the National Health Policy, the government of Pakistan has duly recognized that alone it cannot bear the cost of providing health care to the nation and different mechanisms have been suggested for resource mobilization. Among these is granting autonomy to various teaching hospitals, strengthening of district hospitals, developing public private partner-ships and privatization of primary level health facilities.[6,7]

The paucity of information on equitable allocation of resources predicts the actual situation of available literature on the subject. The willingness to pay has not been documented for the different initiatives of alternative financing strategies and the level of participation/ability is yet to be addressed in Pakistan.

This study was carried out at the first level care facility to address the financial sustainability of government health care interventions at the community level.

This study was undertaken to explore the question of willingness to pay for health care from the communities' perspective and their ability to participate in the cost sharing mechanisms. The objectives of the study were to determine the demand for health care services in the community; at first level care facilities and community level and to determine the willingness of the community (Willingness to pay) to participate in cost sharing mechanisms for provision of primary health care on the following aspects of alternative financing mechanisms: -

(a) Fee for Service

(b) Prepayment

MATERIAL AND METHODS

The survey was conducted in November 1998 and the study population was all the households (approx 155,000 households) in District Jehlum of Punjab Province in Pakistan, Jehlum was chosen as it has been at the forefront of implementation of interventions and health care reforms. The survey was cross sectional household interview survey. Household was defined as all the members of a family living within one compound and using the one kitchen.

For the survey, a multi stage clustering technique was applied in which the Primary Sampling Units were all households in district Jehlum. Three strata were identified as Urban, Semi Urban, and Rural. The staging was done at Ward (Urban areas are divided into municipality wards of 15-20,000 population each) in urban and semi urban areas, and Union Council (Rural areas are divided into Union Councils administratively of approx 15,000 populations each) and Village Level in the rural area. For sample size calculation, absolute precision (d) was taken as 5 percentage points and expected prevalence (p) was taken at 50% assuming that 50% will be willing to pay. The design effect was taken as 1.5 due to the multi stage sampling methodology. The required sample size came to 577 households; this was rounded out to 600 households. The questionnaire developed by UNICEF for Health Care Demand and Health Expenditures Survey in the Bamako Initiative was modified and adapted for the survey.

In each enumerated household, the head of the family or in case of non-availability the eldest family member, mother, father or wife of head of household were interviewed. The minimum qualification of the survey team was graduate and two medical doctors were supervising the data collection throughout. The question asked was: Would you be willing to pay for health care at the government health facility? For what services and what are your conditions? And what is the maximum amount you would be willing to pay?

A Socio- Economic Score (SES) was constructed for the households and groups were made according to quartiles. The data was analyzed using EPI INFO 6.04 D and MS Excel.

RESULTS

The survey population comprised of 601 households, out of this 72% was in the rural area, 11% in the semi urban area, and 17% in the urban area. The average number of persons in a household was 6.9. The per capita income was Rs 894 (U$18 approx at exchange rate of 1998 Rs 48=U$1) per month and per capita expenditures were Rs 901, the expenditure on food on average comprised of 50% of the total expenditure.

Socio demographic profile

The proportion of under 15 years of age in the population was 42.1% while above 60 years was 6%.. The sex distribution was 105 males to 100 females. The overall adult literacy rate (Adult Literacy Rate: Percentage of persons aged 15 years and over who can read and write (8)) was 70%, 83% for males and 56% for females.

Willingness to pay

On the question of willingness to pay at a Government facility to obtain health care 437 (72.7%) of the households indicated their willingness to pay for health care it was 81% in the urban, in the rural population 72%, and in the semi urban 60% were willing to pay at a government facility. Stratification by Income groups and SES revealed that the low Income and SES group had less willingness to pay for health care compared to the middle and high groups (Table 1). The willingness to pay was conditional and availability of medicines was identified as a condition by 89% of the households. For service provision, 71% were willing to pay for medicines and 38% for curative care episodes (Table 2).

Table-1:Cross tabulation of Willingness to Pay Health Care at First Level Care Facility

		Yes (%)	**No (%)**	Total*
Cost consideration Prevented From Seeking Care	No	118 (76.6)	36 (23.4)	154
	In part	22 (53.7)	19 (46.3)	41
	Totally	13 (65.0)	7 (35.0)	20
	Total	**153 (71.2)**	**62 (28.8)**	**215**
Treatment paid from	Cash At Hand	142 (74.3)	49 (25.7)	191
	Household Savings	2(66.7)	1 (33.3)	3
	Loan	6 (35.3)	11 (64.7)	17
	Assistance From Outside	1(50.0)	1 (50.0)	2

	Others	2	0	2
	Total	**153 (71.2)**	**62 (28.8)**	**215**
Delay In Seeking Care	0-1 days (No delay)	105 (71.9)	41(28.1)	146
	2-3 days	39 (72.2)	15 (27.8)	54
	4-7 days	6 (60.0)	4 (40.0)	10
	more than 7 days	2 (50.0)	2 (50.0)	4
	Total	**152 (71.0)**	**62 (29.0)**	**214**
Stratified by Residence	Urban	82 (80.4)	20 (19.6)	102
	Semi Urban	42 (64.6)	23 (35.4)	65
	Rural	313 (72.1)	121 (27.9)	434
	Total	**437 (72.7)**	**164 (27.3)**	**601**
Income Groups by Quartiles	Low	121 (63.0)	71(37.0)	192
	Middle	193 (73.7)	69 (26.3)	262
	High	123 (83.7)	24 (16.3)	147
	Total	**437 (72.7)**	**164 (27.3)**	**601**
Socio Economic Groups by Quartiles	Low	106 (64.2)	59 (35.8)	165
	Middle	194 (75.2)	64 (24.8)	258
	High	137 (77.0)	41 (23.0)	178
	Total	**437 (72.7)**	**164 (27.3)**	**601**

** Totals will vary as number of respondents per category varies*

Table 2 Prerequisites and Services identified by the Households willing to pay for care

	Number	**Percentage**	**% of Households**
Prerequisites			
Availability of Medications	391	(39.5)	89.3
Availability of Staff	263	(26.5)	60.0
Laboratory facilities	112	(11.3)	25.6
Affordable costs	66	(6.7)	15.1
Less Waiting time	58	(5.9)	13.2
Changed working Hours	41	(4.1)	9.4

Without Condition	27	(2.7)	6.2
Others	33	(3.3)	7.5
Total	991*	(100.0)	+
Services Identified			
Drugs	312	(37.5)	71.2
Curative Care	161	(19.4)	36.8
Child birth	99	(11.9)	22.6
Injections	69	(8.3)	15.8
All types of Health Services	63	(7.5)	14.4
Injuries, First Aid	46	(5.5)	10.5
Antenatal Care	43	(5.2)	9.8
Immunization	37	(4.5)	8.4
Total	831*	(100.0)	+

+ Totals will not add to 100% as multiple responses per household are tabulated

* Number of responses

Table-3: Amounts indicated by method by those willing to pay (Rs.)

	Median	25th Percentile	75th Percentile	Mean	Range
Per Visit	**20**	5	20	**22**	198
Per Month per family	**50**	20	100	**96**	990
PerYear per family	**100**	50	200	**195**	995
Per year per person	**20**	8	80	**56**	495
Per month per person	**15**	10	20	**27**	297

Table-4: Cross tabulation of responses if the consideration of costs prevented from seeking care

Consideration Of Cost Prevented From Seeking Care					**Total ***
		No (%)	**In part (%)**	**Totally (%)**	
Treatment paid from	Cash At Hand	150 (78.5)	28 (14.7)	13 (6.8)	191
	Household Savings	2 (66.7)	1(33.3)	0	3
	Loan	0	10 (58.8)	7 (41.2)	17
	Assistance From Outside	0	2	0	2
	Others	2	0	0	2
	Total	**154 (71.6)**	**41 (19.1)**	**20 (9.3)**	**215**
Delay In Seeking Care	0-1 Days (No Delay)	114(78.1)	22 (15.1)	10(6.8)	146
	2-3 Days	34 (63.0)	15 (27.8)	5 (9.3)	54
	4-7 Days	4 (40.0)	3 (30.0)	3 (30.0)	10
	More Than 7 Days	1 (25.0)	1 (25.0)	2 (50.0)	4
	Total	**153 (71.5)**	**41 (19.2)**	**20 (9.3)**	**214**
Stratified by residence	Urban	36 (85.7)	5 (11.9)	1 (2.4)	42
	Semi Urban	18	0	0	18
	Rural	100 (64.5)	36 (23.2)	19 (12.3)	155
	Total	**154 (71.6)**	**41 (19.1)**	**20 (9.3)**	**215**
Income Groups by Quartiles	Low	32 (54.2)	14 (23.7)	13 (22.0)	59
	Middle	75 (72.1)	23 (22.1)	6 (5.8)	104
	High	47 (90.4)	4 (7.7)	1 (1.9)	52

	Total	**154 (71.6)**	**41 (19.1)**	**20 (9.3)**	**215**
Socio Economic Groups by Quartiles	Low	30 (57.7)	12 (23.1)	10 (19.2)	52
	Middle	70 (72.9)	16 (16.7)	10 (10.4)	96
	High	54 (80.6)	13 (19.4)	0	67
	Total	**154 (71.6)**	**41 (19.1)**	**20 (9.3)**	**215**

Totals will vary as no of respondents per category vary

The methods of payment indicated by those who were willing to pay, 21% agreed to enhanced fixed purchee fees (fixed fee per visit), 32% were ready to pay yearly payments, 27% monthly payments, and 20% indicated that they would like to pay as per type of care received according to the severity of disease and drugs prescribed (Fig 1). The amounts that they have indicated are in shown in Table 3.

Ability to pay

In 72% of the cases cost was not considered as a barrier in seeking care and only 19% of the cases considered cost as a partial barrier, the rest indicated that cost was the major barrier. In case the treatment was not paid from available cash in the household, the willingness to pay decreased. The delay in seeking care was also correlated with the decrease in willingness. Further analysis revealed that 31% of those reporting a barrier had to resort to financing sources from outside the household. The delay in seeking care also increased, as the cost became a barrier. Out of those, reporting a delay in seeking care, 24% cited financial barriers as the reason for delay. The effect in income groups and socio economic groups was also the same i.e. the low income and SES groups had a greater problem with costs as compared to the middle and high income and SES groups table4.

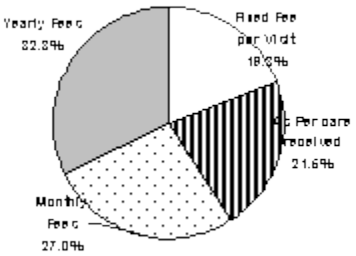

Figure-1: Methods of Payment specified by those willing to pay

DISCUSSION

Limited data is available on the subject of cost sharing mechanisms and even less on the willingness to pay for health care in Pakistan. Key informant interviews in rural Islamabad Capital Territory (ICT), carried out by the Health Financing and Sustainability Project funded by US A.I.D. found that the community is willing to pay for health services "although how much is unknown".[9] Similarly the second evaluation report of the Prime Minister's Programme for Family Planning and Primary Health Care states that " more than a third (35%) of these community leaders thought that the communities will be willing to contribute to pay for Lady Health Worker (LHW) salaries, while 42% thought that the communities will be willing to pay for the medicines and contraceptives provided by the LHW's ".[10]

The 3rd Evaluation Report on Health For All clearly identifies that Pakistan cannot afford to finance its health care adequately with respect to its growing population due to allocational and internal inefficiencies.[11]

The World Bank suggests that provision of essential curative care services and preventive services will cost approximately US $12 per capita in the low-income developing countries.[12] Calculated at the present foreign exchange parity (Rs 65=US$1) this works out to be Rs. 780 per capita or Rs. 11.154 billion per year just for provision of primary health care services to the population whereas the per capita expenditure on health was Rs 160 in 1996-97 by the government.[6]

The optimal role of government in the health care sector has been recently redefined in the World Health Report 2000 as being one of stewardship ("function of a government responsible for the welfare of the population, and concerned about the trust and legitimacy with which its activities are viewed by the citizenry"). This shift in role from provider to steward has yet to take place in the developing world. The change in the function of the government from a provider of services to a regulator is still a long way ahead, at least in Pakistan. The main reason for government interventions in the health care market is the promotion of equity and ensuring the provision of public goods in health care.[2]

Willingness to Pay

The willingness to pay for normal goods depends on the tastes or the amount of disposable income available with the consumer, however in health care the willingness to pay depends primarily on the total wealth of the consumer and in order to pay for care the consumer may even sell off some or total fixed assets. If a family spends most of its savings or incurs large debts in the hope of saving a member's life it is because there is no choice or alternative available in these families.[13] The ability to pay thus is dependent on the total economic value of the consumer as they may even mortgage their future for provision of health care. This raises serious questions about equity and the effect of illness on poor households.

The findings of this study suggest that the community is willing to pay for the public sector services if payment will ensure provision of essential curative services (Table-2). The willingness to pay for public goods (public goods are defined as goods having indivisible benefits and hence no one can be excluded from consumption for not paying. e.g. malaria spray) is less than five percent, if we stretch the definition to include the responses specifying all types of health care the percentage still remains below fifteen percent (Table 2). Moreover, there appears to be a definite pattern to the responses; the willingness to pay for care is mostly linked to provision of medicines.

The important aspect is that the willingness to pay is marginally affected by income, place of residence and/or cost of the treatment incurred. A majority across all strata is willing to pay, although the responses from the low income and low SES groups exhibit a slight decrease in the willingness to pay. This is exactly as expected from the literature.[14-19]

Ability to Pay

For Pakistan, the World Bank suggests, ideally the government should not pay for services that people would be willing to pay for themselves. In other words, government spending should not crowd out private spending.[20] These critical issues have also been identified in the 8th Five Year Plan[21]: In the case of equity it is stated, "The provision of health services is inequitable… The cost of health care to the poor is high and any health care in many cases is inaccessible for reasons of cost or distance". The Pakistan Integrated Household Survey[22] gives a broad and sweeping statement that: in the case of government facilities, specially the FLCF (First Level Care Facility) there appears to be a problem of ability to pay. The (low income) poor would prefer to go to a private doctor and pay for care due to the perceived low quality of care at Government Institutions.

Another important factor to be remembered in this respect is that GNP Per capita of Pakistan is attributed around $ 460 to $ 480 by various international reports. The poverty level of $ 1 pp per person per day calculates to Rs. 3300 per capita per year. It is stated that 12- 40% of Pakistan's population is below the poverty line.[23-25] However

determining the level of ability to pay for health care or any other type of consumption by itself is a political question. It involves the decision on how much should a person spend on his food, clothing, utility, and health.

The question of the ability to pay requires further deliberation and research, as to what are the effects of health care payments on the household budget? What should be the level of exemption from charges? How will the safety nets for the poor be devised? What are the levels of affordability and what mechanisms will ensure equity in provision and charging for care? What are the reliable indicators for assessing the ability to pay for care? The amounts indicated by the community should be viewed as only evidence to support the hypothesis that the community is willing to pay and not as the exact amounts, the community will be able to pay.

The formulation of optimum service delivery packages, which can be sustained, at the different levels of care requires careful consideration. The minimum package proposed by the Macro Economic Commission[5] is estimated at $ 34 per person in developing countries. Sustainability and efficiency in health care delivery should be a priority but not at the cost of equity in service provision. The need for government intervention in the health care market as an inherent feature of the free market economy should be kept in mind. Health care without government control will invariably lead to market failures: inequitable services provision, restrict access to care, and preventive health care services will not be provided.

Despite the limitation that this study was carried out in one district, the sample population compares favorably with other national data including the Census[22,23,26] with respect to its demographic and socioeconomic perspectives.

CONCLUSIONS AND RECOMMENDATIONS

The fact that alternative financing mechanisms are required to ensure provision of essential services is evident even from the community's perspective. The high level of willingness to pay for health care services at the government facilities is in fact an indictment of the current health care system and an expression of dissatisfaction on the current mode of health care delivery. The community indicates its willingness to participate in cost sharing mechanisms for health care but that is linked with the provision of medicines and availability of personnel. Inferences regarding the methods that the community is willing to participate in include; a multiple tier fee structure (variable fee per visit) a fixed fee structure (fixed fees per visit) and social insurance packages (yearly or monthly payments).

Policy Implications

The Government's desire to improve the Health Status of the population is evident from the lofty goals it has set itself in the field of Health Care but the ground realities are that the requisite resources are not available with the Public Exchequer. The need for an increase in expenditure on the social sector specially health is obvious as is the fact that the condition of the economy does not allow an increase in the current expenditures. Therefore, to assure provision of essential health care other avenues need to be explored. The community is willing to participate in different cost sharing mechanisms but the overriding factor is that a minimal level of service delivery needs to be guaranteed. The mechanisms for such a guarantee should be the focus of policy research to ensure sustainability of health services. At the same time the quest for equity should not be cast aside and the development of an efficient yet equitable health care delivery system should receive priority.

The fact that even the low socio economic group has to resort to the private sector for illness episodes is an important reminder that the public health care system is failing to provide the safety net for the poor. Thus, the reason for government intervention in health market is not being fulfilled. The role of the government requires careful consideration as to the expectations of the community and its capacity to accomplish the same given the current economic scenario that is likely to continue for the near future.

There is an urgent need for reforms in the health sector with a specific focus on equity and efficiency. The allocational inefficiencies can be minimized with the proposed devolution of power plan at the district level but the

internal inefficiencies of the system also need to be improved by streamlining the organization and structure of health system in Pakistan.

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