Out of Pocket Spending for Febrile Illnesses among Children Admitted to two Teaching Hospitals in Sri Lanka OutofPocketSpendingforFebrileIllnessesamongChildrenAdmitted-totwoTeachingHospitalsinSriLanka

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Abstract

Background: The private health service has influenced the escalation of out of pocket spending (OOPS), while there is an established free health service in Sri Lanka.Aim: This study evaluates the extent, impact and reasons for rising OOPS among patients admitted to two teaching hospitals in central Sri Lanka. Setting and Design: Prospective mixed method was used and quantitative and qualitative data regarding health expenses were gathered by an interviewer-administered questionnaire among 100 consecutive admissions with acute febrile illnesses.Results: Majority (78

Index terms— out of focket spending, doctor patient communication, target population, acute febrile illness.

1 Introduction

ree health care and education in Sri Lanka date back to the pre-colonial era an up to as far back as 250 BC. The country has maintained commendable health indicators and a high literacy ratio in the region amidst a 35 yearlong precarious war, financial instability and impact of a devastating tsunami. Introduction of free economic policy in 1970's has expanded the provision of health care delivered from the private sector. Though the 2013 United Nations Development Programme Report has categorized the country as a country with "medium human development", (Human development report, 2007), a vast majority of the public represent a lower economic class and the health care seeking pattern has been transformed over the past few decades, which may probably have been influenced by the expansion of the private sector healthcare facilities and changes in the life-styles of the public. Commercialization of the health service has led to escalation of the out of pocket spending (OOPS) of individuals and the nation, which in turn, has caused remarkable economic constraints.

OOPS has been a major concern in the Sri Lankan community in the recent past. Total OOPS in 1990 has gone up by 20 million rupees in 2012 (Sri Lanka Health Accounts, 2008) and currently the major share (83%) of the private sector expenditure on health is paid by OOPS (National health bulletin, 2008, Bandara S.2011).

The Household Income and Expenditure Survey (2012/13) show that in a month, nearly 31.7% of the household population obtains health treatments as outpatients per month (Household Income and Expenditure Survey - 2012/13). This increment of the demand for health services, notably due to epidemics of non-communicable diseases, dengue, intestinal infectious diseases etc,(National Health Bulletin, 2008) and the cost of care amidst an available free health service is mainly due to changes in the health care seeking patterns of the public. Demographic transitions occurring in Sri Lanka, which have a direct impact on the potential demand for healthcare services, have also influenced OOPS. Around 13% of Sri Lanka's population was aged more than 55 years in 2011, compared to half that number four decades ago (RAM Stand point Commentery,2013). On the other hand, optimum utilization of expert services, which are already available in the government sector, has

been hindered due to over-crowding and mal-distribution of service demand especially in the rural and sub-urban areas.

Management of most of the acute febrile illnesses should have no cost other than the inevitable cost of transport and loss of work. However many people seems to spend a substantial amount of money on private consultations, investigations and treatment, even amidst their financial constraints. Such health care seeking behaviours inevitably compromise their economic stability as well as individual and family health promotion pursuits.

This situation of irrational spending on ambulatory care is probably contributed to by the expansion of health facilities in the private sector, and

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Aim: This study evaluates the extent, impact and reasons for rising OOPS among patients admitted to two teaching hospitals in central Sri Lanka.

Setting and Design: Prospective mixed method was used and quantitative and qualitative data regarding health expenses were gathered by an interviewer-administered questionnaire among 100 consecutive admissions with acute febrile illnesses.

Results: Majority (78%) expressed concern about cost of care; low and high income groups have spent 33.6% and 10.7% respectively, of their monthly earning for the current acute febrile illness. low-income group with lack of savings have managed with loans and curtailing routine living expenses of the family.

Conclusion: OOPS appears to be a considerable burden on the public. Deficiencies of doctor patient communication and lack of defined target population could be responsible for this situation.

Deficiencies in the free health care facilities provided by the ever expanding and improving government sector need to be addressed. Furthermore, the problems in the doctor-patient communication, attitudes and beliefs of the general public are playing a pivotal part in this scenario.

This study attempts to evaluate the extent, reasons and impact of out of pocket spending among a series of patients, admitted to two teaching hospitals in central Sri Lanka with febrile illnesses. This study will also apprise the antecedents of such behaviour and patients' perception regarding OOPS on health.

3 II.

4 Materials and Methods

One hundred consecutive paediatric patients admitted to wards of two adjacent teaching hospitals with acute febrile illnesses were recruited for the study. Non-consenting patients and those with long standing chronic illnesses were excluded. Mixed method of collecting quantitative and qualitative data was adopted. A questionnaire to evaluate the extent, background, reasons and perception about OOPS was developed based on several focus group discussions with admitted patients. A 20-item questionnaire with 4 open ended questions was developed and pre-tested.

Each questionnaire was administered by one of four trained interviewers on 100 consecutive admissions to two teaching hospitals in the Kandy district of central Sri Lanka. Demographic description, monthly income, expenditure and cost of care for the current episode of illness were evaluated. Qualitative data based on their perceptions regarding extra spending on health care was collected using 4 open-ended questions.

5 III.

6 Results

The total study sample consisted of 56 patients from hospital A and 44 patients from hospital B, representing 28% and 34% of total admissions during that particular period, in hospitals A and B respectively. Majority (83%) was below age 5 years and 10% were between 5 -8 years and 7% were above 8 years. In the study sample, according to the income, 31(31%), 32(32%), and 33(33%) of parents were in the income categories of <25 000 Rs/month, 25000-50000 Rs/month and>50000 Rs/month respectively. Table1 : Mean income and expenditure of different economic classes Volume XIV Issue V Version I Year ( )

Figure **??** : Changes in the mean health expenses as a percentage of total monthly income with different income categories Out of the total sample of 100 patients, 89(89%) has tried medication from the private sector prior to admission as their first choice. Total expenditure for this acute febrile illness ranged from Rs 0 to Rs 43,450.00 (Mean Rs 5,432.19) which is 0 % to Rs 468% (Mean 25.95%) of the monthly income. % has spent more than their monthly income for the episode of the current febrile illness. Average expenditure for this episode of illness was 33.6% of the monthly income among those who less than 25 000 Rupees per month compared to 10.7% among those who earn more than Rs 50 000/ month. The major share of the cost was due to loss of work (32%) and travelling (25%), followed by costs for doctor consultation fees (9 %), drugs (11%) and investigations (12%).

Expenses incurred due to acute illness had been a constraint for 94.2% of the study sample. They express their feelings by "It is not easy to spend money like this" "We managed it somehow" "We had to pawn our jewellery", but some had the idea that "it is worth spending on the child whatever the problems we have" come at the end"; however some said "they had less response to the treatments from the OPD "we had to waste a lot of time in long queues."

Reasons for out of pocket spending was attributed to appearance of new symptoms (36 cases; 45%), unexpected worsening (12 cases; 15%), fever was not settling (50; 62.5%), and the parents were scared since the child became ill (34 cases; 32.5%). They express their feelings "the doctors are too busy" "the health staff is maintaining a gap", "language problems" and "they don't understand our economic problems" which could be attributed to poor communication.

Reasons for avoiding the free health care service offered by government included, convenience (18 cases; 22.5 %), familiarity (40 cases; 50%), easy access (50 cases; 62.5%) and confidence on their family physician (8 cases; 10%). In response to the open ended questions they expressed their views as "the child showed a good response to the GP's medications last time", "the GP surgery is closer than the hospital", "last time the child showed no response after taking medication from the OPD several times" and "we have been used to going to that GP since the child was born" Analysis of the degree of impact on patients' economic status indicated that, 41. 3% had compromised their savings, 44.8 % had taken loans for management of this illness.

7 IV.

8 Discussion

Health care seeking behaviour causing escalation of out of pocket spending has been observed in many countries all over the world, at times even exceeding catastrophic levels leading to economic breakdown (Somkotra, 2009). Health care seeking be haviour is influenced by several factors; service availability, illness pattern, service policies like extent of private and public partnership, availability of alternate methods of spending such as insurance schemes, commercialization of health care services and public attitudes towards available services (Sri Lanka labour force survey,2013). Similarly, OOPS has definite impact on the economic stability as well as health status of the public that will in turn affect the entire nation (Sri Lanka labour force survey, 2013).

The choice of the majority of our sample (89%) has been the private sector in spite of the availability of free and reliable health care services delivered by the government. The country has a successful record of providing free health service over several decades. The public has the access to free health care delivery within a reach of 3 miles in any part of the country **??**Charlton, 2014). Currently one doctor serves1815 population **??**Census, 2006) and there are 157.3 nurses per 100,000 populations. Hospital bed density is 3.1 beds/1,000 populations **??**Census, 2004) **??**RAM commentary, 2008). The country has managed to progressively improve its records of satisfactory infant mortality rate, currently down to 8 deaths/1,000 live births (2010 census), maternal mortality rate down to 35 deaths/100,000 births (2014 census), and a life expectancy up to 74.1 years (2012 census) in the region [18], while maintaining the literacy ratio as high as 91.2%. (2010 census) that reaches closer to the standard of a developed country **??**RAM ratings,2008).Expression of their trust in existing system by the majority of the study sample would have been partly influenced by the study setting being a hospital and the presence of an interviewer who is representing the government hospital. Amongst all these facts, the reasons for the public approaching private sector in spite of financial difficulties are worth exploring. Availability and efficiency of the private sector has been the reason for the gradual escalation of the

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Volume XIV Issue V Version I Year ( ) K spread of private health service. Since early 1980s with the introduction of open economic policies the government medical officers were allowed to engage in private practice after working hours and charge patients for their services (National health bulletin, 2008). This policy has led to initiation and expansion of the private health care services exponentially; resulting in expansion of consultation services, laboratory services and pharmacies.

The number of private hospitals has gone up from 44 in 1990 to 112 in 2011 [1].These institutions provide out-patient care to 419,000 in 1990 and to 6 million in 2011. Number of patients treated as inpatients in private hospitals has gone up from 65,000 in 2009 to 401,000 in 2011 (National Health Expenditure, 2011). This exponential growth of the private health sector has dragged in the deserted people without an easily accessible and convenient health service with direct access to the specialists.

The parallel economic growth of the country depicted by per capita income, Rs 18,912 in 1990 to Rs. 46,207 in 2014 has also diverted more people in to the private sector health services (National health bulletin, 2008). However the high economic growth of recent years has not, for the most part, reached the poor. Sri Lanka ranks 4th among Asian countries showing high economic inequality, based on the Gini-index of 46 in 1990 to 49 in 2014(National health bulletin, 2008). This indicates that a significant proportion of the population is probably not in a position to cope with expensive health care costs. Mainly the high-income groups are utilized still in-hospital services of the private sector, but the out-patient services are utilized by people of all income categories. (National health bulletin, 2008).

Lack of target population is contributing for perplexities of health care seeking be haviour of the public. Ambulatory care provided by public sector does not have a defined target population. Even the private sector, either by general practitioners or part time practicing government doctors, does not adhere to a target population. This culminates in improper planning or irregular follow up, repetition of investigate on sdue to deficiencies in proper record keeping, finally adding to OOPS. Cost of travelling and cost for investigations was the major contributor of OOPS in this study. How much of this travelling and investigations could be curtailed by rational use of health care services would be a valuable consideration.

Although the private health sector is on the rise, the prevailing referral system is unsatisfactory and the record keeping is not a mandatory requirement. On the other hand, the quality of the private health sector has not been properly monitored, which is very important in protecting the community from catastrophic outcomes. A study done in Thailand indicates that, the preference to use private sector healthcare services among wealthy families has made them more vulnerable to health related issues and disastrous spending than poor families **??**Somkotra T,2009) Deficiencies in doctor patient communication could be attributed for unacceptable OOPS. As reflected by the responses to open ended questions, lack of confidence in the public sector, convenience, reliability and familiarity of their personal GP, suggest deficiencies of doctor-patient communication of the prevailing public health service. Traditional methods of doctor-patient communication style adopted by the majority of the government medical officers do not address patients' ideas, concerns, emotions and expectations. In a society with over 90% literacy ratio, patient cantered approaches and patient empowerment are valuable strategies to harness for better health of a nation.

Epidemics of dengue seem to have devastated our patients forcing them to seek health care in the private sector. However In the present study, only 6.25% of patients had sought medical advice in the private sector due to the fear of dengue.

Most of the parents in the study population expressed concerns about constraints on their economy caused by OOPS. This response is partly an expression of the mentality of people living in a society with a free health care service. However 26.25% of people have managed their illnesses with loans and some have pawned their jewellery. Reasons for this trend in a background of having free health care service is unclear. Reasons given for approaching private sector over free health care were convenience, easy access, familiarity and the confidence. However this opinion is probably biased due the presence of the interviewer, which became a confounding factor. Only a few had expressed serious concerns on lack of facilities, long waiting time and poor quality of the service in public health care service.

Sri Lanka is currently spending about 70 USD per capita for health care (Sri Lanka Health Accounts, 2011, 2005-2009,). Health expenditure is 3.5% of GDP (Economic and Social Statistics of Sri Lanka, 2014) out of which Government of Sri Lanka spends 1.7% (Sri Lanka health accounts, 2011) of GDP for health care. Proper utilization of these public funds should bea high priority in health economic policies in the country.

10 V. Conclusions and Recommendations

This small study with limited power has demonstrated that the majority admitted to two hospitals in Sri Lanka, which has an established free health service, had selected private healthcare services prior to admission, incurring significant costs in comparison to their income. Such irrational health care behaviour could be attributed to deficiencies in doctor patient communication, lack of target population and deficiencies in the public health sector, for instance, lack of facilities, efficiency and difficulties in easy access. more patient centred, attractive and feasible would be beneficial to those who seem to struggle with the limited money they have. Best use of the existing private-public partnership could be achieved only if the public is making an informed decision on their health care spending. Further studies would be essential for detailed analysis of this timely problem and solutions, which will be beneficial for the individual patient as well as for the nation as a whole. Modifications of the organization of the existing health care system, including recognizing the definite target population, promoting patient centred approaches when practicing and teaching and training of competencies for government medical officers in order to win the trust of the general public will be useful in the long run.

11 VI. Limitations

The study sample does not represent the national population and the interviewer presence would have biased the opinion of participants.

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Figure 1: Figure 1 :

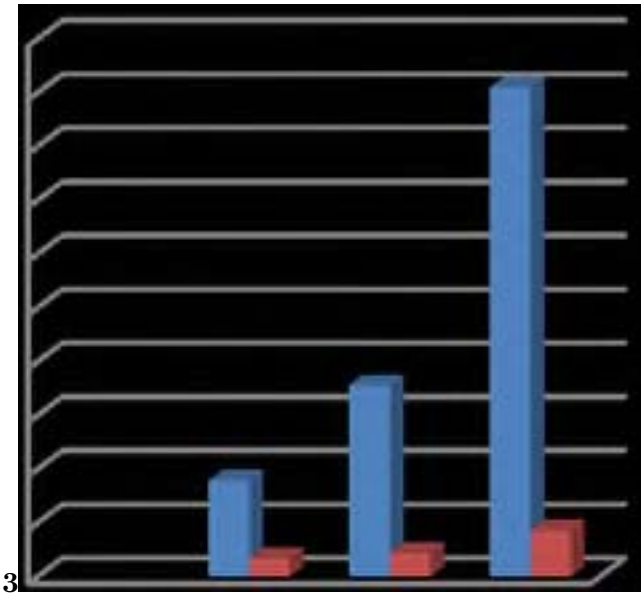

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Figure 2: Figure 3 :

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	MONTHLY INCOME		
Reason for preferring private sector	<25000 RS (< 191 USD)	25000-50000 Rs (191 -382 USD)	>50000 rs (> 382 USD)

Figure 3: Table 2 :

[Healthaccounts20052009] , Retrievedfrom Healthaccounts20052009 . http://www.ips.lk/publications/series/healthecon/sri_lanka_health_account_2005_2009_ips/national_health_accounts_2005_2009_ips.pdf

[Central Bank Of Sri Lanka ()] *Central Bank Of Sri Lanka*, 2014. Economic and Social Statistics of Sri Lanka (Retrieved from)

[Unitednationsdevelopmentprogramme ()] *df References Références Referencias Making the state funded free healthcare service lth*, Unitednationsdevelopmentprogramme . gov.lk/en/publication/AHB2012/Annual%20Health%20Bulletin%20%202012.pdfSriLankaNational 2001. p. 16. (Human developmentreport)

[Charlton] 'Effective health delivery'. Editorial Charlton . 10.4172/23299126.1000e105. http://dx.doi.org/10.4172/23299126.1000e105 *Gen* 2014 p. 4A.

[Bandara (2011)] *Emerging Health Challenges in Sri Lanka: more money for health and more health for money,The blog of the Institute of Policy Studies of Sri Lanka (IPS) Sri Lanka apex socio-economics policy think-tank. Talking economics*, Samanthi Bandara . http;//www.ips.lk/talkingeconomics/ Apr 18 2011. cited2014August20.

[Household Income and Expenditure Survey -2012/13, Preliminary Results of First Three Monthly Rounds (2012)] *Household Income and Expenditure Survey -2012/13, Preliminary Results of First Three Monthly Rounds*, http://www.statistics.gov.lk/HIES/HIES2012PrelimineryReport.pdf July, August, September 2012. p. .

[Private pills for public pains, the private sector of sri lanka. RAM Stand point commentary (2013)] *Private pills for public pains, the private sector of sri lanka. RAM Stand point commentary*, http://lra.com.lk/reports/0313_healthcare_final.pdf March 2013, pgs14.

[Sri Lanka health at a glance, National health bulletuin ()] *Sri Lanka health at a glance, National health bulletuin*, http://www.hea 2008.Vol1,25.

[Sri Lanka labour force survey, Annual report ()] *Sri Lanka labour force survey, Annual report*, http://www.statistics.gov.lk/samplesurvey/Labour%20Force%20survey_Annual%20Report_2012-final.pdf 2013.

[Somkotra and Lagrada ()] 'which households are at risk of catastrophic health spending: Experience in Thailand after universal coverage'. T Somkotra , P Lagrada . 10.1377/hlthaff.28.3.w467. *Health affaires* 2009. 28.