# Chapter 2

# LITERATURE REVIEW

The broad aim of this chapter is to critically review conceptual approaches to the micro-private health care financing question at the family level, and to propose an approach which focuses on the sources of health care expenditures of families in their daily fight against malaria as an example of an endemic local communicable disease. The general approaches of family ability to pay including all demand-based approaches, are outlined in section 2.1 . These approaches focus mostly on health care expenditure and utilization, basic needs and affordability in the short run. The existing research to date about family resources-coping strategies and ability to pay for health care expenditures is reviewed in section 2.2. Coping strategies consolidate knowledge about the resources and strategies which poor households use when faced with payment difficulties.

## Section 2.1 - General approach to family's ability to pay for health care expenditures

Economists have a concept to examine affordability, namely demand, defined controversially as willingness and ability to pay. Consumers are assumed to be able to afford whatever they are willing to pay, because they know best how to allocate their resources. In this review, I assume the health care to be affordable if its consumption does not force the family to make sacrifices elsewhere, in other words, the family disposal resources for commodities and investments do not contribute to cope with the increasing health care expenditures.

### 2.1.1 - Health care expenditure and utilization studies

This first section examines one important study about the utilization approach to the family's ability to pay for health care in Cameroon.

Litvack and Bordart (1993) conducted a pre-post controlled experiment in Cameroon of introducing user fees simultaneously with improved drug supply. Their conclusion indicated that fees plus local drug availability(improvement in quality), caused the poor to increase utilization disproportionately. This finding is explained by the relative affordability of health care at local government health centres compared to more distant providers which were previously being used. When cheap and effective drugs became locally available after fees were introduced, travel and time costs were reduced, lowering the total cost of care. This study has been frequently quoted in Ministry of Finance financial planning as empirical evidence supporting the health care financing policy package of the introduction or increase of user fees in Cameroon. While the relationship between price, quality and utilization is of vital significance for cost recovery planners, this study did not allow firm conclusions to be made about absolute affordability. The main weaknesses of this study are discussed below.

Conceptually, this study is based on the fact that people will be prepared to pay according to their ability when drugs are available. To increase the utilization of health facilities by providing the drugs that should have been there in the first place is not sufficient to convince us that user fee financing is the path to a better health for all in Cameroon. In addition, the utilization assumption that willingness to pay is synonymous with ability to pay must be questioned because payment for drugs may have serious financial consequences for the family. More information is needed about where the money to pay for drugs came from, and the implications of these expenditures for families and individuals within them.

Practically, a number of questions arise from the study :

First, it was not clear whether or not such findings could be replicated in other settings within the country. Although,

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despite recent economic decline, Cameroon is still one of the highest income African countries, and the area of the project (province of Adamawa) a relatively prosperous and cash-rich one. Therefore, user fees may not have been 'relatively affordable' in poorer Cameroonian districts.

Second, it was not clear exactly what type and amount of quality improvement would be necessary to affect quality perceptions sufficiently to produce this result. In the Litvack and Bodart study, drug availability, health worker motivation and training of a community health and management committee were all thought to have improved. Drug availability has often been assumed to have been the crucial component.

Third, there may be hidden external support costs which question replicability in less well supported projects, districts or provinces, and the sustainability in the same settings in the long run.

It is important to note that the family decision to use health services is a complex one, determined not only by the perceived quality, the availability of drugs or other services or the price, but by its ability to pay the overall health care expenditures needed for medical treatment of an episode of illness. The complexity of factors which influence families' decision to spend money on health care and the various resources they mobilize to cope with the increasing health care costs make these expenditures to be considered not affordable to families; even if the rate of utilization is likely to be increased in the setting. The costs of accessing health care can be considered affordable when utilization is not deterred for financial reasons, and when the opportunity costs incurred do not reduce levels of consumption and human capital investments. If this not the case, families just will have to pay for health care expenditures which are probably beyond their ability to pay.

### 2.1.2 - An economic principle of family ability to pay for health care

Two papers are considered which discuss theoretically the question of ability to pay for health care in developing countries.

Steven Russell (1996), in a review article described the concepts and evidence of ability to pay for health care in developing countries. The author stated that most policy debates and research on cost recovery have focused on willingness to pay for essential services, and have tended to assume that willingness to pay is synonymous with ability to pay. This article questioned this assumption, and suggested that willingness to pay may not reflect ability to pay. Households may persist in paying for care, but to mobilize resources they may sacrifice other basic needs such as food and education, with serious consequences for the household or individuals within it. The opportunity costs of paying make the payment unaffordable because other basic needs are sacrificed. An approach of ability to pay founded on basic needs and the opportunity costs of payment strategies is therefore proposed. From the few (mostly qualitative) studies available, common household responses to payment difficulties are identified, ranging from forego consumption of essential commodities, forego human capital investments, use or sell stores and assets, make claims on government. This article addressed the questions of the complex forces which influence family behaviour, expenditure priorities and resources allocation decisions; the impact of increasing health care expenditure on family budgets, consumption and investments; and ultimately, the impact of family health expenditure decisions on livelihoods and the family production of health. The author pointed out that ability to pay is a complex empirical question. Family priorities, resources and vulnerability are multi-faceted. Each family and individual within it will face different illness and cost burdens, resource flows and constraints. Furthermore, the ability to pay approach outlined in the paper implies that external value judgments about what is needed and about family expenditure priorities and patterns are required to judge ability to pay. He concluded that this raises a fundamental dilemma, since definitions or perceptions of need differ between individuals, families and

groups. These dilemmas have been raised but not fully addressed in the article, and require further debate and research to develop understanding of ability to pay and inform policy initiatives which might contribute to more affordable health care. Conceptually, our study will owe much to this important review article and will contribute to develop an empirical approach involving a simple modeling, with emphasis on a local tropical African context and a single endemic disease : malaria

Wallman and Baker (1996) conducted a study on which resources pay for treatment in a district of Kampala(Uganda). The model proposed is a means for (i) documenting the resources a woman deploys to choose, seek, find, get and pay for treatment; (ii) comparing what she has/does with a neighbour facing similar symptoms and problems, and (iii) understanding which difference between them makes most difference to the way they manage illness. This model allows assessment of the value of both formal and informal resources in the household system. It will not establish the absolute or market worth of households in the sample, but does offer a framework for comparing households which have the same access to a given set of treatment options when faced with the same symptoms. Its application improves the possibility of understanding which resources, or combinations of resources, make most difference to a household's capacity to seek and get the treatment it has decided it needs. The paper is one element of multi-layered and multidisciplinary study of 'the Informal Economy of Health in African Cities'. The overall study aims are (i) to map the cultural, infrastructure and clinical factors affecting the treatment-seeking behaviour of women in low-income urban areas; (ii) to compare their effect(s) on the management of symptoms of adult venereal infection (STD) and crisis symptoms in children under five. Important dimensions of that context are the social and physical signs which trigger the conclusion that a symptom is 'serious enough' to need treatment outside the home in the first place. The focus here is the value of resources mobilized after the 'serious enough' assessment has been made. Our study will utilize this study in relation to some practical aspects in estimating the severity in the tropical African context.

## Section 2.2 - Family resources-coping strategies and ability to pay for health care expenditures

This section examines a few studies which have used both household surveys and qualitative research to explore the family's sources of health care financing founded on the affordability principle in order to question their ability to pay for health care in the short term. The discussion below owes much to the work of Russell (1996) and Wallman et al (1996), who have explored different approaches to affordability.

### 2.2.1 - Families surveys on coping strategies and ability to pay for health care

Abel-Smith and Rawal (1992) conducted a study on '' Can the poor afford free'' health services in Tanzania? The results of this study showed that 32% of rural households surveyed : 22% of urban households found it difficult to pay for health care. The authors interpreted the figures to be a substantial proportion of the population. However, in answer to the question asked to all interviewees about the resources used to pay for care, about 60% of respondents used non-routine household health care expenditure budget lines to cope with the medical costs of treatment.

Ettling et al (1994) conducted a 'KAP' survey in Malawi about household income and household expenditure on the treatment or prevention of malaria. The results of this study showed that over 40% of all households, independent of income level, reported expenditures on malaria treatment. In contrast, only 4% of very low income households spent resources on malaria prevention measures compared to 16% of other households. Almost half of the reported malaria cases sought treatment at a health facility at a cost of $0.21 per child case and $0.63 per adult case. The overall direct expenditure on treatment of malaria illness by household members was $19.13 per year(28% of annual income) among very low income households. The authors concluded that very low income households, with an average annual income of $68, carried a disproportionate share of the economic burden of malaria, with total direct and indirect costs of malaria

among these households consuming 32% of annual household income. This study implicitly raised the question of affordability of malaria health care expenditure among the very low income households. As the total costs of malaria treatment among those households consumed 32% of their annual income, is that the cause of low investment in health prevention(4%)? Would household disposal resources for consumption and human investment be allocated to the malaria health care expenditure which shared the great part of household annual income? Perhaps a multiple regression analysis will tell us the degree of association between the health care expenditure for malaria control and both consumption and investments budgets.

Fabricant (1992) conducted a survey on the affordability and equity of primary health care costs in Sierra Leone. He found that cash to pay for care was not available in 56% of households when faced with a sudden illness. The study investigated the sources of financing and found that money was obtained through coping strategies in over a third of the cases where money was not readily available. Respondents to a questionnaire interview mentioned borrowing from friends and relatives most frequently, followed by the sale of food crops, cash assets, lowering investments and consumption budgets to pay for health care.

Louis et al (1992) carried out a transverse survey to evaluate the financial charges of antivector control and disease at the family level for 'malaria disease' in Yaounde, Cameroon. Their results showed that malaria represents a dominating endemic for which the yearly financial effort consented by each family amounts to 57,000 CFA Francs (1$ US = 250 CFA Francs), which represents medical care and entailed services as well as the purchase of chemicals for antivector control. Although, this study began to address the problem of malaria disease burdens to the micro-family level, but It did not answer the questions about the opportunity costs. The opportunity costs incurred by a family which spent annually about 230 $ US of its resources for malaria remain undisclosed. In the Cameroonian context, a well-off family may simply forego 'unnecessary' expenditures, while an income poor family may have to make damaging cutbacks to food consumption, and education or may be forced to sell assets. In addition, how to judge, whether the consumption, investments and

assets foregone are 'necessary' or discretionary. These questions need to be explored in greater detail in both quantitative and qualitative approaches.

Mcpake et al (1992), in a review of the Bamako Initiative in five African countries, used household surveys to generate information on households' cash availability and the different ways households mobilize resources. From these surveys results, widespread inability to pay was indicated by answers to general questions which asked whether people were prevented from using health services due to a lack of cash; but the problem was more restricted when the respondent was asked to remember a specific experience when they actually used a health service but were denied drugs due to lack of cash. The authors assumed answers to the more specific questions were more reliable. However, more serious ability to pay problems were also indicated : in certain communities nobody used government health services due to the cost; and while Bamako Initiative services were often considered affordable, a much larger proportion of households may have found the price of more sophisticated services prohibitive. The surveys instrument used in this study found that nearly all respondents resorted to non-routine cash sources, suggesting a lack of routine cash income and widespread payment difficulties.

Waddington and Enyimayew (1989) conducted a study on the impact of user Charges in Ashanti-Akim district, Ghana. The results of this study showed that the main areas of investment reported to be under treated, excluding health for the moment, was education. In this study, a man who paid 2000 Cedis for his wife to spend four days in hospital with jaundice also needed to make subsequent payments for drugs. these payments coincided with the reopening of schools, creating financial difficulties : 'The money spent on my wife's illness was earmarked for the payment of children's school fees and buying of school uniforms '. This result indicated that the household disposal resources for investment in education were contributed to cope with the health care expenditure of a family member.

Although the evidence presented here identified various resources and coping strategies used by families when payment difficulties arise, there is still only fragmentary information on the approach to family ability to pay for health care expenditures. This study aims to make further analyses in developing a methodological approach of identifying the family ability to pay for health care expenditures on malaria treatment in Cameroon.