

Health-seeking behaviour studies: a literature review of study design and methods with a focus on Cambodia

John Grundy

Nossal Institute for Global Health, The University of Melbourne

Peter Annear

Nossal Institute for Global Health, The University of Melbourne



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Health-seeking behaviour studies: a literature review of study design and methods with a focus on Cambodia

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Corresponding author: John Grundy

Address: The Nossal Institute for Global health, University of Melbourne, jgrundy@unimelb.edu.au

Other contributors: Peter Annear, The Nossal Institute for Global Health, University of Melbourne

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INTRODUCTION

A renewed focus on demand-side strategies to increase utilisation of health care services has been a recent feature of health systems development, especially in developing countries. While necessary, supply-side interventions through infrastructure development, human resource mobilisation, provision of essential drugs and equipment and various forms of revenue raising have often not been sufficient to guarantee equitable and effective distribution of health services.

Providing access to health services according to need has become more complex in the context of an increasing role for private providers and, frequently, a more limited role for the public sector. Within Asia, this is perhaps most clearly evident in countries that have made the transition from formerly centralised public administrative structures to more decentralised and market-oriented economies, as is the case in Cambodia, Mongolia, Vietnam and Indonesia.

Where health systems are characterised by high out-of-pocket payments and a wide range of public and private health care providers, understanding the health-seeking behaviours (HSB) of different communities and population groups is essential if adequate access to services and protection against unaffordable health costs are to be achieved.

The study of health-seeking behaviours is not well developed. Few studies are national in coverage, methodologies can vary widely, and there is no commonly applied approach. Many are focused on limited questions related to observed selection of provider at the time of illness and do not adequately investigate either the opportunities facing patients or their reasons for choosing one provider over another.

This paper assesses the nature of previous HSB studies in Cambodia, where understanding health-seeking behaviours is now of special importance because the introduction of demand-side financing to provide access for the poor to public health facilities has been effective (for example, through health equity funds—see Annear, Bidgeli et al 2008). Despite this, a preference for the use of private providers is still evident even among those guaranteed free access to public providers.

The purpose is not to conduct a meta-analysis of health-seeking behaviours but to make suggestions and recommendations about methods and approaches for future studies. The review focuses on published and grey literature about Cambodia, but it also includes a review of relevant literature from Asia more broadly as a source of experience, evidence and comparison.

In this paper we first identify the main types of HSB studies (those related to health care seeking and those related to health seeking more broadly), and we compare the different research methods and designs used in such studies. One important question is whether a uniform approach to the conduct of HSB studies can be developed. We also investigate approaches to understanding the connection between health systems utilisation and socio-cultural conditions.

The review was based on a search of relevant published and grey literature for the period 1995-2010 conducted through the PubMed database using search terms 'health seeking behaviour/behavior Asia' and 'health seeking behaviour/behavior Cambodia'. Unpublished research materials and studies were sourced through personal contacts with practitioners and researchers (particularly in Cambodia). In order to canvass the range of approaches to HSB studies, the search was open ended. The aim was to identify all articles and reports that may be relevant, and no inclusion and exclusion criteria were specified in the study design beyond the search terms and relevance.

The findings were analysed by organising the studies according to common themes that emerged from the search. In the following sections we present the results of the literature review, followed by discussion and conclusions.

RESULTS OF THE REVIEW

Based on the literature search, the materials to be reviewed were sorted into four main topics:

1. Types of HSB studies;
2. Methods used in HSB studies;
3. Cambodia-specific studies;
4. Conceptual issues in HSB studies.

These topics form the basis for our analysis of the HSB studies and the results upon which our conclusions are based.

Types of HSB studies

When considering types of studies, a distinction needs to be made between health care-seeking behaviour studies and health-seeking behaviour studies (MacKian 2003).

There are two main types of health care-seeking behaviour studies. The first analyses barriers to care that lie between the patients and the services. According to MacKian (2003), the second type investigates the process of health care seeking. This involves identification of pathways to the formal health care system, often commencing with home care and traditional healers and extending to the formal system, pathways differing according to the presenting condition. In a literature review of HSB studies in developing countries, Tipping and Segall (1995) demonstrated that the decision to engage with a particular medical channel is influenced by a variety of socio-economic variables, including sex, age, the social status of women, the type of illness, access to services and perceived quality of the service.

Health-seeking behaviour studies look at illness behaviour more generally and focus in particular on motivating factors of illness perception and health belief. Studies that look beyond the individual for social patterns or determinants of decision making refer to the concept of 'social cognition'. This includes the sense of local control over circumstance and the influences local groups and communities have on patterns of decision making.

Nowhere in the literature is it argued that these two types of study are mutually exclusive or cannot be combined. There are studies, for example, of situations in which the perception of what illness is has affected the treatment-seeking pathway (see Wilkinson 2001).

Additionally, very few studies are national in their geographic or demographic focus. Most are concentrated in villages and districts. The best examples of national HSB studies are demographic and health surveys (DHS), which apply quantitative methods only (MOP 2000, MOP 2005). DHS and mortality surveys focus in some part on health impacts and describe accessibility and utilisation patterns associated with this impact. However, while DHS associate patterns of health facility utilisation with socio-economic status and location, they cannot describe individual perceptions of social influences on health-seeking behaviour. Finally, most studies focus on single disease questions.

Methods used in HSB Studies

The various methods described here are evident in both health-seeking behaviour studies and in health care-seeking behaviour studies.

Household surveys

Household surveys are the most common method of HSB study, generally under the names of knowledge, attitude and practice (KAP) studies, treatment (care) seeking behaviour or health-seeking behaviour. Most are disease specific. Sample size of course varies but is commonly 1000-2000 respondents; surveys are commonly conducted using structured interview questionnaires.

The World Bank provides guidelines and advice on how to design 'multi-topic household surveys' (Grosh and Glewwe 2000). The approach is to discuss first the 'big picture' concerning the overall design of surveys, modules to be used and the procedures for combining modules into questionnaires and questionnaires into surveys. Individual modules are discussed in depth as well as major policy issues. Modules include:

consumption, education, health, employment, anthropometry, non-labour income, housing, price data, environmental issues, fertility, household income, savings, household enterprises and time use.

National demographic and health surveys (DHS) use a larger sample size for household data collection. DHS typically include indicators related to household population characteristics, individual respondent characteristics, patterns of utilisation according to various categories (fertility, injury and acute illness, child health, maternal health), monitoring of specific disease prevalence (HIV, malaria, malnutrition) and health impacts. DHS collect data on costs of care and source of money spent on care, as well as utilisation of services according to first, second or third treatments.

Demographic and health surveys normally disaggregate data to provincial level. DHS also correlate outcomes in areas such as nutrition or delivery by trained providers with socio-economic indicators including wealth, education and location. Most DHS surveys focus on districts and subdistricts and apply single methods, which consist of either cross-sectional household surveys or qualitative studies. Often specific diseases (and hence population groups such as women, inpatients, ethnic minorities) are targeted.

In Cambodia, demographic and health surveys were conducted in 2000 and 2005, with a further round scheduled for 2010 (not yet completed). In another approach, a household study in Nepal (Sharma 2008) analysed the distribution of care-seeking time—that is, the number of days from the onset of symptoms of malaria to the time when the patient sought treatment from a provider. This was considered to be the best practice for investigating the health care-seeking behaviour of malaria patients in rural areas of two districts in Nepal.

Facility-based surveys

These come mostly in the form of patient surveys and are often disease specific in areas such as Tuberculosis (TB) or neonatal care. Clients are recruited at facilities and followed up using either qualitative or quantitative methods (Wang, Long et al 2008; Srivastava, Awasthi et al 2009). Conclusions drawn from facility or household surveys may appear mundane or obvious, albeit important. For example, a TB study by Wang, Long et al (2008) concluded: 'To be more effective, TB control efforts need to be better accessible to the economically and socially vulnerable'.

Other quantitative studies

Quantitative techniques may be used to analyse contextual influences on health care seeking and outcomes. For example, a study in Nigeria (sample size 4000) analysed the individual and social background characteristics of families with children with protein energy malnutrition (Uthman 2009). Predictably, the study found that social characteristics (wealth index) were associated with health care seeking and outcomes. The study by Sharma and Vong-Ek (2009) examined the association of individual and community characteristics with obstetric morbidity and care-seeking behaviour in Thailand. Multi-level logistic regression analysis among 930 women living in 86 villages indicated that community impoverishment rather than social and health infrastructure was associated with the likelihood of seeking appropriate care.

Again, the predictability of the impact of social stratification on health access and outcomes raises the question about the utility of such surveys, which are of more value to monitor the progress of health system and poverty alleviation strategies over time than to identify the determinants of HSB.

A quantitative study of 1921 subjects in one district in Bangladesh (Aldana, Piechulek et al 2001) assessed the degree of satisfaction with health care, the researchers concluding that provider behaviours, perceived technical competence and waiting time were major predictors of client satisfaction. The authors concluded that clients' emotional and social perceptions seemed to be the dominant motivators for care seeking. The concluding question was: To what degree does the meaning of quality differ between laypersons and professionals?

Qualitative surveys, ethnographic and narrative studies

A variety of methods are applied in qualitative surveys. Shaikh, Haran et al (2008) provide an ethnographic account of HSB and the determinants of health service utilisation of people living in rural northern areas of Pakistan. Data were collected from ten gender-specific focus group discussions; specific interview methods were used to develop 'illness narratives', which included descriptions of causal attributions and help-seeking behaviours and the description of HSB through time in areas such as TB, vaginal discharge and neonatal deaths.

The use of 'illness narratives' is common. Patel, Andrew et al (2008) held serial in-depth interviews with 42 married women with the complaint of abnormal vaginal discharge in Goa, India, focusing on causal attributions and help-seeking behaviours. The women explicitly linked their personal experiences of social adversity and stress with their complaints, an explanation reinforced by health care providers. Målqvist, Nga et al (2008) also used the narratives approach to collect information on births and neonatal deaths in Quang Ninh province, Vietnam. The narratives included information about care-seeking in relation to delivery and illness. A quarter of the neonatal deaths had no contact with the health-care system at the time of death. Neonatal death within 24 hours of birth was more likely when the mother did not seek care at the time of delivery. Mothers of ethnic minorities were more likely to exhibit this care-seeking behaviour at delivery.

Weiss, Somma et al (2008) used in-depth semi-structured 'Explanatory Model Interview Catalogue' interviews with 100 patients at three sites in Bangladesh, India and Malawi to enquire about patterns of distress, perceived causes and help-seeking behaviours in the context of illness narratives related to TB. Exaggerated concerns about the risk of infection despite treatment contributed to the social isolation of women. Public health services were preferred in Malawi, and private doctors in India and Bangladesh. Cross-site analysis identified features of TB that influenced the burden of disease and affected timely help seeking and adherence to treatment.

Qualitative surveys provide more opportunity to investigate motivations for different HSB and may also uncover contextual influences on understanding of disease causation and care-seeking behaviours, for example between different ethnic groups. One UK study of diabetes highlighted an ethnic group's perception of the role of social circumstances as the main cause of diabetic illness, while other ethnic groups emphasised the role of their own lifestyle 'choices' and 'personal failings' (Lawton, Ahmad et al 2007).

Qualitative methods often research treatment pathways. For example, one study using semi-structured interviews examined factors affecting the treatment pathway for TB patients in Nepal (Asbroek, Bijlsma et al 2008). These included patient factors (such as severity of complaints, the ability to pay for services, availability of services and peer support for choosing a provider) as well as specific health services factors (perceived quality, costs and service level and lack of provider-initiated referral).

Another study looked at perceptions of quality in Bangladesh and adopted a qualitative secondary analysis of a baseline community survey. The study focused on patterns of the use of health care resources in relation to the last episode of serious illness of any family member during the previous year and the perceived quality of services from different facilities. The researchers recommended more research on 'client-focused interventions' (Anwar 2009).

The distinction between a professional concept of quality and a client or cultural perception is reinforced by a recently published study in rural Cambodia (Matsuoka, Aiga et al 2009). This study of sixty-six mothers using thirty in-depth interviews and six focus groups identified barriers that affected the health care-seeking behaviour of pregnant women. The study identified a range of physical, health system and cultural barriers to care that included the social influence of community members, the behaviour of health professionals, costs of care and perceptions of technical quality. Barriers were classified as physical, cognitive, organisational, psychological and sociocultural.

Mixed-methods surveys

Some surveys used mixed methods. In one study of the attitudes of mothers to maternal care-seeking behaviour in Bangladesh (Moran, Winch et al 2007), in-depth interviews were conducted with a smaller sample (twenty-four) followed by a larger sample of structured quantitative interviews (1490). The qualitative interviews were used to identify the main care-seeking patterns (there were three) after which the quantitative survey determined the frequencies associated with this pattern.

In Nepal, a mixed methods approach was adopted for monitoring maternal health-seeking behaviours, health service system performance and health outcomes (DOHS Nepal 2009). That is, HSB was not identified as an isolated area of research interest but was linked to a research program that included studies of health system performance and monitoring and evaluation of outcomes. In this way, the research presented a comprehensive picture of demand- and supply-side factors in selected districts.

For one study in Cambodia (UNICEF 2009), household surveys were conducted in four communities. During these surveys, individuals were identified for follow-up in-depth interviews based on their capacity to describe health-seeking behaviours. These in-depth interviews were supplemented with information through focus group discussions in each community.

Cambodia-Specific Studies

Our review of HSB studies in Cambodia reveals a concentration on disease-specific studies, mostly understood through facility-based surveys and household surveys in small geographic areas. Conclusions are largely programmatic, while the characteristics of demand, perceptions of quality and pathways of care seeking are less commonly undertaken.

Peer-reviewed studies

Quantitative surveys of health care-seeking behaviour predominate in the peer-reviewed literature on Cambodia. Only two health-seeking behaviour and a single qualitative study were found. Table 1 lists all peer-reviewed articles of Cambodian health behaviour studies between 2003 and 2009, according to type, purpose, subject, sample and conclusions.

Table 1. Peer-Reviewed HSB Studies in Cambodia, 2003-2009

Topic/purpose	Author/year	Study method	Sample	Conclusions/recommendations
Health-seeking behaviour studies				
Quantitative survey method				
Out-of-pocket health expenditure and debt in poor households	Van Damme, Van Leemput et al (2004)	Patient interviews	Dengue patients in 72 households	Average treatment costs for those who used exclusively private providers were US\$103; those who combined private and public providers US\$32; those who used exclusively the public hospital US\$8. Modest out-of-pocket health expenditure frequently causes indebtedness and can lead to poverty.
To assess the cost and impact of an episode of dengue fever	Huy, Wichmann et al (2009)	Household prospective, community-based, matched case-control study using a structured questionnaire	16 villages in Kampong Cham province (n = 60)	Socio-economic status was associated with hospitalisation; 63% of households incurred an average debt of US\$23.5; a possible reason for a lower rate of hospitalisation among children from poor households was the burden of higher illness-related costs and debts.
Qualitative survey method				
Health seeking and access to care for children with suspected dengue	Khun and Manderson (2007)	Ethnographic study. Key informant interviews, focus group discussions (28 women), in-depth interviews (38 women) using open-ended questionnaires, and ongoing observations	Two villages in Kampong Cham province; mothers of children with suspected dengue	Choice of care was based on perceptions of severity of illness, confidence in the provider or practitioner and affordability. Barriers to access included poverty, limited availability of care and perceptions of the poor quality of care at health centres and hospitals. Women initially used home remedies, then sought advice from public and private providers, shifting from one sector to another in a pragmatic response to the child's illness.

Table 1. Peer-Reviewed HSB Studies in Cambodia, 2003-2009 cont...

Topic/purpose	Author/year	Study method	Sample	Conclusions/recommendations
Health care-seeking behaviour studies				
Quantitative survey method				
Comparison of health care-seeking behaviour between poor and better-off people after health sector reform in Cambodia	Yanagisawa, Mey et al (2004)	Household survey with structured questionnaire	257 women of reproductive age selected at random in one health centre coverage area. Data were collected on mothers' socio-demographic characteristics and episodes of family illness within 30 days prior to the survey	Respondents most often used home remedies as a first step, followed by self-medication; subsequently, people used self-medication or the private sector. Very poor people used the health centre more often than better-off as a first and second step. Keeping treatment fees low maintained the affordability of health-centre services for the poor. This benefit diminished quickly with distance from the health centre. The significant difference between poor and better-off people disappeared for villages situated more than 2 km from the health centre.
Demographic and clinical characteristics of HIV-infected inpatients	Sok, Harwell et al (2006)	Facility-based survey of public sector health facilities	Survey of facilities in four border provinces	Sexually transmitted infections (STI) services should be expanded to health centres not currently offering STI care.
Acceptance of post-abortion contraception	McDougall, Feters et al (2009)	Facility-based survey using a structured questionnaire	All public hospitals nationally and a sample of health centres	There is a need for improving contraceptive counselling and training for midwives, increasing contraceptive choices, promoting access to contraceptives.
Factors influencing voluntary counselling and testing utilisation among TB patients	Yi, Poudel et al (2009)	Facility-based survey using a structured questionnaire	Two district referral hospitals	Need for effective strategies to reduce AIDS stigma and initiating routine HIV testing in TB facilities.
Decentralised directly observed treatment, short-course (DOTS) and TB treatment	Saly, Onozaki et al (2006)	Cross-sectional study of clients in pilot sites using a structured questionnaire	All clients enrolled at pilot sites	Decentralising DOTS to primary care health centres is effective in reducing the delay in TB treatment.
Assess the effects of a user fee scheme, and related fee exemption system on HSB	Jacobs, Price et al (2007)	Patient interviews using a structured questionnaire	199 pairs of patients at one district referral hospital (n=298)	Fee-exemption schemes can be pro-poor provided that the exemption is based on effective pre-identification of intended beneficiaries.
Health care-seeking behaviour of schizophrenic patients	Coton, Poly et al (2008)	Cross-sectional survey of psychiatric patients and their care givers		Traditional and religious remedies are the first pathway to mental health care; lack of knowledge about mental health and facilities appeared to be the main cause of patients' care-seeking behaviour.
Access to artemisin combination therapy (ACT) for malaria in remote areas	Yeung, Van Damme et al (2008)	A cross-sectional survey carried out in three different types of intervention areas using a structured questionnaire	Sample drawn from three areas: with village malaria workers, malaria outreach teams and no specific interventions. Cases of fever were interviewed	8% of clients in non-intervention areas accessed drugs from a public source. Both intervention schemes significantly increased the likelihood of being seen by a trained provider.
Qualitative survey method				
Maternal health-seeking behaviours	Matsuoka, Aiga et al (2009)	Qualitative study	65 in-depth interviews in one commune	A successful approach to increasing the use of maternal health services should involve changes to both service programs and public education.

Unpublished studies and reports

A 1998 household study of health demand (NPHRI, WHO et al 1998) included interviews with 3200 households across sixteen purposively selected districts. The study was one of the first attempts in post-conflict Cambodia to investigate health care-seeking behaviours (Table 2).

Wilkinson (2001) reviewed HSB studies carried out in Cambodia in the 1990s for the Ministry of Health and the World Health Organization (see also MOH and WHO 2001). He defined a number of concepts that are fundamental to the understanding of health-seeking behaviour:

- **Access**—determines whether patients are aware of services and are able to reach them within an acceptable time. In 2001, only 55 per cent of the total population was within ten kilometres, or a two-hour walk, of a primary level facility, and only 73 per cent of these facilities provided the minimum standard health services.
- **Utilisation**—refers to the rate and pattern of use of services. Between 1997 and 1999, the proportion of the population using public sector health facilities for first treatment fell from 30 to 23 per cent.
- **Demand for service**—equates with health behaviour, that is, whether a patient becomes interested in using a service in the first place or adopts healthy practices.
- **Perceptions of quality of care**—can act as either a motivator or a barrier to service utilisation; closely linked to demand, access and utilisation.
- **Health beliefs**—provide a rationale for health-seeking behaviour. The widespread resort to ineffective, costly and apparently irrational health-seeking behaviour had to be set in the context of traditional belief systems about the aetiology of disease and how one gets well. For example, a study of health centre use among rural women in Pursat province cited the giving of injections as one of the major factors influencing patients' choice (RACHA 1999). A study in two districts by Van de Put (1995—cited in Wilkinson 2001) found little knowledge of modern health care, including its classification of illnesses and the different possibilities for treatment.

Wilkinson (2001) also identified the main elements of health-seeking behaviour in Cambodia evident during that period. The main features were:

- sharp differences in HSB according to socio-economic status and geographical location;
- a high degree of somatisation of psychosocial and economic problems;
- lack of understanding of how modern allopathic health care works (including diagnosis and treatment);
- traditional perceptions of causal relationships of illness and disease causing 'health-shopping' behaviour;
- a significant proportion of all illnesses and injuries untreated;
- the central role of the *kru Khmer* (traditional healer) in health seeking behaviour;
- a cultural preference for curative health care to take place in, or near to, the home;
- self-medication as the first recourse for the majority of health-seekers;
- a marked preference for private providers and/or traditional healers as first points of contact, due to easy access, flexibility of payment and availability of drugs and/or injections;
- limited knowledge or actual misinformation about costs and availability of services at health centres;
- lack of information crucial in hampering informed choice.

During the last decade, a number of studies have been carried out, mostly project related, and various reports have appeared. These are summarised in Table 2.

Table 2. Unpublished HSB studies and reports, Cambodia, 2001-2009

Topic/purpose	Author/year	Methods	Results and conclusions
Health care-seeking behaviour studies			
Quantitative survey method			
The demand for health care and concepts for future research	NPHRI, WHO et al (1998)	Quantitative household survey included interviews with 3200 households across 16 purposively selected districts	Health costs remained a major household expenditure. In health care seeking, purchasing drugs was the most common first action, mainly due to less waiting time and the availability of drugs; there was a large unmet need for contraceptive knowledge and methods, and about 60% of women who had recently delivered did not choose public health facilities because of distance, family couldn't participate, cost, lack of drugs and not a Khmer tradition.
Review of the behaviour of private sector providers in Phnom Penh	Ramage (2001)	Semi-structured interviews with private health providers and with mothers of children under five years in four provinces	Private providers reported that on average 33% of their clients were children under five. Only 62% of private clinics reported advising re-hydration therapy for children with diarrhoea and widespread use of tetracycline to treat diarrhoea. Mothers were asked to describe symptoms of last illness and then the care-seeking behaviour. The cost of treatment at private clinics was by far the most expensive. Only 24% of mothers took their children to a government health centre, while 75% paid more for private treatment.
POVILL—Poverty and Illness: Evidence for Policy project*	Meessen, Chheng et al (2009)	Rapid household survey (30 minute interview per household); comparative analysis of three health districts (sample 5975)	Results from the study, designed to track care-seeking pathways for specific illnesses, are still in preparation.
Health-seeking behaviour—baseline demand survey, Phnom Penh	Urban Health Project (2000)	Household survey	The key factors considered when seeking health care were the need for fast, effective treatment, the cost of health services, perceptions of quality, location of services, opening times, uncertainties about fee levels, access to exemptions and negotiation of methods of payment. Traditional pathways of treatment were to self-medicate and/or use traditional medicines. If money was available, people asked health staff to administer injections and/or IV infusions. If the condition of the patient did not improve, they consulted with local providers and/or purchased 1-2 days' supply of antibiotics. If conditions continued to deteriorate, they visited one of the 'free' hospitals in Phnom Penh. [The same phenomenon of 'health shopping' was detected in the UNICEF 2009 study.]
Mixed methods			
Health access study of four poor communities in Phnom Penh	UNICEF (2009)	Household survey and qualitative methods	Findings documented health care-seeking pathways, health care costs, and perceptions of health and quality of care. Private providers, who were often resident in the community, were the first contact for care in most instances, particularly for mild illnesses. Recommendations focused on social protection, public health and service delivery models.
Qualitative survey method			
KAP study of immunisation in Kampong Chhnang province/ PATH**	Forder (2002)	Focus-group and individual interviews based on a participatory learning and action methodology	Data collected at three localities: water communities (which house the ethnic Vietnamese minority), road communities (near the communication and provincial capital) and rural communities (more than a 1½ hour drive from the main road). Findings detected isolation of some ethnic groups, and general powerlessness of the population in seeking care; provided insights on population perceptions of the health services; and described the impact of side effects on health-seeking behaviour.
Medical practitioners and traditional healers—A study of health seeking behavior in Kampong Chhnang	Collins (2001)	122 semi-structured interviews in three districts: a flood area, hill area and main roadside urban area.	Examined clients' perceptions of quality, particularly in relation to choice of provider.

Notes:

* POVILL is an international partnership of ten organisations contributing to efforts to reduce the incidence of severe poverty due to major illness and to improve access by the poor to health services; funded by the European Union.

** PATH is an international NGO based in the USA delivering health programs in Cambodia and other developing countries.

Conceptual Issues in HSB Studies

A body of literature provides a thoughtful critique of HSB studies, including recommendations for addressing the limitations of these types of studies.

One common criticism is that HSB studies often describe patterns of behaviour without elucidating causes for the behaviour. Hausmann-Muela, Muela-Ribera et al (2003) observe that the KAP survey technique, though providing highly descriptive data, does not provide an explanation of why people do what they do. KAP studies are also based on the underlying assumption that there is a direct relationship between knowledge and action.

Many analysts recognise the very weak relationship between health knowledge and health-seeking behaviour and therefore proceed by analysing individual or household decision making within a social context. The very fact that HSB is patterned is suggestive of the role of social influence or sociocultural factors in determining or influencing decisions. As a consequence, many studies are unable to recommend an effective way forward and provide recommendations in many cases that are statements of the obvious.

Moreover, the research methods will affect the type of recommendation. For example, a social research method is more likely to generate a social policy recommendation. In a study of diarrhoea in rural Bangladesh, Edgeworth and Collins (2006) discovered that households exhibiting weakened social and human capital were more excluded from information on appropriate self-care treatments; the authors recommended a shift in health policy towards facilitation of self-care through support of social networks and education channels.

Traditional HSB theories (for example, the health belief model or notions of 'locus of control') essentially base the determinants of health-seeking behaviour within the individual or the household. However, HSB actually extends beyond personal and household factors, to include community and health system factors. MacKian (2003) observed that, in the patterning of health care-seeking behaviour, many studies ignored the social complexity resulting from the interaction of individual, society and health care system. That is, while there is an individual or household element in health decision making, local area patterning of decisions reflects a collective or social determinant of HSB.

Analysing this patterning of HSB is a more balanced approach from the standpoint of the individual within the society. This is sometimes referred to as capability theory (Sen 2001), which aims to link individual freedoms with social agency in determining health behaviours and outcomes. Ruger (2010) has developed this theory further by articulating a 'profile of health capability' that views health decision making as a balance of individual decision (internal factors) and social constraints or enablers of decision making (external factors). As Ruger argues, it is important to describe what individuals are actually able to do in an optimal environment (health capability) versus their current environment (health achievement).

DISCUSSION

Rationale for Mixed Methods Approaches

This brief analysis of published and other studies in Cambodia and more broadly in Asia indicates, first, the distinction between 'health-seeking' and 'health care-seeking' approaches. Health care seeking is a much more common subject of study than the broader issues that determine health or explain the causes of the revealed care-seeking behaviours. Secondly, in this regard, quantitative surveys are a more common method of research than qualitative methods. Quantitative methods appear more appropriate for care-seeking studies, while the use of qualitative or mixed methods appears more useful for health-seeking studies where there is a greater need to explain causation.

Collins (2001) distinguished the different functions of qualitative and quantitative research. He argued that the qualitative research step identifies the significant categories of cultural attitude, values, preference, customary practice and world view present in the population. The quantitative step uses more rigorous sampling procedures to measure the actual prevalence or distribution of the attitudes or values in the population. More

broadly, he contrasted the global paradigm of health and illness (biological) with indigenous paradigms of health (social, psychological, spiritual and physical). Collins explained:

Uppermost in our interviewing strategy was an interest in probing the reasons some providers were chosen over others and in learning what providers were returned to repeatedly, and what providers were avoided. By understanding the customary and usual health seeking behavior of our informants, we aimed to uncover the values and preferences that underlay those choices.

It is evident that few HSB studies have been conducted in Cambodia, especially since 2005. Research that was undertaken focused largely on disease-specific conditions with narrow research questions. In the international literature as well, there is not a great deal of information on HSB in relation to the expectations and pressures of society on decision making. Large household surveys have been undertaken on patterns of utilisation (particularly through DHS), but apart from identifying exposures related to socio-economics, location and education status, such large household surveys do not demonstrate an understanding of the determinants of HSB.

By contrast, qualitative or mixed methods approaches are more likely to capture both prevalence of behaviours according to specific health conditions and the rationale for specific HSB pathways. With this understanding, 'triangulation of data' from different methods becomes not simply a mechanism for testing the validity of findings. More importantly, it is a way to build a multidimensional understanding of reality that corresponds to the interacting influences and decision pathways of clients, communities and providers.

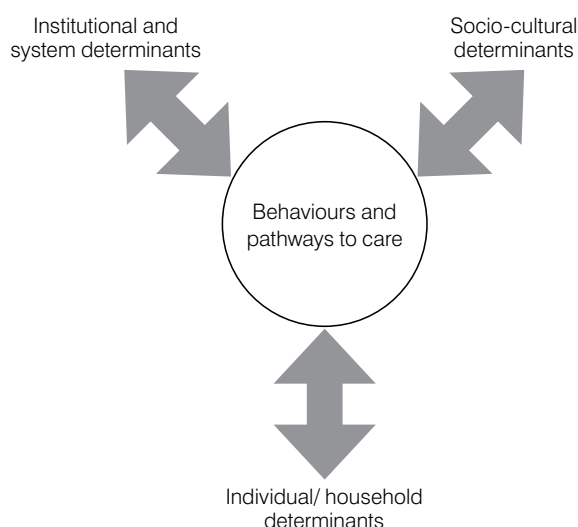
Household surveys can provide information on the prevalence and distribution of choice of provider for a range of priority conditions, correlate socio-economic and geographic factors with health care-seeking and identify the priority reasons for choice of provider. Qualitative methods can then map out sociocultural determinants of behaviour patterns and of provider choice, uncover perceptions of quality and provide an understanding of the impact of the values, beliefs and social conditions that shape patterns of decision making in communities.

Health Research and Health Capability

Many HSB studies seem to adopt theoretical assumptions based on a cause-and-effect understanding of the relationship between specific knowledge, attitudes and practices and health behaviours and outcomes. In this sense, the patient, client or community then becomes a 'target' of 'interventions' from expert practitioners and organisations equipped with an assumed superior set of knowledge, attitudes and behaviours. This language common to public health reflects the dominance of expert opinion in the proposed modelling of healthy behaviours.

In this view, the task of changing behaviours becomes a clinical question: What intervention is best suited to changing the behaviour that will optimise potential for better health outcomes and hence the public good? This could entail a pattern of health care-seeking behaviour for a distinct disease, or may relate to a pattern of household health behaviours.

In contrast, a dynamic conception of HSB views the cause and effect of health-seeking behaviours arising not just from individual KAP but also from the KAP of households, communities and health systems. That is, whether an individual decides to seek out health care may be a function more of how health care practitioners behave or how the system operates than of what the client knows or believes. This three-way relationship between households, health institutions and wider sociocultural environment is a more useful way of understanding not just health-seeking behaviours but also the causes of those behaviours (Figure 1).

Figure 1. Determinants of Health Care-Seeking Behaviours

Source: the authors

CONCLUSION

The review of literature demonstrates that many HSB studies provide quite mundane solutions for complex health problems. Mundane solutions mostly present in the form of reinforcement of targeted health education messages or interventions for what are discovered to be unhealthy or inappropriate population practices or beliefs. This is partly the result of using narrow research methods that provide little or no information about causation.

The results in much of the analytic literature of an inability to find a way forward through HSB studies (frequently expressed in terms of gaps between knowledge and behaviours) is in all probability an outcome of research agendas that focus on one area of capability only (often specific to a single disease or syndrome). As well as client pathways to care, there are also care pathways shaped by health providers, and these pathways also intersect on the socio-economic and cultural landscape.

In analysing HSB from the standpoint of capability of individuals, households, communities and health systems, it is understood that expectations about the behaviour of others (for example, providers or influential community members) combine to shape the health behaviours of households and individuals (and vice versa). This broader perspective on examining health-seeking behaviour—together with the use of multiple methods for research data collection and analysis—is more likely to capture the social and institutional dynamics that help to shape the complexity of health-seeking behaviours. Only with an understanding of these complex dynamics, including the causation of HSB in various circumstances, will it be possible to design and implement effective programs that provide for patients and their communities the capability for appropriately accessing required health services.

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