An Integrated Health Model for understanding client perspectives and health-seeking behavior in developing countries

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Submitted
Abstract

Reassessment of healthcare strategies and systems can help developing countries to ensure that their health system is viable and responsive to the needs of the population. In the literature, several models have been presented to help understand people’s perceptions and use of healthcare and health insurance services. Using empirical qualitative data from our study in Ghana, we found that these theoretical models, derived from different disciplines, do not build on insights beyond their own domain. Fragmentation has led to the inability of prevailing models to adequately account for the socio-cultural aspects required for the understanding of client perceptions. This paper seeks to overcome this fragmentation by presenting an integrated model in which theories of anthropology, sociology and economics are built upon to explain clients’ perceptions and use of healthcare and health insurance. It specifically focuses on the influence of the wider socio-cultural system on the perceptions and health seeking behavior of clients. The new model, termed the Integrated Health Model, presupposes that people operate as bounded rational entities in determining the type of health care that best serves their needs. It offers a comprehensive framework that helps researchers and practitioners to integrate diverse aspects that inform perceptions on illness and promote improved healthcare and health insurance uptake. The Integrated Health Model was designed through an assessment of prevailing theoretical models and empirical insights from a field study in Ghana.

KEY WORDS:
Health Insurance; Ghana; Integrated Health Model
Background
Developing countries are home to the world’s most impoverished populations and are confronted with epidemiological, communicable and chronic conditions (Economist-Intelligence-Unit, 2012). Most developing countries are continually reassessing their healthcare strategies and systems to ensure that they are viable and able to meet the needs of the population. The adoption of health insurance supports universal access to quality health care among the poor populations (Jehu Appia, 2011; Economist-Intelligence-Unit, 2012). Theoretical models are important in guiding our understanding of clients’ perceptions of illness and their use of health care and health insurance as well as for the design of interventions. Most models, however, have not been built on insights beyond their own domain and this limits their ability to account for a diversity of influences that affect perceptions of illness, health-seeking behavior, and use of healthcare and health insurance services.

This paper presents an Integrated Health Model to comprehensively account for these socio-cultural/community influences and to guide our understanding of clients* perceptions of illness, health-seeking behavior, and use of healthcare and health insurance services as embedded in their community. The Integrated Health Model seeks to understand perceptions and health seeking behavior of clients in their own socio-cultural context and builds on insights from 1) the socio-anthropological theory of healthcare systems (Kleinman, 1978); 2) the theory of social capital (Woolcock & Harper, 2001) (Gauntlett, 2011); 3) the theory of new institutional economics (North, 1990) (Easterly, 2008, Fukuyama, 2000); and, 4) the three dimensional trust model (Mechanic, 1998) (Mechanic & Rosenthal, 1999). The model has been operationalized in a qualitative research in Ghana, in which clients’ perceptions of illness, health care, and health insurance were studied in two different regions. Through this contextualizing process we could test the model on its applicability and completeness.

Assessment of current models on illness and health care
The models presented here are selected because of their strong focus on the socio cultural context of people that is influencing decision-making.

Kleinman (1978) introduces the socio-anthropological model to explain clients’ perceptions of illness and choice of care. He describes three healthcare systems: popular (or domestic), folk (or traditional), and professional (western), which are organized by subsystems of socially legitimate beliefs, values, expectations,

* Clients are defined here as member of their community. They are (potential) clients of healthcare and health insurance services
roles and relationships, called clinical realities. These clinical realities influence people’s perceptions of illness and health care. Kleinman’s explanatory models are ‘notions about an episode of sickness and its treatment that are employed by those engaged in the clinical process’ (Kleinman, 1978 p.88 ; Tirodkar et al., 2011). They determine not only what type of healer or doctor patients visit, but also what course of treatment they will follow, including medication adherence and social or spiritual activities that might be believed to help in recovery. His theory demonstrates that in studying the perceptions and health-seeking behavior of clients, just concentrating on the professional health system will mean ignoring clients’ clinical realities and their possible preferences for the folk sector such as traditional herbalist or fetish priest.

Another model used to account for the healthcare choices of the clients is the theory of social capital. Coleman defined social capital as ‘the networks of community relationships that facilitate trust and motivate action’ (Coleman, 1988 p.105) or as ‘an accumulated stock which requires an investment and generates a stream of benefits’ (Coleman, 1988; Grootaert & Bastelaer, 2002). Social relations within and between (community) groups and the social support that people derive from their social networks do influence perceptions and choice of health care. In Ghana, for example, we found that most people are affiliated with one or more groups. Church groups in particular are considered to be strong and able to mobilize people to engage in activities such as moral and/or financial support for the sick. Woolcock and Harper explain social capital as a framework of bonding relations and effects at micro, meso and macro level (Woolcock & Harper, 2001). We expect that diverse channels of social capital offer potential opportunities to clients, healthcare providers and health insurance schemes for mobilization, information sharing, collective decision-making and the reduction of opportunistic behavior. In rural communities of Ghana, with wide social networks and groups, bonding through networks is likely to be stronger compared with urban areas. Existing networks and development of new networks of relationships can stimulate access to improved and increased information and help revise beliefs on illness and health care. The social capital framework helps to understand perceptions by unraveling the effect of social relations in and between groups and its relationship with health seeking behavior.

A theory closely related to the social capital theory is the new institutional economics. It builds on the social capital theory and has also been applied to explain investments in and choice of healthcare services. It is a branch of economics that explains what institutions are, how they arise, what functions they serve and how they evolve over time. Formal and informal institutions create order and re-
duce uncertainty (North, 1990). Easterly labels them as 'top down' and 'bottom up' views (Easterly, 2008). Where formal institutions (e.g., formal laws, property rights and contracts) are strong and efficient and are enforced effectively, trust will grow and transactions costs will be reduced. With respect to health care and health insurance, it has been shown that well-organized insurance programs that have clear contracts with healthcare providers and a well-functioning quality control system in place, attract more enrollees compared with an insurance scheme where healthcare providers, due to lack of effective monitoring, deliver poor services which make clients uncertain about the benefits of the scheme (Quimbo, 2012). In cases where regulations are not adhered to and enforcement is weak, people prefer to rely on informal institutions. Informal institutions, which consist of local norms and common rules of conduct, are also examples of social capital (Fukuyama, 2000) and are a product of gradual, evolutionary change (Easterly, 2008). In certain cohesive, closely-knit societies, informal institutions can be stronger than formal institutions. Norms and formal laws should not be seen as substitution but rather as complementary and can serve as backup mechanisms for resolving private disputes (Klein, 1998) whereas norms can help shape or facilitate the adoption of laws by serving as guidelines for legal decisions and by making gradual policy change more acceptable (Easterly, 2008; Lohlein, Jütting, & Wehrheim, 2003). In many rural communities where the traditional (folk) health sector receives a lot of trust, a health insurance organization can liaise with the traditional sector by engaging and sensitizing traditional healers for timely referrals to the professional healthcare sector, where clients can receive services covered by the insurance.

In these three theories and in our qualitative data, trust is shown to be fundamental in people's choice of health care. The three-dimensional trust model developed by Mechanic describes clients' trust in the healthcare provider (interpersonal trust), the insurance scheme (organizational trust) and the regulator (system trust), with each of these divided into subdimensions (Mechanic, 1998; Mechanic & Rosenthal, 1999). Trust in the regulator can be compared with trust in formal institutions. Mechanic limits his model to the professional health system, excluding socio-cultural influences that play an important role in most poor communities. TABLE 1 (p. 42) provides the key features, the linkages and the applicability of the theories.

The Integrated Health Model
Each of the four theories presented above has strengths and limitations in terms of understanding clients' perceptions, behavior and decision making. During the fieldwork in Ghana, we found that none of the models are able to adequately
Table 1 Key features of 4 theories

<table>
<thead>
<tr>
<th>Specific features</th>
<th>Socio-anthropological model</th>
<th>Social capital model</th>
<th>NIE model</th>
<th>3-dimensional trust model</th>
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<td>Micro and macro level model. Explains perceptions of illness and health; defines popular, folk and professional health care systems. Uses cultural systems (e.g. beliefs and customs) and clinical realities to explain perceptions on illness, health and health care.</td>
<td>Micro and meso level model. Uses social networks: collective values and norms; access to information; civic engagement and collective action and solidarity; trust support; reduced opportunistic behavior to explain choice of health care and support.</td>
<td>Meso and macro level model. Identifies the role of formal and informal institutions in reducing uncertainty and generating trust in health care system. Low transaction costs and impact of institutional changes are crucial in determining the choice of health care.</td>
<td>Micro, meso and macro level model. Describes dimensions and sub-dimensions of trust of client in health-care provider, insurser and system. It emphasizes inter-personal, organizational and system trust.</td>
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<td>Interfaces (linkages between models)</td>
<td>Cultural beliefs, norms, customs.</td>
<td>Social groups with common rules of conduct, common norms.</td>
<td>Informal institutions.</td>
<td>System trust through effective laws and regulations.</td>
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<td>Applicability and relevance</td>
<td>Partly applicable for socio-cultural explanatory models and clinical realities. Beliefs, symbols and customs are pervasive in many societies/ cultures. Model does not (a) include influences beyond individual relations (e.g. groups, institutions) and (b) regulations and transaction costs.</td>
<td>Partly applicable for its emphasis on relevance of groups and networks, the socio-cultural context. Model does not anticipate changes over time due to economic developments and social transformation.</td>
<td>Partly applicable for its focus on the role and changes of informal and formal institutions, transaction costs and regulations. Model lacks a rigorous understanding of cultural systems in decision-making.</td>
<td>Partly applicable, for its focus on trust and how it develops. It distinguishes between trust in provider, health insurance scheme and health system. Model overemphasizes regulation/enforcement and factors which underlie public trust. It excludes socio-cultural influences.</td>
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account for the salient factors that explain people's perception of illnesses, choice of health care and participation in health insurance scheme. Integrating insights from different theories into one model results in more explanatory power (Cummings, Becker & Maile, 1980). In the model presented below, we therefore seek to overcome this fragmentation by presenting an integrated model that involves socio-anthropological processes (e.g., beliefs and norms regarding illness and health); social capital (e.g., social networks, solidarity and collective action); institutions and transactions (new institutional economics); and, system trust and enforcement (trust model).

Our model, termed the Integrated Health Model (IHM), is based on an assessment of the aforementioned theories and lessons derived from the fieldwork in Ghana. In addition, the model builds on an earlier unpublished model of Schellekens and Lindner, which is based on the principles of the new institutional economics (Schellekens & Lindner, 2011). They developed a transaction exchange model of the client, the community, the provider, and regulator. This model reflects the daunting complexity of health systems, with potentially conflicting interests and goals of stakeholders in the system. Schellekens argues that in most African countries, dis-balance in the exchange model is caused by asymmetric information. High levels of uncertainty result in lack of trust, high transaction costs and unfavorable behavioral effects (North 1991). In their model, Schellekens and Lindner focus on the professional health sector, excluding folk and popular sectors, which play an important role in most socio-cultural settings. In their model, healthcare providers and health insurance providers form the supply group and are considered to have joint interests and trade-offs.

The IHM presents a conceptual model of healthcare systems – folk, popular and professional – as an integral part of a wider socio-cultural system (FIGURE 1), where clinical realities (i.e., beliefs and values) and social relationships influence people’s perceptions on illness and healthcare services. This wider socio-cultural system influences the role of institutions in the clients’ decision-making process. The model seeks to explain the effects of institutions that are necessary to facilitate interventions and policy change. The model uses a pentacle to explain the demand for (access) and supply of (delivery) healthcare services that meet the needs of the people. The individual client and the community to which the client belongs, with respectively the individual and group interests, are on the demand side, and the professional healthcare provider and insurance organization are on the supply side, while the traditional healer (folk sector) is defined as a supplier outside of the professional system. The government as a policy maker is responsible for regulating supply and demand to ensure equitable access to care. Health insurance providers can also be considered as regula-
tors, as insurance alters the way people make decisions about buying and selling health care (Quimbo, 2012). However, since the government is often the responsible authority for policy regulations related to health insurance organizations, we position the health insurance provider on the supply side. The popular sector, consisting of domestic care, is positioned close to clients and community.

The IHM presupposes that people, whether living in the urban areas or rural setting, operate as bounded rational entities, i.e., action rational within their own context, in determining the type of health care that best serves their needs (Bandura, 1977). Clients revise their expectations and assessment of healthcare services based on the information obtained from their social networks (e.g., neighbors, communities and associations) and other sources (e.g., radio and extension services) as well as their own experience (Ozawa & Walker, 2011). Their choices may, therefore, change over time as, for example, new networks of relations emerge, offering access to new information that may influence beliefs. In closely-knit traditional societies, informal institutions are strong and clients tend to have solid trust in the popular and folk health sector while in a strong, well regulated formal sector people develop trust in the professional health sector.

The arrows represent interrelationships that offer choices, trade-offs and rights and responsibilities to the stakeholders and create a level of equilibrium
in the health pentacle. For example, from the perspective of clients and communities, aspects such as access and quality are important. Clients prefer to pay a low premium for health care and insurance, which is obviously not in the interest of providers and insurers who have to recover their investment costs. The interest of the individual client may in certain cases differ from the community interests. For example, an individual with a chronic disease will prefer to have drugs for chronic diseases covered but the community may not be keen to pay high premiums due to the high cost of this type of drugs. People are willing to use offered healthcare services if they trust that the quality and benefits are high. This quality consists of objective verifiable technical issues (e.g., clinical and management competence and availability of facilities) and non-technical qualities such as effective interpersonal relations and communication between provider and clients. Our fieldwork reveals that for most clients, especially in rural Ghana, these non-technical issues are crucial elements for the creation of trust in the healthcare system. Trust captures the relational nature of interactions between two parties that can reveal communication hurdles and people's beliefs in a system (Ozawa & Walker, 2011). The healthcare provider also has to offer quality services as part of their contractual agreement with the health insurance provider. Healthcare providers face the risk of having their contract terminated if they consistently fail to meet predetermined standards. In practice this does not apply to public healthcare facilities, which in certain cases have received blanket accreditation. This consequently influences the level of quality of services provided.

The government as a policy maker and regulator has a crucial role to play in safeguarding public goals. In Ghana, the government is responsible for approving laws and regulations related to the National Health Insurance Scheme (NHIS), but also those related to medical protocols and human resources in health, for example production and distribution of qualified staff, curriculum requirements and employment protocols. Unequal distribution results in certain areas facing limited healthcare services. Proximity to healthcare services influences the type and cost of health care available to clients.

The health insurer’s objective is to guarantee quality and accessible healthcare services to clients through affordable premiums in order to encourage the large-scale enrolment necessary to offset rising management and implementation costs and to develop a sustainable healthcare system. Contracting healthcare providers that deliver quality health care to clients for a reasonable price is in the interest of both the insurer and clients. In Ghana, the NHIS stimulates the demand for health care by registering clients and collecting premiums as well as facilitating the delivery of health care by registering and accrediting healthcare
providers and paying for the services they deliver to clients. The trust of clients that the insurance will deliver in the moment of need and the trust of healthcare providers that the claims for services delivered will be paid for, is crucial for the long-term functioning of the insurance system. Problems have been reported concerning delays in reimbursement (Dalinjong & Laar 2012; Sodzi-Tettey 2012). Accordingly, an increasing number of healthcare providers are likely to treat non-insured clients more promptly because they pay in cash, which enables providers to avoid the delays associated with claims payments by the NHIS. The NHIS recognizes these challenges and is working towards improving the system but with mixed success.

**Conclusion**

We have reflected on the strengths and limitations of the prevailing models and used our empirical data to understand clients’ perceptions of illness, of healthcare and health insurance services, and their use of these services. Furthermore, we reason that it is important for the different models to expand beyond their own domain and include insights from other disciplines to help improve their explanatory value. The paper has presented an integrated health model based on an assessment of the prevailing models and complemented with lessons learned from a field study in Ghana. We are of the opinion that this integrated model provides explanatory power and adequately accounts for the socio-cultural aspects that explain perceptions of illness and health-seeking behavior and the use of healthcare and health insurance services. The model, which considers the socio-cultural context as detrimental, offers insights that can guide researchers who are involved in multidisciplinary research into illness, healthcare and health insurance services.
References


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