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# Can social capital help explain enrolment (or lack thereof) in community-based health insurance? Results of an exploratory mixed methods study from Senegal

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ABSTRACT

CBHI has achieved low population coverage in West Africa and elsewhere. Studies which seek to explain this point to inequitable enrolment, adverse selection, lack of trust in scheme management and information and low quality of health care. Interventions to address these problems have been proposed yet enrolment rates remain low. This exploratory study proposes that an under-researched determinant of CBHI enrolment is social capital. Fieldwork comprising a household survey and qualitative interviews was conducted in Senegal in 2009. Levels of bonding and bridging social capital among 720 members and non-members of CBHI across three case study schemes are compared. The results of the logistic regression suggest that, controlling for age and gender, in all three case studies members were significantly more likely than non-members to be enrolled in another community association, to have borrowed money from sources other than friends and relatives and to report having control over all community decisions affecting daily life. In two case studies, having privileged social relationships was also positively correlated with enrolment. After controlling for additional socioeconomic and health variables, the results for borrowing money remained significant. Additionally, in two case studies, reporting having control over community decisions and believing that the community would cooperate in an emergency were significantly positively correlated with enrolment. The results suggest that CBHI members had greater bridging social capital which provided them with solidarity, risk pooling, financial protection and financial credit. Qualitative interviews with 109 individuals selected from the household survey confirm this interpretation. The results ostensibly suggest that CBHI schemes should build on bridging social capital to increase coverage, for example by enrolling households through community associations. However, this may be unadvisable from an equity perspective. It is concluded that since enrolment in CBHI was less common not only among the poor, but also among those with less social capital and less power, strategies should focus on removing social as well as financial barriers to financial protection from the cost of ill health.



## Introduction

Community-based health insurance (CBHI) is typically not-for-profit and aims to provide financial protection from the cost of seeking health care through voluntary prepayment to community owned and controlled schemes (Hsiao, 2001). Senegal has witnessed a rapid increase in the number of CBHI schemes, reaching 129 in 2007 (CAFSP, 2010). The government elected in 2012 views CBHI as a mechanism for achieving universal coverage (Ministère de la Santé, 2012), a continuation of the previous government's policy (Ministère de la Santé, 2004). However, as in most low- and middle-income countries (LMIC), overall coverage in Senegal remains low, with 4% or less of the population enrolled in CBHI (Soors, Devadasan, Durairaj, & Criel, 2010), echoing wider limitations of CBHI (Ekman, 2004).

There have been numerous studies on the determinants of enrolment in CBHI in sub-Saharan Africa (SSA) (Defourny & Faillon, 2011). Demand-side determinants identified by quantitative studies from West Africa are: higher levels of wealth and education, poorer health status and being prone to the risk of illness (Chankova, Sulzbach, & Diop, 2008; De Allegri, Kouyate, et al., 2006; Jütting, 2003, 2004). Determinants on the supply-side include a

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perception of the inadequacy of traditional care and long distance from the health facility (De Allegri, Kouyate, et al., 2006). Qualitative studies suggest that perceptions of quality of health care, trust in CBHI scheme management (Criel & Waelkens, 2003), availability of information on CBHI (Ridde, Haddad, Yacoubou, & Yacoubou, 2010) and scheme design (De Allegri, Sanon, Bridges, & Sauerborn, 2006) also determine enrolment. A third set of determinants points to social and cultural issues, including low levels of socioeconomic inequality within the community, membership of other community organisations (Jütting, 2003) and ethnicity and religion (De Allegri, Kouyate, et al., 2006; Jütting, 2003).

The literature proposes the following strategies to address inequity, adverse selection and inadequate supply of health services and insurance: public funding to subsidise premiums, strategies to promote increased revenue collection from the "healthy and wealthy", and improved CBHI management and quality of care (Mills et al., 2012; Ndiaye, Soors, & Criel, 2007; Soors et al., 2010). Yet continued low rates of enrolment suggest these strategies have not been successfully implemented. Meanwhile to date there has been no attempt to systematically explain how and why social and cultural determinants affect CBHI enrolment and understand the policy implications. This gap is addressed by the present study which proposes that the decision to enrol in CBHI is determined, in part, by levels of social capital. The hypothesis to be tested is that people who decide to enrol in CBHI have bonding and bridging social capital, while those who do not enrol have less bridging social capital or have bonding social capital only. This is explored by comparing levels of social capital among members and non-members of three CBHI schemes in Senegal.

## Background: defining social capital

The study builds on the argument that social capital can promote or constrain CBHI, proposed in a literature review of CBHI by Mladovsky and Mossialos (2008). They adopt the following definition of social capital: "the information, trust and norms of reciprocity inhering in one's social network" (Woolcock, 1998: 153). Tracing interconnected theories of social capital they further adopt the principle that social capital constitutes: "those expectations for action within a collectivity that affect the economic goals and goal-seeking behaviour of its members, even if these expectations are not oriented towards the economic sphere" (Portes & Sensenbrenner, 1993: 1323).

### *Bonding versus bridging social capital*

Drawing on Portes and Sensenbrenner (1993), Mladovsky and Mossialos (2008) argue that distinguishing between "bonding" and "bridging" social capital is essential in understanding whether features of social capital (e.g. expectations between individuals, the trustworthiness of structures, information channels, norms and effective sanctions) have a productive outcome in CBHI. "Bonding social capital" inheres in dense networks within communities. Research suggests that while bonding social capital makes the accumulation of human and economic capital possible in some contexts, it can be unproductive in others. For example in some immigrant groups in the USA high levels of bonding social capital lowered transaction costs in enterprise (Portes, 1998; Portes & Sensenbrenner, 1993). However, bonding social capital was unproductive in other groups, promoting free-riding on communal resources, derision of efforts to work hard and cutting off important external sources of information (Portes & Sensenbrenner, 1993); this is hereafter termed the "negative effect of bonding social capital". The differing impact of bonding social capital on economic action is explained by varying levels of "bridging social capital", which inheres in micro level extra-community networks. Productive immigrant groups were characterised by individuals who were able to draw on bridging relations outside the network *as well as* bonding relations. This is thought to be because extra-community relations were free from the potentially overwhelming demands family and friends place on successful members of the group for support, permitting exchange to take place on the basis of formal rules or fair market competition (Portes & Sensenbrenner, 1993). Studies of bonding and bridging social capital from the development literature on SSA (Campbell, 2003; Njuki, Mapila, Zingore, & Delve, 2008; Titeca & Vervisch, 2008) broadly support the findings from North America. However, mixed methods studies differentiating between the impact of bonding and bridging social capital in SSA are rare, and none have focused on CBHI.

### *The unequal distribution of social capital*

Another characteristic of social capital which may hinder positive developmental outcomes is identified by Bourdieu (1986) who argues that individuals who already hold forms of capital (economic, social, cultural and/or symbolic) are strategically more adept at accumulating and transforming it (he argued that these forms of capital are fungible). Through the continual process of accumulating and transforming the different forms of capital, unequal power relations and social hierarchies are formed and strengthened. The aforementioned literature on social capital in Africa also broadly supports this theory. As such it is important to study the *distribution* of social capital within communities and consider how this might cause unequal access to benefits offered by development projects. Previous studies of CBHI do not take such issues into account.

## Methods

The study used a mixed methods multiple case study design which included a household survey and semi-structured interviews. Ethical approval for the research was obtained from the Senegalese Ministry of Health.

### *Case study selection*

The fieldwork was conducted in March–August 2009. To enhance generalisability of the results of the study (Yin, 1994), multiple (three) cases constituting CBHI schemes were selected: Soppante, Ndondol and Wer Ak Werle (WAW) (Table 1). Three regions (out of 12) were first selected for inclusion in the study. These were among the regions with the highest number of CBHI schemes in Senegal (Table 1), meaning the study focuses on contexts where CBHI development is relatively advanced. In each region, the federation which coordinates CBHI schemes provided information used to identify the three cases. The cases all fulfilled two basic criteria of success in order to control for the possibility that a lack of enrolment was mainly due to supply-side problems: the number of members[1] ever enrolled in the CBHI scheme (including those whose policy had expired) was greater than the national average of 329 (Hygea, 2004); and the schemes had been established for a minimum of 8 years. At the same time, the schemes varied according to the following criteria, in order to study a wide range of

[1] A "member" (termed "adherent" in French) is permitted to register 10–12 people from their household on the insurance policy meaning that the total number of enrollees in the insurance schemes was far higher than the number of "members". The premium for each individual in the household is paid monthly.