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Can health insurance improve access to quality care for the Indian poor?

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Abstract

Purpose. Recently, the Indian government launched health insurance schemes for the poor both to protect them from high health spending and to improve access to high-quality health services. This article aims to review the potentials of health insurance interventions in order to improve access to quality care in India based on experiences of community health insurance schemes.

Data sources. PubMed, Ovid MEDLINE (R), All EBM Reviews, CSA Sociological Abstracts, CSA Social Service Abstracts, EconLit, Science Direct, the ISI Web of Knowledge, Social Science Research Network and databases of research centers were searched up to September 2010. An Internet search was executed.

Study selection. One thousand hundred and thirty-three papers were assessed for inclusion and exclusion criteria. Twenty-five papers were selected providing information on eight schemes.

Data extraction. A realist review was performed using Hirschman's exit-voice theory: mechanisms to improve exit strategies (financial assets and infrastructure) and strengthen patient's long voice route (quality management) and short voice route (patient pressure).

Results of data synthesis. All schemes use a mix of measures to improve exit strategies and the long voice route. Most mechanisms are not effective in reality. Schemes that focus on the patients' bargaining position at the patient-provider interface seem to improve access to quality care.

Conclusion. Top-down health insurance interventions with focus on exit strategies will not work out fully in the Indian context. Government must actively facilitate the potential of CHI schemes to emancipate the target group so that they may transform from mere passive beneficiaries into active participants in their health.

Keywords: health insurance, quality improvement, access to care, community health insurance, realist review, India

Introduction

Despite India's rapid economic growth and innovations in the medical sciences, inequities in access to quality health care remain [1, 2]. Evidence indicates that the low public spending on social policy [3] and health [4], the rapid commercialization of the health system [5] and the absence of an adequate apparatus to regulate the quality of services [6] are the main cause of a growing insecurity of the Indian poor regarding their access to quality care.

In India the quality of health care is a major problem, both in terms of technical quality and infrastructure, as well as of having a patient-friendly organization and staff [7–9]. Till today, government failed in monitoring public health staff adequately to make them responsive to poor patients' needs [10]. A common way to exit the low-performing public sector is to buy health services from private providers. However, because of the absence of well-functioning regulatory measures and self-regulation, the quality in the private sector is very diverse [6]. Many private providers, especially those consulted by poor people, are ill-qualified and charge a lot of money for low-quality treatment [5]. With limited social health protection, the predicament of many Indian poor often boils down to the uneasy choice between either forgoing treatment or risking impoverishment [11].

In its last two periods of governance, the United Progressive Alliance has been trying to solve the inaccessibility of quality care for the poor. To upgrade the health

infrastructure and human resources in remote areas, the government has launched the National Rural Health Mission (NRHM) (2005–2012). Next, it is trying to improve health insurance coverage among poor populations. Enthused about the high enrollment rates of some community health insurance (CHI) schemes such as Yeshasvini and Self-Employed Women's Association (SEWA), the Eleventh Five Year Plan (2007–2012) refers to CHI as tools to extend social health protection to workers belonging to the informal sector [12]. In the NRHM [13] document, CHI has been promoted as one of the measures to bring 'accessible, affordable, accountable and good quality health care'. In April 2008, the Ministry of Labor has launched ambitious plan covering 360 million poor Indians through a fully subsidized health insurance scheme: Rashtriya Swasthya Bima Yojana (RSBY) [12, 14].

CHI is not a new phenomenon in India. Since the 1950s, non-governmental organizations (NGO) have executed local risk-pooling mechanisms to improve the access to quality care and to protect households from high health expenses. At the moment, about 115 CHI schemes exist. Given the political interest in running a nationwide health insurance scheme, and collaborating with existing CHI schemes [12, 13], the impact of these schemes needs further investigation. For some schemes, the potentials to provide financial protection [15, 16] and improve access to health care [17–19] have already been analyzed. Data about whether and how CHI schemes could improve the quality of care are, however, limited.

Following Walshe's plea [20], the purpose of this article is to perform a realist review of eight Indian CHI schemes described in published literature in order to assess their potentials in ensuring the access to quality care. The intent of the review is to examine the underlying program theories in order to give insights into the underlying mechanisms and the contextual factors that may hamper or facilitate their ambition to improve the quality of health care.

Methodology

We adopted a realist review as described by Pawson *et al.* [21]. In a nutshell, a realist review starts from the description of key theoretical assumptions behind interventions, that is, the basic hypotheses about how intervention measures will influence the subject's action, and then goes on to investigate their accuracy and scope. The intervention is supposed to work out like this, but what happens in reality? Whether these underlying mechanisms are actually triggered, and produce the desired outcomes, depends largely on the given context and the characteristics of the subjects. The analysis of the interplay between contextual factors, content and measures, mechanisms and outcomes leads to a refined explanatory model [22].

Evidence base

An literature search was conducted using the academic search engines PubMed, Ovid MEDLINE (R), Ovid MEDLINE (R) In-Process & Other Non-Indexed Citations, All EBM Reviews, CSA Sociological Abstracts, CSA Social Service Abstracts, EconLit, Science Direct and the ISI Web of Knowledge and ISI proceedings. Based on the international discourse on CHI [23–25], the following combination of keywords was entered: (India OR Indian) AND (('community health insurance') OR ('community based health insurance') OR ('micro health insurance') OR ('mutual health insurance') OR (('community scheme') AND health) OR (microinsurance AND health) OR (('micro insurance') AND health) OR ('community health fund') OR ('mutual health fund') OR ('mutual health organization')). Subsequently, the databases of the Social Science Research Network and principal centers dealing with research on CHI in India were explored. Specifically, we consulted database of the ASIAN Micro Insurance Network of the International Labour Organization, the CHI Network linked to the Institute of Public Health, Bangalore, the Micro Insurance Academy, the Consortium on Strengthening Micro Health Insurance Units for the Poor in India, and the Centre for Insurance and Risk Management of the Institute for Financial Management and Research, Chennai. Relevant literature was also identified through the Internet search engine Google Scholar.

All the papers in English, reported before September 2010, were included. More details of the selection process are displayed in Fig. 1. The 1133 papers resulting from the search were assessed on their thematic focus (CHI performance on access to and quality of delivered health care) and geographic focus (India) (Steps 2, 3 and 4). The research team identified 25 papers for detailed analysis, which, in total, provide a fragmented evaluation of 21 CHI schemes. From these 21 schemes, eight schemes were selected for further review (Step 5). The selection criteria were that at least two different papers discussed the scheme's impact on quality of and access to health care and that enough contextual information of the specific scheme was available. In order to saturate the information base, the websites of the selected CHI schemes [26–33] were screened.

Quality appraisal

In a realist review, all forms of evidence are considered as being equally authoritative when it may contribute to the fuller development of the explanatory framework [21, 22]. Instead of papers being assessed merely against *a priori* standards for quality appraisal, the individual papers were evaluated by four members of the research team firstly and foremost for their relevance to the theory under test. Do they contribute to a saturation of contextual information and information on the scheme's impact on the quality of and access to health care? Nevertheless, some evidence may be of poorer quality and reviewers need to flag those issues for the readers [34]. The rigor of the included papers is assessed with focus on methodological design, analysis and discussion. A detailed overview of this appraisal could be found in Table 1.

Data extraction and analysis

The data extraction and analysis was carried by four members of the research team in an iterative way going back and forth between data and theory. While reading all papers and additional information, the members of the research team categorized elements of content and measures, performance outcomes and contextual factors. Subsequently, those categories were discussed within the team and a table reporting information on the eight schemes was drawn (see Table 3). The two other members reviewed the final analysis. The six members of the research team are the six authors of the article.

The key program theories: exit or voice

In recent policy discourse, it is predominantly argued that health insurance will improve access to quality care by consumer-directed forms of empowerment [35]: 'RSBY

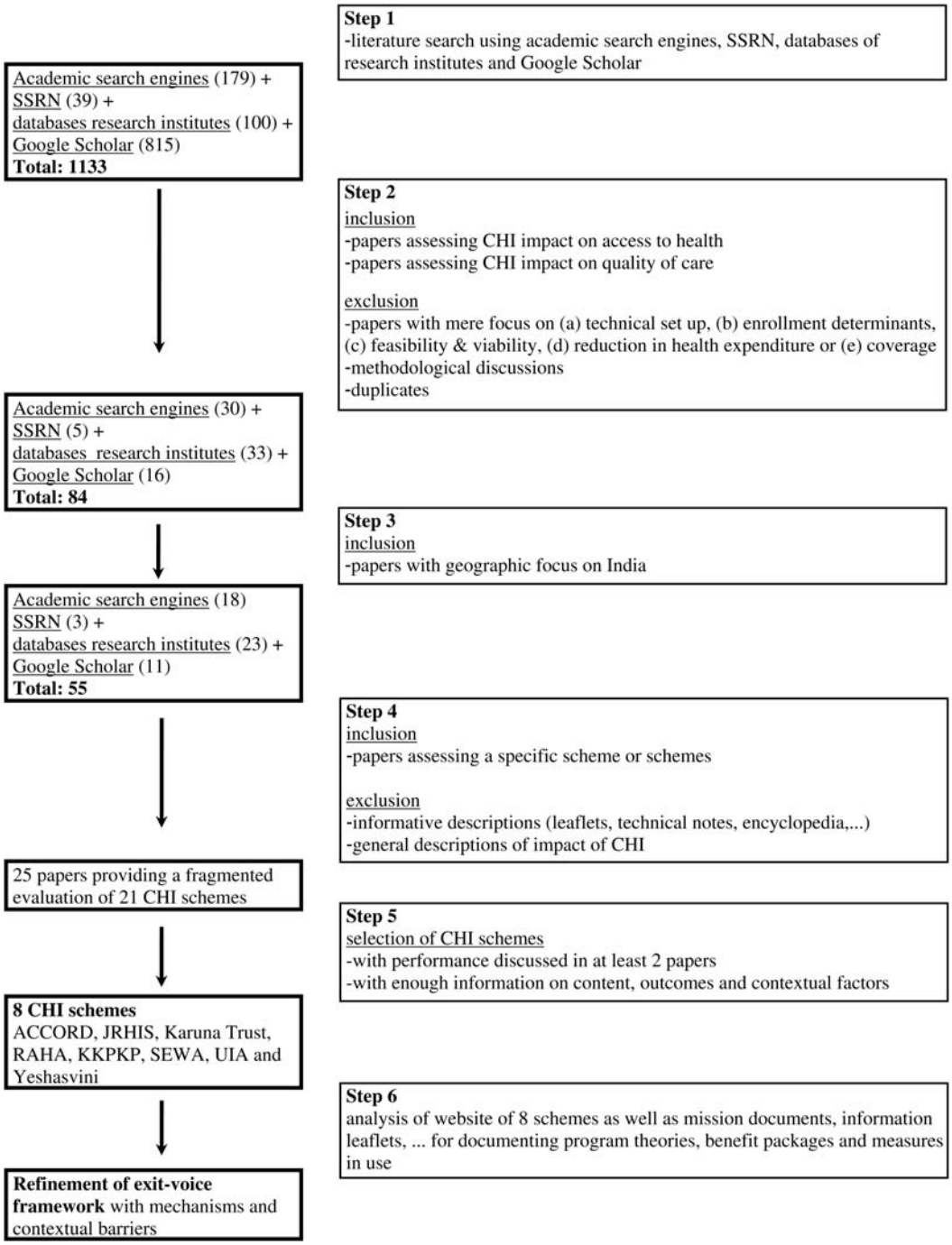

Figure 1 Selection of the evidence base. The number of each individual source state the additional new information, i.e. all papers, which are already identified using the source above it, are not counted.

Table 1 Quality appraisal of the included papers

Study, scheme(s)	Purpose of paper	Rigor: (a) methodology; (b) data
Group 1: Descriptive case studies		
Ahmed (mimeo) [45], KKPKP	Describe uniqueness of the scheme and constraints, needs and aspirations of stakeholders	*Consultancy report*: (a) descriptive statistics, but methodology for data collection and analysis strategy not made explicit; (b) informal meetings with beneficiaries and formal interviews with other stakeholders: trade union, insurer, hospitals
Criel and Devadasan [46], RAHA	Analyze the functioning and identify constraints and areas for improvement	*Unpublished evaluation*: (a) descriptive statistics, but lot of extrapolation; (b) discussions with stakeholders, data from records and reports
Garand [47], SEWA	Assess the evolution and performance since the development of the business plan	*Evaluation report*: (a) methodology for data collection and analysis strategy not made explicit; (b) literature review, discussions with stakeholders, data from records and reports
Jajoo and Bhan [48], JRHIS	Describe the genesis and development of the scheme	*National peer reviewed article*: (a) critical description by staff, but analysis strategy not made explicit; (b) no description of data collection
Kuruvilla and Liu [49], Yeshasvini	Examine reasons for success and evaluate potential transferability	*International peer reviewed article*: (a) methodology for data collection and analysis strategy not made explicit; (b) literature review, discussions with stake holders, data from records and reports
Leist and Radermacher [50], UIA	Description of organizational structure	*Consultancy report*: (a) part of comparative study using case study designs (Infosure), but methodology for data collection and analysis strategy not made explicit; (b) interviews with stakeholders and data from reports
Radermacher *et al.* [51], Karuna Trust	Assess the evolution and performance since the development of the business plan	*Evaluation report*: (a) methodology for data collection and analysis strategy not made explicit; (b) literature review, discussions with stakeholders, data from records and reports
Radermacher *et al.* [52], Yeshasvini	Assess the evolution and performance since the development of the business plan	*Evaluation report*: (a) methodology for data collection and analysis strategy not made explicit; (b) literature review, discussions with stakeholders, data from records and reports
Group 2: Comparative reviews		
Acharya and Ranson [53], 4 schemes in Gujarat	Evaluate CHI schemes as alternative for financing health-care expenditure	*National peer reviewed article*: (a) methodology for data collection and analysis strategy not made explicit; (b) literature review and discussions with stakeholders
Devadasan *et al.* [54], 12 Indian schemes	Describe CHI schemes (context, design, management) and impact	*National peer reviewed article*: (a) methodology for data collection and analysis strategy not made explicit; (b) literature review, discussions with stakeholders and data from records and reports

Devadasan *et al.* [55], 10 Indian schemes	Describe CHI schemes (context, design, management) and impact	*International peer reviewed article*: (a) inductive case study methodology; (b) literature review, discussions with stakeholders and data from records and reports
Ranson [56], 12 Indian schemes	Review the experience of schemes: impact on health system goals, hospital access and protection	*International peer reviewed article*: (a) methodology for data collection and analysis strategy not made explicit; (b) literature review and field visits, but bias in favor of well-documented schemes
Group 3: Impact assessments		
Aggarwal [57], Yeshasvini	Evaluate impact on health utilization, protection and treatment outcomes	*Research report*: (a) propensity score matching methods; (b) household survey and secondary data from government databases
Bauchet *et al.* [58], UIA	Measure how the scheme improve the quality of provided care	*Research report*: (a) comparison of insured with uninsured based on qualitative analysis and statistical methods (Mann–Whitney test, Fisher's exact test and regressions) and Donabedian 'structure, process, outcome' approach; (b) in-depth interviews with patients, survey under lead doctor, visit of facilities and medical reports
Devadasan *et al.* [59], ACCORD	Analyze performance vis-à-vis access to hospitalization	*National peer reviewed article*: (a) qualitative analysis and descriptive statistical analysis; (b) interviews with key informants, data from records and reports
Devadasan *et al.* [18], ACCORD	Analyze performance vis-à-vis access to hospitalization	*International peer reviewed article*: (a) multivariate logistic regression; (b) panel survey
Devadasan *et al.* [60], ACCORD	Measure impact on quality of care using patient satisfaction as a proxy	*International peer reviewed article*: (a) comparison between two schemes and insured and uninsured patients through a statistical analysis (median, proportions and confidence intervals); (b) literature review, FGD and structured questionnaire on 19 satisfaction indicators using a dichotomous scale
Dixit and Chouvet [61], UIA-Parvati	Assess impact on members' well-being, satisfaction and utilization of additional services	*Research report*: (a) descriptive statistical analysis; (b) quantitative questionnaire with open-ended questions and secondary data
Dror *et al.* [19], BAIF, UIA, Nidan	Identify impact on protection and equitable access to health care	*International peer reviewed article*: (a) univariate statistics, parametric (ANOVA, *t*-test) and non-parametric tests; (b) household survey and qualitative interviews with managers
Michielsen *et al.* [62], CSSC, KKPKP, UIA	Analyze impact on access to affordable health care of good quality	*International congress paper*: (a) realist evaluation using qualitative analysis; (b) 15 focus group discussions with female members in different slums and quantitative data on socio-economic status

(*continued*)

Table 1 Continued

Study, scheme(s)	Purpose of paper	Rigor: (a) methodology; (b) data
Ranson and John [63], SEWA	Identify problems of the quality of hysterectomy care	*International peer reviewed article.* (a) quality analysis based on Donabedian 'structure, process, outcome' approach; (b) literature review, field visits, discussions with stakeholders, data from records and reports
Ranson *et al.* [64], SEWA	Analyze impact on protection and access to quality health care	*International peer reviewed article.* (a) multivariate logistical regression; (b) household surveys of three populations
Ranson *et al.* [17], SEWA	Analyze the experience a pilot Preferred Provider System	*International peer reviewed article.* (a) Qualitative analysis and multivariate logistical regression; (b) Household surveys of three populations, in-depth interviews with members and grassroots level staff
Sinha *et al.* [65], SEWA	Analyze barriers that hinder patients to fully use the benefits of the scheme	*International peer reviewed article.* (a) qualitative analysis; (b) 6 focus group discussions with members and grassroots level staff
Sinha *et al.* [66], SEWA	Measure distributional impact of the scheme across different target groups	*International peer reviewed article.* (a) multivariate logistical regression; (b) household surveys of three populations

provides the participating BPL household with freedom of choice between public and private hospitals and makes him a potential client worth attracting on account of the significant revenues that hospitals stand to earn through the scheme' [14]. On the basis of the stated casual hypotheses, the research team proposed to use Hirschman's notions of exit and voice theory [36] as the root model for pattern matching to identify general mechanisms and contextual determinants of success or failure to improve access to quality care.

Hirschman (1970) developed his framework to analyze ways in which consumers cope with performance deterioration of the delivered services and goods. Basically, he regards consumers as the ultimate source of control over provider responsiveness with two mechanisms at their disposal: exit and voice. 'Exit' refers to the fact that consumers can simply leave and use competitors. Voice refers to the expression of grievance with the aim to change the situation for the better. Voice can be channeled 'through individual or collective petition to the management directly in charge, through appeal to a higher authority with the intention of forcing a change in management or through various types of actions and protests, including those that are meant to mobilize public opinion' [36].

The most prominent variation on this model is perhaps the accountability framework presented in the World Development Report (WDR) 2004, Making Service Work for Poor People [37]. The WDR framework combines three sets of actors—clients/citizens, service providers and policy-makers—and two routes of accountability. Via a 'long route', citizens could inform policy-makers on their needs in terms of quantity, quality and responsiveness of providers. These, in turn, can hold the providers accountable by enforcing laws through adequate bureaucratic or market-based regulatory measures and sanctions. Via a 'short route', responsiveness is achieved through direct 'client power' or by 'voting with the feet' ('exit'). To make those accountability routes fully functional for poor people, authors have stressed the necessity of an intermediary role played by NGOs, such as civil society organizations, self-help groups and community-based organizations [38]. These roles could imply the co-production of services to make them more manageable and socio-culturally acceptable [39], pressuring the government from the outside as an organized watchdog, or participating directly in the core functions of government itself (co-governance) [40].

Pattern matching and causal mechanisms

To discuss the underlying mechanisms a combination of competitive elaboration and principled discovery approaches to pattern matching was applied, as described by Mark *et al.* [41]. Based on the exit-voice notions and a consultation of the literature on CHI, three generative mechanisms were articulated *a priori* and put to the test against the evidence base. It is commonly argued that CHI schemes can improve access to quality health care by providing an exit route (M1), co-producing a long voice route (M2) and guarding over the long route of accountability (M3) [23, 25, 42–44]. During the review, we discovered another currently understudied

Table 2 Causal mechanisms whereby CHI could improve access to quality health care

Mechanism	Possible measures	Contextual requirements	Outcomes
M1—Exit route: CHI increases poor peoples' purchasing power and freedom of choice to access quality providers and exit low-performing providers	• Reduction of financial barriers via insurance: cashless or reimbursement • Increase in number of available health-care facilities by co-production • Provision of information and counseling	• Market competition with availability of quality providers • Fully informed members capable of evaluating both technical and interpersonal quality of care • No other financial and socio-cultural barriers • No power imbalance at provider/patient interface	Low-performing providers improve the quality of care to prevent that poor insured patients buy their health care elsewhere
M2—Co-producing a long voice route: Schemes strategically purchase health care from providers, which gives a mandate to set quality standards	• Enlistment of providers • Contracts stipulating quality standards • Treatment protocols • Performance-for-payment mechanisms • Monitoring and disciplinary action • Social accountability	• Availability of quality providers who could be enlisted • Schemes informed about quality performance of providers • Schemes in a position to bargain • Schemes capable of monitoring enlisted providers or having external actors doing this • Fully informed insured members report quality problems experienced	Providers improve and maintain standards of care to ensure that they remain enlisted and ensure a steady income over time
M3—Guarding over the long voice route: Schemes link communities with politically more voiced groups or hold government or other external actors accountable to regulate the health system	• Social mobilization • Networking and lobbying • Social pressure • Social disclosure • Feedback mechanisms and participation of communities in the schemes	• Schemes have a strong social network • Government capable of and willing to implementing a regulatory framework • Self-regulating provider associations • Room for civil society in lobbying and agenda setting	Well-functioning monitoring and disciplinary systems are in place and providers improve their standards of care to avoid sanctions by government or other external actors

(*continued*)

Table 2 Continued

Mechanism	Possible measures	Contextual requirements	Outcomes
M4—Short voice route: Social care and emancipatory programs increase poor peoples' confidence to negotiate directly with providers over the quality of care	• Community health workers, social workers or NGO-doctors • Guardian of the sick and socio-cultural translator • Health education • Participation and capacity building • Facilitating development of social capital	• Members capable of evaluating both technical and interpersonal quality of care • Providers start dialogue with patients • Providers are not opportunistically responding to patients' demands • Providers accept presence of community health workers, social workers or NGO doctors during clinical encounter	Improvement of relationship between providers and patient Increase in poor patients' confidence to negotiate with providers

mechanism: strengthening the short voice route by transforming the power imbalance at the provider–patient interface (M4). The different mechanisms, possible measures and contextual requirements to achieve the expected outcomes are described more in detail in Table 2.

Results

The papers could be divided into three groups as presented in Table 1. The first group describes schemes for their design features [45–52] following a case-study approach. In the second group, papers provide a comparative review of CHI schemes giving information about 18 schemes [53–56]. A third group contains papers analysing the impact of the CHI schemes on the quality of and the access to health care for their respective target group [17–19, 56–66]. The performance was assessed in a more systematic way following a defined research question and qualitative or quantitative methods.

The eight Indian CHI schemes we identified are very diverse in terms of design, initiator, size and target populations. Further details of each scheme are presented in Table 3. This diversity has an impact on the scheme's measures and the provided activities. Four schemes under review have health delivery functions (provider type): Action for Community Organisation, Rehabilitation and Development (ACCORD), Jowar Rural Health Insurance (JRHIS), Karuna Trust and Raigarh Ambikapur Health Association (RAHA). The other schemes purchase care from independent providers, both public and private: Kagad Kach Patra Kashtakari Panchayat (KKPKP), SEWA, Uplift India Association (UIA) and Yeshasvini. Further, the insurance risk can be born by the community (mutual type), the NGO (insurer type) or the NGO purchases an insurance product from a formal insurance company (partner–agent type) [55, 67].

The rest of the result section is presented in the order of the mechanisms outlined in Table 2.

Mechanism 1: Exit route

If we explore the exit route in practice, the question to be answered is if the CHI schemes improve access to healthcare facilities, and hence increase the patients' freedom of choice. For ACCORD, JRHIS, RAHA, SEWA's Preferred Provider Systems, Yeshasvini and UIA, an increase in access has been reported resulting in a higher utilization of health services by the target group. In all these schemes, except for UIA, schemes provide financial benefits at time of consumption through cashless systems. Although cashless systems are frequently promoted because members do not have to worry about treatment costs before seeking care, the evidence demonstrates that other financial and non-financial barriers exist, which hamper poor people to access health facilities of good quality, and thus, limit exit options.

Under most schemes, indirect costs such as loss of wage, drugs, medical tests and transportation, remain, which

Table 3 Characteristics of the eight selected CHI schemes

	Name (year), state ACCORD (1992), Tamil Nadu	JRHIS (1978), Maharashtra	Karuna Trust (2002), Karnataka	KKPKP (2003), Maharashtra
(a) Type	(a) Partner agent (health NGO)	(a) Mutual (provider)	(a) Partner agent (health NGO)	(a) Partner agent (union)
(b) Initiator	(b) Development organization	(b) Hospital	(b) Public–private partnership	(b) Union
Content	• Insurance for hospitalization • Coverage of primary care in NGO health centre and hospital	• Free primary care via community health worker (CHW) • Insurance for hospitalization and outpatient care at NGO hospital	• Free hospitalization in public center • Subsidized outpatient care • Compensation for loss of wage, drugs and transportation	• Insurance for hospitalization
Measures	• Cashless system • Counseling via CHW • CHW and doctors from community • Member participation • Feedback mechanisms • Nested social program	• Cashless system • Counseling via CHW • Social accountability • Member participation • Feedback mechanisms • Capacity building • Nested in social program	• Cashless system • Social workers in hospital • Top-down implementation • Nested in social program	• Reimbursement • Counseling via social workers • Quality monitoring by government or insurance company • Top-down implementation • Lobbying and social mobilization • Nested in social program
Outcomes				
(a) access	(a) Improved access, indirect costs	(a) Improved access	(a) Improved access, non-financial barriers	(a) Non-financial barriers, discrimination, indirect costs
(b) quality	(b) Increase in technical and interpersonal quality of care	(b) Increase in technical and interpersonal quality of care	(b) Irrational treatment, corruption, provider fraud	(b) Irrational treatment, abuse of patients, provider fraud

(*continued*)

Table 3 Continued

	Name (year), state			
	ACCORD (1992), Tamil Nadu	JRHIS (1978), Maharashtra	Karuna Trust (2002), Karnataka	KKPKP (2003), Maharashtra
Context and stake holders	M1: rural: few health facilities M2: community-based and participatory character increases trust in NGO M2: NGO-run facilities increase monitoring, fixed salary of providers M3: lobbying with state government over combining a state program with the CHI to cover other costs M4: socio-culturally close health staff increases trust and dialogue between patient and provider	M1: rural: few health facilities M2: community-based and participatory character increases trust in NGO M2: NGO-related facilities increase monitoring, social accountability mechanisms M3: scheme embedded in government bodies at village and district levels M4: socio-culturally close health workers and emancipation increase confidence to claim quality care	M1: rural: few health facilities M2: little involvement of members in running scheme M2: PPP, but monitoring and control of public facilities remain a government responsibility M3: lobbying power centralized in one person: founder/honorary director M4: members have little voice to claim their rights, victims of corruption	M1: urban: many health facilities M2: miscommunication and high claim rejection cause low trust in scheme M2: monitoring was responsibility of government or insurance company M3: lobbying with government resulted in subsidies for the premium M4: feelings of social exclusion is reproduced during treatment
	RAHA (1980), Chhattisgarh	SEWA (1992), Gujarat	UIA (2003), Maharashtra	Yeshasvini, (2003) Karnataka
(a) Type (b) Initiator	(a) Insurer (provider) (b) Congregational health network	(a) Partner agent (union) (b) Union	(a) Insurer (mutual) (b) Micro-finance institution	(a) Insurer (charity) (b) Public–private partnership
Content	• Free primary and outpatient care via CHW and NGO health centre • Insurance for hospitalization at NGO health centre and hospitals	• Insurance for hospitalization	• Insurance for hospitalization • Discount outpatient coupons	• Insurance for selected surgeries and related outpatient • Diagnostic tests at discount rates
		SEWA I	SEWA II	
Measures	• Cashless system • Top-down implementation	• Reimbursement • Top-down implementation • Social workers help with claims • Nested in social program	• SEWA I + cashless in enlisted hospitals	• Reimbursement • Counseling via CHW and doctor • 24 × 7 helpline • Enlistment of providers • Feedback mechanisms • Member participation • Capacity building • Nested in social program	• Cashless system • Top-down implementation • Enlistment of providers

Outcomes					
(a) access	(a) Improved access, indirect costs	(a) Improved access, non-financial barriers, indirect costs	(a) Improved access, non-financial barriers, indirect costs	(a) Improved access, non-financial barriers, indirect costs	(a) Improved access, non-financial barriers, indirect costs
(b) quality	(b) Irrational treatment, provider fraud	(b) Irrational treatment, provider fraud	(b) Provider fraud	(b) Increase in technical and interpersonal quality of care	(b) Increase in technical quality, provider fraud
Context and stake holders	M1: rural: few health facilities M2: trust in NGO among Christians, run 'for people' (vs. 'with people') M2: health network monitoring is responsibility of congregations M3: ruled by *ad hoc* events, difficult position as Christian organization M4: patient and provider opportunism	M1: rural/urban M2: trust in NGO, control of members fraud but not of provider fraud M2: no formal contract with providers, NGO has low negotiation power M3: lobbying power as 'the example' M4: provider opportunism, reproduction of feelings of exclusion		M1: urban: many health facilities M2: participatory character increases trust in NGO M2: formal contracts and monitoring M3: informal ties with government M4: guidance and emancipation increase confidence to claim quality care	M1: rural: few health facilities M2: 'run for people', charity M2: formal contracts, monitoring is responsibility of TPA M3: lobbying power as 'the example' M4: members have little voice to claim their rights

mitigate the benefits of the insurance. Further, poor peoples' freedom of choice is often limited because health facilities of good quality are lacking or unknown, especially in rural areas. Some schemes, in particular the provider-driven schemes overcome this by providing health services in the facilities run by them (ACCORD, JRHIS, Karuna Trust and RAHA), but this does not ensure the quality if well-functioning monitoring systems are absent (see further). Others such as UIA provide members with information about which enlisted quality providers are located in their neighborhood through a 24/7 helpline and counseling.

Another way of guaranteeing quality care is by enlisting providers that meet up defined standards. However, enlistment sometimes reinforces inaccessibility. Enlisted providers are not always located close to the beneficiaries nor do they automatically adhere to the defined quality standards, as reported for Yeshasvini, SEWA's Preferred Provider System and RAHA. Not only does this make the health facilities geographically and financially inaccessible but they also risk becoming socio-culturally alienating. To counter such problems, KKPKP negotiated with the insurance company to waive the required standards. This way, it succeeded in including providers closer to the beneficiaries, but this is at the expense of the quality of care.

Mechanism 2: Co-producing a long voice route

On paper, the eight schemes engage in active strategic purchasing to assure the quality of provided care. These strategic purchasing mechanisms include the enlistment of providers that adhere with quality standards, blacklisting of providers, contracts, provider payment mechanisms like fixed salaries or fee-for-performance, exclusion of harmful treatment from coverage, negotiation with government officials and social accountability mechanisms. However, most of them face difficulties in ensuring the quality of the provided care. Corruption, fraud and discrimination at the provider–patient interface occur in many schemes: providers release required medical reports only after asking 'processing fees'; members are overcharged and treated rudely; providers prescribe unneeded and harmful treatment or providers ask informal payments.

The main reason is the malfunctioning of quality management mechanisms to control compliance with defined agreements. In general, most schemes lack the capacities to negotiate successfully with providers over monitoring and accountability. In its Preferred Provider System, for example, SEWA has relatively too few hospitalized members to hold a powerful negotiation position regarding the enlisted hospitals. Other schemes depend on the performance of external actors to monitor providers: government officials (Karuna Trust), third-party administrators (Yeshasvini) or officials from the congregation (RAHA). Those external actors do not always fulfill these tasks properly because of incapability or unwillingness to do so.

Secondly, most strategic purchasing solely focuses on the technical aspects of health-care quality (education of providers, treatment protocols or presence of infrastructure and drugs). Little attention is paid to relational aspects of the clinical encounter. Evidence, however, shows that socio-cultural alienation, discrimination and problematic relationships with health workers pose important barriers to access quality care.

Thirdly, most schemes reflect a paternalistic understanding of development where the target groups are approached as passive beneficiaries, rather than as active partners. Sometimes they are consulted about their needs, but little room exists for participation in monitoring or quality management. However, the bottom-up approach of JRHIS, ACCORD and UIA seems very fruitful in improving the effectiveness of the long voice route. In JRHIS, for example, the target group decides over the salary of health workers considering their performance. The UIA scheme is completely run by the community and members are represented at a high management level of the UIA itself, where they can voice the problems with regard to the quality and search for contextualized solutions. This participatory approach strengthens the trust in the scheme and emancipates members to express the encountered problems with low-quality treatment to the management of the scheme.

Mechanism 3: guarding over the long route of accountability

Most schemes maintain strategic relations with government or other external actors (funding organisations). Some schemes (Yeshasvini, Karuna Trust and SEWA) hold powerful lobby positions with the government and reside in political advisory groups. This lobbying has definitely contributed in putting the issue of health insurance for the poor on the political agenda, but the impact on pressuring the government or professional bodies to regulate the health sector is not visible. Through negotiations with government Karuna Trust, KKPKP and recently ACCORD achieved financial partnerships that allow them to, respectively, give free care and compensate for other indirect costs, fully subsidize the premiums and cover primary care. Nevertheless, such public partnerships sometimes negatively affect the schemes' credibility in the target communities. Members of Karuna Trust question the quality of care provided because of the low-quality performance stigma of public sector providers. The partnership with government also pushes KKPKP in a difficult position towards their members. Due to a high claim rejection rate and absence of clear communication by the for-profit insurance company, members loose their trust in the union to provide social protection, and change the social exclusion and discrimination that they experience. It makes them more reluctant to engage in the KKPKP insurance program. However, the contractual mandate to hold the insurance company accountable lies with the municipal government who pays the premium.

Introduction of an additional mechanism 4: Short voice route

Consumer-directed empowerment or co-producing the long route to accountability has little direct impact on the power

imbalance that typifies the problematic relationship between providers and poor patients.

The right-based approach of ACCORD, JRHIS, UIA or KKPKP embedded in a broader ideology of emancipation and community building creates options that challenge these power imbalances. ACCORD overcomes the socio-cultural alienation by selecting providers from the target community itself. In JRHIS and UIA, social workers accompany members during hospitalization. These socially close workers function as guardians of the sick, that is, go-betweens translating patient's concerns, negotiating a good and respectful treatment, securing the continuity of treatment and breaking the ceremonial order between blame-submitting providers and poor patients who passively accept maltreatment. Also for KKPKP, social workers support members in claiming their health rights by persistently pressuring hospitals to observe the court order that obliges them to provide inpatient care at concessional rates to poor people. These forms of social care generate a sustainable change in attitude of providers towards poor patients by battling the ignorance of poor patients about their rights and because providers fear social pressure and social disclosure by the schemes.

Further, the participatory way of working of the UIA and JRHIS seems to emancipate members in seeking good quality health care, wherein they negotiate with health workers over the quality of care they expect. In the frequent insurance group meetings, members of UIA exchange information about good and bad providers and the way they dealt with the problematic behavior of the health workers. Through its broader development activities, also JRHIS succeeds in increasing the organizational ability and confidence of its members in claiming their right to demand health care of high quality.

Discussion and conclusion

This realist review discusses underlying mechanisms popularly used by national and international policy-makers to promote the introduction of health insurance in India as a solution to improve poor peoples' access to quality health care, against the background of the experiences of eight CHI schemes. Its value lies in the novelty of a refined explanatory model and in the systematic analysis of the impact of CHI on the quality of provided care, an understudied theme in the research on CHI in India. Currently, only four papers focus on such an issue [58, 60, 62, 63].

A refined explanatory framework

Based on the review of experiences of CHI schemes, we suggest the integration of a fourth mechanism (M4) whereby some CHI schemes seemingly improve access to quality care in a sustainable way: strengthening the short voice route by transforming the power imbalance at the provider–patient interface. There is congruence of this with experiences of CHI schemes in sub-Saharan Africa [68] and Cambodia [69]. The fourth mechanism also shares the growing recognition of the need of a transformative dimension in social protection [70, 71], social policy [72] and social work [73] where transformation refers to the need of analyzing, resisting and challenging structures of power at micro- and macro levels that underlie social exclusions and vulnerability of the marginalized groups (Fig. 2).

Strengths and limitations

The review does not provide clear answers to questions as to which intervention would most effectively improve access to quality health care. Rather, it provides a critical discussion of ideas that inspire the recent policies to cover the Indian poor with health insurance. Further, it provides insights in some contextual factors that influence the success of existing interventions, alerting policy-makers to the role that CHI schemes could play in the social health protection policy, and problems that they might expect to confront in the complex health sector in India.

A major limitation was the relatively limited evidence base. Because of the contextual particularity of the commercialized Indian health system, we decided to limit our review to experiences of the Indian CHI schemes. By combining fragmented pieces of evidence on performance, based on access and quality, measures and contextual factors, we nevertheless obtained the information necessary to discuss and refine an explanatory model, which is one of the main aims of a realist review [21, 22]. However, it is methodologically important to check the value of the refined explanatory framework by using it in other contexts. A similar review with focus on CHI experiences in sub-Saharan African countries, for example, would provide interesting comparative insights, but lies outside the scope of this paper.

Why do Indian CHI schemes face difficulties in improving access to quality care?

The success in which the Indian CHI schemes manage to improve access to quality health care is moderated. The

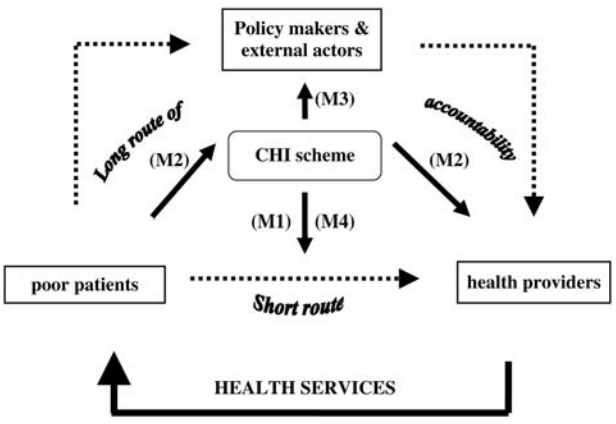

Figure 2 Refined explanatory framework on how CHI schemes improve access to quality health care for poor people (adapted from the WDR 2004, Making Services Work for Poor People).

review shows that the hypotheses that health insurance could improve this access to quality care by strengthening exit or voice routes do not automatically work out in practice due to several contextual factors.

Exit mechanisms (M1) are hampered due to the shortage of decent health infrastructure in remote areas, remaining direct and indirect costs, health illiteracy and ignorance among marginalized target groups and other socio-cultural barriers. With limited exit options, strengthening the voice of the poor has been promoted as a valuable alternative. However, in the absence of some back-up of a regulatory framework on a national level, it is difficult for CHI schemes to strengthen the long voice route effectively (M3). Moreover, the co-production of a long voice route on lower governance level could improve the quality as long as all stakeholders involved actively take up their responsibility (M2). It seems, however, that most schemes have little power in the bargains with providers, insurance companies, professional associations and government over quality standards, price negotiations and accountability mechanisms.

Further, the review shows that precisely those schemes that also focus on the members' emancipation via the short voice route (M4) seem to successfully improve access to quality care, even if exit and long voice routes are restricted by other contextual factors. This supports the argument that a good provider–patient relation is an essential part of interventions for quality improvement and that the power imbalance in this relations should be challenged to provide effective social health protection

The RSBY is the most inclusive and comprehensive social health protection intervention of the Indian government so far. Health insurance is expected to improve the quality of health care by financially empowering (M1) and introducing strategic purchasing mechanisms (M2). If carefully integrated in the NRHM, the RSBY promises to reduce the health insecurity of the Indian poor to a minimum. It will, however, not succeed completely in bringing 'accessible, affordable, accountable and good quality health care' if the focus remains on increasing financial means and freedom of choice in a top-down manner. Next to the improvement of the health infrastructure, adequate mechanisms are needed to regulate India's health system and to ensure the quality of care both in terms of technical quality as well as the attitude of providers towards the poor. NGOs and community-based organizations, such as CHI schemes, have potentials in creating and maintaining the long and short voice routes as shown in the review. Nevertheless, the Indian government needs to attribute to these organizations a more active role than merely advertising the RSBY. It has to tap and facilitate actively the potential of such organizations to, effectively, co-produce community-based quality assurance mechanisms to emancipate the target group so that they transform from mere passive beneficiaries into active participants in their health.

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References

1. World Health Organization. *World Health Statistics 2008*. Geneva: WHO, 2008.
2. Baru R, Acharya A, Acharya S *et al*. Inequities in access to health services in India: caste, class and region. *Econ Polit Wkly* 2010;**45**:49–58.
3. Ghosh J. Social policy in Indian development. In: Mkandawire T (ed). *Social Policy in a Development Context*. Houndmills: Palgrave 2004, 284–307.
4. Duggal R. Healthcare in India: changing the financing strategy. *Soc Policy Adm* 2007;**41**:386–94.
5. Baru RV. Private health sector in India—raising inequities. In Gangolli LV, Duggal R, Shukla A (eds). *Review of Healthcare in India*. Mumbai: Centre for Enquiry into Health and other Allied Themes 2005, 269–78.
6. Peters DH, Muraleedharan VR. Regulating India's health services: to what end? What future?. *Soc Sci Med* 2008;**66**:2133–44.
7. Bhat R. Characteristics of private medical practice in India: a provider perspective. *Health Policy Plan* 1999;**14**:26–37.
8. Rao KD, Peters DH, Bandeen-Roche K. Towards patient-centered health services in India—a scale to measure patient perceptions of quality. *Int J Qual Health Care* 2006;**18**:414–21.
9. Rao KD, Peters DH. Quality improvement and its impact on the use and equality of outpatient health services in India. *Health Econ* 2007;**16**:799–813.
10. George A. 'By papers and pens, you can only do so much': views about accountability and human resource management from Indian government health administrators and workers. *Int J Health Plann Manage* 2009;**24**:205–24.
11. Berman P, Ahuja R, Bhandari L. The impoverishing effect of healthcare payments in India: new methodology and findings. *Econ Polit Wkly* 2010;**45**:65–71.
12. Planning Commission. *Eleventh Five Year Plan (2007–2012)*. New Delhi: Government of India/Oxford University Press, 2008.
13. Ministry of Health and Family Welfare. *National Rural Health Mission (2005–2012)*. New Delhi: Government of India, 2005.

14. Ministry of Labour and Employment. Rashtriya Swasthya Bima Yojana India. http://rsby.gov.in (21 September 2010, date last accessed).
15. Ranson K. Reduction of catastrophic health care expenditures by a community-based health insurance scheme in Gujarat, India: current experiences and challenges. *Bull World Health Organ* 2002;**80**:613–21.
16. Devadasan N, Criel B, Van Damme W *et al*. Indian community health insurance schemes provide partial protection against catastrophic health expenditure. *BMC Health Serv Res* 2007;**7**:1–11.
17. Ranson K, Sinha T, Gandhi F *et al*. Helping members of a community-based health insurance scheme access quality inpatient care through development of a preferred provider system in rural Gujarat. *Natl Med J India* 2006;**19**:274–82.
18. Devadasan N, Criel B, Van Damme W *et al*. Community health insurance in Gudalur, India, increases access to hospital care. *Health Policy Plan* 2010;**25**:145–54.
19. Dror D, Radermacher R, Khadilkar SB *et al*. Microinsurance: innovations in low-cost health insurance. *Health Aff* 2009;**28**:1788–98.
20. Walshe K. Understanding what works—and why—in quality improvement: the need for theory-driven evaluation. *Int J Qual Health Care* 2007;**19**:57–9.
21. Pawson R, Greenhalgh T, Harvey G *et al*. Realist review—a new method of systematic review designed for complex policy interventions. *J Health Serv Res Policy* 2005;**10**:21–34.
22. Pawson R, Greenhalgh T, Harvey G *et al*. *Realist Synthesis: An Introduction*. Manchester: Economic and Social Research Council, 2004.
23. Carrin G, Waelkens MP, Criel B. Community-based health insurance in developing countries: a study of its contribution to the performance of health financing systems. *Trop Med Int Health* 2005;**10**:799–811.
24. Criel B, Waelkens MP, Soors W *et al*. Community Health Insurance in Developing Countries. In: KHeggenhougen K, Quah S (eds). *International Encyclopedia of Public Health*. San Diego: Academic Press 2008, 782–91.
25. Radermacher R, Dror I, Noble G. Challenges and strategies to extend health insurance to the poor. In: Churchill C (ed). *Protecting the Poor. A Microinsurance Compendium*. Geneva: International Labour Organization 2006, 66–93.
26. Action for Community Organisation Rehabilitation and Development. Adivasi Mutual Health Insurance Programme, India. http://www.ashwini.org/insurance.php (21 September 2010, date last accessed).
27. Kagad Kach Patra Kashtakari Panchayat. Jan Arogya Yojana, India. http://www.wastepickerscollective.org (21 September 2010, date last accessed).
28. Karuna Trust. Community Health Insurance, India. http://karunatrust.com (21 September 2010, date last accessed).
29. Mahatma Gandhi Institute of Medical Sciences. Jowar Rural Health Insurance Scheme, India. http://www.mgims.ac.in (21 September 2010, date last accessed).
30. Raigarh Ambikapur Health Association. Samaritan Fund, India. http://rahaindia.org (21 September 2010, date last accessed).
31. Self Employed Women's Association. Vimo SEWA, India. http://www.sewainsurance.org (21 September 2010, date last accessed).
32. Uplift India Association. Uplift Mutuals, India. http://www.upliftmutuals.org (21 September 2010, date last accessed).
33. Yeshasvini. Yeshasvini Co-operative Farmers Health Care Scheme, India. http://www.yeshasvini.org (21 September 2010, date last accessed).
34. Pope C, Mays N, Popay J. *Synthesising Qualitative and Quantitative Health Research: A Guide to Methods*. Berkshire: Open University Press, 2007.
35. Bhatia MR, Yesudian CAK, Gorter A *et al*. Demand side financing for reproductive and child health services in India. *Econ Polit Wkly* 2006;**41**:279–84.
36. Hirschman AO. *Exit, Voice and Loyalty: Responses to Decline of Firms, Organizations and States*. Cambridge, MA: Harvard University Press, 1970.
37. World Bank. *World Development Report 2004 Making Service Work for Poor People*. Washington: WB, 2003.
38. Mehrotra S, Jarrett SW. Improving basic health service delivery in low-income countries: 'voice' to the poor. *Soc Sci Med* 2002;**54**:1685–90.
39. Ostrom E. Crossing the great divide: coproduction, synergy, and development. *World Dev* 1996;**24**:1073–87.
40. Ackerman J. Co-governance for accountability: beyond "exit" and "voice". *World Dev* 2004;**32**:447–63.
41. Mark M, Henry G, Julnes G. *Evaluation: An Integrated Framework for Understanding, Guiding, and Improving Policies and Programs*. San Francisco: Jossey-Bass, 2000.
42. Jacquier C, Ramm G, Marcadent P *et al*. The social protection perspective on microinsurance. In: Churchill C (ed). *Protecting the Poor. A Microinsurance Compendium*. Geneva: International Labour Organization 2006, 45–64.
43. Develtere P, Doyen G, Fonteneau B. *Micro-insurance and Health Care in Developing Countries*. Leuven: Cera Foundation, 2004.
44. Jütting J. *Health Insurance for the Poor in Developing Countries*. Hampshire: Ashgate Publishing, 2004.
45. Ahmed SI. *Kagad Kach Patra Kashtkari Panchayat (Waste Pickers' Union) Health Insurance Scheme*. Chennai: Centre for Insurance and Risk Management, mimeo.
46. Criel B, Devadasan N. *A Review of Raha's Medical Insurance Scheme*. Antwerp: Institute of Tropical Medicine, 2006.
47. Garand. *VimoSEWA India. Paper No. 16*. New York: World Bank, 2005.
48. Jajoo U, Bhan A. Jowar Rural Health Insurance Scheme: in the spirit of Sarvodaya. *Econ Polit Wkly* 2004;**39**:3184–8.
49. Kuruvilla S, Liu M. Health security for the rural poor? A case study of a health insurance scheme for rural farmers and peasants in India. *Int Soc Secur Rev* 2007;**60**:3–21.
50. Leist H, Radermacher R. *Brief Technical Report on Swasthyapurna Mutual Health Fund*. Bonn: Deutsche Gesellschaft für Technische Zusammenheit, 2004.

51. Radermacher R, van Putten-Radermacher O, Müller V *et al. Karuna Trust, Karnataka, India*. Paper No. 19. New York: World Bank, 2005.

52. Radermacher R, Wig N, van Putten-Radermacher O *et al. Yeshasvini Trust, Karnataka, India*. Paper No. 20. New York: World Bank, 2005.

53. Acharya A, Ranson K. Health care financing for the poor community-based health insurance schemes in Gujarat. *Econ Polit Wkly* 2005;**40**:4141–50.

54. Devadasan N, Ranson K, Van Damme W *et al*. Community health insurance in India: an overview. *Econ Polit Wkly* 2004;**39**:3179–83.

55. Devadasan N, Ranson K, Van Damme W *et al*. The landscape of community health insurance in India: an overview based on 10 case studies. *Health Policy* 2006;**78**:224–34.

56. Ranson K. Community-based health insurance schemes in India: a review. *Natl Med J India* 2003;**16**:79–89.

57. Aggarwal A. *Impact Evaluation of India's 'Yeshasvini' Community Based Health Insurance Programme*. New Delhi: GDN, 2009.

58. Bauchet J, Dalal A, Mayasudhakar P *et al. Can Insurers Improve Healthcare Quality? Evidence from a Community Microinsurance Scheme in India*. New York: The Financial Access Initiative, 2010.

59. Devadasan N, Manoharan S, Menon N *et al*. ACCORD community health insurance—increasing access to hospital care. *Econ Polit Wkly* 2004;**39**:3189–94.

60. Devadasan N, Criel B, Van Damme W *et al*. The effect of community health insurance schemes on patient satisfaction—evidence from India. *Indian J Med Res* 2011;**133**:40–9.

61. Dixit A, Chouvet D. *IPG and HMF Impact Study Swabhimaan*. Pune: InterAide/Uplift, 2008.

62. Michielsen J, Denny J, Chaudhuri L. *Researching the Transformative Dimensions of Social Protection in Health (SHP): Transformations in the Power Relation between Providers and Female Slum Dwellers in Mumbai and Pune (India)*. Antwerp: University of Antwerp-CELLO, 2009.

63. Ranson K, John KR. Quality of hysterectomy care in rural Gujarat: the role of community-based health insurance. *Health Policy Plan* 2001;**16**:395–403.

64. Ranson K, Sinha T, Chatterjee M *et al*. Making health insurance work for the poor: learning from the Self-Employed Women's Association's (SEWA) community-based health insurance scheme in India. *Soc Sci Med* 2006;**6**:707–20.

65. Sinha T, Ranson K, Chatterjee M *et al*. Barriers to accessing benefits in a community-based insurance scheme: lessons learnt from SEWA Insurance, Gujarat. *Health Policy Plan* 2006;**21**:132–42.

66. Sinha T, Ranson K, Mills AJ. Protecting the poor? The distributional impact of a bundled insurance scheme. *World Dev* 2007;**35**:1404–21.

67. Radermacher R, Dror I. Institutional options for delivering health microinsurance. In: Churchill C (ed). *Protecting the Poor. A Microinsurance Compendium*. Geneva: International Labour Organization, 2006, 401–23.

68. Criel B, Samba Bâ A, Kane F *et al. Une expérience de protection sociale en santé pour les plus démunis: Le fonds d'indigence de Dar-Naïm en Mauritanie*. Report No. 26. Antwerp: Institute of Tropical Medicine, 2010.

69. Noirhomme M, Meessen B, Griffiths F *et al*. Improving access to hospital care for the poor: comparative analysis of four health equity funds in Cambodia. *Health Policy Plan* 2007;**22**:246–62.

70. Sabates-Wheeler R, Devereux S. Transformative social protection: the currency of social justice. In: Barrientos A, Hulme D (eds). *Social Protection for the Poor and Poorest: Concepts, Policies and Politics*. Houndmills: Palgrave, 2008, 64–84.

71. Michielsen JJA, Meulemans H, Soors W *et al*. Social protection in health: the need for a transformative dimension. *Trop Med Int Health* **15**:654–8.

72. Mkandawire T. Transformative social policy and innovation in developing countries. *Eur J Dev Res* 2007;**19**:13–29.

73. Jönsson JH. Beyond empowerment: changing local communities. *Int Soc Work* 2010;**53**:393–406.