The Role of Health Policy and Systems in the Uptake of Community-Based Health Insurance Schemes in Low- and Middle-Income Countries: A Narrative Review

Health Services Insights
Volume 16: 1–6

DOI: 10.1177/11786329231172675

Amika Shah[1,2], Samrawit Lemma[1], Chelsea Tao[1,3] and Joseph Wong[1,3,4]

[1]The Reach Alliance, Munk School of Global Affairs & Public Policy, University of Toronto, Toronto, ON, Canada. [2]Institute of Health Policy, Management, and Evaluation, University of Toronto, Toronto, ON, Canada. [3]Munk School of Global Affairs & Public Policy, University of Toronto, Toronto, ON, Canada. [4]Department of Political Science, University of Toronto, Toronto, ON, Canada.

ABSTRACT: This study explores how health policies and systems can affect voluntary uptake of community-based health insurance (CBHI) schemes in low- and middle-income countries (LMICs). A narrative review was conducted involving searches of 10 databases (Medline, Global Index Medicus, Cumulative Index to Nursing, and Allied Health Literature, Health Systems Evidence, Worldwide Political Science Abstracts, PsycINFO, International Bibliography of the Social Sciences, EconLit, Bibliography of Asian Studies, and Africa Wide Information) across the social sciences, economics, and medical sciences. A total of 8107 articles were identified through the database searches, 12 of which were retained for analysis and narrative synthesis after 2 stages of screening. Our findings suggest that in the absence of directly subsidizing CBHI schemes by governments in LMICs, government policies can nonetheless promote voluntary uptake of CBHIs through intentional actions in 3 key areas: (a) improving quality of care, (b) providing a regulatory framework that integrates CBHIs into the national health system and its goals, and (c) leveraging administrative and managerial capacity to facilitate enrollment. The findings of this study highlight several considerations for CBHI planners and governments in LMICs to promote voluntary enrollment in CBHIs. Governments can effectively extend their outreach toward marginalized and vulnerable populations that are excluded from social protection by formulating supportive regulatory, policy, and administrative provisions that enhance voluntary uptake of CBHI schemes.

KEYWORDS: Community-based health insurance, enroll, health policy, health system, narrative review

RECEIVED: December 31, 2022. **ACCEPTED:** March 15, 2023.

TYPE: Review

FUNDING: Financial support for the research and publication of this article was provided by the Reach Alliance, a research initiative founded at the University of Toronto in partnership with the Mastercard Center for Inclusive Growth.

DECLARATION OF CONFLICTING INTERESTS: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

CORRESPONDING AUTHOR: Joseph Wong, Department of Political Science, Munk School of Global Affairs & Public Policy, Founder, The Reach Alliance, University of Toronto, 1 Devonshire Place, Toronto, ON M5S3K7, Canada.
Email: joe.wong@utoronto.ca

Background

While most countries are working toward Universal Health Coverage (UHC), reaching vulnerable, and marginalized populations remains a challenge.[1-3] Despite global commitments to achieving UHC—from the 1978 Alma Ata Declaration[4] to the most recent Sustainable Development Goals agenda[5]—there remains a gap in extending access to healthcare for the poorest of the poor. These include informal sector workers and their dependents, the geographically remote, undocumented migrants, and those who have fallen through public social safety nets.[3] One way to enhance coverage for individuals excluded from conventional public and private health coverage models is through Community-Based Health Insurance (CBHI) schemes, involving "not-for-profit insurance owned and managed by members of the scheme, who pool funds and share risk across the community."[6] Since they are designed to serve a smaller, more targeted population, CBHI schemes can often be more adaptable, and dynamic than traditional health insurance programs, offering varying pricing models, and benefits to fit the specific needs of the target population.[7]

Major international agencies suggest that CBHIs can be a transitional mechanism to achieving UHC in low-income countries, especially where government capacity to finance and deliver health care is low.[8] Notably, the international policy model linking CBHIs to UHC was informed by the history of health services financing in Europe and Japan during the 19th century whereby decentralized CBHI schemes were eventually merged to form a national health insurance pool.[8,9] Many national health systems were formed through the consolidation of workplace or location-based insurance funds. In some African countries, CBHI schemes that were initially decentralized in different districts were unified into a large national insurance pool with proactive government involvement in financing and providing regulatory frameworks for local CBHIs.[10] Moreover, CBHIs can mitigate health and financial risk, especially among poorer people. Indeed, a recent review on CBHIs in Low- and Middle-income Countries (LMICs) indicates that CBHIs provide some income protection against the user fees required by public sector health facilities.[10]

Although the literature suggests that there are some generalizable lessons to be learned from the implementation of CBHIs emerging from different socioeconomic contexts, it cannot be assumed that all CBHI schemes will eventually be integrated into a national insurance scheme. While CBHI

schemes have demonstrated some success in building trust between users and healthcare providers, and acting as a financial risk mitigation scheme against catastrophic out-of-pocket payments for low-income individuals and families, CBHI programs struggle with the problem of financial sustainability and low or volatile enrollment rates, especially when they are voluntary and/or small in scale.[11]

The empirical and theoretical literature recognizes the overall importance of a supportive regulatory and policy environment in overcoming these CBHI enrollment challenges to provide access to quality health care services for members.[12-14] However, there is relatively little exploration of what these policy measures look like specifically, and how they influence the mechanisms and outcomes of CBHI schemes when it comes to enrollment. Although government financial support (ie, public subsidies) to CBHI schemes has been explored extensively in the literature, limited attention has been paid to government policies, and regulations that create the enabling conditions for CBHIs to function at their maximum potential.[15] Hence, in-depth knowledge synthesis is needed to understand the specific mechanisms that enable CBHIs to be effective in reaching marginalized populations in resource-constrained settings, such as in LMICs. To address this gap, the aim of this narrative review is to elucidate the relationship between health policies and systems and the uptake of voluntary CBHIs operating in LMICs. The research question is: *In what ways do health policy and systems in LMICs influence the uptake of voluntary CBHIs?*

Methods

Narrative reviews are scholarly summaries involving interpretation and critique to produce authoritative arguments based on informed wisdom.[16] In this study, a narrative review was conducted informed by a realist review approach. Realist reviews are a theory-based approach rooted in a realist philosophy of science used to answer the question, what works, for whom, under what contexts, how, why, and to what extent.[17] Interventions in such studies are viewed as complex (ie, realist) social interventions that can alter, depending on the context in which they are delivered, triggering mechanisms that lead to both intended, and unintended outcomes.[17] This realist approach steers away from one-size-fits-all approaches to complex social issues and instead aims to identify factors and explain relationships between context, mechanisms or programs, and outcomes with the goal of deriving transferable, rather than generalizable, insights.[17]

In this narrative review, we adopt the realist review's consideration of context to unpack the specific conditions and circumstances under which complex programs, such as CBHIs, achieve or fail to achieve specific outcomes.[17] In the current analysis, the adoption of a realist approach to this narrative review offers the opportunity to gather and synthesize evidence from a broad range of data sources to identify government policies in LMICs (context), which promote or hinder enrollment (outcome) in voluntary CBHI schemes (mechanism).

In consultation with a research librarian at the University of Toronto, a search strategy was developed for 10 electronic database searches: Medline, Global Index Medicus, Cumulative Index to Nursing, and Allied Health Literature, Health Systems Evidence, Worldwide Political Science Abstracts, PsycINFO, International Bibliography of the Social Sciences, EconLit, Bibliography of Asian Studies, and Africa Wide Information. Given the interdisciplinary nature of the research topic, these databases were selected to ensure literatures from both the humanities and health sciences were searched. Studies identified by databases were reviewed against the inclusion and exclusion criteria outlined in Table 1. A 2-stage process was used to screen articles, whereby articles were reviewed in duplicate, first by title and abstract, and later, by full text. Studies whose full text could not be found were excluded. Reviews were retained during the full text stage, where their reference lists were reviewed for relevant studies and then excluded from the final included studies. Authors independently extracted data from included studies using a data extraction form. The whole research team then discussed the details from the data extraction form in order to identify key themes related to the research question. Reporting of the study findings were guided by the Scale for the Assessment of Narrative Review Articles for quality narrative review articles.[18]

Results

A total of 8107 references were identified by the database searches with 201 duplicates removed after importing into Covidence.[20] In the first stage, 7877 studies were screened in duplicate by title and abstract with 7580 studies excluded. The remaining 312 studies were then reviewed by full text with 300 studies excluded, leaving 12 studies discussed in the narrative review.

The sections below present a narrative synthesis of the potential effect of government health policy and systems on the uptake of CBHI schemes in LMICs. The findings revealed 3 main factors which can affect voluntary uptake: (1) regulation of quality of care; (2) integration of CBHIs within national health policy goals; and (3) provision of administrative and managerial support.

Regulation of quality of care

Poor quality of care is commonly recognized to negatively impact enrollment in CBHIs. Atnafu et al[21] found that perceived quality of care measured on a Likert scale differed significantly among insured and uninsured households in Acefer, Ethiopia. They observed that a greater proportion of uninsured respondents perceived the quality of care to be lower than perceptions reported by insured respondents. In another study, researchers found that despite various strategies employed in the design and implementation (eg, theater and radio-based

Table 1. Study inclusion and exclusion criteria for narrative review.

Inclusion Criteria
1. Study published in English in a peer-reviewed journal
2. Published after 1992
3. All study designs (eg, RCT, controlled before-and-after studies, interrupted time series designs, cohort studies, case–control studies, cross-sectional surveys, case study, evaluation, qualitative, etc.) related to the research question
4. Study describes a voluntary CBHI as defined by McCord[6]: "not-for-profit insurance owned and managed by members of the scheme, who pool funds and share risk across the community"
5. CBHI operated in LMICs as defined by the World Bank definition for low- and middle-income economies: "economies with a GNI per capita of $1035 or less in 2019 calculated using the World Bank Atlas method"[19]
6. Describes an outcome of enrollment
Exclusion Criteria
• CBHIs that are designed and implemented by governments
• CBHIs that are disease-specific schemes, vouchers, conditional cash transfers, social, or national health insurance schemes, or the extension of the latter two to the informal sector
• Studies that focus on proposed CBHI schemes
• Gray literature, policy reviews, proposals, conference abstracts, or systematic reviews
• Other health insurance mechanisms (eg, private, social or mandatory, disease-specific schemes, vouchers, conditional cash transfer)
• Discussed a health financing system other than health insurance schemes

enrollment campaigns) of a CBHI scheme in Burkina Faso, only 4.9% of the eligible population enrolled in the scheme.[22] Regardless of enrollment status, participants often expressed dissatisfaction with long wait times, excessive prescribing, and treatment differences based on socio-economic status. Similarly, despite perceptions of faith-based hospitals funded by the CBHI as offering better care than public units,[23] low enrollment in the scheme was attributed to poor quality of care.[24] In contrast, studies reported that high quality of care is a key enabler of scaling the Kisiizi Hospital CBHI scheme, which reached 41 500 active members (30% of Rubabo County, Rukungiri District population) in 2018.[25,26]

In the absence of directly funding CBHI schemes, studies indicate that the government and its policies can have a positive effect on the uptake of CBHIs indirectly through regulating and improving the quality of care provided. In India, Aggarwal, and colleagues reported that a high quality of private network hospitals facilitated the scheme's high enrollment.[27] The quality of network hospitals was initially vetted by the scheme's independent charitable trust (Yeshavini Cooperative Farmers' Health Care Trust), chaired by the Principal Secretary of the Department of Cooperation, and included employees of the Karnataka Department of Cooperation and Director of the Health Department among its members. The Trust used a self-assessment form to vet prospective network hospitals, offering valuable government support and consequently, developing patient trust in the scheme. Aggarwal contended that these quality assurance measures contributed to the scheme's high enrollment in India with 1.6 million members enrolled in the scheme's first year and a 29.3% increase in membership observed between 2008 and 2009.[27]

Key informants in Armenia interviewed by Poletti et al[15] emphasized the importance of aligning CBHI programs with public policies and legislative frameworks that regulate quality of care. Legislative frameworks offer legal definitions of clinical roles, formally accredit facilities and providers, clarify the legal status of health facilities, define prescribing authority, establish quality of care and clinical practice standards, and develop quality assurance procedures.[15] According to the authors, the lack of CBHI-specific regulations had a detrimental impact on the quality of care. This is because it limited the capacity of nurses to deliver specific types of health care, such as the management and treatment of chronic disease, as well reproductive and antenatal care to target populations.[15] These findings strongly suggests that regulatory policies that explicitly oversee quality assurance procedures and treatment protocols can enable medical staff to incorporate a wider range of services in their practice and improve overall quality of care.

Integration of CBHI into national health policy goals

In LMICs, governments can also facilitate enrollment in CBHI schemes by creating a supportive regulatory environment for CBHIs that aligns with the national health system and the government's broader health goals. Some governments, however, find it difficult to align CBHI policies with existing national health policy goals and guidelines. For example, in Uganda, the

Ishaka and the Save for Health Uganda schemes only achieved a coverage rate of 2% and 6% of their hospital catchment areas in 2005. The limited coverage rate was partially due to significant policy conflicts within the national health system between promoting fee-based CBHI schemes and committing to eliminate user fees in public health units.[23] As a result, there was no centralized regulatory framework in place to integrate CBHI into Uganda's national health goals.[23] Within such an ambiguous and contradictory policy environment, health workers and other stakeholders who are obliged by government guidelines to provide free health care have little incentive to promote CBHI programs to their patients.[23] The practical difficulty of relying on CBHI as a transitional mechanism to developing a universal healthcare system is highlighted by this tension between fee-paying models in the form of CBHIs and the government's commitment to free healthcare. Clear policy guidance that explicitly positions CBHI schemes in alignment with broader national health system goals can result in a more enabling environment for CBHI providers to reach their enrollment and care objectives, while promoting their legitimacy among users, providers, and policymakers.[13] A study by Iqbal et al[28] demonstrates the impact of clear policy guidance for a CBHI scheme run by an international health research organization (icddr,b) in Chakaria, Bangladesh. Twenty percent of the catchment area enrolled over the first 3 years of the CBHI's operation. During that period, 38% of first-time users renewed, which suggests that individuals who were previously unfamiliar with the benefits of insurance and risk-pooling came to recognize the health and financial benefits of CBHI. This modest success can be attributed in part to Bangladesh's health financing strategy, which emphasized the role of small mutual health insurance and community-based health insurance schemes as an interim step toward the consolidation of a national social health insurance scheme.[28] While CBHI and similar microinsurance schemes cannot likely serve the entire national population or be the sole mechanism to achieve UHC, examples from Bangladesh, Indonesia, and Vietnam feature CBHI as a means to both reduce the national health care bill while increasing access to and use of healthcare services.[28]

Iqbal et al[28] also found that policymakers and CBHI program managers must accommodate citizen participation in the schemes, and allow patients and providers to engage in decisions regarding scheme management and design. The literature shows that trust is crucial for improving enrollment rates in CBHI schemes, including trust in the organization implementing the program as well as in healthcare providers.[28]

Provision of administrative & managerial support

Beyond providing subsidies, improving quality of care, and integrating CBHI into broader national health goals and policies, the government can also enhance the administrative and managerial capacity of CBHIs by leveraging its existing structures and resources. A CBHI program administered in the Indian state of Karnataka is a good example. The Yeshasvini health care program involved a partnership with the government and private sector to leverage their unique, respective strengths.[27] While the CBHI program was governed by an independent, private charitable trust, it was managed, and administered by the government's Department of Cooperation (DOC), which had a vast administrative infrastructure to support the insurance scheme. This type of government involvement contributed to building trust between enrollees and the community insurance scheme.[27] The DOC's administrative role provided program managers within the government access to the grassroots level, enabling them to mobilize membership, to engender trust and social capital with enrollees (including rural farmers and informal sector workers), and more effectively manage the program to fit local needs.[27] Leveraging the government's administrative and management capacity through a partnership between the DOC and a CBHI, the Yeshasvini scheme enhanced its coverage and health care quality with little additional administrative overhead.

Effective management and administration can also have a positive effect on enrollment rates. For example, one CBHI scheme in the Bwamanda district of North Western Zaire increased its enrollment from an initial 28% (of the district population) to between 60% and 65% within a few years. Criel and Kegels[29] examined the various factors which contributed to the CBHI's high voluntary enrollment rate, and identified the scheme's management system as one key factor. The district's health service system achieved real gains in operational efficiency because of its 2-tier management system, which rationalized the allocation of resources in the local health insurance scheme and decentralized health provider system.[29]

Health human resource management is critical to enhancing the enrollment performance of CBHI schemes. A comparative study by Joseph and Maluka[30] looked at factors influencing CBHI enrollment in 2 districts in Tanzania (Iramba and Iringa), and found that differences between the districts in terms of their local health management systems were responsible for variations in enrollment patterns. Interviewees in the Iramba district highlighted various supports provided by the scheme's managers, including coaching and training for health facility staff members, monthly evaluation of CBHI performance, the introduction of portable health service packages, and the flexible provision of access to health services in any primary health facility in the district.[30] Correspondingly, Iramba experienced a drastic increase in enrollment, from 5% to 12% in the first 10 years and then to 54% in year 14. In contrast, interviewees from the Iringa district noted the lack of effective support from management. In this district, CBHI enrollment declined from an initial rate of 5% to under 2% after 10 years.[30]

Lessons Learned

The findings of this study raise several considerations for CBHI planners and governments in LMICs to promote

voluntary enrollment in CBHIs. The first finding is that improving quality of care positively affects enrollment into CBHI schemes.[25-27] Legislative frameworks that oversee standards on quality of care and clinical practice, as well as develop quality assurance procedures, can contribute to an increase in enrollment in CBHI schemes.[15] The second finding is that an enabling regulatory environment that integrates CBHIs into national health system goals enhances CBHI enrollment outcomes, by providing coherent policies that support rather than constrain the impact of CBHIs in extending access to health to marginalized populations.[13] Finally, the third finding suggests that governments can further enhance uptake by leveraging their administrative infrastructure to effectively and efficiently manage the day-to-day operations of CBHI schemes, including collecting insurance premiums, mobilizing membership, providing training to managerial staff, vetting health providers and facilities, and evaluating CBHI performance.[27,29,30] Taken together, these findings suggest that in the absence of directly subsidizing CBHI schemes through public funds, governments in LMICs can still take valuable actions to increase the voluntary uptake of CBHIs.

Limitations

Findings of the present study should be interpreted in light of the following limitations. First, despite consultation and review of the search strategy by a research librarian, it is possible the multidisciplinary database search strategy employed could have missed relevant studies. Second, included studies were restricted to those with enrollment as an outcome, and thus studies exploring related concepts such as willingness-to-pay, dropout, and retention were not within scope. As government and policy contexts almost certainly impact such related outcomes, these may be fruitful areas for future research. Third, included studies were restricted to CBHI schemes that were voluntary in nature and not government-run. Therefore, the role of government and policy in schemes that are government-initiated and/or with mandatory enrollment were excluded from this review. Fourth, included studies must also explicitly discuss the role of policy and/or government in the scheme. Fifth, studies were restricted to articles published in English in peer-reviewed journals from 1992 forward. This start date was selected because of the pivotal impact the 1993 World Development Report had on government funding for health in LMICs.[31,32]

Conclusion

A large body of the CBHI literature focuses on the demand and supply side factors that affect enrollment in CBHI schemes, however, there has been relatively little exploration of policy measures that influence outcome of CBHIs. In this review, we discussed how health policy and systems may affect the voluntary uptake of CBHIs in LMICs. More specifically, we examined the role of governments in creating an enabling environment for CBHIs operating in LMICs in non-financial capacities. Our findings indicated that governments could play a key role in facilitating uptake of CBHIs by improving quality of care, providing a regulatory framework that integrates CBHIs into the national health system goals, and leveraging its administrative and managerial capacity to facilitate enrollment.

Author Contributions

Conceptualized and designed the intervention: all authors
Collection and assembly of data: AS, SL, CT
Data analysis and interpretation: all authors
Drafted initial manuscript: all authors.
All authors critically reviewedand approved the final version of the manuscript.

ORCID iD

Amika Shah https://orcid.org/0000-0002-8615-2683

REFERENCES

1. Kutzin J. Anything goes on the path to universal health coverage? No. *Bull World Health Organ*. 2012;90:867-868.
2. Lagomarsino G, Garabrant A, Adyas A, Muga R, Otoo N. Moving towards universal health coverage: health insurance reforms in nine developing countries in Africa and Asia. *Lancet*. 2012;380:933-943.
3. Wong J. Achieving universal health coverage. *Bull World Health Organ*. 2015;93:663-664.
4. International Conference on Primary Health Care. 1978, Alma-Ata, World Health Organization. Primary Health Care: Alma-Ata 1978 [nineteen Hundred and Seventy-Eight]; Report of the International Conf. on Primary Health Care Alma-Ata, USSR, September 6-12, 1978.
5. THE 17 GOALS. United Nations. Accessed October 23, 2022. https://sdgs.un.org/goals
6. McCord M. Health care microinsurance—case studies from Uganda, Tanzania, India, and Cambodia. *Small Enterp Dev*. 2001;12:25-38.
7. Dror DM, Radermacher R, Khadilkar SB, et al. Microinsurance: innovations in low-cost health insurance. *Health Aff*. 2009;28:1788-1798.
8. Mladovsky P, Mossialos E. A conceptual framework for community-based health insurance in low-income countries: social capital and economic development. *World Dev*. 2008;36:590-607.
9. Ogawa S, Hasegawa T, Carrin G, Kawabata K. Scaling up community health insurance: Japan's experience with the 19th century Jyorei scheme. *Health Policy Plan*. 2003;18:270-278.
10. Adebayo EF, Uthman OA, Wiysonge CS, Stern EA, Lamont KT, Ataguba JE. A systematic review of factors that affect uptake of community-based health insurance in low-income and middle-income countries. *BMC Health Serv Res*. 2015;15:543.
11. Ekman B. Community-based health insurance in low-income countries: a systematic review of the evidence. *Health Policy Plan*. 2004;19:249-270.
12. Turcotte-Tremblay AM, Haddad S, Yacoubou I, Fournier P. Mapping of initiatives to increase membership in mutual health organizations in Benin. *Int J Equity Health*. 2012;11:74.
13. Dror DM, Hossain SA, Majumdar A, Pérez Koehlmoos TL, John D, Panda PK. What factors affect voluntary uptake of community-based health insurance schemes in low- and middle-income countries? A systematic review and meta-analysis. *PLoS One*. 2016;11:e0160479.
14. Gottret PE, Schieber G. *Health Financing Revisited: A Practitioner's Guide*. World Bank Publications; 2006.
15. Poletti T, Balabanova D, Ghazaryan O, et al. The desirability and feasibility of scaling up community health insurance in low-income settings—lessons from Armenia. *Soc Sci Med*. 2007;64:509-520.
16. Greenhalgh T, Thorne S, Malterud K. Time to challenge the spurious hierarchy of systematic over narrative reviews? *Eur J Clin Invest*. 2018;48:e12931.
17. Pawson R, Greenhalgh T, Harvey G, Walshe K. Realist review—a new method of systematic review designed for complex policy interventions. *J Health Serv Res Policy*. 2005;10(Suppl 1):21-34.
18. Baethge C, Goldbeck-Wood S, Mertens S. SANRA-a scale for the quality assessment of narrative review articles. *Res Integr Peer Rev*. 2019;4:5-7.
19. World Bank Country and Lending Groups—World Bank Data Help Desk. Accessed October 23, 2022. https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

20. Better systematic review management. Covidence. Published June 11, 2020. Accessed October 23, 2022. https://www.covidence.org/
21. Atnafu DD, Tilahun H, Alemu YM. Community-based health insurance and healthcare service utilisation, North-West, Ethiopia: a comparative, cross-sectional study. *BMJ Open*. 2018;8:e019613.
22. De Allegri M, Sanon M, Sauerborn R. To enrol or not to enrol?": A qualitative investigation of demand for health insurance in rural West Africa. *Soc Sci Med*. 2006;62:1520-1527.
23. Basaza R, Criel B, Van der Stuyft P. Low enrollment in Ugandan community health insurance schemes: underlying causes and policy implications. *BMC Health Serv Res*. 2007;7:105.
24. Basaza R, Criel B, Van der Stuyft P. Community health insurance in Uganda: why does enrolment remain low? A view from beneath. *Health Policy*. 2008;87:172-184.
25. Kakama AA, Namyalo PK, Basaza RK. Feasibility and desirability of scaling up Community-based Health Insurance (CBHI) in rural communities in Uganda: lessons from Kisiizi Hospital CBHI scheme. *BMC Health Serv Res*. 2020;20:662.
26. Baine SO, Kakama A, Mugume M. Development of the Kisiizi hospital health insurance scheme: lessons learned and implications for universal health coverage. *BMC Health Serv Res*. 2018;18:455.
27. Aggarwal A. Achieving equity in health through Community-based Health Insurance: India's experience with a large CBHI programme. *J Dev Stud*. 2011;47:1657-1676.
28. Iqbal M, Chowdhury AH, Mahmood SS, Mia MN, Hanifi SMA, Bhuiya A. Socioeconomic and programmatic determinants of renewal of membership in a voluntary micro health insurance scheme: evidence from Chakaria, Bangladesh. *Glob Health Action*. 2017;10:1287398.
29. Criel B, Kegels G. A health insurance scheme for hospital care in Bwamanda District, Zaire: lessons and questions after 10 years of functioning. *Trop Med Int Health*. 1997;2:654-672.
30. Joseph C, Maluka SO. Do Management and leadership practices in the context of decentralisation influence performance of community health fund? Evidence from Iramba and Iringa Districts in Tanzania. *Int J Health Policy Manag*. 2017;6:257-265.
31. Fadlallah R, El-Jardali F, Hemadi N, et al. Barriers and facilitators to implementation, uptake and sustainability of community-based health insurance schemes in low- and middle-income countries: a systematic review. *Int J Equity Health*. 2018;17:13.
32. Mays N, Pope C, Popay J. Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field. *J Health Serv Res Policy*. 2005;10(Suppl 1):6-20.