BMJ Global Health

Time to abandon amateurism and volunteerism: addressing tensions between the Alma-Ata principle of community participation and the effectiveness of community-based health insurance in Africa

Valéry Ridde, ^{1,2} Abena Asomaning Antwi, ³ Bruno Boidin, ⁴ Benjamin Chemouni, ⁵ Fatoumata Hane, ⁶ Laurence Touré ⁷

To cite: Ridde V, Asomaning Antwi A, Boidin B, et al. Time to abandon amateurism and volunteerism: addressing tensions between the Alma-Ata principle of community participation and the effectiveness of communitybased health insurance in Africa. BMJ Glob Health 2018;**0**:e001056. doi:10.1136/ bmjqh-2018-001056

Handling editor Seye Abimbola

Received 11 July 2018 Revised 17 September 2018 Accepted 22 September 2018



© Author(s) (or their employer(s)) 2018. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

For numbered affiliations see end of article.

Correspondence toProfessor Valéry Ridde;
valery.ridde@ird.fr

INTRODUCTION

The 1978 Alma-Ata declaration asserted that primary healthcare 'requires and promotes maximum community and individual self-reliance and participation in the planning, organisation, operation and control of primary healthcare.' It enshrined community participation in health management. Thirty years on, however, WHO's 2008 report on primary healthcare² noted the weak progress in this area and reaffirmed the need to mobilise people's participation. The declaration formulated in anticipation of the second international conference on primary healthcare, slated for October 2018 (Kazakhstan), reiterates these principles by promoting community participation in healthcare governance, management and funding and by considering populations to be coproducers of health.

In Africa, the development of community-based health insurance (CBHI: autonomous, not-for-profit, voluntary member-based organisations based on solidarity³) is, along with primary health centre management committees, a core component of this participation strategy. Indeed, a key characteristic of CBHI is that 'the community is involved in driving its setup and in its management." Yet despite a momentum observed in the development of CBHI schemes nearly three decades ago⁵ 6—generally referred to as health mutuals (mutuelles de santé) in francophone countries—numerous studies have highlighted the difficulties encountered in actually implementing user participation:

Summary box

- ► Forty years after the 1978 Alma-Ata declaration, the second international conference on primary health care in October 2018 is expected to reaffirm the place of communities in health systems management and governance.
- ► In parts of Africa, community-based health insurance (CBHI)—with communities at the centre—is still seen as a strategy for achieving universal health coverage (UHC)—but there are tensions between the Alma-Ata principle of community participation, as currently interpreted, and CBHI.
- ► The tension relates particularly to the community's role in terms of the voluntary nature of CBHI membership and volunteer involvement of the community in governance andmanagement—this tension requires a rethink of the role of communities in CBHI.
- ➤ We use examples of Rwanda, Ghana, Mali and Senegal to demonstrate the challenges associated with the place of communities in CBHI, and the need to reduce the role of community volunteers in CBHI and instead focus on professionalising management.
- ► Countries that still wish to rely on CBHIs for UHC must find ways to make populations enrolment compulsory, and strengthen the professionalisation of CBHI management, while also ensuring that communities continue to have a place in CBHI governance.

the low contributive capacity of populations, resulting in low enrolment rates and a very limited amount of premiums; very unequal consideration of the needs of beneficiaries (variability in the package of care covered, insufficient quality of care, tensions between CBHI schemes and health service providers); limited benefits for the poorest, who are not

involved and the voluntary nature of enrolment and amateurism of management.⁷⁻¹¹

These challenges related to the role of communities in CBHI have led to attempts at revitalisation, such as making the system of premiums more flexible; developing partnerships with health facilities and relying on continental networks (eg, Union africaine de la mutualité), national networks (eg, Union technique des mutuelles in Mali; Groupe de recherche et d'appui aux initiatives mutualistes in Senegal), or territorial authorities that provide development support, financial guarantees or regulatory frameworks. The development of CBHI has been part of the current movement to promote universal health coverage (UHC) since the mid-2000s.² In the spirit of Alma-Ata, this commentary examines the relevance of community participation in CBHI, considered by WHO to be one of many instruments for moving towards UHC.4

PARTICIPATION, CBHI SCHEMES AND UHC

Today, UHC is driving the global health agenda, as shown by the 2012 resolution of the United Nations General Assembly and the fact that it is at the core of one of the 2015 sustainable development goals (ie, 3.8: achieve universal health coverage). As we have shown elsewhere, ¹² analysis of the rhetoric of global health actors shows a consensus for more civil society involvement in strengthening health systems for UHC. There are many strategies for funding UHC, and we will not review here the history of health financing approaches in Africa. ¹³

It should be noted, however, that the two most important recent health financing interventions in Africa—user fees exemption policies and results-based financing (RBF) have not reversed the side lining of community participation. 13-15 User fees exemption policies, while often beneficial in terms of increasing people's use of care and reducing in equalities in access, have not provided the opportunity for people to have a voice and have often resulted in a recentralisation or verticalisation of decision making, while decentralisation remains elusive, particularly in West Africa.¹³ Experiences of community-based RBF are rare and still inconclusive, 16 and communities' involvement with RBF implementation in health facilities also remains very weak, 6 even producing undesirable effects during community audits. ¹⁷ As for CBHI, history shows that 'the success of voluntary schemes is modest, and even quite feeble, 18 and that 'In some countries, VHI (voluntary health insurance) may have hindered moving equitably towards UHC.'19

Thus, at the international level, there are increasing calls for an end to the voluntary nature of this type of insurance mechanism, with respect to both participation in governance and payment of premiums. ^{4 20 21} In fact, 'No country has effectively progressed towards UHC through voluntary health insurance'. ²² Yet on the ground, especially in Africa, we still see projects to support CBHI, or political leaders or donors insisting on the need to

continue to support them, advocating persistently for community participation and voluntary enrolment.

In this commentary, we argue that the original ideal of community participation and voluntary enrolment adopted at Alma-Ata (and reprised for its 40th anniversary), and which was at the heart of past and present movements to support CBHI in Africa, is perhaps no longer the concept in which to invest if we are aiming for UHC. This is not to suggest that civil society no longer has a place in health system governance. Rather, we propose abandoning the ideal of volunteer involvement in CBHI schemes, because they need to both professionalise their management and find ways to make the payment of premiums compulsory. For this demonstration, we use the cases of Rwanda, which has embraced this solution, then Ghana, which is attempting to do so with more difficulty, and Mali, which is currently considering a similar solution, and finally Senegal, which does not seem to be heading in this direction.

Obviously, our reflection is based on a premise: the obligation for states to increase public funding for the health sector. This is an essential condition for UHC that many experts have been emphasising for a very long time, ²³ including recently for CBHI schemes, ²¹ and which our case studies confirm.

RWANDA: CBHI IN NAME ONLY

Rwanda has made enormous strides towards UHC by enrolling almost three-quarters of its population in its CBHI scheme. After the genocide, the Ministry of Health settled in 1999 on CBHI as the policy option to increase healthcare utilisation because of its emphasis on participation. The government considered community participation in the management of local affairs, such as primary healthcare, to be vital for preventing the return of violence. Indeed, it blamed 'the subculture of passive obedience which left people open to political and sectarian manipulation' as one cause of the genocide. Also, in a context of extreme resource scarcity, the population's financial participation in healthcare financing was considered a necessity.

Fast forward 20 years, and CBHI is, as far as enrolment is concerned, a success. Yet this performance has been achieved at the expense of the initial commitment to community participation and agency. First, in 2006, CBHI was made compulsory because of the government's frustration with the slow enrolment in the schemes, which jeopardised their sustainability through limited risk pooling and adverse selection. Compulsory enrolment increased health coverage dramatically. This was achieved by the efforts, sometimes coercive, of the local administration to get people to pay their premiums every year, and by some funding from the Global Fund that covered premiums for about 30% of the population.²⁸ CBHI deployment was paralleled by a high commitment to health funding by the government and donor agencies. In 2017, health represented 16.5% of government expenditure, one of the highest rates in Africa.²⁹ In total, while the population's contribution constitutes the backbone of CBHI revenues (60%), those revenues only cover about 10% of the country's total health expenditure.²⁹ While CBHI is now a success in terms of coverage and ability to extract money from the poor informal sector, its capacity to contribute to the country's total health expenditure remains very limited. Second, the CBHI schemes have become increasingly managed by state professionals. Successive laws in 2007 and 2015 curtailed the population's role in managing CBHI resources. The responsibilities of the community are now limited to enrolment promotion and financial participation. In 2015, the management of all CBHI schemes was transferred to the Rwandan Social Security Board (RSSB), the parastatal body in charge of civil servants' pensions and health insurance. The rationale was that the CBHI's growing resources required professional management and auditing. Finally, the transfer to RSSB was the occasion to further centralise resources nationally and, consequently, increase risk pooling.²⁶

The Rwandan 'CBHI' is now a CBHI in name only. As a response to the all-too-familiar challenges of poor management, adverse selection, low enrolment and small risk pooling of CBHI schemes, ^{8 10} the government has effectively built what looks like a social health insurance (SHI) programme with a poll tax component. The Rwandan 'CBHI' is now a compulsory system gathering resources for healthcare from domestic taxation, international aid and individuals' contributions, all managed centrally by a public organisation.

GHANA: SING THE NATIONAL HEALTH INSURANCE SCHEME (NHIS) FOR UHC

Ghana began experimenting with CBHI in the late 1980s. Since then, a comprehensive health insurance scheme has become the permanent goal of different governments and political regimes. This period of experimentation ended with the enactment of the NHIS in 2003. This improved and uniform health insurance scheme was an enhancement of the CBHI schemes established in 1995. 30

With the promulgation of Act 650 in 2003, three kinds of health insurance schemes came into being: district mutual health insurance schemes, private mutual health insurance schemes and private commercial health insurance schemes. The NHIS is primarily financed by taxes on a national basis. An amendment to the law (act 852, 2012) requires every Ghanaian to enrol in a scheme. This achievement is the result of the combined efforts of government, technocrats, unions (specifically, the Trade Union Congress) and donors (World Bank, the International Labour Organization (ILO), etc). The scheme in the sch

Although the NHIS appeared promising given the initial rapid growth in the number of subscriptions (36% in 2012, but 62% of those were exempted), ^{24 30} the proportion has since stagnated at 40%. ³³ Despite the fact that the NHIS has been described as having a generous

benefit package,³⁴ the enrolment and renewal numbers have not been improving,²⁴ even for exempt categories.³³

Studies have highlighted several reasons for this mixed record. First, while membership is legally compulsory, in reality it is not enforced. Second, there are many disincentives to joining: dissatisfaction with health workers' behaviour, inadequate control over adverse selection by scheme managers, poor management of requests for healthcare, delays in reimbursement, supervisors' poor monitoring of the actual performance of acts, users' inadequate control over these acts. Several avenues for improvement have been proposed.35-37 The first is to actually enforce compulsory enrolment in the NHIS. The second is to ensure this compulsory enrolment is accompanied by a real improvement in the quality of care. The Presidential NHIS Review Group suggested that contributions from people in the informal sector should be stopped and that Thai-style UHC reforms, which would be predominantly tax financed, should be launched. 37 The group suggested that primary care and maternal, newborn and child health be subsidised at '100% with no user fees'. The third is to professionalise the insurance systems to guarantee rapid, efficient and transparent reimbursement of health expenditures. However, fulfilling these conditions requires a significant commitment from the public authorities, notably through the National Health Insurance Authority, as supervisor of the national health insurance system. With this, the system would be a bit further away from any essentially community-based responsibility for health insurance governance.

MALI AND SENEGAL: REVITALISING CBHI FOR UHC

The health systems and health financing policies of these two West African countries are based on a history of cost recovery and heavy reliance on users' financial contribution. These policies have been relative failures with regard to communities' participation in the governance of health facilities and in access to care, which is constrained by user fees and which has overshadowed the other dimensions of the reforms.

Mali was the first country in Africa to have a mutual health insurance code in 1996. The Union Technique du Mali (UTM) was created in 1998 to support the development of CBHI and has received international funding (USA, France, Canada, etc). In 2003, there were only about 20 functional CBHI schemes. ¹⁸ In 2014, Mali had 187 CBHI schemes, covering only 4.5% of the national population. ⁴¹

Today, Mali has decided to base its universal health insurance program (RAMU) aimed at UHC on three classic pillars: (1) a compulsory contributory system for the formal sector (17% of the population); (2) a unremarkable system for the poor (5%) and (3) the revitalisation of CBHI for the remaining 78% of the population in the informal and agricultural sectors. However, aware of the challenges associated with households' capacity to contribute to CBHIs, the state subsidises 50% of

membership (4.6 euros per person). The national strategy for the expansion of CBHI (2011-2015) set itself the objective of creating 351 municipal CBHI schemes. It had a 3-year pilot phase supported by external partners (France, Belgium, Luxembourg, ILO, UNFPA), with an estimated total budget of around 20 million euros. Of the 150 CBHI schemes that were expected to be created by the end of this pilot phase, it appears only 30 were set up. An evaluation showed that, aside from the public security and political crisis of 2011–2012 and the limited appeal of the basket of services, this modest result was due particularly to the fact that the state financed only 19% of the total membership subsidies and that few partners wished to support this strategy—hearkening back, once again, to the low contributive capacity of households. 41 Achievement of RAMU's overall goal of having 45% of the total population covered by these three systems by 2023 is thus jeopardised.

Beyond the low public funding, it should also be noted that the population does not have confidence in the state, making a compulsory contribution difficult to enforce. Indeed, when the Malian government launched its compulsory health insurance (AMO) in 2011, it was met with fierce resistance from civil servants. 42 The subject was widely covered by the press at the time. 43 For example, the union of academic teaching personnel demanded and won an end to compulsory deductions from salaries and the reimbursement of sums already collected. 44 The government had to back down and change the nature of the contribution from mandatory to voluntary, but did so without changing the law that maintained the obligation. Beyond the lack of preparation and information, ⁴³ it was 'the obligation that was the determining factor in the teachers' rejection of social insurance'. 44 Today, however, after more explanation and education, but especially in light of the effectiveness of the AMO, Malian civil servants seem more willing to accept the principle of obligation, and the number of people enrolled has been increasing steadily. The CBHI schemes themselves, and particularly the UTM, have long supported compulsory enrolment and the professionalisation of their management, but the legislative texts do not allow it (both in Mali and in the countries of the WAEMU region). However, the RAMU provides an excellent opportunity to overcome these legislative and regulatory blockages, since the law applies to all Malians, with the informal and agricultural sectors being subject to it via mutual insurance. All that remains now is to find the modalities to enforce it.

Senegal has a very similar history and a UHC strategy built on the same three pillars (with some specific differences that cannot be presented here for lack of space). The legal framework for mutual health insurance was established in 2003. Senegal was to have 673 CBHI schemes by the end of 2016. As in Mali, Senegal subsidises 50% of the annual premium (5.3 euros), and theoretically since 2013, 100% of the contributions for the indigent (family solidarity grant: BSF), whom it enrols in CBHI schemes. Indigents and CBHI scheme members

are considered within the same pillar of community health insurance. At the end of 2016, of the 2.2 million current beneficiaries of this CBHI, 33% had contributed, and the rest were fully subsidised by the state. The challenges of Senegalese households' contributive capacity are also widely known, in terms of enrolment in CBHI schemes. An antional agency for universal health coverage (ACMU) was set up in 2015 with more than 200 staff. However, the ambitious overall target of covering 75% of the total population with the three schemes by 2017 was not achieved, as current coverage is estimated at 47%, of which a large portion contributes nothing (eg, BSF recipients, children under five, seniors) or very little (eg, student UHC).

Two strategies for CBHI coverage have been tested in Senegal, and their results are useful to support the arguments in our article. In the first strategy, the state, supported by USAID, developed a national approach to decentralise health insurance (DECAM). It is based on the usual principles of CBHI, with the stated objective of creating at least one scheme per municipality. 46 In 2013, the ministry considered that CBHI schemes were 'the only ones with the potential to cover the majority of the Senegalese population.'47 After a pilot phase launched in 2012, DECAM went national in 2015. However, only 7% of the informal sector population is reportedly covered by CBHI, and a recent study showed that communities have a rather poor opinion of their community-based governance. 46 To counter the challenges of volunteerism, the idea has often been put forward in Senegal that managers of CBHI schemes need to be professionalised and their salaries subsidised.²⁰ Moreover, management remains highly centralised, with the reimbursement of state subsidies being processed directly between health facilities and the Ministry of Finance without going through the CBHI scheme. As such, in 2017, the ACMU decided to pay, for 1 year, the salary of one manager per CBHI scheme and, for 2 years, a 'technical management unit' at the departmental level, with an administrative and financial manager and an agent assigned to monitor the CBHI scheme. Moreover, in Senegal as in Mali, 'the support for a mandatory insurance was limited because this constitutes a too intrusive state interference in the individual sphere.'48

For the second strategy, from 2014 to 2016, two departments in Senegal tested the implementation of departmental health insurance units (UDAM), conceived and supported by the Belgian Development Agency. The approach was totally different at the outset because it was based on regional risk pooling, regional portability, family or whole-village enrolment (and a price incentive policy for enrolment) and above all, the professionalisation of staff. To ensure the effectiveness of the UDAM, there was no longer any question of relying on the voluntary participation of villagers, but rather on the professionalism of managers and medical consultants. The president of a former CBHI scheme explained: 'with UDAM, we were relieved, because the financial burden was too heavy for

our CBHI schemes.'⁴⁹ At the end of 2016, the penetration rates for the two departments were 21.4% and 24% (65% of which were BSFs subsidised by the state), whereas in 2013, they were under 1% for the CBHI schemes in these departments. These UDAMs had reportedly achieved the number of enrolments needed to ensure their financial autonomy.⁴⁹ Membership remains voluntary, but professionalisation is certainly one of the keys to this success.

CONCLUSION

Beyond the international consensus in favour of UHC, ¹² the path to achieve it must necessarily be tailored to each national context. ⁵⁰ This comparison of four African countries (along with recent analyses of Kenya, Nigeria, Tanzania ²⁴ and elsewhere in West Africa ²¹) shows that, if countries wish to rely on CBHI in their transition towards UHC, they must absolutely re-examine the relevance of voluntary membership and of community-based and volunteer-driven management. However, we recognise that the challenges of mandatory enrolment are enormous and should be further analysed. ²¹ Yet the four cases highlight, in different ways, the inherent tension at the heart of the Alma-Ata principles when CBHI is chosen as the means towards achieving UHC.

In a context of resource scarcity, foreign aid volatility and low capacity in the community, it might be difficult to uphold the principles of community decision in resource management and CBHI enrolment if UHC is to be taken seriously. As WHO suggests in its analysis of CBHI schemes, 'mandatory enrolment of the population' has become necessary, as has the professionalisation of their management, which is not synonymous with privatisation. Moreover, mandatory enrolment and professionalisation can only be achieved effectively if African states commit themselves to taking seriously their citizens' health by substantially increasing (as did Rwanda) public financing of the health system and subsidising members' contributions. 21 23 African states could draw inspiration from the current examples of Thailand and some Indonesian provinces, where the government gave everyone in the informal sector free membership, financed through taxes.

Mandatory enrolment and professionalisation are obviously easier said than done, and the historical–social–political context that has enabled Rwanda to achieve this is markedly different from that of other countries in sub-Saharan Africa. Some recent experiences in Senegal, Mali and Ghana, like the case of Rwanda over the past 15 years, show that the return in force of the state, notably through very large subsidies of CBHI premiums, is also symptomatic of a tension with regard to the role of populations. The will of the state to oversee the use of its subsidies will certainly reduce the CHBI schemes' autonomy. This, however, appears to be the condition for broad and effective health coverage. One example of this comes from Mali. Debates in the 1990s surrounding the formulation of the national policy for indigent care in

health concluded that the state did not wish to engage in financing but preferred instead to shift almost all of the responsibility to local authorities. Then, in 2009, at the launch of the policy, the state decided to finance 65% of expenditures, leaving only 35% to territorial authorities. In 2016, given the local authorities' difficulties in mobilising funds, the state further increased its contribution to 85%.

Our commentary is clearly not intended to deviate from the salutary spirit of Alma-Ata in relation to the importance of primary healthcare and of the population's role in health systems. However, this role should not be in the form of a direct payment through a voluntary financial contribution to health insurance, as this is neither effective nor equitable. There is definitely a need to reflect on how communities can find a meaningful role in CBHI governance while ensuring CBHI professionalisation and compulsory enrolment to advance the ambitious objective of achieving UHC by 2030. This is also a call for African countries to rely more on compulsory public financing mechanisms sourced from progressive taxation.

Author affiliations

¹IRD (French Institute for Research on Sustainable Development), CEPED (IRD-Université Paris Descartes), Universités Paris Sorbonne Cités, ERL INSERM SAGESUD, Montreal, Canada

²University of Montreal Public Health Research Institute (IRSPUM), Montreal, Canada

³Centre lillois d'études et de recherches sociologiques et économiques (Clersé), Université de Lille, Université Lille 1, Lille, France

⁴Institut des sciences économiques et du management (ISEM), Université Lille 1, Lille. France

⁵Department of International Development, London School of Economics and Political Science, London, UK

⁶Département de sociologie, Université Assane Seck de Ziguinchor, Ziguinchor, Sénégal

⁷Miseli, Bamako, Mali

Acknowledgements We wish to thank Celine Deville, Fanny Chabrol, Ludovic Queuille and Elisabeth Paul for their feedback on a previous version of this article. Thanks also to Donna Riley for translation and editing support. The comments from both anonymous reviewers were very helpful in improving our argument.

Contributors VR: had the initial idea for this paper with BB and BC. VR: coordinated the writing of the article, wrote the introduction with BB, the section on Mali and Senegal with FH and LT and the conclusion. BC: wrote the section on Rwanda. BB, AAA: wrote the section on Ghana with the support of BB. All authors contributed to the development of ideas and the writing of the manuscript, commented on drafts and approved the final version.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement No additional data are available.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0

REFERENCES

- WHO. Declaration of Alma-Ata, International conference on primary health care. USSR: Alma-Ata. 1978.
- WHO. The World Health Report 2008. In: Primary health care now more than ever. Geneva: World Health Organization, 2008.
- Criel B, Waelkens MP. Declining subscriptions to the Maliando Mutual Health Organisation in Guinea-Conakry (West Africa): what is going wrong? Soc Sci Med 2003;57:1205–19.
- Mathauer I, Mathivet B, Kutzin J. Community based health insurance: how can it contribute to progress towards uhc? Geneva: World Health Organization, 2017.
- Ndiaye P, Soors W, Criel B. Editorial: a view from beneath: community health insurance in Africa. Trop Med Int Health 2007:12:157–61.
- Criel B, Atim C, Basaza R, et al. Editorial: Community health insurance (CHI) in sub-Saharan Africa: researching the context. Trop Med Int Health 2004:9:1041–3.
- Alenda-Demoutiez J, Boidin B. Community-based mutual health organisations in Senegal: a specific form of social and solidarity economy? Rev Soc Econ forthcoming.
- De Allegri M, Sauerborn R, Kouyaté B, et al. Community health insurance in sub-Saharan Africa: what operational difficulties hamper its successful development? Trop Med Int Health 2009;14:586–96.
- Ridde V, Haddad S, Yacoubou M, et al. Exploratory study of the impacts of Mutual Health Organizations on social dynamics in Benin. Soc Sci Med 2010;71:467–74.
- Dror DM, Hossain SA, Majumdar A, et al. What factors affect voluntary uptake of community-based health insurance schemes in low- and middle-income countries? a systematic review and metaanalysis. PLoS One 2016;11:e0160479.
- Waeikens MP, Coppieters Y, Laokri S, et al. An in-depth investigation of the causes of persistent low membership of community-based health insurance: a case study of the mutual health organisation of Dar Naïm, Mauritania. BMC Health Serv Res 2017;17:535.
- Robert E, Lemoine A, Ridde V. Que cache le consensus des acteurs de la santé mondiale au sujet de la couverture sanitaire universelle? Une analyse fondée sur l'approche par les droits. Canadian Journal of Development Studies / Revue canadienne d'études du développement 2017;38:199–215.
- Ridde V. From institutionalization of user fees to their abolition in West Africa: a story of pilot projects and public policies. BMC Health Serv Res 2015;15(Suppl 3):S6.
- Paul E, Albert L, Bisala BN, et al. Performance-based financing in low-income and middle-income countries: isn't it time for a rethink? BMJ Glob Health 2018;3:e000664.
- Ridde V, Gautier L, Turcotte-Tremblay AM, et al. Performance-based Financing in Africa: time to test measures for equity. Int J Health Serv 2018;48:549–61.
- Falisse JB, Meessen B, Ndayishimiye J, et al. Community participation and voice mechanisms under performance-based financing schemes in Burundi. Trop Med Int Health 2012;17:674–82.
- Turcotte-Tremblay AM, Gali-Gali IA, De Allegri M, et al. The unintended consequences of community verifications for performance-based financing in Burkina Faso. Soc Sci Med 2017;191:226–36.
- 18. Letourmy A, Pavy-Letourmy A. La micro-assurance de santé dans les pays faible revenu. Paris: AFD, 2005.
- Pettigrew LM, Mathauer I. Voluntary Health Insurance expenditure in low- and middle-income countries: exploring trends during 1995-2012 and policy implications for progress towards universal health coverage. *Int J Equity Health* 2016;15:67.
- Mladovsky P, Ndiaye P, Ndiaye A, et al. The impact of stakeholder values and power relations on community-based health insurance coverage: qualitative evidence from three Senegalese case studies. Health Policy Plan 2015;30:768–81.
- Idrissi ZEE, Özaltin E, Haazen D. Couverture sanitaire universelle et secteur informel en Afrique de l'Ouest francophone: Etat actuel, perspectives et proposition d'orientations stratégiques. Washington DC: World Bank, 2018.
- Mathauer I. Health financing for Universal Health Coverage: objectives and directions for reform, 2016.
- Ottersen T, Elovainio R, Evans DB, et al. Towards a coherent global framework for health financing: recommendations and recent developments. Health Econ Policy Law 2017;12:285–96.
- Umeh CA. Challenges toward achieving universal health coverage in Ghana, Kenya, Nigeria, and Tanzania. Int J Health Plann Manage 2018

- Umeh CA, Feeley FG. Inequitable access to health care by the poor in community-based health insurance programs: A review of studies from low- and middle-income countries. Glob Health Sci Pract 2017;5:299–314.
- Chemouni B. The political path to universal health coverage: power, ideas and community-based health insurance in Rwanda. World Dev 2018;106:87–98.
- MINALOC. Rwanda five-year decentralization implementation program. Kigali: Ministry of Local Government, Republic of Rwanda, 2004.
- Kalk A, Groos N, Karasi JC, et al. Health systems strengthening through insurance subsidies: the GFATM experience in Rwanda. Trop Med Int Health 2010;15:94–7.
- Ministry of Health. Annual report: community based health insurance. Kigali: Government of Rwanda, 2012.
- Otoo N, Awittor E, Marquez P. Universal health coverage for inclusive and sustainable development- country summary report for Ghana. Washington DC: Health, Nutrition and Population Global Practice, World Bank Group Report, 2014.
- Alhassan RK, Nketiah-Amponsah E, Arhinful DK. A review of the national health insurance scheme in Ghana: what are the sustainability threats and prospects? *PLoS One* 2016;11:e0165151.
- 32. National Health Insurance Authority. Ghana health insurance review. the national health insurance magazine. Accra: PMB Ministries, 2011.
- Agyepong IA, Abankwah DN, ADroso A, et al. The "Universal" in UHC and Ghana's National Health Insurance Scheme: policy and implementation challenges and dilemmas of a lower middle income country. BMC Health Serv Res 2016;16:504.
- Odeyemi IA, Nixon J. Assessing equity in health care through the national health insurance schemes of Nigeria and Ghana: a reviewbased comparative analysis. *Int J Equity Health* 2013;12:9.
- Kotoh AM, Aryeetey GC, Van der Geest S. Factors that influence enrolment and retention in Ghana' National Health Insurance Scheme. Int J Health Policy Manag 2017;7:443–54.
- Wang H, Otoo N, Dsane-Selby L. Ghana national health insurance scheme: improving financial sustainability. Washington, DC: World Bank Group, 2017.
- 37. Presidential NHIS Review Committee. *Proposed redesign and restructuring of the national health insurance scheme*. Accra: Presidential NHIS Review Committee, 2016.
- Balique H, Ouattara O, Ag Iknane A. Dix ans d'expérience des centres de santé communautaire au Mali. Santé Publique 2001;13:35–48.
- Foley EE. Your pocket is what cures you: the politics of health in Senegal. Piscataway, NJ: Rutgers Press, 2010.
- 40. Paganini A. The Bamako initiative was not about money. *Health Policy Dev* 2004;2:11–13.
- Ouattara O, NDiaye P. Potentiel des mutuelles de santé la mise en œuvre de la Couverture Maladie Universelle au Mali et au Sénégal. Coordination MASMUT zone UEMOA, 2017.
- Toure L. Emergence et formulation d'une politiaue publique sociale au Mali : le Ramed (régime assistance médicale. Bamako: MISELI, 2018.
- Escot F. Analyse du traitement par la presse malienne de la protection sociale de janvier 2011 juin 2017. Bamako: MISELI, 2018.
- Goita SO. Les difficultés de mise en place de l'assurance maladie obligatoire au Mali : le cas des enseignants du supérieur. Rev Fr Aff Soc 2018:199–204.
- 45. ACMU. Mise en œuvre de la couverture maladie universelle : rapport d'activites de l'annee. Dakar: ACMU, 2016.
- 46. Sagna O, Seck I, Dia AT, et al. Étude de la préférence des usagers sur les stratégies de développement de la couverture sanitaire universelle à travers les mutuelles de santé dans la région de Ziguinchor au sud-ouest du Sénégal. Bulletin de la Société de pathologie exotique 2016;109:195–206.
- Ministère de la Santé et de l'Action Sociale. Plan stratégique de développement de la Couverture Maladie Universelle au Sénégal 2013-2017. Dakar: République du Sénégal, 2013.
- Fonteneau B, Vaes S, Van Ongevalle J. Toward redistributive social protection? Insights from Senegal and Morocco. Leuven: BeFind, Acropolis, Working Paper n°21, 2017.
- Ladriere F, Ndiaye E, Gaye P. La mise en oeuvre et les resultats des unites departementales d'assurance maladie au senegal. Dakar: Minisère de la santé, CTB, 2017.
- 50. WHO. The world health report health systems financing: the path to universal coverage. Geneva: World Health Organization, 2010.