Background

In Sierra Leone, with the launch of the Free Health Care Initiative (FHCI), efforts were made to improve the official incentive package of health staff, by **substantially increasing salaries** for all technical cadres of the Ministry of Health and Sanitation (MoHS) in 2009, creating a **performance-based financing (PBF) scheme** with an individual bonus component (2010), and introducing a **remote allowance** for those working in hard-to-reach areas (2012) which aimed to address the rural/urban imbalances in the distribution of the health workforce. However, there is limited evidence on the **actual earnings of individual health workers**. This is because (i) official payments may differ from those defined by the MoHS because of the poor implementation (for example, the remote allowance was introduced, but soon discontinued), and (ii) non-official incomes such as DSAs, activities outside of the health sectors, private practice or gifts from patients, or even the exact amount of individual PBF bonuses, are not known by policy makers. Our research aims to describe all the financial incentives that make up the health workers remuneration, and understand the determinants and the implications of this "complex remuneration".

Methods

The study was carried out in the districts of **Bo, Kenema and Moyamba** between September 2013 and April 2014:

- A survey of **266 health workers** working in 198 randomly selected PHUs was carried out, including the cadres of CHOs, CHAs, nurses and midwives (SRN and SECHN) and MCH Aides. The questionnaire focused on the amount received monthly for the following sources of income: salary, remote allowance, individual PBF bonus, share of the user fees charged for non-exempted services, salary supplementations, DSA and income-generating activities outside of the health sector. At the end of the interview, health workers were given logbooks to fill in daily for eight weeks, reporting revenues earned each day (including gifts and payments from patients, sale of drugs and incomes from private practice) and activities carried out.

- **39 in-depth interviews** were carried out with a purposively selected sub-sample of health workers.
Findings

How much do primary health workers earn and from which sources?

Our results show that health workers’ income is composed of a variety of payments (Figure 1). Salary is the main source income for workers of all cadres, followed by DSA and PBF bonuses. Gifts from patients and communities, often presented in-kind, and non-health activities are also quite relevant. In particular, for the 21% of HWs reporting such earnings, income from activities outside of the health sector (most frequently: farming, small trading and business, or credit groups) represent a substantial revenue, amounting to 20%, 23% and 11% of the total income for CHOs, CHAs/nurse and MCH Aides respectively. In contrast, by the time of the survey, payments of remote allowance were interrupted, which is reflected in the negligible income from that source. Similarly, most donors and NGOs had discontinued the payment of salary supplementations, in order to better align to national policies. User fees are also a less relevant income, likely because of the introduction of the FHCI.

Our analysis shows that about 15% of the survey sample was not receiving salary (i.e. not on payroll). In particular, all those interviewed who graduated from first training or re-training after 2010 were not on payroll or did not receive the upgraded salary corresponding to their new grade.

Who receives each income and who earns more from each income source?

Our statistical analysis shows that, all other characteristics equal, in-charges are more likely to be on payroll, to receive gifts from patients and PBF bonuses (and have higher revenues for the latter), and to have incomes from activities outside of the health-sector. This results in a significantly higher overall income compared to workers in staff positions. Health workers in urban areas are more likely to be on payroll. However, they are less likely to receive DSA and gifts from patients (because most of the gifts are in-kind, it is in rural, farming areas that patients and communities share them with the health workers). We found no difference in total income between urban and rural workers. Importantly, the district in which health workers are deployed makes a difference in their PBF payments (health workers are more likely to receive them in Kenema and receive significantly less in Bo), as well as in the DSA they receive (DSA payments received in Moyamba are significantly higher than in Bo, but lower than in Kenema). The cause of such differences seems to be found in the presence (or not) of NGOs providing support to facilities in different ways (e.g., supporting PBF-related indicators, training and supervision). Such district variations result in a significantly higher overall income for health workers in Kenema, compared to Moyamba and Bo.

Figure 1: Absolute and relative mean income by cadre and by component
What are the health workers’ views on their incomes?

From the interviews, it emerged that financial issues were a major concern for most health workers. Some also mentioned income fragmentation as a problem. We found that the views of health workers on their revenues are not only influenced by the amount earned, but also by the non-financial features of each income. For example, incomes that are easy to access, paid locally and in cash (such as DSA) are more appreciated and appear essential for the daily subsistence of those in rural posts, compared to incomes which can be retrieved only by accessing a bank account (i.e. salary). The fairness and transparency in income payment also emerged as important. Many health workers resented the fact that themselves or some of their colleagues were not receiving any salary or not the correct amount after re-training. Similarly, the unclear procedures regarding remote allowance calculation and eventually its discontinuation were a source of complaint. While salary emerged as by far the most important income, health workers reported negative views over it. In contrast, views were positive about PBF. This seems to be explained by the fact that, from the health workers perspective, the rather unpredictable timing of the PBF payments and the yearly delays (which delink it from the effort exerted at the time) make PBF seen as a windfall, with less sense of entitlement compared to the salary. However, the positive views of PBF payments were mitigated by the irregularity and long delays in payment, and the complicated and opaque practices of the bonus distribution between staff which were caused by those delays (see Box in this page).

How do health workers use their incomes?

When asked about how they come with their financial problems, HWs recurrently said that they “manage”, in the sense that they ‘get by’, but also meaning that they actively administer their incomes, spending them differently to take advantage of their non-financial features. In general, health workers use the salary for expenditures that are of a high amount and regular, such as school/college fees and to ensure the subsistence of their family. Moreover, salaries are received on bank accounts in towns where health workers are likely to be subject to the requests of family members. In contrast, revenues from DSA, activities outside of the health sector and in-kind gifts are used for the personal subsistence and to address unexpected emergency issues. Irregular incomes (such as DSA and PBF) have the advantage of being more easily ‘hidden’ from family pressures, while income from activities outside of the health sector can provide flexible financial resources which work as a mechanism to smooth earnings over time and deal with the irregularity of other revenues.

We also found that, at facility level, in-charges and senior staff tend to support their junior colleagues, who are often not on payroll, by sharing with them part of their incomes. Sharing practices seem to happen more often in smaller facilities (MCHPs) where there are only two staff of the same cadre, but different for seniority. Health workers report to share in-kind gifts (food) given by the communities and eaten together, PBF bonuses which are shared with those who were not working in the facility at the time which the PBF bonus refers to and also DSA. Many health workers mentioned that a part of their DSA is handed to colleagues or used to buy food to use together. However, these sharing practices are completely informal and depend on individuals’ good will. While they contribute to the motivation and team spirit within the facilities in some cases, in others failed expectations of income sharing and income imbalances are cause of tension between staff.

The perceptions of health workers on being paid by performance are generally positive as they said that this payment modality increases their motivation and the effort exerted. Health workers reported that the PBF scheme provides them also with non-financial motivation in two ways: (i) it clarifies tasks and requirements and therefore improves service delivery, and (ii) the part of the bonus that is spent on the facility contributes to improving their working environment. From a financial perspective, the individual PBF bonus is considered motivating as it is a complement to the salary and an unexpected extra. In particular, given that it is often a substantial amount, it can be re-invested in income-generating activities outside of the health sector.

However, some issues in the implementation processes act as ‘demotivators’. In particular, the delays in payment of PBF bonus have negative consequences as, (i) they cancel the link between performance and payment received, (ii) they create complicated and opaque sharing practices with staff who moved to another facility since the period when the PBF bonus was earned (who have to be traced and met to share the funds), and (ii) they allow opportunities for mismanagement and misappropriation of PBF bonus by some in-charges. The difficult access to the bonus via bank accounts in district town is also demotivating for health workers.
Recommendations

- It is essential to **improve the management of the official payments** to health workers. In particular, payroll should be up to date, with the inclusion of newly trained and recruited workers as well as the updating of those who re-trained and upgraded. To ensure sustainability and limit costs, the payroll reform should take place through an improved **systematic routine information** and data management system, rather than ad hoc cleaning exercises and censuses. Because of the proximity between health workers and DHMTs, a **decentralized HRH management system** would be more adapted, flexible and effective. There is also the need to **streamline and clarify allowances** (such as remote allowance and PBF bonuses) and **improve the transparency** over entitlements and functioning. This would allow health workers to have a clearer view on their earnings expectations and facilitate their daily/monthly financial management.¹

- **Better information** is needed on the entire remuneration of health workers and on the different earning opportunities based on individual and facility characteristics. This knowledge would allow policy-makers to tailor strategies to increase incentives for rural and other underserviced areas, and to avoid unjustifiable disparities between districts, for example and improve the distribution and motivation of health workers.

- Policy-makers should engage in **careful analysis of all aspects of financial incentives**, including information on the views of health workers. We found that **incomes are not fully “fungible”**, which means that increasing one revenue of 1,000 Leones may not be the same as the same increase in another one. In the eyes of health workers, the value of each income depends on other factors beyond their face monetary value, such as ease of access, fairness and transparency, regularity and timeliness of payment, sense of entitlement, and possibility of hiding the amount earned.

Notes

² For further explanations, see the paper: Bertone MP, Witter S (2015), An exploration of the political economy dynamics shaping health worker incentives in three districts in Sierra Leone. Social Science and Medicine, 141: 56–63. Available at: http://bit.ly/1E7D2dC
⁴ For further detail on this recommendation also see Policy Brief by ReBUILD – September 2015. Available at: https://rebuildconsortium.com/resources/

This Policy Brief was prepared in **November 2015** and is based on Bertone MP, Lagarde M “Sources, determinants and utilization of health workers’ revenues: evidence from Sierra Leone” paper under review, and Bertone MP (2015), Performance-Based Financing in the context of the ‘complex remuneration’ of Health Workers – Findings from a mixed-methods study in rural Sierra Leone. Presentation at the international Health Economists Association conference, Milan (Italy), July 2015, available at: http://bit.ly/1ktWwk9

This study was carried out by researchers at the **London School of Hygiene and Tropical Medicine** (LSHTM) as an affiliate project under the ReBUILD research consortium. The **ReBUILD Consortium** is a research partnership funded by the UK Department for International Development. Led by the Liverpool School of Tropical Medicine and the Queen Margaret University (Edinburgh) in the UK, ReBUILD works with partners in Cambodia, Sierra Leone, Uganda and Zimbabwe to explore ways to strengthen policy and practice on health financing and human resources. For information on ReBUILD research, visit [www.rebuildconsortium.com](http://www.rebuildconsortium.com) or follow on Twitter @ReBUILDRPC

The **LSHTM affiliate project** in Sierra Leone focuses on the financial incentive environment for health workers which was shaped in the post-conflict period, and aims at describing the multiple remunerations available for primary health workers, the causes and determinants of the variation in earnings at individual, facility and district level, as well as the implications of such remuneration structure. Further information on the affiliate project and outputs, including all policy briefs, are available at [http://bit.ly/1F9tnG](http://bit.ly/1F9tnG) or contacting Maria Bertone - maria.bertone@lshtm.ac.uk

---


2 For further explanations, see the paper: Bertone MP, Witter S (2015). An exploration of the political economy dynamics shaping health worker incentives in three districts in Sierra Leone. Social Science and Medicine, 141: 56–63. Available at: http://bit.ly/1E7D2dC. And the corresponding policy brief: Incentives to improve health workers retention and motivation: implementation challenges and informal practices at district level. The role of DHMTs and NGOs. Available at: https://rebuildconsortium.com/resources/


4 For further detail on this recommendation also see Policy Brief by ReBUILD – September 2015. Available at: https://rebuildconsortium.com/resources/