Maurice Yé Dr. Med

Performance-based incentives for health care providers in rural Nouna Health District: Design, implementation and effects on maternal and neonatal health services utilization and quality in Burkina Faso

Promotionsfach: Public Health

Doktovater: Prof. Dr. Rainer Sauerborn

In Burkina Faso, like many other countries, PBI has been considered as an innovative health system model to increase the use, quality and efficiency of health care services in low-and middle-income countries. This was found essential as an alternative to accelerate progress towards achievement of millennium development goals (MDG) 4 and 5 that Burkina Faso did not reach although some progress.

In this study, the ultimate goal was to assess the potential effects of an innovative performance-based incentive scheme on the utilization and quality of Maternal and Child Health (MCH) services.

The study explored health worker's perceptions and acceptance for an innovative PBI scheme based on locally generated income.

Through participatory process, criteria for incentive funds' management and key performance indicators were identified to set the PBI scheme in Nouna Health District.

The PBI scheme combined both financial and non-financial incentive as workers themselves during baseline qualitative study suggested it in 2010.

In addition, the use of MCH services and the quality of care was assessed and compared with a non-interventional district in Solenzo to draw lessons on its effectiveness.

In this article, we reported the findings from a quasi-experimental study design of a PBI intervention in rural health districts in Burkina Faso.

The study combined data from qualitative and quantitative findings collected in 2010 before PBI intervention and in 2014 at the end of PBI intervention in 12 primary health centres (PHC).

Overall, main data were collected within the 12 PHC and has covered three-year routine health statistics, health facilities assessment, antenatal care observations with 2010 women, childbirth observation with 210 women and client-satisfaction survey with 376 women in each district.

The findings show that the majority of health workers have a positive perception about PBI scheme and were in favor to test such an innovative scheme using available resources.

Moreover, there was much enthusiasm towards financial and non-financial incentive perceived as dual motivators.

The high level of acceptance for that scheme was probably influenced by a need to introduce more equity among workers in attending training perceived as an important non-financial incentive.

From PBI implementation experience, most initiative targeted either team-based or individual incentive.

In the present study, most health preferred team-based incentive. The prevalent arguments were the difficulty in assessing individual performance. Reaching consensus among team on performance assessment criteria was difficult. Many workers also argued in favor of strong team spirit in place and opting for individual will jeopardize relationship among the team.

The study also identified Key performance indicators that fit better with health worker's perspectives in terms of performance assessment. Most indicators were oriented to MCH service's performance measurement and linked to those used by Ministry of Health.

Four groups of indicators were retained: indicators related with MCH and PMTC (12 indicators); delivery (four indicators); newborn care and immunization (six indicators); drugs and consumables availability (six indicators). However, the list of KPIs was later reduced to ten (10).

About the effects of PBI in the utilization of MCH services, our study reported a significant increase in mean selected MCH indicators from baseline 2010 to end of

intervention 2014 in the intervention district (Nouna) compared to control district (Solenzo).

Although reported improvement in some quantitative indicators such us: antenatal care, institutional delivery, pregnancy at risk detected and referred, intermittent preventive treatment of malaria; some indicators such us polio vaccine and BCG at birth did not change.

Certainly, the PBI scheme could have play a role in achieving these results. However, the role of other structural factors such us MCH care subsidies 'policy in place since 2007 should not be neglected.

In contrast, the quality of care measured at pre-intervention and post-intervention did not show any improvement attributable to the PBI intervention. These reported findings corroborate previous impact evaluation studies where the evidence on the quality of care is mixed or cannot be ascertained due to many shortcomings in evaluation design.

Drawing lessons from the study, whose main hypothesis was to test whether pay-forperformance can improve the MCH service's utilization and the quality of care as well, I can conclude that.

- The PBI scheme was effective in improving the quantity of care provided, in other words, the utilization of MCH services in intervention area. The fact that performance-based incentive can improve the utilization of specific MCH services is documented elsewhere.
- The PBI scheme, as unexpected was not effective in improving the quality of MCH care in intervention area compared to non-intervention area.
- A process whereby health workers are strongly involved in the designing of the performance-based incentive scheme was most likely to lead to a higher acceptance rate.
- The study may provide a driving force for other countries in how to design and implement an original PBI scheme based on domestic resources and promise for sustainability.
- Further researches are needed to better address the quality of care issues.