POSITIVE AND NEGATIVE EFFECTS OF FINANCIAL AND NON-FINANCIAL INCENTIVES MECHANISM FOR HEALTH WORKERS IN RURAL AND REMOTE AREAS OF ETHIOPIA. FOCUS ON OROMIA, SOMALI AND TIGRAY REGIONS

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Abstract

Le risorse umane sono essenziali per un servizio sanitario di qualità. L’Etiopia ha una grave carenza di figure sanitarie e circa il 60% del suo sistema sanitario è supportato dalla comunità internazionale che le fornisce finanziamenti, competenze tecniche, strumenti e medicine. ONG e agenzie internazionali utilizzano meccanismi di incentivazione finanziaria e non per trattenere operatori sanitari e salvaguardare il servizio sanitario nell’intero Paese. Esperienze e ricerche mostrano come strategie per massimizzare le motivazioni degli operatori sanitari in paesi in via sviluppo devono includere entrambi i tipo di incentivi: finanziari e non.

Human resources for health are essential for the delivery of a quality health service. Ethiopia has a serious shortage of health workers with almost 60% of its Health System supported by the international community who provide financial and technical support, equipment and drugs. NGOs and International Agencies utilize financial and non-financial incentive mechanisms to retain health workers and safeguard the delivery of basic services throughout the country. Experience and the evidence suggest that any comprehensive strategy to maximize health worker motivation in a developing country context has to involve a mix of financial and non-financial incentives.

Keywords

Incentives, Health Workers, Ethiopia, Rural Areas, Health.

Introduction

Human Resources (HR) are the key-starting point of health services. Their number, skills and commitment are critical elements to deliver quality services. According to the international community and the World Health Organization the global number of health workers is insufficient and their education inadequate to guarantee the coverage of basic services everywhere. Two main issues mainly relate with the crisis of the Human Resources for Health (HRH): 1) the shortage of health workers (e.g. doctors, nurses, midwives), that becomes particularly serious in rural areas; 2) the brain drainage of qualified health workers, mainly doctors and nurses, to more Developed Countries where they can have better salaries.

The crisis of the HRH is huge and difficult to address as single country.
Ethiopia is one of the 57 Countries pointed out by World Health Organization (WHO) for the seriousness of the shortage of HRH\(^1\) (WHO, 2006). In Ethiopia, the international community, providing financial and technical support, equipment and drugs support almost the 60% of the Health System\(^2\) (CSIS, 2012). The national health policy emphasizes the importance of achieving access to a basic package of quality primary health care services for all segments of the population\(^3\) (MOH, 2005). The health workforce density is 0.027, 0.018 and 0.26 per 1,000 people for physicians, midwives and nurses respectively. This means that there are only about eight physicians, nurses and midwives per 10,000 populations. The ratio of health workers per 1,000 people, which at national level is 0.84, shows clear disparity across the different parts of the country, ranging from the lowest (0.49) in Somali Region to the highest (2.8) in Harari Region. However, regions with more than 95% of the country’s population have less than the national ratio of health workers to population\(^4\) (AHWO, 2010). The majority of the physicians serve the urban population, which is only 16% of the total population. People in urban areas thus have more benefit compared to those in rural areas in terms of access to mid-and high-level health professionals\(^5\) (AHWO, 2010).

Addressing the HRH problem in Ethiopia, international non-governmental organizations (INGO) and International Agencies apply financial and non-financial incentive mechanisms to retain health workers and safeguard the delivery of basic services across the whole country. Top-up on salary, per diem for out-station duties, transport/housing allowances and training courses are the most common incentive mechanisms in use.

The World Health Organization defines incentives as “all the rewards and punishments that providers face as a consequence of the organizations in which they work the institutions under which they operate and the specific interventions they provide”\(^6\) (WHO 2006). Mathauer and Imhoff (2006) define an incentive as: “an available means applied with the intention to influence the willingness of physicians and nurses to exert and maintain an effort towards attaining

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\(^2\)Morrison J. S., Brundage S. (June 2012), Advancing Health in Ethiopia with fewer resources, an uncertain GHI strategy and vulnerabilities on the ground, A Report of CSIS Global Health Policy Center.

\(^3\)Federal Ministry of Health (2005), Essential Health Services Package for Ethiopia.


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organizational goals”. More tightly defined, an incentive is “an explicit or implicit financial or non-financial reward for performing a particular act”7 (Mathauer & Imhoff, 2006).

Incentives can also be viewed as the factors and/or conditions within health professionals’ work environments that enable, encourage and motivate them to stay in their jobs, in their profession and in their countries. In the Guidelines for Incentives to Health Workers (HW), WHO groups incentives into financial and non-financial ones. Financial incentives are usually integral to the employment contract.

Buchan defines incentives as “one particular form of payment that is intended to achieve some specific change in behavior”8 (Mathauer & Imhoff, 2006).

Experience and the evidence suggest that any comprehensive strategy to maximize health worker motivation in a developing country context has to involve a mix of financial and non-financial incentives.

Objectives
To identifying positive and negative effects of specific financial and non-financial incentive mechanisms for health workers, making a comparison among them and taking examples from the different strategies used by the non-governmental organizations (NGO) and international organisms working for the promotion of health for everyone.

To give some suggestion and recommendation for future projects and strategies in health projects; finding a study method useful to standardize the collection of these information.

Methodologies
The research time was four months, from the beginning of May to the end of August 2013. The first month has been used to do a feasibility study, literature research and preparing the topics for interviews. A month and half has been used to find the interviewees and organize the meetings with key-informants on the field. Another month and half was used for the data analysis and preparation of the report.

7Mathauer I., Ingo Imhoff I. (2006), Human resources for Health: Health worker motivation in Africa: the role of non-financial incentives and human resources management tools, German Technical Cooperation (GTZ); BioMed Central.
8Mathauer I., Ingo Imhoff I. (2006), Human resources for Health: Health worker motivation in Africa: the role of non-financial incentives and human resources management tools, German Technical Cooperation (GTZ); BioMed Central.
A literature research was conducted at global and national level. The sources have been searched on electronic database and includes: articles published on international and Ethiopian medical journals; reports and documents on website of international agencies and organizations (i.e. WHO or United Nations); and official documents of the Ethiopian Ministry of Health (MOH).

Collected papers and reports have been used to review information regarding the world health situation, and the health status in developing countries (e.g. index of poverty, pro-capita health costs, number of doctors, nurses, midwives and health workers), and analyze the international point of view regarding the use of incentive for health workers. Data collected through the literature review have allowed the analysis of results from similar researches and studies in other African Countries. Overall, 45 documents have been consulted.

Semi-structured interviews have been held with key informants, including:

1. **local personnel of international and national NGOs**, working in rural and remote areas of Ethiopia (and especially in Oromia, Somali and Tigray Region) and involved in healthcare programs, to gather information on the incentive strategies they use and their perceptions and suggestions regarding the incentive mechanisms for health workers;

2. **international organizations** involved in healthcare programs, to gather information on incentive strategies they use and their perceptions and suggestions regarding the incentive mechanisms for health workers;

3. **local authorities**, as health managers and medical directors at hospital, area or regional level, to collect their perceptions and their feelings and to understand their point of view regarding the incentive mechanisms in health projects run by NGO working in their territories of competence;

4. **Project Managers, Countries Representatives and Technical Personnel recruited by NGO**

Five different semi-structured topic guides have been prepared in English to guide the interviews. Each topic guide is divided in two sections. The first one, with six questions, is the same for all interviews and it has been used to gather the demographic information and working positions of interviewees; the second one changes according to the category of the interviewee.

The interviews have not been analyzed answer by answer, but rather by topics emerged and discussed with the key-informants. Topics have been reordered in main themes that constitute the research's results. The information contained were coded to facilitate the analysis of the results: every code corresponds to a main topic of the research.

Ten codes were used to synthesize the data collected: 1) challenges of the Ethiopian Health System; 2) HRH as a specific problem of the Ethiopian Health System; 3) positive effects of the incentive mechanisms; 4) negative effects of the incentive mechanisms; 5) financial incentives versus non-
financial incentives; 6) incentive mechanisms as solution of HRH shortage in Developing Countries; 7) incentive mechanisms used by NGOs; 8) measures put in place by MOH to control the brain drainage of qualified HW and retain them in rural and remote areas; 9) measures that could put in place by MOH to control the brain drainage of qualified HW and retain them in rural and remote areas; 10) feelings and impressions about the international practice of incentive mechanisms.

A color was assigned to each code to ease the analysis of interviews, where coded topics were underlined accordingly. Writing the results, the interviews have been analyzed also at another level according to the fact that answers and information comes from a local or international interviewee to better understand any difference between the international and the national perception on incentive mechanisms for HW.

Interviews were conducted in Addis Ababa and in Makalle, in Tigray Region. The language used was English. Interviews were conducted in private without the help of a translator, since it was observed that upon the signatory of the interview anonymity format, interviewees felt free to answer the questions. This is also why the article cannot report the name and the location in the notes when interviewee’s words are reported.

**Results**

Results are presented according to the main topics coded in the interviews with key-informants.

*Challenges and HRH of the Ethiopian Health System*

The challenges of the Ethiopian Health System reported by the key-informants can be divided into different categories: structural problem of the Country; problem in health management; scarcity of resources and budget; lack in quality of services, care and trainings; lack of health awareness; problems linked to the health workers; other challenges.

Most of the respondents agreed that these problems are more relevant in rural and remote areas where the unavailability of transport means and the huge distances between villages and the health facilities is critical “People are not educated on health and they don't understand the importance of health… there is a lack of awareness in healthcare… a lot of people in countryside prefer the traditional medicine… a lot of young girl died during delivery but when you ask to local people and communities if they are offended for this they answer that it is natural and there are no problems.
Few coordination in health, no good reporting in monitoring and evaluation… too much bureaucracy… lack of clear communication”.

Half of the interviewees have mentioned the low salary given to health workers all over the Country.

55% of the respondents reported a number of difficulties related to HRH: short number, brain drainage of qualified health workers, lack of motivation, absenteeism on the working place, lack of good working opportunities. It is important to remark that the HRH issue is considered a consequence of other problems: the salary is too low thus doctors leave the Country; in rural areas there are no roads, no electricity and no internet, thus HW prefer remaining in towns.

Most of the respondents have tried to explain their ideas in a productive accent, for examples the majority of people that complained of the low HW salary, explained also that the costs of life has increased a lot in the recent years. They provided data on prizes of food or house or transportation to justify their affirmation. Some of them also recognized that in recent years the quality of life in town has really changed, with many opportunities that are not present in rural and remote areas where no incentives or attractions are available.

*Measures put in place by the Ministry of Health (MOH) to control the brain drainage of qualified HW and retain them in rural and remote areas*

57% of the interviewees have agreed that one strategy of the Government to address the brain drainage and the HW retention is to accelerate trainings and create new trainings, in order to have more health providers and suggestion changes in their careers. Also with competitions among health facilities promoted by the MOH to motivate health staff and promote an improvement of their skills and capacities. The National Commitment (before to be free to receive their diplomas and certificates every health worker has to serve for some period where the Government decided), allowing specialists to open their own private clinics, allowing private visit in government hospitals and remunerating the overwork time and paying more the night duty are motivating health workers.

29% affirmed that there are some efforts focus on changing the attitudes of health workers and teaching them commitment.

Through all these answers, key-informants seem affirming that the Ethiopian Government is making significant efforts to improve the national Health System, and tackle the HRH crisis. At the same time, most interviewees specified that these measures are not enough to fully address the brain drainage of HW and retain them in rural and remote areas. The incentives foreseen for HW
deployed in rural areas are part of the Ethiopian Health Policy and seem to be the best strategy to retain HW. Other efforts are done in training larger number and new cadres of health workers even if they recognized that this strategy may create confusion in the health figures and careers and affect the quality of services as the majority of newly trained staff is low level cadres. For everyone salary should be increased.

Incentive mechanisms used by NGOs and the feelings about that practice

Nine international NGOs working in health development projects in Ethiopia participated in the study. All of them declared to collaborate with local health authorities at different levels within their projects. Furthermore, most of them cooperate with Health Center (HC) Managers, Hospital Managers and Universities staff. In terms of financial incentives, all the INGOs interviewed affirmed to use them within their health projects.

100%, the total of the respondents, declared to use per diem. Per diem is a daily allowance paid in connection with the work done not in the usual working place or not as part of the routine daily work. INGOs use per diem in two main cases:

1) When the HW is requested to do additional work for the projects, in locations that are not his/her duty station and for monitoring and evaluation activities (working for some days per week in HC / Health Post (HP) in rural and remote areas; immunization campaigns; distribution of drugs and food etc.). All respondents stated that this kind of per diem is not provided only to HW but to everyone that support the project activities (e.g., drivers, cleaners, watchmen, consultants);

2) During training courses: per diem for trainees and trainers.

In regard to per diem, there seems to be a sort of uniformity among the nine INGOs. There seems to be also uniformity in the daily amount of the per diem which is usually between 150 and 250 ETB (about 6-10 euro).

Another type of incentive mechanisms is a sort of allowance given on-top of the salary of the single health worker. Despite the strategy used to provide health workers with some extra funds on-top on their salaries has different patterns across the organizations interviewed, it is quite common among all of them.

Some organizations provide a budget support directly to hospital administration that is directly responsible to allocate part of the funds to increase the hospital workers salaries. It is the hospital
administration to decide the amount and the number of people to receive the allowance (or top-up) on the salary.

Others have an agreement with a public hospital by which the hospital commits to pay the staff according to the government salary scale, but by placing them in the next higher level, and the organization is responsible to pay for the difference in the salary.

In regard to non-financial incentive mechanisms, none of the INGOs have reported to use them. According the international organization the practice of proving financial and non-financial incentives to local health workers is good because:

- it contributes to address part of the economic problem of Ethiopia, supporting a more appropriate salary to HW and improving the health system;
- it motivates HW and makes them more satisfied of their work: “if health workers are paid better there are more happy, they work better and take more care of their patients”;
- it allows the retention of health workers in the country: “with the recruitment of INGOs and international agencies a lot of people that are no more working for the health sector come back to the health sector”;
- it attracts local people to work in rural and remote areas.

The negative implications reported by the key-informants included:

- the tendency of HW that have worked for international NGOs agencies to migrate within and beyond the country to get the same, and usually high salary;
- the poor sustainability of the project after its end;
- the influence of good salary scale on the national market.

*Positive and negative effects of the incentive mechanisms to health workers*

Only one interviewee affirmed not to know any positive example of the incentive mechanisms provided to HW, in rural and urban areas. 75% agreed top-up on salary and *per diem* motivate HW. Health workers are more satisfied of their job and they are more commitment towards the delivery of care to patients.

Financial incentives for health workers are a right, because they are the only possibility for HW to have a salary that allows them to survive.

Three interviewees cited the advantages of incentives in rural and remote area, where top-up and *per diem* become like a “compensation” for HW that often have to work without light or water or
not enough medical equipment. Thanks to these incentives, HW decide to remain in remote and rural areas and thus the communities living there can benefit of health services.

Three respondents have specified that incentive mechanisms for health workers are one possibility to limit the brain drainage of HW from rural areas to big towns and from Ethiopia to abroad.

Three interviewees cited also positive effects of non-financial incentives, especially the trainings that are very important to improve skill and capacities of the staff.

31% affirmed that among the positive effects of providing incentive to HW, there is also the improvement and expansion of the health system. One key-informant specified that the incentive mechanisms contribute to the achievement of the national health goals and support the decentralization of the health system all over the country. The incentives, specified another one, allow taking inside the country also new technologies and equipment that will help the improvement of the health sector as a whole. One interviewee shared the example of a very good collaboration between an international health project and the Government.

Summarizing, respondents have recognized the role of incentive mechanisms in contributing to enhance the quality of health care services. HW play a very important role in the delivery of health services and the commitment and satisfaction to their job is essential to improve the national health system.

10% affirmed not to have any example of negative effects of the incentive mechanisms provided to HW. Among the others, the most common negative effect of incentives is related to discouraging the commitment among HW: “incentives create a mentality that drugged the market: there is continue request of incentives … people work for INGOs only if there are incentives”.

The same thing seems to happen also with the per diem provided in the framework of trainings: “HW are always searching trainings where they get per diem and nobody works in HP o HC… people make training only to gain money”.

Other important negative effects discussed are:

- The risk of a conflict creation between the government and international NGO or agencies: “people want to work for INGOs because they can find a better salary… there is a brain drainage from governmental facilities to INGOs… HW go only in INGOs trainings that have a better payment”;
- That in rural and remote areas incentive mechanisms are necessary to retain the HW, but only INGOs can take care of these areas.
- The relative limited sustainability of the INGOs health project: “When the incentive stop people leave”
The few transparency of the international funds and the fact that the Ethiopian Government is not able to use them in the right way.

Summarizing, the negative effects of the incentives seem exactly the contrary of the positive effects. The financial incentives discourage the commitment of health workers that accept a job only for the monetary benefit of it and remain at the mercy of their salary increment. This means that part of the population has an unsafe and insecure accessibility to basic health services.

Incentive mechanisms as solution of HRH shortage in Developing Countries

44% have stated that incentive mechanisms are a solution for the HRH shortage in Developing Countries: “incentives reduce the turn-over of HRH, with incentives more doctors stay where they are assigned to work”.

For 25% incentives could be a solution, but specified that they are not the only solution and they need to be integrated with other strategies to be fully effective. 25% affirmed that incentive mechanisms are not a solution for the HRH shortage in Developing Countries and they agreed that incentive, especially the financial ones, are not sustainable in the future. 44% have underlined the need and importance for the incentive strategy to be in accordance with the government policies, to ensure it does not remain unproductive.

Financial incentives versus non-financial incentives

One important evidence from the interviews is that the totality of the interviewees have mentioned housing or transport as a non-financial incentives and this have implications about their preference for financial and non-financial incentives.

The majority of the respondents (69%) have stated that both incentives, financial and non-financial, are important and that both are necessary.

9% affirmed that they are better than non-financial ones and HW should receive them to be motivated and effectively work in rural and remote areas of Ethiopia.

59% cited top-up on salary as good motivators for HW and two of them specified that it is impossible to maintain health workers in rural areas without providing them a good top-up on salary.

Among the best non-financial incentives for HW, interviewees cited:

- trainings (48%)
- career possibilities (27%)
housing allowance (27%)
- recognition for their work (24%)
- improvement of the health infrastructures (17%)
- transport allowances (14%)
- improvement of the working environment (10%)
- health insurance for HW (10%)
- improvement of the capacity building of health managers (10%)
- governmental support to medical staff in need (7%)
- scholarships (7%)
- flexible work hours (3%)
spend their time in training to gain the per diem. As for the researcher’s opinion, two are very important negative effects: the brain drainage of HW from public facilities to international health development projects, and the importance given to NGOs and national agencies to guarantee the healthcare in rural and remote areas. Numerous international researches on the argument indicate that incentives are a practice in many Developing Countries with the objective to reduce the brain drainage of HW from rural to urban areas and from the Country to more Developed Countries. Moreover, the incentive mechanism is a practice well recognized by the WHO.

Every INGO interviewed admitted to have incentive mechanism for local health workers serving in their projects in rural and remote areas of Ethiopia.

Another important evidence coming out from the interviews is the importance of non-financial incentives. During the discussion on incentive mechanisms, INGOs and Health Managers have mainly referred to the financial incentives. But HW interviewed have underlined also the importance of the non-financial incentives. During the interviews the word recognition had a lot of importance among HW, they ask recognition for their work and more when they are working in rural and remote areas of the Ethiopia.

As WHO declared in his user guide for HRH in rural and remote areas, a good incentive mechanism includes both financial and non-financial incentives to be positive and useful to the empowerment of local health staff.

In conclusion, the research showed that incentive mechanisms are not positive or negative in absolute terms. It is important however analyzing the Ethiopian context and to limit as much as possible the negative effects of incentives. For example, it is advisable a certain level of coordination among all international organizations and agencies engaged in Ethiopia to reduce the differences across the several incentive practices and the salary scales of HW in rural areas, and to coordinate the in-service training programs to avoid the participation of HW also for the sake of the per diem.

Incentive mechanisms are used by Ethiopian Government, INGOs and international agencies to guarantee health coverage also in rural and remote areas of the Country. International efforts should first focus on helping countries to develop an HRH strategy reflective of specific domestic contexts and international best practices, keeping themselves abreast about the international debate on the argument, and creating forum and participating with research and evidences experienced.

A good incentive strategy should include both financial and non-financial incentives, and a good level knowledge of the labor market of the country in which it is set. Indeed, the research has pointed out the importance of a common and shared strategy of incentive mechanisms, in order to
create a conductive environment to increase their positive effects on the National Health System, enrich its resources and better support the delivery of health care for all. Interviews confirmed a general positive impression of the incentive mechanisms to health workers in rural and remote areas, for a better quality delivery of health services.

**Acknowledgment**

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