Focused Bottom-Up Monitoring Approach for Improving Performance Health Indicators- Lessons from Community Based Monitoring and Planning Process, Maharashtra

Abstract

Existing health information systems in developing countries are managed and used mainly by biomedically trained personnel and by general healthcare administrators. They focus on epidemiology, service utilization, and finance; they generate little of the socio-cultural data needed for developing and adjusting health services and disease control programme to local health related perceptions, values and resources. The health indicator information system processes the information in such a way that only summaries reach the higher levels especially in India, it generates data mostly at the state level, that too technical and having limited to local communities and also never generated based on local community’s involvement and needs. However, one of the welcome steps envisaged under National Rural Health Mission for strengthening the Monitoring of Information and Evaluation Systems is triangulation of data generated through health system and community-based accountability process i.e. Community Based Monitoring and Planning process in Maharashtra. Hence, under ongoing community based monitoring and planning process, a focused intervention was initiated the intervention was implemented in more than 307 villages from 19 blocks of 9 districts of Maharashtra. The attempt was made to simplify and demystify the performance Health Indicator data towards empowering communities for using Health Indicator data as an evidence to ensure accountability of service providers, ultimately contribute in improving health service delivery. The lessons and learning shared in this manuscript would encourage and provide perspective to health activists, community practitioners, and public health system on how performance health indicators data can be used for mobilizing communities towards improving health service delivery.

Keywords: Health Indicators; Community Based Monitoring; Accountability; Village Health Sanitation and Nutrition committee; Health Information Management System; Public Health system; National Health Mission; Maternal health indicators; Maternal health; High risk mother

Introduction

In a vast country like India, full of diversity and disparities, it is a big challenge to implement, the various programmes in the health sector following the policy guidelines within the constitutional and legal framework and to achieve the desired impact on all sections of the population, especially the deprived ones. In order to plan, design, implement and monitor these programs and to evaluate their performance and impact, statistical data on a large number of indicators are required [1]. Hence, the health statistics are crucial for decision making at all levels of health care systems. It facilitates better decisions in policy design, health planning, management, monitoring and evaluation of programmes and services including patient care and facilitate improvements in overall health services performance and outcome. Health management information incorporates all the data needed by policy makers, clinicians and health service users to

Abbreviations

improve and protect population health [3]. Further, the demand for health statistics has increased, especially in the context of growing interest on evidence-based planning in health programmes as well as promoting the values of transparency and accountability as essential requirements of democratic governance at various levels in India as well as globally [1]. After Alma Ata declaration ‘Health for All by 2000’ was launched in 137 countries including India. The responsibility of state to provide comprehensive primary health care as per this declaration led to formulation of country’s first National Health Policy in 1983. An important problem identified was the state of Maternal and Child Health Care (MCH) and the policy identified key indicators and time bound targets to be achieved in respect of these indicators. Then onwards various policies, followed by Millennium Development Goals (MDG) in 2015 and various programs, schemes were launched being implemented since last 40 years towards protect, improve life of people. In this regard as mentioned above, decision makers need to be well equipped to measure whether policies and programmes are directed at the right beneficiaries, are meeting set targets and whether appropriate monitoring and evaluation tools are in place. Donors are also increasingly placing more emphasis on performance, linking the release of funds to performance based measures [1]. Hence, various data sources were generated such as Data on most of the all health indicators is available in successive rounds of the Census of India, Sample Registration System, National Family Health Survey (NFHS), District level Household & Facility Survey (DLHS), National Sample Survey (NSS), and Official Statistics available in Health & Family Welfare Year books and other publications of government of India.

**NRHM and Health Information Management System**

Along these resources of data, in April 2005, National Rural Health Mission (NRHM), which was launched by the Government of India (GoI). NRHM has a mandate to bringing about dramatic improvement in the health system and the health status of the people, especially those who live in the rural areas of the country. Apart from several mechanisms that would be established under NRHM, one of the core strategies is the "Strengthening capacities for data collection, assessment and review for evidence-based planning, monitoring and supervision". As a step in this direction, the Ministry of Health and Family Welfare (MoHFW), GOI, has established a dedicated Health Management Information System (HMIS) portal for all Public Health related information [2]. In addition, one of the welcome steps envisaged under NRHM for strengthening the Monitoring of Information and Evaluation Systems (MIES) is triangulation of data generated through health system and community-based accountability process i.e. Community Based Monitoring and Planning (CBMP). This triangulation was mainly planned to enable increased participation by all stakeholders in managing and developing accountable and responsive services and supports, participatory decision making based on data reflecting enabling factors and implementation bottlenecks.

Community Based Monitoring and Planning process as an innovative and community need based feedback mechanism-The CBMP was introduced as a third-party monitoring of rural public health service. Nine states of the country, including Maharashtra, were selected to implement CBMP on a pilot basis between 2007 and 2009 [4]. Since last 13 years, CBMP processes have continued to expand in Maharashtra, covering 1120 villages in 17 districts at present, based on facilitation by around 25 Civil Society Organizations (CSOs). According to the objectives of CBMP mentioned in manual, It will provide regular and systematic information about community needs, which will be used to guide the planning process appropriately; It will provide feedback according to the locally developed yardsticks, as well as on some key indicators; It will provide feedback on the status of fulfilment of entitlements, functioning of various levels of the Public Health System (PHS) and service providers, identifying gaps, deficiencies in services and levels of community satisfaction, which can facilitate corrective action in a framework of accountability; It will enable the community and community-based organisations (CBOs) to become equal partners in the planning process [2]. It would increase the community sense of involvement and participation to improve responsive functioning of the public health system. The community should emerge as active subjects rather than passive objects in the context of the PHS; It can also be used for validating the data collected by the Auxiliary Nurse Midwife (ANM), Anganwadi Worker (AWW) and other functionaries of the PHS [4]. Hence CBMP in Maharashtra is organized at multiple levels, from village to state. Health officials, elected local Panchayat representatives, CSOs and active community members form multi-stakeholder monitoring and planning committees (M&PC) at each level. The implementation of CBMP includes awareness-raising and preparatory activities, capacity-building and training of participants, formation and functioning of M&PCs, community-based assessment of health services, organization of public hearings and state-level dialogue events [5]. Specifically, CBMP generates evidence which is not generally available through conventional channels, namely, quality of provider–patient interface, ‘informal’ or illegal charges being demanded by certain providers, actual availability and time wise presence of health staff in field and in facilities, non-medical aspects of services, for example, levels of cleanliness, availability of drinking water, causes of patient dissatisfaction and so on [6]. However, to triangulate the existing generated data around health indicators by PHS with data generated through CBMP process, focused intervention was planned and implemented since last two years.

**Material and Methods**

**Focused intervention under CBMP on improving performance Health Indicators (HI)**

Since last decade, various processes are being implemented under CBMP process. However, while working on HI in the year 2018-19 onwards, the core operational framework and key processes under CBMP have been retained. But eventually, method of evidence generation was changed in which instead of covering various health care entitlements, it was decided that to select and assess performance HIs mainly linked with maternal and child health. See below a matrix on activities conducted under regular CBMP since last 10 years and modified activities conducted under focused HI intervention. Please refer table 1- Activity flow chart of focused intervention on performance Health Indicators The selection of these performance was done in consultation with grassroot level CBMP implementing organizations who have intensive and continuous interaction with local communities. The activities mentioned in column no. 2 were conducted in 307 villages and 59 PHCs from 19 blocks of 9 districts covered under CBMP area. Though the regular CBMP process is being implemented in 886 villages, 180 PHCs from 29 blocks of 13
districts of Maharashtra, it was decided that the focused HI based intervention will be conducted in villages where the CBMP process is being implemented since 2007 i.e. pioneering villages. The focused intervention was initiated from November 2018 in all selected CBMP covered areas. In order to do a systematic documentation of this new initiative, the data was collected in two phases. The phase 1 considered as a non-intervention phase where the information related to all selected performance indicators was collected from records of health providers for the period from April to October 2018 whereas the phase 2 was considered as intervention phase for the period from November 2018 to March 2019, where activities were conducted in selected 307 CBMP covered villages followed by the data generated on these selected HI was taken from records maintained by health service providers. Along with this quantitative data, the attempts were made to document list of issues emerged from this initiative as well as the positive changes occurred mainly in delivery of services were also documented by activists from CBMP implementing organizations in the form ‘stories of change’.

Results

Positive impacts of focused intervention on performance HIs

The impact was measured mainly by comparing the data from two phases i.e. non-intervention phase and intervention phase. The main focus was of comparison was to understand increased number of beneficiaries in the context of availing the health services. As well as, the attempt was made to analyse the documented stories of change and minutes of meeting of VHSNCs which helped in understanding factors that are influencing various qualitative aspects like community mobilization, participation, integration/conversion among various actors etc.

2.3 times increased registration of pregnant women.

If we compare between intervention and non-intervention phase, increase in pregnancy registrations were found visible. In non-intervention phase from April18 v-October 2018, total registrations were 609 i.e. average registrations per month were 87. Whereas in since intervention started, in the period of November18 to March19 registrations recorded were 1376. Average registrations it per month for this period increased to 187. Which was a bigger jump. This clearly reflects impact of 2.3 times increase in the registrations of pregnant women. Please see Figure 1.

1.8 times increased the number of pregnant women in ANC.

It was seen that not only for obtaining registration records from ANM, but systematic follow-up and monitoring on ANC services too played important role during intervention. Average 20 to 25 percent increases in ANC services were found and average ANC check-ups were increased by 1.8 times. Above graph clearly reflect impact of intervention in the period. Please see Figure 2.

2.3 times increased no. of High-risk pregnant women who have received IV Iron Sucrose.

Average 27% increase found in HB check-up during ANC. Haemoglobin (HB) check-up is a key check-up in the second and third trimester of the pregnancy. It was seen that number of women having HB less than 9 in the intervention period was increased 2 times more than that of non-intervention period. But average increase in receiving IV iron sucrose was increased only by 1.2 times. These were certainly lesser in proportion of increased HB checkings. During intervention period from regular follow-ups, it came forward that treating women HB less than 9 was increased but these women were divided in two categories. Women who could monitored by giving medicines with diet plan, and Iron sucrose injectable were given only if HB drops under 7.0. Please see Figure 3.
get complete data for eligible women for PMMMVY and JSY schemes. To rectify these gap efforts were made in the intervention period like awareness for early registration, scheme benefits. Committee members arranged awareness camps for opening bank accounts, documents required. From this awareness came forward that 56% women conceived first time did not receive PMMMVY first instalment after registration. Nearly half from the total entitled women did not receive neither PMMMVY nor JSY benefits after registering under conceiving first time and BPL/SC/ST conceived second time.

**Increased active participation of VHSNC**

During the intervention, it was clearly coming forward that if the committee meetings are held up regularly, awareness is generated, and more issues get resolved through active community participation with the committee members. Out of 289 villages from 16 blocks, 56.5% villages conducted at least 4 VHSNC meetings in the span of Oct 18 to March 19. All these meetings had main agenda of making VHSNC more active and functional for resolving local level issues. These committees focused further on awareness on anaemia, arranging HB camps, follow-ups of various camps related to ANC, immunisation, awareness camps on institutional delivery and public health services. Apart from that committees and nodal NGOs took rigorous follow-ups about early registration during pregnancy, awareness about having account in banks, required documents, and helped women to open bank accounts organising camps. All these committee activities showed direct impact on the increased number in ANC services, increased registrations, and availing scheme benefits.

**Discussion**

There is no doubt that grounded work of 13 years of CBMP process facilitated in implementation of focused intervention on performance Health Indicator. However, our analysis highlights critical ingredients that would be important for implementing community-based intervention focusing on performance Health Indicator in other states of India and perhaps relevant to other countries.

**Retrieving the existing democratic spaces and converting these into forces**

Various democratic spaces are existing in each and every village across all over India. These spaces are either given by constitution like village council (Gram Sabha), Gram Panchayat etc. or some of spaces have been established under any program/scheme declared by state or central government. For example, in health sector, VHSNC was constituted in each and every village of India under NHM. It is expected that these invented spaces should be linked with village council or elected body of village council. But, unfortunately, both these spaces are mostly defunct and these spaces are just available spaces. Hence, the attempt was made to focus on these both spaces and tried to convert them into forces. In this case, the most of the VHSNCs were conducted meeting occasionally after receiving funds but the activists from CBMP implementing organization had interacted with each member of VHSNC individually as well as conducted regular and continuous meeting of VHSNC for orienting them about importance of HI and intervention related to it. The regular interaction and meeting with VHSNC members contributed in increasing ownership of members as well as their involvement in it. Another tactic is very important in the context of converting spaces in to forces is that the VHSNC members were engaged by giving them various activities towards improving the performance HI. For example, initially the local activist has pushed for regular monthly VHSNC meeting in each intervention village. In each meeting, VHSNC members reviewed and discussed every issue related to HI. The plan of action for addressing issues was developed by VHSNC members. All these tactics contributed in reactivating the VHSNC which led to active participation of members in taking forward intervention as well as in resolving the issues.

**VHSNC saved the life of pregnant women and her baby!**

A migrated labourer family from Shirdi was working in bricks furnace unit on daily wages basis in Junnar, a tribal block of Pune. Sanjivani, a wife of migrated labourer was third time pregnant. As she went for her ANC check up in Atpale PHC, doctor told her that she has server anaemia having only 4 gm% and as she was pregnant it will
be life threatening situation for her as well as baby. But, due to very poor financial conditions and lack of knowledge about this physical condition, she felt very helpless, disappointed and also confused. As on one hand, there were very limited facilities available at Government’s Community Health Centre(CHC); on other hand, private hospitals in Pune city required at least 2 hours to reach there with charging more fees for medical treatment, she was non-co-operative and very reluctant to take any medical treatment. Indeed, the Surule village is covered under CBMP process and also selected under focused HI intervention, during orientation of VHSNC by the local health activists. The orientation meetings and regular interaction between local activist and VHSNC members provided better understanding to VHSNC members about their role and responsibilities. As a result of this, the VHSNC meeting started on monthly basis, in on meeting, the local health provider shared that communities are not having faith on any health care system especially public health services, she presented a case of Sanjivani as an example of mistrust among communities on health care system. Hence, the VHSNC members have taken this case as a challenge to regain the trust as well as improve the functioning of VHSNC through it. All female members visited Sanjivani’s family and ensured her that VHSNC and health provider will take care of her. Followed by they have arranged ambulance with the help of Medical Officer and referred her to Government hospital at Pune. The VHSNC members were in touch with hospital superintendent and staff for further treatment. Finally, Sanjivani delivered a healthy baby and she appreciated the efforts of VHSNC members by saying VHSNC saved life of my baby and me!

Enabling conducive environment for increasing involvement and engagement of communities and local decision makers.

Community accountability processes provides platform to communities and activists mainly to ask questions. However, due to power dynamics between various strata within community, the voices marginalized and vulnerable communities often unable to reach out. Hence, tracking of all beneficiaries especially from marginalized communities where members of VHSNC distributed responsibilities among themselves from tracking. It was also observed that VHSNC members ensured support to beneficiaries or their relatives who had raised the issues or given critical feedback on performance HI, mainly in mass/public dialogue. This tactic contributed in not only building confidence but also help in increasing their courage to ask question. As well as, the beneficiaries recognized the importance of their involvement and engagement when the VHSNC members and activists shared positive impacts of improvement in performance HI. This has been evident by comparing the number of issues emerged in last two financial years. It is observed that in 2018-19, the number of issues raised under this intervention was—whereas the number has substantially increased -- in 2019-20.

Empowering VHSNCs by demystifying and simplifying the Health Indicator related data

As it is mentioned above that communities and even service providers haven’t known the criticality and importance of record keeping/filling of registers especially in the context of Health Indicators. It is also evident that these indicators are not decided and prioritized in consultation with either community or service providers. Indeed, communities are habitual in just giving answers to questions asked by service providers, also service providers or any official has no obligation to get back to communities and share what happened to their feedback. Hence, it was decided to initiate the intervention on performance indicator than main indicator like Maternal Mortality Rate(MMR), as these key indicators have multi-faceted and complex causes. Hence, the intervention has planned with the assumption that focused intervention for improving performance indicators would contribute in improving key HI. Before initiating intervention, consensus was built among various actors especially among VHSNCs and local service providers where detailed discussion conducted by activists on basic information on key HI and performance HI; its importance and planned intervention around that. Followed by VHSNC members were involved in analysis where they have oriented about how to identify identification the issues from the information received from health providers, various activities were developed and conducted towards monitoring of each HI and resolving issues.

Addressing not only health care services issues but also allied services.

As Health is a cross cutting issue for all socio-economical and cultural aspects, while working in health sector, it is crucial to address not only health related issues but also social determinants of health. It was one of the limitations faced by activists and VHSNCs during implementation of CBMP process. However, while working of performance indicators, sector wise categorization done. In which most of the issues were from health sector whereas issues from nutrition, education, banking and rural development were also identified. Hence, VHSNCs had taken responsibility to address issues which are directly or indirectly linked with performance HI.

VHSNC addressed the issues related to Health social determinants such as nutrition, water and sanitation.

Kitali, a village situated in Armorri block of Gadchiroli district. All basic and essential public facilities like school, sub centre, anganwadi are available in this village. The activists from local organization were regularly visited village as it is under focused HI intervention. As a part of orientation of VHSNC and activity given to VHSNC, they have visited each PHF. While visiting to anganwadi, they had interacted with beneficiaries i.e. pregnant, lactating women and worker present in anganwadi centre as well as worker. As it was rainy season, the issue of uncleaned drinking water has been raised by both of them. And next day, there was epidemic of diarrhoea in the village. VHSNC responded immediately and provided support to local health functionaries during dealing with epidemic. After surge of epidemic, VHSNC members visited each and every hand pump as well as all wells followed by discussion with worker who is looking after the maintenance of these facilities. While interacting with community members, the VHSNC realized that the worker is doing his job efficiently and regularly. As the worker pointed out that there is no regular supply of bleaching powder, the VHSNC demanded to block level officer of rural development as well as water & sanitation department. And also ensured supply of bleaching powder from block level and gram panchayat i.e. village council. Followed by regular testing of water samples sent to sub-district hospital is being monitored by VHSNC on regular basis. This strategy contributed in bringing conversion among not only various actors and sectors but also enabled in improving inter-departmental cooperation.
Supportive engagement with service providers than confrontation

‘In order to improve the performance of the PHS, simply confronting and blaming to frontline providers is not sustainable strategy. Based on this lesson from CBMP process, proper orientation of healthcare providers and officials at various levels at the initiation of intervention on performance HI helped in reshaping their attitudes and primes them to respond to accountability mechanisms in a positive manner. Proactive and responsive healthcare providers have been publicly appreciated, and genuine constraints they face have been raised during multi-stakeholder dialogues involving officials with a view to addressing them. Medical officer agreed to provide iron sucrose to high risk pregnant women having less than 9 gm % HB. In Beed block from Beed district, the issue of not giving intravenous (IV) iron sucrose to pregnant women of having less than 9 gm% of HB, according to guidelines provided by Union Ministry of Health and Family Welfare. But in all PHCs from Beed block, the practise of providing iron sucrose treatment for those pregnant women having Hb less than 7 gm% and not 9 gm%. Hence this issue was identified in monthly meeting of VHSNC while tracking of high risk mother. It was observed that the pregnant women sent back from Primary Health Centre with conservative treatment who are having less more than 7 gm%. After continuous follow up with local health providers by VHSNC for changing the norm, but it didn’t resolve. Followed by the VHSNC involved Gram Sabha, as this issue needed to address at higher level, gram sabha issued written demand to medical officer and block level official for correcting it. Local CBMP implementing organization arranged a meeting between VHSNC members and medical staff of PHC to discuss and resolve it. But medical officer cleared his position by saying that he is following the order received from district level. Then In order to resolve this important issues, medical officers and all VHSNCs decided to write join request letter to block and district officials. Finally, issue was resolved after an advocacy and follow up done by medical officer and elected members of VHSNCs jointly.

Ensuring continuous external facilitation from activists of grassroot level organizations

The CBMP process in Maharashtra has been significantly based on CSOs working at various levels. Their presence, forms and modes of activity vary tremendously across contexts, and hence their role would need to be carefully considered. Here, conscious effort was taken while defining the role of activists where they have taken lead in initial period especially in reactivating and empowering VHSNCs followed by their orientation. The activities during intervention were mainly conducted by VHSNC where the activists were involved in facilitation. It is clear that the role of activists and CSOs cannot be zero down but it can be modified from leading to facilitation and keeping motivation among key actors as well as maintaining the momentum of the process.

Decentralized planning of local available funds for addressing the service delivery issues

As we learnt from CBMP that monitoring and planning must go hand in hand, the emphasis was given on the planning component in focused HI intervention process. As a part of data collection, the information related to budget expenditure was collected from service providers to understand present status of it. As a strategy, the issues emerged from intervention, have been addressed by planning of local funds, it contributed in getting effective utilization of local funds mainly keeping in view community’s needs. Attempt was made to utilize funds (other than VHSNC untied funds) received from other sources or under other schemes but have some linkages with health.

There are following few examples where local funds were utilized for addressing the issues emerged from performance HI intervention.

• In Ghatajni block of Yavatmal district, the VHSNC used their untied funds for organizing the camp for opening of bank account of pregnant women. The VHSNC and local activists decided to address the issue of not getting monetary benefits to pregnant women as they don’t have bank account. They had meeting with bank manager and requested to participate in the camp where all pregnant women have been mobilized with required documents for opening of bank account.

• The VHSNC untied funds were utilized for purchasing Urine Pregnancy Test (UPT) kits in Chandagad village from Kurkheda block of Gadchiroli district.

• The VHSNC of Vagajwadi village from Bhor block of Pune district addressed the issue of non-availability of equipment like BP apparatus, wight measuring machine, blood sugar measurement kit etc. It has been solved by purchasing all equipments from 14th finance commission funds available at village level. These equipments are being used for ANC of pregnant women.

Conclusion

Despite the undeniable positive impacts of CBMP, lack of political will, resistance by many officials to accountability processes, attitudinal as well as structural barriers to improving services, and deeply ingrained undemocratic modes of functioning contribute to the following major challenges:

Defending the democratic spaces like VHSNC, monitoring and planning committees that have been created as part of the CBMP process is a continuous struggle because they are not yet fully integrated in the system. The elected representatives are one of key decision makers. But they are being appointed on rotation basis and replace after every 5 years through democratic election process. Indeed, conduction of regular and continuous orientation and sensitization of these newly elected representative is somewhat cumbersome process. Another challenge is that there are persistent pressures from some health system officials to constrict or dilute certain accountability processes, a situation that has to be resisted by CBMP implementing organizations in an ongoing manner.

Through focused intervention, it is very clear that it has potential to resolve the local level issues leading improvement in service delivery. However, major policy changes at the state level are required to address these issues, or communities and local health activists risk becoming de-motivated, and may lose interest in this process.

Addressing the discrepancies between government data and feedback received from beneficiaries during tracking them. Firstly, many gaps are observed in maintenance of registers by service providers as well as there are not timely updated. However, these
are very chronic issues having deep rooted causes like vacant post of service providers, major work load, contractual appointment and duplication of work due to lack of intra and inter-departmental coordination. The identified discrepancies during focused HI intervention have been raised and addressed in consultation with concerned health providers. However, Human Resources promotion, planning and effective management are main solutions for addressing these issues.

References