Validation of Targets Related to Maternal and Child Health Services in the Rural Area of the Bhavnagar District, Gujarat: A Cross Sectional Study

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Abstract:

Introduction: Despite 'Target free approach' being implemented since more than 20 years, the targets related to MCH services are still decided and distributed by top to bottom approach in Gujarat. Irrational distribution of targets may lead to under or over achievement of the targets by SCs and PHCs. Objective: To validate the targets related to MCH services in the rural areas of the Bhavnagar district, Gujarat for the year 2019-2020. Method: A cross-sectional study was carried out to count the actual number of MCH beneficiaries by visiting each house of the selected villages (One village each from a good performing and a poor performing SCs of two randomly selected PHCs from each block of Bhavnagar district) and interviewing a family member of the household. This numbers from the villages were compared with the targets assigned to the respective villages. Results: The actual number of antenatal women was found to be 26.6% lower and 38.8% higher than the assigned targets for early pregnancy registration in the villages of poor and good performing SCs respectively. Similarly the actual number of deliveries was found to be 47.2% lower than the assigned targets for institutional deliveries in poor performing SCs. It was also observed that the actual number of children eligible for full immunization in the respective area was found to be much lower in both the groups of SCs than the assigned targets. Conclusion: Assigned MCH targets were found improper in the villages of Bhavnagar district.

Keywords: Full immunization, Institutional delivery, Registration of pregnancy, Targets.

Introduction:

In India, Family Planning Programme was the first health programme to be introduced in 1952. In fact India was the first country to launch a national programme for Family Planning. Later on the programme was expanded to include the elements of Child Survival and Safe Motherhood (CSSM), Universal Immunization and Reproductive and Child Health (RCH) to focus on overall health of women and children.¹

Before 1996, there was rigid implementation of target-based approach in the programme. The annual targets were prescribed by the central government to each state, which in turn were passed to the facility level through the system.² This approach placed little importance on needs of the community.

In 1995, Ministry of Health and Family Welfare (MoHFW) decided to implement a 'target free approach' (TFA) to family planning in one or two districts of each state in the country on an experimental basis. Later the approach was renamed as Community Needs Assessment Approach (CNAA). The 'top-down' approach was replaced by 'bottom-up' approach with an aim to focus on community needs and to improve the quality of service.³

In Gujarat, the approach was piloted in Valsad district. However according to Sangwan and Maru
From the selected villages, all households were visited by the investigator. From each household, a woman, who was pregnant anytime during April 2019 to March 2020, was interviewed. If such woman was not available in the house, any other available adult female member of the household was interviewed. If no female member was available at the time of the visit, then any available adult male member of the household was interviewed.

During the house-to-house survey, 99 houses were found closed and all possible information about those families was collected from their neighbours. Best possible attempts have been made to collect the complete information from available records and from the family member who was best aware about the information.

Demographic information regarding all family members of the household was collected by using pre-tested, semi-structured questionnaire. Data related to assigned targets were provided by the Jilla Panchayat, Bhavnagar. These data were compared with the primary data collected by the investigator.

Informed written consent was obtained from the participants after explaining the nature and purpose of the study in the vernacular language.

Data entry was done in Microsoft excel and data analysis was done in Epi Info software version 7.0 developed by Centers for Disease Control and Prevention (CDC) with appropriate data checks in order to avoid errors in data entry.

**Results:**

The data was collected from a total of 40 villages (20 good performing and 20 poor performing), comprising a total of 4614 households which included 2413 households from villages of poor performing and 2201 households from villages of good performing subcentres. From each household, one adult member fulfilling the inclusion criteria was interviewed. There were 213 and 331 couples (respectively in the villages of poor and good performing subcentres) with a pregnant woman during the period between April 2019 and March 2020.
Table 1 to 3 show the comparison of assigned targets with the actual number of beneficiaries in the area. The information about assigned targets for different MCH services for the year 2019-20 were collected from JillaPanchayat Bhavnagar and Information about number of pregnant women, number of deliveries and number of children eligible for full immunization in the household during the year 2019-20 was collected from the family member/neighbour of each household.

According to Table 2, in poor performing SCs, assigned targets for the institutional delivery were higher by 47.2% than the actual no. of deliveries for that area as verified by field survey. While it was found higher by 2.2% in the villages of good performing SCs. Overall assigned targets for whole area under the study was higher by 26.9% than the actual number of pregnancies in the whole area.

Table 3 shows that, in poor performing SCs, assigned targets for the full immunization were higher by 44.4% than the actual number of eligible children for full immunization in that area as verified by field survey. Similarly the assigned targets were found 28.8% higher in good performing SCs. Overall assigned targets of the whole area under study was higher by 37.1% than the actual number of eligible children for full immunization in the area during the study period.

### Table 1: Comparison of the targets for early registration of pregnancy with the actual number of pregnant women in the area during the year 2019-20

<table>
<thead>
<tr>
<th>Sub-centers</th>
<th>Assigned target for pregnancy registration (a)</th>
<th>Number of pregnant women in the Area (b)</th>
<th>Difference (%=[a-b]/a*100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor performing</td>
<td>293</td>
<td>215</td>
<td>+78 (+26.6%)</td>
</tr>
<tr>
<td>Good performing</td>
<td>243</td>
<td>337</td>
<td>-94 (-38.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>536</td>
<td>552</td>
<td>-16 (-2.9%)</td>
</tr>
</tbody>
</table>

As observed from Table 1, for poor performing SCs, assigned targets for the year 2019-20 for pregnancy registration were found higher by 26.6% than the actual number of pregnancies during the year in the area as verified by field survey. However, the assigned targets were found lower by 38.7% in the good performing SCs. Overall assigned target of the whole area under study seems to be lower by 2.9%.

### Table 2: Comparison of the targets for institutional delivery with the actual number of delivery in the area during the year 2019-20

<table>
<thead>
<tr>
<th>Sub-centers</th>
<th>Assigned target for institutional delivery (a)</th>
<th>Actual number of deliveries in the area (b)</th>
<th>Difference (%=[a-b]/a*100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor performing</td>
<td>267</td>
<td>141</td>
<td>+126 (+47.2%)</td>
</tr>
<tr>
<td>Good performing</td>
<td>219</td>
<td>214</td>
<td>+5 (+2.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>486</td>
<td>355</td>
<td>+131 (+26.9%)</td>
</tr>
</tbody>
</table>
Discussion:

In this study, the actual number of pregnant women in villages of poor performing SCs was found lower than the assigned target for early registration of pregnancy, while reverse scenario was observed in the villages of good performing SCs. Thus even if all available pregnant women in villages of poor performing SCs would have had their pregnancies registered, it would not have been possible for SCs to achieve the assigned targets. On the other side, for villages in good performing SCs, even if only 72% of all the pregnancies could be registered, targets of these villages could be achieved. This irrational assignment of the targets results into wrong assessment of the performance of the SCs, which ultimately makes the whole exercise of assessing the performance of the SCs useless.

For institutional delivery, the assigned targets were found nearly twice the actual number of deliveries that took place in the villages of poor performing SCs during the same year. Therefore even if all the pregnant women of the area had delivered their babies in an institution, the SCs would achieve only about 50% of the assigned targets. However for good performing SCs, the assigned targets for the institutional delivery were found nearly comparable to the actual number of deliveries that took place in the area. And probably that might be the reason of them being identified as good performing SCs.

It was observed that for full immunization, the actual number of eligible children in the villages of poor and good performing SCs was respectively 44.4% and 28.8% less as compared to the assigned targets for the same year. Thus it was not possible for SCs to achieve the assigned targets even with the best of their efforts.

This so-called (false) under-achievement or poor performance leads to undue pressure from higher authorities on the staff and this in turn may lead to false (exaggerated) reporting of MCH services by field staff. This may lead to generation of wrong and useless reports which cannot be used for monitoring or policy decisions at higher level. This practice of exaggerated reporting leads to perception among higher authorities that the assigned targets are appropriate. So they give similar targets for the next year and this cycle continues. This practice results into wastage of human resources in useless work.

Conclusion:

Over all it was observed that, MCH targets set by higher authorities were found notably different from the number of available beneficiaries during the same year in the same rural area of the Bhavnagar district.

Recommendations

The distribution of MCH targets (ANC, registration, Institutional delivery and full Immunization) needs to be rationalized. If this can be done, official record of the performance of Bhavnagar
district (as a whole) will be improved significantly. And it may also improve the record of the performance of the so-called poorly performing SCs. This may provide us the real data about the performance of the centers, which can be used by the authorities for various purposes. The targets for the area should be determined on the basis of latest available records like Family Health Survey or any other latest and reliably updated records.

Declaration:
Conflicts of Interest: Nil
Funding: Nil

References: