



Need for strengthening the routine reporting system of health services: A comparison of HMIS and national survey reports of Himachal Pradesh

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ABSTRACT

National health surveys along with periodic continuous reporting under various health programmes, are the common ways of assessing the health problems and the condition of health services in any area of the country. The ingenuity of this report plays a major role in framing our future health policies. The report of NFHS4 for the state of Himachal Pradesh, conducted in the year 2015-16 was compared with the reporting for the reproductive and child health indicators from the HMIS for the same time period. A difference of 10-25% exists between the two reports in terms of immunization, delivery and family planning. The survey reported a better delivery of services for immunization and pregnant women, whereas routine reporting demonstrated a better performance in family planning. The cause of discrepancies between our national reporting system and surveys need to be identified to get a more realistic view of the ground realities.

INTRODUCTION

Performance assessment of the health services in any area is usually assessed either by independent surveys or their routine health management information system (HMIS). [1] National and state level performance is assessed by their respective surveys which include representative random sampling, but if the performance of any particular district or centers of a particular block is to be assessed, then the MIS becomes an important and immediate tool for assessment. Such a routine activity generates rich information but with expected bias, as the reporter tends to report the socially and administratively desirable response in their monthly performance. Counter to this bias, an independent survey in each block has the operational limitations and could not be feasible, but a regular feedback based on the analyzed MIS data can bring the faith in the MIS data and improve its understanding and further helps the primary and

secondary level health staff to refine the strategies in the local area. Before conducting an independent survey the usefulness of MIS data needs to be looked first to have an overall insight for program and its performance. Through this analysis the authors intend to identify the variability between the results from the MIS data and the national level survey of reproductive and child health (RCH) indicators of Himachal Pradesh.

MATERIAL AND METHODS

Himachal Pradesh, one of the smaller states of the north-western part of the country, and a population of around 0.68 crore [2] has made significant progress in bringing down the crude birth and death rates and other mortality indicators thereby increasing the standard of living. In HP the health services (promotive, preventive and curative) are primarily provided by Ministry of health and family welfare and the department of Indian health systems of medicine and homeopathy. Due to the large rural

population and hostile geographic and weather conditions, the State is still backward and poor in terms of economy.[3] The annual report for the year 2015-16 of RCH indicators was taken from the official site of the department of Health and Family welfare and the website of the National Health Mission Himachal Pradesh.[4] The normal flow of data in the state follows the bottom up approach. The SubCentre reports to Primary Health Center (PHC), the PHC to Community Health Center (CHC) and the CHC to District Hospital. District Hospital reports to District Headquarter (HQ) where data after collation is sent to the State HQ. The report from the National family health survey-4 (2015-16) also presented results for certain indicators of RCH. This survey used standardized questionnaires and employed a face to face interview technique with adults for collection of data. It followed a multi stage clustered sampling approach for collection

of data across all the states. It involved interviewing women of age 15-49 years, using the individual woman's questionnaire. Men aged 15-54 years in about 15% of households were interviewed using the individual Men's Questionnaire. [5]

The RCH indicators in HMIS were grouped into immunization, family planning, maternal and child health (MCH). The results of the indicators were presented in the form of proportion of total needs assessed. The NFHS report grouped the above indicators as marriage and fertility, current use of family planning methods, delivery care and child immunizations. The achievements here were presented as proportion of total sample surveyed.

RESULTS

Table 1 : Comparison of HMIS and NFHS-4 reports in terms of RCH indicators for Himachal Pradesh. (2015-16)

Indicator groups	HMIS indicators	Percentage achievement of need assessment	NFHS-4 indicators	Percentage
Immunization	BCG	70%	Children age 12-23 months who have received BCG	94.8%
	DPT-3	60%	Children age 12-23 months who have received 3 doses of DPT vaccine	85.0%
	OPV-3	71.1%	Children age 12-23 months who have received 3 doses of polio vaccine	82.4%
	Measles	74.1%	Children age 12-23 months who have received measles vaccine	87.5%
MCH	Antenatal care	72.6%	Mothers who had at least 4 antenatal care visits	69.1%
	Institutional Deliveries	51%	Institutional births for births in last 5 years	76.4%
	Tetanus Immunisation (Pregnant Women)	63.4%	Mothers whose last birth was protected against neonatal tetanus*	86.3%
	Pregnant Women given 100 IFA	59.2%	Mothers who consumed iron folic acid for 100 days or more when they were pregnant	49.4%
Family planning	Condom user among eligible couples (free distribution)	16.3%	Current Use of Condom among currently married women age 15-49 years	12.7%
	Oral pill user among eligible couples (free distribution)	5.4%	Current use of pill among currently married women age 15-49 years	1.5%
	Tubectomy among females of eligible couples	1.6%	Female sterilization	34.5%
	Vasectomy among males of eligible couples	0.1%	Male sterilization	2.4%

*mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth.

The comparison of the survey and routine reporting in table 1 shows that a difference of 24.8% exists in BCG, 25% in DPT-3, 11.3% in OPV-3, 13.4% in measles vaccination of survey and routine reporting with NFHS reporting higher proportions. Among MCH indicators, institutional deliveries and TT immunization of mothers were 25.4% and 23.3% higher respectively in the survey as compared to routine reporting. The proportion of condom users and oral pill users was higher in the HMIS reporting as compared to the NFHS report. However female sterilization was 34.5% in the survey as compared to only 1.6% according to the routine reporting. (Table 1)

DISCUSSION

HMIS is a systematic monitoring and epidemiological tool which provides up-to-date complete and timely information to health managers at various levels in order to make important decisions about programme performance.[6] On comparing reports from the HMIS system with the results of the NFHS 4, we see a marked difference in figures for the same variables in the two reports. The figures reported under NFHS4 are higher by 15-20% in immunization coverage, and MCH services. However the number of antenatal cases are marginally high (2.5%) in the routine reporting and there is also higher number of contraceptive usage in the HMIS reports.

The reasons for difference between the two reports, with HMIS showing lower figures, could vary from faulty data collection and reporting to unfamiliarity of the grass root level worker with the HMIS reporting system. Other possible reason cited by a study from the same region for this discordant reporting and recording could be fear of reporting more/less than previous years which may lead to changes in the system further leading to increase burden of work or it could be under pressure reporting to present the health systems performance as it has been in past years.[7] Poor performance of health sectors in sub-Saharan Africa has been attributed to carrying out "business as usual", a static mindset among the key actors and poor supervision of health systems which are progress blocking agents.[8] Also a concept of "mailbox syndrome" has come up which is a phenomenon whereby a crucial information generated at the health facility level is mailed rather than used locally for quality care improvement. This syndrome is contrary to the concept of decentralization which is currently implemented in the country. [9, 10]

Information technology may have its own benefits but its usage still puts many ill at ease. Hence the sight of a complicated computer system with a village or a small township battling with problems of electricity and network connections could certainly result in lower reporting. [11] Higher reporting is seen in HMIS where consumable items such as IFA, condoms and oral pills are reported. Indent and consumption of all such supplies is reported separately to all the stores at the state level. Hence the reporting in these cases was probably being done more sincerely. The increase in proportion of ANC cases under HMIS is perhaps because of the criteria of four ANC checkups obligatory for inclusion in NFHS4.

Whereas the national level survey is conducted after carrying out stratified random sampling, the HMIS reporting involves the entire population under study. The MIS data should be discussed in a scientific and supportive manner, so that the service providers understand the implications of the information to the beneficiaries and community in general and should not consider such an intervention to be a fault finding exercise.

The reporting bias can be understood through discussion of the health system records and reports at the monthly meetings of supervisor and health workers. The feedback and corrections of facts or novel suggestions should be conveyed to the higher authorities for better implementation of health programmes and policies. The community itself can also monitor the quality of records at level of village (community based monitoring). [12]

CONCLUSION

A marked variability between the reports of MIS data and the national level survey was observed for various parameters of RCH. RCH is an important indicator of our country's health and development. These discrepancies point out towards the key stakeholders demanding corrective measures to be taken to improve the reporting through HMIS for a fairer picture of the utilization of our health services. Monitoring and supervision of HMIS can observe the errors and help rectify them through training of workers.

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