

Evaluation Of Health Management Information System For Maternal And Child Health Services At Subcentre Level In A Rural Block Of Haryana, India

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Abstract

Health Management Information System is defined as a system that provides upto date, relevant, adequate, timely, reliable and reasonably complete information to health managers at various level and sharing of technical and scientific information by health personnel in order to make well informed management decisions about programme performance and operations¹.

The Health Management Information System provides information to support planning and control functions of the managers and help them in decision making. In 1999, under Ninth Five Year Plan speedy operation of HMIS (version-2) was implemented throughout India which is again computer compatible w.e.f. 01-04-992.

Critical review of the Health Management Information System (Version-2) revealed that in rural setting a subcentre is responsible for about 5000 population in rural and 3000 in tribal and hilly area, has been recognized as unit of reporting of health information once a month. Health workers male and female, who make sub-centre team have been trained and given a set of 13 registers to record health information³.

MATERIAL AND METHODS

The study was conducted in the block Lakhanmajra which is the rural field practice area of Pt. BDSharma PGIMS, Distt. Rohtak, Haryana. 20 functional subcentre during the year 1998-99 were selected from this block.. The study design was cross-sectional. 400 mothers i.e. 20 mothers from each subcentre having children 1-2 years of age (i.e. born 1998-99) were selected by systematic random sampling technique from birth register of subcentre.

For assessing the quality of health information 10 elements of maternal and child care services were chosen, which were number of living children, date of birth, past obstetric history taken, number of ANC checkups, TT doses, IFA tablets, delivery conducted by, number of PNC checkups, family welfare method used and immunization of child.

A scoring system was developed for each element. First hand information generated from clients was matched with record maintained by workers and if the information generated from client's matched with the record the score was given one & for unmatched information score was given zero. The score was added for all elements & graded on following scale 0-5 score was poor, 6-8 good & 9-10 score

were excellent. The data collected was analyzed using suitable statistical tests.

RESULTS

10 elements observed, the record of 6 elements found to be correctly recorded in 50% of the cases. There were 3 elements which were not recorded on their respective registers by workers at all in more than 50% of cases

Figure 1

Table 1: Quality of records in study subject (n - 400)

Elements of Record	Correctly Recorded	Incorrectly Recorded	Not Recorded	Total
A.N.C.	96 (24.0)	90 (22.5)	214 (53.5)	400 (100)
I.F.A.	207 (51.7)	131 (32.8)	62 (15.5)	400 (100)
T.T.	344 (86.0)	38 (9.5)	18 (4.5)	400 (100)
Past Obst. Taken	189 (47.2)	211 (52.8)	0 (0.0)	400 (100)
Delivery Cond by	242 (60.5)	39 (9.8)	119 (29.7)	400 (100)
Immunization	264 (66.0)	9 (2.2)	127 (31.8)	400 (100)
Contraception	110 (27.5)	33 (8.3)	257 (64.2)	400 (100)
P.N.C.	57 (14.2)	86 (21.6)	257 (64.2)	400 (100)
No. of Living Children	236 (59.0)	143 (35.8)	21 (5.2)	400 (100)
D.O.B	287 (71.7)	113 (28.3)	0(0.0)	400(100)

Percentage depicted in parenthesis

Out of 400 clients interviewed in respect to different 10

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elements, the record of 8 (2%) was graded as excellent. 156 (39.0%) records were good. The record for rest 236 (59.0%) were graded as poor (Table-II).

Figure 2

Table 2: Grading of health records as determined through sample survey 1998-99 (n = 400)

Subcentre	GRADES			Total
	Excellent	Good	Poor	
Chiri - 1	1 (5)	12 (60)	7 (35)	20(100)
Chiri - 2	0 (0)	12 (60)	8 (40)	20(100)
Ghironhi	3 (15)	16 (80)	1 (5)	20(100)
Chandi	3 (15)	15 (75)	2 (10)	20(100)
Indergarh	0 (0)	10 (50)	10 (50)	20(100)
Kharenthi	1 (5)	13 (65)	6 (30)	20(100)
Bhagwati Pur	0 (0)	0 (0)	20 (100)	20(100)
S.G. Pur	0 (0)	8 (40)	12 (60)	20(100)
Titoli	0 (0)	6 (30)	14 (70)	20(100)
Ghuskani	0 (0)	12 (60)	8 (40)	20(100)
Sunder Pur	0 (0)	3 (15)	17 (85)	20(100)
S.P. Kalan	0 (0)	12 (60)	8 (40)	20(100)
L.M.J.	0 (0)	1 (5)	19 (95)	20(100)
Nandal	0 (0)	7 (35)	13 (65)	20(100)
Bainsi	0 (0)	6 (30)	14 (70)	20(100)
Kharak Jatan	0 (0)	4 (20)	16 (80)	20(100)
B.A PUR-1	0 (0)	7 (35)	13 (65)	20(100)
B.A PUR-2	0 (0)	3 (15)	17 (85)	20(100)
Gaddi Kheri	0 (0)	3 (15)	17 (85)	20(100)
Bhali	0 (0)	6 (30)	14 (70)	20(100)
Total	8 (2)	156 (39)	236 (59)	400(100)

Percentage depicted in parenthesis

DISCUSSION

The state of Haryana has been implementing the health management information system (Version 2.0) since 1992.

As many as 59% of records relevant to the essential components of maternal and child health services were graded as poor quality & 39.0% and 2% of the records were categorized as good and excellent respectively. Similar observations were made by ICMR multicentric intervention study (1989-1992) 4. Correctness of records about immunization, attendant at the time of delivery, PNC, & contraception was 66%.60.5%,14.2% & 27.5% respectively. This result of immunization is similar to the finding of NFHS-II for Haryana State⁵.

CONCLUSION

1. Therefore as a matter of policy a single service

register or at the best two registers need to be evolved for preparation of consolidated information from recorded data. One such model of eligible couple register Vikalp M.P. Rajgarh Project & States of Maharashtra introduced "Family Health Card" which replaced all registers.

2. During the basic training of workers and their continuing education, the health workers should develop the skill of handling data, its analysis and appropriate actions and decisions based on the data.
3. Mechanisms like working of anganwadi and subcentre, under one roof (integrating sub centre and anganwadi function), joint survey, joint meetings at sector level and involvement of ICDS in RCH annual action plans at subcentre level can go a long way to improve the quality of records and services. Joint training and continuing education of functionaries can enrich the quality of data collection and its appropriate use subsequently.

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