Status of 'P' reports under Integrated Disease Surveillance Programme (IDSP) in Jaipur district

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Abstract— *Integrated Disease Surveillance Programme (IDSP) is very important programe in controlling the diseases commonly found in the area. Symptomatic (S Form), Presumptive (P Form) and Laboratory Confirmed (L Form) type of reporting is there under IDSP. Present study is to assess the status and quality of 'P' form reports of year 2016 in Jaipur district. For this study 2 District hospital, 4 CHCs and 8 PHCs were selected randomly as reporting units. Every 'P' report under Integrated Disease Surveillance Project (IDSP) for all the 52 weeks of the year 2016 from each selected study unit were included in the study. These reports were assessed in percentage of expected reports sent. Quality of reports were assessed in terms of completeness, timeliness and regularity. Present study found that overall 'P' reports of IDSP reports sent were 85.03% of 'P' reports expected to sent. Significantly less 'P' reports were sent by DH i.e. 47.12% of expected to send whereas CHC sent maximum i.e.92.31%. This study also found that overall 93.21% of 'P' reports were complete, 76.98% of 'P' reports were sent on time and all were regular. PHC sent maximum (95.21%) complete reports followed by at CHC (90.63%) and at DH (83.67%). 'P' reports were sent on time by DH, CHCs and PHCs in 83.67%, 80.73% and 76.98% respectively without significant variation. All the 'P' reports sent from every sampling unite was regular.*

Keywords: Integrated Disease Surveillance Programme (IDSP), 'P' Reports.

I. INTRODUCTION

Disease surveillance is an important component of public health program.[4] Union Minister of Health and Family Welfare formally launched Integrated Disease Surveillance Project (IDSP) on 8th November 2004. IDSP is a decentralized, district based surveillance program. It is intended to detect early warning signals of impending outbreaks and help initiate an effective response in a timely manner. It is also expected to provide essential data to monitor progress of on-going disease control program and help allocate health resources more efficiently.[5]

Initially Integrated Disease Surveillance Project was launched in 9 states i.e. Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Uttarakhand and West Bengal. IDSP was implemented in three phases: Phase I (2004-05)- 9 states, Phase II (2005-06)- 14 states, Phase III (2006-07)- 12 states. Now IDSP is fully Government of India funded program since under the 12thFive Year Plan with a domestic budgetary support worth Rupees 6.4 Billion.[13]

In Rajasthan IDSP covers 23 diseases in IDSP for weekly reports i.e. Acute Diarrheal including Acute gastroenteritis, Bacillary Dysentery,Viral Hepatitis, Enteric Fever, Malaria, Dengue /DHF/DSS, Chikungunia, Acute Encephalitis Syndrome, Meningitis, Measles, Diptheria, Pertusis, Fever of

unknown origin (PUO), Acute Respiratory Infection (ARI)/ Influenza like illness(ILI), Pneumonia, Leptosirosis, Acute Flaccid Paralysis <15 years of age, Dogbite, Snake bites, Scrub Typhus and Swine Flue (H1N1). Any other unusual Syndromes were also considered for weekly report in IDSP.[31]

District level is the focus for integrated disease surveillance system. At sub-centre levels multi- purpose health workers (MPHW), Accredited Social Health Activist (ASHA) and Auxiliary Nurse Midwifery (ANM) are involved in data collection through Form-'S' (based on syndromic approach) on weekly basis, Form 'P' (presumptive cases) is used by the clinicians for provisional diagnosis and Form-'L' (laboratory cases) for the lab-confirmed cases.

This approach is based on detection of early warning signals of impending outbreaks and helps initiating an effective response in a timely manner. Through the provision of 'L', 'S' and 'P' form detection of early warning signals of impending outbreaks and initiation of an effective response in a timely manner is ensured. Hence, quality of data generation and capturing in Form 'S', Form 'P' and Form 'L' makes the final impact across the state and overall surveillance system in country.

Studies are done across the country to evaluate the IDSP project and to find out its reporting status. But there is scarcity of such studies in Rajasthan. So this present study is conducted with the aim to find out quality of reporting 'P' reports under IDSP of the year 2016 in Jaipur district.

II. METHODOLOGY

This institution based descriptive type of observational study was conducted to assess the quality of reporting 'P' reports under Integrated Disease Surveillance Project (IDSP) in government health facilities/centers in Jaipur district of the year 2016. This study was conducted under department of community medicine, of SMS Medical College, Jaipur (Rajasthan).

Study units were selected from Jaipur district from both CMHO offices i.e. CMHO Jaipur I and CMHO Jaipur II of medical and health administration. Study units were selected randomly as one urban area hospital and one rural block. From urban areas, one district hospital from each CMHO office, so Kanwatiya Hospital from CMHO I and Jaipuriya Hospital from CMHO II. From rural areas Shahpura from CMHO I and Bassi from CMHO II. From Shahpura block, 2 Community Health Centers (CHC) namely Shahpura and Manoharpur were selected randomly. Likewise from Bassi block, 2 Community Health Centers (CHC) namely Bassi and Tunga were selected randomly. From each of selected block, 4 Primary Health Centers (PHC) were selected. Dhanota, Dhwali, Saiwad, and Radawas PHCs were selected from Shahpura block and from Bassi Benada, Kanota, Rojwari and Sambhariya PHCs were selected randomly. Thus in total 2 district hospitals, 4 CHCs and 8 PHCs were selected for the study as reporting units to assess quality of 'P' reports under IDSP.

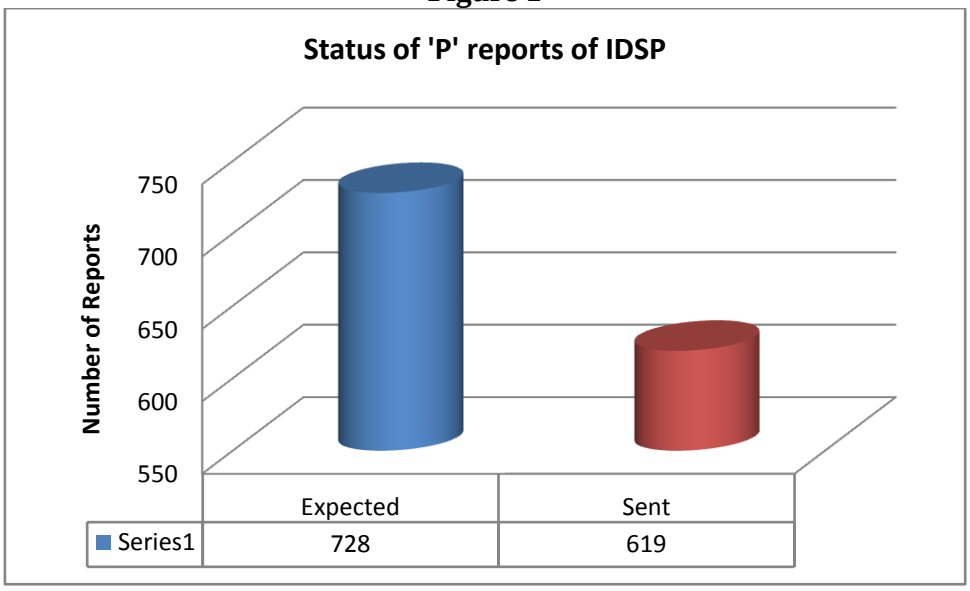
Every ’P’ report under Integrated Disease Surveillance Project (IDSP) for all the 52 weeks of the year 2016 from each selected study unit were included in the study. These reports were assessed in percentage of expected reports sent. Quality of reports were assessed in terms of completeness, timeliness and regularity

Statistical Analysis: Data were complied and statistically analyzed by using Microsoft excel 2010 worksheet. Results were expressed in percentages.

III. RESULTS

In present study, out of total 728 'P' reports expected to sent from total study units, 619 i.e. 85.03% were sent. (Figure 1)

Figure 1



It was also observed that 'P' reports are not received at any study unit and least 'P' reports were sent by DHs i.e. 47.12% of expected to send reports whereas CHCs sent maximum i.e. 92.31%. Likewise PHCs sent 90.87% 'P' reports of expected to send. This variation of 'P' reports sent from various study units was found significant. (Table 1)

Table 1
Reporting status of 'P' reports sent from various reporting units

S. No.	Type of Reporting Units	Expected	Present status	
			No	%
1	DH(N=2)	104	49	47.12
2	CHC(N=4)	208	192	92.31
3	PHC(N=8)	416	378	90.87
	Total Repots	728	619	85.03

Note: 'P' reports are not received at any study unit
Chi-square (Sent) = 137.214 with 2 degrees of freedom; P < 0.001 LS=S

When quality of reports is concerned, it was observed that overall 93.21% of 'P' reports were complete. It was also observed that all 'P' reports sent by DHs, CHCs and PHCs were 83.67%, 90.63% and 95.21% complete respectively. This variation of completeness of 'P' reports sent as per reporting unit wise was found significant. (Table 2)

Table 2
Status of completeness of 'P' reports sent from various reporting units

Type of Reports	Reports Sent	Complete		Incomplete	
		No.	%	No.	%
DH (N = 2)	49	41	83.67	2	4.08
CHC (N = 4)	192	174	90.63	18	9.38
PHC (N = 8)	378	362	95.77	16	4.23
Total Repots	619	577	93.21	37	5.98

Chi-square = 6.215 with 2 degrees of freedom; P = 0.045 LS=S

Regarding timeliness of reports, it was observed that overall 76.98% of 'P' reports were sent on time. It was also observed that 'P' reports sent by DHs, CHCs and PHCs were sent on time in 83.67%, 80.73% and 76.98% respectively. This variation of 'P' reports sent on time as per reporting unit was not found significant. (Table 3)

Table 3
Status of Timeliness of 'P' reports sent from various reporting units

Type of Reports	Reports Sent	In time		Not in Time	
		No.	%	No.	%
DH (N=2)	49	41	83.67	8	16.33
CHC (N=4)	192	155	80.73	37	19.27
PHC (N=8)	378	291	76.98	87	23.02
Total Repots	619	487	78.68	132	21.32

Note 'P' reports are not sent at SC level
Chi-square = 1.857 with 2 degrees of freedom; P = 0.395 LS=NS

Regarding regularity of reports, it was observed that all the 'P' reports were regular at every study unit, so there was no variation of regularity of 'P' reports sent as per reporting unit. (Table 4)

Table 4
Status of Regularity of 'P' reports sent from various reporting units

Type of Reports	Reports Sent	Regular		Not regular	
		No.	%	No.	%
DH (N = 2)	49	49	100.00	0	0.00
CHC (N = 4)	192	192	100.00	0	0.00
PHC (N = 8)	378	378	100.00	0	0.00
Total Repots	619	619	100.00	0	0.00

Chi-square = 0 with 2 degrees of freedom; P =1 LS=NS

IV. DISCUSSION

Present study observed that overall 'P' reports of IDSP reports sent were 85.03% of 'P' reports. Regarding 'P' reports reporting as per reporting unit wise in this study it was that least (significantly less) reports were sent by DH i.e.47.12% of expected to send whereas CHC sent maximum i.e.92.31%. And PHC sent 90.87% 'P' reports of expected to send.

An IDSP evaluation survey[30] conducted by Ministry of health and family welfare observed that 97% Districts are reporting weekly disease surveillance data under IDSP.

Ajay Gaikwad et. all (2010)[39] (S-forms), presumptive surveillance (P-forms), and laboratory (L-1), L2 and L3 reporting formats, was 58.2% (18.6). The mean (SD) of the P, S, L1, L2and L3 reporting forms were 48.73% (16.25), 50.42% (16.76), 46.8 % (20.17) and 87.4 % (22.32) respectively.

This study also found that overall 93.21% of 'P' reports were complete, 76.98% of 'P' reports were sent on time and all were regular. When completeness of 'P' reports were analyzed as type of reporting units it was found with significant variation, having maximum (95.21%) reports sent from PHCs complete followed by at CHC (90.63%) and at DH (83.67%). When timeliness of 'P' reports were analyzed as type of reporting it was found without significant variation, having 'P' reports sent by DH, CHCs and PHCs were sent on time in 83.67%, 80.73% and 76.98% respectively. All the 'P' reports sent from every sampling unite was regular.

Dhananjay et. all (2009)[38] conducted a study to evaluate the performance of newly started surveillance system in term of completeness and timeliness of weekly reporting. They conducted multistage random

sampling techniques had been done for selection of Primary Health Centers (PHCs), Community Health Centers (CHCs) and Sub centers. They found that reporting was incomplete (Syndromic Surveillance 13.7% and of Presumptive Surveillance was 87.5%) and not on time.

Rahim AA et al. (2016)[51] assessed the incentive based reporting model using the completeness of reporting units, completeness of case reporting and timeliness. It was noted that timeliness and completeness exceeded over 70% in urban and rural, which emphasizes the reliability of this approach.

V. CONCLUSION

Present study concludes that overall 'P' reports of IDSP reports sent were 85.03% of 'P' reports expected to sent. Significantly less 'P' reports were sent by DH i.e. 47.12% of expected to send whereas CHC sent maximum i.e.92.31%.

This study also concludes that overall 93.21% of 'P' reports were complete, 76.98% of 'P' reports were sent on time and all were regular. PHC sent maximum (95.21%) complete reports followed by at CHC (90.63%) and at DH (83.67%).

CONFLICT OF INTEREST

None declared till now.

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