

## Title: "A study to assess the utilization pattern of services under Desi Ghee Scheme, Kalewa Yojna and Janani Express Service among women of a selected PHC of Amer Block, Jaipur district, Rajasthan".

Mrs. Kamlesh Singh<sup>1</sup>. Dr Kochuthresiamma Thomas<sup>2</sup>, Dr RK Manohar<sup>3</sup>

Ph. D. Scholar, Department of Nursing, NIMS University, Rajasthan, Jaipur.
 Professor & PhD Guide, NIMS University, Rajasthan, Jaipur.
 Prof & HOD, Department of PSM, NIMS University, Rajasthan, Jaipur.

### **ABSTRACT:**

*Introduction:* JSY is a safe motherhood programme, which has led to an increase in institutional deliveries. Rajasthan Government has specially introduced programme such BPL Desi Ghee Scheme, Kalewa Yojna and Janani Express Scheme (JES) ie., free ambulance service (104) to increase utilization of the services.

**Objectives:** To assess the utilization of BPL Desi Ghee, Kalewa Yojna and Janani Express Schemes among mothers having under-five children attending PHC Achrol, Amer Block, Jaipur, district.

*Materials and Methods :* A descriptive, cross-sectional study was conducted at PHC Achrol, Jaipur, among 750 mothers in 2017. Quantitative approach was used and the mothers were interviewed with a structured, pretested questionnaire after informed consent. Descriptive and inferential statistics had been used.

**Results:** Majority (86.4%) of the mothers of PHC Achrol had registered themselves during antenatal period. 87.2% of the mothers stayed in health facility post delivery for 24-48 hours. 74.5% of the women had received 5 litres of Desi Ghee after first delivery. 83.06% were provided with warm cooked food during their stay at health facility.

Around 76.26% of the pregnant women had utilized the free Ambulance service provided under Janani Express Scheme. Majority (55.86%) of the mothers were accompanied by ASHA/HW/ANM in the Ambulance to the health facility. There was significant association between utilization of health services with socio-demographic variables such as mothers' age, religion, education, caste and socio- economic status (p-value <0.005).



**Discussion:** Findings show that a gap still exists in the utilization of BPL Desi ghee Scheme, Kalewa Yojna and JES Scheme.

**Conclusion:** Factors predicting utilization of government health schemes especially attitude can be looked into for improving utilization of health schemes, intensifying awareness campaigns.

KEYWORDS- BPL Desi Ghee Scheme, Janani Express Scheme, Kalewa Yojna, Mothers, Rajasthan.

#### **1. INTRODUCTION**

Every day approximately 800 women die globally, from preventable causes related to pregnancy and childbirth. Improving maternal health was one of the eight Millennium Development Goals (MDGs) adopted by the international community in 2000. Under MDG-5, countries are committed to reducing maternal mortality by three quarters between 1990 and 2015. To improve the availability of and access to quality health care, especially for those residing in rural areas, the poor, women, and children, the government had launched the National Rural Health Mission for the 2005-2012 period with an aim to provide accessible, affordable accountable effective reliable primary health care and bridging the gap in the rural health care through creation a cadre of ASHA <sup>[1]</sup>. This mission is also the instrument to integrate multiple vertical programmes to be integrated with existing programmes of Health and Family Welfare including Reproductive Child Health  $- II^{[2]}$ 

Despite massive program efforts and availability of technology needed to avert maternal deaths, the maternal mortality ratio (MMR) in India continues to be high. Population-based estimates of MMR are lacking. Under its flagship, National Health Rural Mission and Janani Suraksha Yojana Scheme (JSY), or Safe Motherhood Scheme, the Indian government uses cash incentives to encourage women to give birth in health facilities. Indian society is caught in the crossroads; emerging from the traditional methods of child birth, government schemes, barriers, knowledge and empowerment of women.

In India people living in rural areas do not have proper hospital facilities and access to health care. A high proportion of them continue to suffer and die from preventable diseases; pregnancy and child birth related complications as well as malnutrition. In Rajasthan State, as per the Second report of GS &SS 2017 (Period 2011-1016) analysis of data relating to pregnant women registered for ANC in Rajasthan State revealed that against the targets of 87.18 lakh institutional deliveries in the State, the achievement was only 67.03 lakh (76.89 per cent) during 2011-16.<sup>[3]</sup> The rural public health care systems in the country are in an unsatisfactory state which leads to impoverishment of poor households due to expensive private sector health care.

Utilization of health services are not even everywhere due to varied reasons. Understanding the utilization pattern will give an insight into the future course of action.



Therefore, the aim of this study was to logically analyze the utilization pattern of Government health schemes among women in Rajasthan. The Maternal benefit Schemes considered for this study is *BPL Desi Ghee Scheme, Kalewa Yojna and Janani Express Scheme.* 

#### 1.1. BPL Desi Ghee Scheme

Pregnant women would be provided with three liters of Desi Gee after the first ANC test), while the remaining two litres would be given at the time of discharge after delivery. This way, it will help in maintaining the maternal nutrition in pregnancy and lactation period of BPL women. The pregnant women will get coupons of three litres of ghee after the check-up between the fourth to six months of pregnancy<sup>[4]</sup>

#### 1.2. Kalewa Yojna

Pregnant women are provided with free warm food cooked by Self help groups for two days post delivery, provided they stay at Health Facility. This scheme is funded by NRHM and implemented by DWCD<sup>[4]</sup>.

#### 1.3. Janani Express Scheme



Janani Express is a Scheme launched on 02 Oct. 2012, to promote JSY, institutional deliveries provide free round the clock transportation to pregnant women to health centers for delivery and help in reducing maternal mortality ratio. This facility is also available in pre- and post delivery periods. The toll free number is 104.<sup>[4]</sup>

#### **2. REVIEW OF LITERATURE**

Delivery of maternal health care services is a major challenge to the health system in developing countries. ID has been recognized as a strong pillar to avert maternal deaths in India. (Manas P Roy 2018) conducted a study based on data available from District Level Household Survey 4 (DLHS-4) (2012-13). The findings showed a better coverage of ID than national figure during CES 2009. A major credit for this goes to Janani Suraksha Yojana (JSY). In fact, state wise analysis proved that there is an upward trend at the latest survey. Haryana has documented modest rise to 77% from 63% while for HP (50.3% to 77.8%) and Punjab (60.3% to 82.7%), the difference is quite striking. <sup>[5]</sup>

**Thongkong et al. (2017)** conducted a study in which they prospectively collected data on 3,682 births (in 2009–2010) from a demographic surveillance system in five districts in Jharkhand and Odisha state, India. Linear probability models were used to identify the determinants of receipt of JSY benefits. Poor-rich inequality



in the receipt of JSY benefits was measured by a corrected concentration index (CI), and the most important drivers of this inequality were identified using decomposition techniques. While the majority of women had heard of the scheme (94% in Odisha, 85% in Jharkhand), receipt of JSY benefits was comparatively low (62% in Odisha, 20% in Jharkhand). The findings of this study concluded that JSY benefits were not equally distributed, favouring wealthier groups. These inequalities in turn reflected pro-rich inequalities in the institutional delivery. The JSY scheme is currently not sufficient to close the poor-rich gap in institutional delivery rate. Important barriers to institutional delivery remain to be addressed and more support is needed for low performing districts and states.<sup>[6]</sup>

**Dereje Kifle et al (2017)** conducted a triangulated community-based cross-sectional study on, "Maternal health care service seeking behaviors and associated factors among women in rural Haramaya District, Eastern Ethiopia" 561 women in reproductive age group who gave birth in the last 2 years were randomly included. Bivariate and multivariate logistic regressions model was used to identify the associated factors. Odds ratios with 95% CI were used to measure the strength of association. It was found that maternal health care service seeking behavior of women was ; antenatal care 74.3% (95% CI; 72.5, 76.14), attending institutional delivery 28.7% (95% CI; 26.8, 30.6) and postnatal care 22.6% (95% CI; 20.84, 24.36). Knowledge of pregnancy complications, educational status, and religion of women were found to be significantly associated with antenatal health care, delivery and postnatal health care service seeking behaviors' triangulated with individual, institutional and socio-cultural qualitative data. It was recommended that, focused health education with kind and supportive health care provider counseling will improve the maternal health care seeking behaviors of women.<sup>[7]</sup>

**Sonu Goel et al (2017)** in a community based cross-sectional mixed method concurrent study on, "Factors influencing Janani Express Scheme Utilization in a Northern city of India", conducted from August 2012 to March 2014 in Chandigarh city among 100 women residing in the catchment areas of primary and secondary level health care facilities of Chandigarh. Mothers who gave birth in proceeding two years (2011 and 2012) were interviewed using a structured questionnaire and in-depth interview checklist by trained field investigators. Findings of Logistic regression model suggested that more than 3 ANC visits by women was significantly associated with the uptake of JSY benefit (OR= 17.4). The factors influencing decreased uptake of administrative paper work. It was concluded that there is a need to remove the bottlenecks and thus ensure smooth delivery of cash benefits.<sup>[8]</sup>

Geddam JB et al. (2017) conducted a community based cross sectional study to understand the determinants of utilization of reproductive health services by migrant population living in non-notified slums of Hyderabad city in the Indian state of Telangana. 761 rural to urban internal migrant mothers with a child of less

1142 | Page



than 2 years of age residing for a period minimum of 30 days and not more than 10 years were selected through cluster random sampling method. Multinomial logistic regression analysis was carried out for analysis of determinants of adequate ANC utilization. Univariate regression analysis was carried out of each variable against dependent variable to determine its independence. The findings disclosed that mothers receiving at least 4 antenatal care visits and institutional deliveries in migrants were 69.6% and 69% respectively, compared to 85.8% and 97% in general population of Hyderabad city. The likelihood of mothers receiving adequate care is 6.7 times higher in mothers with secondary education compared to formal education. The likelihood of institutional delivery is 7.8 times higher in mothers availing adequate antenatal care versus inadequate care and 2.2 times higher in mothers with secondary education versus formal education. The conclusion drawn was that utilization of antenatal care services and promotion of institutional deliveries can be improved by acting on the supply side barriers such as health care infrastructure and demand side barriers such as indirect consumer costs, financial constraints and community engagement.<sup>[9]</sup>

In the light of the preceding review of the studies carried out in this area, researcher found that there are very few studies focusing on Utilization of maternal health specific complementary programmes such as BPL Desi Ghee Scheme, Kalewa Yojna and Janani Express Scheme among mothers in Primary Health Centres have been carried out. Thus to fill this lacunae the current research study was undertaken.

#### 3. Objectives

- a) To assess the utilization of BPL Desi Ghee Scheme, Kalewa Yojna and Janani Express Schemes among antenatal mothers having underfive children and attending PHC Achrol, Amer block, Jaipur district.
- b) To identify the association of utilization of health Schemes with socio-demographic variables of women.

#### 4. Material and Methods

The research methodology used for the present study is a community based descriptive study. The study has been conducted in Primary Health Centre Achrol selected by multi stage sampling method. In the present study, survey (quantitative analysis) is used to find out the Utilization and perceived barriers to utilization of Rajasthan Government health schemes namely, BPL Desi Ghee Scheme, Kalewa Yojna and Janani Express Scheme among mothers, having under five children and attending the antenatal clinic of PHC Achrol of Amer Block, Jaipur district.

**Sample-** All married women between the reproductive age group (15-49) having under five children and attending the antenatal clinic at selected Primary Health Centre.

Sample Size: It was conducted on 750 beneficiaries from PHC of Amer Block, Jaipur, Rajasthan.



**Data collection tool:** Study instrument was structured pretested questionnaire in local hindi language which was used after content validation by experts as well as translation and back translation method. Reliability was tested using split half method and Correlation score was 0.89 and found to be reliable.

Data was collected from all married women having underfive children and attending antenatal OPD in Primary Health Centre Achrol, which is a Public Private Partnership Model of PHC. The study was done in six months Sep 2017 to Feb 2018.

#### 5. Results and Analysis

#### 5.1 Demographic details of Beneficiaries:

Demographic study means study of both quantitative and qualitative aspects of selected human population. Quantitative aspects include composition, age, gender, size, and structure of the population. Qualitative aspects are the research specific factors such as live children, birth order, place of birth etc of Beneficiaries, which are related with specific research design. Results of demographic analysis are elaborated in table (5.1) below.

Parameters	ACHROL (N=750)		
	Frequency	Percentage (%)	
Mother's Age			
<20 yrs	101	13.46%	
21 – 30 yrs	339	45.2%	
31- 40 yrs	123	16.4%	
>40 yrs	187	24.93%	
Religion			
Hindu	387	51.6%	
Muslims	203	27.07%	
Others	160	21.33%	
Mother's Educational Status			
Illiterate	388	51.73%	
Primary	297	39.6%	
(1-8th std)			
Secondary and above	65	8.66%	

#### TABLE (5.1) DEMOGRAPHIC DETAIL OF BENEFICIARIES

1144 | Page



(9 <sup>th</sup> std & above)			
Husband's Educational Status			
Illiterate	203	27.07%	
Primary	354	47.2%	
(1-8th std)			
Secondary and above	193	25.73%	
(9 <sup>th</sup> std & above)			
Caste of Respondents			
General	302	40.2%	
SC/ST	50	6.66%	
OBC	200	26.67%	
Others	198	26.4%	
Socio Economic Status of Respondent			
Below Poverty Line	202	26.93%	
Above Poverty Line	548	76.07%	

Family Type			
Joint	486	64.8%	
Nuclear	264	35.2%	
Occupation of Mother			
Professional	101	13.47%	
Skilled	173	23.07%	
Unskilled	253	33.73%	
Unemployed	223	29.73%	
Occupation of Respondent's Husband			
Professional	162	21.6%	
Skilled	205	27.34%	
Unskilled	152	20.26%	
Unemployed	231	30.8%	

The findings in the above (Table 5.1) revealed that, majority (45.2%) of the women of PHC Achrol were between 21 to 30 years of age. Those less than 20 years of age were 13.46%. Majority of the respondents were Hindus in both Achrol (51.6%), while Muslim respondents were 27.07%. Majority of the respondents were illiterate (51.73%)while majority of the husbands (47.2%) of respondents had undergone Primary education till 1145 | P a g e



8<sup>th</sup> standard. Only 8.66% of women were educated above secondary level. It can be observed that even though the husbands of respondents were not highly educated but still they were more educated than the women in the villages. 40.2% of beneficiaries belonged to general category, 26.67% were OBCs' 6.66% were SC/ST and 26.4% belonged to others category. The findings also revealed that, 26.93% of the respondents were of BPL category. Majority(64.8%) of the respondents lived in joint family and 29.73% were unemployed.. Professionals were 13.47% while 21.6% of the spouses of women were professionals. It can be concluded that both unemployed beneficiaries as well as unemployed spouses of beneficiaries were more or less similar percentage wise with a marginal difference.

Few other demographic variables related with the theme of current research study were analyzed from the respondents and are elaborated below in (Table 5.1.1)

### TABLE (5.1.1) OTHER DEMOGRAPHIC VARIABLES RELATED WITH PREGNANCY OF RESPONDENTS

Parameter	ACHROL(N=750)		
	Frequency	Percentage (%)	
Live children			
<1 year old	403	53.74%	
1-3 years old	324	43.20%	
3-5 years old	23	3.06%	
Birth Order (present	Birth Order (present pregnancy)		
First	298	39.74%	
Second	396	52.80%	
Third	56	7.46%	
Place of delivery of last pregnancy			
Government	546	72.8%	
hospital			
Private	161	21.46%	
hospital/Nursing			
home			
Home	43	5.73%	

From the table above, it is found that majority (53.74%) of the beneficiaries had live children under one years of age; and 52.80% were pregnant with second child during the time of study, while majority had delivered their previous child in government health facility 72.8% in government hospital and 21.46% in Private hospital/



Nursing home. Around 5.73% had home delivery. Thus, it can be concluded that still efforts are required to bring about 100% hospital deliveries.

#### 5.2 Utilization of Govt. health Schemes

Studying the distribution of utilization in population subgroups highlights whether, the most vulnerable population receives the benefits of Government Health Schemes and equity in access is maintained.

Received 5 litres of Desi Ghee/ Milk Coupon	ACHROL (N=202)	
	Frequency	Percentage (%)
Yes	151	74.75%
No	51	25.25%

#### TABLE (5.2.1.) UTILIZATION OF BENEFITS UNDER BPL DESI GHEE HEALTH SCHEME.

In table above, it is found that 74.75% of BPL respondents from Achrol PHC had received 5 litres of Desi Ghee after first delivery, while 25.25% of them had not received the 5 litres Desi Ghee as stated under the scheme.

## TABLE (5.2.2.) PERSON ACCOMPANYING PREGNANT WOMEN TO THE HEALTH CENTRE IN THE AMBULANCE

ACCOMPANYING PERSON IN THE AMBULANCE	ACHROL (N=750)	
	Frequency	Percentage (%)
ANM / H W	246	32.8%
ASHA	173	23.06%
Family members	331	44.14%

The findings in the above table show that majority (44.14%) of the respondents from Achrol PHC were accompanied by family members in the ambulance when going to the health centre and only 23.06% were accompanied by the ASHA need to be improved with health education campaigns.



ACHROL (N=750)	
Frequency	Percentage (%)
72	9.6%
654	87.2%
24	3.2%
	(N Frequency 72 654

TABLE (5.2.3.) HOURS OF STAY IN HEALTH FACILITY AFTER DELIVERY

In the above table the number of days respondents stayed in health facility after delivery has been examined. The table revealed that 87.2% respondents stayed in health facility after delivery between 24 hrs to 48 hrs whereas only 3.2% of them in the health centre for more than 48 hours after delivery. Around 9.6% post natal mothers of Achrol PHC remained in the health facility for less than 24 hours after delivery.

TABLE (5.2.4.) UTILIZATION OF JANANI EXPRESS SCHEME

Utilization of Free Ambulance	Achrol Be	neficiaries
Services (104)	(N=	750)
YES	572	76.26%
NO	178	23.73%

Maximum Beneficiaries from Achrol (76.26%) used the free Ambulance services provided by the health facility during ANC.



# TABLE (5.2.5.) RECIEPT OF WARM COOKED FOOD BY POST NATAL MOTHERS AT HEALTH CENTRE

Received free and warm cooked food	ACHROL (N=750)	
	Frequency	Percentage (%)
Yes	523	83.06%
No	127	16.94%

It is observed in the above table that, majority of the mothers of Achrol (83.06%) were given warm cooked food (Under Kalewa Scheme) post delivery during their stay at the health facility. Only, 16.94% of them had not received free and warm cooked food during their stay in the health facility post delivery.

#### Association of utilization of government health schemes with socio-demographic variables.

The study showed there was a significant association between utilization of health services with variables such as mother's age (p value=0.011<0.05); religion (p value= 0.039 <0.05); education(p value=0.0006<0.05); caste(p value=0.002<0.05); socio-economic status(p value= 0.009<0.05); and family type(p value=0.039>0.05) among women attending antenatal clinic at Achrol PHC.

#### 6. Discussion

750 beneficiaries from Achrol PHC were interviewed. Majority respondents of PHC Achrol (45.2%) were between 21 to 30 years of age while minimum respondents (13.46%) were of age 20 yrs and below. In a similar study on JSY in Rajasthan and Madhya Pradesh, 76% and 80% of the beneficiaries were aged 20-29 years respecpectively.<sup>177</sup> 51.6% of the women were Hindus and 27.07% were Muslims. Contrary to this, the findings in a similar study by Isha Mahapatra in 2017, revealed that, 96.89% of the respondents of Odhisha were Hindus<sup>[10]</sup>. As far as caste composition is concerned maximum respondents 40.2% were of General category whereas 26.67% were OBCs', 6.66% of them were of SC/ST caste and 26.4% belonged to Others category. In a similar study, on concurrent assessment of JSY in five States in India, it was observed that, one-third of the women in UP belonged to the SC category while one fourth of them in Bihar and Rajasthan were SC<sup>[11]</sup>. The socio-economic conditions of the mothers interviewed under this study, showed that, only 26.93% of the respondents were below poverty line (BPL). The study on concurrent assessment of JSY again revealed similar findings, 29 % of BPL families in Rajasthan, this proportion was found to be the lowest, while 46 per cent of the mothers were from BPL families in UP. More than three-fifth of the respondents in a similar study showed that monthly income of their spouses were in the ranges of Rs.5000 to Rs.10000.<sup>[12]</sup> In yet another study 77.6% belonged to below Poverty Line (BPL) category.<sup>[13]</sup>



Majority (64.8%) respondents lived in joint family. Similar results were noted in a study by Kaushik et al. Around 33.73% were unskilled workers. Only 13.4% of the respondents were professionals as against 21.6% of their spouses. In a study on JSY it was found that, (66%) mothers were housewives and only 68 (34%) were working somewhere.<sup>[14]</sup> 53.74% of the respondents had a child less than 1 year old. In a similar study among ANC registered women in Karimganj District, out the 373 respondents, 34% of them had 2 children, 42.6% of them had 3 children and above and 23.3% of them had 1 child.<sup>[12]</sup> In the present study, maximum respondents 52.80% were pregnant with their second child. Contrary to the findings, Deshpande in his study found that 88.5% of the beneficiaries were pregnant with first or second child, and more than 7% third para.<sup>[15]</sup> Majority (72.8%) respondents had delivered their previous baby at a Government hospital. In a similar study, Prinja S et al. (2015) found that out of 82% coverage of institutional delivery in Haryana state, 65% took place in public sector facilities.<sup>[16]</sup> Thus, it indicates that efforts are still required to bring about 100% hospital deliveries to bring down maternal morbidity and mortality.

Significant association was observed between utilization of health services with variables such as mother's age (p value=0.011<0.05); religion (p value= 0.039 <0.05); education(p value=0.0006<0.05); caste(p value=0.002<0.05); socio-economic status(p value= 0.009<0.05); and family type(p value=0.039>0.05) among women attending Achrol PHC

#### 7. Conclusion

The purpose of this study was to identify and empirically analyze the utilization three Government health schemes among mothers in selected PHC area in Amer block, Jaipur district, in Rajasthan. The Government Maternal benefit Schemes considered in this study are *BPL Desi Ghee Scheme, Kalewa Yojna and Janani Express Scheme (JES.*. The findings show that a gap still exists, in the utilization of BPL Desi Ghee Scheme, Kalewa Yojna and JES in the rural population. There is need to intensify efforts to disseminate specific information by displaying information about Government Maternity Benefit Schemes at government and private hospitals and educating women in the community groups. Mass media campaigns and health education is recommended to increase the awareness about Government Maternity Benefit Schemes.

#### REFERENCES

[1] Rate in India: Issues and challenges Last Updated:March 16, 2017 http://www.gktoday.in

/iaspoint/current/maternal-mortality-rate-in-india-issues-and-challenges/

[2] Munjial M, Kaushik P, Agnihotri S. A Comparative analysis of institutional and non institutional delivery 2009;32(3):131–40.

[3] Second report of GS &SS 2017 (Period 2011-1016) Analysis of data relating to pregnant women registered for ANC in Rajasthan State.



[4] Schemes of Government of Rajasthan in Health. State Institute of Health and FamilyWelfare, Jaipur.SIHFW: an ISO 9001:2008 certified Institution.

[5] Roy MP. Determinants of institutional delivery in three Northern Indian States: Evidence from DLHS4. J NTR Univ Health Sci 2018;7:8-12.

[6] Thongkong et al. How equitable is the uptake of conditional cash transfers for maternity care in India?Evidence from the Janani Express Scheme in Odisha and Jharkhand. International Journal for Equity in Health (2017) 16:48.

[7] Dereje Kifle., Telake Azale., Yalemzewod Assefa Gelaw and Sayehirad Alemu Melsew Maternal health care service seeking behaviors and associated factors among women in rural Haramaya District, Eastern Ethiopia:. Reproductive Health2017;14:6

[8] Sonu Goel., Deepak Sharma., Soma Rani. Factors influencing Janani Express Scheme utilization in a northern city of India. Int J Reprod Contracept Obstet Gynecol. 2017 Feb;6(2):575-579

[9] Geddam JB, Ponna SN, Kommu PR, Kokku SB, Mamidi RS, Bontha VB. Utilization of maternal health services by the migrant population living in the non-notified slums of Hyderabad city, India. Indian J Comm Health. 2017; 29, 1: 29-38.

[10] Ipsa Mohapatra1., Sonali Kar., Amrita Kumari. A Study on Utilisation of Janani Suraksha Yojana (JSY)Services in an Urban Slum in Bhubaneswar, Odisha. JMSCR 2017; Jan. Vol (05). Issue(01). Page 15859-15864.

[11] Uttekar BP, Sharma J, Uttekar V, Shahane S. Assessment of ASHA and Janani Surksha Yojana in Madhya Pradesh. Centre for Operations Research and Training. Vadodara, India; 2007: 1-58.

[12] Rasida Begum and G. Albin Joseph. A Study on Awareness of Janani Suraksha Yojana (JSY) among ANC registered women in Karimganj District. Asian Journal of Multidisciplinary Studies, 5(6) June, 2017.

[13] Sanjeev K Gupta. To assess the social profile, knowledge, attitude and utilization pattern of Janani Suraksha Yojna beneficiaries in N.S.C.B.Medical College, Jabalpur.

[14] Sonu Goel., Deepak Sharma., Soma Rani. Factors influencing Janani Suraksha Yojana utilization in a northern city of India. Int J Reprod Contracept Obstet Gynecol. 2017 Feb;6(2):575-579

[15] Deshpande RV. Is Janani Suraksha Yojana (JSY) contributing to the reduction of maternal and infant mortality? An insight from Karnataka. J Family Welfare. 2011;57(1):1-9.

[16] Prinja S, Bahuguna P, Gupta R, Sharma A, Rana SK, Kumar R (2015) Coverage and Financial RiskProtection for Institutional Delivery: How Universal Is Provision of Maternal Health Care in India? PLoS ONE 10(9): e0137315.