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ORIGINAL RESEARCH ARTICLE

MATERNITY INCENTIVE SCHEME ON SAFE DELIVERY SERVICES IN RURAL AREA OF KAVRE DISTRICT

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ABSTRACT

Maternity incentive schemes were to encourage mothers to use skilled birth attendance for the best prevention of maternal and child death where as the pregnant women should have access to high quality prenatal care which, they can afford and where, they are treated with respect. The objective of the study was to determine the knowledge and utilization of maternal incentives scheme on delivery services at rural area of Nepal. This study was cross-sectional descriptive in nature and Study was conducted in Panchkhal VDC, Kavre district of Nepal.The numbers of married women of reproductive age group were the study population. The sample size was taken as 96. Most of the respondent had primary education (38.5%) and illiterate (15.6%). Highest mobilization of sources which provided throughout the health institute disseminates the MIS information During the study seventy nine mothers went to hospital for treatment. Utilization of incentive helps to change the delivery behavior (practice) of women (78%) within the hospital services by the skilled birth attendants. The 54.2% were not getting money (private hospital) for delivery and 13.5% respondents used money in nutrition and transport, 11.5% used in medicine and 1.0% respondent didn't spend money. Low income and poor women (63%) have been more benefited from the incentive scheme followed by Janajati (12.5%), Dalit (12.5%) and rural women (9.4%) respectively. Importance of maternity incentive scheme (MIS) on safe delivery services (SDS) needs to be disseminated in rural community through integrated health education program. Most of the respondents reported that only incentive is not the matter of utilization of hospital services, but the issue of mother and child health.

Key words: *Maternity incentive, Safe delivery, Rural, Kavre.*

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INTRODUCTION

Different surveys in Nepal have shown that women's health, especially during pregnancy and childbirth, is a major health problem in the country. Due to inadequate safe delivery practices, absence of skilled and well equipped health staff, lack of community awareness and limited supply of medical equipment, maternal mortality and morbidity rates during pregnancy are very high.[1] Safe motherhood is one of the programs in context of Nepal. Safe motherhood program is for betterment of the health status of Nepalese women and for achieving the fifth millennium development goal (MDG) to improve maternal health, and to meet the associated targets to reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio and ensure universal access to reproductive health by 2015 remains perhaps the greatest development challenge. Extraordinary progress has been made in reducing maternal mortality, which has been halved over the past ten years, through support to trained midwives, safe and legal abortion[2] effective prenatal care needs to be improved.

Nepal government introduced maternity incentive scheme in July 2005 with operational guidelines. The Maternity Incentives Scheme (MIS) are a demand creation intervention for the component safe motherhood services and also addresses supply & equity to some extent. Maternity incentives scheme were implemented by the Government of Nepal with Department of International Development Nepal

(DFID) funding and technical assistance through the Support to the Safe Motherhood Programme (SSMP) (WHO/SERO, 2009)[2]. The Safe Delivery Incentive Programme (SDIP) comprises several financial benefits to women and health workers. It consists of a conditional cash transfers (CCT) to women who deliver in a health facility; an incentive to health workers for each delivery they attend; and free delivery care for eligible women[3]

Institutional deliveries increased from 13.5% to 15.3%. Attendance of home deliveries by a health worker increased from 10% to 14.4% which is shown by Health Management Information System (HMIS) data for 2006/07 that compared with the previous year, thus the MIS appears to be contributing to a noticable increase in health worker attendance for home deliveries[4].

In Nepal, one woman dies every two hours due to preventable childbirth causes and unsafe abortions.3 According to the WHO, 60% of maternal deaths in Nepal occur after birth, with more than half occurring within one day[4]. This indicates high levels of trauma and a lack of skilled delivery staff and postnatal care. Directly related is the Neonatal Mortality Ratio (NNMR) which is reported as one of the highest in the world at 50 per 1,000 live births, accounting for two-thirds of the Infant Mortality Rate.

Pregnancy and childbirth are more dangerous in Nepal. At least 4,400 Nepali women die each year during pregnancy or at the time of delivery. More than three Quarter (81%) deliveries occur at home. Only 23.4% of all deliveries are assisted by a health worker. Around 50% are attended by family or friend, 20% by TBA or community volunteer and 7% by no-one. 79% of maternal deaths occur at home or on the way to a facility[5] This study was carried out with the objective to determine the level of knowledge and utilization of maternal incentives scheme on delivery services on rural area of Kavre district of Nepal

MATERIALS AND METHODS

This study was descriptive, cross-sectional study design. The study site was Panchkhal VDC, Kavre district of Nepal. The study populations were married women of reproductive age group. The sample size was calculated by using the formula: where, 1.96 at 95% confidence interval and 5 percent allowable error. The proportion of safe delivery conducted by health workers was 23.4 (MOH, 2006). The validity of the instrument was maintained and continuously verified by the consultation with subject expert from the very beginning of the study and during the questionnaire preparation. The reliability was maintained by pre-testing the instrument among the 10 % of the population size and necessary modification was done in the light of pretesting. Moral value and human dignity throughout the study was honored. Precaution was taken to safeguard the right and welfare of the respondents in the study and informed consent was obtained from the respondents prior to administration of the questionnaire.

RESULTS

Table 1: Distribution by demographic features

Description	Number	Percent
Family and Casts Type		
Nuclear	57	59.4
Joint	39	40.6
Janajati	47	49.0
Bramin	21	21.9
Dalit	21	21.9
Chhetri	7	7.2
Hindu	91	94.8
Christian	5	5.2
Education		
Illiterate	15	15.6
Inf. education Primary	12	12.5
Secondary	37	38.5
H..Secondary	28	29.2
	4	4.2
Occupation		
Agriculture	74	77.1
Service	4	4.2
Business	13	13.5
Labor	1	1.0
Others	4	4.2

Age of Marriage		
< 18 yrs	44	45.8
18-20 yrs	22	22.9
> 20 yrs	30	31.3

Out of 96 respondents 59.4% respondents were from nuclear families and 40.6% were from joint families. Regarding the caste and ethnicity, 47 respondents (49%) represented from Janjati, Representation from Dalit and Brahmin were equal (21.9%) and representation from was only 7.2%. Similarly, respondents were categorized according to their religion which demonstrated 91 subjects were followers of Hindu religion and 5 subjects reported that they were the follower of Christianity.

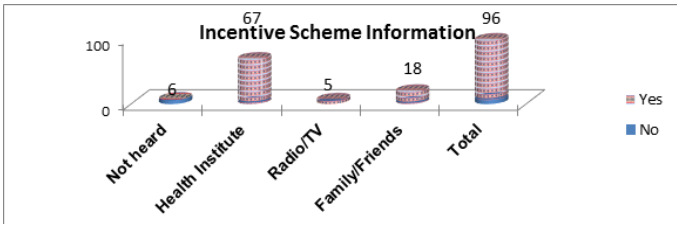
Regarding educational status of respondents, more than one third respondents (38.5%) received only primary education followed by Secondary, Informal education, Higher secondary (29.2%, 12.5% and 4.2%) respectively. However, 15.6% respondents were found to be illiterate. Higher proportion of respondent (77.1%) reported that they were the farmers and their main occupation was agriculture. Whereas, (13.5%) respondents were involved in some kind of business. Four subjects reported that they were in government service and only one respondent was daily wages labor (1%). About half of the respondents (45.8%) were married before the age of 18 years. Twenty two respondents reported that they married during 19-20 years and only 30 respondents were married after twenty years. (Table 1)

Table: 2

Number of children	Number	Percent
Not having Children	16	16.7
1-2 children	53	55.2
3-4 children	26	27
09 children	1	1.1
Total	96	100

As described in the above table, out of 96 respondents, 53 respondents had one to two children, 27 respondents reported that they had three to four children and 16 subjects have not given birth to any children. Surprisingly, one respondent had 9 female children. (Table 2)

Fig. 1: MIS information heard from different sources



As depicted in the above figure, question was asked to the respondents whether they have heard about the Maternity Incentive Scheme (MIS) or not and study team were informed that majority of the subjects (93.7%) had heard about the MIS whereas, only 6.3% respondents reported that they never heard about the MIS information. Regarding the source of information about MIS further question was asked to the respondents who were aware about the MIS. Sixty seven subjects reported that their main source of information was Health institutions. However, main source of information to 18 respondents was family members and friends and five respondents had gained knowledge on Maternity Incentive Scheme through Radio/ Television.

Out of ninety six. 75% respondents reported that the information dissemination was sufficient and 87.5% respondents reported that the incentive scheme has developed the positive attitude among the community people and has increased the utilization of maternity services. Out of total respondents, 78.1% reported that the MIS encourages women to attend hospital for utilization of delivery services.

Among the total convinced respondents, seventy six subjects (79.2%) visited the hospital for treatment, two respondents expressed their views that they visited the hospital to save the mothers from complication and (3.1%) respondents visited the hospital to save the babies from complications. Fifteen subjects were not convinced to attend the hospital for safe delivery. Eighty subjects (83.3%) expressed their views to visit hospital for next delivery even after the scheme would be stopped. Inquiry was made why they wanted to visit the hospital and seventy four respondents spelled that visit of the hospital will benefit both child and mother. Whereas, four

respondents answered that they visited hospital for their one's own health. Five respondents answered due to lack of money for delivery and one subject expressed that she visited hospital for delivery because she did not get any support from the family members and ten respondents did not answer that particular question. Out of 96 respondents, 60 subjects (62.5%) expressed their feeling that the maternity incentive scheme can change the delivery behavior of women. However, 50 subjects (54.2%) were not benefitted by incentive scheme because their delivery was conducted in private health institutions. About the use of money received through MIS during delivery was also inquired and mixed answers were received, 13/96x100 respondents spent money for extra food, 15/96x100 respondents spent money for transport and 9/96x100 subjects used money to buy medicine. However, 6/96x100 subjects remained silent regarding the use of incentive provided by the government and one respondent did not take the incentive.

DISCUSSION

The government of Nepal has introduced Maternity Incentive Scheme (MIS) in 2005 to increase the utilisation of delivery services provided by the skilled birth attendants. The aim of the scheme are to mitigate the barrier in seeking care, provide relief to the poor families, and promote the utilization of safe delivery service and ultimately to contribute in reduction of maternal mortality in the country According to the report published by UNICEF Nepal [6]. If all women have access to emergency obstetric care, 74% of all maternal deaths can be prevented. However, only 5% women utilise emergency obstetrics care services in Nepal.[7]

In this study, percentages of nuclear families were found more than the joint families. There were more numbers of Janajati mothers and their education was limited up to primary level only. Most of the respondents were dependent on agriculture. In this study, teen age marriage and teen age pregnancy was found higher than the studies conducted in Nepal and other neighboring countries which is also the cause of increasing maternal & child morbidity and mortality in our country.

Information about the MIS was quite satisfactory among the study subjects. Maternity incentive scheme provided throughout the country is very beneficial for maternal and child health. However, utilization of the scheme needs to be increased and various Methods and Medias for this purpose should be used. Printed and electronic medias like newspapers, radio and television were found not up to the limit for dissemination of messages about Maternal incentive scheme as well as free safe delivery services in health institutions though nationwide dissemination of MIS information is being done through radio and Television. In this study, most of the FCHV were found to be unaware about the MIS and free safe delivery scheme.

Eighty seven percent mothers agreed that the incentive scheme creates the awareness of community people. Among the total respondents, seventy five subjects expressed that the information dissemination was sufficient. Less education was not the barrier of getting information about MIS to the mother in this study.

In this study, seventy eight percent of mother noted that the incentive encourages women to go to hospital to give birth of a child. Among them, most of the mothers did not know the conditions for receive the payment only the few mothers were informed about the conditions of receiving payments. About one fifth (20.8%) mothers were clear about the information that incentive will be given to mothers who give birth only two children.

Eighty nine percent of mothers received the full payment (Rs. 1000) among them, only sixty percent mother received 100% of allocated scheme money. Rest of the mothers did not receive full payment due to the delivery conducted at private hospital. More expensive and the expenses were more than that of government incentive scheme.

Respondents were inquired about the purpose of hospital visit and revealed a variety of answers. Seventy nine mothers went to hospital for treatment of mother and children and prevention of complication as well. Some respondents answered differently that they visited the hospital for prevention of untimely death, to use the available services and

build confident and avert the risk of home delivery or obstetric situation. Most of the respondents of this study expressed that incentive is not the cause for hospital going; it is the matter of mother and child's health. Eighty mothers committed to visit hospital for next delivery even after the stoppage of MIS too. Utilization of incentive helps to change the delivery behavior of women. Similar type of study conducted in Nepal also depicts the similar result.[9 & 10]

Fifty four respondents did not receive the incentive because their delivery was conducted in private hospital. Similarly, 13/96x100 mothers used money for nutritious food, 18/96x100 mothers in transport, 14/96x100 mothers used money for purchasing medicine and 2 /96x100 respondents used money for other purpose and 1/96x100 answered that she did not spend the money. Significant association in between maternity incentive scheme and use of money by mothers themselves was reported (P value = 0.000 Pearson's Chi-Square).

Importance of maternity incentive scheme (MIS) on safe delivery services (SDS) needs to be disseminated in rural community through integrated health education program.[11] This type of study should be carried out in large scale in different rural community and among different ethnic groups of Nepal. National Radio and Television should broadcast MIS information nationwide in regular basis. The incentive scheme creates the awareness and increases the utilization of services. Therefore, proper mobilization of the FCHV to provide information to mothers and expected mothers is the demand of the country which will help to reduce maternal and child morbidity as well as mortality.

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