ORIGINAL ARTICLE

Maternal incentive scheme in Nepal – status of knowledge and financial benefits received by mothers on ANC incentive and safe delivery incentive program

Sudarshan Subedi[1], Hari Prasad Kaphle[2], Subina Acharya[3], Neena Gupta[4], Varidmala Jain[5]

[1,2]Lecturer, School of Health and Allied Sciences, Pokhara University, Kaski, Nepal, [3]Nursing Instructor, Fewacity Institute of Medical Sciences, Pokhara, Nepal, [4,5]Assistant Professor, Faculty of Health Sciences, Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad, Uttar Pradesh, India

Abstract	Introduction	Methodology	Results	Conclusion	References	Citation	Tables / Figures

Corresponding Author

Address for Correspondence: Sudarshan Subedi, Lecturer,School of Health and Allied Sciences, Pokhara University, Kaski, Nepal
E Mail ID: subedisudarshan@gmail.com

Citation

Subedi S, Kaphle HP, Acharya S, Gupta N, Jain V. Maternal incentive scheme in Nepal – status of knowledge and financial benefits received by mothers on ANC incentive and safe delivery incentive program. Ind J Comm Health. 2014;26(3):273-277.

Source of Funding : Nil, **Conflict of Interest:** None declared

Article Cycle

Submission: 30/07/2014; **Revision:** 08/09/2014; **Acceptance:**10/09/2014; **Publication:**20/09/2014

Abstract

Background: Antenatal (ANC) and Safe Delivery Incentive Program (SDIP) of Nepal is implemented with the view to increase institutional delivery, thereby improving maternal health. The program has been a public issue regarding its information cum. incentive received by the clients and reimbursement to the health facilities. The study aimed to identify and assess the knowledge with financial benefits received by mothers from 4ANC visits and institutional delivery. **Methods**: Descriptive study was conducted among six villages of Syangja district, Nepal in December 2013. Data was taken from mothers who had delivered during the last one year of study. Full concern was adapted to consent, anonymity, confidentiality and validity. Epi-data and SPSS were used for analysis and interpretation of data. **Results:** Among the total 414 mothers, 60.6% and 82.9% were aware on 4ANC incentive and SDIP respectively. Total, consulted, mothers who had delivered in health-facility (n=212) received delivery incentive. Comparing the delivery benefits with ANC (n=212), 65.4% of mothers were deprived from ANC incentive though they practiced scheduled ANC visit. As an interesting fact, some other cases of non-ANC visit (n=3) and less than four/non-scheduled visit (n=8) were benefited from the ANC incentive as opposed to the rule of scheme. Analysis has shown that mothers who were aware on ANC incentive scheme were 5.2 times more likely to receive incentive than those of unaware one. **Conclusion:** The utilization of ANC incentive is found to be the result of its level of awareness. Government and concerned authority should valuably focus on ANC incentive program to increase its utilization like SDIP.

Key Words

Maternal Incentive Scheme; Aama Program; ANC Incentive; Safe Delivery Incentive Program (SDIP); Nepal.

Introduction

Safe Delivery Incentive Program (SDIP) was launched by Government of Nepal in 2005 with the goal in reducing maternal mortality and morbidity via improvement in maternal service utilization; focused primarily to increase the coverage of health facility-delivery and secondly to increase skilled birth attendants (health workers) for home delivery services. The program got its inception with the condition linking to the high financial cost as a one of the barriers to women for accessing skill birth attendance in delivery.

SDIP is a scheme, which initially has covered three aspects. Firstly, the financial assistance (NRs.500, 1000 and 1500 in the Terai, Hill and Mountain areas respectively) is compensating the costs of transportation for women which varies due to the geographical reason. Second is the remuneration allocated for trained health workers for attending either home delivery or institutional delivery figuring NRs. 300; and by strategy, the payment for home delivery is reduced to NRs. 200 from 2008 in order to emphasize the importance of institutional delivery. Third one is the free delivery service at public health facilities (where payment provided for health facility ranges from NRs. 1000 to NRs. 7000 according to types of delivery – normal, complicated and caesarean section to compensate the costs of drugs,

supplies, equipment's and incentive to health workers), initially started in 25 districts with low Human Development Index (HDI) which, from 2009, has covered all the public health facilities along with some non-governmental and private hospitals around the country. The SDIP, from its second revision in 2009, added another financial scheme for women (a cash payment of NRs. 400) after completion of 4 scheduled ANC visits, for which health-facility delivery and first postnatal visit are mandatory. SDIP, from its second revision in 2009 merged with Aama Program (the term "Aama" refers to mother) and now the program covers above mentioned four components [1].

Aims & Objectives

This study covers the first and fourth components of Aama Program i.e. SDIP and ANC incentive. The objective was to identify and assess the knowledge and financial benefits received from 4ANC visits and institutional delivery among mothers who had gone through delivery during the last 12 months in 2013.

Material and Methods

A descriptive study using quantitative approach was carried out among randomly selected six Village Development Committees (VDCs) of Syangja district of western Nepal in December 2013. Mothers having delivery in the last year were the study population. Proportionate-to-population was adopted to identify the samples from each VDC. It was followed by simple random sampling to select the final respondents. Structured interview schedule was used as a tool for data collection after pre-test to make it more practicable and convenient. Data obtained through face to face interview technique was entered by using 'epi-data' and analyzed with the help of 'Statistical Package for Social Science' (SPSS). Chi-square test and odd's ratio were calculated to find out the association and strength of association respectively.

Ethical clearance was given by Research Committee of School of Health and Allied Sciences, Pokhara University. All the information collected during the study was utilized only for study purpose. Verbal consent was taken from the respondents prior to study; anonymity and confidentiality was maintained wherever required. The Research Committee had approved the procedure of the above mentioned consent.

Results

The total of, 414 mothers were interviewed completely and relevant data was collected. The analysis was performed on the basis of socio-demographic characteristics along with ANC and delivery related information, knowledge on ANC incentive and SDIP among mothers, concerning to the benefits received from SDIP and ANC incentive scheme by institutional delivered mothers.

Socio-demographic Characteristics – Out of total 414 women, 63% (n=261) were from joint family. There was almost same distribution among the cast/ethnicity (Brahmin, Chhetri/Thakuri, Gurung/Magar and so-called Dalit comprising almost a quarter for each). The reported prevalence of early marriage (before 18 years) was 34.1%, followed by 65.7% marriage between the ages 18 – 30 years, with 0.2% late marriage.

ANC and delivery related characteristics – The total 14.7% (n=61) of mothers were reported first pregnancy before 18 years of age, followed by 84.1% between the age of 18 – 30. The knowledge on ANC visit was found popularly high (95.5%) but there was variation in practice viz. 11.4% absent for ANC visit, 27.2% had less than 4 visits or unscheduled and 61.4% scheduled visits as per the ANC protocol. The status of last delivery was near about equal for both non-institutional and institutional delivery (48.8% home/related place delivery and 51.2% institutional delivery). (Table 1) Knowledge on ANC Incentive and SDIP – Only 60.6% (n=251) mothers knew that government provides incentive after the completion of 4 ANC visit but only 3/4th of them mentioned the correct amount (NRs. 400) regarding that. On the contrary, 82.9% mothers were aware about the incentive that is provided to mothers in delivery as health-facility; among the population, 90.4% knew that the amount is NRs.1000. (Table 2)

Benefits received from SDIP and ANC Incentive Scheme – Out of total mothers who delivered in government or government listed health-facilities (n=212), total per cent had received incentive. It means that NRs. 1000 is provided to all mothers by institution. On the contrary, additional NRs. 400 was received by only a quarter of respondents (25.9%). (Table 3). Through the analysis on the received amount of incentive with the status of ANC visit, it was found that only 34.6% (n=44 out of 127 schedule visits) mothers got full amount of incentive (i.e. NRs. 1000 for institutional delivery with NRs. 400 additional for scheduled ANC visit). This showed that

65.4% of mothers were deprived from ANC incentive (NRs. 400) though they visited for four ANC visit as per the schedule i.e. on 4, 6, 8 and 9 months respectively. In contrast, some of the cases reporting a single visit (n=3) and having visit of less than four or non-scheduled visit (n=8) were benefited from the ANC incentive (NRs. 400) which oppose the rule of scheme. (Table 4)

Relationship between awareness and benefits – An association has been made between the awareness on incentive scheme and received incentive. It was found that the awareness on ANC incentive is highly associated with the received amount (p=<0.001); women aware on ANC incentive scheme were 5.2 times more to receive incentive in comparison to those unaware one. Furthermore, there exists no significant difference between delivery incentive and knowledge on that. (Table 5)

Discussion

The study revealed the prevalence of institutional delivery as 51.2%, which was slightly more than the current national prevalence i.e. 43% [2]. The prevalence of free institutional delivery in Nepal has increased each year after the implementation of SDIP i.e. 13.5% in 2005/06 to 43% in 2011/12 [1], the result is evident along with other factors as shown by different studies [3-5].

The study shows a large difference between awareness on ANC incentive and SDIP among mothers. Only 60.6% women were aware of ANC incentive with 3/4thhaving appropriate knowledge whereas the figure was 82.9% in case of delivery incentive with more than 90% having proper knowledge. The awareness on SDIP in this study was found higher than other studies – 25% in 2008 [6] and 64.8% in 2012 with 85.7% proper knowledge [5]. Financial barrier was one of the major factors which favored home delivery before the implementation of SDIP [7]. Motivation and incentive are required to pregnant mothers especially from rural areas regarding the importance of adequate ANC visits and delivery in health institution [8]. As per the policy, SDIP as a motivational factor has focused to fully subsidize the cost and ensure mothers do not pay anything out of pocket for institutional deliveries [9]. As a result of program implementation, the percentage of receiving delivery incentive by institutionally delivered mother increased significantly from 29% in 2005/06 to 100% in 2011/12. This study also showed that the total per cent of mothers with institutional delivery had received the amount of NRs. 1000 as a cost for transportation, which is found to be consistent with other studies done in different parts of the country [5, 10]. In this context, one of the study conducted in India under similar circumstances revealed a significant association between cash benefit assistance and different level of health care settings [11]. SDIP now has reached to every mother who came to health facility for delivery; this may be the result of almost a decade experience of health system along with increased level of awareness created through a wide dissemination of information from the side of government, health facilities and health workers. Nevertheless, loopholes still exist in the program. Some of the studies have shown the related findings viz. all the mothers not receiving incentive, mismatch between facility records and mother's records, mothers asked to return later on to collect the incentive, providing incentive partially [12], and home delivery cases claimed by the respective health facilities [10]; this could be due to misappropriation of incentive funds, recording errors, late receipt of budgeted funds by health facilities or the misuse of funds [12].

Although the utilization of SDIP was found to be significant enough, both in the present and other different studies, it seems that the ANC incentive scheme still is in infancy. This study found that among the mothers who had gone through four scheduled ANC visit (n=127), only 34.6% (n=44) had received the ANC incentive (additional NRs 400) along with delivery incentive (NRs 1000); remaining 65.4% had received delivery incentive but deprived from the ANC incentive. In a study, only 16% (46 of the 289) interviewed women had received the 4ANC incentive, among which 94% matched health facility records with women's reports but the rest 6% was recorded in health facility register was conflict in opinion [12]. There is lack of adequate information and research regarding 4ANC incentive in Nepal. Moreover, the series of report published by the Department of Health Services has only encompassed the information on SDIP and failed to address the status of 4ANC incentive. There could be various reasons for having low utilization, inadequate and inappropriate information and recording of ANC incentive. The major reasons for clients' side could be lack of awareness on 4ANC incentive, difficulties in meeting the 4ANC protocol (visits in specified months), lack of retention of ANC card and failed to show ANC card at the time of receiving incentive provided. Nonetheless, health

system is not free from weaknesses on this matter. Some of the reasons found for low utilization of ANC incentive as stated in a study were problem of separate fund disbursement for SDIP and 4ANC, health workers 'ignorance on 4ANC incentive, unavailability of funds and/or lack of records and receipts on 4ANC at private hospitals [12].

The difference between utilization of ANC incentive and delivery incentive was found to be affected by knowledge on respective aspect. Mothers who were aware of ANC incentive were 5.2 times more likely to receive the incentive with compared to mothers unaware. On the contrary, awareness on delivery incentive does not matter with receiving the concerned incentive. It could be that health facility are more sensitive in the disbursement of delivery incentive but ANC incentive may be caused so due to some problems in health system (as stated earlier) where mothers have to demand for their right of receiving incentive as a result of their awareness on incentive.

Conclusion

Awareness on ANC incentive was found to be very low with compared to delivery incentive which is affecting the utilization of each. Remarkably, the safe delivery incentive program has achieved its highest level of utilization but the ANC incentive program is under its maturity.

Recommendation

Awareness on ANC incentive among mothers should be focused by concerned authority because it tends to increase the utilization of the same. Moreover, there is the need of some more researches to identify the causes and program loopholes in minimal utilization of ANC incentive. Like in delivery incentive, the series of report published by Department of Health Services should incorporate adequate data and information on ANC incentive in future with priority.

Authors Contribution

All authors have contributed in almost all aspects of study. SS: conception and design, acquisition and analysis of data; article drafting and revision, final approval; HPK & SA: acquisition and analysis of data, article drafting and revision, final approval; NG & VJ: analysis of data, article drafting and revision, final approval.

Acknowledgement

Authors are highly acknowledged to Research Committee of School of Health and Allied Sciences of Pokhara University for providing ethical clearance to conduct the research. Moreover, the contribution of respondents in providing their valuable information will always memorable.

References

1. Department of Health Services (2005/06 – 2011/12) Annual Report (series). Department of Health Services, Ministry of Health and Population, Government of Nepal.
2. Department of Health Services (2011/12) Annual Report. Department of Health Services, Ministry of Health and Population, Government of Nepal.
3. Witter S, Khadka S, Nath H, Tiwari S. The national free delivery policy in Nepal: early evidence of its effects on health facilities. Health Policy and Planning. 2011;26:84-91.
4. Baral G. An assessment of the safe delivery incentive program at a tertiary level hospital in Nepal. J Nepal Health Res Counc. 2012 May;10(21):118-24. PubMed PMID: 23034373. [PubMed]
5. Karki A (2012) Safe Delivery Incentive Program Under Maternal Health Financing Policy of Nepal: A Case of Kailali District in Nepal. Dhaka: North South University.
6. Powel-Jackson T, Neupane BD, Tiwari S, Morrison J, Costello A (2008) Evaluation of safe delivery incentive programme: Report of the Evaluation. Kathmandu: SSMP, Nepal.
7. Borghi J, Ensor T, Neupane BD, Tiwari S. Financial implications of skilled attendance at delivery in Nepal. Trop Med Int Health. 2006 Feb;11(2):228-37. PubMed PMID: 16451348. [PubMed]
8. Pradhan P, Bhattarai S, Paudel I, Gaurav K, Pokharel P. Factors Contributing to Antenatal Care and Delivery Practices in Village Development Committees of Ilam District, Nepal. Kathmandu University Medical Journal 2013;41(1):60-5.
9. Voetberg A, Bhattarai M, Belay TA. Nepal: Staying the Course on Maternal and Child Health. 2013 World Bank.
10. Bhusal CL, Singh SP, Bc RK, Dhimal M, Jha BK, Acharya L, Thapa P, Magar A. Effectiveness and efficiency of Aama Surakshya Karyakram in terms of barriers in accessing maternal health services in Nepal. J Nepal Health Res Counc. 2011 Oct;9(2):129-37. PubMed PMID: 22929841. [PubMed]
11. Trivedi R, Adhikari P, Singh S, Sharma V, Nath S. Comparative evaluation of JSY services at different health care settings of Rewa, Madhya Pradesh. Ind J Comm Health. 2014; 26(1):92-97. [Google Scholars]
12. Upreti SR, Baral S, Lamichhane P, Khanal MN, Tiwari S, Tandan M, et al. Rapid Assessment of the Demand Side Financing Schemes: Aama and 4ANC Programmes (The Seventh Rapid Assessment). Kathmandu: Ministry of Health and Population; Nepal Health Sector Support Programme and Health Research and Social Development Forum, 2013.

----------x----------

Tables

TABLE 1 ANC AND DELIVERY RELATED INFORMATION (N=414)

Characteristics	Frequency	Percentage
Age at first pregnancy		
Less than 18 years	61	14.7 **Table Continue…**

18 to 30 years	348	84.1
More than 30 years	5	1.2
Knowledge on ANC visit		
Yes	397	95.9
No	17	4.1
Status of ANC visit		
No visit	47	11.4
Non-scheduled visit	113	27.2
Scheduled visit	254	61.4
Status of latest delivery		
Institutional delivery	212	51.2
Non-institutional delivery	202	48.8

TABLE 2 KNOWLEDGE ON ANC INCENTIVE AND SDIP

SDIP related characteristics	Frequency	Percentage
Knowledge on ANC incentive (n=414)		
Yes	251	60.6
No	163	39.4
Status of Knowledge (n=251)		
Correct	190	75.7
Incorrect	61	24.3
Knowledge on delivery incentive (n=414)		
Yes	343	82.9
No	71	17.1
Status of Knowledge (n=343)		
Correct	310	90.4
Incorrect	33	9.6

TABLE 3 BENEFITS RECEIVED FROM SDIP AND ANC INCENTIVE SCHEME (N=212)

Characteristics	Frequency	Percentage
Received delivery incentive		
Yes	212	100
No	0	0
Received amount		
NRs. 1000	157	74.1
NRs. 1400 (Rs. 1000 plus Rs. 400)	55	25.9

TABLE 4 ANC VISIT, INSTITUTIONAL DELIVERY AND DELIVERY INCENTIVE

ANC visit status	Institutional delivery	Received amount of incentive (n=212)	
		Rs. 1000	**Rs. 1400**
No visit	24	21 (87.5%)	3 (12.3%)
Non-scheduled visit	61	53 (86.9%)	8 (13.1%)
Scheduled visit	127	83 (65.4%)	44 (34.6%)
Total	212	157	55

TABLE 5 ASSOCIATION BETWEEN AWARENESS AND BENEFITS (N=212)

Variables	Received amount of incentive		χ^2	P value	OR
	Rs. 1000	**Rs. 1400**			
Awareness on ANC incentive					
No	61 (91.0%)	06 (9.0%)	14.72	<0.001	5.2
Yes	96 (66.2%)	49 (33.8%)			
Awareness on delivery incentive					
No	11 (68.8%)	5 (31.2%)	0.25	0.567*	--
Yes	146 (74.5%)	50 (25.5%)			