

**POSTPARTUM FAMILY PLANNING INTEGRATION WITH MATERNAL, NEWBORN
AND CHILD HEALTH SERVICES****Mohammad Imran***

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ABSTRACT

Background: The information related to family planning and services help in improving gap between births and also address the unmet required for contraception. The optimal family planning and MNCH practices regarding maternal and child health, and nutrition are beneficial for the health of woman as well as the newborn. **Purpose:** The present study aims to investigate postpartum family planning integration with maternal, newborn and child health services. **Methodology:** The study has incorporated cross-sectional design approach for tracking the services received by the respondents. The study has been conducted in different hospitals and health-care centers. Women approaching towards maternal, newborn, and child health (MNCH) care were involved in this study. Each woman was given a survey form to be filled during their visit to the health-care clinic. The women were asked about their knowledge regarding the significance of family planning. **Results:** The results have shown that majority of the women visited the facility clinic either for consulting doctor for her sick child (47.4 %) or for postnatal care (23 %). The knowledge regarding the importance of family planning was not satisfactory among majority of the women (65.9 %). Whereas, 74.1 % of them stated that they had some knowledge regarding the negative impact of short pregnancy on the health of mother as well as the child. However, majority of the women (85.2 %) confirmed that they were satisfied with health of their children even after short pregnancy durations. **Conclusion:** It has been concluded that although family planning services in the existing community-based MNCH programs were effective, but the level of awareness regarding the significance of family planning was not satisfactory.

KEYWORDS: Postpartum, Family Planning, Maternal Health, Newborn, Child Health Services.**INTRODUCTION**

In the past 20 years, the increased use of contraceptives has caused 40% reduction in the maternal deaths (Ahmed et al., 2012). Women do not seek family planning at the time of childbirth; however, they are likely to attend antenatal, prenatal, and child health services. The maternal, newborn, and child health (MNCH) care is extended to offer reliable and valuable opportunities for each woman, who is at risk of closely packed pregnancies (Cleland et al., 2012). The nutritional programs, opportunities for integrated service delivery, and childhood immunization are missed often; despite of increased uptake of family planning integrated with maternal as well as newborn's health. Women are provided with information related to family planning and services by taking advantage of postpartum family planning programs and MNCH continuum of care. This would help in improving gap between births and also address the unmet required for contraception (Ahmed et al., 2013)

During pregnancy, childbirth, and child's first two years, family planning and MNCH are considered as important components of care for women. There are beneficial

effects of optimal family planning and MNCH practices regarding maternal and child health, and nutrition. There is increased risk of maternal mortality, poor pregnancy outcomes, and stunting in children in close birth intervals. Different ways of integration are used along a continuum usually. The term full segregated was proposed by Ahgren and Axelsson (2005) that was concerned with the use of a single service at the health facility clinic accidentally. Whereas, the term fully integrated is associated with multiple resources. In the same context, the conceptual model proposed by Ahgren and Axelsson (2005) provided efficient definitions for a low-income clinical setting. At any facility, the term single provider is referred to the consolidated care provider by a single person; however, the internal referrals between the providers are used for multiple located providers referring to the delivery of integrated service (Mackenzie et al., 2018).

It is a cost-effective method to measure the challenges associated with integrated healthcare delivery that determines what and how to measure. Therefore, the integra initiative project is likely to be developed to overcome the shortcomings of the failed approaches.

This would help in generating simple client flow assessment tool for tracking the maternal and child health services received by the mother and infant, respectively (Ahmed et al., 2015). In the developing countries, meeting postpartum contraceptive needs is a major challenge, as majority of the women deliver their babies at home (Ahmed et al., 2015). Promoting the use of contraceptives is a significant family planning strategy as ovulation among the women returns after 4 weeks of the childbirth. There are increased chances of women to conceive before even resuming with their menstrual cycle. Therefore, the use of contraceptives has been promoted during the early post-partum period for avoiding unwanted births and improves pregnancy spacing (Ahmed et al., 2015).

Majority of the women (95%) from the developing countries wish to postpone their pregnancy for at least 2 years after the last delivery. However, contraceptives are not used by all the women. An interval of approximately 24 months has been recommended before attempting next pregnancy after the last delivery. This interval helps in reducing the risk of adverse maternal, perinatal, and outcomes. A latest study conducted by Rutstein and Winter (2015) confirmed 20% of the births possessed shorter inter-birth interval for more than 24 years. However, within three years after delivery, around 55% of the births resulted from pregnancies (Ahmed et al., 2015). The health of mothers as well as babies is significantly affected by short birth intervals, because of sibling competition and maternal nutritional depletion (3rd tab, Conde-Agudelo et al. 2012). The risk of maternal mortality, nutritional deficiencies, low birth weight, and preterm births is increased among the women with short birth intervals. Child survival is likely to improve among women with longer birth spacing. A study conducted by DaVanzo et al. (2007) stated that chances of abortions, miscarriage, and stillbirths were increased among the women with shorter pregnancy intervals.

Women were approached immediately after giving birth through global postpartum family planning (PPFP) launched by the Population Council. Majority of the contraceptive methods were clinic-based during the initial years of implementing this program. The clinical setting helped in approaching towards women, resulting in the implementation of PPFP program among different health facilities. Along with delivery being conducted at home, majority of the women rarely visit the health facilities after their delivery (postpartum). PPFP program failed because of this reason as it failed to reach a large population period. Enormous challenges of reaching women after birth immediately tend to experience a period of neglect. A gateway to reach women during antenatal care visits is provided by the integration of family planning and maternal and newborn health (MNH) services. The present study has investigated postpartum family planning integration with maternal, newborn and child health services.

MATERIAL AND METHODS

Study Design: The study has incorporated cross-sectional design approach for tracking the services received by the respondents under the implementation model. The study has provided large mixed-method descriptive evaluations including the surveys and interview with the respondents.

Study Setting: The study has been conducted in different hospitals in Karachi on the basis of duration, intensity, and level of support towards the integration of PPFP programs. The hospitals considered in this study included Lifeline Hospital and Hamdard Hospital. It is also associated with pragmatic factors such as accessibility.

Study Sample: The data of 135 female respondents was calculates through sample size calculator that determines how many people are needed to be interviewed to get result reflecting the target population as precisely as needed.

Inclusion and Exclusion Criteria

The women seeking services at targeted MNCH service delivery area was involved in this study. Moreover, the women aged between 18 – 40 years and were pregnant or had child with age of under 2 years, were also included. However, the women who were seeking for labor and delivery services were excluded.

Data Collection: The data has been collected in 2017 during the months of November and December. The research assistants administered a questionnaire at every clinical facility. The main aim of the study was to screen as many eligible females in the target service delivery areas. Each woman was directed to fill the questionnaire during her visit to the healthcare facility. The arrival of time was noted and the form was given to the client to be filled and hand it over to any facility staff she interacted with. The departure time was also noted when the clients returned the form and left the facility clinic. The women were asked about their knowledge regarding the significance of family planning. However, the women who were not aware about this were informed and guided regarding this aspect.

Data Analysis: The data collected from the respondents was managed, cleaned, coded, and exported to Statistical Package of Social Sciences (SPSS) version 20.0.

Ethical Consideration: The ethical concern includes voluntary participation and informed consent. The principles follow to guarantee that human subjects are selecting to take part of their free will. The data collected from the patients stored in a password protected laptop of researcher. The confidentiality of personal data of participants of the study was the main ethical concern for the researcher. The current research study maintained and followed the complete code of conduct and also kept under consideration all the ethical codes imperative for

the conduction of the research study. An approval was obtained from the hospital and management before initiation of this project. A proper introduction was given to the participants before filling of questionnaire about the project. They were completely assured regarding the authenticity of the study and were told clearly that the data will only be used for conducting a research study. Moreover, it was also made sure that the data will be kept safe and anonymous in order to maintain the standard of confidentiality.

RESULTS

A total of 135 female respondents were recruited in the study. The average length of time a single respondent

spent travelling to the facility ranged from about half an hour to an hour. Moreover, the time spent at the facility clinic were as long as 2 hours 30 minutes. Majority of the women visited the facility clinic either for consulting doctor for her sick child (47.4 %), or for postnatal care (23 %) (Table 1). The respondents were asked about their level of awareness regarding family planning and importance of long pregnancy interval. Majority of the women stated that they had minimum knowledge regarding the importance of family planning (65.9 %). Whereas, 74.1 % of them stated that they had some knowledge regarding the negative impact of short pregnancy on the health of mother as well as the child.

Table. 1: Demographic Details.

Measure	Items	Frequency	Percentage (%)
Purpose of visiting facility	Antenatal care	11	8.1 %
	Postnatal care	31	23 %
	Child sick	64	47.4 %
	Immunization	10	7.4 %
	Counselling of family planning	5	3.7 %
	Laboratory	10	7.4 %
	Pharmacy	4	3 %
Awareness of family planning	Yes	40	29.6 %
	No	95	70.4 %
Awareness of importance of long pregnancy interval	Yes	46	34.1 %
	No	89	65.9 %
Any medical condition due to short pregnancy interval	Yes	100	74.1 %
	No	35	25.9 %
Satisfied with child's health	Yes	20	14.8 %
	No	115	85.2 %

The women with short pregnancy duration narrated that they were suffering from minor to major complications since their delivery (74.1 %). However, they confirmed that they were satisfied with health of their children even after short pregnancy durations (85.2 %) (Table 1). Table 2 has depicted the evaluations of cross tabulation analysis to examine relationships within the data that might not be readily apparent when analyzing total survey responses. A fair number of respondents (49) agreed on the fact that health opportunities for integrated service delivery are missed and contraceptives should be promoted during the early post-partum period. Neutral response was obtained regarding the importance of family planning for maintaining women's health and administration of contraceptives during the early post-partum period (Table 2).

Table. 2: Crosstab Evaluations.

		Health opportunities for integrated service delivery are missed					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Contraceptives should be promoted during the early post-partum period	Strongly Agree	4	0	0	0	0	4
	Agree	3	12	0	0	0	15
	Neutral	0	49	0	0	0	49
	Disagree	0	14	9	33	5	61
	Strongly Disagree	0	0	0	0	6	6
Total		7	75	9	33	11	135
		Family planning help in improving gap between births					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Contraceptives should be promoted during the early post-partum period	Strongly Agree	4	0	0	0	0	4
	Agree	15	0	0	0	0	15
	Neutral	32	6	11	0	0	49
	Disagree	0	0	59	2	0	61
	Strongly Disagree	0	0	0	0	6	6
Total		51	6	70	2	6	135
		Family planning is important components of care for women					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Contraceptives should be promoted during the early post-partum period	Strongly Agree	4	0	0	0	0	4
	Agree	4	11	0	0	0	15
	Neutral	0	8	41	0	0	49
	Disagree	0	0	56	5	0	61
	Strongly Disagree	0	0	0	4	2	6
Total		8	19	97	9	2	135
		Postpartum contraceptive needs are a major challenge					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Contraceptives should be promoted during the early post-partum period	Strongly Agree	4	0	0	0	0	4
	Agree	15	0	0	0	0	15
	Neutral	49	0	0	0	0	49
	Disagree	37	19	5	0	0	61
	Strongly Disagree	0	0	1	4	1	6
Total		105	19	6	4	1	135

DISCUSSION

The findings have suggested the significance of targeted programmatic support to integrate the approach of family planning along the continuum of care. The results have shown that the awareness about family planning and its positive impact on health of mother and child due to prolonged pregnancy interval is not satisfactory. The low level of awareness regarding postpartum use of contraceptives suggest the need for better means of institutionalizing and sustaining interventions. These results are consistent with the previous study conducted by Mayhew et al. (2016). The results showed that care to these individuals can be given through the incorporation of a functional integration measure, to avoid misleading conclusions on its ‘impact’ on health outcomes. The present study has provided authentic results as it has used the client flow method providing detailed information on combination of services clients received.

Complemented by the community-level integration activities, the integration initiative tends to demonstrate feasibility of integrating MNCH and family planning services at health centers and dispensaries. It is also necessary to examine, evaluate, and document changes in practices and use of services. In the present study, the

questionnaire distributed among the respondents has helped in examining consistency of service integration and characteristics of clients receiving integrated services. Mix results have been obtained regarding the impact of postpartum interventions on increasing birth spacing or reducing frequent childbearing. A study conducted by has shown that integration of family planning services is significant for maintaining health of mother and the newborn (Ahmed et al., 2015). Similarly, in the developed countries, the counselling and provisions for the use of contraceptives has become a standard part of postpartum care (Lopez et al., 2012).

Another study conducted by Church et al. (2017) stated that there is significant impact of increased cumulative exposure to integrated care over two years on the goals of life after making adjustments and certain programs. These programs are likely to help in rolling out integrated services to ensure repeated contact over time. The present study has also specified time required by each respondent to reach the nearest clinical facility. The survey results showed that lengthy travel distances are associated with decreased use of health services and poorer health outcomes. These results are consistent with another study conducted by Karra et al. (2016). It is

possible that each patient feel difference in their care after arriving at the nearest facility. The findings of this paper can be used to inform future integration efforts in different countries across the world.

CONCLUSION

The results of the present study have clearly demonstrated that integration of family planning services in the existing community-based MNH programs are effective as well as feasible. However, the level of awareness among the respondents regarding the significance of family planning was not satisfactory. The major challenge faced in this aspect is early postpartum family planning that is difficult to be implemented among the women, who deliver at neonates at home. However, the present study has shown that MNH programs help in approaching to the women during their antenatal and postpartum periods for improving their access and use of contraceptives. This also helps in reducing unwanted births, improve child's survival, and prolong birth intervals that affect the health of mothers, positively. The study has made significant contribution towards global dialogue regarding the operationalization of services for reducing the missed opportunities to care for women.

The significance of programmatic support specific to distinct service delivery areas has been highlighted. The results have clearly suggested the need to address sustaining behavior after an intervention has ended. In these settings integration does not lead towards greater waiting times for the women, who access towards integrated MNCH-family planning services. Future studies need to address other tools and integration focused programs for examining the consistency of service integration and the women, who receive these integrated services.

REFERENCES

- Ahgren, B., & Axelsson, R. Evaluating integrated health care: a model for measurement. *International journal of integrated care*, 2005; 5(3). Doi: 10.5334/ijic.134.
- Ahmed, S., Ahmed, S., McKaig, C., Begum, N., Mungia, J., Norton, M., & Baqui, A. H. The effect of integrating family planning with a maternal and newborn health program on postpartum contraceptive use and optimal birth spacing in rural Bangladesh. *Studies in family planning*, 2015; 46(3): 297-312.
- Ahmed, S., Li, Q., Liu, L., & Tsui, A. O. Maternal deaths averted by contraceptive use: an analysis of 172 countries. *The Lancet*, 2012; 380(9837): 111-125. Doi: 10.1016/S0140-6736(12)60.
- Ahmed, S., Norton, M., Williams, E., Ahmed, S., Shah, R., Begum, N., ... & McKaig, C. Operations research to add postpartum family planning to maternal and neonatal health to improve birth spacing in Sylhet District, Bangladesh. *Global Health: Science and Practice*, 2013; 1(2): 262-276. Doi: 10.9745/GHSP-D-13-00002.
- Church, K., Warren, C. E., Birdthistle, I., Ploubidis, G. B., Tomlin, K., Zhou, W., ... & Mayhew, S. H. Impact of integrated services on HIV testing: a nonrandomized trial among Kenyan family planning clients. *Studies in family planning*, 2017; 48(2): 201-218. Doi: 10.1111/sifp.12022.
- Cleland, J., Conde-Agudelo, A., Peterson, H., Ross, J., & Tsui, A. (2012). Contraception and health. *The Lancet*, 380(9837), 149-156. Doi: 10.1016/S0140-6736(12)60609-6.
- DaVanzo, J., Hale, L., Razzaque, A., & Rahman, M. Effects of interpregnancy interval and outcome of the preceding pregnancy on pregnancy outcomes in Matlab, Bangladesh. *BJOG: An International Journal of Obstetrics & Gynaecology*, 2007; 114(9): 1079-1087.
- Karra, M., Fink, G., & Canning, D. Facility distance and child mortality: a multi-country study of health facility access, service utilization, and child health outcomes. *International journal of epidemiology*, 2016; 46(3): 817-826. Doi: 10.1093/ije/dyw062.
- Lopez, L. M., Hiller, J. E., Grimes, D. A., & Chen, M. (2012). Education for contraceptive use by women after childbirth.
- Mackenzie, D., Pfitzer, A., Maly, C., Waka, C., Singh, G., & Sanyal, A. Postpartum family planning integration with maternal, newborn and child health services: a cross-sectional analysis of client flow patterns in India and Kenya. *BMJ open*, 2018; 8(4): e018580.
- Mayhew, S. H., Ploubidis, G. B., Sloggett, A., Church, K., Obure, C. D., Birdthistle, I., ... & Integra Initiative. Innovation in evaluating the impact of integrated service-delivery: the Integra indexes of HIV and reproductive health integration. *PLoS One*, 2016; 11(1): e0146694. Doi: 10.1371/journal.pone.0146694
- Rutstein, S. O., & Winter, R. (2015). Contraception needed to avoid high-fertility-risk births, and maternal and child deaths that would be averted. *ICF International*.