

Volume 10, Issue 1, (Special Issue)
March, 2018

ISSN No.:2348-4667

Anthropological Bulletin

a peer reviewed international journal

*Special Issue:
Women and Children's Perspectives*

Guest Editor:
Daud Salim Faruque

AB

Department of Anthropology
University of Lucknow, Lucknow, India

Role of Anganwadi as a Catalyst for Utilization of Maternal Health Services

Qurratul Aein Ali¹ and Saima Obaid²

ABSTRACT

The development of a child starts with the mother's womb and after birth it largely depends on various factors like nutritional status, basic primary educational setup, sharpening of mental ability and skills, to name a few. Along with child, maternal health is also important as majorly, maternal and child under nutrition is the attributable cause of more than one third of the mortality of children under five years of age (LANCET, 2008) which in itself is an alarm to awaken and restructure various programs and policies so as to reach towards the required result. Integrated Child Development Services (ICDS) is one of such an initiative. This scheme cater to the needs of mother and children and under this scheme the basic needs of issues associated with child development are taken care of like providing them with supplementary nutrition, immunization, basic education etc. This paper is an attempt to study the current scenario of women's health and development through Anganwadi centers and the functionality of Anganwadi in utilization of maternal and child health related service. Randomly selected studies in the identified localities namely rural and urban/semiurban areas of Aligarh dist. highlighted some issues in availing the services through Anganwadi, like ignorance of the community, lack of coordination and among service providers and beneficiaries and lack of willingness from the Anganwadi workers' etc are some of the issues to be address. But wherever there are good relationship and coordination this agency namely Anganwadi actually proven to be a catalyst in bringing positive changes.

Keywords: *Anganwadi, Integrated Child Development Services(ICDS), Nutrition, Maternal and child health*

Introduction:

Women's health is one of the major determinants of the health of the entire community (WHO, 2005). Women's health concerns are interrelated and influenced by early marriage, illiteracy, unsafe abortions, poor environmental hygiene, social and cultural influences and malnutrition, (Raju, K et.al 2017). Deficiency of vitamins, proteins, minerals, various other social factors, and poor health is a causal factor of malnutrition among women and adolescent girls around the globe and pose risks to the survival of mothers and children especially in countries like India (Manoharan, 2017). There are many social factors associated

¹ Assistant Professor, Deptt of Social Work, Aligarh Muslim University, India
 Email: qurratulali@gmail.com

² Research Scholar, Deptt of Social Work, Aligarh Muslim University, India

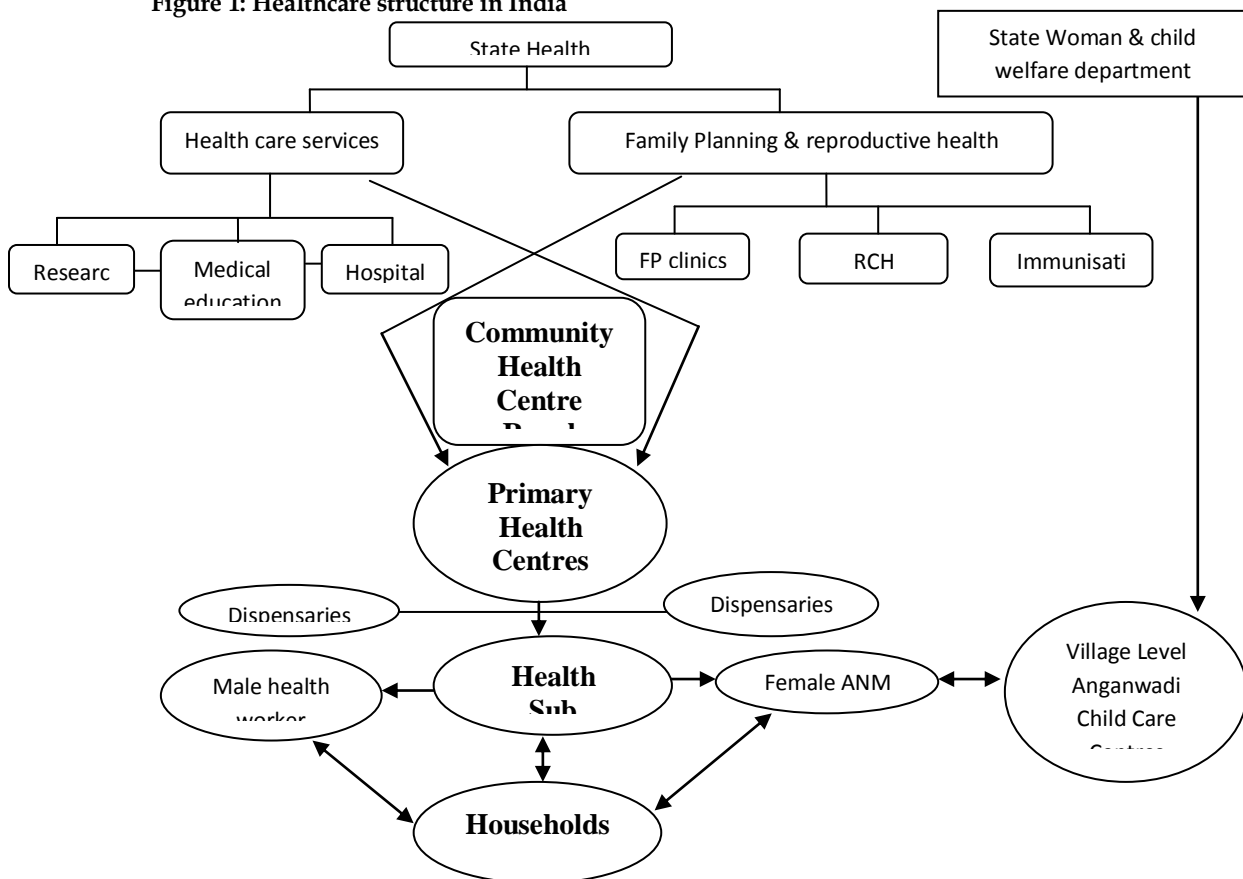
with the status and utilization of the maternal and child health services, like education accessibility, awareness, economic status etc. child development has also been buffeted by society and culture (Smuts & Hagen, 1985). In India, the government has taken multiple steps to cater to the issues related to women health and development in the form of some schemes like ICDS etc.

The healthcare structure in India is well knit and structured in such a way which targets one and all, ranging from metropolitan cities to smallest villages. Despite of strongly knit policies and well-structured healthcare facilities at all levels, India's utilization of basic healthcare services is still poor which can be attributed to illiteracy and unawareness, negligence, cultural factors, poverty and some other factors (Shariff, A. & Singh, G, 2002). The lower utilization of general healthcare services has also weakened maternal healthcare services utilization among women. As per the existing literature, more focus has been on family planning and contraceptive methods whereas very few studies have been found to be on the utilization of services related to improving neonatal, infant and maternal health basics. In India itself, more than 50 percent of children born have a high incidence of mortality in the first year of their birth (Measham & Chatterjee, 1999). With this high intensity of child mortality, it becomes important to understand the reproductive health care aspects and its structure whereby focus can be centered upon in order to reduce maternal and child mortality in India.

Concerted efforts are needed to address the vulnerabilities of the large population, especially when it becomes difficult for them to access and afford health facilities. An increasing recognition that "healthy women means healthy nation" is required to achieve development targets.

There are many studies on the ICDS in relation to the Child development are there but rarely any studies are to analyze the role of ICDS/Anganwadi in women's health/maternal health outcomes.

Figure 1: Healthcare structure in India



India has a broad network of healthcare structure regulated by central and state government at different levels. Figure 1 depicts the health care services structure in India where reproductive health care is one of its important segments consisting of family planning services, reproductive and child health services and immunization services. These services are provided at community as well as primary level.

Anganwadi child care centers have its prime importance, because of its easy accessibility, holistic nature and community-based approach.

Integrated Child Development Scheme (ICDS)

As a part of outreach programs, voluntary female workers are stationed at village and unit level which works in line with the formal and traditional healthcare system. These workers are Anganwadi workers which impart their services through Anganwadi centers running under Integrated Child Development Services (ICDS) which was launched on October 2nd, 1975 focusing on women and child health.

The basic unit of this program is Anganwadi centers. These women and child care Anganwadi centers are run by State women and child welfare department. An Anganwadi center is established over a population of 1000 households where it is her duty to register pregnant women and provide them with nutritional and medicinal supplements, assist them in getting regular health checkups, provide nutritional and health counseling to expectant and lactating mothers, imparting non formal and pre school education to children in the age group 3-6 years and assist them in getting immunized. Along with that, an Anganwadi worker is always supposed to be in touch with the community women in order to help them with their maternal and child health issues and make them aware about those issues and motivate them to learn new things related to child healthcare practices.

As Anganwadi worker can turn out to be the most important pivot of connecting women at village level with the reproductive healthcare system due to her involvement with the people at grassroots level, it is crucial to understand their functionality and role in improving and strengthening our maternal healthcare system and hence improving maternal and child mortality rates and creating more healthy society. This paper tries to study the prospective improvement that Anganwadi centers could bring in utilization of reproductive healthcare services in India.

Maternal Health

Most of the deaths from causes related to pregnancy and childbirth occur in the developing world, and almost all of these deaths are preventable with existing knowledge and technology. International health community which includes the World Bank, the World Health Organization, the United Nations Population Fund, and agencies in 45 countries in response to this challenge launched the Safe Motherhood Initiative in 1987. This initiative was aimed to halve the number of maternal deaths by year 2000 by providing programmes focusing majorly on the provision of following three services:

- a) Information and education: It was designed to create demand for clinical services, alert women and others to possible complications, and help develop transport links with obstetric units in district hospitals.
- b) Community based obstetrics: With trained nurse midwife staff to provide prenatal care, supervise normal deliveries, and refer women who develop complications.
- c) District hospital facilities: To provide essential obstetric services, including neonatal resuscitation. **Naomi Craft (1997)**

According to the Fact sheet of the WHO, approximately 1000 women die every day from preventable causes of the pregnancy and childbirth. Out of that 99% deaths occur in developing nations, moreover it is higher in the rural areas than urban areas, more young

face more risk of pregnancy than older women. Factsheet of WHO(2012) further defined that skilled care during ante natal care, delivery and post natal care can save women and newborn babies (Ali.Q.2017).

“India’s maternal health condition is not at all satisfactory, it had the largest number of maternal deaths in the world” (Barry, 2007). “In the year 2009, the count of maternal deaths was 212 on every 100,000 live births, although the MMR dropped from 212 deaths per 100,000 live births in 2007-09 to 178 in 2010-12, yet, India is behind the target of 103 deaths per live births which has to be achieved by 2015 under the United Nations mandated MDG” (Mehta, 2014), according to the findings of “Targets Overview of MDGs” it is slow and off track. Clearly, the initiatives have not been effective enough in encouraging political prioritisation of this issue in India or implementing adequate strategies “Maternal mortality remains a major challenge to health systems worldwide, even though a sharpened focus on reduction of maternal mortality became a defining part of Millennium Development Goal 5” (Ronsmans et al., 2006).

To improve the maternal Health status, it is recommended to have at least three antenatal cares, but the fact as per the National Family Health Surveys show increase in antenatal care, but the target is not achieved according to NFHS-1, 65%; NFHS-2, 66%; and NFHS-3, 77%, women were getting any type of antenatal care. In access to antenatal care rural urban gap is also very wide. In urban areas (84% in NFHS-1; 86% in NFHS-2; and 91% in NFHS-3) on the contrary in rural areas (59% in NFHS-1; 60% in NFHS-2; and 72% in NFHS-3) women were having access to any type of antenatal care (Ali.Q. 2017).

Malnutrition and Health Impact

In India, 55% women are anemic and every third woman is under-nourished (NFHS-3).

“Malnourishment in women can be harmful to both mother and baby during pregnancy and childbirth for many reasons. If the woman has suffered from malnourishment most of her life, her body is likely to be underdeveloped, with a narrow birth canal, making labour difficult and increasing the risk of obstructed labour and foetal death” (Bale et al., 2003).

Recommended dietary allowances, nutrient intakes, and gaps

RECOMMENDED DIETARY ALLOWANCES, NUTRIENT INTAKES, AND GAPS												
	Age Group 1-3 years			Age Group 4-6 years			Pregnant Women			Lactating Women		
	RDA	Intake	Gap	RDA	Intake	Gap	RDA	Intake	Gap	RDA	Intake	Gap
Energy (Kcal)	1240	687	553	1690	978	712	2175	1654	521	2425	1852	573
Protein (g)	22	18.6	3.4	30	26.5	3.5	65	45	20	75	46.7	28.3
Iron(mg)	12	4.3	7.7	18	6.8	11.2	38	12	26	30	11.8	18.2
Vitamin A (µg.)	400	56	344	400	66	334	600	111	489	950	107	843
Calcium(mg)	400	161	239	400	66	334	1000	352	648	1000	320	680
Thiamin(mg)	0.6	0.4	0.2	0.9	0.6	0.3	1.1	1.0	0.1	1.2	1.2	0

Riboflavin(mg)	0.7	0.3	0.4	1.0	0.3	0.7	1.3	0.5	0.8	1.4	0.6	0.8
Niacin(mg)	8.0	4.7	3.3	11.0	7.4	3.6	14.0	12.4	1.6	16	14.4	1.6
Vitamin C (mg)	30	9	21	40.0	15.0	25	40	26	14	80	28	52
Free folic acid (µg.)	30	18	12	40	26	14	400	48	352	150	52	97

[Source: MWCD, 2009]

India has a high number of malnourished people and our child malnutrition rate is also unacceptable high. iron, vitamins calcium, protein deficiencies are very common.

To combat this issue of high malnutrition, ICDS has developed its programs and services especially targeting the vulnerable section who are more deficient n din need of extra support.

Following are some of the components of ICDS.

A. For children less than 3years of age:

- On 5th day of each month, bachpan diwas is celebrated and children are provided with supplementary nutrition in the form of premix laddoos.
- Regular growth monitoring
- Routine immunization
- Health checkup to monitor timely growth
- Referral services in case of requirement of any urgent medical attention

B. For children between 3-6 years of age:

- Providing preschool and non-formal education in the form of plays and toys which enhances their motor learning skills.
- On 25th day of each month, ladli diwas is celebrated and they are provided children with supplementary nutrition in the form of namkeen daliya.
- Regular growth monitoring
- Routine immunization
- Health check-up
- Referral services in case of requirement of any urgent medical attention

C. Nursing and expectant mothers:

- Timely health checkup
- On 15th day of each month mamta diwas is celebrated and they are provided with supplementary nutrition like meetha daliya to fulfill their nutritional requirement.
- Distribution of Iron tablets and immunization for Tetanus toxoid
- Awareness regarding nutrition and health education.

D. Women in the age group of 15-45 years:

- Providing them nutritional and health education

E. Adolescent girls between 11-18 years of age:

- Supplementary nutrition to fulfill their nutritional requirement(Daliya, Premix Laddoo, etc)
- Timely health checkup and immunization
- Iron Folic Acid and deworming tablets.

- Non-formal education along with home-based skill training which includes tailoring and candle making etc
- Referral services in case of requirement of any urgent medical attention
- Training them on the management of Anganwadi center.

It is also important to understand the status of the utilization of these services, and to understand the gap so to achieve the millennium goals.

Methodology:

For this study, various case studies have been conducted in and around areas of Aligarh city (Aligarh lies in Uttar Pradesh state of India having a total area of 3700.4 square km. The district is closely situated to National Capital of India, Delhi). Study includes villages and suburbs for the purpose of analyzing the causative factors which hampers the utilization of maternal and child health care facilities which are already available at their end. The respondents of this study were selected purposively in the selected areas, cases have been studied for qualitative analysis which is presented in the form of case studies.

Case studies related to issues and challenges and impact of Anganwadi centers in the improvement of maternal and child health

A:- From rural areas:

1. Samreen (name changed) is of 27 years of age belongs to Abbasi caste. She has never been to school. Her husband works in a polish factory as a laborer and earns 10,000 rupees monthly. She gave birth to four children out of which three were born at home and for the youngest one she opted for government hospital as the birth place. Her two children died due to some unknown reasons and remaining two are alive who were born with a very low weight whereby health personnel responsible for providing assistance in such cases should have kept an eye on the existing condition of children and mother but according to her no proper attention and special care was given to them by any means as no ASHA and Anganwadi worker have contacted her. As per her obstetric history she has previously suffered one miscarriage, the reasons of which are not known to her. *She has not taken much services from Anganwadi center due to lack of attention and poor attitude of the Anganwadi worker towards the client's problems and issues.* Also, her two living children were born with very low weight and for that also no attention and special care was given by ASHA and Anganwadi worker to minimize the problem.
2. Naghma (name changed) is of 27 years of age, an uneducated lady. Her husband is a laborer and their family income is around rupees 7000 per month. She is expecting her first child and being taken care of by Anganwadi worker in an appreciable manner. She has been given timely supplementation and Iron Folic Acid tablets by the worker along with timely advices of food intake, proper rest and all other precautions to be taken by her. She is being helped by the worker in getting the required tests done during pregnancy by visiting the Primary Health Centers time to time. Being uneducated, she herself would not have been able to avail these healthcare services in required manner, *but due to assistance from Anganwadi worker, she has been able to maintain a healthy pregnancy and is now aware about the role of good dietary intake for improving her unborn child's health.* As it is her first pregnancy, so she was very nervous in the beginning as she was not aware about anything but now she is hopeful that due to all the support and counseling she is getting from Anganwadi worker, she will be able to manage her reproductive health in good condition.
3. Mehjabeen (name changed) is a high school pass out, of 28 years of age, belongs to Abbasi family. Her husband works in a polish factory with earnings of around 10,000 rupees per month. She has three children born through both caesarean

section and normal mode of delivery. Out of those, two were born in hospital and one child was born at home. *The reason behind her going to private clinic is not getting required care and attention either through Anganwadi or from ASHA, as previously she had also suffered one miscarriage due to her inability to carry the child as she was anemic at that time which was diagnosed by the doctor she was seeing in a private clinic. At the time of interview, her two children who were born underweight are still not growing well as per their age, reasons being her inability to provide needed care and lack of counseling.*

4. A 19-year-old Sabina (name changed) has been married in an Abbasi family since last 4 years. Her husband works in a polish factory and able to earn an income of around 12000 rupees monthly. She has given birth to two children, the eldest one was born in a private clinic while the youngest one in a government hospital which died later due to jaundice. The reasons for weak newborn could be attributed to her non availing of any ante natal care during her pregnancy. At present, she is pregnant with her third child and visibly she seems weak and anemic. Even though she was in a deplorable condition *she did not want to seek assistance from Anganwadi worker because of worker's ignorant attitude.* But after suggestions provided by her significant others, she is seeing a doctor privately running clinic nearby for maintaining good health during this pregnancy. *She is totally dissatisfied with the Anganwadi services and during her interview often complained about facilities they are entitled to get from Anganwadi centers but are not provided and despite of all hurdles they are bound to seek healthcare services from privately running clinics which charges a lot of money.*
5. Pavitra (name changed) is not educated, 28 years old belongs to Lodhi family. Her husband is a contractor and earns around 20000 rupees per month. She gave birth to three children at home without any professional medical assistance and her one child died due to some unknown reasons after 6 months of birth. As per her obstetric health, she had also suffered a miscarriage earlier due to anemic conditions. *After regularly visiting Anganwadi center in her locality, she got to know various new information regarding maternal and child healthcare aspects which she has started following for taking care of her and nutritional requirement of her children. Only complain for the anganwadi was about irregular distribution of nutritional food items which she can not buy from outside on a regular basis. She is now also able to seek urgent medical attention when required by her children as earlier she used to ignore those signs of ill health considering it to be a normal issue for a child. Due to timely assistance provided by ASHA for immunization, she is able to provide them regular vaccination and her children are growing well now.*

As it is evident from the above case studies, multiple factors have been found to be affecting poor utilization of maternal health care related services among women in rural areas. These are illiteracy, unawareness about maintaining good maternal health due to early marriage and childbearing, lesser age gaps among multiple pregnancies due to which the mother is unable to take care of herself, lack of coordination and will of the Anganwadi workers with the community, negligent and bad attitude of the workers towards beneficiaries.

Lack of community participation and willingness towards the Anganwadi services was also also identified as the factors behind poor utilization of the services.

whereas in some of the areas/centers (very few) Anganwadi workers have been working in a commendable manner and are able to assist the community women and motivate them to get more services professional health service providers.

B:- From urban/semiurban areas:

1. Archana (name changed) is 30 years old belonging to Lodha caste and she has never been to school. Her husband works as a laborer and earns a monthly salary of rupees 5000. She gave birth to five children out of which three died in womb due to some internal gynecological complications. Her children were born underweight and due to lack of nutrients they still were not growing according to their age. She, being uneducated was not aware about the nutritional requirements of herself and children. But after her child started going *Anganwadi center for non-formal education, she also started attending meetings and got to know about newer perspectives of maternal and child health through Anganwadi worker. The changes that she brought afterwards in her family nutritional status after getting aware has changed her perception of Anganwadi center as earlier she considered these centers as only a place of getting food items.* She has now gained more confidence to discuss issues related to maternal health with the ASHA and Anganwadi workers.
2. Kavita (name changed) is 22 years of age and have studied up to 5th class and belongs to Prajapat family. Her husband is a tea vendor and earns around 5000 rupees per month. She has delivered four children at home, out of which two died due to diarrhea. No proper care and handling was done of the newborn during birth by the local dai (midwife). it has been assessed that she considers these centers for distribution of food items only and not availing assistance for getting maternal and child health related services. Though ASHA and anganwadi workers also visits in their area, but her negligent attitude doesn't allow them to discuss anything related to the health of their children and themselves. She doesn't have much faith on these services. As per the observation, her remaining two children were also underweight and not growing as per their age group, in this case her unawareness was the reason and even lack of will of the anganwadi workers create this miserable situation.
3. Nazmeen (name changed) is of 26 years of age, belongs to Pathan family has studied till 12th class. Her husband works in a lock factory with earnings of around 8000 rupees per month. She has one child of around 1 year of age born in government hospital and she is expecting her second child and taking ANC in government hospital. She had suffered two miscarriages previously due to her weak and anemic condition as less care was provided to her from the family side as well as she herself was unaware about maintaining good health. *She visits the Anganwadi centre often only to take nutritional food items from there, but she has pointed out regarding the irregular distribution of items.*
4. Shashi (name changed) aged 45 years belongs to Prajapat caste. She is not educated and her husband works as a laborer with earnings of around 7000 rupees monthly. *She took ante natal care during her pregnancy in government hospital after getting information and motivated by the anganwadi worker, she also takes food items and assistance related to immunization of their children. But also complained about the irregularity of the supply and distribution of nutritional food*
5. Sunita (name changed) is 25 years of age belonging to Dhobi caste and she has studied upto 5th class. Her husband is a laborer in a brick kiln nearby and earns around 5000 per month. Earlier she suffered two miscarriages due to anemia and weakness, and then she discussed it with ASHA and along with her she went to nearby health center for consulting with doctor. She gave birth to two children in government hospital afterwards who were healthy and she herself is able to take care of her health as now after much counseling given by ASHA she understands the importance of food and nutrition in managing better health conditions. *Her one child studies in Anganwadi center and is learning slowly but gradually. Overall, she is satisfied with the working of Anganwadi worker and hopes to get better facilities in the*

nearby future with respect to education provided to children and provision of food supplements to the beneficiaries.

Above cases depict the issue of urban beneficiaries especially with regard to maternal health as most of the women are hesitant to share the existing problems and issues related to maternal health with any professional due to which sometimes they result in creating more complex situations which may negatively affect mother or child's health. Though urban areas have better accessibility to healthcare and educational service, and Anganwadi is not the only resource they have.

Discussion:

On the basis of the analysis of these cases few reasons have been identified, which are needed to be address.

Negligence and illiteracy of the women

From the analysis of these studies, it can be said that, most of the times the women who are uneducated are much hesitant to seek medical advice even though they have some kind of complications. In many of the cases, early marriage and childbearing were the root cause of mishandling of pregnancy and resulting in miscarriages afterwards. If community women are provided with right guidance and proper assistance by health service providers, it may help in attaining self-reliance by women living in those areas and they will be able to improve their maternal health and can take good care of their families in terms of health and nutrition.

Though ICDS program is well woven to cater to the needs of mother and child, through direct and indirect support of health service providers in assisting the women during their pregnancy and afterwards and connecting them with formal medical structure, the utilization of these services is much dependant on beneficiaries as most of them are hesitant, reluctant and unaware of the shortcomings of neglecting maternal and child health care issues. For them, there is a strong need for behavior modification of those women and increase their participation in all activities of Anganwadi centers which can be done through regular counseling and visits of Anganwadi workers to their homes.

Mismanagement of the resources:

Some of the ladies has taken the food items from the Anganwadi regularly and sell those items to the fruit vendors. Reason asserted by them for this practice is presence of large amount of "Laha" in Dalia and Panjeeri that they get from Anganwadi centre which is not suitable for their consumption so they find it an easy alternative to sell it and get some fruit or money in place of those items.

This misconception needs to address and communicated them properly with the fact.

Lack of coordination and willingness of the Anganwadi workers

Many of the cases have pointed towards negative attitude or carelessness of Anganwadi worker in carrying out their roles properly.

Anganwadi workers are least concern about the counselling sessions, which is an integral part of the service. Breastfeeding issues are not much discussed by Anganwadi worker with the beneficiaries.

Caste and religion

It has also been observed that the beneficiaries in the rural areas are more caste and religion oriented in taking the benefits of the anganwadi services, as the Muslim women in the rural areas have less connection and faith in Anganwadi workers compare to the urban Muslim women/beneficiaries who utilize the services without concerning the religion and caste of the Anganwadi workers. (Majority Anganwadi belong to Hindu community, even in the Muslim majority areas).

It has also been found that the Anganwadi workers in the rural areas are also not having any good remarks towards the Muslim beneficiaries, unlike their counter parts in the urban areas.

Very few Hindu beneficiaries were also reluctant in taking services from the lower caste workers.

Conclusion:

India's healthcare system can only be strengthened when it is efficient enough to serve people at unit or village level because most of the services are confined to urban areas. As still a large majority of Indians reside in villages, it becomes important to provide them with better healthcare service and specifically maternal healthcare as women living in rural areas are mostly unaware and ignorant about the ill effect of neglecting maternal health. Anganwadi centers working in villages can prove to be a better source of information and assistance to the people as they can get benefitted more from utilizing the healthcare services provided at their end. In this paper, case studies have been presented which signals upon the issues in availing of services through Anganwadi, like ignorance, lack of coordination among service providers and beneficiaries, and wherever there are good relationship and coordination this agency namely Anganwadi actually proven to be a catalyst in bringing positive changes.

In view of this; it is advisable the policy makers to motivate the Anganwadi workers more in developing good rapport with the community members and to develop more positive relationship with the community members which would be resulted into more and more successful outcomes.

References:

- Ali, Q. (2017). *Migration, Maternal Health and HIV/AIDS: the Challenges ahead: Paragon International Pub. New Delhi.*
- Arnold, F., Nangia, P., & Kapil, U. (2004). Indicators of Nutrition for Women and Children: current status and recommendations. *Economic and Political Weekly*, 39(7), 664–670.
- Bale, J. R., Stoll, B. J. and Lucas, A. O. (2003). *Improving Birth Outcomes: Meeting The Challenge In The Developing World.* Washington DC: The National Academies Press.
- Barbara, W. L. and Behrman, J.R. (2017). Determinants of Women's Health Status and Health-Care Utilization in a Developing Country: A Latent Variable Approach. *The Review of Economics and Statistics*, Vol. 66, No. 4 (Nov., 1984), pp. 696-703
- Barry, N. (2007). *The Chinese Economy: Transition and Growth.* Cambridge: MIT Press.
- Central Bureau of Health Intelligence. (2017). National Health Profile, Chapter 4 (Health Finance). *National Health Profile.* Retrieved from <http://cbhidghs.nic.in/writereaddata/mainlinkFile/Nhp17Ch4.pdf>
- Chakrabarti, A., & Chaudhuri, K. (2007). Antenatal and maternal health care utilization: Evidence from northeastern states of India. *Applied Economics*, 39(6), 683–695.
- Gupta, M. Das, & Lokshin, M. (n.d.). *India ' s Integrated Child Development Services Nutrition Program Who Does It Reach and What Effect Does It Have ?*
- Kotecha, P. V, Patel, S. V, Shah, S., Katara, P., & Madan, G. (2012). Health seeking behavior and utilization of health services by pregnant mothers in Vadodara slums. *Healthline.*
- Measham, Anthony R. and Meera Chaterjee (1999), *Wasting Away: The crisis of malnutrition in India*, Washington DC: World Bank.

- Meredith, R. L. and Thapa, B.K., et.al. (2005). How Does Schooling Influence Maternal Health Practices? Evidence from Nepal. *Comparative Education Review*
- Peltzer, K., & Pengpid, S. (2011). Health behavior interventions in developing countries. *Health Behavior Interventions in Developing Countries*, 3(2011), 1-353.
- Ronsmans, C., and Graham, W.J. (2006). Maternal mortality: who, when, where and why. *Lancet*, 368(9542):1189-1200.
- Shariff, A. & Singh, G. (2007). Determinants of Maternal Health Care Utilisation in India : Evidence from a Recent Household Survey. In *NCAER, Working Paper Series No. 85*.
