

Challenges and Patterns of Complementary Feeding for Women in Employment: A Qualitative Study from Rural India

QUAZI SYED ZAHIRUDDIN¹, ABHAY GAIDHANE^{1*}, PRITI KOGADE¹,
UMESH KAWALKAR², NAZLI KHATIB³ and SHILPA GAIDHANE⁴

¹Department of Community Medicine Datta Meghe Institute of Medical Sciences, Wardha, India.

²District RCH Officer, Zilla Parishad, Akola, India.

³Department of Physiology Datta Meghe Institute of Medical Sciences, Wardha, India.

⁴Department of Medicine Datta Meghe Institute of Medical Sciences, Wardha, India.

<http://dx.doi.org/10.12944/CRNFSJ.4.1.06>

Received: January 05, 2016; Accepted: February 29, 2016)

ABSTRACT

Timely initiation of complementary feeding and pattern of complementary feeding is suboptimal in India. Women in employment faces challenges for following optimum Infant and Young Child Feeding practices, which have a significant impact on growth and development of child under 2 years of age. Objective was to study challenges faced by women in employment for complementary feeding and pattern of complementary feeding in rural area. Qualitative study was conducted in rural area of Wardha district, India. Six FGDs were conducted and participants (total 39) were women in employment having child between 6-23 months and community level service providers. Women in rural area resume work early, could not practice exclusive breast feeding for six months. They initiate complementary feeding early and had inadequate awareness regarding complementary feeding. Women initiate semisolid and soft food at 4-6 months, smashed solid food at 7-9 months. Women leave their babies at mercy of the elders or sometime neighbours when they are at work. Villages do not have child care facilities or creches. All these determinants compromises complementary feeding with regards to timely and adequacy, recommended dietary diversity, safe feeding. Challenges for practicing exclusive breast feeding for 6 month, early initiation and inadequate complementary feeding adversely affect growth and development of children in rural area which may have undesired long term implication on the cognitive development. Strengthening Anganwadi program in India with more focus on children under 2 years, community baby care rooms / creches services would be useful strategy for supporting the women in employment to practice the optimum IYCF recommendations. India needs a conducive workplace policies and adequate protection by law for women in employment.

Key words: Complementary Feeding, Breast Feeding, Women in Employment, Rural India.

INTRODUCTION

As a global public health recommendation, infant should be exclusively breastfed for the first six month of life to achieve optimal growth, development and health. There after to meet their evolving nutritional requirements, infant should receive nutritionally adequate and safe complementary

foods while breastfeeding complementary feeding. Furthermore, it was also noted that the complementary feeding pattern is suboptimal in India².

Employment among women has risen dramatically over the last 10 years. In 1982, 43 percent of women with a child under one year

of age worked outside the home. By 2008, this proportion increased to 56.4 percent². As a result of employment, women with an infant required to spend considerable time at work, and this may pose challenge for them to care for their babies during working hours. These challenges may be further compounded, as the maternity benefit / maternity leave for women in formal employment is only for a period of 6 months and lack of policy support or social security measures for women working in non formal sector.

Very little information exists regarding pattern and challenges faced for complementary feeding by women in employment in Indian rural settings, where most of the women work in non-formal sector, mostly in farms or domestic help or daily wage workers and therefore are inadequately covered under current policies. With this background, we undertook this study to explore the pattern of complementary feeding and challenges for complementary feeding faced by women in employment from rural area of Wardha District.

METHODOLOGY

The study was conducted in rural areas of Wardha district located in central part of India. Wardha district has a population of around 1.2 million and about 67.53% people reside in rural area (2011 census). Occupation of majority of people is farming. Most of the women from rural areas from the district work as a daily wage worker in farms. Wardha District has eight blocks. Two blocks Seloo and Deoli were selected for the study. Study participants were women in employment in unorganised as well as organised sector and with child aged between 6 to 23 months, Accredited Social Health Activist (ASHA), and Auxiliary Nurse Midwife (ANM) The study protocol was approved by the Institutional Ethics Committee.

Methods

Data was collected by Focus Group Discussion (FGD). Total six FGDs were conduct. Four FGDs were conducted for women working in formal and non formal sectors. Two FGDs was conducted with Accredited Social Health Activist (ASHA) a community health worker and Auxiliary Nurse Midwife (ANM). For FGDs, eight to ten

employed women having child in the age group of 6 to 23 months was purposefully selected from study villages. Total 39 women, 8 ASHAs and 6 ANMs participated in FGDs.

FGD guide was prepared after brain storming sessions with ASHAs and ANMs. FGD Guide incorporated issues such as (a) The woman's working details - type of work and duration of work; (b) knowledge about colostrum, breastfeeding and exclusive breastfeeding; (c) initiation time of complementary feeding and what are the common reasons for initiation; (d) age at which the child was first fed with some common complementary foods; (e) pattern of complementary feeding – type of food given, age at which some specific foods are introduce, method of feeding, frequency of complementary feeding; (g) knowledge regarding timely, adequate, proper and safe complementary feeding; (h) challenges for complementary feeding – type and duration of work and does it influence practice of complementary feeding, feeding baby when mothers are away at work, carrying baby to their workplace, certain provisions for breast feeding and complementary feeding at workplace, pattern of feeds and dietary diversity.

FGDs were conducted in local Marathi language and it lasted for 90 to 120 min. Session began with a brief introduction and description of the study purpose. All participants were assured about confidentiality, and were asked to respect each other's opinion. Participants were informed that there is no right or wrong answers and encouraged to share their views regarding the pattern of complementary feeding and challenges faced for adequate and safe complementary feeding.

Data Analysis

All recording and written notes were converted into transcript. Two researchers read transcripts independently and then coded transcript using descriptive words or phrases. Coded transcripts were then segregated into areas of interest, and themes that emerged were outlined. This outlining of themes, along with sample-coded transcripts to illustrate each theme, was reviewed and edited. Data are presented textually with quotes to illustrate study findings, wherever required.

Findings

Women employed in organised sector and participated in FGDs were teachers, clerk in bank, social worker working in hospital, and computer operator. Women working in unorganised sector were mostly agricultural labourers, construction worker and some were working as domestic help. Age of the participant ranges from 19 yrs to 31 yrs. Working hours for women in non-formal sector was eight to ten hour in a day. It was noted that women working in non-formal sector resume their work early and some have to resume as early as second month after deliver. Nine women participated in FGDs also mentioned they resumed job before fourth month of delivery.

Participants during FGDs stated women from rural area have correct knowledge about the colostrum, early initiation of breast feeding and exclusive breast feeding. With regards to practices, participant mentioned, usually women feed colostrum to their baby and initiate breast feeding as early as possible. FGDs also revealed that giving pre-lacteal feed in the form of honey and jaggery water is a common practice in rural area. Pre-lacteal feed is given by senior or elder member in the family, even in institutional / hospital delivery.

Practicing exclusive breast feeding for six month was very challenging for women in employment. Moreover, complementary feeding is initiated before six month as most of the women working for employment have to resume work as too early.

Participants stated that, in rural area the common practice is to first introduce water or rice water or lentil/pulses water, clear soup of rice or pulses. It is of watery consistency prepared by cooking of rice or pulses (specially red gram) with water. Giving cow's milk to baby as early as four month is common practice in rural area as well when mother is in employment. It was also noted that women perceive that rice water, pulses water and cow milk are not complimentary food, rather they think that all liquids are substitute of breast milk. During discussion, one of the mothers told that

"I give my baby only liquid substance like dal water, rice water and cow milk. He is now five month

old. I have no option but to start these liquids as I have to resume my job at four month after delivery. These are the affordable choices available for us."

At six to eighth month semisolid and soft solid foods are introduce. Most commonly used semisolid food item were khichadi (rice and dal cooked together with oil and salt), dal and rice, satu etc. Satu, a homemade infant formula, is a powder prepared from roasted pulses and cereals locally available. Two to three teaspoon of powder is added in a glass of water (approximately 200 ml) or milk (one serving bowl) with one teaspoon of sugar or jaggery to prepare a semisolid paste, which is then feed to child. This is freshly prepared at each feed and given by spoon. Commercial infant formula for feeding baby is rarely used as it is expensive. Solid foods such as like chapatti, egg, potato, sweets, shira, upamaetc are usually introduce at 7 to 8 month of child age. However, biscuits are given as a pacifiers to 4 to 5 months old babies. Solid food are smashed after cooking before feeding. It was also observed that 9 to 10 month old infants are feed what ever is cooked at home. One of the women narrated..

We feed all those food which are prepare for us in home in smashed form like chapatti, boiled eggs boiled potato, Rice and Dal, and other things. We do not have that much time and choice, we go to farm everyday for work..we don't prepare separate food for baby when they eat all that we cooked for everybody.

Participants mentioned that most of the mothers from rural area are not aware of verity of food choice and various methods of preparation of complementary feeding.

As measured by the WHO indicators, adequatedietary diversity was considered if the child between 6–23 months of age receives foods from four or more food groups of the seven food groups and child is considered to be receiving minimum meal frequency if he/she receives solid, semisolid, or soft foods with the minimum number of 2 and 3 times for breastfed and 4 times for non-breastfed infants and children aged 6–23 months, respectively. The study reveals that the knowledge regarding the importance of dietary diversity was very low and less

than 50% of the women participated in the FGDs stated that they gave not more than 2 to 3 food groups. The selection of food for complementary feeding depends on something that child likes to eat and what is affordable and available at home. One mother responds stated

"We only cooked for babies that we are cooking traditionally in our home. We are not aware of the other preparation that you are mentioning and we do not know how to cook. If someone train us and it is easy (convenient) we can cook that for our baby"

Job/employment poses a significant challenge for complementary feeding, right from preparation to feeding babies timely, hygienically and safely. Mothers usually do not carry their baby at farms or work place. Even in organised sector employer do not provide for the feeding room / baby care room facility at work place. Family members (mother in laws) or elder sibling take care of their babies back home when mother is at work. Often mothers cook food in morning and these prepared food are feed to baby by caregivers throughout the day. Women in FGDs mentioned they understand the important hygiene, time and frequency of feeding, but that is very challenging to follow when we are at work. One participant narrated..

"Mother take best care of their children, but when we are at work we don't have any option but to depend on the elderly person or sometimes even on neighbours to looks our babies. They feed to children according to their likes and dislikes, and not sure how they feed my baby. We hope they are they maintain hygiene during feeds."

Support from husbands/fathers specially for feeding to baby is so insignificant. Husbands or fathers have little contribution to child care. Traditionally baby care practices particularly feeding kids consider as mothers responsibility. Participants in the FGD stated the need to having baby care facility or Creche in all villages. One participant mentioned..

If there are palnaghar (Creche) in our village I will prefer keeping by baby there (in Creche) if it an hygienic and a trained caregiver is there.

ASHA worker in FGDs mentioned

Only child in the age group of 3 to 6 years go to Anganwadicentres. There are no facility for the babies less than 3 years old in the village so they have left on the mercy of some elder in the home, or some elder sibling or even sometimes neighbours or close relatives.

DISCUSSION

The study emphasises that women pose significant challenges for complementary feeding when they are out at work. Study reveals that most of women in rural area are well aware regarding the importance of avoiding pre-lacteal feeds, colostrum feeding, early initiation of breast-feeding, exclusive breast feeding till six months and timely initiation of complementary feeding. However, women in employment face significant challenges to practice exclusive breast feeding and timely and appropriate complementary feeding. In India women in the workforce has increase significantly in the last decade and most of them work in informal sector such as farm worker, domestic help, of other daily wage workers. Moreover, women in rural area women are overburdened, as they have to earn for the family as well as to feed the entire family in addition to care for kids.

Our finding reveal that many women in employment resume their work as early as three months after childbirth and it is challenging for them to practice the exclusive breast feeding for six month. Therefore they have to initiate complementary feeding early. Most of women have to resume resumed their work very early due to financial distress or fear of loosing job. Study of Danielle et al says that returning to work was one of the main reasons for early initiation of complementary feeding and reduce breast feeding⁴. Other studies reported that full-time working mothers breastfed an average of 16.5 weeks, which was 8.6 weeks less than nonworking mothers and employed women also introduced complementary foods at younger ages^{5,6}. Similar to our findings, many studies have identified that factors that influence early initiation complementary feeding among working women are timing of return to work or employment, daily working hours and to some extent type of job^{7, 8, 9, 10}.

We observed that water is given to baby as early as two months in dry and hot months and followed by liquid foods, such as soup of rice or dal (pulses) and cow milk at four to five months. At Five to six month of age of child soft and semi-solid such as khichadi, Dal and Rice, Satu, Soji, etc are introduce. At 7 to 9 months of age solid food such as chapati, vegetables, boiled potato, boiled eggs etc are introduce. Solid foods are generally smashed and a thick paste is prepared for feeding. Cookies / biscuit are as early as 4 to 5 months. Very, few mothers use commercial infant formula for feeding in rural area as it is costly.

However, women perceive that giving water, rice water, pulses water and cow milk are not complimentary food, and only semi solid, solid foods like homemade infant formula, commercial infant formula, khichadi, chapati, vegetables etc are the complementary food and they thought that all liquids are substitute of breast milk. This misperceptions, may be due to socio-cultural practices since generations and lack of awareness regarding complementary feeding among women from rural area. Studies from rural India also stated that lower socioeconomic status, undesirable socio-cultural beliefs, maternal illiteracy, and ignorance are reason for the poor knowledge and practices regarding complementary feeding^{6,9,10,11}.

With regards to dietary diversity in complementary feeding, study reveals that overall practice related to dietary diversity was inadequate and key predictors were poor knowledge regarding importance of dietary diversity among mothers, affordability and availability of food at household and early resumption of the work, person back at home taking care of the baby with mother is at work. Type of food group and pattern of the feeding largely depends upon the age and sociocultural practices within the community.

In most of families, when mothers are out for work, elder persons, mostly grandmothers, take care of child. Nevertheless due to old age it is challenging from them to maintain the frequency, adequacy, dietary diversity, timing, hygiene of complementary feeding. Similar finding reported by

Patel et al that children aged 6-23 months, minimum dietary diversity rate was 15.2%, minimum meal frequency 41.5% and minimum acceptable diet 9.2% and possible reason may be older age of caregiver in addition to lack of accurate information, social beliefs and practices about complementary feeding¹².

Our study reveals that in rural area, contribution of fathers in child care is insignificant. This may be due to social norms that traditionally day to day child care is considered as mothers responsibility. This have put a tremendous burden on the women from rural area as she is required to work for income as well as she has to work in home. Furthermore villages have hardly have any facility like creches or community baby care room. Current Anganwadi Program under Integrated Child Development Scheme in India have a very limited family centred care and mostly children from three to six years of age receive care and informal education at the centre. Therefore, mothers' have no other option but to leave there babies at the mercy of elders, or siblings or neighbours when they are out for work. It is risky and challenging to take babies at their workplace as well, as most of them are working in farms as a daily wage workers. Moreover, it was observed that employers thinks that if women brought her child then she may not concentrate on her work.

Thus our study reiterates that employment poses a significant challenges for practicing exclusive breast feeding and adequate complementary feeding and this may adversely affect the growth and development of children in rural area which may have undesired long term implication on the cognitive development and human capital of the country. Strengthening the current Anganwadi program in India to provide the community baby care rooms or creches services for infants would be the useful strategy for supporting the women in employment to practice the optimum IYCF recommendations. This may require revising of strategy and additional resources. Furthermore, India needs to have a conducive workplace policies for women working in both for organised and informal sector as well as adequate protection by law for women in employment.

ACKNOWLEDGEMENT

We sincerely thank all the women who participated in the FGD and given their valuable inputs.

REFERENCES

1. WPRO | Health in Asia and the Pacific [Internet]. WPRO | WHO Western Pacific Region; [cited 2013 Oct 3]. Available from: http://www.wpro.who.int/health_research/documents/Health_in_Asia_and_the_Pacific/en/index.html
2. Labor force participation of mothers with infants in 2008/: The Editor's Desk/: U.S. Bureau of Labor Statistics [Internet].. Available from: <http://www.bls.gov/opub/ted/2009/may/wk4/art04.htm>
3. Datta V. Child care in India/: Emerging issues and challenges for the 21st century. 1992;2:99–108.
4. Weber D, Janson A, Nolan M. Female employees' perceptions of organisational support for breastfeeding at work: findings from an Australian health service workplace. ...Breastfeed.... [Internet]. 2011 [cited 2013 Oct 3]; Available from: <http://www.biomedcentral.com/content/pdf/1746-4358-6-19.pdf>
5. Fein SB, Roe B. The effect of work status on initiation and duration of breast-feeding. *Am. J. Public Health* [Internet]. Murdoch Children's Research Institute, Melbourne, Australia.; 1998;88(7):1042–6. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1508266&tool=pmcentrez&rendertype=abstract>
6. Batal M, Boulghourjian C, Akik C. Complementary feeding patterns in a developing country: a cross-sectional study across Lebanon. *East. Mediterr. Health J.* [Internet]. 2010 Feb [cited 2013 Oct 2];16(2):180–6. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/20799572>
7. Auerbach KG, Guss E. Maternal employment and breastfeeding. A study of 567 women's experiences. *Am. J. Dis. Child.* [Internet]. 1984 Oct [cited 2013 Oct 1];138(10):958–60. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/6475857>
8. Duckett L. Maternal employment and breastfeeding. *NAACOGS. Clin. Issu. Perinat. Womens. Health Nurs.* [Internet]. 1992 Jan [cited 2013 Oct 1];3(4):701–12. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/1476850>
9. Igbedioh S. Influence of mother's occupation and education on breast-feeding and weaning in infants and children in Makurdi, Nigeria. *Nutr. Health* [Internet]. 1994 [cited 2013 Oct 3]; Available from: <http://nah.sagepub.com/content/9/4/289.short>
10. Visness C, Kennedy K. Maternal employment and breast-feeding: findings from the 1988 National Maternal and Infant Health Survey. ... *J. Public Heal.* [Internet]. 1997 [cited 2013 Oct 3]; Available from: http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.87.6.945?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3Dpubmed
11. Kuriyan R, Kurpad AV. Complementary feeding patterns in India. *Nutr. Metab. Cardiovasc. Dis.* [Internet]. 2012 Oct [cited 2013 Oct 2];22(10):799–805. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22748607>
12. Patel A, Pusdekar Y, Badhoniya N, Borkar J, Agho KE, Dibley MJ. Determinants of inappropriate complementary feeding practices in young children in India: secondary analysis of National Family Health Survey 2005–2006. *Matern. Child Nutr.* [Internet]. 2012 Jan [cited 2013 Oct 2];8Suppl 1:28–44. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22168517>