

CHAPTER V

KNOWLEDGE, ATTITUDE AND PERCEPTION OF INFANT FEEDING METHODS AMONG HIV POSITIVE WOMEN AND HEALTH CARE PROVIDERS

5.1. Introduction

The Prevention of Parent to Child Transmission of HIV/AIDS (PPTCT) programme was launched in the country in the year 2002 following a feasibility study in 11 major hospitals in the five high HIV prevalence states, namely, Andhra Pradesh, Karnataka, Maharashtra, Manipur and Tamil Nadu. The PPTCT programme reveals that 27 million pregnancies occur annually in India. Of those, 34,675 pregnant women (0.13 per cent) were found HIV positive annually. In the absence of any intervention, an estimated cohort of 13,000 infected babies will be born annually. The PPTCT programme aims to prevent the pre-natal transmission of HIV from an HIV infected pregnant mother to her new born baby. The programme entails counselling and testing of pregnant women in the ICTCs. The PPTCT services cover about 37 per cent annual estimated pregnancies in the country. In the year 2013-14, nearly 10 million pregnant women accessed this service. Of these, 12,008 pregnant women were HIV positive. The National Family Health Survey (NFHS-3) which was held in 2006 found that two-thirds of women in Odisha heard of AIDS. But only 11 per cent of women and 25 per cent of men had comprehensive knowledge of HIV/AIDS (NFHS-3, 2005-06). In order to provide universal access to these services, further scale up was planned up to the level of Community Health Centre and the Primary Health Centre, as well as private sector by forging public-private partnerships. Through these measures, the Government of India is committed to work towards achievement of global target of “Elimination of new HIV infections among children” by 2015.

The present study, researcher describes the attitude about infant feeding practice methods among HIV positive women and health care providers in selected health facilities. Further, infant feeding methods recommended by the health care providers have been elaborated.

5.2. HIV positive mothers received infant feeding counselling during ANC visit

HIV counselling and testing is an important part of a continuum of HIV prevention and treatment services. These services include three main components - integrated counselling and testing services, PPTCT and HIV-TB collaborative activities. As per the PPTCT guidelines, every pregnant woman received counselling during the antenatal visit. Table 5.1 shows that more than three-fourths of HIV positive women (76 per cent) received HIV counselling during their ANC visit. However, a dismal picture was found related to the counselling on infant feeding as a little more than half of the positive women (53 per cent)

received information about the same during their visit to health care centres for ANC. The level of knowledge on methods of feeding practices helps in improving child health that extensively reflects in survival of a child from HIV/AIDS.

Table 5.1 HIV positive women received counselling during ANC visit (Per cent)

Counselling received during ANC visit	Yes (%)	No (%)
Received HIV counselling during ANC visit	76.0	24.0
Received infant feeding counselling during the ANC visit	53.0	47.0

Source: Computed from the primary data.

The percentage of HIV positive mothers received information on different topics discussed during their presence in HIV counselling session is presented in Table 5.2. Majority of HIV positive women (73 per cent) received information on “exclusive breast feeding” followed by the positive women (64 per cent) who received advises on “formula/replacement feeding” practices and the information on supplementary feeding is 53 per cent of positive women respectively. Most of the information given to HIV positive women during HIV counselling was exclusively about breast feeding and bottle feeding methods, priority being given in medical advise to the former.

Table 5.2 HIV positive women received advises given during HIV counselling (Per cent)

Advices given during HIV counselling	Yes Per cent	No Per cent
About exclusive breastfeeding only	73.0	27.0
About bottle feeding only	64.0	36.0
About suplimentary feeding/cow milk	53.0	47.0

Source: Computed from the primary data.

5.3. Knowledge of HIV positive women about infant feeding methods

Information related to breast feeding of child by HIV infected women and knowledge on feeding method is given in Table 5.3. The responses were collected in three forms of responses such as “Yes”, “No” and “Don’t Know” for each specific questions. More than half of the HIV positive women responded about their knowledge on three different issues relating to methods of feeding practices, viz., (1) feeding only breast milk is adequate to babies in the first six months of life (52 per cent), (2) breast milk prevents childhood illness (51 per cent), and (3) feeding only formula or other food to babies is expensive than breast

milk (53 per cent). But about one-third of HIV positive women (33 per cent) reported that they had knowledge of feeding only formula or other food to a baby to prevent the HIV transmission.

Table 5.3 Knowledge of feeding methods among HIV positive women (Percentage)

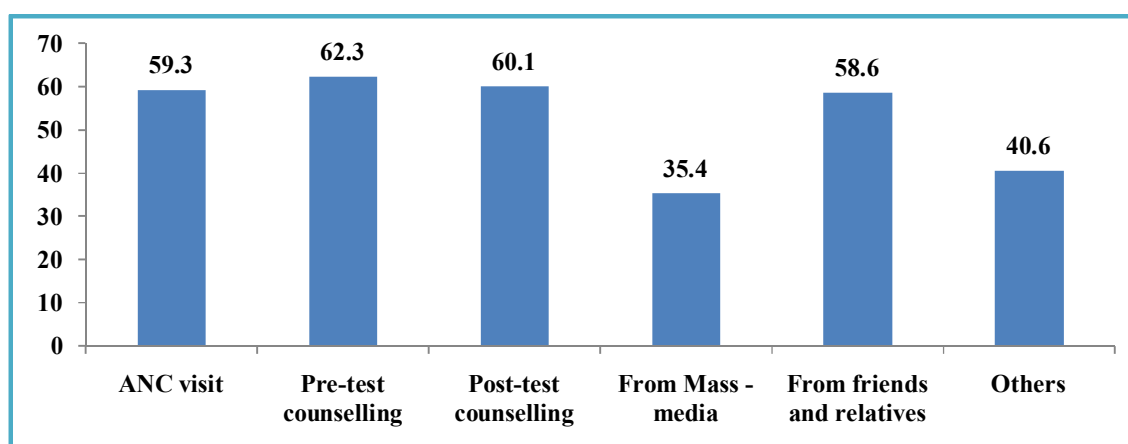
Knowledge of feeding methods	Yes	No	Don't Know
Feeding only breast milk is adequate to babies in the first six months of life	52.0	26.3	21.7
Breast milk prevents childhood illness	50.7	30.9	18.4
Feeding only formula or other food to babies is expensive than breast milk	53.3	26.3	20.4
Feeding only formula or other food to baby to prevent the transmission	32.2	31.6	36.2

Source: Computed from the primary data.

Percentage of HIV positive women who received knowledge of infant feeding

Knowledge of infant feeding practices among HIV positive women is essential for improvement of the health of a child. Percentage of HIV positive women who received knowledge from various sources is depicted in the Figure 5.1. Over 60 per cent of them received this knowledge from pre-test and post-test counselling at the health facility followed by ANC visit and friends and relatives (59 per cent). Findings show, the role of mass media doesn't have any impact on their infant feeding practices.

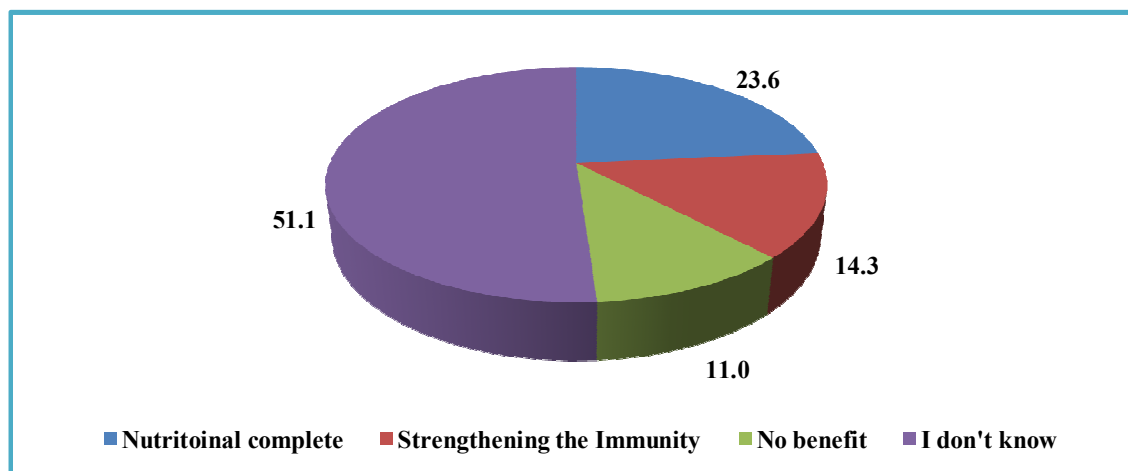
Figure 5.1 HIV positive women receiving knowledge on infant feeding (percentage)



Source: Computed from the primary data.

In addition to knowledge about the recommended infant feeding practices, HIV positive women were asked the benefits of colostrum. Figure 5.2 shows the proportion of such women. More than 50 per cent of them did not know its benefit and only 24 per cent of them had some knowledge of it. The immunological benefit of colostrums was about 14 per cent only.

Fig 5.2 Proportion of HIV positive women who knew benefits of colostrums



Source: Computed from the primary data.

The proportion of HIV positive women who knew the benefits of breast feeding a baby are presented in Table 5.4. A majority of HIV positive women reported that it is nutritious and makes the baby healthier. About 51 per cent of them said that breast milk protected the child against disease.

Table 5.4 Advantages of breast feeding reported by the HIV positive women

Particulars	Yes (Per cent)
Nutritious	66.7
Makes baby grow and strong	33.8
Makes baby healthier	61.2
Only the food for baby	23.5
Protection against disease	51.2
Psychological benefit	14.6
Reduces stomach pain	29.1

Source: Computed from the primary data.

5.4. Attitude of HIV positive women towards PPTCT and breast feeding

The attitude of HIV positive women towards PPTCT and breast feeding helps in improving health services of the child. Accordingly, different questions related to knowledge of HIV positive women about breast feeding were asked to them. A likert-type attitude scale was framed to measure the performance of respondents. The five response categories ranged from strongly agree (SA) to strongly disagree (SD), along with no opinion (U), with scores of 5 for SA and 1 for SD responses and this scoring is reversed in the case of negative items. Women who responded as “strongly agree” secured the highest score as against women who responded strongly disagree.

Table 5.5 displays the responses of HIV positive women on different issues relating to MTCT and infant feeding practices. A higher proportion of HIV positive women (68 per cent) “Strongly agreed” and accepted the need of a test of HIV for every pregnant women. Nearly one out of every five HIV positive women (22 per cent) agreed with the statement indicating more awareness. About 76 per cent HIV positive women either strongly agreed or agreed that HIV positive women should not get pregnant as they transmits the virus to their children. Most of these HIV positive women were worried about their health.

With regard to breast feeding practices, about 41 per cent of HIV positive women feared stigma and 58 per cent feared disclosure. These findings suggest that fears of stigma and disclosure exist in the community.

The study collected information on support of family towards preference for methods of feeding practices (i.e. Breast feeding or formula feeding) used by the HIV positive women in likert scale. More than half of the respondents disagreed/strongly disagreed (54 per cent) with the statement representing lack of support by the family on choices of feeding the baby. About one-fourth of HIV positive women (72 per cent) supported the PPTCT programme.

Table 5.5 HIV positive women's attitude (Percentage)

Particulars	Strongly agree	Agree	Disagree	No-opinion	Strongly disagree
Every pregnant woman should get tested for HIV	68.2	21.9	0.0	5.3	4.6
Once she is HIV positive, she should not get pregnant	55.6	20.2	4.1	10.5	9.6
Using protective gears (condoms) in pregnancy/ BF reduces MTCT.	12.8	22.9	24.8	34.3	6.2
Some women BF beyond 6 months due to fear of stigma	41.4	21.2	17.3	11.5	8.6
Some women BF beyond 6 months due to fear of disclosure	57.8	15.9	9.2	6.7	10.4
Some women BF beyond 6 months due to lack of education	42.6	22.9	15.9	10.5	8.1
Family will support her on the choice of feeding the baby	15.8	17.8	43.4	12.5	10.5
Support national PPTCT programme	51.3	20.9	9.6	11.9	6.2

Source: Computed from the primary data.

5.5. Attitude towards MTCT, breast feeding and formula feeding

To assess attitudes towards mother to child transmission of HIV, breast feeding, complementary feeding and infant feeding in the context of HIV, HIV positive women were asked to agree, disagree or remain neutral on attitudinal questions. Table 5.6 shows their attitude towards modes of MTCT and HIV.

According to table 5.6, about 61 per cent of HIV infected women believed that they can pass on the virus to their babies. Despite counselling on infant feeding, 50 per cent of the respondents believed that if such women choose to breast feed their infants, they can pass on the virus to their babies. These findings suggest prevailing negative attitude towards the safety of breast feeding option for HIV infected women.

Table 5.6 Attitude of HIV positive women about modes of MTCT of HIV

Particulars	Agree	Disagree	No opinion
HIV positive women can transmit HIV to their babies	61.2	30.6	8.3
HIV positive women can transmit HIV to their babies if they choose to breast feed	52.1	30.8	17.1
HIV positive women can transmit HIV to their babies during pregnancy	65.6	27.2	7.2
HIV positive women can transmit HIV to their babies during labour and delivery	31.2	57.3	11.2
HIV positive women can transmit HIV to their babies during breast feeding	72.4	20.3	7.1

Source: Computed from the primary data.

The attitude of HIV positive mothers towards breast feeding and formula feeding plays a prominent role for furthering the development of child health, nutrition and hygienic practices. Accordingly, respondents were asked questions related to their perception towards the impact of breast feeding and formula feeding. A Likert-type attitude scale was framed to measure the opinions of mothers. The five response categories ranged from strongly agree (SA) to strongly disagree (SD) through no opinion (U), and they scored 5 for SA and 1 for SD responses and this scoring was reversed in the case of negative items.

Table 5.7 depicts the attitude of HIV positive women towards breast feeding and formula feeding practices. Around 84 per cent of HIV positive women either agreed or strongly agreed on health improvement of child due to breast feeding as against 79 per cent who favoured formula feeding towards this end. There is no significant difference between the practices of breast feeding and formula feeding on the nutritional status of a child. An equal proportion of respondents (77 per cent) supported (agreed or strongly agreed) on nutritional improvement of a child due to either breast feeding or formula feeding. Several respondents showed a positive attitude towards the practice of breast feeding either for “hygienic” reason or to “satisfy infant”. So far as the criterion of satisfies infant, the practice of breast feeding was preferred by 80 per cent of respondents who “agreed” or “strongly agreed” as against formula feeding (72 per cent).

Table 5.7 Attitude towards breast feeding and formula feeding among HIV positive women

Particulars	Breastfeeding (Per cent)	Formula feeding (Per cent)
Healthy		
Strongly agree	27.3	16.7
Agree	56.8	62.4
Disagree	10.4	13.5
No opinion	5.4	3.1
Strongly disagree	0	4.2
Nutrition complete		
Strongly agree	22.2	13.9
Agree	55.6	63.9
Disagree	14.5	22.2
No opinion	2.8	0
Strongly disagree	5.6	0

Contd..

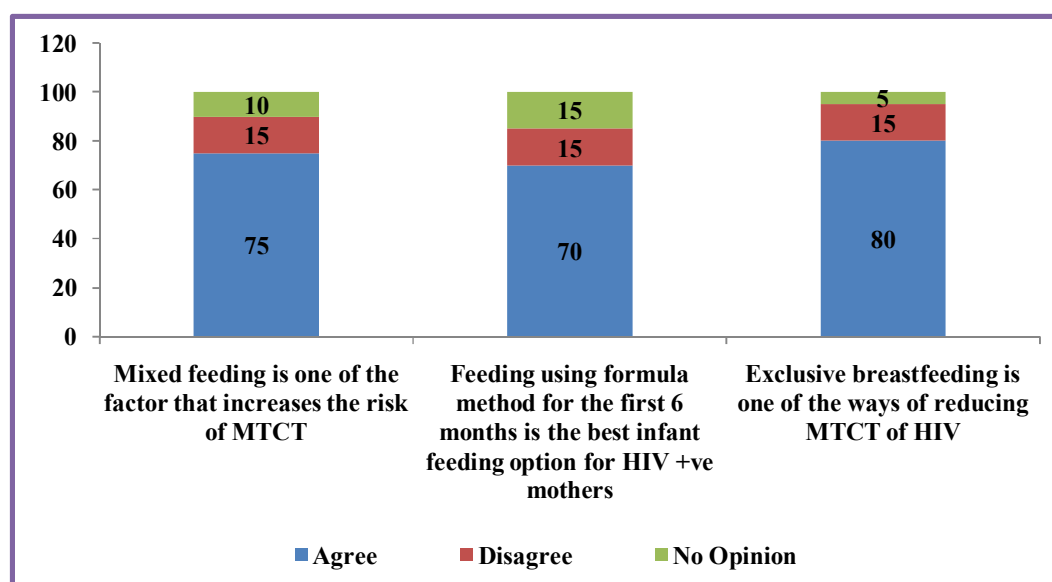
Particulars	Breastfeeding (Per cent)	Formula feeding (Per cent)
Satisfies infant		
Strongly agree	22.2	16.7
Agree	58.3	55.6
Disagree	19.4	23.6
No opinion	0	0
Strongly disagree	0	4.2
Hygienic		
Strongly agree	24.6	16.7
Agree	61.1	63.9
Disagree	11.1	19.4
No opinion	0	0
Strongly disagree	3.1	0

Source: Computed from the primary data.

5.6. Attitude of HIV infected mothers towards infant feeding practices for reducing the risk of MTCT

A majority of the respondents (80 per cent) supported the view that the use of exclusive breast feeding was one of the ways to reduce MTCT of HIV affected women. Around three- fourths of the HIV positive women agreed on increase in the risk of MTCT because of mixed feeding. ‘The use of formula method of feeding for the first 6 month’ was the best infant feeding option for 70 per cent mothers as they agreed with the aforesaid statement (Figure 5.3).

Figure 5.3 Attitude of HIV infected mothers towards infant feeding practices for reducing risk of MTCT



Source: Computed from the primary data.

5.7. HIV Positive women received Sd NVP

The present study found the coverage of single dose of Nevirapine prophylaxis in order to prevent the Parent to child Transmission of HIV. More than three in every four positive women (78 per cent) received Sd of NVP during their visit to ANC. However, half of the HIV positive women (44 per cent) received the same on post-test counselling (Table 5.8).

Table 5.8 Per cent of HIV positive women who received the Sd of NVP (mother baby pairs)

Receipt of Sd of NVP by HIV positive women	Per cent
HIV positive women who received post test counselling	44.3
HIV positive women who received Sd of NVP during ANC visit	78.1

Source: Computed from the primary data.

5.8. Health care providers' knowledge of PPTCT and breast feeding and recommendations

Health care providers are known to be among the key players in promotion of optimal infant feeding practices. They are the major source of advice and information about child nutrition and care in most families. Their information and advice is relied on by HIV positive women and families. In health facilities, health care providers are expected to support, promote and protect optimal infant and young child feeding practices including breast feeding. This huge responsibility requires them to have adequate knowledge and skills necessary to protect, promote and support breast feeding, and appropriate complementary feeding. The knowledge of health care providers about infant feeding with reference to HIV/AIDS reflects the capacity building block of the HIV eradication programme.

The present study enquired about awareness of health care providers about the critical issues relevant to the infant feeding in the context of HIV/AIDS. In-depth interviews were conducted with 12 health care providers (seven counsellors, three doctors and two lab-technicians). Table 5.9 shows the responses given by health service providers about critical issues relevant to infant feeding in the context of HIV/AIDS. The issues include knowledge about modes of MTCT of HIV, knowledge of infant feeding option, advantages of breast milk and risk factors of MTCT of HIV during breast feeding. As regards knowledge about various modes of vertical transmission of HIV from mother to her baby, findings shows that 72 per cent of all responses given by health care providers recognize that MTCT of HIV can occur during labour and delivery (36 per cent); and

during breast feeding (36 per cent). The proportion of responses that recognized that MTCT of HIV can occur during pregnancy was only 29 per cent. The main advantage of breast feeding is nutrition, followed by reduced MTCT of HIV and growth and development. In other words, these were 28 per cent, 25 per cent and 23 per cent respectively.

Further, results presented in Table 5.9 show the responses given by health care providers about their knowledge of infant feeding options for HIV positive mothers. The most known option was breast feeding. This option was cited 19 times which is equivalent to 49 per cent of all responses. Replacement feeding using commercial infant formula was cited 9 times (23 per cent of all responses), whereas replacement feeding by using home modified cow milk was mentioned 11 times (28 per cent of all responses).

Furthermore, the interviewed health care providers pointed at the practice of mixed feeding that was a major factor that increased the risk of MTCT of HIV. Mixed feeding was mentioned 19 times (36 per cent of all responses). The second most frequently mentioned factor that increased the risk was re-infection with HIV. It was mentioned 12 times which was equivalent to 23 per cent of all responses. The least known factor was poor positioning and attachment of a baby to the breast. This factor was mentioned by only two health care providers which is equivalent to 4 per cent of all responses.

The finding about knowledge of health service providers about infant feeding in the context of HIV and AIDS reveals some knowledge gaps in some important issues. Although the national PPTCT guidelines do not recommend home modified infant formula such as cow milk to be used as an option for HIV infected mothers, some health service providers mentioned it as an acceptable option. These facts signify the need for capacity building of health service providers so that they can support mothers to adopt recommended practices that are necessary to prevent MTCT of HIV and increase the likelihood of HIV-free survival of HIV exposed children.

Table 5.9 Health service provider’s knowledge about infant feeding in the context of HIV/AIDS (N=12)

Health Service Provider’s Knowledge about infant feeding	Per cent
Modes of MTCT of HIV	
During pregnancy	29
During labour and delivery	36
During breastfeeding	36
Advantages of breast milk	
Complete nutrition	28
Good growth and development	23
Prevents childhood illness	19
Reduce MTCT of HIV	25
Others	5
Infant feeding option for HIV positive mothers	
Breastfeeding	49
Formula feeding	23
Replacement feeding (using cow milk)	28
Risk factors of MTCT of HIV during breastfeeding	
Breast conditions	17
Viral loads	13
Poor positioning and attachment	4
Mixed feeding practice	36
Others	31

Source: Computed from the primary data.

5.9. Training attended by the health care providers on PMTCT and infant feeding

The provision of training programme on infant feeding, nutrition and care of HIV positive persons helps to change the attitude of health providers towards the patient. Knowledge of the global and national initiatives geared towards protecting, promoting and supporting optimal infant feeding practices is crucial for health care providers who implement PPTCT services. Of crucial importance is their knowledge of international and national recommendations on infant feeding and risk of MTCT of HIV. Recently, the Government of India updated and implemented national guidelines for PPTCT of HIV and PPTCT of HIV using Multi-drug Anti-retroviral regimen. Table 5.10 provides data regarding them. The result of the survey shows 60 per cent health care providers received training on PPTCT and 50 per cent of them received it on infant feeding counselling. Very few health care providers received training about new WHO guidelines. These findings put more emphasis on the need for intensive capacity development on matters related to infant and young child nutrition so as to improve the capacity of health workers.

Table 5.10 Training attended by the health care providers on PPTCT and infant feeding. (N=12)

Types of training attended by the providers on PPTCT and infant feeding	Per cent
New WHO guidelines	20
Infant feeding counselling	50
Nutrition for people living with HIV/AIDS	40
PPTCT	60

Source: Computed from the primary data.

5.10. Responded by health care providers on PPTCT services provided at the health facility

In-depth interviews were conducted with health care providers to understand the PPTCT services provided at the health facility. The health care providers responded that in line with WHO standards for a comprehensive strategy, the national PPTCT programme provided prevention, care and support services. The programme adopted a public health approach to provide these services to pregnant women and their children. This approach sought to ensure equitable access to high-quality PPTCT services at the grass-root level, while taking into account what is feasible on a large-scale within the available health infrastructure, and human and financial resources (NACO, 2013). Pre-test counselling, post-test counselling, clinical staging and ARV prophylaxis were provided at the PPTCT sites. After the group pre-test, mothers went through a short individual counselling session where HIV test was routinely offered by PPTCT counsellors. Mothers who accepted the routine HIV offer went through Voluntary Counselling and Testing (VCT). Others who refused the HIV test were encouraged to reconsider the importance of PMTCT and were assured that testing could be arranged in subsequent antenatal visits (*Quoted by a Counsellor, at the Hospital-1 in Ganjam district*). Post-test counselling was carried out with both HIV positive and HIV negative mothers. Counselling for HIV positive pregnant mothers focused on promoting optimal infant feeding. A PPTCT counsellor stated, “Most of the women offering services here come from the rural areas. They are very poor and very few people afford the formula/replacement feeding.” Another counsellor explained, “We receive the HIV positive women from different parts of the district, sometimes we get them from outside the district. We provide information on all methods so that HIV positive women are able to choose infant feeds themselves according to their own personal circumstances.”

Questions relating to breast f and complimentary feeding and importance of colostrums were discussed with health care providers. About 65 per cent of them reported

that they discussed with HIV positive women complementary feeding practices, followed by duration of breast feeding (60 per cent). The discussion on importance of colostrums was reported less (40 per cent).

Table 5.11 Responses of health care providers regarding practices of breastfeeding counselling. (N=12)

Particulars	Responses (Yes) Per cent	Responses (No) Per cent	Not Applicable Per cent
Discussed importance of colostrums with HIV positive women	40	16	44
Discussed initiation of breastfeeding with HIV positive women	55	35	10
Discussed duration of breast feeding	60	30	10
Discussed complementary feeding	65	30	5

Source: Computed from the primary data.

5.11. ARV prophylaxis for infected HIV positive women and exposed children

The national PPTCT programme supports single dose of Nevarapine prophylaxis for both HIV infected women and exposed children. Such HIV positive women were usually given “take home” dose of Nevarapine for themselves and their children. The “take home” dose was usually provided after 32 weeks of gestation. At the three facilities, the HIV positive women were advised to deliver at the hospital. In the event of a home delivery, they were encouraged to return with the baby within 72 hours to the hospital to administer drugs (Nevarapine) to the baby and mother (*quoted by a counsellor and lab-technician*). Although the PPTCT staff acknowledged the importance of follow-up of HIV positive mothers not the least in connection with choice of breast feeding options, neither facility was able to offer regular home support or follow-up visits due to the shortage of staff and resources. In a facility there was a shortage of outreach workers. Follow-up visits took place only in rare instances when resources were available.

5.12. Infant feeding messages for HIV infected and lactating women

PPTCT counsellors of the selected health facilities of Ganjam, Khordha and Cuttack district reported that during the post-test counselling for HIV positive mothers, they were told to exclusively breast feed without giving water or any other solid or liquid until the child was six months old. They promoted formula/replacement feeding, only to satisfying the AFASS criteria of the HIV positive women. In contrast, PTCT counsellors reported

that counselling and education for HIV positive mothers focused on all methods include exclusive breast feeding, modified cow milk and formula/replacement feeding. A counsellor at the selected hospital of Ganjam district explained, *“Since I started counselling in 2009, I am mentioning infant feeding options to all the HIV infected and HIV negative women. My experience has shown that a majority of the HIV positive mothers choose exclusive breast feeding and a small minority will go for the formula. In the end, the message we emphasize is, therefore, about exclusive breast feeding and formula/replacement feeding”*.

A counsellor at the selected hospital of Khordha district observed that lack of training in PPTCT and infant feeding counselling represented major obstacles on how messages on infant feeding for HIV infected mothers were provided. She observed: *“I have had no training in PPTCT infant feeding counselling. I was just given an infant feeding training manual to stud. But self study is not the same thing as being trained. I am sure my messages to HIV infected mothers will improve after training”*.

5.13. Messages on disclosure of HIV status to partner

PPTCT counsellors reported that they encouraged HIV infected mothers to disclose their status to partners and motivate them to come for Voluntary Counselling and Testing (VCT). PPTCT counsellors explained to HIV positive women that disclosure would open doors of support from partners and reduce stress and loneliness that they might suffer as a result of non-disclosure. They also explained that a partner’s test promoted adherence to PPTCT infant feeding choice and prevented further HIV infection for the couple.

5.14. Conclusion

Our study provides information about the knowledge, attitude and perception of infant feeding methods among HIV positive women and health care providers in the selected hospitals of the studied area. Half of these women revealed that breast feeding was adequate for the babies in the first six months of their life and it prevented childhood illness. Feeding formula food/other food was expensive. About 66 per cent of HIV positive women reported that breast feeding was nutritious to the babies. However, half of them did not know the benefit of the colostrums. Attitude of women towards PPTCT and breast feeding suggested that 63 per cent women strongly agreed that every pregnant woman should get tested for HIV. The study reveals that stigma and fear of disclose of results may be barriers to implement the recommended period of exclusive breast feeding. More than

60 per cent of HIV positive women believe that some of them do breast feeding beyond six months due to fear of stigma and fear of disclosure. This appears to be similar to a study done in Uganda. A study done in 2010 by Nyasinde Mujumali showed that HIV positive women were breast feeding beyond six months due to the fear of stigma and disclosure. Most of the HIV positive women supported PPTCT strategies which is a positive attitude towards PPTCT intervention.

Their attitude towards MTCT, breast feeding and formula feeding is highlighted in the study. More than 70 per cent of HIV positive women reported that they could transmit HIV to their babies during breast feeding. Though 80 per cent of them agreed that exclusive breast feeding was an appropriate option for feeding the exposed children, 70 per cent of them considered the use of formula food as the best option. At the same, likert-type of scale defined that 84 per cent of HIV positive women either agreed or strongly agreed on health improvement of children due to breast feeding as against 79 per cent of them who favoured formula feeding.

The present study also enquired about the awareness of health care providers about infant feeding and PPTCT, training in PPTCT and new WHO guidelines on infant feeding. A majority of health service providers lacked basic knowledge of infant feeding counselling in the context of HIV and AIDS and essential nutrition interventions necessary for promoting children and maternal nutrition. This signifies the need for capacity building of health service providers in the studied area so that they can offer and support mothers to adopt recommended practices that are necessary to prevent MTCT of HIV and increase the likelihood of HIV-free survival of HIV exposed children.

Taking into account the present situation of HIV and AIDS and risk of MTCT, there is a need to strengthen infant feeding counselling in the context of HIV and AIDS in PPTCT services. Further, women's empowerment through education, improvement of ANC follow-up status and male involvement may significantly associate with PPTCT knowledge, attitude and uptake of the services.