Sexual Aspects of Breast and Lactation

9

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9.1 Introduction

This chapter will address various aspects of sexuality that, in some way, are related to breastfeeding.

It will start with the relation between breast and sexuality, followed by the relation between breastfeeding and sexuality.

Both physiology, psychology and behaviour, and the relationship between the woman and her partner will get particular attention in either of those parts, with the remark that in real life, it is, of course, difficult to separate those factors since they tend to influence each other in a sometimes unpredictable choreography. As a sideline, we will share some ideas on the social aspect of breastfeeding. This chapter deals with the natural situation, whereas Chap. 15 will deal with disturbances of this process.

Midwives should be familiar with the whole range of possible responses to sexuality concerning breastfeeding. So that they can counsel women and couples appropriately and tackle the concerns and expectations, often entailing some psycho-education on what the woman can expect during this phase [1].

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9.2 The Breast and Sexuality

9.2.1 Physiology of Breast and Sexuality

In the breasts, the first sign of sexual arousal is the erection of the nipple (with left and right breast often not equally responding to sexual arousal). In full arousal, the increase of nipples is 0.5–1.0 cm. Such nipple erection can also occur during anxiety and non-sexual arousal. The second sign of arousal is increased venous flush, which shows a rash on the skin. Later in the arousal phase, the areola becomes swollen, by which the (visual) nipple erection seems to diminish. After orgasm, that areolar swelling quickly disappears, by which the nipple erection appears to return.

The breast volume can increase by 20–25% with full arousal. That happens both in the woman who never was pregnant and in the primigravid woman. Such volume increase during arousal is less after having breastfed one baby. After having nursed a second baby, there is no more volume increase during sexual arousal, probably because of the extensive development of the venous drainage system during those lactation periods.

In the primigravid woman, the increase in volume (due to arousal hyperconges-tion) is added to the pregnancy congestion. This combination can cause pain in the nipple and areola area, especially at the end of the first trimester. Later in pregnancy, that complaint usually disappears.

The tactile sensitivity of all areas of the female breast is (after puberty) more significant than in men, with maximal sensitivity at midcycle (in women without hormonal contraception) and during menses [2].

9.2.2 Psychology and Behaviour

At the start of puberty, breast development can create some pain in the breasts. Women can experience this period of change as positive (a sign of becoming a woman), but it also can be very unsettling. That variation depends on many factors like the age at which the breast development starts (somewhere between ‘too early’ and ‘too late’); her mother’s implicit breast-related attitude and explicit education regarding the breasts; cultural messages about decency or honour; and the threat of the ‘male gaze’.

Gradually, the breasts play a role in the woman’s female identity, which appears very culture-bound. Whereas in many African countries, the breast is predominantly a symbol of motherhood, in some other cultures, it is predominantly a symbol of femininity, accompanied by feminine pride in some women and insecurity in many women.

Gradually, the breasts can also play a role in a woman’s lovemap.[1] For many women, the breasts become an erogenic zone. When women were asked about breast or nipple stimulation and sexual arousal, approximately 80% indicated that such

[1] Lovemap; this represents the person’s (or couple’s) highly individual set of erogenic zones, ways to become aroused, erotic scripts, et cetera.

stimulation caused or enhanced sexual arousal, whereas 7% indicated that such manipulation decreased arousal [3]. In Dutch research, 15% of women stated that they had experienced an orgasm purely due to breast stimulation [4]. The combination of 'breast and sexuality' is clearly an area with much variety and is greatly influenced by culture [1].

There is much sexual variety in how the breasts and nipples are stimulated and how they are part of the woman's or the couple's lovemap. Knowing about that lovemap is not relevant for the HCP, except when it causes confusion or interferes with breastfeeding or when it becomes relevant related to an apparent sexual problem.

9.2.3 Breasts and the Partner

The female breasts are also an important 'erogenic zone' for most partners, both for visual and for tactile pleasure. The same goes for the female partner in lesbian relationships.

The stimulation of breasts and nipples triggers the release of oxytocin in the woman's brain, which will focus her attention on the partner, strengthening her desire to bond with him (or her).

However, this represents the literature that originated almost entirely from the Western World. Anthropologists found in many cultures that the female breasts had no sexual meaning for men [1]. When men grow up with the idea that a woman is either a mother or a lover, her transition to breastfeeding apparently can make his sexual desire disappear.

9.2.4 Social Aspects

The female breasts have been a centre of attention from time immemorial. In the oldest human sculptures, they represented a symbol of fertility. Some cultures have tried to conceal them to varying degrees, whereas others implicitly or explicitly exposed the breasts. In some indigenous tribes of Southern and Eastern Africa, the women walk bare-breasted. In orthodox religious countries and the USA, a nipple will never be shown on television. At the same time, in nearly every American heterosexual porn story, the size of the female breasts is mentioned. Such cultural realities will undeniably influence how girls and women feel at ease (or not) with their breasts and body.

9.3 Breastfeeding

9.3.1 Benefits for Mother and Child

Breastfeeding has numerous benefits for both mother and child. In the mother, a period of breastfeeding reduces the future risk of endometrial cancer, ovarian cancer, breast cancer, and type 2 diabetes. Stimulation of the breasts is seen as having

Fig. 9.1 Motherhood

Painting by Stanislaw Wyspiański (1905)

health benefits. There is a hypothesis that breast cancer will occur less in women who experienced much sexual stimulation and suction of breasts and nipples [5]. Breastfeeding can assist women in birth spacing, and it can turn negative relationships between mother and baby into positive ones [6], and it can positively affect the mother's emotional well-being (Fig. 9.1).

In infants, it stimulates cognitive development and protects against gastrointestinal tract infections, necrotizing enteric colitis, allergic diseases, celiac disease, inflammatory bowel disease, SIDS, obesity, diabetes, and leukaemia.

The WHO recommends starting breastfeeding ('nursing') within one hour after the birth and suggests nursing exclusively for 6 months following birth unless medically contraindicated [7]. A high HIV viral load is one of the few contraindications.

9.3.2 Physiology of Breastfeeding

Before the first pregnancy, the breast consists mainly of adipose tissue with lactiferous lobes that drain into the lactiferous ducts, then drain into the lactiferous sinus,

and then into the nipple–areolar complex. During the first trimester, the ductal system expands and branches out into the adipose tissue in response to the increase of oestrogen with ductal proliferation and elongation and a decrease in adipose tissue. The acinar cells proliferate into lactocytes. In pregnancy, each breast's volume increases by approximately 400 g. The increased oestrogen levels cause well-elevated prolactin levels. At 20 weeks, the mammary glands are sufficiently developed and start producing milk components ('colostrum') under the influence of prolactin (lactogenesis I). At this stage, the high levels of oestrogen and progesterone inhibit the production of 'mature milk'. Towards the end of pregnancy and especially immediately after birth, the levels of oestrogen and progesterone decrease, allowing milk production and eventual 'let-down' for breastfeeding. With the post-partum withdrawal of luteal and placental sex steroids and placental lactogen, the prolactin increase activates the alveolar cells to release milk into the alveoli and smaller ducts. Some 30–40 h after birth, the complete milk production is induced by prolactin (lactogenesis II), and the colostrum production alters into 'mature milk' production in this transitional phase. After that, milk production is further driven by milk removal (lactogenesis III). The combined storage capacity of the breasts is between 80 and 600 ml of milk (with L and R not always equal). In this stage, prolactin and oxytocin mechanisms balance the consumption and production of milk.

Oxytocin has a role in the milk-ejection reflex.

The high prolactin levels at childbirth and immediately post-partum fall within a week to half the childbirth level. In the breastfeeding woman, the prolactin levels go up and down, peaking some 45 min after the start of feeding. With frequent feeding (>8×/day), the levels stay high.

Without breastfeeding, the level will be back to pre-pregnancy within a week.

Whereas during pregnancy, the production of prolactin is suppressed by oestrogen and progesterone, the increased prolactin levels in lactating mothers cause a decrease in oestrogen and androgen. The low oestrogen level creates in the vagina an atrophic state (as in menopause). The low androgen causes decreased arousability and, in many women, decreased sexual desire, by which breastfeeding women tend to restart sexual life later.

The sensitivity of the breasts increases tremendously within 24 h after childbirth, which may be the key to activating the suckling-induced discharge of oxytocin and prolactin and inhibiting ovulation during lactation [5].

9.3.3 Social Aspects of Breastfeeding

Breastfeeding is a relevant element in the strong bonding between the mother and her child, generated by the baby's sucking reflex that triggers the release of oxytocin in the mother's brain. When anthropologists looked into various pre-industrial cultures, they found that cultures with long-continued breastfeeding showed less suicide and had less violence [8].

Despite knowing the benefits, health care does not succeed in having most women breastfeed for months.

Whereas in many African countries breastfeeding in public is the norm, it is frowned upon in many other countries. However, many of those countries have laws that allow women to breastfeed their babies in public. The reasons seem manifold. Under the pressure of cultural taboos, many young women see themselves as an object first and as a person second. When society implicitly associates the breast with sexuality, or when society associates the nude breast with indecency, it quickly can induce guilt and shame in nursing mothers, negatively affecting the nursing process. We believe that women should be encouraged to breastfeed and reclaim the naturalness of doing so in public worldwide. We should not forget that the first step to protecting babies is breastfeeding, which benefits the health and welfare of the baby, mother, family, and community [9].

9.4 Breastfeeding and Sexuality

We have to be aware of various factors that play a role when discussing the topic of 'breastfeeding and sexuality'. Successively we will address aspects of physiology, the influence of society, psychology and behaviour, the partner relationship, and the role of the midwife or other HCP. Finally, we will look at the essential troubles that can develop and potential ways to deal with them.

9.4.1 Physiology Aspects

Physiology has an essential link between breastfeeding and sexuality, with a significant role for oxytocin. Oxytocin causes the happy, contented feeling after breastfeeding, with stress reduction and the overall relaxation that breastfeeding conveys. Uterine contractions during breastfeeding are a well-known aspect of uterine involution, primarily known because they can be rather painful, even more so in multigravid women. However, uterine contractions can also have other ('more sexual') consequences. A group of 153 Dutch mothers was asked about sensations during breastfeeding. Of them, 71% had experienced pleasurable contractions in the womb area, and 34% had experienced a feeling of sexual arousal. Surprising was that 8% indicated having experienced an orgasm just by breastfeeding [4]. According to an extensive meta-content review of research articles, one-third to one-half of breastfeeding mothers described breastfeeding as erotic ('an intense physical lust') [10].

Such oxytocin connection goes as well the other way round. When getting sexually aroused (especially when having an orgasm), milk can leak or be sprayed outside forcefully. The breasts (and especially the nipples) are more sensitive in the months of breastfeeding.

During the months of breastfeeding, various hormonal and non-hormonal factors influence sexual desire. Prolactin is known to reduce sexual desire. Although diminishing from the very high levels around childbirth, prolactin stays high throughout the nursing period. The high prolactin levels also influence the gonadal hormones

causing low oestrogen levels. Oestrogen should be low because oestrogen diminishes the milk flow. That, however, also causes an amount of vaginal atrophy (as if the woman is in her menopause). The androgen levels are also low, especially the testosterone level. That can cause both the absence of desire and low arousability. A complicating sideline among women is the big difference in their sensitivity to androgen levels. The low androgen levels are also causing lowered assertiveness and low energy or fatigue.

9.4.2 Society and Culture

Culture strongly influences the priorities in the woman's roles after childbirth. Saha reviewed the sexual advice literature in the United States over three decades [11]. When promoting breastfeeding, HCPs reflected the societal view that the husband owned the female breasts and that women must please their partners by timely returning to intercourse.

Research in the Philippines looked at the relationship between lactation, sexuality, and relationship commitment by comparing non-pregnant women, non-cycling breastfeeding women, and cycling breastfeeding women (i.e. without or with monthly bleeding). Cycling breastfeeding women have the highest sexual functioning and relationship commitment scores [12].

9.4.3 Psychology and Behaviour Aspects

Above we already addressed that some women experience sexual sensations during breastfeeding. When the woman with this experience has never heard of this as normal, she can get confused. In a research questionnaire, the question on 'erotic response during breastfeeding' had a high (37%) rate of non-response, indicating that this is a 'rather touchy area' [10]. A quarter of women had experienced feelings of guilt because of such sexual feelings, and some had stopped breastfeeding.

Leaking milk during lovemaking can confuse, depending on how well the woman can balance her roles as a mother and a lover. Whereas this is threatening for some women, other women thrive on it.

The higher sensitivity of breasts and nipples can be the start or intensification of breast sexuality in some couples. In other women, the former sexual ways of stimulating now can have lost their sexual, arousing effects. For some other women, all forms of sexual breast play can be too much in this period or have to be toned down.

Such vast differences can also be found in the reaction to the changed appearance of the breasts. For some women and their partners, this can be a feast of femininity; for others upsetting or nearly disgusting. All these areas need integration into health information.

Studies often measure breastfeeding sexuality in comparison with pre-pregnancy sexuality, but breastfeeding and the feelings involved may create new forms of

sensuality and satisfaction. Usually, a relatively strong and sensual connection develops between the mother and the baby [13]. However, for mothers (and also for researchers), it does not seem easy to separate sensuality and sexuality.

9.4.4 Partner and Relationship Aspects

Just as in young mothers, partners show a wide range of reactions. These reactions can be negative, including jealousy because the baby gets so much attention. Perceived devotion to the child at the partner's expense and the intimacy between mother and child, fostered during breastfeeding, can elicit jealousy from new fathers [14]. The mother may also feel jealous when she is the breadwinner and her male partner takes the primary caregiving role and develops an extra close relationship with the child. Higher levels of attachment anxiety in both mothers and fathers are associated with greater jealousy of the partner–infant relationship. Attachment anxiety is characterized by mistrust in the relationship and preoccupation with the possibility of rejection or abandonment.

So, elevated attachment anxiety in oneself or one's partner may play a maladaptive role in adjustment to the transition to parenthood by sparking jealousy of the partner–infant relationship. Such feelings can contribute to a decline in romantic relationship adjustment during the early postpartum period. Given that the quality of a couple's romantic relationship sets the stage for establishing parent-child and co-parenting relationships, jealousy of the partner–infant relationship could have broader negative implications for the developing family system [14]. The attractive prenatal shape and firmness of the breasts, that maybe increased prenatal erotic desire and arousal, will change and perhaps influence desire [1]. Some partners will be turned off by the carnal aspects of breastfeeding, whereas others will get highly fascinated or even aroused by the voluptuousness of breastfeeding.

Such shifts in sexual sensations and experiences will rarely become troublesome, providing the partners have a more or less similar emotional reaction to these new experiences and feelings.

The leaking of milk during the woman's sexual arousal or orgasm can induce some couples to wish to drink from her breasts. There is no contraindication to that, as long as both wholeheartedly agree (and the baby keeps adequate nutrition).

9.4.5 Changed Sexual Function in the Breastfeeding Woman (and Couple)

We have already mentioned the strong influence of hormonal changes on breastfeeding women. High prolactin, low oestrogen, and low androgen levels tend to be accompanied by low sexual desire, low arousability, atrophic vaginal wall, low energy, and decreased assertiveness.

Added to that are the nightly feeding sessions causing a lack of sleep. Combined with an emotional focus on the baby, it is easily possible that the young mother is not in the mood for extensive sexual contact.

That can be different for the male partner. Most men have more sexual desire than their female partners, fitting with their higher testosterone levels. Besides, after the first childbirth, many men are in some way confused by their new role, which can cause stress. For many men, sexuality is one of their ways to deal with stress. Especially when a couple has developed the routine to finalize sex with penetration, there is a reasonable risk for dyspareunia. When dyspareunia happens once, that does not need to be so bad. However, repeated dyspareunia can become a vicious circle where pain, less sexual desire, and mutual tension and separation can have long-term adverse effects. This can create the following scenario:

> The male partner wants sex. He is neither very good at understanding that his wife is not yet ready for that, nor is he capable of picking up her non-verbal signals. The woman is tired but feels guilty when disappointing him. Her lack of arousal will prevent lubrication. Because their communication is inadequate for this situation, they will too quickly proceed to penetration. Penetration in the atrophic and not lubricated vagina will cause pain. So there will be no sexual pleasure for the woman, and maybe feelings of guilt in the man. Besides, her low testosterone level has reduced her assertiveness. Because of her 'learned social role', she will not stand firm and reject penetration. In the long run, the pain and the memory of pain can eventually become part of a vicious dyspareunia circle (pain → low desire → pain).

That is not good for the mother, not for the couple, and not for their joint partnership and parenting [15]. Much research data on post-partum sexuality show this lower sexual reality in lactating women [16, 17]. Sexual inactivity and dysfunctional problems are partly translated into lower partnership quality. This sexual scenario is regularly found in common sexological practice as a precursor of later sexual relationship problems.

Most literature shows that resumption of sexual activity is earlier in multiparous women and later in older women. Sexual functioning apparently is also influenced by the type of breastfeeding, with the partial breastfeeding women showing better vaginal lubrication [18].

9.5 Long-Term Breastfeeding

A small group of women continues for an extended period with breastfeeding. That can go up to several years, with some mothers 'tandem feeding' both a baby and a toddler. In Finnish research, both surrounding people and the women themselves had mixed reactions to that [19]. It brought these mothers much emotional pleasure, although some vehemently denied that there was any sexual pleasure in it [19].

9.6 Weaning

Weaning is the process of replacing breastmilk with other foods, the process by which the baby gradually gets used to eating family or adult foods and becomes less dependent on breastmilk. The process varies from culture to culture and is often tailored to the child's individual needs. Weaning is said to be on time when the child is 24 months old [20].

After complete weaning, it takes several menstrual cycles before the breasts have returned to their previous size.

Australian research looked into the changes at (complete) weaning of the first child [21]. After 2–3 weeks, there was less fatigue and better mood, and after 3–4 weeks, sexual activity and intercourse frequency increased. That indicates that breastfeeding keeps the testosterone levels low, by which sexual desire can be low and fatigue high.

In the phase between full breastfeeding and (complete) weaning, ovulation will return.

In the nonlactating woman, the first ovulation can occur 25 days after childbirth, although most women will not ovulate until six weeks post-partum.

In lactating women, a later return of ovulation is found with a higher frequency of breastfeeding sessions, with a longer duration of each feed and less supplementary feeding [22]. Exclusive breastfeeding reduces the ovulation risk by 98–99% up to 6 months post-partum, as long as there has been no menstruation, and by 94–97% after an anovular menstruation. These findings suggest that contraceptive use is indicated among women who resume menstruating before six post-partum months or continue breastfeeding beyond 6 months.

Since a new conception is not recommended within 18 months after birth, it will be evident that good post-partum care includes proactive attention to contraception. Chapter 20 will address that topic.

9.7 Clinical Implications for Midwives (and Other HCPs)

Breastfeeding or not? Midwives and HCPs have to find a proper balance in providing information. In good care, such information should be adequate and realistic, both on the benefits for the mother, the baby, and the mother–child relationship and potential consequences for sexuality. Despite all our good intentions, the woman and the couple have to decide to breastfeed without us creating feelings of guilt in them.

Prevention and Pre-lactation Counselling We recommend routinely including the combination of breastfeeding and sexuality in couple counselling and prenatal classes [16]. Those are the situations where one should not beat around the bush but be clear and explicit.

Below is an example of a way to already in advance give adequate information on potential sexual consequences:

‘Be aware that breast-feeding probably will influence your sexual connections in many ways. Your desire can decline, but you can also get aroused by nursing. You could lose milk when you are aroused, and you can like that, or it can make you uncomfortable or even disgusted (and the same goes for your partner).
You can get so intimately connected with the baby that you forget your partner (which can make your partner jealous). Your partner can lose all sexual desire or, on the contrary, dearly wants sexual intimacy and orgasm.
Those are all perfectly normal reactions! Due to hormonal changes, it can take many weeks before your vagina is again ready for penetration. If you are not yet prepared and try penetrating, it will cause pain.
Be assured that pain can quickly turn into longstanding pain and a longstanding absence of desire. When orgasmic relief is needed, we recommend other stimulation or different ways to reach orgasm. Especially at this stage, they are a far better solution than penetration’.

Lactation Counselling As recommended by WHO and UNICEF, all relevant professionals should invest in counselling for early initiation and continuation of breastfeeding, and in that way, benefitting maternal and infant health. That should be done in the post-partum checks, home visits, Internet, phone, lactation apps, et cetera [23].

Lactation Problems Sexual problems related to disturbances in breastfeeding will be addressed in Chap. 15.

Dealing with Troublesome Sexuality In this phase, many couples experience sexual disturbances. Since most couples are too shy to address that to their HCP, the professional should pro-actively question sexual disturbances. At this point, the midwife has several advantages. Midwives understand the influence of hormones and the physical consequences of childbirth and maybe episiotomy. Above all, they benefit from the trust developed throughout the entire period of pregnancy and birth.

There is the confusion of changing roles and responsibilities, fatigue, drowsiness, and perineal soreness. Then, confusion and conflict can grow between the woman and her partner on resuming the prenatal or pre-pregnancy pattern of sexuality. Here, the empathetic midwife can guide the couple to renegotiate and rediscover sexuality and intimacy and assist in the foundation of happy couple life. Among the needed tools are a clear explanation of the underlying causes, respect for the difference between the partners, and indirectly providing solutions. For instance, in this way:

…That is what happens in many couples. The woman loves hugging and cuddling, but she is too tired, and her vagina is too sore for penetration. Continuing to penetration will not only give pain, but then her desire for hugging and cuddling will completely disappear. In that situation, some couples have learned to hug and play without continuing to penetration. When the man likes or feels the need to have an orgasm, he gives it himself with his wife in his other arm. Maybe that is something also for you to consider…?

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