S4 Table. Qualitative Meta-synthesis of themes and sub-themes

Levels and factors	Article references [Linked to S3 Table]
INDIVIDUAL LEVEL	
MOTHER ATTRIBUTES	
Mother HIV positive status: Being HIV positive has influenced feeding choices and exclusivity across policy periods, mostly towards EFF but recently EBF: ***Fear of HIV transmission to the infant*** was discussed mostly around mixed feeding, although fears of any breastmilk were expressed consistently ***Knowledge about transmission risk*** in breastmilk and while on ART tended to be inaccurate, usually overestimating risk (except early on) ***Fear of disclosure through feeding method (formula and/or exclusivity)***, based on perceived community norms (see Community) ***Timing of HIV diagnosis***	[2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, 16, 17,19,20, 21, 23, 24, 25, 27, 28, 31] *[4, 5, 6, 7, 8, 9, 11, 12, 14, 15, 16, 17,19, 20, 21, 23, 25, 27, 28, 29, 31, 32, 34]* *[2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, 17, 19, 20, 25, 27, 32]*
Employment: The need to find work and/or go to work, resulted in formula feeds ***Unemployment:*** While generally supporting EBF, financial dependence also limited perceived choice	[2, 3, 4, 7, 9, 11, 22, 28, 29, 30, 31, 33] *[1, 2, 3, 7, 11, 17, 22, 23,25]*
Young age/Adolescent: Young mothers talked about having less power to decide on feeding choices (see also Household). Some age-specific barriers to EBF: ***Return to school,*** resulting in a shift to formula ***Body image***, such as sagging breasts due to breastfeeding	[17,23] *[2, 7, 23, 28, 31, 33]* *[2, 4, 23, 29]*
Past feeding experiences: Depending on the outcomes of experiences, this could influence current choices	[3, 4, 5, 6, 7, 12, 13, 29, 30, 34]
Breastfeeding knowledge: Accurate knowledge assisted EBF, particularly: ***Milk sufficiency****:* Knowing that breastmilk was enough for an infant ***Duration:*** Knowing how long to breastfeed exclusively ***Superiority:*** Being able to cite the superiority of breastmilk over formula ***Low cost:*** Avoidance of formula costs supported breastfeeding choice	[1, 2, 4, 5, 6, 7, 8, 9, 11, 12, 19, 20] *[4, 5, 6, 11, 12, 14, 15, 19, 20, 22,27, 29, 30]* *[5, 10, 12, 14, 20]* *[1, 2, 3, 4, 6, 8, 17, 25, 28, 29, 31, 33]*

S4 Table. Qualitative Meta-synthesis of themes and sub-themes

	[3, 11, 13, 19, 20, 25, 28]
Contamination beliefs: Ideas that social or behavioural interactions could taint the quality of breastmilk and be passed onto infants threatened EBF	[2, 3, 11, 22]
Self-efficacy/confidence to breastfeed: When low, this was also a threat to EBF	[7, 8, 12, 31]
Expressing: Willingness and ability to express breastmilk supported EBF	[3, 31]
<u>INFANT ATTRIBUTES</u>	
Temperment, especially crying: Crying was often interpreted as hunger or discomfort, leading to mixed feeding. Feeding was also used to silence crying.	[1, 3, 4, 7, 12, 14, 15, 19, 21, 22, 27, 30, 31, 33]
Growth: Mothers used growth to identify if feeding choices were appropriate.	[1, 4, 5, 6, 14, 15, 19, 22, 28, 30]
Health events: Conditions like oral thrush or HIV conversion led to feeding changes, usually away from EBF	[3, 4, 9, 10, 11, 15]
<u>MOTHER-INFANT RELATIONSHIP</u>	
Current feeding experiences: The way feeding was experienced by mothers influenced whether feeding choices were maintained or not	[1, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 20, 29, 31]
Practicality/ease: How well a feeding choice was perceived to fit with lifestyle	*[1, 3, 6, 9, 12, 20, 23, 25, 28, 29, 30, 31, 33, 34]*
Percieved sufficiency: Whether mothers felt their infant was satiated by milk	*[1, 3, 4, 5, 6, 7, 9, 10, 11, 14, 15, 20, 30, 31, 34]*
Bonding/love: Mothers feeling closer to their infants supported EBF	*[3, 5, 6, 11, 12, 14, 28]*
Breast problems: Mastitis, engorgement, and cracked nipples hindered EBF	*[1, 3, 6, 10, 11, 12]*
Food insecurity: Mothers felt their own food insecurity contributed to insufficient milk, which led to mixed feeding	*[6, 30]*
Latching: When infants struggled to latch, breastfeeding was abandoned	[10, 32]

S4 Table. Qualitative Meta-synthesis of themes and sub-themes

SETTINGS LEVEL	
HEALTH SYSTEMS AND SERVICES	
Medical advice/counselling: Health workers were reported to influence feeding choices, both for or against EBF, based on their advice and the following:	[1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 14, 15,17, 20, 22, 24, 25, 27, 28, 29, 31, 32, 33, 34]
(In)consistency of messages: Within-facility inconsistencies were particularly damaging to EBF, often noted between PMTCT and labour wards	*[3, 4, 5, 7, 8, 9, 10, 12, 14, 15, 20, 24, 27, 29, 31, 32]*
(In)adequate messages: Mothers often felt there were not told things that would have assisted them to make a choice or prepare for challenges	*[1, 2, 3, 4, 5, 7, 10, 12, 14, 15, 17,20, 22, 24, 29, 31]*
EBF only: If clear, single messages supported EBF, but messages were also experienced as inconsistent with community knowledge and/or experiences	*[3, 4, 5, 14, 20, 25, 29, 31, 34]*
Free formula programme: This reduced EBF practices and had its own issues:	[3, 4, 5, 6, 8, 9, 12, 14, 15, 16, 19, 20, 24, 25, 28]
Insufficient/stock-outs: Mothers using the programme reported not having enough to feed their infants and resorting to mixed feeding	*[4, 6, 7, 8, 9, 12, 14, 15, 17,19, 24, 25]*
Brand stigma: Associations between Pelargon formula from government and HIV meant mothers tried to buy alternatives or hide brand	*[12, 24,27, 29, 32]*
Mother-Baby Friendly Hospitals: These facilities were noted by mothers, often by the forceful attitudes of staff as well as pro-breastfeeding practices:	[2, 4, 5, 10, 12, 31, 34]
Restricting bottles or formula: This was often described in the context of mothers hiding their feeding practices or being "forced" to change practices	*[2, 4, 5, 10, 12, 34]*
Lack of separation, where mothers were able to stay with infants helped breastfeeding, although not all MBFH's followed through	*[9, 10, 31]*
Latching support, provided by health workers was highly appreciated	*[31, 33]*
FAMILY SETTING	
Family influence: Family members, particulary mothers, influence decisions. Fathers and siblings also influence. Specific influences included:	[1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 14, 15, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 29, 31, 32, 33, 34]
Socio-cultural: Pressuring mothers to follow cultural/family practices of feeding or cleaning that threaten EBF	*[2, 3, 4, 5, 6, 8, 9, 12, 14, 15, 17, 18, 20, 22, 25, 26, 31, 33]*
Living/caregiving arrangements: Influenced decisions, giving family members more say over feeding practices, especially of young mothers	*[2, 3, 4, 8, 9, 12, 15, 17, 20, 22, 23, 25,27,28,29]*

S4 Table. Qualitative Meta-synthesis of themes and sub-themes

Financial dependency: Families who financially supported mothers and infants had more say over feeding practices	*[2, 3, 6, 8, 9, 12, 14, 15, 20, 22, 23]*
Family support for HIV positive mothers: This was strongly linked to support for EBF if the mothers disclosed	[2, 4, 5, 6, 7, 8, 9, 12, 15, 17, 18, 19, 20, 23, 25,26,27]
Threat of violence/abandonment: These fears worked against disclosure	*[2, 3, 4, 5, 6, 18, 27, 32]*
WORKPLACE/SCHOOL SETTING	
Employee letters: One mother talked about trying to influence an employer to support EBF through a letter from the clinic.	[27]
COMMUNITY SETTING	
Gossiping/HIV stigma: This was raised as an EBF barrier, as the practice is linked to HIV, which mothers addressed in the following ways:	[3, 4, 5, 6, 7, 8, 12, 13, 14, 15, 17, 18, 24, 25, 26, 27, 28, 29, 32, 34]
Concealment: Where mothers hid their true feeding practice to avoid stigma	*[3, 8, 12, 15, 17, 24, 25, 26, 27, 29, 31, 32, 34]*
Explanation: Where community is educated about importance of EBF to gain support and to address/reduce HIV stigma	*[5, 12, 19]*
Community support interventions: Several articles described these directly:	[5, 11, 12, 13]
Buddies/peers/mentor mothers: Mothers appreciated locally available support to advise or encourage them in the community setting	*[12, 13, 19]*
Postnatal support: A variety of ideas were suggested by mothers in addition to actual support through postnatal counselling, support groups and income generation projects.	*[5, 7, 11, 12, 22, 31]*
Milk bank/wet nurse: This was noted as a support option only once	*[3]*
STRUCTURAL LEVEL	
SOCIO-CULTURAL CONTEXT	
Mixed feeding norms: Expecations to mixed feed from family and community were consistently referenced as a challenge for EBF	[1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, 18, 23, 25, 26, 31, 33]
Breastfeeding norms: They expectation to breastfeed (often as part of mixed feeding) was noted by mothers across all policy periods	*[1, 2, 3, 4, 11, 12, 14, 15, 17, 32]*

S4 Table. Qualitative Meta-synthesis of themes and sub-themes

Motherhood norms: Ideas of what it meant to be a good mother influenced decisions	[2, 3, 4, 5, 6, 16, 31]
HIV stigma against formula feeding, was reported widely	[2, 3, 4, 7, 8, 9, 11, 12, 14, 15, 16, 17, 19, 24, 25, 28, 29, 32]
HIV stigma towards any sort of exclusive feeding was also reported	[2, 3, 4, 5, 7, 8, 9, 14, 15, 34]
HIV stigma towards intervention, such as buddies, was another experience	[12, 13]
MARKET CONTEXT **Culture of commercial formula:** A few articles highlighted how use of commercial formula is perceived as a culture in South Africa, preferred above other complementary foods	[21, 22, 30]
Breastfeeding promotion: Mothers talked about how materials/campaigns promoting breastfeeding influenced their decisions, with a call for clear messages	[14, 15]
Media engagement: Mothers discussed channels they use to seek out information on infant feeding via the Internet or social media	[33, 34]