



A USER-CENTERED APPROACH TO PRODUCT DEVELOPMENT CLOTHING FOR LACTATING WOMEN

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Abstract: In spite of the remarkable advantages of breastfeeding aimed at together mother and kid, modern women still face a number of psychosocial obstacles in addition to these emotional and physical difficulties. The creation and enhancement of clothing for nursing mothers has a lot of promise. Designing and creating functional apparel for a breastfeeding mother was the goal of this study. For in-person interviews, a questionnaire was created to gauge the clothing needs of lactating mommas. The indicated clothing needs stood incorporated into the enterprises of the garments. Functional clothes made with this kind of design and construction can provide lactating women more self-assurance to breastfeed in public settings, thereby removing psychosocial walls to breastfeeding and enhancing psychological coziness thru boosting their self-esteem.

Keywords: Cloths, Garments, Apparel, Nursing, Functional Clothing

1. Introduction:

Women undergo both physical and psychological changes during lactation. This time frame prepares a woman for parenthood, which is the next stage of development. She has her own requirements and wants at this time, thus she will have different demands for clothing during nursing than she would under regular circumstances. Like an absorbent texture, looseness, and most importantly, a carefully made garment with extra room for freedom of movement so she won't have to lift up the shirt while feeding her infant. Wearing appropriate clothing, which may be made by applying a variety of design techniques in an acceptable way, can help women enhance themselves. The basic components of clothing, color and design, can accentuate a person's personality when employed correctly. One can choose garments that will satisfy the wearer's desire by gaining an awareness of design. Most breastfeeding women simply don regular clothes, which makes it unpleasant for them to feed their babies and makes them feel uncomfortable. Even in marketplaces, lactation-specific gowns are not readily accessible. Therefore, it is crucial to create some clothes specifically for nursing women that are comfortable and aesthetically pleasing as well as functional in terms of lactation. With the same goal, research was done on lactating moms' current dress codes and any issues that might arise. Numerous prestigious ready-to-wear stores, showrooms, and malls in Kanpur Nagar (U.P.) city were visited to learn about the availability of different

casual clothing, formal wear, and night wear for breastfeeding ladies. To learn about their clothing habits during nursing and any issues they had with current clothing habits during lactation, 25 urban lactating mothers were randomly chosen from maternity and children's hospitals. According to a survey, urban women were dissatisfied with the way they were currently dressing during the lactation period and wanted to improve it by giving their garments new elements to make them more fashionable and comfortable. During the lactation time, maternity clothing plays a very important function as well because it is uncomfortable and unpleasant to breastfeed while wearing regular clothing. Therefore, it is imperative to create apparel specifically for lactating mothers (Khatri, 2016). Wearing appropriate clothing, which may be designed by applying a variety of design techniques in an acceptable way, can help one enhance them. The basic components of clothing, colour and design, can accentuate a person's personality when employed correctly. An excellent collection of nursing apparel is one thing that every nursing mother needs (Lawrence, 2005). One can choose garments that will satisfy the wearer's desire by gaining an awareness of design. Wearing nursing attire makes it simpler and more enjoyable to feed your baby (Anonymous, 2015). Most breastfeeding women simply don regular clothes, which makes it unpleasant for them to feed their babies and makes them feel uncomfortable. Even in marketplaces, lactation-specific gowns are not readily accessible. Therefore, it is crucial to create some clothes specifically for nursing women that are comfortable and aesthetically pleasing as well as functional in terms of lactation. With the same goal, a study was done to determine the preferences of breastfeeding women for the type of fabric, constructional aspects, and designing features of karees for nursing mothers.

2. Objectives:

- To amass info on dress linked snags of the lactating moms
- To progress apposite enterprises of wears aimed at the theme

3. Material and methods

The study was carried out between January 2021 to July 2022 in my hometown Kanpur Nagar (U.P). A 27-year-old nursing mother named Mrs. Akanksha was chosen for the current investigation. She was working in gynecologist department (Ganesh Shankar Vidyarthi memorial medical college). She was in the office from 9 am until 5 pm. She used to bring her 7-month-old baby with her to the institution. Because it's difficult to work with a baby during working hours, she left her in the nursery while she was in her duty. She gives her five meals per day. Baby feeding is a private action that is frequently uncomfortable or humiliating to do in public. She had difficulty while nursing the infant since she needed to raise the outfit or dress from each the edge or the neckline. She discussed her delivery with the detective. She had a caesarean delivery and had difficulties feeding her child. Because she was physically unfit at the time and spent the majority of her time on the bed, she created a cut in her nightgown at the breast region to make it easier for her to feed the baby. After educating the subject on nursing apparel, treatment bras, and fixtures, the sleuth spoke through the focus and carefully recorded her needs and issues.

4. Results

The full effort of edifice stood separated in the subsequent headlines: -

Designing

According to the specifications of the topic, five different shirt designs were created. Designs included both business attire and formal attire. Below are the five designs' sketches and descriptions:

Design 1: Practical Breastfeeding Shirt with horizontal closure pattern

- Use of unseen zipper at bust close for initial
- Front thru Coat collar

2: Functional breastfeeding Top through sleeve less jacket for initial.

- Band neck by front twist design
- top plain and printed sleeve less Jacket

3: Functional breastfeeding Shirt with horizontal fastener pattern covered pleated stripes

- Front stand color
- Back- box pleats with yoke

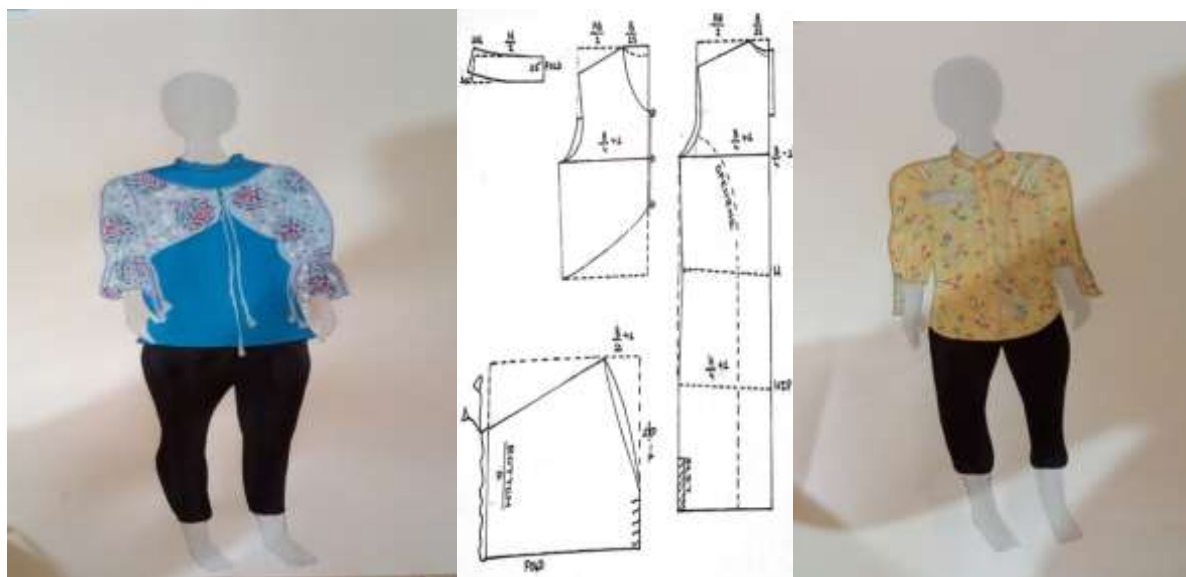
4: Functional breastfeeding Shirt with frill attached zipper pattern

- Gathers at the base of the yoke
- Plain sleeve with cuff

5: Functional breastfeeding Shirt by overlapping yoke zipper design

- Front by round neck stroke
- Use of unseen zipper on together edges at bust close on behalf of initial
- half sleeve





Evaluation and choice of strategy

Only two of the five designs that the investigator had prepared were chosen for actual construction after being appraised by the subject.

Building and wear probationary

The clothing was constructed using all the features and cut with the use of appropriate drafting patterns. The individual wore the clothing for the duration of the testing, which lasted two days, after it was finished being made.

Assessment

A 3-point ranking scale stood developed to evaluate adequacy of constructional characteristics and comfort. The individual was asked to rate the generated clothing on a five-point scale after remarks were posed to gauge their acceptability.

Table 1 : Suitable assessment of development clothing

S.N.	Functional features of Shirts	Appearances of efficient structures of shirt	Frequency			Aptness score shirt 1
			H.S(3)	S.(2)	S.W.S(1)	WMS
1	Constructional geographies					
a)	Size and outline of shirt	span of the shirt		yes		2(S)
		edge lines of the shirt	Yes			3(H.S)
b)	string at stomach	informal to tie	Yes			3(H.S)
		relaxed to open	Yes			3(H.S)
c)	zipper first	relaxed to fasten		yes		2(S)
		easy to unfasten		yes		2(S)
		length of closure opening			yes	1(S.W.S.)
2	Taxation of comfort					

a)	comfortable during wear	easy to wear	Yes			3(H.S.)
		easy to remove	Yes			3(H.S.)
		ease in dress	Yes			3(H.S.)
		ease of suckling while exhausting dress	Yes			3(H.S.)
b)	material of shirt	hand of touch of fabric		yes		2(S)
		drape of material giving to the project	Yes			3(H.S.)
c)	overall attendance	aesthetic charge of uniform		yes		2(S)

H.S= Highly, S= Suitable, S.W.S= Some What Suitable

Table 2: Suitable taxation of development clothing

S.NO.	Functional sorts of Shirts	Appearances of well-designed features of shirt	Frequency			Suitability score shirt 1
			H.S(3)	S.(2)	S.W.S(1)	WMS
1	Constructional structures					
a)	Size and contour of shirt	measurement of the shirt		Yes		2(S)
		circumference positions of the shirt	Yes			3(H.S)
b)	sequence at waist	laidback to tie	Yes			3(H.S)
		calm to open	Yes			3(H.S)
c)	zipper opening	easy to fasten		Yes		2(S)
		easy to unfasten		Yes		2(S)
		length of zipper opening			yes	1(S.W.S.)
2	Assessment of comfort					
a)	comfortable during wear	easy to wear	Yes			3(H.S.)
		easy to remove	Yes			3(H.S.)
		luxury in wear	Yes			3(H.S.)
		ease of nourishing while exhausting dress	Yes			3(H.S.)
b)	fabric of shirt	hand of touch of cloth		Yes		2(S)
		drape of textile giving to the enterprise	Yes			3(H.S.)
c)	inclusive appearance	visual value of costume		Yes		2(S)

Table 3: Suitable calculation of development clothing

S.NO.	Functional structures of Shirts	Appearances of functional geographies of shirt	Occurrence			Suitability score shirt 1
			H.S(3)	S.(2)	S.W.S(1)	WMS
1	Constructional features					
a)	Size and outline	extent of the shirt		Yes		2(S)

	of shirt				
		circumference outlines of the shirt	Yes		3(H.S)
b)	string at stomach	relaxed to tie	Yes		3(H.S)
		relaxed to open	Yes		3(H.S)
c)	zipper initial	relaxed to fasten		Yes	2(S)
		easy to unfasten		Yes	2(S)
		extent of zipper introductory		yes	1(S.W.S.)
2	Assessment of wellbeing				
a)	comfortable during wear	easy to wear	Yes		3(H.S.)
		easy to remove	Yes		3(H.S.)
		ease in wear	Yes		3(H.S.)
		ease of breastfeeding while irksome the gear	Yes		3(H.S.)
b)	fabric of chemise	arrow of feel of drapery		Yes	2(S)
		drape of textile conferring to the enterprise	Yes		3(H.S.)
c)	overall entrance	aesthetic assessment of dress		Yes	2(S)

5. Discussion and Analysis

Table 1 qualities, including ease of dress and removal, comfort of wear and nursing while exhausting the uniform, and blind of the material giving to the enterprise, were create to be extremely acceptable for evaluating the level of comfort. The dress's hand and aesthetic values were appropriate. In relation to table 2, it is evident from table two that features of construction such as length, circumference, ease of fastening, and measurement of zip opening stood create to be very suitable for assessing suitability. It was determined that there is only one feature that is simple to unfasten. Features including ease of wear and removal, convenience of wearing and feeding while exhausting the uniform, blind of textile, and aesthetic price stood determined to be very acceptable for evaluating the level of comfort. The fabric's hand was appropriate. It is evident after table 3 that when evaluating the adequacy of kurti, the question sturdily arranged that the garment's strategies were straightforward enough for someone who is good at sewing to copy them, washable, wearable, and useful if worn with maternity bra in addition to being suitable for the intended use. She concurred that fashionable, functional clothes was worth the extra money spent on it because it was easy to wear. She is unable to comment on how challenging the garment's intricate designs made it to stitch. She disagreed that the neck zip made the outfit uncomfortably tight and interfered with her ability to work. The argument that wearing and taking off functional clothing takes more time, that these clothes appear unsightly, that they are difficult to wash and maintain, and that the unusualness of the garment should prevent it from being recommended was strongly refuted by the topic. She disagreed that the clothing was uncomfortable because the breast-level zip made it difficult to work. Subjects significantly objected with the garment's unattractiveness, difficulty in cleaning, unsuitability, and lengthier time spent putting on and taking off. Thus, it can stay determined that the subject stayed content per the practical strategies. By mixing a range of styles in different costumes, more research might be undertaken in a similar manner.

6. Conclusion

The results of the study suggest that there must be "Special Parenthood Provisions" in every civic or city and that maternity clothing with useful features is highly desirable. The created designs can be employed by garment production facilities to cater to the needs of this unique consumer group, who have particular requirements for comfortable clothing. These outfits are comfortable to wear and meet their practical needs.

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