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Research Paper

Consumer awareness and use of baby care products with special reference to baby diapers

KALINDRI VERMA AND MEENU SRIVASTAVA

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■ ABSTRACT : With increased consumer awareness about health and hygiene for personal safety in view of harmful effects of chemicals used in textile processes and products, emphasis on use of herbal products has been increasing day by day. Health friendly baby care products are more in demand to take care of baby's sensitive skin and avoid common skin problems. The present exploratory study was conducted in Udaipur city of Rajasthan on 50 mothers of young babies below three years of age, using structured interview schedule. Findings revealed that majority of the respondents had good knowledge about baby care products and opined that these products used to give satisfactory performance in use but at the same time found them quite expensive to use.

See end of the paper for authors' affiliations

KALINDRI VERMA

Department of Textiles and Apparel Designing, College of Home Science, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA **KEY WORDS:** Consumer, Awareness, Use, Baby, Care, Product, Diaper

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ith the advancement of the technologies over the last few decades, a lot of change has occurred in the fashion and textiles industries, its manufacturing process, product development, etc. to meet out the ever increasing demand of consumer of various age groups related to health and hygiene. But still the textile industry is facing so many challenges. The presence of micro-organisms and other harmful substrates in the environment excessively deteriorating most of the textile products while in use. The presence of micro-organisms in baby clothing causes so many harmful effects like rashes, infections etc. Health and hygiene are the primary requirements to live comfortably, as the young babies forms a most vulnerable group of the society, ensuring their good health is of prime concern to all members of the society. With the advent of new

technologies, the growing needs of the consumer in the wake of baby care and hygiene can be fulfilled without compromising the issues related to safety, baby care and environment (Chandrasekar *et al.*, 2013).

Many commercial baby care textile products are currently available in market with a range of antimicrobial properties under different trade names for textile industry. Natural variant has immense scope for research in order to provide physiological comfortable innerwear with antimicrobial finish (Pannu, 2013). Research and development activities is trying to keep pace by developing more and more effective and safe solution (Gupta, 2007). Antimicrobial finishing of the diaper front sheets with eco-friendly, anti-allergic herbal extract have no ill effects on the baby skin (Ahamed *et al.*, 2012). Eco-friendly wipes were developed with 100 per cent viscose non-woven fabrics finished with 25 per cent concentration of herbal oils (Chinta and Priyanka, 2014). Diaper rash or nappy rash, is a generic term applied to skin rashes in the diaper area that are caused by various skin disorders and or irritants. If the wetness is prolonged, this can lead to softening and breaking down of skin which makes it more susceptible to friction from the surface of the nappy (*http://www.nottinghameczema.org.uk*).

This infection also results in peeling of the skin. Nappy rashes create irritation on the baby's skin especially in the region of the diaper that is the crotch, buttocks and stomach (*https://en.wikipedia.org*).

With the increasing demand for fresh and hygienic life style, the consumption of multi-functional textile is increasing day by day. There is increase awareness towards baby hygiene, demand for ecofriendly finishes to prevent skin infections, body odour and to improve physiological comfort value of garments and other baby care products. In recent years, comfort has become a mandatory requirement in baby care products. Young mothers are very baby health conscious. Through researches it was found that most of the educated women are still unaware about ecofriendly baby care products. Unknowingly, they are using synthetic products which are toxic in nature and harmful for baby sensitive skin and create common skin problems. The present study was conducted in the light of the above facts, with the aim to explore the knowledge and awareness of mothers regarding availability and use of baby care products with special reference to baby diaper.

■ RESEARCH METHODS

The present study based on survey work was conducted in Udaipur city of Rajasthan to collect desired information regarding awareness and use of baby care products from mothers of young babies with special reference to baby diapers. The researcher purposively selected a sample of 50 mothers having baby/babies under three years of age. An structured interview schedule, developed by the researcher was used to elicit the required information about socio-economic profile of the selected respondents and information about knowledge, awareness regarding baby care textile products, source of information, monthly expenditure on baby care products, type and frequency of using baby diapers, etc. The developed schedule was pre-tested on ten non sample subjects. The collected data was analyzed for statistical treatment in the light of objective of study.

■ RESEARCH FINDINGS AND DISCUSSION

The findings of the present study as well as relevant discussion have been presented under following heads :

Profile of the respondents :

Socio personal characteristic such as age, education level, occupation, income and family type were studied. The respondents selected in the study were young mothers of kids below 2 years of age. The details of the information related to this have been furnished in Table 1.

Age :

The data presented in Table 1 shows that majority of respondents (46%) were in the age group of 21 to 25 years, 36 per cent were between the age groups of 26 - 30 years and 14 per cent belonged to the age group of 31-35. However, only very few (4%) respondents were found in the age range of 35-40 years.

Education :

Perusal of the table further reveals that 42 per cent of the respondents were qualified upto graduation level followed by 38 per cent respondents who were educated upto post graduation level. It was observed that 14 per cent respondents had their education upto higher secondary level, respectively. Remaining 6 per cent had education upto secondary level. It was found that none of the respondents had education upto primary level.

Family type :

It is clear from Table 1 that the majority of the respondents (62 %) belonged to the nuclear family and rest of them (38%) belonged to joint family.

Occupational status:

Regarding occupation, the data revealed that majority of the respondents (66%) were in the non-working category, while remaining 34 per cent respondents were among the working category.

Monthly family income:

The most significant and vital factor which has its bearing on the economic status of the family is its income. The standard of living of a family is based on the economic condition of that family. Table depicts that 46 per cent of the respondents were in the income range of Rs. 40,000-50,000 per month, 26 per cent in Rs. 30,000-40,000 per month and 18 per cent respondents belonged to the income range above Rs. 50,000 per month. Only 2 per cent respondents said that their monthly income was between Rs. 10,000 to 20,000. It was found that none of the respondents had income below Rs. 10,000 per month.

Number of children in the family:

Data in Table 2 reveals that majority of the respondents (70%) had single child followed by 30 per cent respondents who had two children in their family.

Child age:

Perusal of the Table 2 further reveals that 26 per

cent of the respondents had children between the age group of 13 to 15 months. The age range of children in the category of 10 -12 months, 19-21 months and 22-24 months were found by respondents as 14 per cent, 18 per cent and 16 per cent, respectively.

Knowledge and opinion of the respondents about baby care products :

The researcher explored information about knowledge and opinion of the respondents about baby care products available in the market and amount of expenditure incurred per month by them on baby care products. Perusal of the Table 3 shows that majority of the respondents (66%) had good knowledge while remaining respondents (34%) had poor knowledge about

Aspects	Category	Respo	ondents
Aspects	Category	Frequency (f)	Percentage (%)
Age (in years)	21-25	23	46
	26 - 30	18	36
	31-35	9	18
Education	Primary School	-	-
	Secondary	3	6
	Higher Secondary	7	14
	Graduate	21	42
	Post graduate and above	19	38
Family type	Nuclear	31	62
	Joint	19	38
Occupational Status	Working	17	34
	Non-Working	33	66
Monthly family income (Rs.)	Below 10,000	-	-
	10,000-20,000	1	2
	20,000-30,000	4	8
	30,000-40,000	13	26
	40,000-50,000	23	46
	Above 50,000	9	18

Table 2 : Percentage distribution of respondents by age and number of children in the family			(n= 50)
Aspect	Category	Respo	ndents
Азресс	Category	Frequency (f)	Percentage (%)
No. of children	Single child	35	70
	Two children	15	30
Age	0 to 3 months	3	6
	4 to 6 Months	6	12
	7 to 9 Months	0	0
	10 to 12 months	7	14
	13 to 15 months	13	26
	16 to 18 months	4	8
	19 to 21 months	9	18
	22 to 24 months	8	16

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baby care products. Regarding opinion of the baby care products in terms of cost, performance in use, etc.

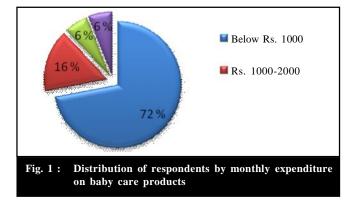
It was found that 66 per cent respondents reported these products as very expensive, however, few of the respondents (7%) revealed that the price of the available baby care products was reasonable. Majority of respondents (86%) were satisfied by the performance of baby products available in the market. From the findings it can be concluded that majority of the respondents had good knowledge about baby care products and opined that these products used to give satisfactory performance in use but at the same time quite expensive to use.

Monthly expenditure on baby care products:

Data pertaining to monthly expenditure incurred by the respondents on baby care products as depicted in Fig. 1 revealed that majority of the respondents (72%) used to spend below Rs. 1000 per month followed by 16 per cent respondents who spent Rs. 1000 -2000/- per month on purchase of baby care products. An equal percentage of respondents (6%) each used to spend Rs. 2000-3000/- and more than Rs. 3000 per month, respectively on baby care products.

Source of information about baby care products:

With regards to source of getting information about baby care products has been presented in Table 4. Data represents the various source of information to



respondents about baby care products. It was found that family members and media was the main source of information about baby care products. Majority of the respondents (66%) got the information from elders in the family, 46 per cent from internet and 36 per cent from their friends. 26 per cent of respondents said, they got information from the market stores. A very few of the respondents (14 %) said that they came to know about baby care products from trained healthcare professionals. Based on the findings it could be concluded that media and elders were the main source of information.

Type of baby care products used:

The respondents were asked about the use of baby care products and responses were presented in Table 5, which indicates that cent per cent respondents were using

Table 3 : Percentage distribution of respondents by their knowledge and opinion about baby care products(n=50)			(n=50)	
Aspect	Category	Respor	Respondents	
Aspect		Frequency (f)	Percentage (%)	
Knowledge about baby care products	Yes	33	66	
	No	17	34	
Opinion about baby care products	Satisfactory performance	43	86	
	Cost effective	7	14	
	Expensive	33	66	
	Quality parameters	5	10	

* Respondents were having multiple responses

Table 4 : Percentage distribution of respondents by source of information of baby products		(n=50)	
Aspect	Category	Respondents	
		Frequency (f)	Percentage (%)
Information source of	Friends	18	36
baby care products	Elders in family	33	66
	TV/Media	47	94
	Stores	13	26
	Internet	23	46
	Trained healthcare professionals	7	14

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variety of baby products like baby diapers, baby bed linens, and baby skin care products followed by 46 per cent respondents who were using mosquito nets. It was also found that 66 per cent respondents were using Baby wipes, 58 per cent respondents using baby feeder and 34 per cent were using baby packer. A very few of the respondents (14 %) were using nappy pads also and that too during outdoor visits like social gatherings, shopping etc.

Preference of type of diaper :

The data presented in Table 6 shows that 38 per cent respondents were using disposable diapers, out of this 10 per cent respondents were using open diaper and 28 per cent were using Baby Pant Diapers. The reason given by the respondents for frequent use of disposable diaper was its hygienic character, convenient to use and comfortable for the baby's tender skin. Majority of the respondents (46%) were using cloth diapers in which 14 per cent were using Homemade diapers and 32 per cent were using readymade cloth diapers because in their opinion it was cheap and comfortable for the baby skin. It was also found that few of the respondents (16%) were using both types of diapers for their baby.

On the basis of findings it can be concluded that majority of the respondents preferred readymade cloth diaper followed by baby pant diaper under category of disposable diaper.

Reasons of using cloth vs disposable diapers :

The researcher was curious to know about the reason behind their choice of diapers and frequency of using them. The data gathered revealed in Table 7 that cent per cent respondents were using cloth diapers as it was found convenient, comfortable, reusable, cost effective, easy changeability and hygienic as revealed by 54 per cent respondents.

It was also found that cent per cent respondents using disposable diaper found it as convenient, comfortable for baby, easily available, less energy consuming, have more absorption capacity, and less infectious.

Frequency of using diapers :

With respect to the frequency of using cloth diapers Fig. 2 apparently state that majority of the respondents (46%) were using cloth diaper daily because it is cost effective and hygienic and 6 per cent were using cloth diaper occasionally when baby suffer from diaper rashes, whereas 10 per cent were using cloth diaper frequently because they were also using disposable diapers daily.

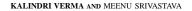
Data further reveals that 38 per cent respondents were using disposable diaper daily because it have more absorption capacity, convenient and hygienic for baby

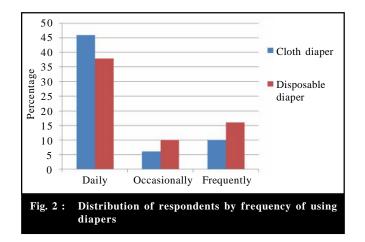
Table 5 : Percentage distribution of respondents by use of baby products			(n=50)
Aspect	Category —	Respondents	
Aspect	Category	Frequency (f)	Percentage (%)
Types of baby products used	Baby diapers	50	100
	Nappy pads	7	14
	Baby wipes	33	66
	Baby feeder	29	58
	Baby packer	17	34
	Baby bed linens	50	100
	Mosquito net	46	92
	Baby skin care products	50	100

* Respondents were having multiple responses

Table 6 : Percentage distribution of respondents by their preference of type of diaper			(n=50)
Aspect	Catagory	Respondents	
	Category —	Frequency (f)	Percentage (%)
Preference of diaper	Disposable diaper	19	38
	Open diaper	5	10
	Baby pant diaper	14	28
	Cloth diaper	23	46
	Homemade diapers	7	14
	Readymade diapers	16	32
	Both	8	16

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and 10 per cent were using occasionally when child was outside of the home such as market and they use only cloth diapers in the home. Whereas 16 per cent were using disposable diaper frequently because they were also using cloth diapers daily in day time and disposable diaper use in the night time.

Fabric preference in cloth diaper:

The data presented in Table 8 shows that cent per

cent respondents preferred woven cotton fabric in cloth diapers because it is easy to dry and easily washable. Cloth diapers of hosiery material was preferred by 74 per cent respondents as it was found more absorbent, flexible and resilient in use besides being easily available in the market.

A good number of respondents (46%) also preferred pile weave (terry towel material) fabric because it had more absorption capacity and easily available in the market followed by 10 per cent respondents who preferred blended fabric, because it was found easy to clean and easily dry in winter season. Few respondents (18%) preferred cloth diapers made of soft old fabric available at home.

Factors affecting choice of readymade diapers:

The data depicted in Table 9 shows the percentage distribution of respondents by factors affecting choice of readymade diapers. It was found that cent per cent respondents were keeping in mind many factors while selecting readymade disapers like cost, comfort, durability, constructional details. It these respondents, only 12 per cent looked at functional details and 6 per cent for style

Table 7 : Percentage distribution of respondents by reasons of using different type of diapers(n=5)			(n=50)	
Aspect	Category	Number of	Number of respondents	
Aspect	Category	Frequency (f)	Percentage (%)	
Reasons of using cloth diapers	Convenience	50	100	
	Comfort	50	100	
	Reusability	50	100	
	Hygienic	27	54	
	Cost effective	50	100	
	Easy to change frequently	50	100	
Reasons of using disposable	Convenience	50	100	
diapers	Comfort	50	100	
	Easily available	50	100	
	Less energy consuming	50	100	
	More absorption capacity	50	100	
	Hygienic	50	100	

Respondents were having multiple responses.

Table 8 : Percentage distribution of respondents by preference of fabric in cloth diapers			(n=50)
Aspect	Catagory	Number of respondents	
	Category	Frequency (f)	Percentage (%)
Preference of fabric	Cotton	50	100
	Hosiery	37	74
	Towel fabric	23	46
	Cambric fabric	-	-
	Synthetic fabric	5	10
	Any other	9	18

* Respondents were having multiple responses

Table 9 : Percentage distribution of respondents by factors affecting choice of diapers			(n=50)	
Asmost	Category	Number of r	Number of respondents	
Aspect		Frequency (f)	Percentage (%)	
Affective factors for choosing among	Cost	50	100	
readymade diapers	Comfort	50	100	
	Functional details	6	12	
	Durability	50	100	
	Style	3	6	
	Constructional details	50	100	

* Respondents were having multiple responses

of the diapers.

Conclusion :

Findings revealed that majority of respondents were in the age group of 21 to 25 years, qualified upto graduation level, belonged to the nuclear family and were in the non working category, they had family income in the range of Rs. 30,000-40,000 per month. Majority of respondents had single child. Media and elders were the main source of information for baby care products. Cent per cent respondents were using variety of baby products like baby diapers, baby bed linens, and baby skin care products. A very good number of respondents (46%) were using cloth diapers because it is cost effective and hygienic, The reasons of using disposable diapers as revealed by respondents (38%) was, more absorption capacity, convenient and hygienic for baby. Majority of the respondents had good knowledge about baby care products and opined that these products used to give satisfactory performance in use but at the same time found them quite expensive to use. Hence, it can be concluded that with increased consumer awareness regarding health and hygiene aspects, the market for health friendly baby care products is expanding. Efforts be made to develop low cost baby care product of high quality to meet out the needs of consumers of all income groups.

Authors' affiliations: **MEENU SRIVASTAVA**, Department of Textiles and Apparel Designing, College of Home Science, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA

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