ORIGINAL RESEARCH PAPER

Management

MARKETING OF ECO-FRIENDLY AND LOW COST SANITARY NAPKINS: A LITERATURE REVIEW

KEY WORDS: Sanitary Pads, Eco-friendly, Marketing, Menstruation etc.

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Purpose-The purpose of the study is to review the low cost, eco-friendly and reusable sanitary pads among adolescent Girls and women. The main problem of unawareness about the use of sanitary pads is especially in the rural areas. This study tries to explore the harmful effects of plastic sanitary pads on women health and environment. The study also describes the perception of women and their buying behaviour of sanitary pads from the review of related Literature. **Design And Methodology-**This study is based on 21 literature reviews which are specifically based on the rural areas of India, north America, turkey, Ogun state, Nigeria, south Korea, and china from 2010 to 2021. All the literature reviews were studied from online journals from reputed publishers.

Findings- The study finds out that there are various taboos and misconceptions regarding the use sanitary napkins. Women in rural areas can't afford high cost sanitary pads. It also finds out that modern sanitary pads are made of harmful plastic which are non-biodegradable and harmful for health of women as well as to the environment. Some findings were promoting banana novel fibre sanitary pads which were eco-friendly.

Practical Implications- The study suggests that there is an urgent need to promote natural banana fibre sanitary pads which is beneficial for woman as well as for the environment. Manufacturer should reduce the price and use the quality of stuff in it. If price of sanitary pads is reduced then the demand will increase because many women can't buy the sanitary pads due to their high price. Manufacturer should advertise sanitary pads so that it attracts most of the consumers. Packaging must be done in such a way that it can easily understand by women in rural areas. Manufacturers should use environment friendly chemicals in sanitary pads so that they can decompose in short time and can minimise the soil pollution. Menstruation hygiene management should be a part of school curriculum also.

INTRODUCTION

Menstrual is a natural biological process experienced by all girls and women from the age of 12-13 years to 45-50 years. Every woman's menstrual cycle is unique and individual and the length of menstrual cycle varies from one woman to other but the average age of this cycle is 28 days. In India, mostly in rural areas, there are a lot of taboos and misconceptions related to menstrual cycle like feeling of embarrassment and it is considered as unclean and dirty (Garg et al., 2011). Women made their own personal strategies to tackle the menstrual period. Globally these strategies vary due to personal preference, knowledge availability of resources, economic status, culture and tradition, beliefs and education about menstruation. There are also a lot of factors affecting buying behaviour of sanitary pads like personal preference, product features (thickness length and wings), social factors, brand knowledge and advertising. Sanitary pads are based on how comfortable you are with it. (Cha and Park, 2019). There are various kinds of sanitary pads which are available in the market like Whisper, Stayfree, Saathi etc. The market of feminine hygiene product can be segmented into supermarkets, hypermarkets, pharmacies, drugstores and online websites. Market comprises different products such as Reusable cloth pads, reusable tampons, commercial sanitary pads and menstrual cup (Mahajan, 2019). The demand of hygiene products made from natural raw material, organic and bio-degradable are increasing day by day because they are reusable, cost effective, eco friendly and easily available in the market. In urban areas woman can easily avail sanitary napkins from chemists, pharmacies and general stores (Mehta et al., 2020). In rural areas, women use unhygienic products due to lack of awareness and unavailability of feminine hygiene products. Majority of woman in rural areas use reusable or non commercial sanitary napkins cloths or rags, dried leaves and ash because they cannot afford high cost sanitary pads. Due to poor menstrual hygiene, women suffer from various diseases like urinary tract infections, RTI and infertility. (Fadnis, 2017). Advertising is best tool to promote feminine hygiene market which increases awareness and sales of hygiene products which automatically

affect the buying behaviour of customers(Simes and Berg. 2010). There are also many Public policies running in India which promotes the use of sanitary pad usage among poor women. But some policies have neglected the critical points of sanitary care (Garg et al., 2011).

Literature Review

(Garg et al. 2011) studied the effect of physiological changes facing by girls at the time of their adolescent years. It was found out that India was covered by some religious myths and misconceptions with do's and don'ts of menstruation and the government of India launched a new scheme in 2010 towards menstrual hygiene by providing subsidized sanitary napkins to rural girls. The working of the scheme was given to Asha workers, which were providing the sanitary napkins to rural girls. The study also found out that there was a lack of awareness regarding acceptability of sanitary napkins and teachers also feels shy in educating the adolescent girls about these problems and mothers also didn't educate girls before the time of menarche. (Shah et al. 2013) explored the menstrual hygiene practice among tribal region of Gujarat. It was found out that in India there was 70% of women who were not able to buy it because of its high cost. There was also a society named "Sharda Mahila Vikas Society" which encouraged the women empowerment regarding their menstrual health. It was found out that there was a type of sanitary napkin which was made of a cloth named falalin and it was recyclable and sold at price of Rs 10 for three month. Most of the women didn't know about the falalin cloth and they did not have correct knowledge about the menstruation as well as the products and also the cost was major barrier for them. (Mahajan, 2019), This article showed that how imperfect information and culture affected the menstrual hygiene products. Policymakers and manufacturers required to be informed about the material of the product when it comes to market because sanitary napkins product material plays a crucial role. It is related to hygiene. Without proper information there will be no demand for the product. The menstrual hygiene products market is growing fastly and continue to expand, so it concluded that menstrual hygiene

products evolving fastly with a variety of product because it is easily available for consumers. Manufacturers should be informed about the need of consumers. (Achuthan 2021), this study examined that poor menstrual hygiene practice affect adolescent girls of developing countries towards achieving sustainable goals. The challenge is for both women and environment. In India 22% women live in rural areas. Due to poverty they use unhygienic practices. In rural areas women dispose sanitary pads by burying or throwing in the garbage. In contact with soil disposable napkins kill the soil microorganisms and delay the decomposition, so recyclable sanitary pads is an option. The purpose of this paper was to accept reusability of sanitary pads or banana fibre pads. Banana fibre pads are degradable and reusable. It is the sustainable material for sanitary pads and it is an alternative of disposable sanitary pads. (Yagnik, 2013) investigated the role of media in marketing of the products which changed the mind of the people in selecting the type of the product to be purchased. The study tried to elaborate on how media coverage changes the mind of women regarding sanitary pads and advertisement of menstrual hygiene products removed all the barriers regarding Menstruation. Most of the women gave up their primary education due to menstrual taboos or the lack of knowledge. The study shows that media have to take the step forward and it has to be reach at every street of rural area so that it encourages the women empowerment. (Chothe et al. 2014) The study addressed the perception and confusion on the menstrual hygiene. There were many cultural beliefs and misunderstanding regarding menstrual education. Menstrual education plays a important role in adolescent girls. Lot of programmes and initiatives has previously been taken to improve the menstrual hygiene. This study found out that in proper way the advertising should be done so that more women and adolescent girls able to buy sanitary pads in rural backward areas. Educational programmes must be arranged at the school level.(RaySubhasis,2016) this study showed how marketization and marketing of disposable sanitary napkins are using unhygienic materials in hygiene products .It has become a challenge for policy makers, government and manufacturers. It is also harmful to the environment as it is non biodegradable and bad effects on health of women. Women feel shy talking about the menstruation. Through Natural Health mission government of India is providing sanitary pads for Rs 1 but most of the consumers are not interested as it is made of poor quality. Women are not able to talk about menstruation so easily. Sustainable marketing must be done towards eco friendly sanitary pads. (Garikipati, 2017)study explored to provide better sanitary care for slum women in India, a number of programmes have previously been arranged to popularise the use of sanitary pads among poor women in rural areas. It had reviewed the menstrual practices in different areas across India. Many of the advantage had also been taken to improve menstrual hygiene. The focus is on the type of policies in India that promotes the use of sanitary pads usage among poor women and also focused on sustainable sanitary service. It had a direct bad effect on women's health. The study concluded that there is use of sanitary pads especially in rural areas is very low. The study is carried out by SAFA which work in slums of Hyderabad. The report showed that major programmes should be done to improve sanitary heath care by advertising, promoting, door to door marketing, schooling etc. It should also be cost effective. (Fednis, 2017) Introduced the hash tag "lahu ka lagan" on twitter to protest against the government issued of to impose GST 14% on sanitary pads. "lahu ka lagan" means tax on blood. This was not the first the non profit organization attempted to attention this issue but also in October 2016 before the tax policy announced. Twitter campaign focused on to demand policy change in India after this tax committee reduces the tax from 14% to 12%. This hashtag raised the voice of poor rural women who were not able to come forward, so it concludes that sanitary pads product should be tax free and must be at low cost so that poor women can buy it. (Bae et al.2018)it

reported that disposable absorbent hygiene products like sanitary pads played a important role in women's life. This article reviewed the safety of sanitary pads, maximum of village area women preferred clothes and rags as because they think sanitary pads would be costly they can't able to buy it at high cost. This study concluded that government of the country have to think to provide best quality of sanitary pads at low cost and as educate them at school level and the advertising and various programmes should be done in rural areas .(Bako et al. 2019) The study showed the relationship between television advertising of sanitary pads and purchasing behaviour of female users. Companies should invest in advertising to create awareness about using sanitary pads. Many brands came forward through advertising. A lot of manufacturers were concerned about the psychology of female consumers and behaviour on the use of sanitary pads. Advertising is best promotional tool for promoting sanitary pads through various medium like radio, television, newspaper, magazines or any other mediums. Television is the strongest medium of advertising because it can reach to maximum of the people in short period of time. It changes the attitude, behaviour, and of women . (Tudu et al.,2019) Saathi sanitary pads started in 2015 with a mission to develop an eco friendly and biodegradable sanitary pads. Presently Sanitary pads contain more than 90% plastic and some pads are made up of four plastic bags. Its goal was also to replace the non, chemical sanitary pads used during menstruation with sustainable environment friendly. Saathi is providing alternative to commercial, on biodegradable sanitary pads which is 100% Organic and also biodegradable. It decomposes within 6 months. Saathi pads are made up of banana fibre. Banana fibre is extracted from banana stem pulp that comes from stem of the banana tree. Saathi sanitary pads resolved the problem of affordability, availability, and . (Tiku, 2019) the purpose of this paper was to design and development a reusable sanitary pad without a pad holder for the economically challenged people. A reusable pad must be needed because it not harmful to the environment, less irritating, highly customisable and it covers economical issues. This product mainly focussed on producing the reusable sanitary pads which is made easily available with good fabric and protects the women health and also ecofriendly also cost affordable. (Cha and Park, 2019) studied that consumer preferred the disposable sanitary pads. The product management of disposable sanitary pads is important in supporting women's health and a sustainable environment. This study focused on women's disposable sanitary pads. Women mostly chooses products with low price and show their interest in products which offer high discounts. They were also influenced by the brand name and their packaging as it can easily be understood to women. This study also provided a sustainable growth strategy regarding environment.(Mehta et al., 2020)investigated that woman menstruates 450 cycles in her lifetime and maximum of the woman used disposable sanitary napkins which created harmful effect on women as well as on environment. These kind of sanitary pads are harmful for our nature and hazardous to workers who are working on it. The material of sanitary pads must be recycled so that it can't harm anyone. Reusable sanitary napkins are washable pads that are not only cost effective but also an eco friendly sustainable option. Reusable sanitary pads are useful alternative to disposable napkins. This study also explored that there is need to develop eco friendly reusable sanitary napkins which also must be cost effective. (Bhagwat and Jijina, 2020), this article described the route level work of project Sakhi which created awareness about menstrual hygiene and had set up self sustaining production units of low cost sanitary napkins in rural areas. The Sakhi movement was launched in 2010 and it was found that many women had infections due to poor menstrual hygiene and mostly school girls remain absent during periods. They couldn't buy sanitary napkins as they feel it embarrassed. The objective of that project was to manufacture low cost and bio-degradable sanitary pads and

also provide some employment to rural women. This project created the awareness and removed all the barrier of shame about menstruation in women. (Shibly et al. 2021), showed how biopolymer based sanitary pads were an alternative on biodegradable sanitary pads. The manufacturer must be focused to manufacture very low cost and eco-friendly sanitary napkins. Nowadays sanitary napkins are made up of three kinds of sheets, top sheets, the absorbing material and the leaking barrier sheet. Arunachalam Muruganantham recently developed low cost sanitary napkins where they tried to reduce the amount of SAP utilisation in the core layer because SAP has bad effect on user which causes reaction such as skin infections. There was an option which is bio polymer which can use in the absorbent core of sanitary napkins which increases the non toxicity of this product which is key objective of this research. This study found out that there is a need to implement biopolymers as a substitute because it is eco friendly and it minimise the health risks. (Koskenniemi, 2021) showed how menstrual shame can be removed through activism. This paper mainly focused on the alternative menstrual products such as menstrual cups, reusable pads and period underwear. Various activists also

raised their voice against menstrual taboos and argued on alternative products which passed a positive and educational message to people on menstruation. The purpose of this paper was to ' how the menstrual product can sell electronically'. (Jui-Che-Tu et al. 2021) explored with the innovations in the technology, even after most of the people were using disposable products which is harmful for their health as well to environment. During Covid-19 people have become more sustainable regarding the environment and their health. Various kind of menstrual hygiene products are available in the market but most of the products are hazardous to environment. This study examined the development of menstrual product by making it reusable. Women have positive opinion about menstruation and their body. In these study women moves towards the eco friendly and reusable sanitary pads because they see it on internet . Various sanitary pads are available in the market which is sustainable to the environment. This study concluded that manufacturers make their product eco friendly because when it comes in the open market it also be sold through online Marketing because in this new generation maximum people prefer to buy online rather than going to the market.

	Publisher Name	year of publication	Journal Name	Title of the paper	Origin	Authors Name
1	Tailor &Francis	2010	Health care for women	surreptitious learning: Menarche and	Canada	Simes and
			International	menstruation product advertising		Berg
2	Springer	2011	Maternal and child	India moves toward menstrual hygiene:	India	Garg et al.
			health journal	subsidized sanitary napkin for rural		
				adolescents girls-issue and challenges		
3	Taylor and Francis	2013	Health care for women	reframing menstruating in India:	India	Yagnik
			International	metamorphosis of the menstrual taboo		
				with the changing media coverage		
4	Tailor &Francis5	2013	Sexual and	Improving quality of life with new MHP(India	Shah et al.
			reproductive health	Menstrual Hygiene Practices) among		
			matters	adolescent tribal girls in rural Gujarat		
5	Sage	2014	Health promotion	Students perception and doubts about	India	Chothe et
			practice	menstruation in developing countries		al.
6	Sage	2015	Journal of health	Menarche and menstruation in rural	India	Behra et al.
			management	adolescents girls in Maharashtra's		
				qualitative study		
7	Elsevier	2016	_	Wings to fly-but to where? Menstrual	India	Ray et al.
				hygiene, marketization and vulnerability		
				among subaltern women in India		
8	Wiley	2017	_	To pad or not to pad: Towards better	India	Garikpati
			development	sanitary care for slum women in India		
9	Tailor & Francis	2017	Feminist media studies	Feminist activists protest tax on sanitary	India	Fednis
				pads: attempts to normalize conversations		
				about menstruation in India using hash tag		
				activism		
10	MDPI	2018	Sustainability journal	Safety evaluation of absorbent hygiene	Korea,	Bae
				pads: A review on assessment framework	China	
	_			and test methods	and USA	
11	Sage	2019	Journal of creative	Impact of media advertisement on	Nigeria	Bako et al.
			communication	consumer behavior		
12	Wiley	2019	Journal of Philantropy	Saathi sanitary pads: Eco friendly pads	India	Tudu
	_		And Marketing	which will make you go bananas!		
13	Sage	2019	Indian journal of	Imperfect information in menstrual	India	Mahajan
			gender studies.	health and the role of informed choice		
14	Emerald	2019	International journal of	Design and development of feminine	Ethiopia	Tiku
			clothing science and	reusable pad without pad holder		
			technology			
15	Elsevier	2019	Sustainable Production	Consumer preference and market	Korea	Cha &Park
			and Consumption	segmentation strategy in the fast moving		
				consumer goods industry: The case of		
10	0-6-171-1-1	0000	T	women's disposable sanitary pads	T	D. G 1. 4 4 - 1
16	Oxford University	2020	Journal of public health	Reusable sanitary napkins-time to revisit	India	Mehta et al
17	Tailor &Fransis	2020	Social work in public	A psychosocial lens on an indigenous	India	Bhagwat
			health	initiative to address menstrual health and		and jijina
10	Ci	0001	Deallatin afth attach	hygiene in Indian villages	D1 - 1	Chilles 4 1
18	Springer	2021	Bulletin of the National research centre	Development of biopolymer based	Banglad esh	Shilby et al
			research centre	menstrual pad and quality analysis	esn	
				against commercial merchandise		

19	Tailor & Francis	2021	Feminist media studies	Say not to shame, waste, inequality and	Finland	Koskennie
				leaks! Menstrual activism in the market		mi
				for alternative period products.		
20	Springer	2021	BMC women's health	A novel banana fiber pad for menstrual	India	Achuthan
				hygiene in India-a feasibility and		
				acceptability study		
21	MDPI	2021	International journal of	Women's cognition and attitude with Eco	Taiwan	juiche-tu et
			environmental research	friendly menstrual products by consumer		al.
			and public health.	lifestyle		

CONCLUSION OF THE STUDY

This study mainly focused on Eco friendly, low cost and reusable sanitary napkins. After reviewing all the papers the results showed that there is a lack of awareness regarding menstrual hygiene management in women and girls. Adolescent girls failed to discuss about menstruation with their mothers as they feel embarrassed. Using unhygienic product hazardous infections occurs in the body. Manufacturers produce that kind of sanitary pads which are reusable and of low cost so that it does not affect their health and the environment, like Saathi sanitary pads which is reusable and of low cost. The buying behaviour of women regarding sanitary pads also depends on its cost, a study came out that it must be tax free because mostly in rural areas women can't able to buy it because of its high price so government and manufacturers should think to make it tax free to get a sustainable environment in the future. Manufacturers should use that type of material in it which is not harmful to the environment. The studies also recommended that advertising should be creative, its content must be cleared and invest more in the advertising

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