# Perception and Knowledge of Women and Men Regarding Menstruation and Menstrual Products

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Abstract:- This paper discusses the level or degree of awareness people have regarding the environmental impact of menstrual products. Now a days the most popular types of products are also considered as the most detrimental to our natural environment, Especially due to the amount of hidden plastic in disposable items. This research tries to find out whether people understand that this is the case and whether those that are more aware of the damage are likely to make choices that are less harmful to the environment. A mixed approach and initiative were taken, using online surveys and targeted groups. The findings of the research show that most participants were not aware of the amount of plastic used in disposable menstrual products, and that there are other reasons related to the environmental impact which people are generally not aware of. Some of the participants were more aware of the issues and carrying more knowledge than others and the research also suggest that the participants with a higher awareness are more likely to choose products which are less harmful and less dangerous to the environment. Based on these results, future precaution and areas of further research are suggested.

**Keywords:-** Single-Use Plastics; Menstrual Commodities; Environmental Impact; Consumption

### I. INTRODUCTION

Female hygiene during menstruation is very much essential for a woman during her active reproductive life spanning over 35 to 40 years. It is a matter of great regret, majority of the women in India are still deprived of the basic means of menstruation hygiene management due to factors such as illiteracy, poor economic scenario, ignorance social and cultural compulsions.

Even in the present time, majority of the rural Indian women are restrained from safe practices during menstruation due to the taboo forced by them. Such distressing view starts with most girls opting out of schools on reaching puberty due to lack of adequate infrastructure in our rural schools to cope with this phenomenon leave alone the wherewithal to access menstrual commodities and their affordability. India has very few best practices on sanitary waste management system. For instance, Panaji took an initiative to accumulate sanitary waste and hand it over to the common biomedical treatment facility for incineration. However, this has its own issues and problem, as the facility does not have enough capacity. In Kerala, households are educated to give sanitary waste separately, but again disposal is a great challenge and hard task. Small scale sanitary incinerators are used in schools, colleges and institutes but how harmful its emission needs to be assessed.

### II. WHAT IS MENSTRUATION?

Menstruation period is a natural and biological phenomenon of procreation, in which a female goes through this cycle roughly at least once a month. The process is triggered and controlled by the pituitary gland in the brain which prompts the release of a mature ovum from the female ovary to lodge in the uterus for a fortnight waiting to be fertilized by sperm. In the absence of fertilization, the ovum along with the primed inner wall of the uterus discharged as menstrual flow from the genitals in the form of blood. This flow lasts for 4 to 5 days at the time of menstruation.

### What are menstrual products made of?

Most of the conventional or traditional sanitary napkins are made of plastics or its derivatives to the extent of almost 90%. Polymers are also used. The tampons are made of rayon while cups are made of silicone and sometimes made of rubber. These being the most commonly used menstrual products, pose a great threat to the users in direct contact with the skin causing allergies or rashes and breeding ground for several infections. In recent times, reusable cotton cloth sanitary napkins and more particularly organic, biodegradable and compostable menstrual commodities are gaining popularity, despite the deterrence of higher cost.

#### ➤ What are organic, biodegradable pads?

Sanitary pads that have an organic plant based top cover with a corn, bamboo, wood, banana, jute pulp or cellulose absorbent core and thus free from any plastics, chlorine, latex, rayon, chemical additives, dyes or deleterious materials are classified as biodegradable pads. This makes them fully compostable and helps to reduce the accumulation of plastic waste.

There are over a billion of non-degradable sanitary napkins clogging India's sewage systems, water bodies, landfills and the commercial pads, tampons consist of 90 percent plastic, and are also bleached with chlorine. In India, one of the major culprits of the plastic pollution are the traditional menstruation commodities available here.

A quiet revolution is going on among educated and cautious Indian women. Though the eco-friendly menstrual products are sold at a higher price, these products are made of natural raw materials, are far better for our own wellbeing and far less harmful to the ecological system. One may not be comfortable with switching to a menstrual cloth pads overnight, but we can all easily look at moving to an eco-friendly brand of pads or tampons as an alternative choice.

It's a matter of great concern that plastics have invaded our lives. And while they are convenient for packaging and transportation, they are extremely toxic, harmful and dangerous for the environment.

Many of our personal hygiene commodities also have plastic in them, and one of the biggest examples for these is sanitary pads used by women. In fact, the 'plastic shield', that does not permit moisture and the blood to seep through, is considered as the unique selling proposition for many of the manufacturing companies. Moreover, the plastic covering and the shield does prevent embarrassing bloodstains during periods, but at what cost?

While there is no convenient official data, several reports disclose that on an average about 9000 tones of menstrual waste materials are generated in India monthly and most of it are sanitary pads. All these plastic-based sanitary pads are either thrown in the toilets or thrown in the open as garbage along with other household waste. Huge number of women in India uses sanitary pads. A majority of the pads are made of plastic. According to an Institute named Menstrual Health Alliance India, out of the total sanitary waste generated in the country, about 45% is due to menstrual products, largely sanitary napkins. There is no proper disposal system for menstrual waste either, and this is not merely a problem in India but also a global problem, especially in the developing countries.

### III. RESEARCH METHODOLOGY

**Research Design:** Descriptive Research **Data Sources:** 

#### Secondary Data:

Secondary Data sources are journal, magazines, newspapers, web portals etc.

### **Primary Data:**

We collected primary data through personal interview with the customer towards menstrual and its product approach using questionnaire

**Research Approach:** Survey Method **Research Instrument:** Structured Questionnaire **Sampling Design:** 

Sampling Frame:

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Females & Males from Gujarat State were taken for the survey.

### **Sampling Unit:**

Females of Colleges, Malls, Hospitals, Relatives & Neighbors.

#### Sample Size:

423 are Women & 123 were Male)

### **Sampling Method:**

Simple Random Sampling.

# **Contact Method:**

Personal Interview

#### **Statistical Tools Used:** Chi-Square Test.

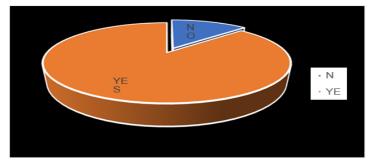
#### Scope of the Study:

1. The present study aims at assessing the behavior and awareness towards eco-friendly menstruation product.

# IV. DATA ANALYSIS DATA ANALYSIS: (FOR MEN OUESTIONNAIRE)

# MEN FAMILIARITY TOWARDS MENSTRUATION.

	Frequency	Percent
NO	16	13
YES	107	87
Total	123	100



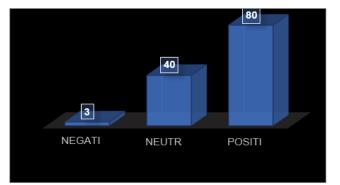
#### Interpretation:

From the above pie chart, we conclude that in our survey out of 123 Male, (107) 87% are familiar with Menstruation and (16) 13% were not familiar with Menstruation.

### Table: 01:

# PERCEPTION TOWARDS MENSTRUATION

	Frequency	Percent
NEGATIVE	3	2.4
NEUTRAL	40	32.5
POSITIVE	80	65
Total	123	100



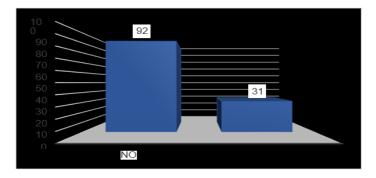
#### Interpretation:

Out of 123 Males, we interpret that maximum number of respondents, i.e. (80) 65.0406% takes menstruation in positive manner, (3)2.4390% takes menstruation in negative manner while (40)32.5203% takes menstruation in neutral manner.

### Table: 02:

# <u>"MENSTRUATION" A WOMEN'S ISSUE THUS SHOULD NOT BE</u> DISCUSSED WITH MEN.

	Frequency	Percent
NO	92	74.8
YES	31	25.2
Total	123	100



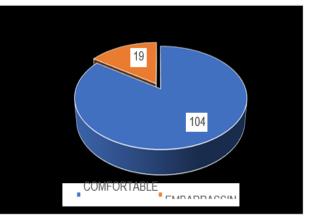
#### Interpretation:

From the above pie chart, we conclude that in our survey out of 123 Male, 92(75%) thinks that menstruation should be discussed though it's a women's issue while (31)25% are thinks that menstruation is a women's issue and should be discussed.

Table: 03:

# SPEAKING ABOUT MENSTRUATION IS A TABOO TOPIC OR NOT

	Frequency	Percent
COMFORTABLE	104	84.6
EMBARRASSING	19	15.4
Total	123	100



# Interpretation:

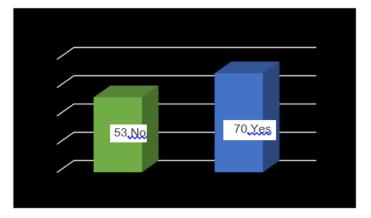
Out of 123 Males, we interpret that maximum number of respondents, i.e. (104)84.6% are comfortable in talking about menstruation while (19)15.4% felt embarrassing while taking about menstruation.

**Table: 04:** 

### Table: 05:

# OCCURRENCE OF DISEASES TO WOMEN IF MENSTRUATION TOOLS ARE NOT EFFECTIVELY USED.

	Frequency	Percent
NO	53	43.1
YES	70	56.9
Total	123	100



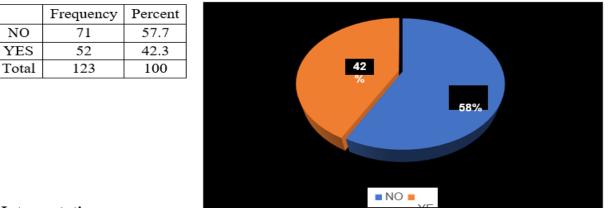
# Interpretation:

From the above pie chart, we conclude that in our survey out of 123 Male, 70(56.9%) knows that if menstruation tools are not used effectively women may have diseases

while 53(43.1%) do not know about diseases if menstruation tools are not used.

### Table: 06:

# **BUYING MENSTRUATION PRODUCT FOR FEMALE**



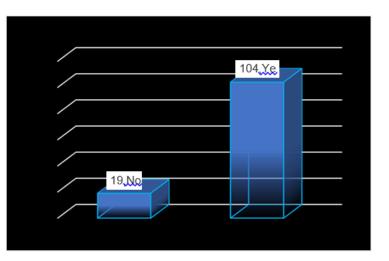
### Interpretation:

From the above pie chart, we conclude that in our survey out of 123 Male, (71)57.7% never bought any menstruation product for female while (52)42.3% bought menstruation product for female.

### **Table: 07:**

# PREFERENCE OF ECO-FRIENDLY MENSTRUATION PRODUCTS FOR FEMALE

	Frequency	Percent
NO	19	15.4
YES	104	84.6
Total	123	100



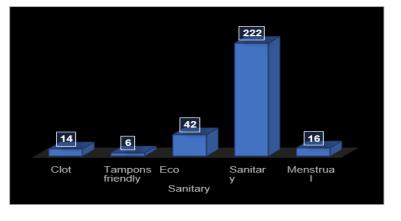
# Interpretation:

From the above pie chart, we conclude that in our survey out of 123 Male, (104)84.6% prefer eco-friendly menstruation product for female while (19)15.4% do not prefer eco-friendly menstruation product for female.

# DATA ANALYSIS

# (FOR WOMEN QUESTIONNAIRE)

	Frequency	Percentage
Cloth	14	5%
Tampons	6	2%
Eco friendly Sanitary Napkins	42	14%
Sanitary Napkins	222	74%
Menstrual Caps	16	5%
Total	300	100%



### Interpretation:

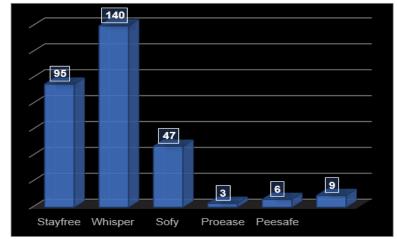
Out of 300 Females, we interpret that maximum number of females, i.e. (222)74% prefer Sanitary Napkins and very a smaller number of females (6)2% prefer Tampons while only (42)14% prefer Eco Friendly Sanitary Napkins.

Table: 08:

Table: 09:

# PREFERENCE OF BRAND

	Frequency	Percentage
Stayfree	95	31%
Whisper	140	47%
Sofy	47	16%
Pro ease	3	1%
Pee safe	6	2%
Others	9	3%
Total	300	100%



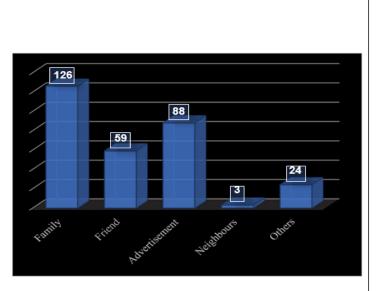
### Interpretation:

Out of 300 Females, we interpret that maximum number of females, i.e. (140)47% prefer Whisper while on (95)31% use Stayfree and least number of females (3)1% use Proease.

### Table: 10:

### INFLUENCE TO USE BRAND

	Frequency	Percentage
Family	126	42%
Friend	59	20%
Advertisement	88	29%
Neighbours	3	1%
Others	24	8%
Total	300	100%

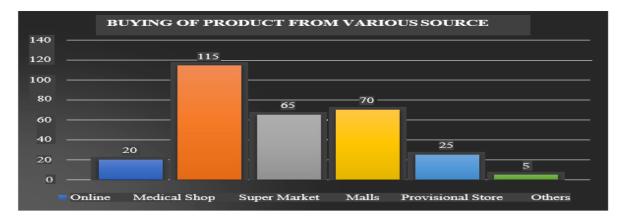


### Interpretation:

Out of 300 Females, we interpret that maximum number of females, i.e. (126)42% influence to use brand due to family & (88)29% where influenced by Advertisement while very least number of females influence by the neighbours.

### **BUYING OF PRODUCT FROM VARIOUS SOURCE**

	Frequency	Percentage
Online	20	7%
Medical Shop	115	38%
Super Market	65	22%
Malls	70	23%
Provisional Store	25	8%
Others	5	2%
Total	300	100%



# Table: 11:

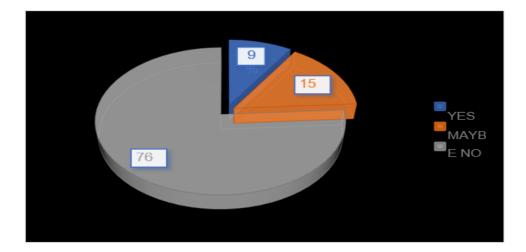
### Interpretation:

Out of 300 Females, we interpret that maximum number of females, i.e. (115)38% buy menstruation product from Medical Shop, (70)23% from Malls & (65)22% from super market while very least number of females buy it from online (20)7% and Provisional Store (25)8%.

**Table: 12:** 

# FEELING SHY AT MEDICAL SHOP WHILE ASKING FOR SANITARY NAPKINS

	Frequency	Percent
YES	27	9
MAYBE	45	15
NO	228	76
Total	300	100



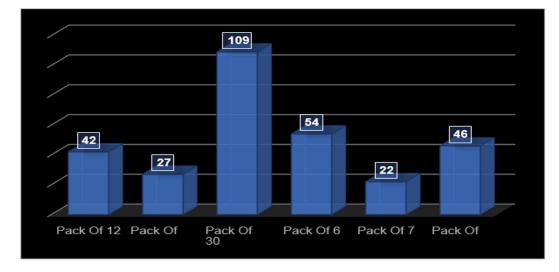
# Interpretation:

Out of 300 Females, we interpret that maximum number of females, i.e. (228)76% females not feel shy for asking sanitary napkins, while (45)15% female maybe shy while buying sanitary pad.

Table: 13:

# **BUYING VARIOUS PACKS**

	Frequency	Percent
Pack Of 12	42	14%
Pack Of 15	27	9%
Pack Of 30 Or More	109	36.3%
Pack Of 6	54	18%
Pack Of 7	22	7.3%
Pack Of 8	46	15.3%
Total	300	100%



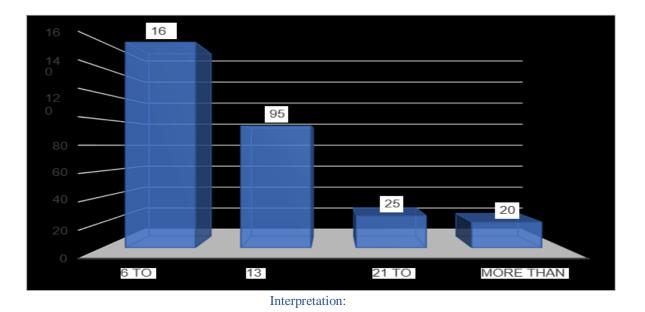
# Interpretation:

Out of 300 Females, we interpret that maximum number of females, i.e. (109)36.3% buy Pack of 30 or more and very few females (22)7.3% buy pack of 7

**Table: 14:** 

# AVERAGE PADS USE IN A MONTH

	Frequency	Percentage
6 to 12	160	53%
13 to20	95	32%
21 to 28	25	8%
more than 28	20	7%
Total	300	100%



Out of 300 Females, we interpret that (160)53% females may use 6 to 12 pads during month, while (95)32% of females may use 13 to 20 pads during month.

Table: 15:

# VARIOUS FACTORS FEMALE SEE WHILE BUYING

	Frequency	Percent
BRAND	24	8%
OTHER	4	1.3%
5PRICE	10	3.3%
QUALITY	262	87.3%
Total	300	100%

	FACT	ORS WHI	LE BUYIN	1G	
				262	
24		4	10		

# Interpretation:

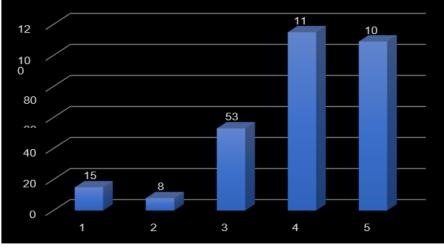
Out of 300 Females, we interpret that maximum number of females, i.e. (262)87.3% sees the quality of the menstruation product while Brand (24)8% comes to second factor while buying and last but not the least third place comes to price (10)3.3%.

### **Table: 16:**

# PRODUCT COMFORTABLE LEVEL TO FEMALES

# (1 IS LESS COMFORTABLE & 5 IS EXTREMELY COMFORTABLE)

	Frequency	Percent
1	15	5%
2	8	2.7%
3	53	17.7%
4	115	38.3%
5	109	36.3%
Total	300	100%



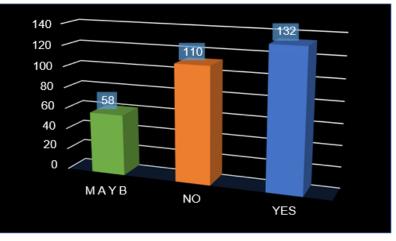
# Interpretation:

Out of 300 Females, we interpret that maximum number of females, i.e. (115)38.3% are comfortable while (109)36.3% are extremely comfortable of the product they are using & (8)2.7% are less comfortable

**Table: 17:** 

### KNOWING ABOUT THE SEVERE DISEASE CAUSED BY USING SANITARY NAPKINS/ TAMPONS

	Frequency	Percent
Maybe	58	19.3%
No	110	36.7%
Yes	132	44%
Total	300	100%



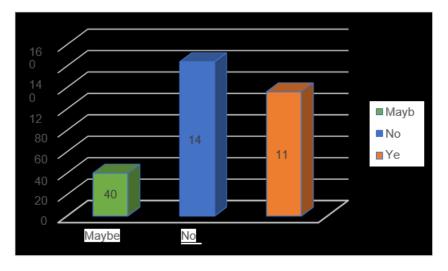
# Interpretation:

Out of 300 Females, we interpret that (132)44% females knew about the disease caused by using sanitary napkins/tampons while (110) 36.7% do not know about various disease caused by using sanitary napkins.

### Table: 18:

# HEARD ABOUT ECO- FRIENDLY MENSTRUATION TOOLS

	Frequency	Percent
Maybe	40	13.3%
No	144	48.0%
Yes	116	38.7%
Total	300	100%



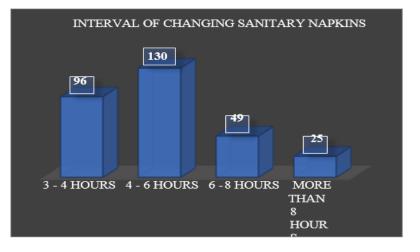
# Interpretation:

Out of 300 Females, we interpret that (116)38.7% females knew about Eco-friendly menstruation tools while a greater number of females (144) 48% have no knowledge about eco-friendly menstruation tools.

### Table: 19:

# TIME INTERVAL OF CHANGING THE SANITARY NAPKINS

	Frequency	Percent	
3 - 4 Hours	96	32	
4 - 6 Hours	130	43.3	
6 - 8 Hours	49	16.3	
More Than 8 Hours	25	8.3	
Total	300	100	



### Interpretation:

Out of 300 Females, we interpret that (130)43.3% females change sanitary pads in 4 to 6 hours while (96)32% change it in 3 to 4 hours and very less number of females i.e., (25)8.3% takes more than 8 hours to change the sanitary pads.

### V. FINDINGS

- 1. On the basis of this research work, we have found that 70.9% are women and 29.1% are men.
- 2. The majority 86.1% respondents are between the age of 18-25, second majority 9% respondents are between the age of 26-35, third majority 4.7% respondents are between the age of 36-50, while minority 0.2% respondent is above the age of 50.
- 3. According to Education Qualification, Females are 70.9% educated and remaining 29.1% are illiterate, Males are 28.8% educated and 71.2% are illiterate.
- 4. According to Occupation for female, 22.9% are students, 3.5% are professionals, 1.4 are business women's and remaining 72.2% are self- employed or housemakers.
- 5. According to Occupation for male, 53.9% are students,0.7% are businessmen, remaining 45.4% are self-employed or professionals.
- 6. We found that 36.7% of women does not know about the diseases occurred because of not using eco-friendly menstrual products.
- 7. As the disposal of menstrual tools plays a vital role in environment safety where 90.3% dispose it in dustbin, 3.7% burn it, and remaining 6% dump it in soil or open areas.
- 8. Out of 300 female respondents, 144 that is 48% of female does not know about the eco- friendly menstrual products, 156 that is 52% female knows from which 65.7% that is 81 females are interested in using eco-friendly menstrual products.
- 9. Out of 300 female respondents, 47.7% that is 143 respondents feels that it is extremely important and

48.3% that is 145 respondents feel that it is important to use eco-friendly menstrual products.

10. From 300 female respondents, 87.3% that is 262 respondents would like to recommend eco-friendly menstrual products.

### VI. RECOMMENDATIONS

- 1. There should be more supply of eco-friendly menstrual tools in market.
- 2. Eco-friendly menstrual product should be available at affordable price.
- 3. It should be available at nearby, in malls and super markets.
- 4. More awareness for menstrual hygiene should be spread.
- 5. Disposal of menstrual tools should be proper which does not harm environment.
- 6. Awareness for disease occurred due to not using required menstrual tools should be done.

### VII. CONCLUSION

Overall, we had great experience and we have observed that consumers are highly unaware about ecofriendly menstrual tools as a result they are using non-ecofriendly menstrual tools. Also, disposal of the tool is also an important factor of destroying environment. Consumers are also not aware about the severe diseases because of not using hygiene menstrual tools. During this project, we observed that there is high demand of eco-friendly tools but at the same time availability and supply of it is very low. Almost all consumers are looking for affordable price of menstrual tools. Thus, we have concluded that more eco-

friendly product should be supplied and affordable range and awareness towards this noble cause should be done at country level.

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