

1 A Comparative Study on Menstrual Hygiene Practices among 2 Women in Maharashtra

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6

7 **Abstract**

8 Menstruation, also called the menstrual cycle, prepares the sexually mature, female body for
9 pregnancy each month. Menstruation is monthly bleeding that begins in girls around 12 years
10 of age. Because bleeding associated with the menstrual cycle happens regularly or
11 periodically, it also is referred to as a menstrual period or, more simply, as a "period." Some
12 girls get their first menstrual period as young as 9 years of age, and others do not begin
13 menstruating until 15 years of age. In developing country Menstruation has always been
14 surrounded by different perceptions throughout the world. Nowadays, there is some openness
15 toward menstruation, but differences in attitude still continue between different populations.
16 There are differences between countries, cultures, religions, and ethnics groups. In many
17 low-income countries, women and girls are restricted in mobility and behavior during
18 menstruation due to their ?impurity? during menstruation.

19

20 *Index terms—*

21 **1 Introduction**

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23 Menstruation is monthly bleeding that begins in girls around 12 years of age. Because bleeding associated with
24 the menstrual cycle happens regularly or periodically, it also is referred to as a menstrual period or, more simply,
25 as a "period." Some girls get their first menstrual period as young as 9 years of age, and others do not begin
26 menstruating until 15 years of age. In developing country Menstruation has always been surrounded by different
27 perceptions throughout the world. Nowadays, there is some openness toward menstruation, but differences in
28 attitude still continue between different populations. There are differences between countries, cultures, religions,
29 and ethnics groups. In many low-income countries, women and girls are restricted in mobility and behavior
30 during menstruation due to their "impurity" during menstruation.

31 In many parts of the world, menstruation is still related to a number of cultural taboos as well as feelings of
32 shame and un-cleanliness. Even today menstruation is a secret of mother and daughter in many families. It is
33 not discussed in the openly ??Harshad Thakur et.al, 2014). Menstrual hygiene is the taboo subject. A topic that
34 many women in India are uncomfortable discussing in openly; matter are keep out from public talks are most
35 likely to be discussed without giving much important.

36 This excludes women and girls from decisionmaking power hygiene related practices of women during
37 menstruation are of considerable importance, Although menstruation is a natural process, it is linked with several
38 perceptions and practices, which sometimes result in adverse health outcomes along with cultural constructs leads
39 to formation of a certain preconception, the reaction to menstruation also depends upon awareness and knowledge
40 about towards menstruation among married women. Hygiene related practices of women during menstruation
41 are important. Poor menstrual hygiene practice is one of the major reasons of high prevalence of Reproductive
42 Tract Infection (RTI) and contributes much too female morbidity.

43 Infection (RIT), which have become a silent epidemic that destroy women's life are closely inter related to poor
44 menstrual hygiene. The use of rags and old clothes is a rule rather than exception in rural areas of India. Unclean

3 B) REVIEW OF LITERATURE

45 rags and old clothes increase the chances of RTIs including urinary, vaginal, and perineal infection (S.Sangeetha
46 Balamurugan et.al, 2014). Women having better knowledge regarding menstrual hygiene and safe practices are
47 less vulnerable to RTI and its consequences. Therefore, increased knowledge about menstruation right from
48 childhood may escalate safe practices and may help in mitigating the suffering of millions of women. This study
49 aims to review the change and prevalence of hygiene practices during menstruation in the year

50 2 Methodology

51 In this study I have included the various demographic and social as well as economic variables to understand
52 how these variables are affected on the menstruation practices among women over the period of time, Background
53 characteristics of women like age, age at marriage, education of husband and women, place of residence, Duration
54 of Marriage, Age at 1st Birth, Marital Status and standard of living and media awareness regarding RTI and
55 region of Maharashtra. Independent variable and dependent variables taken as Methods using for prevent blood
56 stains during maturation and symptoms of RTI and menstrual problems. All methods to prevent blood stains
57 are taken as dependent variables classified into three categories: Any menstruation related problem during
58 last three months=menstrual problem has two categories of 'yes' and 'no' those who have a problem related to
59 menstruation are coded 1 and those who are not they coded 0. Any symptoms of RTI=those have a symptoms
60 they are coded '1=yes' and those who are not they coded '0=no'.

61 The variable was aware about RTI/STI and Exposure of mass media both has two categories of 'yes' and 'no'.
62 Those who are aware about mass media and exposure of mass media were coded 1 and those who are not they
63 coded 0.

64 In Logistic Regression techniques showing the relationship between sanitary method practices and background
65 characteristic in Maharashtra. a) Need for the Study "Menstruation" is the physiological process which starts
66 at menarche at or before sexual maturity, in females and ceases at or near menopause. But its physiology and
67 nature are very poorly understood among the female population due to many socio-cultural factors which make
68 them to adapt certain practices unknowingly whether it is correct or wrong. All women, whether rural or urban,
69 irrespective of their socioeconomic status have their own beliefs and practices concerning menstrual hygiene
70 (Balaji Arumugam et.al 2014). In India, there is generally a silence around the issue of women's health -especially
71 around menstruation. A deep-rooted taboo feeds into the risible myth-making around menstruation: women are
72 impure, filthy, sick and even cursed during their period. Taboos relating to menstruation and health and disease
73 were explored by many studies.

74 Although many studies were conducted to assess the menstrual practices, the diversity of cultural practices in
75 India, the issue has been a taboo until date. Such taboos about menstruation present in many societies impact
76 on girls' and women's emotional situation, mentality and way of life and mostly on their health. So this current
77 study aims to discuss about the knowledge and hygiene practices related to the menstruation among married
78 women in Maharashtra.

79 3 b) Review of Literature

80 Review of Literature is a key step in research process. Review of Literature refers to a widespread, comprehensive
81 and systematic examination of publications relevant to the research project.

82 A cross sectional study of Shabnam Omidvar et.al (2010) conducted on factors influencing hygienic practices
83 during menses among girls from south India. In this study result shows that the Mean age of menarche was
84 13.4 ± 1.2 years; disposable pads were used by two-thirds of the selected girls (68.9%) regardless of age while
85 45.1% reported to use both disposable and non disposable materials. Frequency of changing pads was 2-3 times a
86 day by 78.3% girls. Socioeconomic Status (SES) of the selected girls and their age influenced choice of napkin/pads
87 and other practices such as storage place of napkins; change during night and during school or college hours and
88 personal hygiene. Older girls had better hygienic practices than the younger ones. Seventy six percent of the
89 participants desired for more information regarding menstruation and hygienic practices.

90 A cross sectional study of Tazeen Saeed Ali et.al (2010) was conducted to explore the menstrual practices
91 among adolescents of urban Karachi of Pakistan using by interviews. Descriptive findings showed that 50% of
92 the girls lacked an understanding of the origin of menstrual blood and those with a prior knowledge of menarche
93 had gained it primarily through conversation with their mothers. Many reported having fear at the first experience
94 of bleeding. Nearly 50% participants reported that they did not take baths during menstruation. In this, study
95 concludes that there are unhygienic practices and misconceptions among girls requiring action by health care
96 professionals.

97 Adinma ED AdinmaJI.(2008) A cross-sectional descriptive study was conducted amongst 550 secondary school
98 girls in south-eastern Nigeria to determine their perceptions, problems, and practices on menstruation. Majority
99 of the students, (75.6%), were aged 15-17 years. Only 39.3% perceived menstruation to be physiological.
100 Abdominal pain/discomfort, (66.2%), was the commonest medical problem encountered by the respondents,
101 although 45.8% had multiple problems. Medical problems were most commonly discussed with the mother,
102 (47.1%), and least commonly discussed with the teachers, 0.4%. Analgesics, (75.6%), were most commonly used
103 to relieve menstrual pain. Only 10% of respondents used non-pharmacologic remedies. Unsanitary menstrual
104 absorbents were used by 55.7% of the respondents. Menstruation perceptions are poor, and practices often

105 incorrect. A multi-dimensional approach focusing on capacity building of mothers, and teachers on sexuality
106 education skills; using religious organizations as avenues for sexuality education; and effectively using the Mass
107 Media as reproductive health education channels are recommended towards improving adolescents' perceptions
108 and practices on menstruation.

109 **4 III.**

110 **5 Result and Discussion**

111 Volume XVI Issue VI Version I Place of residences is important factor is closely affected on women knowledge
112 and menstruation hygiene practice in Maharashtra. The percentage of using sanitary method has increased in
113 rural (2.7% to 8.4%) and Urban(18.4% to 23.3%) from year 2007-08 to 2012-13 and the percentage of using
114 cloth/locally prepared napkin/ other method in decreased rural (94.6% to 86.6%) as well as urban (80.4% to
115 72.7%) in year from 2007-08 to 2012-13. The percentage of not using any kind of method has increased in year
116 2007-08 to 2012-13 in both the places (Rural-2.6% to 5% and Urban-1.2% to 4%) in Maharashtra.

117 **6 3: Age at Consummation**

118 The percentage of using cloth/ locally prepared napkin/other method has decreased in age at consummation
119 below 18 (94.4% to 86.6%) and above 18(86.2% to 77.6%) during year 2007-08 to 2012-13. The percentage of
120 using sanitary method has increased in age at consummation below 18 (2.6% to 8.4%) and above 18 (12.3% to
121 18.4%) during year 2007-08 to 2012-13. The percentage of not using any method during menstruation period in
122 age at consummation has increasing in year below 18 (3%to 5.2%) and above 18(15.5% to 4%) in year during
123 2007-08 to 2012-13.

124 **7 4: Duration of Marriage**

125 The percentage of using / locally prepared napkin/other method has decreased by year 0 to 4 year (88.2% to
126 75.4%) and above 10year's (91.4% to 81.1%) of duration of marriage. The percentage of using sanitary method
127 has increased of duration of marriage by year 0 to 4 year (10.7% to 19.9%) and above 10 year (5.6% to 14.2%)
128 during year 2007-08 to 2012-13. The percentage of not using any method during menstruation period in duration
129 of marriage by year 0 to 5: Age at 1st birth The proposition of using sanitary method increased by age at 1st
130 birth, in this table shows that percentage of using sanitary method is high in age group 0-14 to 25-29 (1.5% to
131 8.5%) in year 2007-08 to 2012-13 and percentage of using cloth/ locally prepared napkin and other method has
132 decreased in if the age at 1st birth increased in year 2007-08 to 2012-13.

133 **8 6: Children Ever Born**

134 Those women having no children, one and two children they are more likely to use sanitary method than they
135 having three and more children over the year of 2007-08 to 2012-13.

136 **9 Caste**

137 The percentage of using sanitary method has increased in all Caste for e.g.-Scheduled caste (SC) (7.5% to 14%),
138 Scheduled Tribe (ST) (2.1% to 9.4%), Other Backward class (OBC) (7.2% to 15.9%) and other caste (10.1%
139 to 17.8%). The percentage of using cloth/Locally prepared napkin method has decreased in all caste for eg-
140 Scheduled caste (SC) (90.3% to 80.4%), Scheduled Tribe (ST) (94.7% to 85.2%), Other Backward Class (90.3%
141 to 79.4%) and other caste (88.3% to 78.6%). In not using method has showing that increased use in all caste
142 during year 2007-08 to 2012-13.

143 **10 8: Marital Status**

144 The percentage of women using sanitary method has increased in both currently married and ever married women
145 (7.6% to 15.7%) during year 2007-08 to 2012-13. Using cloth/locally prepared napkin (Currently married-7.6%
146 to 15.7% and ever married-4.8% to 11.1%) has decreased in both the currently and ever married women during
147 year 2007-08 to 2012-13. and not using any method has showing that increased (Currently married-2.1% 4.4%
148 and ever married-3.5% to 6.5%) the currently and ever married women during year 2007-08 to 2012-13. 9: Educa-
149 tion status women Education of women is most important factor are positively affected on knowledge and hygiene
150 practice during menstruation. Those women had taken higher education they are mostly like to use sanitary
151 method than cloth/ locally prepared napkin because of awareness and knowledge about infection related diseases.
152 In this table shows that the percentage of women who had taken higher education those women are more likely
153 to using sanitary method for example illiterate-0.5% to 6.3%, Primary-1.7% to 7.5%, Secondary-5.8% to 13.8%,
154 above secondary-26.8% to 32.1% during year 2007-08 to 2012-13. The percentage of using cloth/locally prepared
155 napkin has decreased during year 2007-08 to 2012-13.

156 Year 2016 4 year has increasing in year below 0 to 4 (1.1% to 4.7%) and above 10 year (2.9% to 4.7%) in year
157 during 2007-08 to 2012-13.

158 **11 10: Education status Husband**

159 The percentage of using sanitary method has increased by education status of husband education For example:
160 Illiterate-0.8% to 6.1%, primary education-1.6% to 7%, secondary education-5.8% to 12.5% and above secondary
161 education 18.4% to 27.1%. The percentage of using cloth/locally prepared napkin has decreased by husband
162 education is higher during year 2007-08 to 2012-13.

163 **12 11: Contraception Use**

164 The percentages of women are using temporary method (24.3% to 27.3%) of contraception they are more likely
165 to use sanitary method than permanent method (4.2% to 12%) and Traditional method (18.1% to 24.9%) during
166 year 2007-08 to 2012-13. The percentage has decreased women are using temporary method (74.7% to 71.7%) of
167 contraception they are less use cloth/locally prepared napkin method than permanent method (93.1% to 83.6%)
168 and Traditional method (79.4% to 73.1%) during year 2007-08 to 2012-13. The percentage of not using any
169 method during menstruation has increased in those women are using permanent method than Temporary and
170 Traditional method during year 2007-08 to 2013-2-13. 12: Type of Delivery

171 The percentage of women having Institutional Delivery they are more likely use to sanitary napkin than those
172 don't have Institutional Delivery. 13: Knowledge about RTI

173 The percentage of women having knowledge about RTI they are most likely to Use sanitary napkin than those
174 don't have knowledge about RTI.

175 **13 14: Type of Toilet**

176 The percentage for using sanitary method has increased by what kind of toilet facility women used. Those women
177 are used flush toilet (15.5% to 20.8%).

178 **14 15: Standard of living**

179 It is shows that socioeconomic classes influences on menstrual hygiene practices among low, medium and high.
180 Those women are having high level of standard of living they are mostly like to use sanitary method than those
181 are belonging low and medium class. The percentage of women who belonging high class of standard of living
182 they used sanitary method 8.9% to 16.2%, those women belonging low classes 4.2% to 14.8 and those women are
183 belongs to medium class 6.5% to 15.4% over the year of 2007-08 to 2012-13.

184 **15 16: Maharashtra region**

185 The percentage of using sanitary method by region wise, Pune, Nasik, Nagpur, Amravati, Aurangabad have
186 frequency of use of sanitary method is below 20 percent. Only in Kokan region have Menstrual Problems. The
187 DLHS-4 data shows the prevalence of various Menstrual Problems with report to sanitary method, cloth/ locally
188 prepared napkin and nothing.

189 Those women are using sanitary method during menstruation are less likely suffer the Menstrual Problems.
190 The women enduring from Painful periods, 4.4 percent are those who use Cloth/Other method and only 3.7
191 percent sanitary method users and only 1.2 percent not using any method. Irregular periods is a common
192 problem of women, reported by 3.2 percent of Cloth/Other users and 3 percent of sanitary method users and 1.1
193 percent not using any method.

194 Table ??-2:-this section talks about the association between menstrual hygiene practices and any symptoms of
195 Reproductive tract infection (RTI). The DLHS-4 data shows the prevalence of various reproductive tract infection
196 diseases with report to sanitary method, cloth/ locally prepared napkin and nothing.

197 Those women are using sanitary method during menstruation are less likely suffer the symptoms of RTI. The
198 women enduring from itching or irritation over vulva and pain in lower abdomen, 3.4 percent are those who use
199 Cloth/Other method and only 2.7 percent sanitary method users and only 2.9 percent not using any method.
200 Low backache is a common problem of women, reported by 9.3 percent of Cloth/Other users and 8.9 percent of
201 sanitary method users and 7.9 percent not using any method.

202 The Table ?? 2.3 represents the media awareness regarding RTI and use menstrual hygiene practices among
203 women in Maharashtra. Maximum 85.4percent from DLHS-3 and 75.5 percent from DLHS-4 of women having
204 awareness through electronic media maintain to use Cloth/ locally prepared method for their menstrual hygiene.
205 89 percent from DLHS-3 and 80 percent from DLHS-4 of women being aware through their friends reported to
206 have used Cloth/Other method for the referencing purpose.

207 the other hand, all most of nearly half (29.4 percent from DLHS-3 and 30.1 percent from DLHS-4) of women
208 being aware through print media and least of 13.1 percent from DLHS-3 and DLHS-4 21.2 percent of women
209 being aware through electronic media reported to have exercised Sanitary method for their menstrual hygiene.

210 Tables ?? prevalence of using sanitary method close to 25 percent.

211 Table ??-1 :-this section talks about the association between menstrual hygiene practices and problem during
212 year 2007-08 to 2012-2013. Almost more than 20 percent of women in Nasik and Amravati are facing RTI problem
213 more than the Kokan, Pune, Nagpur and Aurangabad region in Maharashtra during year 2007-08 to 2012-13.
214 Below than 25 percent women in Kokan and Pune are using sanitary method.

215 In Table ??, Logistic regression shows that among women, residence was the significant predictor of using
216 sanitary methods. As compared to urban women, rural women less likely using sanitary methods. According
217 to age at consummation odds of using sanitary methods were lower for those who started living with husband
218 before age 18 years as compared to those who started living with after age 18 years. Education also seems to be
219 a significant predictor of using sanitary methods low or no formal education was associated with the lower odds
220 of using sanitary napkins.

221 IV.

222 **16 Conclusion**

223 In this study a variety of factors are known are affected on menstrual behavior and practices, the most influential
224 being demographic factor are age of the women, education of women, Place of residences and socio-economic
225 status. Awareness regarding the need for information about safe menstrual practices is very important in
226 especially in women in rural and tribal area because menstrual hygiene is very important risk factor for
227 reproductive tract infection. The high prevalence of symptoms of RTIs and their association with modifiable risk
228 factors, such as contraceptive usage and personal and menstrual hygiene factors, suggest scope for intervention
229 through health education programmed among women in preventing RTIs.

230 Therefore, education on menstrual should be start from before learners reach menstrual period and it should
231 connect to other skills-based health education that continues throughout adolescence. Hence trained school
232 nurses/health personnel, motivated school teachers and knowledgeable presents also play important role in
transmitting the vital message of correct menstrual hygiene.¹

1

a) Demographic and background characteristic of
respondents

1: Age group

Among sample of women, the percentage for
using sanitary method has increased by age group of
women (8.4% to 16.8% in age group 20-29 and 6% to
12.3 in age group 40-49) over the period 2007-2008 to
2012 to 2013 where as the percentage of using Cloth/
locally prepared napkin/other method has decreased,
especially in age group 20-29 (90.1% to 79.7%) and 40-
49 (90.3% to 78.8%). The percentage of not using any
method for protected from blood strain during
menstruation has increased in age group 40-49 (3.6% to
8.9%) in during time period 2007-2008 to 2012 to 2013.

2: Place of residence

Figure 1: Table 1 :

233

1

Background Characteristics	Nothing		Sanitary Method		napkin/othe Cloth/locally prepared	DLHS3	DLHS4	
						DLHS 4	DLHS 3	
	DLHS 4	DLHS 3	DLHS 4	DLHS 3		DLHS 4	DLHS 3	
34920			42814					
DLHS 3								
Age group								
15-19	1.2	5.3	4.8	15	94	79.7	2620	
20-29	1.5	3.5	8.4	16.8	90.1	79.7	12683	
30-39	2.7	2.4	7.5	16.5	89.8	81.1	11286	
40-49	3.6	8.9	6.0	12.3	90.3	78.8	4469	
Place of Residence								
Rural	2.6	5	2.7	8.4	94.6	86.6	21762	
Urban	1.2	4	18.4	23.3	80.4	72.7	9296	
Age at Consummation								
Below 18	3	5.2	2.6	10.2	94.4	84.6	15682	
Above 18	1.5	4	12.3	18.4	86.2	77.6	15358	
Duration of Marriage								
0 to 4	1.1	4.7	10.7	19.9	88.2	75.4	6701	
5 to 9	1.2	3.1	9.2	16.8	89.6	80.1	6119	
10 +	2.9	4.7	5.6	14.2	91.4	81.1	18238	
Age at 1st Birth								
0-14	2.1	7	1.5	8.5	96.4	84.5	613	
15-19	2.8	4.9	3.3	11.1	93.9	84	14916	
20-24	1.7	4.1	10.1	16.4	88.2	79.6	9998	
25-29	1.4	3.7	22	24.5	76.6	71.7	1489	
above30	1.4	4.6	19.7	22.4	78.9	73	218	
Children Ever born								
No Children	1.8	5.4	10.9	19.1	87.3	75.5	3837	
One Child	1.3	4.6	13	20.8	85.7	74.6	4832	
Two Children	1.9	3.5	9.3	16.8	88.7	79.6	9029	
Three and More	2.9	5.3	3	9.3	94.1	85.4	13343	
Want More Child								
Yes	1.2	4.3	9.9	19.2	88.9	76.6	7569	
No more	1.6	4.8	14	20	84.4	75.3	5144	
Can't get pregnant	4.8	8.3	6.8	20	88.4	71.7	250	
Undecided	2	3.7	11.6	21.2	86.3	75.1	644	

Figure 2: Table 1 .

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