
Awareness Regarding Menstrual Hygiene Management in Term of Use of Sanitary Napkin: With Reference to Rural Areas of Central Himalayas

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ABSTRACT

Acknowledging the need to raise awareness about menstrual hygiene management, specifically sanitary napkin use with reference to rural areas girls, the present research was conducted in two blocks of Nainital region, Uttarakhand (260 respondent) by using exploratory cum descriptive research design and SPSS was used for analysis. The finding shows that 49.6% of the girls used sanitary napkins because they think sanitary napkin do not spread infection. The majority of the girls change their sanitary napkins every 4-6 or 8-10 hours. In order to avoid viral infection, 60.4% of girls change their sanitary napkin. Because sanitary napkin provides superior hygiene, sanitary napkins are preferred by 60.4% of the rural college girls.

Keywords: Sanitary napkin, Menstruation Awareness, Hygiene, Exploratory cum descriptive.

Methodology

This research is based on exploratory cum descriptive research design. The universe of the study is Nainital district, Uttarakhand. Total 8 blocks are in Nainital district, Uttarakhand, 5 blocks in hill region and 3 blocks in plain region. By using multi stage sampling, 2 blocks (1 from hill region and 1 from plain region) are selected from 8 blocks by using random method for sampling. From the selected 2 blocks, 2 colleges are selected i.e., Government Degree College, kotabagh and Government Degree college, Patlot. In Government Degree College,

Kotabagh total 130 girls' students in graduation and 253 girls in Government Degree College, Patlot. Total 260 respondents are selected for sampling by using lottery method, 130 respondent from each colleges. The quantitative and qualitative both methods are used in this research. And, the data is also collected through both primary method i.e., questionnaire and interview, and secondary method which includes books, journals, article and internet site. The data is analysis through the tabulation, M.S excel sheet, average and percentage method. The data is present through

various statistical figures. ANOVA, Chi-square and cross-tabulation test are used

for statistical analysis, and last it analyzed by SPSS method.

Menstruation hygiene awareness and Reason for using the sanitary napkin

Crosstab

| | | Why you use sanitary napkin? | | | Total |
|---|---------|------------------------------|----------------------|-----------------------|------------------------|
| | | Prevention of infection | Easy to use | Influenced by someone | |
| Do you have menstruation hygiene awareness? | Yes | Count 77 58.3% | Count 51 38.6% | Count 4 3.0% | Count 132 100.0% |
| | Neutral | Count 27 34.6% | Count 26 33.3% | Count 25 32.1% | Count 78 100.0% |
| | No | Count 25 50.0% | Count 1 2.0% | Count 24 48.0% | Count 50 100.0% |
| Total | | Count 129 49.6% | Count 78 30.0% | Count 53 20.4% | Count 260 100.0% |

In the above table, under which 132 girls who understand the concept of menstruation hygiene awareness and reason for using the sanitary napkin, 70 girls know that infections can be prevented by using sanitary napkins while 51 girls prefer it because of its convenience in use. And four girls are using it because of someone else's advice. Of the 78 girls who did not express their opinion, 27 girls

accepted that sanitary napkins can prevent infection. While 26 girls attributed it to ease of use and 25 girls accepted that it was done by someone else. We came to know about it. Thus, 129 girls used sanitary napkins because it does not cause infection, while 78 girls preferred it because of its ease of use and 53 girls gave reasons for being influenced by others.

Chi-Square Tests

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 65.614 ^a | 4 | .000 |
| Likelihood Ratio | 80.230 | 4 | .000 |
| Linear-by-Linear Association | 23.949 | 1 | .000 |
| N of Valid Cases | 260 | | |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 10.19.

When we analysis the above table, we are interested in the “results of the **Pearson Chi Square** row. We can see here that $\chi(1) = 65.614^a$, $p = .000$. This tells us that there is statistically significant association between menstruation hygiene awareness and you use sanitary napkin.

Since the p-value is less than our chosen significance level $\alpha = 0.05$, we can reject the null hypothesis, and conclude that there is an association between menstruation hygiene awareness and reason for using the sanitary napkin”.

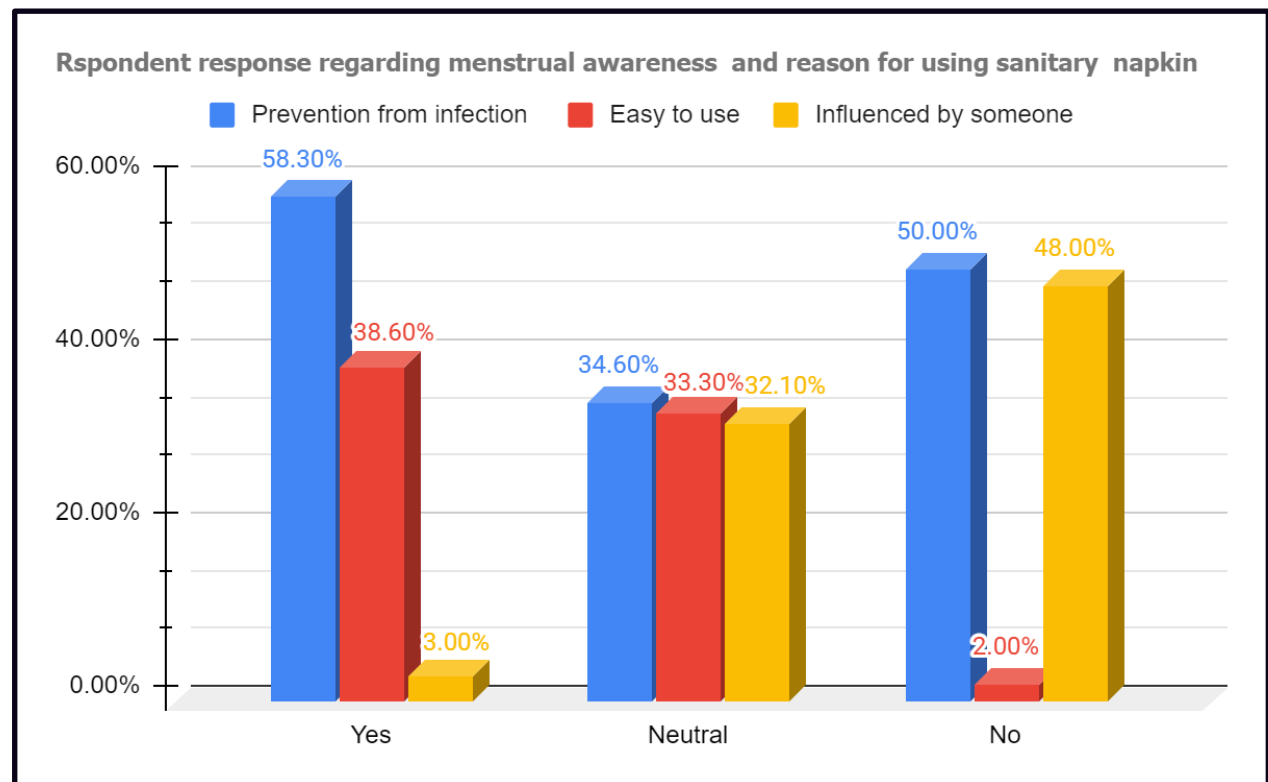
Directional Measures

| | Value |
|---|-------|
| Nominal by Interval Eta Do you have menstruation hygiene awareness? Dependent | .471 |
| Why you use sanitary napkin? Dependent | .338 |

H_0 = There will be no significant association between menstruation hygiene awareness and using of sanitary napkin.

The data included 260 rural college girls of Nainital district. There was a significant association between menstruation hygiene awareness and using of sanitary napkin. $\eta = .471$ & $.338$, $\eta^2 = 0.22$ & 0.150 , which suggests strong association between the

both variables. This leads us to reject the null hypothesis of Strong association between menstruation hygiene awareness and using of sanitary napkin attributes to 22% and 15% of the variance in the each other both variables.



The height of each bar represents the total number of observations in that particular combination of categories. The clusters are formed by the row variable (in this case, class rank). The chart emphasizes the differences within the between

menstruation hygiene awareness and using of sanitary napkin of rural college girls. And more girls accepted that they changed their sanitary napkin to prevent the infections

Menstruation hygiene awareness and the frequency at which the Sanitary Napkin has to be changed

Crosstab

| | | | What is the frequency At which the Sanitary Napkin has to be changed? | | | | Total |
|-------------|-----|-------|---|-------------------------|-------------------------|----------------|-------|
| | | | Not applicable | Every four to six hours | Every eight to 10 hours | Every 12 hours | |
| Do you have | Yes | Count | 1 | 76 | 51 | 4 | 132 |

| | | | | | | |
|---------------------------------|---|-------------|-------------|-------------|-------------|---------------|
| menstruation hygiene awareness? | % within Do you have menstruation hygiene awareness? | 0.8% | 57.6% | 38.6% | 3.0% | 100.0% |
| Neutral | Count % within Do you have menstruation hygiene awareness? | 25 32.1% | 2 2.6% | 26 33.3% | 25 32.1% | 78 100.0% |
| No | Count % within Do you have menstruation hygiene awareness? | 24 48.0% | 1 2.0% | 1 2.0% | 24 48.0% | 50 100.0% |
| Total | Count % within Do you have menstruation hygiene awareness? | 50 19.2% | 79 30.4% | 78 30.0% | 53 20.4% | 260 100.0% |

In the above table under which 132 girls who understand the menstruation hygiene awareness concept, 76 girls admitted that they change sanitary napkins every 4 hours, while 51 girls admitted that in 8 hours they changes sanitary napkins and four girls admitted that they change sanitary napkins every 12 hours, while one girl admitted that she not use it.78 girls who are silent about the menstruation health awareness concept. Of them, 25 girls admitted that they not used it, while 26 girls accepted that within 8-10 hours by them napkin is changed and 2 girls admitted that by them that napkins are changed every 4 hours.50 girls who denies about the concept of menstruation hygiene

awareness. Change of sanitary napkins not used by 24 girls, while the habit of changing napkins every 12 hours has been found by 24 girls. Thus, we can see that more girls change sanitary napkins within 4-6 hours or 8-10 hours.

Chi-Square Tests

| | Value | Df | Asymp. Sig. (2-sided) |
|------------------------------|----------------------|----|-----------------------|
| Pearson Chi-Square | 176.910 ^a | 6 | .000 |
| Likelihood Ratio | 219.156 | 6 | .000 |
| Linear-by-Linear Association | .525 | 1 | .469 |
| N of Valid Cases | 260 | | |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.62.

When we analysis the above table, we are interested in the results of the "**Pearson Chi Square**" row. We can see here that $\chi^2(1) = 176.910$, $p = .000$. This tells us that there is statistically significant association between menstruation hygiene awareness and frequency at which the Sanitary Napkin has to be changed by rural girls".

Since the p-value is less than our chosen significance level $\alpha = 0.05$, we can reject the null hypothesis, and conclude that there is an association between menstruation hygiene awareness and the frequency at which the Sanitary Napkin has to be changed by rural college girls.

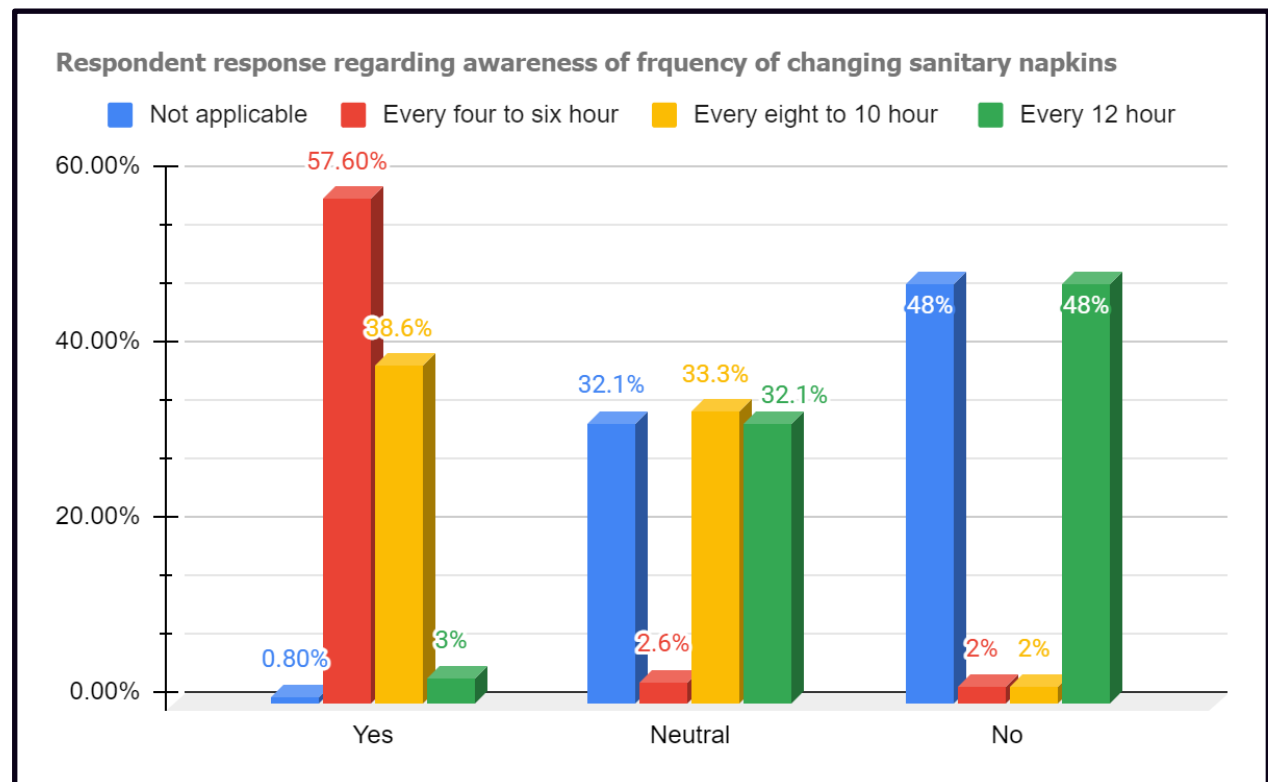
Directional Measures

| | Value |
|---|-------|
| Nominal by Interval Eta Menstruation hygiene awareness Dependent | .782 |
| Frequency of changing the Sanitary Napkin? Dependent | .092 |

H_0 = There will be no significant association between menstruation hygiene awareness and frequency of changing the Sanitary Napkin.

The data included 260 rural college girls of Nainital district. There was a significant association between menstruation hygiene awareness and frequency of changing the Sanitary Napkin., $\eta = .782$ & $.092$, $\eta^2 = 0.60$ & 0.008 , which suggests strong and very weak association between the both

variables. This leads us to reject the null hypothesis of Strong and very weak association between menstruation hygiene awareness and frequency of changing the Sanitary Napkin attributes to 60% and 00% of the variance in the each other both variables.



“The height of each bar represents the total number of observations in that particular combination of categories. The clusters are formed by the row variable (in this case, class rank). The chart emphasizes the differences within the between

menstruation hygiene awareness and frequency of changing the Sanitary Napkin of rural college girls.

More girls accepted (Green Bar Graph) that they changed their pads after 04 to 06 hours and eight to ten hours”.

Menstruation hygiene awareness and purpose of frequently changing the sanitary napkin

Crosstab

| | | | What is purpose of frequently changing the sanitary napkin? | | | | Total |
|-------------|-----|-------|---|-----------------------------|--------------------------|-----------------------------|-------|
| | | | Not applicable | Prevent bacterial infection | Prevent fungal infection | To Prevent viral infections | |
| Do you have | Yes | Count | 2 | 25 | 2 | 103 | 132 |

| | | | | | | |
|---------------------------------|---|-------------|-------------|-------------|--------------|---------------|
| menstruation hygiene awareness? | % within Do you have menstruation hygiene awareness? | 1.5% | 18.9% | 1.5% | 78.0% | 100.0% |
| Neutral | Count % within Do you have menstruation hygiene awareness? | 24 30.8% | 1 1.3% | 25 32.1% | 28 35.9% | 78 100.0% |
| No | Count % within Do you have menstruation hygiene awareness? | 0 0.0% | 0 0.0% | 24 48.0% | 26 52.0% | 50 100.0% |
| Total | Count % within Do you have menstruation hygiene awareness? | 26 10.0% | 26 10.0% | 51 19.6% | 157 60.4% | 260 100.0% |

In the above table under which 132 girls who understand the menstruation hygiene awareness concept, 2 girls admitted that they not use sanitary napkins, while 25 girls admitted that they change sanitary napkins to prevent bacterial infection and 2 girls admitted that they change sanitary napkins to prevent fungal infection, while 103 girl admitted that they change sanitary napkin to prevents viral infection. 78 girls who are silent about the menstruation hygiene awareness concept. Of them, 24 girls admitted that they not used it, while 1 girl accepted that she change sanitary

napkin to prevent bacterial infection and 25 girls admitted that they change sanitary napkin to prevent fungal infection, while 28 girls admitted that they change sanitary napkin to prevent viral infection. 50 girls who deny about the concept of menstruation hygiene awareness, only 24 girl's change sanitary napkin to prevent fungal infection and 26 girls student admitted they change sanitary napkin to prevent viral infection. Thus, we can see that more girls change sanitary napkins to prevent viral infection.

Chi-Square Tests

| | Value | Df | Asymp. Sig. (2-sided) |
|------------------------------|----------------------|----|-----------------------|
| Pearson Chi-Square | 133.494 ^a | 6 | .000 |
| Likelihood Ratio | 147.401 | 6 | .000 |
| Linear-by-Linear Association | 3.361 | 1 | .067 |
| N of Valid Cases | 260 | | |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.00.

When we analysis the above table, “we are interested in the results of the **Pearson Chi Square** row. We can see here that $\chi(1) = 133.494^a$, $p = .000$. This tells us that there is statistically significant association between menstruation hygiene awareness and purpose of frequently changing the sanitary napkin.

Since the p-value is less than our chosen significance level $\alpha = 0.05$, we can reject the null hypothesis, and conclude that there is an association between menstruation hygiene awareness and purpose of frequently changing the sanitary napkin by Rural girls”.

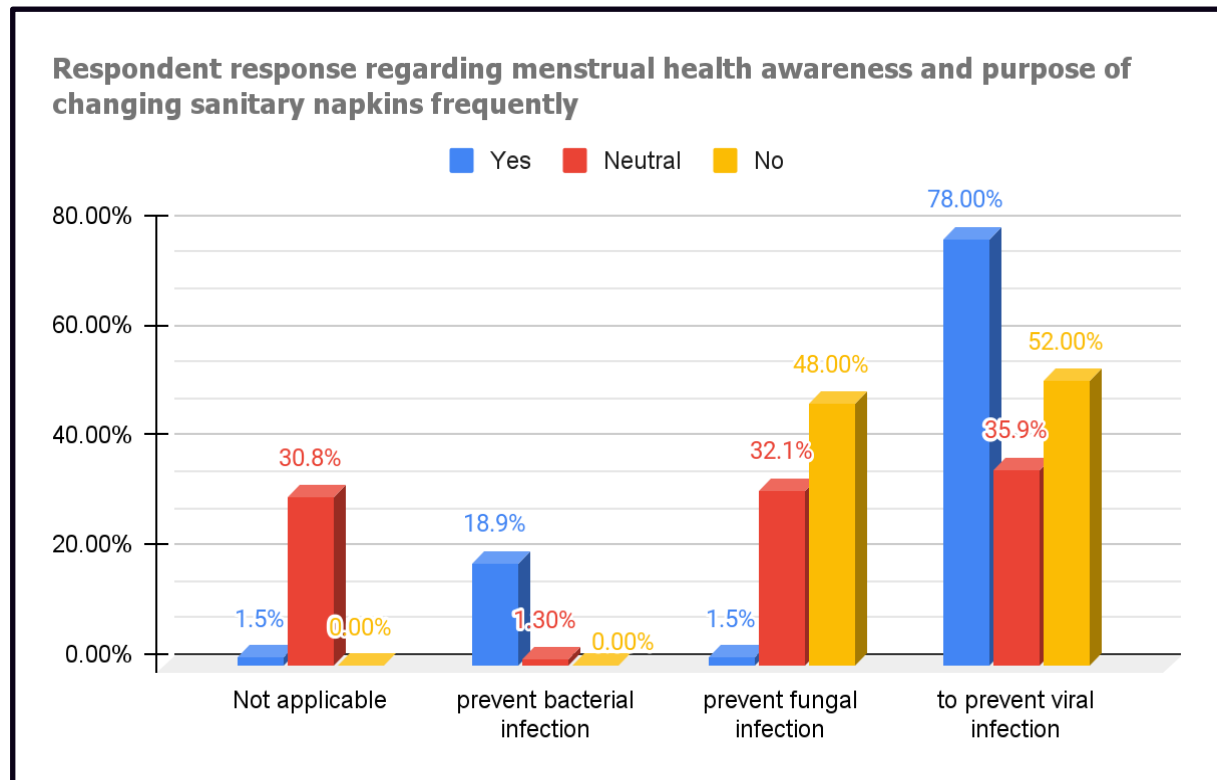
Directional Measures

| | Value |
|---|-------|
| Nominal by Interval Eta Do you have menstruation hygiene awareness? Dependent | .540 |
| What is purpose of frequently changing the sanitary napkin? Dependent | .373 |

H_0 = There will be no significant association between menstruation hygiene awareness and purpose of frequently changing the sanitary napkins.

The data included 260 rural college girls of Nainital district. There was a significant association between menstruation hygiene awareness and purpose of frequently changing the sanitary napkin, $\eta = .540$ & $.373$, $\eta^2 = 0.29$ & 0.139 , which suggests strong association between the both

variables. This leads us to reject the null hypothesis of Strong association between menstruation hygiene awareness and purpose of frequently changing the sanitary napkins attributes to 29% and 13% of the variance in the each other both variables.”



The height of each bar represents the total number of observations in that particular combination of categories. The clusters are formed by the row variable. The chart emphasizes the differences between menstruation hygiene awareness and

purpose of frequently changing the sanitary napkins of rural college girls. More rural college girls accepted that they changed it for to prevent any type of infections

Report

Do you have menstruation hygiene awareness?

| What according to you is best reason for using sanitary napkin in comparison to cloth | Mean | N | Std. Deviation | % of Total N |
|---|--------|-----|----------------|--------------|
| Comfortable | 1.0000 | 28 | .00000 | 10.8% |
| Better hygiene | 1.0000 | 157 | .00000 | 60.4% |
| No visibility | 2.0000 | 50 | .00000 | 19.2% |
| No Smell | 3.0000 | 25 | .00000 | 9.6% |
| Total | 1.3846 | 260 | .65624 | 100.0% |

The above table reports about best reason for using sanitary napkin in comparison to cloth (260) of Nainital districts, 28 (10.8%) girls reports us they use sanitary napkin because it is comfortable, that

mean values is 1.000 and SD = .00000. whereas 157 (60.4%) girls reporting us they use sanitary napkin because of Better hygiene, 50 (19.2%) girls reporting us they use sanitary napkin because no visibility

and 25 (9.6%) girls reporting us they use sanitary napkin because of no smell. This implies that there is a much number of the rural college girls prefer to use sanitary napkin because it providing better hygiene.

Conclusion

The results indicate that 49.6% 129 girls used sanitary napkins because it does not cause infection. Most of the girls change sanitary napkins within 4-6 hours or 8-10 hours. 60.4% girls change sanitary napkins to prevent viral infection. . 60.4% of the rural college girls prefer to use sanitary napkin because it providing better hygiene.

Reference

- [1] Juyal, R., et al. (2012). "Practices of Menstrual hygiene among adolescent girls in a district of Uttrakhand". *Indian Journal Of Community Health*, 24(2).
- [2] Garg , R . et al. (2012). India moves towards Menstrual Hygiene; Subsidized Sanitary Napkins for Rural Adolsecent Girls – Issues and Challenges. *Maternal Child Health J*, 767-774.
- [3] Sabnis, V (2013). "Used sanitary napkins, condoms choking city", (<http://archive.mid-day.com/news/2013/jan/150113-pune-used-sanitary-napkins-condomschoking-city.htm>) (Aug.8, 2013)
- [4] Van eijik,A.M.et al.(2016). Menstrual hygiene management among adolescent girls in India: a systematic review and meta analysis .*BMJ open*, 6(3).
- [5] Kaur, R., et al. (2018). Menstrual hygiene, Management, and waste Disposal: Practices and challenges

Faced by Girls/Women of Developing Countries, National Library of Medicine.

- [6] Kumar, A. et al. (2020). Sanitary napkin Vending Machine (STREE SWACHHATA). *International Research Journal of Engineering and Technology*
- [7] Chauhan, S. et al. (2021). Examining the predictors of use of sanitary napkins among adolescent girls: A multi-level approach. *PLOSONE*.