# Original Research Paper

## Statistics

# ASSESSMENT OF THE KNOWLEDGE AND MENSTRUAL HYGIENE PRACTICES AMONG THE HIGH SCHOOL STUDENTS BELONGING TO DIFFERENT TALUKA OF KALBURGI DISTRICT

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**ABSTRACT**  The present paper is aimed to assess the level of knowledge and menstrual hygiene practices among the high school students belonging to different taluka of Kalburgi district. In this paper where the association between different knowledge factors and menstrual hygiene factors with respect to the respondents of different taluka were identified using Chi-square tests through SPSS package. Chi-square test is a versatile statistical test used to examine the significance of relationship between two or more nominal level variables.

## INTRODUCTION

Menstruation is still regarding as sometime unclean or dirty in Indian society. The reaction to menstruation depends on awareness and knowledge about the subject. The manner in which a girl learns about the menstruation and its associated changes may be having an impact on her response to the event of menarche. Although menstruation is a natural process, it is linked with several misconceptions and practice, which sometime results into adverse health outcomes. Isolation of the menstruating girls and restrictions being imposed on them in family, have reinforce a negative attitude towards this phenomenon. Menstruation practice are clouded by taboos and social cultural restrictions even today, resulting AGs reaming ignorant of the scientific facts and hygiene health practices, necessary for maintain positive reproductive tract infection and its consequences. Therefore, increased knowledge about menstruation, hygiene and safe practice are less vulnerable to reproductive tract infection and its consequence. Therefore, increased knowledge about menstruation right from childhood may escalate safe practice and may help in mitigating the suffering of millions of women. Hence the main objective of this paper to assess the level of knowledge and hygiene practices of menstruation of Kalburgi district by testing the association between different knowledge factors and menstrual hygiene factors with respect to the respondents of Kalburgi distict.

## MATERIALS AND METHODS

The study was undertaken among the school girls of Kalburgi district. For the personal study we have selected four talukas from Kalburgi district. viz: Kalburgi, Chitapur,Aland , Jevargi and Sedam by judgement sampling.

An analytical based cross-sectional study was conducted among the school girls of Kalburgi district. Data collection procedure according to the objective, data were collected using pre-assigned structured questionnaire based on the review of literatures of similar studies. Total 1500 adolescent girls were selected on the basis of convenience sampling technique.

## Survey Of Literature

**Mohammad Poureslamii and Farzaneh Osati-Ashtianiii (2002):** In the paper "Assessing Knowledge, Attitudes, and Behavior of Adolescent Girls in Suburban Districts of Tehran About Dysmenorrhea and Menstrual Hygiene" the study was to assess the level of knowledge, attitudes and health-taking behavior of female students ages 15-18 years old in regard to dysmenorrhea and menstrual hygiene in suburban districts of Tehran, the capital of Iran. The study applied a descriptive, cross-sectional method, in which 250 students were selected at random, using a cluster random sampling method. The data was collected by applying a 44-item questionnaire. Seventy-seven percent of the subjects claimed that they had enough knowledge about dysmenorrhea, from which only 32% practiced the personal health taking behavior, such as taking a bath and using hygienic materials. About 33% of the students avoided any physical activity or even mild exercise during menstrual period. Over 67% of the girls reported to take palliative medicine for their menstrual pain without prescription by a doctor. Fifteen percent of them stated that dysmenorrhea has

interfered with their daily life activities and caused them to be absent from school between one to seven days, similar to other relevant studies. The prevalence of dysmenorrhea in this study was 71%. The main point achieved in this study was the necessity of educating female students about the menstrual period health-taking behaviors, including: appropriate nutrition, exercise and physical activity, personal hygiene, and appropriate use of medication based on physician's prescription.

**Jagruti Prajapati and Riddhi Patel (2015):** In the paper "Menstrual hygiene among adolescent girls: A cross sectional study in urban community of Gandhinagar" the main aims and objectives are to assess the knowledge and the practices of menstrual hygiene among adolescent girls and to assess the restrictions practiced by adolescent girls during menstruation. Study Design: Cross sectional, descriptive, community-based study. Setting: Anganawadi centers (AWCs) of Urban Health Training Center (UHTC) of GMERS Medical College, Gandhinagar, Gujarat, India. Methodology: Total 7 AWCs under UHC 24 in which approximately 155 girls were enrolled. All adolescent girls fit to inclusion criteria & give consent were taken as study subject. Structured questionnaire was used for data collection. Data was collected regarding menstrual cycle, knowledge about menstruation, practices during menstruation and menstrual hygiene. Statistics: Data entry & analysis was carried out in Microsoft excel. Statistical analysis was done by using frequency. Results Concludes that menstrual hygiene was satisfactory among adolescent girls but lack of knowledge & awareness regarding menstruation. Education regarding reproductive health & hygiene should be given by Anganawadi workers as well as included as a part of school curriculum. All mothers irrespective of their educational status should be taught to break their inhibitions about discussing with their daughters regarding menstruation before age of menarche.

**Zelalem Belayneh and Birhanie Mekuriaw (2019):** In the paper "Knowledge and menstrual hygiene practice among adolescent school girls in southern Ethiopia: a cross-sectional study" authors have expressed that menstruation is a normal physiological process of females at their reproductive age. However, it is surrounded with social taboos and supernatural beliefs. The poor knowledge and understanding of menstruation may lead to unsafe hygienic practice that intern increases the risk of reproductive and genito-urinary tract infections, cervical cancer, school drop-out, poor academic performance and overall poor quality of life. Despite such clinical and academic effects, the knowledge and hygienic practice of adolescent girls towards menstruation is not well addressed in Ethiopia, particularly among school adolescent girls. Therefore, the main objective of this study was to assess the knowledge and menstrual hygiene practice among adolescent school girls in southern Ethiopia.

## Association Between Knowledge About Menstruation And The Respondent's Different Taluka

In this section attempt is made to assess and compare the level of knowledge about menstruation of school girls of different taluka of Kalburgi district by testing the association between the knowledge factors viz: Meaning of menstruation, Cause of menstruation, Age at

which menarche attend, Duration of cycle in days with respect to taluka of the respondents. The frequency and percentage distribution of knowledge factors and taluka of the respondents were presented in the following tables.

**Association Between Meaning Of Menstruation And Taluka Of The Respondents.**

$H_0$: There is no significant association between Meaning of Menstruation and Taluka of the respondents.

**Table 3.1 Meaning Of Menstruation And Taluka Of The Respondents**

| Meaning of Menstruation | | Taluka | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Gulbarga | Chitapur | Aland | Jevargi | Sedam | |
| Don't know | Count | 163 | 75 | 65 | 131 | 66 | 500 |
| | % within Taluka | 28.0% | 35.9% | 31.7% | 39.9% | 37.7% | 33.3% |
| Partially know | Count | 215 | 63 | 69 | 117 | 73 | 537 |
| | % within Taluka | 36.9% | 30.1% | 33.7% | 35.7% | 41.7% | 35.8% |
| | Count | 205 | 71 | 71 | 80 | 36 | 463 |
| | % within Taluka | 35.2% | 34.0% | 34.6% | 24.4% | 20.6% | 30.9% |
| Total | Count | 583 | 209 | 205 | 328 | 175 | 1500 |
| | % within Taluka | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**Table 3.1 (a) Chi-square Test For Meaning Of Menstruation And Taluka Of The Respondents**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 30.503[a] | 8 | .000 |
| Likelihood Ratio | 31.465 | 8 | .000 |
| N of Valid Cases | 1500 | | |
| a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 54.02. | | | |

From the above table, we can see that the result is significant since the significant value is less than 0.05. Hence, we reject null hypothesis, which indicates that there is an association between knowledge factor meaning of menstruation and the respondents from different taluka.

**Association Between Cause Of Menstruation And Taluka Of The Respondents.**

$H_0$: There Is No Significant Association Between Cause Of Menstruation And Taluka Of The Respondents.

**Table 3.2 Cause of Menstruation and Taluka of the respondents**

| Cause of Menstruation | | Taluka | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Gulbarga | Chitapur | Aland | Jevargi | Sedam | |
| Don't know | Count | 206 | 88 | 87 | 97 | 55 | 533 |
| | % within Taluka | 35.3% | 42.1% | 42.4% | 29.6% | 31.4% | 35.5% |
| Partially know | Count | 229 | 81 | 71 | 134 | 79 | 594 |
| | % within Taluka | 39.3% | 38.8% | 34.6% | 40.9% | 45.1% | 39.6% |
| Know | Count | 148 | 40 | 47 | 97 | 41 | 373 |
| | % within Taluka | 25.4% | 19.1% | 22.9% | 29.6% | 23.4% | 24.9% |
| Total | Count | 583 | 209 | 205 | 328 | 175 | 1500 |
| | % within Taluka | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**Table 3.2 (a) Chi-square Test For Cause Of Menstruation And Taluka Of The Respondents**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 18.423[a] | 8 | .018 |
| Likelihood Ratio | 18.430 | 8 | .018 |
| N of Valid Cases | 1500 | | |
| a.0 cells (.0%) have expected count less than 5. The minimum expected count is 43.52. | | | |

From the above table, we can see that the result is significant since the significant value is less than 0.05. Hence, we reject null hypothesis, which indicates that there is an association between knowledge factor cause of menstruation and the respondents from different taluka.

**3.3 Association Between Age At Which Menarche Attend And Taluka Of The Respondents.**

$H_0$: There Is No Significant Association Between Age At Which Menarche Attend And Taluka Of The Respondents.

**Table 3.3 Age at which Menarche Attend and Taluka of the respondents**

| Age at which Menarche Attend | | Taluka | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Gulbarga | Chitapur | Aland | Jevargi | Sedam | |
| Don't know Partially know | Count | 106 | 38 | 41 | 107 | 45 | 337 |
| | % within Taluka | 18.2% | 18.2% | 20.0% | 32.6% | 25.7% | 22.5% |
| Know | Count | 193 | 62 | 70 | 123 | 77 | 525 |
| | % within Taluka | 33.1% | 29.7% | 34.1% | 37.5% | 44.0% | 35.0% |
| | Count | 284 | 109 | 94 | 98 | 53 | 638 |
| | % within Taluka | 48.7% | 52.2% | 45.9% | 29.9% | 30.3% | 42.5% |
| Total | Count | 583 | 209 | 205 | 328 | 175 | 1500 |
| | % within Taluka | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**Table 3.3 (a) Chi-square Test For Age At Which Menarche Attend And Taluka Of The Respondents**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 58.718[a] | 8 | .000 |
| Likelihood Ratio | 58.664 | 8 | .000 |
| N of Valid Cases | 1500 | | |
| a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 39.32. | | | |

From the above table, we can see that the result is significant since the significant value is less than 0.05. Hence, we reject null hypothesis, which indicates that there is an association between knowledge factor age at which menarche attend and the respondents from different taluka.

**Association Between Duration Of Cycle In Days And Taluka Of The Respondents.**

$H_0$: There is no significant association between Duration of Cycle in Days and Taluka of the respondents.

**Table 3.4 Duration Of Cycle In Days And Taluka Of The Respondents**

| Duration of Cycle in Days | | Taluka | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Gulbarga | Chitapur | Aland | Jevargi | Sedam | |
| Don't know | Count | 119 | 50 | 48 | 86 | 42 | 345 |
| | % within Taluka | 20.4% | 23.9% | 23.4% | 26.2% | 24.0% | 23.0% |
| Partially know | Count | 177 | 53 | 59 | 126 | 75 | 490 |
| | % within Taluka | 30.4% | 25.4% | 28.8% | 38.4% | 42.9% | 32.7% |
| Know | Count | 287 | 106 | 98 | 116 | 58 | 665 |
| | % within Taluka | 49.2% | 50.7% | 47.8% | 35.4% | 33.1% | 44.3% |
| Total | Count | 583 | 209 | 205 | 328 | 175 | 1500 |
| | % within Taluka | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**Table 3.4 (a) Chi-square Test For Duration Of Cycle In Days And Taluka Of The Respondents**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 34.062[a] | 8 | .000 |
| Likelihood Ratio | 34.448 | 8 | .000 |
| N of Valid Cases | 1500 | | |
| a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 40.25. | | | |

From the above table, we can see that the result is significant since the significant value is less than 0.05. Hence, we reject null hypothesis, which indicates that there is an association between knowledge factor duration of cycle in days and the respondents from different taluka.

**Association Between Menstrual Hygiene Factors And Taluka Of The Respondents.**

This section aimed to identify and compare the level of menstrual hygiene practices of the school girls of different talukas of Kalburgi district by testing the association between hygiene factors viz: able to afford sanitary napkin, using cloth, using new cloth every time, changing absorbent often in a day, disposing sanitary napkin in disposal bin with respect to the respondents of different taluka. The frequency and percentage distribution of menstrual hygiene factors and taluka of the respondents were presented in the following tables.

**Association Between Able To Afford Sanitary Napkin And Taluka Of The Respondents.**

$H_0$: There Is No Significant Association Between Able To Afford Sanitary Napkin And Taluka Of The Respondents

**Table 4.1 Able To Afford Sanitary Napkins And Taluka Of The Respondents**

| Able to Afford Sanitary Napkins | | Taluka | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Gulbarga | Chitapur | Aland | Jevargi | Sedam | |
| Never | Count | 39 | 10 | 7 | 26 | 10 | 92 |
| | % within Taluka | 6.7% | 4.8% | 3.4% | 7.9% | 5.7% | 6.1% |
| Rarely | Count | 142 | 44 | 39 | 96 | 22 | 343 |
| | % within Taluka | 24.4% | 21.1% | 19.0% | 29.3% | 12.6% | 22.9% |
| Some time | Count | 199 | 75 | 70 | 74 | 29 | 447 |
| | % within Taluka | 34.1% | 35.9% | 34.1% | 22.6% | 16.6% | 29.8% |
| ManyTime | Count | 128 | 65 | 75 | 111 | 93 | 472 |
| | % within Taluka | 22.0% | 31.1% | 36.6% | 33.8% | 53.1% | 31.5% |
| Always | Count | 75 | 15 | 14 | 21 | 21 | 146 |
| | % within Taluka | 12.9% | 7.2% | 6.8% | 6.4% | 12.0% | 9.7% |
| Total | Count | 583 | 209 | 205 | 328 | 175 | 1500 |
| | % within Taluka | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**Table 4.1 (a) Chi-square Test For Able To Afford Sanitary Napkins And Taluka Of The Respondents.**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 103.860[a] | 16 | .000 |
| Likelihood Ratio | 105.203 | 16 | .000 |
| N of Valid Cases | 1500 | | |
| a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.73. | | | |

From the above table, we can see that the result is significant since the significant value is less than 0.05. Hence, we reject null hypothesis, which indicates that there is an association between Hygiene factor able to afford sanitary napkin and the respondents from different taluka.

**Association Between Using Cloth And Taluka Of The Respondents.**

H0: There Is No Significant Association Between Using Cloth And Taluka Of The Respondents.

**Table 4.2 (a) Chi-square Test For Using Cloth And Taluka Of The Respondents**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 27.969[a] | 16 | .032 |
| Likelihood Ratio | 28.640 | 16 | .026 |
| N of Valid Cases | 1500 | | |
| a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.63. | | | |

**Table 4.2 Using Cloth And Taluka Of The Respondents**

| Using Cloth | | Taluka | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Gulbarga | Chitapur | Aland | Jevargi | Sedam | |
| Never | Count | 45 | 26 | 10 | 36 | 21 | 138 |
| | % within Taluka | 7.7% | 12.4% | 4.9% | 11.0% | 12.0% | 9.2% |
| Rarely | Count | 183 | 70 | 82 | 115 | 76 | 526 |
| | % within Taluka | 31.4% | 33.5% | 40.0% | 35.1% | 43.4% | 35.1% |
| Some Time | Count | 161 | 50 | 50 | 72 | 38 | 371 |
| | % within Taluka | 27.6% | 23.9% | 24.4% | 22.0% | 21.7% | 24.7% |
| ManyTime | Count | 135 | 48 | 43 | 77 | 28 | 331 |
| | % within Taluka | 23.2% | 23.0% | 21.0% | 23.5% | 16.0% | 22.1% |
| Always | Count | 59 | 15 | 20 | 28 | 12 | 134 |
| | % within Taluka | 10.1% | 7.2% | 9.8% | 8.5% | 6.9% | 8.9% |
| Total | Count | 583 | 209 | 205 | 328 | 175 | 1500 |
| | % within Taluka | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

From the above table, we can see that the result is significant since the significant value is less than 0.05. Hence, we reject null hypothesis, which indicates that there is an association between Hygiene factor using cloth and the respondents from different taluka.

**Association Between Using New Cloth Every Time And Taluka Of The Respondents.**

H0: There is no significant association between Using New Cloth Every Time and Taluka of the respondents.

**Table 4.3 Using New Cloth Every Time And Taluka Of The Respondents**

| New Cloth Every Time | | Taluka | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Gulbarga | Chitapur | Aland | Jevargi | Sedam | |
| Never | Count | 42 | 10 | 7 | 47 | 59 | 165 |
| | % within Taluka | 7.2% | 4.8% | 3.4% | 14.3% | 33.7% | 11.0% |
| Rarely | Count | 186 | 70 | 82 | 133 | 62 | 533 |
| | % within Taluka | 31.9% | 33.5% | 40.0% | 40.5% | 35.4% | 35.5% |
| Sometime | Count | 187 | 62 | 65 | 75 | 28 | 417 |
| | % within Taluka | 32.1% | 29.7% | 31.7% | 22.9% | 16.0% | 27.8% |
| Many Time | Count | 110 | 50 | 31 | 56 | 19 | 266 |
| | % within Taluka | 18.9% | 23.9% | 15.1% | 17.1% | 10.9% | 17.7% |
| Always | Count | 58 | 17 | 20 | 17 | 7 | 119 |
| | % within Taluka | 9.9% | 8.1% | 9.8% | 5.2% | 4.0% | 7.9% |
| Total | Count | 583 | 209 | 205 | 328 | 175 | 1500 |
| | % within Taluka | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**Table 4.3 (a) Chi-square Test For Using New Cloth Every Time And Taluka Of The Respondents**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 154.692[a] | 16 | .000 |
| Likelihood Ratio | 134.792 | 16 | .000 |
| N of Valid Cases | 1500 | | |
| a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.88. | | | |

From the above table, we can see that the result is significant since the significant value is less than 0.05. Hence, we reject null hypothesis, which indicates that there is an association between Hygiene factor new cloths every time and the respondents from different taluka.

**Association Between Changing Absorbent Often In A Day And Taluka Of The Respondents.**

H0: There Is No Significant Association Between Changing

Absorbent Often In A Day And Taluka Of The Respondents.

**Table 4.4 Changing Absorbent Often In A Day And Taluka Of The Respondents**

| Changing Absorbent Often in a Day | | Taluka | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Gulbarga | Chitapur | Aland | Jevargi | Sedam | |
| Never | Count | 38 | 19 | 21 | 28 | 12 | 118 |
| | % within Taluka | 6.5% | 9.1% | 10.2% | 8.5% | 6.9% | 7.9% |
| Rarely | Count | 215 | 80 | 77 | 110 | 62 | 544 |
| | % within Taluka | 36.9% | 38.3% | 37.6% | 33.5% | 35.4% | 36.3% |
| Sometime | Count | 157 | 43 | 55 | 69 | 41 | 365 |
| | % within Taluka | 26.9% | 20.6% | 26.8% | 21.0% | 23.4% | 24.3% |
| Many Time | Count | 116 | 56 | 39 | 98 | 46 | 355 |
| | % within Taluka | 19.9% | 26.8% | 19.0% | 29.9% | 26.3% | 23.7% |
| Always | Count | 57 | 11 | 13 | 23 | 14 | 118 |
| | % within Taluka | 9.8% | 5.3% | 6.3% | 7.0% | 8.0% | 7.9% |
| Total | Count | 583 | 209 | 205 | 328 | 175 | 1500 |
| | % within Taluka | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**Table 4.4 (a) Chi-square Test For Changing Absorbent Often In A Day And Taluka Of The Respondents.**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 27.111[a] | 16 | .040 |
| Likelihood Ratio | 27.102 | 16 | .040 |
| N of Valid Cases | 1500 | | |
| a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.77. | | | |

From the above table, we can see that the result is significant since the significant value is less than 0.05. Hence we reject null hypothesis, which indicates that there is an association between Hygiene factor changing absorbents often in a day and the respondents from different taluka.

**Association Between Disposing Sanitary Napkin In Disposal Bin And Taluka Of The Respondents.**

**H0: There Is No Significant Association Between Disposing Sanitary Napkin In Disposal Bin And Taluka Of The Respondents.**

**Table 4.5 Disposing Sanitary Napkin In Disposal Bin And Taluka Of The Respondents**

| Disposing Sanitary Napkin in Disposal Bin | | Taluka | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Gulbarga | Chitapur | Aland | Jevargi | Sedam | |
| Never | Count | 34 | 8 | 15 | 49 | 16 | 122 |
| | % within Taluka | 5.8% | 3.8% | 7.3% | 14.9% | 9.1% | 8.1% |
| Rarely | Count | 206 | 84 | 65 | 77 | 36 | 468 |
| | % within Taluka | 35.3% | 40.2% | 31.7% | 23.5% | 20.6% | 31.2% |
| Sometime | Count | 163 | 55 | 68 | 74 | 47 | 407 |
| | % within Taluka | 28.0% | 26.3% | 33.2% | 22.6% | 26.9% | 27.1% |
| Many Time | Count | 117 | 41 | 38 | 97 | 62 | 355 |
| | % within Taluka | 20.1% | 19.6% | 18.5% | 29.6% | 35.4% | 23.7% |
| Always | Count | 63 | 21 | 19 | 31 | 14 | 148 |
| | % within Taluka | 10.8% | 10.0% | 9.3% | 9.5% | 8.0% | 9.9% |
| Total | Count | 583 | 209 | 205 | 328 | 175 | 1500 |
| | % within Taluka | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**Table 4.5 (a) Chi-square Test For Disposing Sanitary Napkin In Disposal Bin And Taluka Of The Respondents.**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 77.606[a] | 16 | .000 |
| Likelihood Ratio | 75.060 | 16 | .000 |
| N of Valid Cases | 1500 | | |
| a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.23. | | | |

From the above table, we can see that the result is significant since the significant value is less than 0.05. Hence, we reject null hypothesis, which indicates that there is an association between hygiene factor disposing sanitary napkin in a disposal bin and the respondents from different taluka.

**CONCLUSION**

The null hypotheses are rejected in the cases of knowledge factors viz; Meaning of menstruation, Cause of menstruation, Age at which menarche attend and Duration of cycle in days, in all the cases the significant value is less than 0.05 which means that there is a significant association between all the knowledge factors and the students of different taluka.

Similarly in testing the association between hygiene factors viz: able to afford sanitary napkin, using cloth, using new cloth every time, changing absorbent often in a day, disposing sanitary napkin in disposal bin with respect to the respondents of different taluka shows the null hypotheses are rejected in all the cases since the significant value is less than 0.05 which means that there is a significant association between all the hygiene factors and the students of different taluka.

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