INTRODUCTION

Dysmenorrhoea is defined as periodic pelvic pain occurring with or just prior to menses. It is classified as primary when the pain is in the setting of normal pelvic anatomy and physiology, and as secondary dysmenorrhoea when associated with underlying pelvic pathology. Geographic variations do exist in the prevalence of dysmenorrhoea most probably due to underreporting, as most females regard pain during menses as the price for their gender. Yet the prevalence of dysmenorrhoea is still very high among adolescents and young adults ranging from as low as 33% - 38.7% in India, Turkey to as high as 68.7% - 74.6% in Hong Kong, Malaysia, Nigeria and Egypt.

Dysmenorrhoea is the commonest gynaecologic problem that necessitates women to seek medical attention and often associated with severe disturbing social consequence manifesting in frequent absenteeism in school and workplace among young females and women in their active reproductive age. Reported identifiable risk factors to dysmenorrhoea are smoking, nulliparity and heavy menses. The severity of the pains often vary from mild requiring no medication, to moderate requiring medication without interfering in routine activities and severe often resulting in absenteeism in schools and workplace.

This study was undertaken to establish the prevalence, epidemiology and risk factors to dysmenorrhoea among females in our Maiduguri.

METHODOLOGY

This is a cross sectional descriptive study, which was carried out among female students in six tertiary institutions (simple) in Maiduguri, Borno state. Three hundred structured questionnaires were self administered to randomly selected (simple random selection) females in the study area. The confidentiality of the information was guaranteed and verbal consent obtained. Information pertaining to the socio demographic characteristics, current and past history of dysmenorrhoea, previous pregnancies (viable

ABSTRACT

Background: Dysmenorrhoea is the most common gynaecologic complaint among adolescents and young females. It is often regarded by many as normal, seeking medical attention only when it is unbearable.

Objective: To determine the prevalence, risk factors and effects of dysmenorrhoea among women in Maiduguri.

Methods: This is a cross sectional descriptive study among female students in six tertiary institutions in Maiduguri, Borno state. Three hundred structured questionnaires were administered to ascertain the epidemiology, associated risk factors and possible effect of dysmenorrhoea.

Results: About 63% currently had pain during menses and 69.7% had experienced primary dysmenorrhoea in the past. One third each of such pain were moderate (35%) to require medication and severe (31.7%) as to restrict routine activities, in 8.3% the menstrual pain was so severe to warrant admission in the hospital. There was significant association between current dysmenorrhoea and previous primary dysmenorrhoea, positive family history of dysmenorrhoea, past history of D&C and other gynaecological problems, while smoking was not shown to have any statistically significant relationship. There was an inverse relationship between previous pregnancies and current episode of dysmenorrhoea

Conclusion: Dysmenorrhoea is prevalent among women, yet many do not seek medical attention unless it became unbearable.

Author Affiliations: *Department of obstetrics and gynaecology, Federal Medical Centre, Nguru, **Department of Obstetrics and Gynaecology, University of Maiduguri Teaching Hospital

Corresponding Author: DR A A KULLIMA
Department of obstetrics and Gynaecology, Federal Medical Centre Nguru PMB 02 Nguru.
Yobe state

E mail : drkullima@yahoo.com

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*MB KAWUWA
*A A KULLIMA
**B MAudu
**A G MAIRIGA
**HA USMAN
**BG BAKO

Menstrual pain was so severe to 8.3% of the respondents, the official and domestic activities, in severe (31.7%) as to restrict routine (35%) to require medication and third each of such pain was moderate (36.7%) of the respondents. About one 16.7% and 12% of the respondents problems encountered in 17.7%, were the common gynaecological dysmenorrhoea in the past. About one 209 (69.7%) had experienced primary experiencing pain during menses and nine (63%) were currently respectively. One hundred and eighty 16.7% and 12% of the respondents were the common gynaecological problems encountered in 17.7%, were the common gynaecological menstrual disorders. Menorrhagea, lower abdominal pain and vaginal discharge (those that have reached 28 weeks of gestation and beyond) and miscarriages, pregnancies lost before 28 weeks of gestation), and other associated risk factors were obtained through the questionnaire. History relating to other gynaecological problems, severity and possible effect of dysmenorrhoea were also obtained. The data was analysed using the statistical package SPSS version11.0, while chi square test was used for test of significance

RESULTS
A total of 300 participants responded to the questionnaires with age range of 16 - 50 years and mean of 25.0 ± 2.3. Majority (66.7%) of the respondents were unmarried. Previous pregnancies were reported by 96 (32%) of the respondents out of which more than 80% were viable pregnancies and the remaining were lost as miscarriages. The last child birth were within 1-3 years in about 70% of the respondents, only 6.4% had their last deliveries above 7 years, as shown on table I. Table II illustrates the social factors associated with dysmenorrhoea. Dysmenorrhoea was experienced by 129 (43%), 104 (34.7%) and 19 (6.3%) of their friends, sisters and mothers respectively. Smoking as a social habit was noted only among 4 (1.3%) of the respondents. History of dilatation and curettage (D&C) was found among 34 (11.3%) and it was done for incomplete abortion in 67.6% and induce abortion in 32.4% of the cases as shown on table III.

Menorrhagea, lower abdominal pain outside menses and vaginal discharge were the common gynaecological problems encountered in 17.7%, 16.7% and 12% of the respondents respectively. One hundred and eighty nine (63%) were currently experiencing pain during menses and 209 (69.7%) had experienced primary dysmenorrhoea in the past. About one third each of such pain was moderate (35%) to require medication and severe (31.7%) as to restrict routine official and domestic activities, in 8.3% of the respondents, the menstrual pain was so severe to warrant admission in the hospital. Table V showed the relationship between current history of dysmenorrhoea and associated risk factors. There was an observed significant association between current dysmenorrhoea with past episode of primary dysmenorrhoea, and positive family history of dysmenorrhoea and other gynaecological problems, $X^2=70.730$, $P=0.000$, $X^2=14.66$ $P=0.000$ and $X^2=29.38$ $P=0.000$ respectively. There was an inverse relationship between previous pregnancies and the frequency of current episode of dysmenorrhoea $X^2=13.779$ $P=0.000$ shown on the same table V. However contraceptive used and smoking were not shown to have any statistically significant relationship with dysmenorrhoea.

### Table I: Sociodemographic characteristic

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>200</td>
<td>66.7%</td>
</tr>
<tr>
<td>Married</td>
<td>90</td>
<td>30.0%</td>
</tr>
<tr>
<td>Divorced</td>
<td>7</td>
<td>2.7%</td>
</tr>
<tr>
<td>Widow</td>
<td>3</td>
<td>1.0%</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Table II: Associated social factors for dysmenorrhoea

<table>
<thead>
<tr>
<th>History of</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>129</td>
<td>43%</td>
</tr>
<tr>
<td>Sister</td>
<td>104</td>
<td>34.7%</td>
</tr>
</tbody>
</table>

### Table III: Gynaecological factors associated with Dysmenorrhoea

<table>
<thead>
<tr>
<th>D&amp;C Reason</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td>48</td>
<td>16%</td>
</tr>
<tr>
<td>Mother</td>
<td>9</td>
<td>6.3%</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Table IV: History and severity of dysmenorrhoea

<table>
<thead>
<tr>
<th>Menstrual Pain</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>189</td>
<td>63%</td>
</tr>
<tr>
<td>No</td>
<td>111</td>
<td>37%</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Table V: Previous D&C

| Yes | 34 | 11.3 |
| No  | 266| 88.7 |
| Total| 300| 100 |

### Table V shown the relationship between current history of dysmenorrhoea and associated factors. There was an observed significant association between current dysmenorrhoea with past episode of primary dysmenorrhoea, and positive family history of dysmenorrhoea and other gynaecological problems, $X^2=70.730$, $P=0.000$, $X^2=14.66$ $P=0.000$ and $X^2=29.38$ $P=0.000$ respectively. There was an inverse relationship between previous pregnancies and the frequency of current episode of dysmenorrhoea $X^2=13.779$ $P=0.000$ shown on the same table V. However contraceptive used and smoking were not shown to have any statistically significant relationship with dysmenorrhoea.
**REFERENCES**


