INTRODUCTION

Migraine is a common neurological disorder and is characterized by debilitating head pain and other symptoms such as nausea, vomiting, photophobia, phonophobia and occasionally, visual or sensory disturbances. Due to its negative effects on quality of life, it becomes especially considerable among university students, who by virtue of their curriculum require optimal concentration and performance. Migraine has a prevalence of about 11% in the general population and is ranked as the seventh most disabling disease worldwide (Stovner LJ. et al. 2007; Steiner TJ. et al. 2013) and in the US and Europe alone, headaches particularly, migraine accounts for an estimated 250 million lost days from work or school every year. Migraines is a public health disease in that headaches in migraine, are usually lifelong conditions and cause disability both in terms of the disease and lifestyle restrictions they impose on the individual, associated with profound negative impact on school performance.

ABSTRACT

Background: Migraine is a common neurological disorder that is characterized by debilitating head pain and other symptoms such as nausea, vomiting, photophobia, phonophobia and occasionally, sensory or motor disturbances. Due to its negative effects on quality of life, it becomes especially considerable among university students, who by virtue of their curriculum require optimal concentration and performance. Moderate to severe headache attacks in migraine have a profound impact on school performance among university students. Previous studies have suggested that migraine is present among medical students. However, there is paucity of study in Nigeria on this subject. This study tends to shed more light on the prevalence of migraine among medical students in sokoto, North-Western Nigeria. Methods: This was a prospective cross sectional study among medical students of UsmanuDanfodiyo University Sokoto. Two hundred students were recruited for this study comprising of both male and female students. Self administered structured questionnaire which was designed and pre tested was used to assess for sociodemographic variables and the presence of migraine. All collected data were cross-checked for consistency and statistical analysis was done using SPSS version 20.0 (Chicago IL, USA) statistical software package. Means of two groups were compared using student's t-test while proportions were compared using chi-square with Yates correction where appropriate. Any p-value less than 0.05 was considered statistically significant. Results: One hundred and twenty two of the subjects responded to the questionnaire corresponding to 61.5%. The Female students were 73 (59.8%) while the male students were 49 (40.2%) with female to male ratio of 1.5:1. The mean age of the subjects was 23.03 (±2.99); minimum age was 18 years while maximum age was 40 years. All the level of medical students were represented (except for UG 3 who were on semester break during the study) with more representation from 400 level, 57 (46.7%) and 500 level 29 (23.8%). The prevalence of migraine among the subjects was 31 (28.7%) (fig.3). Of those who reported positive for migraine, 10 (29.4%) was left sided, 6 (17.6%) right sided, 10 (29.4%) both side of the head, while 7 (20.6%) reported generalized headache. The frequency of the migraine varied with some as frequent as 25 times a month. Fourteen (45.2%) reported the presence of sensory aura including visual and olfactory hallucination, while others complained of motor aura. Conclusion: The present study suggested that migraine is not uncommon among the medical students in Sokoto and impacts on students ability to attend and optimally perform in educational activities. Therefore, migraine should be given a public health priority in this community in that headaches in migraine, are usually lifelong conditions and cause disability both in terms of the disease and lifestyle restrictions they impose on the individual, associated with profound negative impact on school performance among university students.

KEYWORDS: Migraine, Medical students, Prevalence.

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Methods:
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Results:
One hundred and twenty two of the subjects responded to the questionnaire corresponding to 61.5%. The Female students were 73 (59.8%) while the male students were 49 (40.2%) with female to male ratio of 1.5:1. The mean age of the subjects was 23.03 (±2.99); minimum age was 18 years while maximum age was 40 years. All the level of medical students were represented (except for UG 3 who were on semester break during the study) with more representation from 400 level, 57 (46.7%) and 500 level 29 (23.8%). The prevalence of migraine among the subjects was 31 (28.7%) (fig.3). Of those who reported positive for migraine, 10 (29.4%) was left sided, 6 (17.6%) right sided, 10 (29.4%) both side of the head, while 7 (20.6%) reported generalized headache. The frequency of the migraine varied with some as frequent as 25 times a month. Fourteen (45.2%) reported the presence of sensory aura including visual and olfactory hallucination, while others complained of motor aura.

Conclusion:
The present study suggested that migraine is not uncommon among the medical students in Sokoto and impacts on students ability to attend and optimally perform in educational activities. Therefore, migraine should be given a public health priority in this community in that headaches in migraine, are usually lifelong conditions and cause disability both in terms of the disease and lifestyle restrictions they impose on the individual, associated with profound negative impact on school performance among university students.

Functional comorbid conditions such as depression, anxiety and post-traumatic stress disorders are not uncommon among Migraineurs (Breslau N and Davis GC. 1993; Jette N. et al 2008; Lanteri-Minet M. et al. 2005). Therefore, if left untreated, these comorbid conditions can increase the risk of progression from episodic migraine (EM) into chronic migraine (CM) (which is characterized by at least 15 headache days a month, including at least 8 days/month with full-blown migraines). In addition, if left untreated, the comorbid psychiatric conditions can increase migraine-related disability, reduce quality of life and negatively impact treatment outcomes.

Chronic migraine (CM) affects approximately 1% of the adult population (Adams AM. et al. 2015; Stovner LJ. et al. 2007; Steiner TJ. et al. 2013) and is the most frequently seen headache syndrome at major neurology specialty centres (Adams AM. et al. 2015; Stovner LJ. et al. 2007; Steiner TJ. et al. 2013). Migraine-related disability is classified by the World Health Organization as more burdensome than common disease like deafness and angina (Jette N. et al. 2008). Furthermore, relative to individuals with episodic migraine or without headaches, those with CM are significantly more likely to be unemployed or employable but not actively working for pay. Individuals with CM are also significantly more likely to be divorced and to have psychological comorbidities (Lanteri-Minet M. et al. 2005).

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Figure 3: Percentage distribution of cases.

Figure 4: Percentage sex Distribution of cases.

Figure 5: percentage Distribution of chronic migraine.
DISCUSSION
Migraine prevalence of 28.7% in our study is closely similar to 27.9% migraine prevalence based on ID Migraine™ among medical students in Kuwait University reported by Al-Hashel et al. (Al-Hashel et al. 2014). Our prevalence correlated well with 24.8% reported recently by Heidi J. et al (Heidi J. et al. 2014) among students of a US medical school. Additionally, though the prevalence of migraine in our study is higher compared to 14.1% prevalence reported by Ojini et al (Ojini FI. et al 2009) in South-Western Nigeria, and 13.1% in South East Nigeria (Ezeala-Adikai BA. et al. 2013), our finding is similar to the prevalence of 33.8% among medical students in Nairobi (Amayo EO. et al 2002). Other international studies that reported lower prevalence compared to our study are, 7.14% in the Southeast of Iran (Shahrakai MR. et al. 2011), 12.2% in Oman (Deleu D. et al. 2001), 12.6% in Turkey (Balaban H. et al. 2012) and 22% in Brazil (Ferri-de-Barros JE. et al. 2011).

Lower prevalence rate reported in Southern regions of Nigeria may be a reflection of multicultural and multiethnic nature of Nigeria, it may also be accounted for by differences in environmental triggers, especially the scouting sunny nature of Northern Nigeria where our study was conducted. Additionally, a relatively smaller sample size could have an effect on our results.

Chronic migraine prevalence rate of 0.9% suggested by our study correlated well with approximately 1% prevalence among adult populations in previous studies (Adams AM. et al. 2015; Stovner LJ. et al. 2007; Steiner TJ. et al. 2013).

CONCLUSION
The present study suggested that migraine is not uncommon among the medical students in Sokoto, and impacts on students ability to attend and optimally perform in educational activities. Therefore, migraine should be given a public health priority in this community in that headaches in migraine, are usually lifelong conditions and cause disability both in terms of the disease and lifestyle restrictions they impose on the individual, associated with profound negative impact on school performance among university students.

REFERENCES


