

Common ailments among sandwich students seen and treated at the University clinic

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Abstract

The objective of the study is to determine the range of disease conditions presented to the UEW Clinic by students pursuing the sandwich programme between June and August every year from 2010-2012. This is a descriptive cross sectional study; retrospective with regards to the data collection. Both quantitative and qualitative data were collected. About 369 patient folders, 109 of which represent 50% of sandwich student who visited the Clinic between June and August in year 2010 were randomly selected, 132 from year 2011 and 128 from the same period in year 2012 were selected to be part of this study. Nearly 80% of all sampled patient folders were aged between 19 and 44 years; 56% were of the female gender; 91% were diagnosed of a condition which was acute in nature; 90% of all chronic conditions were diagnosed to be Hypertension with the rest being Diabetes. About 51% were diagnosed with Malaria; Upper Respiratory Tract Infection (URTI)-11%, Gastroenteritis-10%, Hypertension (HBP)-9%, Urinary Tract Infection (UTI)- 5%, Vulvo-Viginal Candidiasis (VVC) -3%, Otitis Media-3%, Septic Wound- 3% and Conjunctivitis- 2%.

Key words: ailments, chronic, acute, infection, inflammation

Introduction

According to the World Health Organization (WHO); Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. University students are young, lively and generally healthy individuals, but just like any population, they are prone to certain health problems. Not only do University/College students have some of the worst eating, exercising and sleeping habits, they also have to deal with stress from school, relationship etc that take a major toll on their health. (Kristin L. 2002). Campuses are breeding grounds for bacteria and viruses. The combination of stress, lack of or inadequate amount of sleep, and poor eating habits can cause college students to be more vulnerable to these infectious agents. (Pyrek, 2002)

Some of the most common ailments and illnesses on campuses include the following;

Upper Respiratory Infection; usually referred to as the common cold. This is typically the most widespread illness on campuses. Symptoms can include runny nose, cough, sore throat, congestion, watery eyes, sneezing, fatigue, fever, and mild body aches. Since a cold is a viral infection, antibiotics will not cure it. The cold just has to run its course, which can sometimes be up to 14 days. However, there are tasks one can undertake in order to treat the symptoms of a cold. These include drinking plenty of fluids, resting as much as possible, gargling with warm salt water to help throat irritation, and taking over-the-counter medicines, such as a nasal decongestant and ibuprofen. (WHO. 2003)

Influenza; commonly called the flu, can spread rapidly once one person on campus acquires it. Flu symptoms can include body aches, chills, dry cough, fever, headache, sore throat, and stuffy nose. Like the common cold,

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the flu is a viral infection, so antibiotics will not be helpful in recovering from it. To help relieve symptoms, one should rest as much as possible, drink plenty of fluids, and take ibuprofen to ease discomfort. (USAID 2006)

Gastroenteritis

Gastroenteritis is commonly known as the stomach flu. Symptoms may include nausea, vomiting, diarrhea, abdominal cramps, and low fever. The stomach flu is generally caused by a viral infection. To ease the stomach pain, drinking small amounts of clear liquids and eating bland foods, such as crackers or pretzels may help. It is recommended that one avoids dairy products, which are harder to digest. Over-the-counter medications may help relieve symptoms. (Pyrek, 2002)

Conjunctivitis

Conjunctivitis is usually referred to as pink eye. Symptoms may include eye irritation, redness in the white part of the eye, discharge from the eyes, swollen eyelids, and light sensitivity. The leading cause of pink eye is from a viral infection, but it can also be caused by a bacterial infection, an allergic response, or irritation from environmental factors. Pink eye caused by a viral infection must run its course, but artificial tears can help the discomfort. To treat pink eye caused by a bacterial infection, you should visit your doctor to get antibiotic eye drops. Pink eye caused by an allergic response or environmental irritation should resolve on its own with avoidance of the irritant. (WHO, 2001)

Meningitis

Meningitis is most often caused by a bacterial or viral infection. It also may be caused by a reaction to certain medications or medical treatments, an inflammatory disease such as lupus, some types of cancer, or a traumatic injury to the head or spine. Symptoms often resemble those of the flu and may include high fever, severe headache, stiff neck, rash, nausea, vomiting, fatigue, and confusion. If not treated early, meningitis can lead to death or permanent disabilities. College freshmen, especially those who live in dormitories, are at a slightly increased risk for bacterial meningitis. The American College Health Association (ACHA) recommends all first-year students living in residence halls receive the meningococcal vaccine and that other college students under 25 years of age should choose to receive meningococcal vaccination to reduce their risk for the disease. In order to lower one's risk of infection, one should wash hands frequently, avoid sharing drinking glasses or eating utensils, and avoid close contact with an individual who is ill. If symptoms persist or become severe, one should visit the medical clinic on campus or the family doctor. (Kristin L. 2002).

General Objective

To determine the range of disease conditions presented to the UEW Clinic by students pursuing the sandwich programme.

Specific Objectives

1. To determine the general demographic profile of sandwich student who visited the Clinic between June and August of the last 3 years. (2010-2013).
2. To determine the type of conditions (acute or chronic) presented to the clinic by students during the sandwich period.
3. To determine the ten most common conditions presented to the clinic by students during the sandwich programme.

Research Questions

- 1) What are the general demographic profiles of sandwich students who visited the clinic during the study period?
- 2) What types of disease conditions (acute or chronic) did they present the clinic with?
- 3) What are 10 most common conditions presented to the clinic by students during the sandwich period?

Methodology

This is a descriptive cross sectional study; retrospective with regards to the data collection. Both quantitative and qualitative data were collected. Data for the study was collected from patient folders after the requests for this information from the clinic was granted by the Medical Director of the facility by ‘fishing out’ all the folders of patient who visited the facility between May and August of each of the three years under study (2010-2012). The folders for sandwich students among these piles were subsequently sorted and categorized into the corresponding years under study. The number of patient folders selected to be part of the study for each year was determined by the number of patient who visited the facility for the period under study for each of the 3 years; thus the more the number of patient for a particular year, the higher the number of folders that would be selected for that year. Folders for 50% of all sandwich students who visited the Clinic in each of the 3 years were randomly selected to be part of the study.

The data collect from each of the selected folders were categorized into the 3 years (2010, 2011, and 2012); including the sandwich year of admission, age of patient, gender, diagnose made, whether acute of chronic condition etc. Records on the common ailments seen among University students and treated at the various public University Hospitals in Ghana do not exist both on the World Wide Web (www) and a request to the various University Hospitals on this matter did not yield any result including the UEW Clinic- Winneba where this study was undertaken.

Result and Discussion

The study was conducted to determine the kind of diseases conditions seen and treated at the UEW Clinic (North Campus-Winneba) among Sandwich students during the Sandwich programme periods (June-August) from 2010 to 2012.

About 369 patient folders, 109 of which represent 50% of sandwich student who visited the Clinic between June and August in year 2010 were randomly selected , 132 from year 2011 and 128 from the same period in year 2012 were selected to be part of this study. Ninety-one patients representing 24% of all the patients folders from which data was collected belonged to students aged 25-29 years (the largest as far as age groupings used on the study is concerned), followed by 19% belonging to patients aged 30-34 years and 18% belonging to patients aged 35-39 years.(fig. 2 below)

Sandwich Year

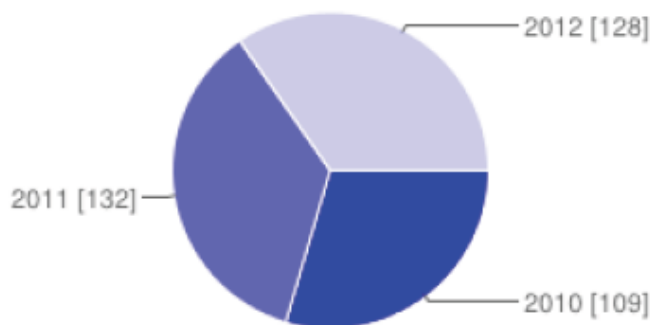


Fig. 1. Yearly distribution of sandwich students

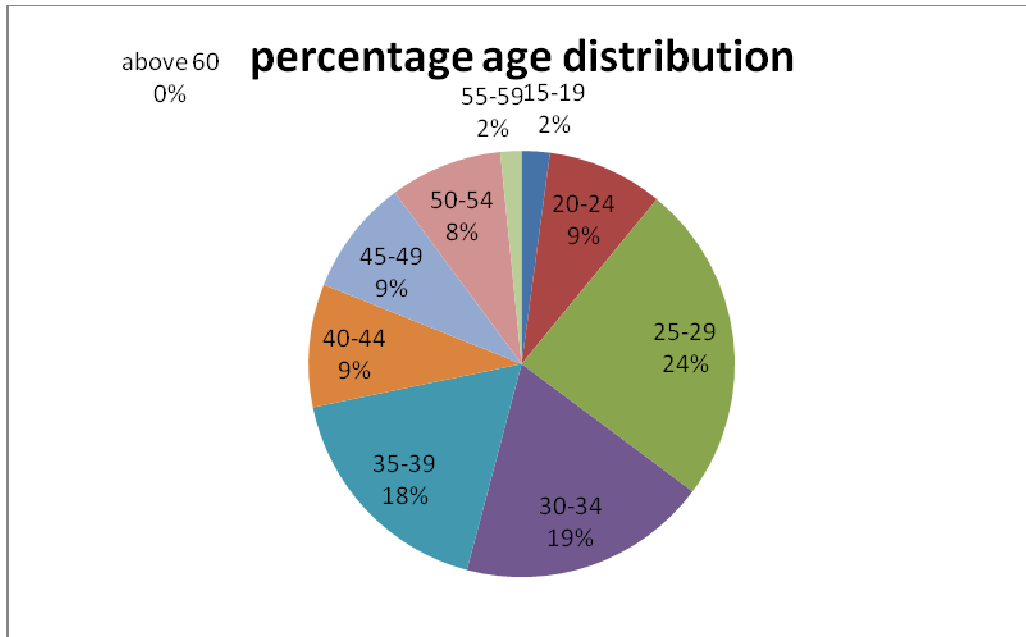


Fig. 2. Age distribution of students

A careful look at the distribution of clients according to age grouping of this study may suggest a fairly young sandwich students population as nearly 80% of the clients whose folders were considered under this study were aged between 19 and 44 years.

It is also observed according to the age groupings that, just above a tenth (11%) of the folders (fig. 2) studied belonged to patient aged 15-24 years and nearly 90% aged above 24 year. In contemporary Ghanaian formal educational settings, most average Ghanaian start tertiary education between ages 19-21 years and finish an average 4-year programme between ages 23-25 years. Taking into consideration the fact that nearly every tertiary educational graduates undergoes a one-year mandatory National Service period and therefore even the very lucky few who gain employment right after national service would do so at the least age 26-27 years. Therefore findings that nearly nine out of ten (90%) of these folders belonging to patients aged above 24 years may go to suggest that, most of the patients or clients may have already been working or have finished some sort of tertiary education mostly teacher training colleges especially because UEW specializes in the furtherance of teacher education beyond the teacher-training level. The above discussions also ties in perfectly well with the general assertion that the sandwich programme are designed to give working class the opportunity to further their studies.

Two hundred and nine (209) (fig. 3) of all sampled folders belong to clients of the female gender.

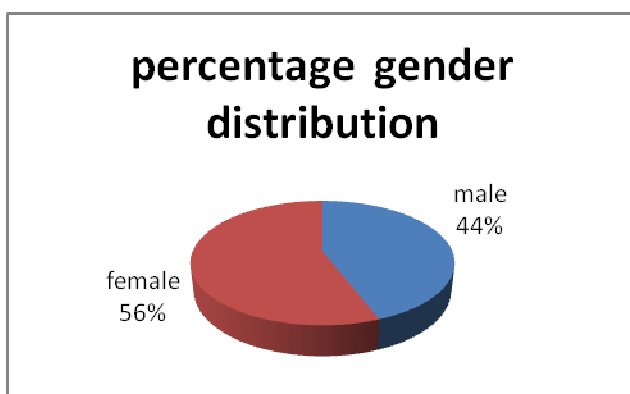


Fig 3. percentage gender distribution

Unlike the findings of other similar studies (GSS, 1998) with regards to the composition of student population which recorded higher percentage enrollment of the male gender as opposed to the female one. This study recorded a higher enrollment of the female gender as far as the hospital attendance of the study groups is concerned.

The observation recorded by this study is very much in line with the composition of the Ghana's general population; according to the Ghana Demographics and Health Survey which recorded that there are slightly more women (53%) than men (47%) in the overall population (GDHS, 2003). It should however be noted that the gender distribution recorded by this study is purely based on hospital attendance by sandwich students who visited the clinic within the above mentioned period.

One may also argue that since the female gender is according to the Holy Bible (*1 Peter 3:7 RSV*) the 'weaker sex', perhaps they are more susceptible to fall sick and there by hospital records showing more women visiting the hospital than their male counterpart. Or could it be the case of the females taking extreme caution and presenting every little conditions to the hospital compared with the male who may only take the pains to seek medical care when the condition is serious? Further studies in this direction with regards to the general gender distribution of the student's population may show whether perhaps the Girl-Child education policy embarked on by successive governments may be yielding results especially if the said study records gender distribution in line with what has been recorded in this study.

Three hundred and Forty-three folders (fig. 4) representing 91% all sampled folders belonged to those ailments diagnosed to be acute in nature with the rest presenting with an ailment diagnosed to be chronic in nature.

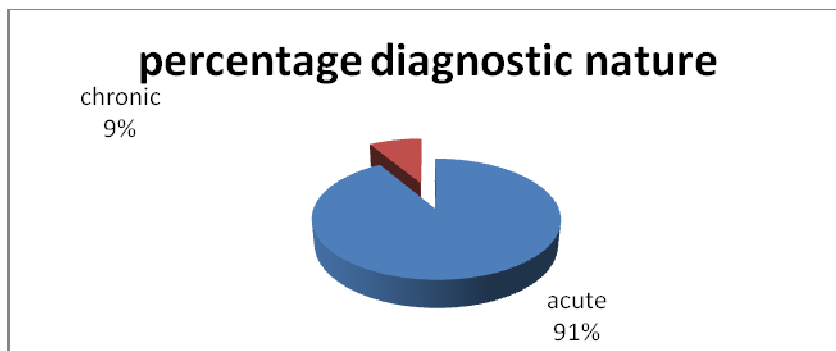


Fig. 4. Percentage diagnostic nature

Thus over 90% of the sample folders belonged to patients who had just come to seek medical attention because their medical condition may have just started or they may have just discovered a change in the way they feel at one part of the body or the other or their condition needs immediate medical attention; unlike patient with chronic condition such as Hypertension or Diabetes who are/were mostly aware of such conditions and so visits the Clinic (or any other Hospital for that matter) periodically (monthly or two monthly) to get medical attention by way of consultation, medication and counseling to manage/control such conditions.

However out of the 32 patients diagnosed with one form of a chronic condition or the other, 90% turned out to be hypertension with the rest being diabetes (fig. 5).

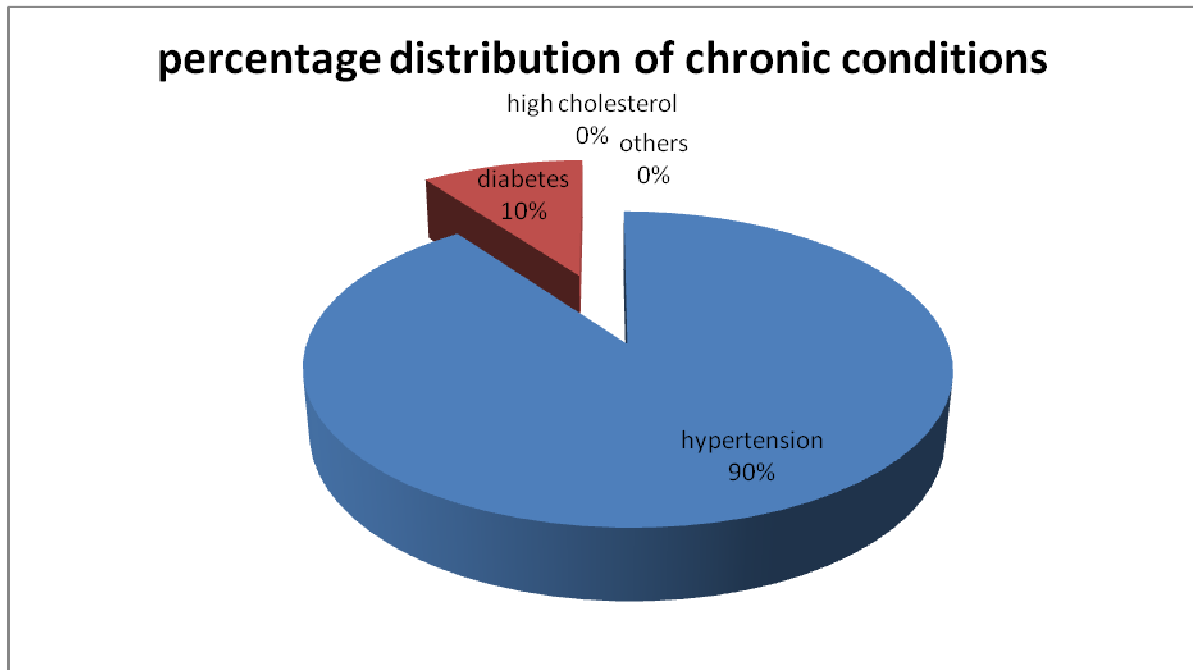


Fig. 5. Percentage distribution of chronic conditions

Considering the relatively ‘young’ nature (nearly 80% aged below 44 years) the study respondents were with regards to age-groupings, the above findings about how many were diagnosed with chronic conditions such Hypertension and Diabetes may be in line with the general medical ascertain that most chronic condition especially high blood pressure (HBP) and diabetes are highly prevalent among people aged above 40 years due to life style changes and their corresponding implications. (Roche, 1991)

Thus the general ‘youthful’ picture demonstrated in the previous discussions regarding their age groupings may explain why as much as 90% of these patients presented with conditions diagnosed to be acute in nature as against chronic. In other words most of the study respondents presented to the Clinic, ailments such as malaria, abdominal pains, coughing, skin infection etc which are mostly acute in nature as against HBP, Bronchial asthma, Diabetes etc which are chronic or long term and may be sometimes lifelong conditions.

This observation is confirmed in fig.6; chart showing the 10 most common conditions (diagnosis) that patients in this study presented to the UEW Clinic during the period of the study. It is observed that 91% of the 10 most diagnosis made or conditions attended were acute in nature.

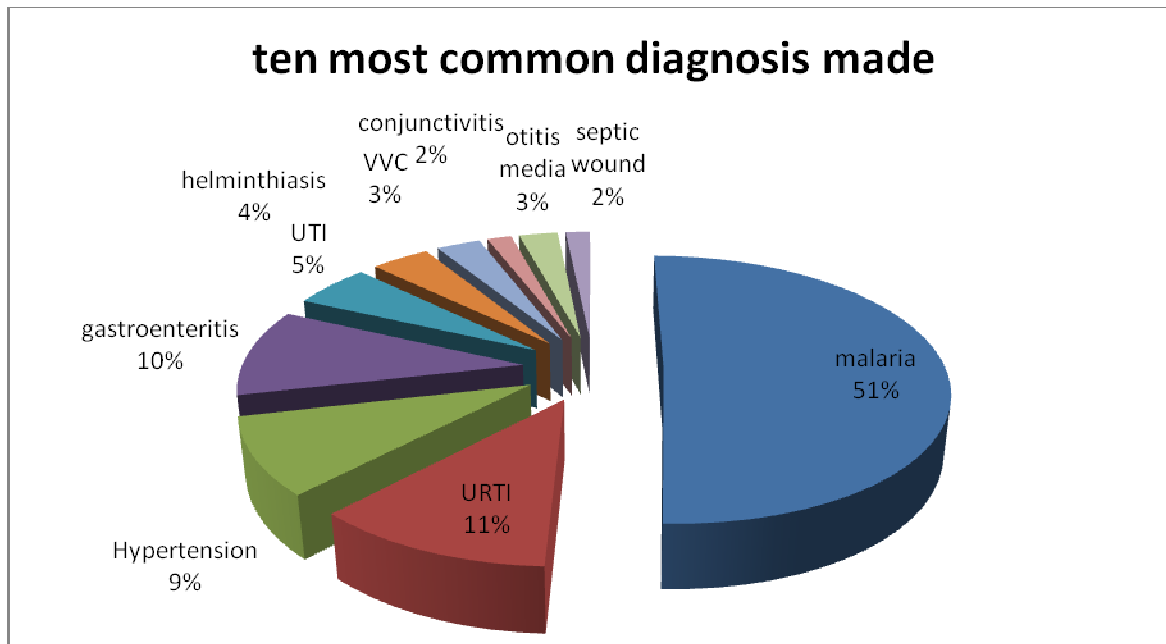


Fig. 6. Most common diagnosis made

The commonest diagnosis made or condition presented by sampled folders belonging to the client who visited the Clinic during the period of study was Malaria representing 51% of the pie followed by Upper Respiratory Tract infection URTI (11%), Gastroenteritis (10%), Hypertension (HBP) (9%), Urinary Tract infection (UTI) (5%), Helminthiasis (Worm Infestation) (4%), 3% each for Volvo Viginal Candidacies (VVC) and Otitis Media and 2% each for Conjunctivitis and Septic Wound. Thus Malaria alone represents more than half of the pie (51%) of the 10 most common conditions diagnosed; possibly because the period of the study (June to August) incidentally fell within the peak period of the traditional Ghanaian rainy season. As expected, these are periods when conditions are rife for mosquito breeding and the subsequent explosion in malaria prevalence across the country.

It is also observed in fig.6 that, out of these 10 most common diagnosis made or conditions presented to the Clinic during the period of the study, 91% were infections/parasitic in nature with the exception of hypertension (9%). These findings may go to buttress the points raised in other similar studies (Pyrek k., 2002) regarding the fact that Campuses are such prolific breeding grounds for infectious organisms due to conditions such as stress, lack or inadequate amount of sleep/rest, poor eating habit, overcrowding and other such conditions.

The findings may however raise question as to the type of environment or living conditions under which these students stay during the course of study. For instance it is known (WHO, 2001) that the bacteria that causes Gastroenteritis or Typhoid Fever (*Salmonella thyphi*) may be found in contaminated food or water sources. Thus the fact that 10% of all cases attended to during the period of the study were diagnosed to be Gastroenteritis raises further question about the sources of food and water that these students consume or the environmental conditions under which such foods/water are prepared.

It is also worth mentioning the fact that some of these infections/conditions especially the Gastroenteritis, Volvo Candidiasis (VVC), Conjunctivitis and Upper Respiratory Tract Infection (URT I) if not well managed could be contagious (spread to other previously uninfected people) and that the issue of overcrowding should be given the needed attention by the University authorities.

Some 18 patient folders (fig. 7) representing 62% of patients whose conditions were diagnosed to be Chronic in nature during the period of the study were aware of or knew their Chronic conditions and were on regular medications for the management of these conditions.

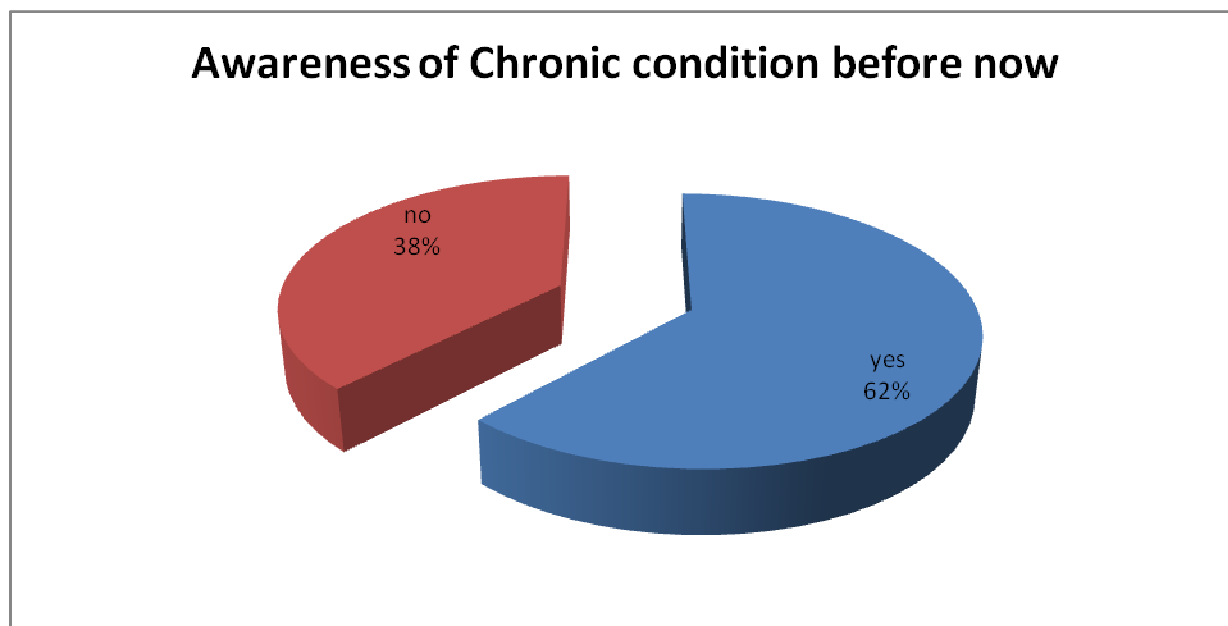


Fig. 7. Awareness of chronic condition

However more than a third (38%) of patients in this group were not aware that they were harbouring any such conditions. Thus these patients (38%) were not taking any medications to help manage these chronic conditions regardless of however long they had been harbouring them simply because they did not know they had such conditions.

The nature of these chronic conditions especially Hypertension and Diabetes are such that they may be detected by chance when the patient visits the hospital mostly with a different condition with exception of a few who may present classical symptoms of polyuria, polyphagia, weight loss etc in the case of Diabetes and extreme headaches, palpitation etc in the case of HBP. For instance with the exception of a few patients who experience extreme forms of palpitations and headaches, most people with HBP do not exhibit any symptoms that may lead a Physician to diagnose hypertension without actually checking the blood pressure first. This means a lot of the patient who were diagnosed with one form of chronic conditions or the other may have been living with these dangerous but silent conditions for a long time even before they gained admission into UEW.

Up until year 2013 which newly admitted sandwich students began to undergo medical screening like the 'tradition' is for their regular fresh student counterpart when they are newly admitted to the school, no such exercise of medical screening was conducted on all the previous years for fresh sandwich students. And the official reason for this failure over the years has been attributed to the short (2 months) and 'tight' schedule for the sandwich program.

One may then argue that these over a third (38%) of patients diagnosed with some form of chronic condition which they (patients) were not aware of previously may have been detected earlier at least a year or 2 before (depending on their year of admission) if medical screening had been conducted on them when they were newly admitted as it's apparently a statutory requirement on the part of the University to medically screen all freshly admitted students into its fold.

It is however commendable that the University has despite the previously held view of 'apparent short and tight schedule' of the sandwich programme now managed to put measures in place to medically screen all fresh sandwich students like their regular student counterparts from the 2013/2014 academic year.

Conclusion

One may based on the above discussions of the findings of this study arrive at the following conclusion;

1. That as far as the demographic profile (regarding age groupings) of the sandwich students who patronized the clinic within the period of the study are concerned, one may describe these patients as a young-to- middle-age population as nearly 80% of them were aged between 19 and 44 years and mostly workers who were taking advantage of the sandwich programme to further their education. More than half (56%) were of the female gender.
2. A little over nine out of ten (91%) presented with or were diagnosed of a condition which was acute in nature. Thus such a condition may have just started, or a change in the way one feels at one part of the body or other may have just been discovered.
3. However nine out of ten (90%) of all chronic conditions diagnosed or presented to the Clinic by these students happened to be Hypertension with the rest being Diabetes.
4. Some of the most common conditions presented by the sandwich student during the course of this study or diagnosed at the Clinic were Malaria (51%), Upper Respiratory Tract Infection (URTI)-11%, Gastroenteritis-10%, Hypertension (HBP)-9%, Urinary Tract Infection (UTI)- 5%, Volvo-Viginal Candidiasis (VVC) -3% , Otitis Media-3%, Septic Wound- 3% and Conjunctivitis- 2%.

Its however worth noting that, nine out of ten (with the exception of HBP) of the ten most commonly diagnosed condition as far as this study is concerned are either infectious (8 out of the rest of the 9) or parasitic (Malaria) in nature which goes to buttress the findings of other similar studies (Pyrek k., 2002) about the assertion that campuses are such prolific breeding grounds for infectious disease due to a combination of conditions such as stress, lack of or inadequate amount of sleep, poor eating habits, overcrowding etc.

Recommendation

Based on the above discussions and conclusions, it is recommended that;

1. Similar studies be carried out among the regular students to determine if similar trends may be recorded as far as diseases presented by students to the Clinic are concerned to enable the University Authorities formulate well informed policies concerning students health in general and to adequately equip/ resource the University Clinic to be able to comprehensively treat all such diseases that it (Clinic) is presented with.
2. More than 90% of all diseases presented to the Clinic by sandwich students according the above discussions turned out to be infectious or parasitic in nature the causes of which are directly influenced by the type of environmental conditions that one leaves under. It is therefore recommended that the University Authorities put in place appropriate policies and arrangements coupled with adequately equipping/resourcing its Health and Sanitation Units to ensure optimum environmental conditions on and around Campus.

References

- Botta R., K. Dunker, K. Fenson-Hood (2008) Using a relevant threat, EPPM and interpersonal communication to change hand washing behaviors on campus. *Journal of Communication in Healthcare*, 1, 373-381.
- Clark, L.R., Jackson, M. & Allen-Taylor, L. (2002) Adolescent knowledge about sexually transmitted diseases. *Sexually Transmitted Diseases*, 29(8): 436-443.
- Ghana Demographic and Health survey, (GDHS) 2003
- Ghana Statistical Service (GSS) and Macro International, *Ghana Demographic and Health Survey 1998*
- Hand washing: Clean hands save lives" (2010). Centers for Disease Control and Prevention. Available at http://www.cdc.gov/hand_washing/ (17 January, 2011)
- Kristin L. Nicholl (2002) Medicine Service, Veterans' Affairs Medical Center, Minneapolis Reprints or correspondence Medicine Service 111
- Pyrek, K, Breaking the chain of infection (2002). Available at <http://www.infectioncontroltoday.com/articles/2002/07/breaking-the-chain-of-infection.aspx> (17 January 2011).
- Roche, A.F., Siervogel, R.M. (1991). Measures of body composition: their relationship to blood pressure and use in epidemiologic research. *Ann Epidemiol.*; 1:313-320

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- Rondini S., Krugu J.K., (2009) Knowledge, attitude and practices study on reproductive health among secondary school students in Bolgatanga, upper east region. *African Journal of Reproductive Health*. 13(4):51-
- World Health Organization (1975) International Classification of Diseases. Geneva 11:241–24
- USAID 2006 [Online] available from <http://www.magweb.org> (accessed on the 12th of April 2009).
- World Health Organization Thailand (2012) *Areas of work: HIV and AIDS.*, from <http://www.whothailand.org/en/Section3/Section109.htm>