

A COMPARATIVE STUDY: PERCEPTIONS AND ATTITUDES TOWARDS MENTAL ILLNESS AMONG FINAL YEAR MEDICAL STUDENTS AND FINAL YEAR NON-MEDICAL STUDENTSEdith Gyamfua Kissi¹ and Peter Appiah-Thompson*²¹Paediatrics Department, 37 Military Hospital, Accra²ENT Unit, Department of Surgery, School of Medical Sciences, University of Cape Coast and Cape Coast Teaching Hospital, Cape Coast, Ghana, West.

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ABSTRACT

In Ghana, mental health issues are not granted as much priority as physical conditions. To some extent, they have been largely side-lined or ignored and this is largely due to misconceptions and inadequate knowledge about the subject. Series of studies show that the perceptions of individuals influence their health seeking behaviours. The purpose of this study was to assess and compare perceptions and attitudes towards mental illness among final year medical students and final year non-medical students at the University of Cape Coast and to evaluate how these perceptions would influence their health seeking behaviours. A comparative cross-sectional study was carried out among students studying medicine and humanities at the University of Cape Coast. Purposive sampling was used to sample 261 students, 65 sixth year students in the medical field and 196 non-medical students in their final year of college education. The study showed that students generally showed positive attitudes and were less discriminatory towards mentally ill persons. Also, majority of students were willing to seek help when faced with mental health issues. In comparing medical students to students in other fields, the study revealed statistically significant differences ($p < 0.05$) in perceptions, attitudes and health seeking behaviours between medical and non-medical students. In conclusion, medical students had more knowledge and experience with mental illness hence they showed more positive attitudes towards mental illness.

KEYWORDS: Mental health, mental illness, perceptions, attitudes, health-seeking behaviour, and stigmatization.**LIST OF ACRONYMS OR ABBREVIATIONS**

WHO	World Health Organization
ICD	International Classification of Diseases
UCC	University of Cape Coast
UCCSMS	University of Cape Coast School of Medical Sciences

INTRODUCTION**Case Example**

Nine years ago, promising young Ms Betty Arthur gained admission to study law at the University of Cape Coast. She was very confident of her future as she was one of the best students to emerge from her high school. Little did she know that she was going to have a tough time. It all started when she failed one of her papers in second year. She became so distressed that it affected her daily activities. Due to bouts of depression, she found it difficult to focus on her studies and gradually her condition worsened so she had to drop out. Ms Betty Arthur was dragged from one place to the other and through it all she was stigmatized, drugged, ridiculed, chained, and beaten at spiritual camps and traditional

shrines. At a point, she was told that she was suffering because she did not serve God well and that her mother had also cursed her with mental illness. She was eventually taken to a psychiatrist after everything else failed. With time she got better and enrolled in a nursing program. She is always looking over her shoulders and prefers to stay indoors because she fears the stigma. Ms. Betty is well now and in her final year of nursing training however, she is concerned that she may not find a job after school because of her psychiatric history.

This scenario is one of the many examples of what happens to people suffering from mental illness in our communities.

It is believed that education is important for the acquisition of knowledge and development of the process of reasoning and judgement.^[1] Tertiary students are therefore expected to have broad-based knowledge on global issues including mental health and mental illness.

The World Health Organization defines mental health not only as the “absence of mental disease”, but it also includes the individual’s biological, social and psychological factors which contribute to an individual’s state and the ability of the individual to function in the community.^[2,3] A healthy mind provides an individual with the capacity to learn, think rationally, grow emotionally, have resilience and self-esteem. Conversely, mental illness is a wide range of diagnosable conditions characterized by troubled thought, drastic changes in mood, or behaviour and it is associated with distress and the inability to function on a day-to-day basis.^[4] Mental illness and mental disorders are used interchangeably in this paper. Mental disorders include schizophrenia, delusional disorder, bipolar disorder, depression, substance misuse disorder, anxiety disorders like obsessive compulsive disorder; post-traumatic stress disorder, dementia, developmental disorders, and personality disorders.^[5]

Mental illness and its associated problems pre-dates as far as 6500BC long before Hippocrates, the father of modern medicine. Around the 13th century, mentally ill persons particularly women were thought to be witches, so they were executed by being burned at stake.^[6] Others were chained in rooms and were not allowed to mingle with society. These beliefs and practices have been going on for years and have been passed on from generation to generation even to this day. With the introduction and amendment of certain laws (Act 846 in Ghana), some of these inhumane practices have been abolished. However, some of these practices are still going on in some communities. For instance, mentally ill persons have rights of their own; they have the right to employment and the right to participate in social events, but the story is different in some Ghanaian communities. Mentally ill persons are denied jobs, and some are chained and beaten at prayer and spiritual camps. Ghana’s culture is highly superstitious hence associating beliefs and practices of witchcraft, curses of deities, seeking traditional/native healing and visiting spiritual/prayer camps with mental illness are common.^[7] Cultural and religious beliefs have some influence on a person’s thought hence a person’s perception. These same cultural beliefs, norms and customs dictate the treatment for mentally ill persons in a community. Moscovici in 1981 proposed the Social Representative Theory which seeks to evaluate the understanding and interpretation of mental illness by lay people. The theory looks at people’s exposure and daily interaction affecting how they think and behave towards mental illness.^[8] Africans believe that curses and punishments from deities due to evil deeds by family members or persons with mental illness, evil spirit possession and witchcraft are causes of mental illness. Therefore, like Ms Betty Arthur, spiritual or traditional healing is sought if a member of the community suffers from mental illness. Consequently, data on mental illness is minimal because spiritual and traditional healers do not keep record of their patients. As such, mental illness is under-reported in many

countries, Ghana included.^[9] Majority of people suffering from mental illness also suffer stigmatization and discrimination due to society’s poor understanding of mental illness.^[7] Goffman in 1963 first proposed three forms of stigma: 1) blemishes of a person’s character such as weak-willed, mental disorder, or unemployment; 2) abominations of the body, related to physical deformities; and 3) tribal stigma of race, religion, or nation. The former two are classified as health-related stigma which has both disease-specific and culture-specific characteristics.^[10,11] Stigma leaves mentally ill persons in a state of grief and it prevents these people from going to seek for help from the right sources. The more persons with mental illness feel stigmatised, the more they feel worthless and the lower their self-esteem. They find it difficult to adjust socially, and their quality of life and chance to seeking help from the right source are all lessened. Like Ms Betty, social stigma can severely affect family relationships, lead to general social rejection and employment discrimination inducing the feeling of helplessness and hopelessness.^[12]

The prevalence of mental illness keeps increasing each year, yet the issues of mental health remain a neglected topic. WHO reported that between 2007 and 2014, the percentage of the world population suffering from mental illness increased to 25% of the global population.^[13] The burden of mental illness continues to significantly grow all around the world. This puts a strain on family relationships, finances and the individual and also leads to discrimination and stigmatization.^[14] In Ghana, mental health issues are not given as much importance as physical health. Rather, they have been left in the hands of spiritual and traditional healers and largely ignored by the government. This is mainly due to misconceptions and inadequate knowledge about the subject.^[15] Only a handful of research have been conducted on mental health, not forgetting that mental illness is also under-reported in hospitals because people prefer to seek help from spiritual and traditional healers where data is not kept. Series of studies show that the perceptions of individuals influence their health seeking behaviours. Education on the other hand teaches individuals how to deal with these perceptions. For this reason, this study is directed at examining college students’ perceptions and attitudes towards mental illness and comparing the attitudes of students who have had much exposure to mental health issues to those who have not.

MATERIALS AND METHODS

Study Design

A comparative cross-sectional study was carried out among students studying medicine and humanities at UCC. The reason for this choice was to enable the researcher to determine the relationship between perceptions of mental illness among students in various fields of study and the willingness to seek help when one is faced with any mental disorder.

Population

The study was carried out on final year medical students and final year non-medical students (those who study humanities) at the University of Cape Coast who were available and willing to participate during the data collection period. The medical students had been introduced to courses in psychiatry and have also had interactions with persons with mental illness whilst the non-medical students may or may not have had exposure with issues concerning mental health.

Exclusion criteria

- Undergraduates who are not in their final year at the UCC.
- Undergraduates who are studying anything other than medicine or humanities.

Sampling Procedure

Purposive sampling was used. This sampling is a non-probability sampling technique that allows the researcher to deliberately choose the participants based on certain qualities. To capture the variations in perceptions of both final year medical students and final year students in the other fields, maximum variations sampling was used. Sampling was based on willingness and availability of participants. This sampling method had the advantage of being timeous and cost effective.

Sample Size

261 responded to the study.

65 respondents from final years studying medicine and 196 final year students from the college of humanities.

Calculation of Sample size

Total population of final year medical students in UCC was used.

$N_1 = 65$ students

Using Cochran's equation, the sample size of final year non-medical students was calculated.

$N_2 = z^2(p*q)/e^2$

$N_2 =$ sample size

$z =$ standard normal deviation set at 95% confidence interval.

$p =$ proportion of respondents (50%)

$q = 1 - p$

$e =$ error margin of 0.07%

$N_2 = (1.96)^2 (0.5*0.5) / (0.07)^2$

$N_2 = 196$

$N = N_1 + N_2$

$196 + 65 = 261$

Therefore $N = 261$

Data Collection Instruments

A self-administered questionnaire was used for this study. The questionnaire which was developed based on literature. It comprised 5 sections, of which section 1 was intended to obtain informed consent from the participant. Sections 2,3,4 and 5 represented the demographics, perceptions about mental illness, attitudes of students

towards mental illness and health seeking behaviours respectively.

Data Collection Procedures

Data was collected using the structured questionnaire in a period of two weeks at the lecture halls and residential halls of 6th year medical and 4th year non-medical students at the UCC. The questionnaires were adequately explained to participants and their consent was sought. The questionnaires were distributed and collected after being filled.

Data Management

Confidentiality and anonymity were ensured during data collection. Names were not recorded in this study, but unique codes were given to the questionnaires to help in easy identification and avoidance of inputting duplicate records. The filled questionnaires were kept in a safe place for two weeks accessible to only the authors. The data was entered into a computer secured with a password known to only the authors. After data entry, the hard copies of the filled questionnaires were set ablaze and destroyed.

Data Analysis

Data was entered into Microsoft Excel and transported to Statistical Package for Social Science (SPSS) version 20.0 for analysis. Data for qualitative variables were interpreted using descriptive forms such as frequencies and percentages. Using a 2 by 3 table and a p-value of < 0.05 , Pearson's Chi square test was used to show comparison between the categorical variables for medical students and non-medical students.

Ethical Issues

This study was approved by the University of Cape Coast Institutional Review Board. Information from participants was kept confidential and participants were not requested to mention their names or write their names on the administered questionnaire. The purpose of the survey was adequately explained to the participant, after which a verbal and written informed consent were sought. The study did not pose any harm to the participant and those who agreed to partake in the study were given the option to opt out at any time if they did not wish to continue the study.

RESULTS

261 students in their final year at the University of Cape Coast took part in the study. Table 1 below summarizes the demographic results of students who responded to the questionnaires. 51.7% of participants were males and 48.3% of participants were females. Ages ranged from 15-35 years with 21-25 being the highest age range (73.6%). Out of the 261 respondents, 233 (89.3%) were Christians.

Table 1: Demographic results of final year students at the UCC.

Characteristics	Number of Respondents	Percentage %
Programme		
School of Medical Sciences	65	24.9
Faculty of Arts	64	24.5
Faculty of Social Sciences	67	25.7
School of Business	65	24.9
Gender		
Male	135	51.7
Female	126	48.3
Age		
15-20	11	4.2
21-25	192	73.6
26-30	54	20.7
31-35	4	1.5
Religion		
Christianity	233	89.3
Islam	22	8.4
Buddhism	1	0.4
Traditional African Religion	1	0.4
No religion	4	1.5

Table 2 below shows students' knowledge about mental illness. For the question of, "Are you familiar with mental health?", 246 corresponding to 94.3% of students responded "Yes". 46.4% of students had information about mental health from general lectures and 59.8% from social media. For the examples of mental illness, depression was chosen by the majority corresponding to

87.4%. 82.8% out of 261 respondents chose drug or alcohol misuse to be a cause of mental illness. 14.6% of students thought mental illness was caused by evil spirits. 93.9% of the students indicated the mentally ill could be treated by consulting a psychiatrist or psychologist.

Table 2: Knowledge of final year students concerning mental illness

Question	Options	Respondents	Percentage %
Are you familiar with the term mental health?	Yes	246	94.3
	No	15	5.7
How did you know or hear about mental health?	General lecture	121	46.4
	Social media	156	59.8
	Family and Friends	67	25.7
	Personal research on the internet or library	92	35.2
Mental illness includes:	Schizophrenia	141	54
	Bipolar disorder	225	86.2
	Psychoses	132	50.6
	Depression	228	87.4
	Developmental disorders	81	31
	Dementia	103	39.5
What causes mental illness?	Anxiety disorders	181	69.3
	Drug or alcohol misuse	216	82.8
	Evil spirits	38	14.6
	Punishment from God	3	1.1
	Traumatic events	203	77.8
	Brain disease	202	77.4
How is mental illness treated?	Genetic inheritance	154	59
	No treatment	7	2.7
	Spiritual Intervention	47	18
	Herbal drugs	27	10.3
	Consult a psychiatrist or psychologist	254	93.9

Table 3 shows the results of students' perception towards mental illness. Students were asked to indicate the extent to which they agreed or disagreed to a statement. 67.5% of students disagreed with the statement, "Mentally ill persons are crazy". 55.1% disagreed with the view that one could identify mentally ill persons by their general

outlook. 82% of respondents agreed that anyone could suffer from mental illness. For the statement, mentally ill persons are violent, 47.5% disagreed. 72.8% of students disagreed that mentally ill persons recovered on their own. 77.8% students agreed to the statement, "mentally ill persons recover when they seek help".

Table 3: Perceptions of final year students concerning mental illness.

Perceptions	Number of respondents (Percentages %)				
	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
Mentally ill persons are crazy.	90 (34.5)	86 (33)	51 (19.5)	27 (10.3)	7 (2.7)
One can identify mentally ill persons by their appearance.	63 (24.1)	81 (31)	51 (19.5)	54 (20.7)	12 (4.6)
Anyone can suffer from mental illness.	12 (4.6)	16 (6.1)	19 (7.3)	93 (35.6)	121 (46.4)
Mentally ill persons are violent.	33 (12.6)	91 (34.9)	90 (34.5)	41 (15.7)	6 (2.3)
Mentally ill persons recover on their own.	64 (24.5)	126 (48.3)	53 (20.3)	13 (5)	5 (1.9)
Mentally ill persons recover when they seek help.	6 (2.3)	12 (4.6)	40 (15.3)	114 (43.7)	89 (34.1)

Table 4 presents respondents' attitudes towards mental illness. 15.7% of respondents disagreed with the statement, "people with mental illness having the same rights as anyone else". 29.5% of respondents agreed to considering anxiety to be a weakness or negative attribute. 16.1% of students admitted that they would be scared to have a conversation with a mentally ill person. 46.7% disagreed with mentally ill persons not being

made to make decisions even concerning routine events. For the statement, "I would be disturbed or upset about working on the same job as a mentally ill person", 20.7% of respondents agreed. 88.5% of students disagreed with one hiding his or her mental illness from family. 70.9% disagreed with persons with mental illness not getting married.

Table 4: Attitudes of final year students towards mental illness.

Statement	Number of Respondents (Percentages %)				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Persons with mental illness should be given the same rights as everyone else.	18 (6.9)	23 (8.8)	45 (17.2)	101 (38.7)	74 (28.4)
I consider anxiety to be a weakness or negative attribute.	43 (16.5)	55 (21.1)	86 (33)	55 (21.1)	22 (8.4)
I would be scared to have a conversation with a mentally ill person.	49 (18.8)	99 (37.9)	71 (27.2)	32 (12.3)	10 (3.8)
Mentally ill persons should not be made to make decisions even concerning routine events.	40 (15.3)	82 (31.4)	73 (28)	47 (18)	19 (7.3)
I would be distraught if I worked on the same job as a someone with mental illness.	49 (18.8)	79 (30.3)	79 (30.3)	42 (16.1)	12 (4.6)
One should keep their mental illness a secret from their family.	142 (54.4)	89 (34.1)	18 (6.9)	4 (1.5)	8 (3.1)
Mentally ill persons should not get married.	83 (31.8)	102 (39.1)	52 (19.9)	15 (5.7)	9 (3.4)
I could marry someone with mental illness.	59 (22.6)	58 (22.2)	91 (34.9)	41 (15.7)	12 (4.6)
Persons with mental illness should be bound and isolated from the public.	85 (32.6)	90 (34.5)	47 (18)	27 (10.3)	12 (4.6)
I would feel embarrassed if people knew that	66	106	50	36	3

someone in my family was mentally ill.	(25.3)	(40.6)	(19.2)	(13.8)	(1.1)
If I were suffering from mental illness, I would not want people to know.	39 (14.9)	83 (31.8)	73 (28)	44 (16.9)	22 (8.4)

From Table 5 below, 81.6% of students were willing to go for professional help in case of serious emotional problems. 75.1% of the respondents said they would feel comfortable talking about personal problems with a professional. 21.4% of respondents said they would feel

ashamed if their friends knew they were getting professional help for an emotional problem. Lastly, 82% of respondents perceived professional help to be effective.

Table 5: Health seeking behaviours of final year students concerning mental illness.

	Number of Respondents (Percentages %)				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would go for professional help in case of serious mental health issue.	9 (3.4)	12 (4.6)	27 (10.4)	87 (33.3)	126 (48.3)
I would feel comfortable talking about personal problems with a professional.	8 (3.1)	27 (10.3)	30 (11.5)	100 (38.3)	96 (36.8)
I would feel ashamed if my friends knew I was getting professional help for an emotional problem.	52 (19.9)	85 (32.6)	68 (26.1)	40 (15.3)	16 (6.1)
I perceive professional help to be effective.	14 (5.4)	6 (2.3)	27 (10.3)	95 (36.4)	119 (45.6)

Comparison of Perceptions of Students on Mental Illness

Table 6 shows that 100% of final year students in the medical field were familiar with the term mental illness whilst 92.3% of non-medical students were familiar with the term. For the various sources of information for mental health, 100% of medical students had been introduced to mental health through general lectures whilst only 29.6% of final year non-medical students had had a general lecture concerning mental illness. Majority of non-medical students (64.8%) got their information from social media, which was 44.2% for medical students. Majority of both medical and non-medical students thought bipolar disorder (i.e., 100%: 83.2%) was a mental illness. For causes of mental illness, Drug and alcohol misuse, traumatic events, brain disease and genetic inheritance were selected by majority of medical and non-medical students. From the result, 100% of medical students suggested consulting a psychiatrist or psychologist for the management of mental illness was appropriate whilst 91.4% of non-medical students also agreed to this. 22.4% of non-medical students thought spiritual intervention to be a treatment option for mental illness whilst 4.6% of medical students agreed to this. Table 7 compares perceptions of final year medical and final year non-medical students using proportions and p-value < 0.05. More medical students (80%) disagreed to the statement, "mentally ill persons are crazy" than non-medical students (63.3%) and this was statistically significant (p-value < 0.05). The statement, "one can identify mentally ill persons by their appearance showed" no statistical difference between medical students and non-medical students (p=0.46). Medical

students (92.3%) were more likely to believe that anyone could suffer from mental illness compared to 78.5% of students who do not study medicine, p-value < 0.05. With a p-value of 0.005, more non-medical students believed that mentally ill persons were violent, and this was statistically significant. There was no significant difference between the two groups on the belief that mentally ill persons could recover on their own and mentally ill persons recover when they seek help.

Table 6: Comparing the knowledge of mental illness among 6th year medical students and 4th year non-medical students.

Questions	Options	Number of Respondents Percentages (%)	
		Medical students (65)	Non-medical students (196)
Are you familiar with the term mental health?	Yes	65 (100)	181 (92.3)
	No	0 (0)	15 (7.7)
How did you hear/know about mental health?	General lecture	65 (100)	58 (29.6)
	Social media	29 (44.2)	127 (64.8)
	Family and friends	11 (16.9)	56 (28.6)
	Personal research on the internet or library	26 (40.7)	62 (31.6)
Mental illness includes:	Schizophrenia	63 (97)	78 (39.8)
	Bipolar disorder	65 (100)	163 (83.2)
	Psychoses	61 (94)	71 (36.2)
	Depression	65 (100)	163 (83.2)
	Developmental disorders	34 (52.3)	47 (24.0)
	Dementia	47 (72.3)	55 (28.1)
	Anxiety disorder	62 (95.4)	119 (60.7)
What causes mental illness?	Drug or alcohol misuse	62 (95.4)	154 (78.6)
	Evil Spirits	3 (4.6)	34 (17.3) P = 0.0108
	Punishment from God	0 (0)	3 (1.5)
	Traumatic events	54 (83.1)	149 (76.0)
	Brain disease	54 (83.1)	147 (75.0)
	Genetic inheritance	54 (83.1)	100 (51.0)
How is mental illness treated?	No treatment	0 (0)	7 (3.6)
	Spiritual intervention	3 (4.6)	44 (22.4)
	Herbal drugs	1 (1.5)	26 (13.3)
	Consult a psychiatrist or psychologist	65 (100)	180 (91.4)

Table 7: Comparing perceptions of mental illness of 6th year medical students and 4th year non-medical students at the University of Cape Coast.

Statements	Medical students -65 Percentages (%)			Non- medical students -196 Percentages %			P- value < 0.05
	Disagree	Not sure	Agree	Disagree	Not Sure	Agree	
Mentally ill persons are crazy	52 (80)	8 (12.3)	5 (7.7)	124 (63.3)	43 (21.9)	29 (14.8)	0.044
One can identify mentally ill persons by their appearance	37 (56.9)	15 (23.1)	13 (20)	107 (54.6)	36 (18.4)	53 (27.0)	0.46
Anyone can suffer from mental illness	3 (4.6)	2 (3.1)	60 (92.3)	25 (12.8)	17 (7.7)	154 (78.5)	0.044
Mentally ill persons are violent	40 (61.5)	21 (32.3)	4 (6.2)	84 (42.9)	69 (35.2)	43 (21.9)	0.005
Mentally ill persons recover on their own	52 (80)	9 (13.8)	4 (6.2)	138 (70.4)	44 (22.5)	14 (7.1)	0.29
Mentally ill persons recover when they seek help	4 (6.2)	10 (15.4)	51 (78.4)	14 (7.1)	30 (15.3)	152 (77.6)	0.96

Comparing students' attitudes towards mental illness

Table 7 compares attitudes of medical and non-medical students. Medical students were more likely to believe that persons with mental illness should have the same rights as everyone else. This was evident by proportions of 75.3% of medical students: 64.3% of non-medical students and also a p value of 0.024. 67.7% of medical students compared to only 27.5% of non-medical students disagreed that anxiety was a weakness or a negative attribute. This was statistically significant because $p < 0.05$. 19.4% of non-medical students agreed that they would be scared to have conversations with someone with mental illness compared to 6.2% of medical students hence a statistically significant p-value of 0.007. When it came to whether mentally ill persons should be made to make decisions even concerning routine events, there was a significant difference between the two groups ($p=0.001$). There was no statistically significant difference between the two groups because majority of students in both groups disagreed that they would be disturbed or upset about working on the same

group as a mentally ill person or one should hide their mental illness from their family. There was a statistically significant difference ($p < 0.05$) on the statement, "I could marry someone with mental illness" – about 49% of non-medical students and 32.3% of medical students disagreed to the statement. For the statement, "the mentally ill should not get married", 84.6% and 66.3% of medical students and non-medical students respectively disagreed with the statement and this was also statistically significant with a p-value of 0.019. Comparing the two groups, there was no statistically significant difference as to whether students would feel ashamed if people knew that someone in their family was mentally ill. On the other hand, more medical students were likely to disagree about binding and isolating mentally ill persons than non-medical ($p=0.006$). With a p value of 0.01 and a proportion of 52.6% of non-medical students against 9.2% medical students, it indicates that non-medical students were likely not to be concerned of people knowing if they suffered from mental illness.

Table 8: Comparing students' attitudes towards mental illness.

Statements	Medical students -65 Percentages (%)			Non-medical students -196 Percentages (%)			P- value < 0.05
	Disagree	Not sure	Agree	Disagree	Not sure	Agree	
Persons with mental illness should be given same rights as everyone else.	12 18.5	4 6.2	49 75.3	29 14.8	41 20.9	126 64.3	0.024
I consider anxiety to be a weakness or negative attribute	44 67.7	10 15.4	11 16.9	54 27.5	76 38.8	66 33.7	0.00001
I would be scared to have a conversation with mentally a ill person	47 72.3	14 21.5	4 6.2	101 51.5	57 29.1	38 19.4	0.007
Mentally ill persons should not be made to make decisions even concerning routine events.	43 66.2	14 21.5	8 12.3	79 40.3	59 30.1	58 29.6	0.001
I would be distraught if I worked on the same job as someone with mentally illness.	39 60.0	17 26.2	9 13.8	89 45.4	62 31.6	45 23.0	0.102
One should keep their mental illness a	59	4	2	172	14	10	0.758

secret from their family	90.8	6.2	3.0	87.8	7.1	5.1	
Mentally ill persons should not get married	55 84.6	7 10.8	3 4.6	130 66.3	45 23.0	21 10.7	0.019
I could marry someone with mental illness	21 32.3	30 46.2	14 21.5	96 49	61 31.1	39 19.9	0.044
The mentally ill should be bound and isolated from the general public	54 83.0	7 10.8	4 6.2	121 61.7	40 20.4	35 17.9	0.006
I would feel embarrassed if people knew that someone in my family was mentally ill.	43 66.2	14 21.5	8 12.3	129 65.8	36 184	31 15.8	0.719
If I was suffering from mental illness, I would not want people to know.	19 9.2	29 44.6	17 26.2	103 52.6	44 22.4	49 25.0	0.001

Table 8 shows that majority of medical students were likely to seek for professional help if they had any mental health issues as compared to non-medical students ($p=0.037$). There was also a statistically significant difference between the two groups when asked whether they would be comfortable talking about personal problems with a professional. 84.6% of medical students and 72% of non-medical students felt they

would be comfortable. The statement, "I would feel ashamed if my friends knew I was getting professional help for an emotional problem" was not statistically significant. With proportions of 90.8%: 79.1% for medical students and non-medical students and a p-value of 0.017 indicated that students in the healthcare sector were more likely to perceive professional help as effective.

Table 8: Comparing health seeking behaviours of students concerning mental illness.

Statement	Medical Students -65 Percentages %			Non-medical students -196 Percentages %			P- value < 0.05
	Disagree	Not sure	Agree	Disagree	Not sure	Agree	
I would go for professional help in the case of serious mental health issue	2 3.0	3 4.6	60 92.3	19 9.7	24 12.2	153 78.1	0.037
I would feel comfortable talking about personal problems with a professional	3 4.6	7 10.8	55 84.6	32 16.3	23 11.7	141 72.0	0.048
I would feel ashamed if my friends knew I was getting professional help for a mental health issue	31 47.7	20 30.8	14 21.5	106 54.1	48 24.5	42 21.4	0.572
I perceive professional help to be effective.	6 9.2	0 0	59 90.8	14 7.1	27 13.8	155 79.1	0.017

DISCUSSION

This study demonstrates the perceptions and attitudes of 261 students at the University of Cape Coast. Findings from the study show that majority (94.3%) of students were familiar with the term mental health. The study also shows that more than half of the students gained their information from social media and this is because social media is the most widely used platform by students. This is consistent with a study done by Abo, M. et al who studied attitudes of female students in the medical and non-medical field towards mental illness in Egypt.^[16] Indeed, social media is increasingly becoming an important information source for the general public.^[17]

In assessing the perceptions of students among final year students, results showed that majority of students believed that drug or alcohol misuse, traumatic events, brain disease and genetic inheritance were common causes of mental illness. Only a few students believed evil spirits (14.6%) and punishment from God (1.1%)

were causes of mental illness. This finding is in contrast to a study carried out by Yeboah, K. among rural folks in the Ashanti Region of Ghana where 96% of participants believed that witchcraft or evil spirits were causes of mental illness and 60% thought it was a punishment from a divine being.^[18] From the study, 93.9% out of 261 students were confident that mentally ill persons could be treated if they consulted a psychiatrist or psychologist. 18%, and 10.3% believed that mental illness could be treated by spiritual intervention and herbal drugs respectively. 2.7% of students believed there was no treatment for mental illness. These findings are in line with a study by Crabb, J. et al who looked at attitudes towards mental illness in Malawi. Only one-quarter of participants believed mental illness could be treated elsewhere aside the hospital.^[19] The Ghanaian culture believes in spiritual and herbal healing. It is not surprising that some students think an alternative treatment or the sole treatment for mental illness is spiritual intervention or herbal drugs. Majority of students disagreed that mentally ill persons were crazy,

and more than half the students also disagreed that persons with mental illness could be identified by their outlook. This is because, mental illness is a host of diseases of which depression, anxiety disorders and some developmental disorders are included. In many of these disorders, patient behaviours are not so abnormal (“crazy”), and patients are often well dressed. Many of the participants i.e. 81.2% were of the belief that anyone could suffer from mental illness. Hence, students believed that mental illness could affect any race, gender, or age. Despite the relatively higher education, less than half of the respondents disagreed that mentally ill persons were violent. A study carried out by Borinstein, A. on public attitudes towards mental illness showed that many Americans believed mentally ill persons were dangerous.^[17] Majority of students did not believe that mentally ill persons could recover on their own however they believed that mentally ill persons recover when they seek help. Majority of the students also perceived professional help to be effective. This study is consistent with a study by Kamimura, A. et al which looked at the perceptions of mental health and mental health services among college students.^[20] Cultural beliefs, religion, experiences and education have an impact on the way an individual perceives things. In the case of university students especially those in their final year, the acquisition of knowledge enlightens and broadens ideas about mental health issues. The findings of this study reveal that majority of university students have some basic knowledge about mental health issues therefore stigma towards mental illness was on the low side among students.

Looking at the rights of the mentally ill persons, more than half of students thought that persons who suffer from mental illness should have the same rights as everyone else. Again, a good proportion of students (67.1%) were against the idea that mentally ill persons should be bound and isolated from the general public. 46.7% of the students agreed that mentally ill persons should be allowed to make their own decisions concerning routine events. A review done by Collagan and Ryan suggested that mentally ill persons should not be forced into treatment except when they cannot make independent decisions. Forcing mentally ill persons is a violation of their rights.^[21] On the issue of marriage, many of the students disagreed with the statement, “mentally ill persons should not get married”. However, majority of students (44.8%) acknowledged that they could not marry someone with mental illness. In the Ghanaian culture, marriage is a rite of passage and it is the union of two families and even communities, not just the individuals involved. Some ages ago, before two persons could get married, both parties made sure there was no form of mental illness in the families they were marrying into. Till date, families with mentally ill persons are stigmatized. It is not surprising that culture still plays a big role in the attitudes of students. This is consistent with a study done by Adeeku, F. who conducted a study on perceptions and attitudes towards

mental illness among the people of Pantang community in Ghana. Participants in this study showed a strong dislike for marrying someone with mental illness.^[13] More than half of the students said they would not be afraid to have a conversation with a mentally ill person or be disturbed if they worked on the same job as a mentally ill person. This is in line with a study done by Poreddi, V. et al in India on people with mental illness and human rights.^[22] From the study, majority (65.9%) of students disagreed that they would feel embarrassed if people knew that someone in their family was suffering from mental illness. 88.5% of students said that one should not hide their mental illness from their family. This finding is consistent with a study by Kamimura, A. where Vietnamese students would seek help from family and friends because family and close friends are an important source of support when one suffers from mental illness.^[20,23] Most students would go for professional help and would feel comfortable talking to a professional about their mental health issues. Students generally showed positive attitudes towards mental illness.^[24]

Findings from the study showed that all medical students were familiar with the term mental health however, 7.7% of non-medical students were not familiar with the term mental illness. 100% of medical students got their information from a general lecture whereas the most common source of information for non-medical students was from social media. This is in line with a study by Abo, M. on healthcare and non-healthcare students’ attitudes towards mental illness. Indeed, this is true for the public where most of the information is from social media. The issue is whether the information from social media is reliable because some of the information are a primary source of fuelling stigma; the media depicts mentally ill persons in plays and movies in a very distasteful way.^[16,17] Knowledge of students were tested by asking them to choose some examples of mental health disorders. Medical students were well-versed on some examples of mental health disorders whilst very few non-medical students chose schizophrenia, psychoses, developmental disorders or dementia as examples of mental illness because they were not familiar with these conditions. Nonetheless, most of the non-medical students were familiar with bipolar disorder, depression, and anxiety disorders as part of mental illness. Generally, majority of medical students and non-medical students believed drug or alcohol misuse, traumatic events, brain diseases and genetic inheritance were all causes of mental illness. From Table 6, with a p-value < 0.05, it indicates that non-medical students were more likely to think evil spirits caused mental illness than medical students. Majority of medical students believed anyone could suffer from mental illness and a $p < 0.05$ makes it statistically significant as shown in Table 7. With a p value of 0.044 non-medical students were likely to believe mentally ill persons were crazy compared to medical students as shown in table 7. Again, non-medical students were more likely to consider

mentally ill persons as dangerous, $p = 0.005$ as shown in table 7. Due to these results, we reject the null hypothesis and accept the alternative hypothesis that there is a statistically significant difference between perceptions of medical students and perceptions of non-medical students towards mental illness at the University of Cape Coast. This study shows that non-medical students were stereotypical about mental illness compared to medical students and this is because non-medical students have had little or no exposure to mental health issues whereas final year medical students may have completed courses in psychiatry and have had exposure with mentally ill persons in their clinical rotations. This finding is consistent with studies by Abo, M. and Desai, D. et al which showed statistically significant difference between perceptions of healthcare students and non-healthcare students. The study showed that healthcare students were more informed about mental health issues, hence they had more positive attitudes towards mental illness.^[16,24]

In comparing the attitudes of students in the different fields, the study showed that there was significant difference in the attitudes of medical students and non-medical students using p values of < 0.05 as shown in table 8. More medical students agreed that anxiety was not a weakness or a negative attribute. Again, medical students are more probable of respecting the rights of mentally ill persons than non-medical students. Some non-medical students felt it was right to bind and isolate mentally ill persons and also that mentally ill persons should not be allowed to make decisions concerning routine events compared to medical students. P - values showed statistically significant figures in table 8. Also, non-medical students are more likely to be afraid to have conversations with mentally ill persons. Medical students may find it easy talking to mentally ill persons because during their clinical rotations they are exposed to different forms of mental illness. The findings also show that more non-medical students agree that mentally ill persons should not get married compared to medical students. Again, more non-medical students disagreed when asked if they could marry someone with mental illness. The burden of mental illness can affect relationships and can put a strain on the finances of individuals. It is no wonder most people would choose not to marry someone with mental illness. Although medical students have more exposure to mental illness than students in other fields of study, the study shows that they would not want people to know if they were suffering from mental illness. It could be explained that students in their final year of medical school are familiar with the stigma attached to mental illness since they are well-versed in mental health and problems associated with mental health. Also, due to the fact that medical students are doctors in the making, they would not want to be associated with mental illness during their years of practice because the society may tag them as "incompetent" doctors.^[16,25] The study shows that students studying medicine showed more positive attitudes towards mental illness than non-medical

students hence we reject the null hypothesis and accept the alternative hypothesis that there is a statistically significant difference between attitudes of medical students and attitudes of students in other fields towards mental illness at the University of Cape Coast.

Health seeking behaviours are influenced by perceptions of an individual, religious, and cultural beliefs. The current study shows that all medical students whereas 91.4% of non-medical students believe that consulting a psychiatrist or psychologist is a way to treat mental illness. 3.6% of non-medical students were convinced there was no treatment for mental illness. Medical students are likely to perceive professional help as effective than non-medical students. There was a statistically significant difference between the two groups; medical students are more likely to see a professional or feel comfortable talking to a professional about their mental health issues than non-medical students. Laidlaw, A. conducted a study and it showed that college students other than medical students were very careful with who they shared their mental health issues with. They would rather share their issues with their peers than to seek help from a professional.^[26,27] Again, because medical students are knowledgeable about the subject of mental health issues, they are more comfortable and more eager to seek help when faced with mental health issues. The findings in this research suggest that the null hypothesis be rejected hence the alternative hypothesis is, there is no statistically significant difference between health-seeking behaviours of final year medical and non-medical students.

CONCLUSION

Tertiary education is a time of many transitions and challenges in students' lives. For most of the students, it is their first time living away from home, learning how to deal with independence, forming more adult relationships, making financial decisions, all in addition to the pressure of exams and coursework. Just like Ms Betty Arthur, tertiary students are at risk of exposure to development and exacerbation of mental illness. In order not to miss one's productive years due to mental illness, the right sources of treatment must be sought. Knowledge influences our perceptions which in turn affects our attitudes and health seeking behaviours.

Based on the findings, this study has shown that generally students have some basic knowledge about mental illness and the stigma attached to mental illness is lesser among university students than in the public as noted from other studies. Students generally had positive attitudes towards mentally ill persons and majority of students were ready to seek help when faced with any mental health difficulties.

The other part of the study compared perceptions and attitudes of medical students and non-medical students towards mental illness. The comparison made it clear that medical students were well grounded in mental

illness than non-medical students hence it reflected in the perceptions, attitudes and health seeking behaviours of the students. Medical students showed significant positive attitudes towards mental illness than non-medical students. Stigmatizing perceptions were seen more significantly in non-medical students than medical students. Again, based on the findings, medical students were more likely to seek help in case of any mental health difficulties. It can be said that education may help people to better understand mental illness and reduce stigmatization and discrimination. More so, further exposure and personal experience with mentally ill persons in the case of health workers, further reduces the stigma.

RECOMMENDATIONS

- Further education should be given to non-medical students. Mental health courses should be added to the school's curriculum just like HIV/AIDS courses are added and this could be non-scoring as well. This is to improve the knowledge of students about mental illness because as future leaders, understanding mental illness is essential for changing certain policies.
- This research looks at the surface of perceptions, attitudes and health seeking behaviours of students towards mental illness. Further studies could look into a larger population in Ghana studying the factors that influence a person's perception, attitudes and health seeking behaviour towards mental illness.

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REFERENCES

1. Education _ Definition of Education at Dictionary.
2. Manwell LA, Barbic SP, Roberts K, et al. What is mental health? Evidence towards a new definition from a mixed methods multidisciplinary international survey. *BMJ Open*, 2015; 5(6):1 -11. doi:10.1136/bmjopen-2014-007079
3. BENOIT EP. Toward a new definition of mental retardation. *Am J Ment Defic*, 1959; 63(4): 559-565.
4. World Health Organization. Fact sheet - Mental Health. *RC63 Fact sheet Ment Heal Geneva, World Heal Organ.* 2019; 1-5. http://www.who.int/healthinfo/global_burden_diseases/2004_report_update/en,%5Cnhttp://www.who.int/mental_health/publications/mental_health_atlas_2011/en,
5. Organization WH. The ICD-10 classification of mental and behavioural disorders: Diagnostic criteria for research. *ICD-10 Classif Ment Behav Disord Diagnostic criteria Res.* 1993:xiii+248p.
6. Gosselin. Introduction to the History of Mental Illness, 2017; 3-24.
7. Carthy MM, Sossou M. Stigma, Discrimination, and Social Exclusion of the Mentally Ill: the Case of Ghana, 2017; 128-133.
8. Riffel T, Chen SP. Exploring the knowledge, attitudes, and behavioural responses of healthcare students towards mental illnesses—A qualitative study. *Int J Environ Res Public Health*, 2020; 17(1): 1-11. doi:10.3390/ijerph17010025.
9. Choudhry FR, Mani V, Ming LC, Khan TM. Beliefs and perception about mental health issues: A meta-synthesis. *Neuropsychiatr Dis Treat*, 2016; 12: 2807-2818. doi:10.2147/NDT.S111543.
10. Dogra N, Cooper S. Defining mental health and mental illness. *Psychiatry by Ten Teach Second Ed*, 2017; (January 2009): 1-11. doi:10.1201/9781315380612.
11. Shirley A. Knowledge and Perceptions of Mental Disorders Among Adults in Zuarungu and Sumbrungu Communities, in Northern Ghana. *Br J Psychiatry*, 2017; 366(10): 436-441. <http://ugspace.ug.edu.gh>.
12. Barke A, Nyarko S, Klecha D. The stigma of mental illness in Southern Ghana: Attitudes of the urban population and patients' views. *Soc Psychiatry Psychiatr Epidemiol*, 2011; 46(11): 1191-1202. doi:10.1007/s00127-010-0290-3
13. Adeeku F. Perceptions and attitudes towards mental illness: The Case of Pantang Community. *Univ Ghana*, 2015; 1-89.
14. Lucksted A, Drapalski AL. Self-Stigma Regarding Mental Illness: Definition, Impact, and Relationship to Societal Stigma. *Psychiatr Rehabil J.*, 2015; 38(2): 99-102. doi:10.1037/prj0000152.
15. Hunt J, Eisenberg D. Mental Health Problems and Help-Seeking Behavior Among College Students. *J Adolesc Heal*, 2010; 46(1): 3-10. doi:10.1016/j.jadohealth.2009.08.008.
16. Abo M. Medical and non -Medical Students ' Attitudes toward Mental Illness, 2016;(January 2013).
17. Borinstein AB. Public attitudes toward persons with mental illness. *Health Aff*, 1992; 11(3): 186-196. doi:10.1377/hlthaff.11.3.186.
18. Yeboah K. Psychiatrist , Geriatric Psychiatry and Counseling Psychology, 2016; 19(7): 5756.
19. Attitudes towards mental illness in Malawi: a cross-sectional survey | BMC Public Health | Full Text. <https://bmcpublihealth.biomedcentral.com/articles/10.1186/1471-2458-12-541>.
20. Kamimura A, Trinh HN, Johansen M, et al. Perceptions of mental health and mental health services among college students in Vietnam and the United States. *Asian J Psychiatr*, 2018; 37(July): 15-19. doi:10.1016/j.ajp.2018.07.012
21. Mfofo-M'Carthy M, Huls S. Human Rights Violations and Mental Illness. *SAGE Open*, 2014; 4(1): 215824401452620. doi:10.1177/2158244014526209.
22. Poreddi V, Ramachandra, Reddemma K, Math SB.

- People with mental illness and human rights: A developing countries perspective. *Indian J Psychiatry*, 2013; 55(2): 117-124. doi:10.4103/0019-5545.111447. [Full text] Attitudes toward mental illness, mentally ill persons, and help-seeking_PRBM.
23. Aruna G, Mittal S, Yadiyal MB, Acharya C, Acharya S, Uppulari C. Perception, knowledge, and attitude toward mental disorders and psychiatry among medical undergraduates in Karnataka: A cross-sectional study. *Indian J Psychiatry*, 2016; 58(1): 70-76. doi:10.4103/0019-5545.174381.
 24. Babür G, Demİrtürk E, Meral Y, Özgüner İ, Yakin İ. Attitudes Towards Mental Illness Among University Students, 2018; (October): 1-2.
 25. Laidlaw A, McLellan J, Ozakinci G. Understanding undergraduate student perceptions of mental health, mental well-being and help-seeking behaviour. *Stud High Educ*, 2016; 41(12): 2156-2168. doi:10.1080/03075079.2015.1026890
 26. Thai TT, Vu NLLT, Bui HHT. Mental Health Literacy and Help-Seeking Preferences in High School Students in Ho Chi Minh City, Vietnam. *School Ment Health*, 2020; 12(2): 378-387. doi:10.1007/s12310-019-09358-641.
 27. Abo M. Medical and non -Medical Students ' Attitudes toward Mental Illness, 2016; (January 2013).

QUESTIONNAIRE

A COMPARATIVE STUDY: PERCEPTIONS AND ATTITUDES TOWARDS MENTAL ILLNESS AMONG FINAL YEAR MEDICAL STUDENTS AND FINAL YEAR NON-MEDICAL STUDENTS

"Hello, my name is Edith Gyamfua Kissi.. I am conducting a study which seeks to assess and compare the perceptions and attitudes of final year medical students and final year non-medical students towards mental illness. I am here to undertake a survey on matters relating to the above-mentioned topic. To find answers to some of these questions, I invite you to take part in this research project. If you accept to participate you will be required to answer the questions in this questionnaire. All the information you provide will be strictly confidential. However, you have the right to accept to participate or not".

Section 1: Respondent consent

I hereby give my consent as a volunteer to participate in this study

Signature:..... Date:.....

Section 2: Sociodemographic Characteristics

Age [] Gender [] Level []
 Programme [] Religion []

Section 3: Perception

1. Are you familiar with the term mental health? a) Yes b) No
2. How did you hear/know about mental health?
 a) General lecture b) media c) internet d) family and friend
3. What causes mental illness?
 a) Drug or alcohol misuse b) Evil spirits c) punishment from God d) Traumatic events
 e) Brain disease f) genetic inheritance
4. How is mental illness treated?
 a) No treatment b) Spiritual intervention c) Herbal drugs d) Consult a psychiatrist or psychologist

Please indicate the extent with which you agree or disagree to the following Statements. SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA= Strongly Agree

		SD	D	N	A	SA
5)	Mentally ill persons are crazy					
6)	One can identify mentally ill persons by their appearance					
7)	Anyone can suffer from mental illness					
8)	Mentally ill persons are violent					
9)	Mentally ill persons recover on their own					
10)	Mentally ill persons recover when they seek help					
	Section 4: Attitudes					
11)	Persons with mental illness should be given the same rights as anyone else					
12)	I consider anxiety to be a weakness or					

	negative attribute					
13)	I would be scared to have a conversation with a mentally ill person					
14)	Mentally ill persons should not be made to make decisions even concerning routine events					
15)	I would be disturbed or upset if I worked on the same job as someone with mental illness					
16)	One should keep their mental illness a secret from their family					
17)	Mentally ill persons should not get married					
18)	I could marry someone with mental illness					
19)	The mentally ill should be bound and isolated from the general public					
20)	I would feel embarrassed if people knew that someone in my family was mentally ill					
21)	If I was suffering from mental illness, I would not want people to know					
	Section 5: Help seeking					
22)	I would go for professional help in case I am faced with any serious mental health issue					
23)	I would feel comfortable talking about personal problems with a professional					
24)	I would feel ashamed if my friends knew I was getting professional help because of a mental health issue,					
25)	I perceive professional help to be effective					