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Prevalence and Psychological Impact of Sexual Harassment against Female Medical Students and Residents at Addis Ababa University, College of Health Sciences

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Contents

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1.Abstract

Background: Gender based violence and sexual harassment remains a substantial issue facing women and girls around the world. Professional women are not exempted, including women who join medical school.

Study objective: The objective of this study was to investigate the prevalence and types of gender-based violence (GBV) and sexual harassment and associated psychological distress in female medical students and residents at Addis Ababa University, College of Health Sciences (AAU CHS).

Method: The study design was a cross-sectional survey. Study participants include female clinical year medical students and residents at AAU CHS. The sampling technique that was employed was total population sampling

with initial target sample size of 340, subsequently changed to 436 after inclusion of first year residents and new clinical year-1 students. The Sexual Experience Questionnaire was used to measure gender-based violence and sexual harassment. Depressive symptoms were measured using the Patient Health Questionnaire 9-item version (PHQ-9). Traumatic stress symptoms were measured using the PC-PTSD scale and anxiety symptoms were measured using the GAD-2. Open-ended questions were used to ask about reporting the incidents, any help obtained, unmet needs and preferences for sources of help. The questionnaires were administered as an anonymous self-administered questionnaire. Data were analyzed using descriptive frequencies and negative binomial regression to look at the association between GBV/sexual harassment and depressive symptoms, traumatic stress and anxiety symptoms.

Results: Even though the questionnaire included sensitive questions, the response rate appeared to be representative of the population. A total of 368 women participated; 65.7% were clinical students and 32.5% were residents. Over one quarter (26.2%) self-identified as having been sexually harassed at the university. Based on systematic screening with the SEQ, the prevalence of sexual harassment among female medical students and residents was substantially higher (81.8%); with 77.2% experiencing gender harassment, 70.6% experiencing unwanted sexual attention and 36.6% experiencing sexual coercion. Of those who were sexually harassed, only 3.2% reported the incident. After reporting, 99.3% did not receive any support from medical school and 97.9% did not receive any help from other institutions. From the women who had received help, 100% of them reported that it was inadequate.

11.1% of the respondents indicated to have moderate depression while 4.1 % of the participants indicated moderately severe and severe depression (each). 38 respondents (10.3%) responded ‘‘yes’’ for 4 out of the 5 questions on the PC-PTSD screening tool indicating possible PTSD. 14.1%

of the respondents scored 3 points (the cutoff point) on the GAD-2 indicating a possible anxiety disorder. Total sexual harassment score and subscales were strongly associated with depression, traumatic stress and anxiety scores. The top three recommendations the women forwarded were to take appropriate actions against the perpetrators, to empower women and increase awareness about the problem.

Conclusions: The study signifies the presence of high prevalence of sexual harassment within the institution. Despite the high figure, there seems to be low perception of sexual harassment, under reporting and inadequate response. One apparent impact is on women's mental health. Participating women identified key actions that need to be taken so that harassment can be reduced and women who experience harassment can be better supported.

1.2. Acknowledgements

I would like to express my gratitude to Dr. Charlotte Hanlon and Dr. Azeb Asaminew for guiding me through the research, for their

feedback and invaluable support. They provided me with their expertise and time through out every step of the way.

1.3. Acronyms

AAU	Addis Ababa University
CHS	College of Health Sciences
EEOC	Equal Employment Opportunity Commission
GBV	Gender Based Violence
LMICs	Low- and Middle-Income Countries
PHQ-9	Patient Health Questionnaire 9-item version
PTSD	Post Traumatic Stress Disorder
SEQ	Sexual Experience Questionnaire
SPHMMC	Saint Paul’s Hospital Millennium Medical College
UK	United Kingdom

2. Introduction

Sexual harassment and gender-based violence are global problems, that are also seen in low- and middle-income countries (LMICs). In recent years, more women in LMICs are now taking on professional roles hence sexual harassment and gender-based violence in workplace setting is coming to the fore.

In Africa, a systematic review and metanalysis were conducted in Nigeria and Ethiopia to determine the overall prevalence of GBV which exhibited higher prevalence in Ethiopia (67.7%).

Impacts of sexual harassment have been studied throughout the world and was found to have negative physical and psychological impact. The psychological impacts are higher rates of depression, anxiety, PTSD, sleep problems. Others are negative effects on work and academic performance, feeling of safety and career advancement.

In Ethiopia, most of the research studies done to date focuses on GBV against women in community and high school settings. In those settings, high rates of sexual harassment have been found, mostly inflicted by intimate partners. But there are some higher institutions in the country which have pioneered doing research in this area. The research yielded the prevalence to be high (27.5%).

In Addis Ababa University College of Health Sciences (AAU_CHS) campus, no such study has been conducted even though there are many anecdotal reports and grievances aired during campaigns and meetings.

2.1 Statement of the problem

There is no evidence about the prevalence of sexual harassment and GBV and associated psychological symptoms in Addis Ababa University, College of Health Sciences. This evidence is needed as an impetus to act and intervene.

2.2. Significance of the study

The study hopes to be of great importance in recognizing the prevalence of sexual harassment and gender-based violence in the institution as well as the types of it. It can help for future interventions and produce institutional and national policies that can protect the community of AAU-CHS. This study is the first of its kind in the College. In doing this, the psychological impacts were identified and women were about their preferences for intervention which will help to ensure that interventions are tailored to their needs and preferences. It is also believed that such research can be reproducible in other institutions so that the extent of the problem can be known in different settings.

2.3. Research questions

In female clinical year medical students and residents at AAU_CHS:

- How prevalent is sexual harassment and gender-based violence?
- What types of sexual harassment and gender-based violence are experienced?
- What is the association between depressive symptoms and GBV and sexual harassment?
- What support and interventions would women affected by sexual

harassment and GBV prefer?

2.4. Scope of the study

This study aims to see the prevalence and types of sexual harassment and gender-based violence against women at AAU_CHS. The scope also includes the psychological impact of these experiences and women's preferences for support and interventions for GBV and associated mental health concerns.

3. Literature review

Gender based violence is defined as “any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life” according to The Declaration on the Elimination of Violence against Women.

There is a range of definitions and categorizations of sexual harassment. There have been proposed legal and empirical definitions of the term. The empirical definition that is all-encompassing is forwarded by Till in 1980. He categorized sexual harassment into five types based on perceptions of their severity, namely, gender harassment, seductive behavior, sexual bribery, sexual coercion, and sexual imposition. The most common form being gender harassment. He defined each as follows :

- *Gender harassment: this includes verbal remarks such as coarse joking, sexist remarks, subjective objectification, sexual posturing, or sexual materials.*
- *Seductive behavior: refers to verbal requests such as sexual advances, subtle pressure, advances, or sexual touching.*
- *Sexual bribery: encompasses sexual advances with some kind of promise of reward*
- *Sexual coercion: incorporates sexual advances with a threat of punishment.*

  Sexual imposition is the most severe form of harassment, comprising sexual assault or touching.

Workplace sexual harassment is defined as "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature . . . when this conduct explicitly or implicitly affects an individual's employment, unreasonably interferes with an individual's work

performance, or creates an intimidating, hostile, or offensive work environment" according to the United States' Equal Employment Opportunity Commission's (EEOC) definition.

Victims of sexual harassment have reported negative psychological consequences following the incident. These include feeling trapped in unchangeable situation, helplessness, worthlessness, fatigue, isolation, shame, guilt, irritability and vulnerability. In addition to this, feelings of hopelessness, avoidance of stimuli associated with the traumatic event, numbing of responsiveness, tremor and an increase in stimuli were reported among women who experienced severe forms of sexual harassment. Threat to victims' job in case of reports, uncertainty of reoffence and working in the same environment where the harassment occurs were linked as factors which can lead victims to symptoms of anxiety.

In multi-country research conducted by the WHO in 2011, it was found that physical and sexual violence against women is common. The study was done in 10 countries, including Ethiopia. The result showed that more than a quarter of women who participated in the research had experienced sexual or physical violence since the age of 15 years. Half of the participant women who were from Bangladesh, Ethiopia, Peru, Samoa, and the United Republic of Tanzania responded that they have been assaulted since that age. Most of this violence were inflicted by intimate partners. The lifetime prevalence of this violence ranged from 15% in Japan and 71% in Ethiopia.

A systematic review and meta-analysis done in sub-Saharan Africa found that the overall prevalence of GBV in Nigeria to be 42.3% and 67.7% in Ethiopia. The overall prevalence of GBV is generally high in these counties and the highest rate was seen in Ethiopia.

In Ethiopia, research was done in high school female students at

Debremarkos which found out the prevalence of GBV at the time to be 57.3 % whereas the lifetime prevalence was 67.7%.

On a research that studied gender equality in global health workplace- UK and Somaliland partnership, women in Somaliland reported more overt gender based discrimination at work place compared to women in the UK.

In a study among US women physicians, 47.7% of women physicians reported ever experiencing gender-based harassment, and 36.9% reported sexual harassment. Of these, 31% of the experiences of gender-based violence and 20% of sexual harassment occurred during internship and residency. This study also identified correlates of experiencing GBV or harassment, including younger age, being separated or divorced and being born in USA with high reporting.

In Austria, a study was carried out to see the gender difference in medical students' experiences of mistreatment by various groups of perpetrators. They found that perpetrators were mostly strangers (79.5%), and friends (75.0%) followed by university staff (68.2%). Next to humiliation, sexual harassment was the most common form of mistreatment. Women were found to experience more sexual harassment than men.

One study looked at abuse and harassment amongst emergency medicine residents in the US and found out that 98% of participants had experienced sexual harassment previously, more common in women than men. Patients were found to be the most common perpetrators with unwanted sexual advances, sexual humor or unfair treatment based on gender.

In US, 61,187 participants were included on a study to identify the association between sexual violence and depression, anxiety and other symptom profiles.it was found that 51% of them were victims of sexual violence of which 18.82% reported being diagnosed with depression, 8.37% with anxiety disorder and 28.28% combination of these.

Studies showed that people have different cultural perceptions as a result

of different tendencies to encode and decode messages. These affect what is perceived as language and behavior that signify sexual harassment. Hofstede described individuals have different values and perceptions of their work situation and these are affected by national cultural structures and dimensions. Another study compared the perception of sexual advances between American and Brazilian men and women and found that they have different perception of what is sexual encounter based on their culture.

A research conducted in Nigeria found that men sometimes use violence to get resistant women to conform to cultural expectation. Women's inability to seek help and escape abusive relationships were found to be low because of their desire to maintain their ''honor'' in the society, because of cultural norms learnt through socialization, and gap of gender power relation. Gendered expectations, privilege men's have and boy-preference in child birth were reported on this research as factors that contribute for violence against women. The socialization process identified includes the upbringing of children which is said to be a key factor in the acceptance of gender inequality.

On a study done in an institution of higher education in Sub-Saharan Africa, it was found that 54.1% of the study participants knew the meaning of sexual harassment. 57% of all respondents said they know sexual harassment does occur at the university, but students didn't identify what sexual harassment acts are in particular. This could be explained because societal perception of sexual harassment varies among and in societies. This in turn can be explained by the presence of gender stereotypes and socioeconomic hierarchies. In this study, females were more able to identify sexual harassment acts because they are likely to have firsthand experience.

In Ethiopia, it is seen that women victims kept silent and confided only in friends and relatives. They didn't seek help from other places because of lack of awareness and general society's non-acceptance of their reporting.

At work place, factors promoting sexual violence include, migration status, culture and lack of negotiating power. Interventions like education of both sexes, creation of awareness, sustainable resource allocation to support victims, effective law enforcements are forwarded by the study. According to the research, perpetration of violence against women in Ethiopia is found widely and is accepted which is linked to the fact that Ethiopia is highly patriarchal and masculine dominance is prevalent as well as accepted. The tolerance of the violence is seen both at individual and societal level in urban and rural settings.it is found that Ethiopian women have 'accepted' the sexual exploitation and don't view it as a crime or report to the authorities. Reasons given are normalization of the acts, family pressure to uphold gender conventions, cultural expectations to meet moral standards of gender in patriarchal society and the resistance of men. This is also supported by historical accounts that tolerated violence against women.

A cross-sectional study conducted at a medical school in Oman determined the prevalence of abuse and mistreatment during clinical internship and found that 96.6% perceived that mistreatment exists. Verbal and academic abuse was common (87.9%), followed by sexual harassment (24.1%) and physical abuse (22.4%).

A study done in Nigeria among female university students found that the prevalence of gender-based violence was 58.8%, of which 22.8% experienced physical violence, 22.2% sexual violence and 50.8% experienced emotional and verbal violence.

In 2020, systematic review and meta-analysis was done to see the prevalence of sexual violence in Ethiopian workplaces and the pooled prevalence of workplace sexual violence was 22%. Of these, 14.1% was for attempted rape, 8% for rape and 33.2% for sexual harassment. The pooled prevalence among female university staffs was found to be highest percentage (49%). In the same study, the sub-group analysis indicated that

the pooled workplace sexual violence was 22% among students of which 20% of the pooled prevalence was in high school and 27% in universities.

A study that looked at the impact of sexual harassment found that frequent sexual harassment can result in significant negative life consequences that affect work place performance and mental health.Another study showed that sexual harassment experiences were significantly correlated with PTSD symptoms even of the victims had sustained other types of trauma previously.On a research that studied the correlation of online and offline sexual harassment in adolescents with anxiety and depression, it was found that 48.50% of girls and 28.19% of boys reported sexual harassment, mostly offline type. This was significantly correlated with increased anxiety and depression symptoms in both genders.

The association of sexual harassment with midlife women's mental health was assessed on a study and was seen that 25% of the participants had depressed mood and 40% of them had anxiety.

A cross sectional study done in Nepal found that the prevalence of depression, anxiety and stress was 45%, 52% and 35% among sexually harassed adolescents. Of these, 31% were having mild to moderate levels of depression while 14% were having severe to extremely severe levels.

On a study conducted in South Africa on African female refugees and migrants, it was found that sexual trauma events were associated with greater odds of post-traumatic stress disorder risk.

In Ethiopia, a research conducted in rural area found that 12-month prevalence of depressive episode among women was 4.8% and life time prevalence of any form of intimate partner violence was 72%. Even though research done in different parts of the world indicate clear negative impacts of sexual harassment on women, this has not been a well-researched area of interest in our country yet.

In university settings there are few studies that have been carried out in

Ethiopia. In a study conducted at Sodo University to assess sexual violence against women, it is cited that the life-time prevalence of GBV was found to be 58% and 59.9% in cross-sectional studies conducted at AAU and Hawassa universities, respectively. The study at Sodo University focused on female students with a sample size of 377 who were enrolled to the university in 2012/1013 and used a simple random sampling technique. In that study, the prevalence of GBV/harassment was as follows: attempted rape 23.4%, completed rape 8.7%, physical harassment 24.2%, verbal harassment 11.3%. But the timing of the incidents was mostly during their high school years or in the first year of enrolment to universities. The perpetrators were mainly their own boyfriends and family members .

During a 16 days campaign carried out in Ethiopia in 2019, a platform was created for female health workers to speak about their experience in relation to sexual harassment and gender-based violence. As a result of this, many female clinicians reported experiences of harassment and GBV. Their reports highlighted the challenges faced by female health workers in Ethiopia including an unsafe working environment, lacking of training and awareness on the area, absence of specific offices to report to and indifferent responses for reported cases, taboos and threats made towards the victims. In addition to getting a huge response on social media throughout the country, the campaign highlighted the adverse impacts of GBV. The impacts were psychological, physical, work related and economical. These included: guilt, withdrawal, denial, self-blame, depression, PTSD and other trauma and stress related illnesses, decreased performance, absenteeism, loss of focus, career interruptions, hampered career advancement and additional cost of living due to measures taken to maintain safety.The campaign resulted in panel discussions and forwarding of ideas for future directions.

More recently, in 2020, at Saint Paul’s Hospital Millennium Medical College a study was done to assess the knowledge, attitude and prevalence of sexual harassment against female undergraduate and postgraduate students. The prevalence was found to be 27.5%, 53.6% of inappropriate touching happened during duty hours of which interns held the most

proportion but only 11.8% reported the incidents.

There have been some encouraging attempts to identify the depth of the problem yet it is an area that needs more research. Following the 16 days campaign Safe Space for Health Care -MED, there were efforts made to implement changes at AAU-CHS. These are, discussion was conducted with female Orthopedics staffs to screen for sexual violence, on-call rooms were separated for men and women, and interns' assessment was made more transparent at the department. In addition to this, a meeting with the staff members was conducted, newly joining residents were given orientation about GBV, decisions were made to strengthen the gender office and to devise a questionnaire about GBV. But to my knowledge, no prior research was done on this topic at the institution. Research based recommendations are important to address the issue in the institution and possibly in the country at large.

4.Objectives of the study

In female clinical year medical students and residents at AAU_CHS:

- To determine the prevalence of sexual harassment and gender-based violence.
- To determine the types of sexual harassment and gender-based violence experienced.
- To explore the association between depressive symptoms and GBV and sexual harassment.
- To identify support and interventions women affected by sexual harassment and GBV would prefer.

5. Methodology

5.1 Study design

The method that was employed was a cross sectional study that was conducted from June 2021 to August 2021.

5.2 Study setting

The study was conducted at AAU-CHS. It is part of AAU and was established in 2009/10 in Ethiopia. It is comprised of four schools of which medicine is one of them and one teaching hospital, Tikur Anbessa Specialized Hospital. The hospital is one of the largest specialized hospitals in Ethiopia and serves as a training center for undergraduate and postgraduate medical students. The TASH is the largest referral hospital in the country with 700 beds, 200 doctors, 379 nurses and 115 other health professionals providing healthcare service for patients coming from all areas of the country.

In 1964, Medicine program was launched as an undergraduate program of five and half years of training. It started with few numbers of students and staff members of which females had little proportion. Throughout the years, the number of female students who are entering medicine has grown. Estimated number of female students after 2017/2018 is about 25-30% of medical students. The current number of medical students in undergraduate program is about 1311.As part of the postgraduate programs, there are 17 speciality and nine sub-speciality programs with years of training ranging from 3 to 5 years.

The nature of training in undergraduate programs include classroom lectures, online learning and practical sessions in different laboratories. The fifth year of undergraduate training will be internship, where students will be working as candidate doctors including duty hours. Residency programs include lectures and didactic activities, in-patient and out-patient services, mentorship, day and night shift duties.

5.3 Study period

The study was conducted from June 2021 to August 2021.

5.4 Sampling technique

Total population sampling technique was used. Survey form was distributed to all eligible women in person. To keep the confidentiality of the process, the form was provided in an open envelope which bears psychiatry department's seal. Participants returned the filled forms in sealed envelope to focal persons appointed by the primary investigator or to the primary investigator directly. The primary investigator made sure the returned envelopes were sealed.

5.5. Study population

Female clinical medical students and residents at AAU_CHS.

Women are more vulnerable for GBV and sexual harassment than men during their lives. Proposed reasons for these include manifestation of power, attitude and roles set by the society and unsafe environments. Similarly, medical school leadership is male dominated and is known for its hierarchy where gradings include subjective assessment of students by their supervisors. Duty rooms are shared by both male and female professionals. The working hours include night-time shifts where females need to pass through isolated, dark and unattended corridors and pathways. These make women more vulnerable for sexual abuse coming from colleagues, other co-workers, or seniors. The rationale for including clinical students only as opposed to including all undergraduate students is because the focus of the research is on clinical setups where students actively participate in hospital-based activities in addition to classroom activities.

5.5.1. Inclusion criteria

All female clinical year undergraduate students and all female residents including newly joined first year residents.

5.5.2. Exclusion criteria

All non-clinical undergraduate students, male undergraduate students, and male residents.

5.6. Sample size

In a research done at SPHMMC, the prevalence of sexual harassment in undergraduate and postgraduate students is 27.5%.

Using the formula,

$$n = \frac{Z_{\frac{\alpha}{2}}^2 p(1-p)}{d^2}$$

Where; Z= Confidence level.

d= Margin of error

P= Prevalence of sexual violence among college students

n_i=306

The total number of female undergraduate and post graduate students during the proposal writing of this research was 340. But during the time of data collection, after the addition of first year residents and new clinical year students, the total number of female medical students and residents became 436.With total population sampling, it was aimed to get the maximum number of respondents which can be representative of the population. From all eligible candidates, 368 (84.4%) women participated in the research.

5.7. Data collection

5.7.1. Data collection tools

(1)Sociodemographic data (age, level of training, marital status and housing accommodation) were included. Mixture of close ended- and open-ended questions were asked for women who endorse any item

in the Sexual Experience Questionnaire that focus on the report of the incident, setting of the incident, the support they obtained, their preference to get support from and negative impacts of the incident.

(2) Using forms that include questionnaires: Sexual experience questionnaire (SEQ), Patient Health Questionnaire-9 (PHQ-9), Primary care post-traumatic stress disorder screen for DSM-5 (PC-PTSD-5), Generalized anxiety disorder 2-item (GAD-2) and few additional open-ended questions. These questionnaires were self-administered. The forms were distributed and collected in person and were made accessible to each department and level of training. The data collected from clinical year-2 students was during their qualification exam week.

A) Sexual Experience Questionnaire (SEQ)-shortened version :The Sexual experience questionnaire (SEQ)-shortened version is a self-report inventory that is used to assess the prevalence of sexual harassment. It includes definition of terms, confidentiality clause and 19-item questions. Each item is rated from 0 (never) to 4 (very often). Women who scored 1 or more on Sexual Experiences Questionnaire (at least one item experienced at least once) are considered as sexually harassed. Reports of subscales are added by computing the 19 items. Subscale scores are calculated by summing the scores on each of the following items: gender harassment (items 1-4, 6-7,9), unwanted sexual attention (items 5,8,10,13-14), and sexual coercion (items 11-12,15-19).This tool has been previously used in studies that were done in Wolaita Sodo university and SPMMHC.

Questions assessing gender harassment are assessing the presence of generalized sexist statements and behaviours that convey insulting or degrading attitudes about women like offensive jokes, sexual remarks, display of sexual materials, condescending treatments and others. To assess unwanted sexual attention, that comprises of unwanted seductive behaviours and offensive advances like attempting to establish romantic relationship, invitation to dates/dinner/drink, touching, stroking or fondling were asked. Sexual coercion which is cross sexual imposition was assessed with questions like feeling of subtly bribed or threatened to get treatments, unwanted sexual attempts, badly treated for refusing sex and others. Questions about gender harassment generally assess hostility whereas questions about unwanted sexual attention and sexual coercion assess sexual advances.

B) Patient health questionnaire 9 (PHQ-9) :PHQ-9 is an instrument used as screening tool for depression and its severity over the past 2 weeks with nine items. Each item is rated from “not at all” to “several days” to “more than half the days”, to “nearly every da y”. A score of ‘1-4’ is indicative of minimal depression, ‘5-9’ mild depression, ‘10-14’ moderate depression, ’15-19’ moderately severe depression and ’20-27’ severe depression.

C) Primary care post-traumatic stress disorder screen for DSM-5 (PC-PTSD-5).It is a 5 item screening questions with yes/no options. It has been used in different studies in rural setups in Ethiopia. A cut-off point of ‘3’is optimally sensitive to probable

PTSD whereas using a cut-off point of 4 is optimally efficient as it decreased false negative screen results.

D) Generalized anxiety disorder 2-item (GAD-2).

It is a 2-item screening tool which grade each question with “not at all”, “several days”, “more than half the days” and “nearly every day”. A cut-off point of ‘3’ has a sensitivity of 86% and specificity of 83% for the diagnosis of GAD.

5.8. Data analysis

Data was analyzed using SPSS version 25 using descriptive frequencies. To investigate the association between scores on the Sexual Experiences Questionnaire and mental health symptoms, it was necessary to use negative binomial regression because the mental health measures (depression, anxiety and PTSD scores) were all negatively skewed and over-dispersed. The candidate was supported with these analyses, which were conducted in Stata version 14.0. The output gives the risk ratio for the association.

6. Ethical considerations

Ethical permission was sought from the Department of Psychiatry, College Health Sciences, Addis Ababa University.

The data extraction sheet was anonymous, the information obtained from the questionnaires was made to be accessed by the primary investigator only and were stored safely, there was a consent form provided on the questionnaire. For women who need additional help, contact addresses were put at the end of the questionnaire through which they can get help from the psychosocial support group that has been launched at AAU_CHS. Two students sought psychological help and they were given the support anonymously. Had there been any allegations that need the attention of the legal system, the respondents were given option to contact the legal office of the institution through the contact information that will be provided on the questionnaire but none was found.

7.Dissemination and utilization of results

The results of this study will be presented at the Department of Psychiatry, Addis Ababa University. The final thesis will be availed in both soft and hard copies at College of Health Sciences, Addis Ababa University library. This will be open for the staff and future publishing.

8. Result

8.1. Description of sociodemographic characteristics

The total number of residents and female medical students enrolled at AAU_CHS is around 436. Of these, 368 participated in the research giving an estimated response rate of 84.0%. The target sample size was only 340 because this did not include the first-year residents and residents of

gynecology and pediatrics. Preclinical year-2 students passed to clinical year-1 students during the time of data collection and had at least 6 weeks of attachment, hence they were added as eligible participants. Most (93.1%) of the participants were in the range of 20 to 29 years old; with 62.3% in the range of 21-24 years and 30.8% in the range of 25-29 years. Only 6.8% of participants were 30 years or above. **Table-1**

Residency programs' year of training spans from 3 years to 5 years. Anesthesiology, dermatology, emergency medicine, family medicine, internal medicine, nuclear medicine, neurology, pediatrics, psychiatry and radiology are programs with 3 years of training. The programs that have 4 years of training include ENT, general surgery, gynecology and obstetrics, oncology, oral and maxillofacial surgery, orthopedics and Pathology. Neurosurgery, plastic surgery and urology programs' training last 5 years. The highest number of respondents are from internal medicine department whereas the lowest are from oncology. Clinical students comprised 67.5% of the participants, and 32.5% of participants were residents. The highest number of respondents were clinical year-2 students (43.2%) and the lowest number of respondents were fourth year residents. There were no responses collected from fifth tear residents. Of the total participants, 301 (84.8%) were single, 53 (14.9%) were married and 1 (0.3%) was divorced. 120 (34.7%) of the participants lived on-campus. **Table-1**

Table-1: Sociodemographic characteristics

Sociodemographic	Number (N)	Percent (%)

characteristics			
Age (in years)	21-24	217	62.3
	25-29	97	30.8
	30 and above	24	6.8
Level of training	Clinical year-1	86	24.3
	Clinical year-2	153	43.2
	Residency yr-1	52	14.7
	Residency yr-2	27	7.6
	Residency yr-3	34	9.6
	Residency yr-4	2	0.6
Marital status	Single	301	84.8
	Married	53	14.9
	Divorced	1	0.3
House accommodation	On-campus	120	34.7
	Off-campus	226	65.0

8.2. Responses to sexual experience questionnaire

The initial screening question for the presence of sexual harassment is: ‘‘have you ever been harassed at the university?’’. 73 (26.0%) of the participants responded that they had ever been harassed at the university. **Fig-1**

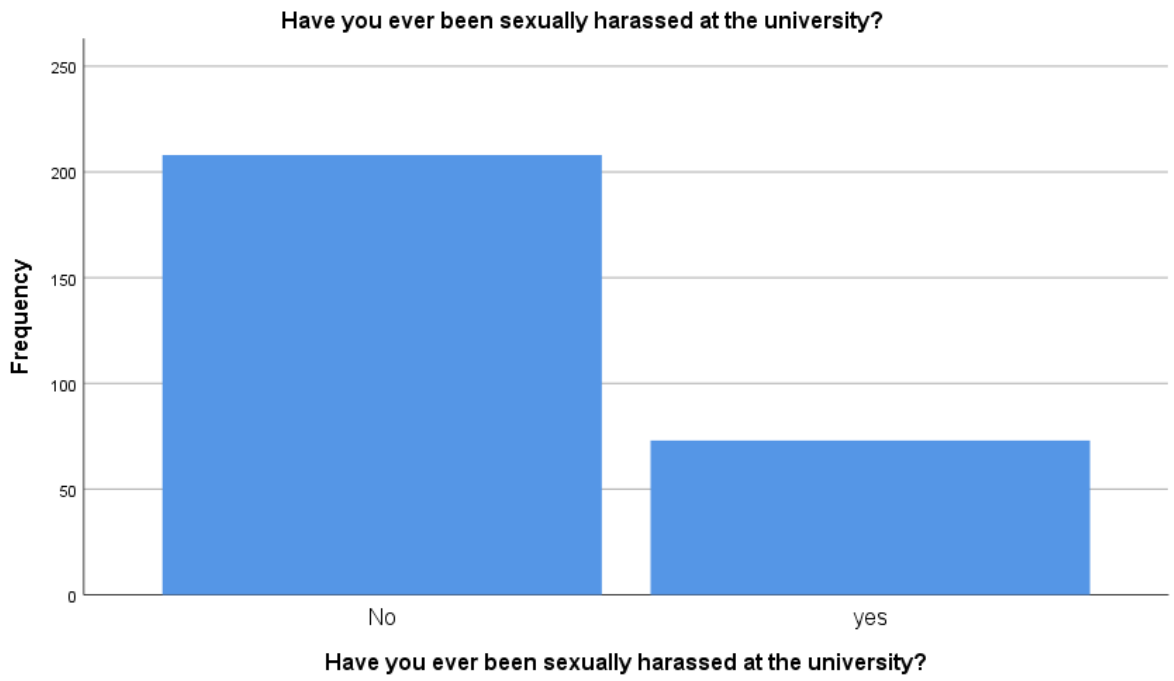

Fig 1. Response for ‘‘have you ever been sexually harassed at the university?’’

81.8% of women scored 1 or more on Sexual Experiences Questionnaire (at least one item experienced at least once). (sample n=291) .77.2%

scored 1 or more on gender harassment sub-scale (sample n=311). 70.6% scored 1 or more on the unwanted sexual attention sub-scale (sample n=316). 36.6% scored 1 or more on the sexual coercion subscale (sample n=320). The sample number for each subscale differs because there were missing data for some subscales but not for others. **Table-2**

Table 2: Types of sexual harassment

Type of sexual harassment	Frequency (N)	Total number of respondents (N)	Percent (%)
Gender harassment	240	311	77.2
Unwanted sexual attention	223	316	70.6
Sexual coercion	117	320	36.6

With regard to the frequency of sexual harassment, (in terms of never, once sometimes,…) 196 respondents out of 367 (53.4%) reported that they have experienced it at least once. **Table-3**

Table 3: Frequency of sexual harassment

Frequency of sexual harassment	Number (N)	Percent (%)
Never	136	37.0
Once	20	5.4

Sometimes	124	33.7
Often	33	9.0
Very often	18	4.9
Habitually told suggestive stories or offensive jokes	1	0.3

8.3. Setting of sexual harassment, safety, reporting and strategies used

Only 3.2% of women reported the incident. From those who reported, 99.3% did not receive any support from medical school and 97.9% did not receive any help from other institutions. From the women who had received help, 100% of them reported that it was not adequate**. Fig-2**

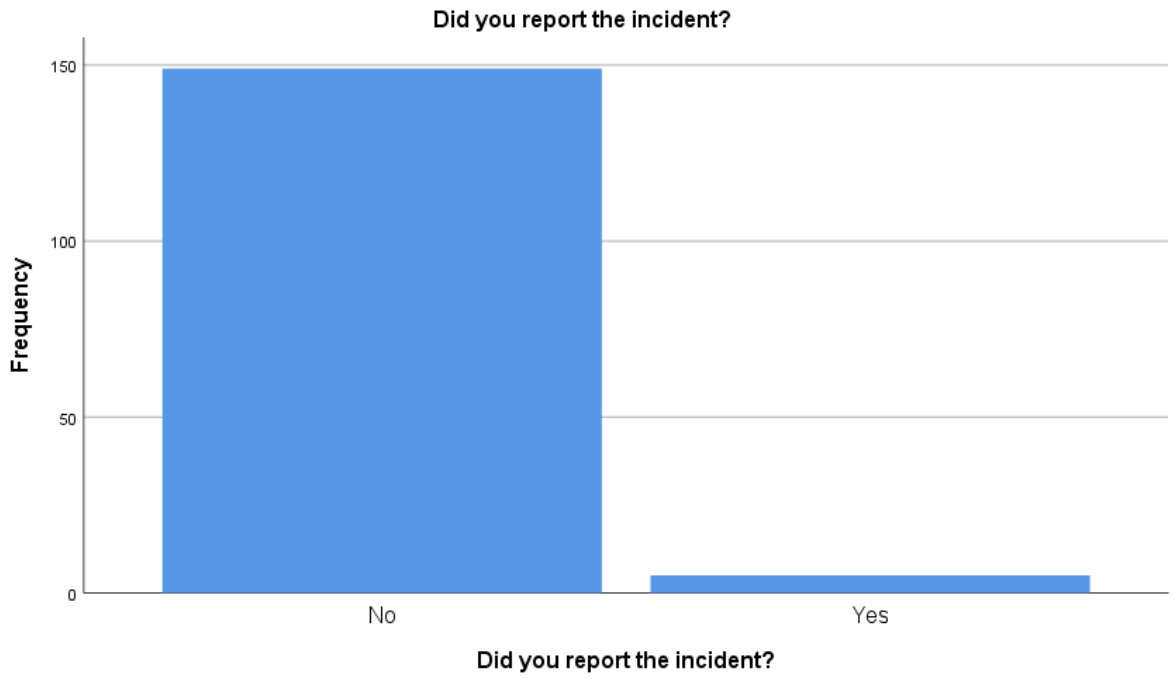

Fig 2. Response to "Did you report the incident?"

40(28.4%) respondents reported that they didn't report the incident because of fear of academic consequences and 9.9% of them feared repeat abuse or harassment. 27.7% of the women didn't know where to report. **Table-5**

Table 5: Reasons for not reporting

Reasons	Number	Percent (%)
Fear of academic consequences	40	28.4
Fear of repeat abuse or harassment	14	9.9
Didn't know where to report	39	27.7
I didn't think it would	8	5.7

make a difference		
I thought I can handle it by myself	6	4.3
I didn't know it was something to be reported	3	2.1
I didn't want the incident to go public	2	1.4
combination of these reasons	29	20.6

Other reasons include ''I didn't think it would make a difference'' , ''I thought I can handle it by myself'', ''I didn't know it was something to be reported', ''I didn't want the incident to go public'', and combination of these reasons. Combination of reasons accounts for 20.6% of the reasons for not reporting.

32.9% of the incidents occurred during duty hour and 48.3% of them happened in other settings. Combination of different settings was the second most common setting where respondents experienced sexual harassment. **Table-4**

Table 4: Setting of the incidents

Setting	Number (N)	Percent (%)
Duty hours	47	32.9
During lectures	13	9.1

Mentorship meeting	13	9.1
Commination of settings	44	31
During clinical rotations	8	5.6
Library and the way back to dormitory from library	5	3.5
In the hallways	3	2.1
Lounge	4	2.8
Others	6	4.2

Other settings include during clinical rotations, library and the way back to dormitory from library, in the hallways, lounge, during exams, at student clinic, online, in the compound harassment from the security guards and in class debate during gender class.

28 women out of the respondents commented on the open-ended question regarding their safety as ‘’I feel safe’’ while 33 reported feeling ‘’not safe’’. Others reported they feel ‘’relatively safe’’, ‘’fair’’, ‘’not safe during duty hours’’ and ‘’safe but cautious’’. **Fig-3**

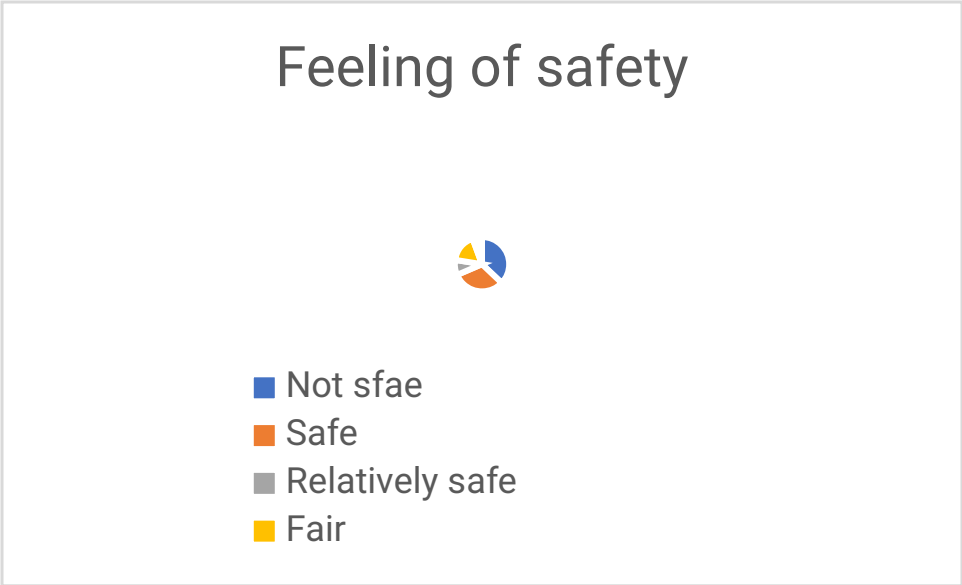

Fig- 3- Feeling of safety

From 57 women residents who responded about the effect of the incident on their choice of specialty, 98.2% were not affected.

The impact sexual harassment has on career is reported mainly as '' none'', ''I have low self-esteem'', ''I was very distressed and couldn't focus on my studies'', and ''I have psychological distress''.

Support systems recommended by the respondents were to create awareness about sexual harassment, to empower women, prepare platforms where open discussions can be held, taking reassuring measures on the perpetrators, arranging counselling and therapy sessions for women, organize responsible body which is trusted by the students, organize peer support groups, to facilitate anonymous reporting systems, to prepare separate duty rooms ad toilets, to build a transparent teaching system, provide public lectures, to involve families and to make sure the reporting offices are approachable.

The top three recommendations the women gave for the school are to have appropriate measures/punishments taken on the perpetrators, empowerment ad encouragement of women to come forward and awareness creation.

8.4. Description and association of psychological impact

41 respondents (11.1%) scored between 10 and 14 on PHQ-9 screening tool, 15 participants scored 20 and more indicating the presence of depression and severe depression respectively. 38 respondents (10.3%) responded ‘‘yes’’ for 4 out of the 5 questions indicating probability of PTSD. 14.1% of the respondents scored 3 points on GAD-2. **Table-6**

Table 6: Findings of screening tools

Psychological measure		Number (N)	Percent (%)
Depression	Mild Depression (PHQ-9 score of 5-9)	88	24.0
	Moderate Depression (PHQ-9 score of 10-14)	41	11.1
	Moderately Severe	15	4.1

	Depression (PHQ-9 score of 15-19)		
	Severe depression (PHQ-9 score of ≥ 20)	15	4.1
Post-traumatic stress disorder (PC-PTSD score of ≥ 4)		38	10.3
Generalized anxiety disorder (GAD-2 score of ≥3)		52	14.1

The risk ratio for the association between SEQ total score and PHQ-9 symptoms was 1.02 (95% confidence interval 1.01, 1.04; p = 0.001). This means that for every 1-point increase in SEQ score there was 1.04 times increase in PHQ score. That means a strong association between SEQ score and depressive symptoms (sample n=275).The risk ratio for the gender harassment sub-scale and PHQ-9 total score was 1.05 (95%CI 1.02, 1.08) (n=292).For unwanted sexual attention sub-scale and PHQ-9 total score, the RR was 1.04 (1.01, 1.08) (n=296).For sexual coercion subscale and PHQ-9 total score, the RR was 1.05 (95%CI 1.01, 1.09) (n=301).RR for total sexual experience scale score was also significantly associated with both GAD total score (1.02; 95%CI 1.01, 1.03; n=274) and PTSD total score (1.03; 95%CI 1.01, 1.04; n=262).

9.Discussion

This institutional based study assessed the prevalence and psychological

impact of sexual harassment against female medical students and residents at AAU_CHS. The majority of women (81.8%) had experienced some form of sexual harassment at least once (scored 1 or more on Sexual Experiences Questionnaire). Experience of sexual harassment was strongly associated with negative mental health status. However, very few (only 3.2%) reported the incident and very few women (<1%) received support of any kind.

In this study, it was seen that 4 out of 5 women had experienced sexual harassments, with the majority having experienced gender harassment and unwanted sexual attention and over one third have experienced sexual coercion. These findings indicate that sexual harassment of women in AAU-CHS is the norm.

Compared to the life time prevalence of gender-based violence and sexual harassment (15% in Japan to 71 % in Ethiopia) the finding of this research is high. Compared to physicians US, the prevalence of sexual harassment in this institution is more than twice as common. The finding is lower when compared to emergency medicine physicians experience of sexual harassment in the US (98%). On a research done in Austria to assess sexual harassment during medical training, the prevalence of sexual harassment was found to be 38% which is significantly lower than the finding of this study. Similarly, the rate of sexual harassment in Oman medical school was 24.1 %. The figure is still high when compared to the study conducted in Northern Nigeria which is 58.8%. In reference to the study done on female medical students at Sodo university, AAU and Hawassa university, the prevalence ranged from 36.1% to 59.9%. From the female students who reported harassment at AAU_CHS, 47.9% of them have been sexually harassed at least sometimes. This signifies the problem is deep rooted and common. .

This figure is high compared to a previous institutional study carried out at SPMMHC’s that found the prevalence of sexual harassment among female

undergraduate and postgraduate students to be 27.5%. This higher number of prevalence might be related to the out-of-hours working for clinical students/ residents, unseparated duty rooms, the long distance from library to dormitory which can be unattended during night times. These reasons might explain the difference between the prevalence in this institution and other non-medical setups. But in relation to the finding done at SPHMMC, the setup is relatable but there is above 50% increase in prevalence in at AAU_CHS. This might be secondary to a culture at this institution that normalizes sexual harassment or other factors that need further study.

From each subscale, gender harassment is found to be highly prevalent that signifies the participant faced sexist statements and behaviours that convey insulting or degrading attitudes about women like offensive jokes, sexual remarks, display of sexual materials, condescending treatments and others. From other studies, it is found that the higher rate of gender harassment worldwide rather than unwanted sexual attention and sexual coercion can be explained by the underlying motivation. It is said that the motivation that lies under gender harassment is expressing hostility towards women unlike sexual exploitation which motivates the first two. This may indicate that women in the institution are targets of men's hostility and even though these are women who are educated, men tend to undermine them..

26.3% of the participants responded they have been sexually harassed at the university on the screening question which appears before the Sexual Experience Questionnaire. The figure is high but when compared to the finding after found after the completion of the questionnaire (81.8%), there is a 55.6% difference. This shows that the perception of sexual harassment might be low. As seen in other studies, culture determines the different tendencies to code and decode messages and differs from country to another. On a research done in Sub-Saharan Africa,54.1% of the

respondents knew the meaning if sexual harassment but students didn't identify what the acts are in particular. It has been proposed that it can be because of societal perception, gender stereotypes, socioeconomic hierarchies and effects of patriarchal society. Hence, the low perception might be explained by possible tendency to normalize and get accustomed to sexual harassment as a result of living in a culture where sexual harassment is a common practice .

In this study, only 3.2% reported the incident and more than quarter of them reported that they didn't report the incident because of fear of academic consequences followed by not knowing where to report and combination of reasons. The finding in this study that participants felt that there could be academic consequences implies that people in authority over them were responsible for the harassment. Lack of awareness about the reporting system perpetuates the incidents even though there are structures in the school that are meant to serve the purpose. The women identified combination of factors hampering them from reporting that signifies that there are layers of barriers that keep victims away from reporting.Prior studies show that not reporting is common in victims of sexual harassment and this can be explained by cultural expectation to maintain 'honor', socialization, patriarchal community and prevalent gender inequality. Working on the reporting system, awareness creation and arranging legal support were mentioned as possible ways to go forward in this area.

Finding of this research shows that 32.9% of the incidents occurred during duty hour, followed by combination of settings (30.0%). On the study done at SPHMMC, the commonest time to experience sexual harassment was in the night duty with 53.6% and the commonest place was at ward with 39.3%. decreased number of working staff during duty hours, unseparated duty rooms and dark places are said to be the reasons for the high incidence on studies. This implies that that the nature of the workplace is important and that it is not currently safe for women. .

The impacts of sexual harassment found on this study are comparable to other studies. In US, on a study done to identify the association between sexual violence and depression, anxiety and other symptom profiles.it was found that 51% of them were victims of sexual violence of which 18.82% reported being diagnosed with depression, 8.37% with anxiety disorder and 28.28% combination of these. It is seen that work performance decreases, PTSD and anxiety increases. Similarly, 25% depression rate and 40% anxiety rate was seen in such population, In Nepal, rate of depression, anxiety and stress in sexually harassed women were found to be 45%, 52% and 35% respectively. From these, 31% had mild to moderate depression while 14% of them had severe to extremely severe depression. On a research done in South Africa, the rate of depression was found to be 48% in African refugees and migrants who had sexual trauma Frequent sexual harassment, as seen in this study, has been identified as a factor in the development of negative psychological impacts..

On a 16 day campaign done in Ethiopia regarding sexual harassment and gender based violence, it was stated that the impacts include guilt, withdrawal, denial, self-blame, depression, PTSD and other trauma and stress related illnesses, decreased performance, absenteeism, loss of focus, career interruptions, hampered career advancement and additional cost of living due to measures taken to maintain safety. On another research conducted in rural area found that 12-month prevalence of depressive episode among women was 4.8% and life time prevalence of any form of intimate partner violence was 72%. The current research found the screening tools yielded indication of moderate and very severe depression to be 11.1% & 10.3% and for GAD & PTSD to be 10.3 % and 14.1% respectively. unwanted sexual attention and coercion were all strongly associated with depressive symptoms. Sexual harassment also showed high association with and PTSD and GAD. This signifies that the response to sexual harassment needs to account the mental health consequences like identification of problems, treatment and creating a

safe environment where victims can rehabilitate well .

Support systems recommended by the respondents are to create awareness about sexual harassment, to empower women, prepare platforms where open discussions can be held, taking reassuring measures on the perpetrators, arranging counselling and therapy sessions for women, organize responsible body which is trusted by the students, organize peer support groups, to facilitate anonymous reporting systems, to prepare separate duty rooms ad toilets, to build a transparent teaching system, provide public lectures, to involve families and to make sure the reporting offices are approachable. The top three recommendations the women gave for the school are to have appropriate measures/punishments taken on the perpetrators, empowerment ad encouragement of women to come forward and awareness creation. other studies recommendations are in line to these findings. Encouraging attempts to create awareness at AAU_CHS have been done by giving orientation to newly joining residents which can expand to include all female students at the institution. Discussions made at department level by directly asking the need of female residents and empowering them can be replicated in others too. Taking appropriate measures where both perpetrators and victims can learn from can encourage women to report..

Recommendation

It is seen from this study that there are gaps in the identification of sexual harassment, feelings of safety, reporting, measures taken and negative mental health impacts. One of the recommendations forwarded by other studies is to identify the depth of the problem which this study can be one of many yet to come. Using these findings, existing interventions and modifications of systems can be facilitated. These includes using the institution’s media, creating awareness, creating accountability and proper

reporting systems which are easy to access and that keep confidentiality, protecting women from academic consequences related to reporting by minimizing the subjectivity of grading system, separating duty rooms, assigning security guards for the way back to library at night, giving women alarms when they are on call, taking appropriate measures on perpetrators, providing support system including addressing mental health, challenging the culture of 'tolerant' attitude towards sexual harassment and many more.

Limitations and Strengths of the study

One of the limitations of this study is missing data. Some respondents started out filling the forms but dropped out questions at the end, specially the open-ended questions. There are approximately 100 women (mostly residents) who didn't participate in the research. Since residents attach at different hospitals for months, accessing them and following them up to fill the questionnaire was highly inconvenient. In addition to this, the sensitive nature of the research might have played a part in the non-participation of the research and the missing data. Moreover, intern doctors which are said to be the highest victims of sexual harassment were not included in the research as there were no interns at the institution because of delay in training as a result of COVID-19. Since the research is cross sectional study, it omits eligible participants who have withdrawn from the university during the time of research. It also doesn't describe the casual relationship of the variables. Finally, clinical year-2 students were taking their qualification exam when they filled the questionnaire. The presence of depressive symptoms during the time can dilute the association between sexual harassment and depressive symptoms.

Despite this, one of identified strength of the research is the questionnaire included sensitive and discomforting questions so it was designed to keep the confidentiality of the respondents. Furthermore**,** the sample size is representative of the population and there were respondents who sought help after filling the questionnaire.

Conclusions

The study signifies the presence of high prevalence of sexual harassment in the institution. Despite the high figure, there seems to be low perception of sexual harassment and under reporting. The incidents happen at different settings and this in turn affect feeling of safety and has negative mental health impact. Unwanted sexual attention and coercion were strongly associated with depression. The top three recommendations the women forwarded are taking appropriate measures on the perpetrators, empowerment of women and awareness creation.

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11.Annex

Addis Ababa University, College of Health Sciences

Introduction and consent form

Thank you for taking time to participate in this research. You are being asked to participate in a research study. This form provides you with information about the study. Your participation is entirely voluntary, and you can refuse to participate without penalty or loss of benefits to which you are otherwise entitled.

Title of Research Study: Prevalence and psychological impact of sexual harassment against female medical students and residents at Addis Ababa University, College of health sciences.

Principal Investigators and Telephone Number(s)

Nardos Seifu (MD, final year psychiatry resident) - +251-910637616

Azeb Asaminew (MD, Psychiatrist)

Charlotte Hanlon (MD, psychiatrist)

Purpose of the study is to determine the prevalence of sexual harassment against

female medical students and residents at AAU_CHS, to examine the psychological impacts of it and identify the preferences of women regarding the intervention.

The questionnaires will take no more than 20 minutes to fill. The surveys will help us to understand how common it is for women to experience harassment or gender-based violence while at the university.Additionally, the questions will ask about any negative symptoms you might currently be experiencing
.
Some of these questions may be of a personal or sensitive nature. Hence, you may experience some discomfort. If you wish to discuss any risks you may experience, you may ask call the Principal Investigator listed above.

Feel free to contact the principal investigator or contact person for psychosocial support team of the institution if you feel the need to discuss any emotions resulting from the completion of these surveys.

Contact person for psychosocial support team:……

Principal investigator: Nardos Seifu -+2510910637616 Email: nardosseifu2@gmail.com

Privacy and confidentiality: In order to protect your confidentiality, no identifying information will be requested of you. Hence, none of the information you will provide can be linked to you in any manner. If the results of this research are published or presented at scientific meetings, your
identity will not be disclosed.

The information you provide may be used to improve the well-being of students on university campuses. You will be also aiding the researcher in completing the requirements for her speciality training.

If you feel that you have been harassed at your university, you may contact.
+251118693705 Gender office at CHS.
********** for legal advice

Demographics Form

1. What is your age?.....
2. Level of training: U Clinical year-1 U Clinical year-2 U Resident

   2.1. If you are a resident, what year of training are you in?

   U 1st U 2nd U 3rd U 4th U 5th

3. Marital status: U Single U Married U Divorced U Widowed
4. Housing accommodation: U On campus U Off-campus

5. Private Sexual Experiences Questionnaire (SEQ) – Shortened Version

On the next few pages we will be asking you various questions related to sexual harassment. Some of these questions may be sensitive, but please be assured that your responses will be completely anonymous and cannot be associated with you.

5. Have you ever been sexually harassed while at the university? Yes / No
6. How were you harassed?

Read each of the situations listed and then check the box that matches how often you have had this experience. Some questions may appear repetitive, but please answer them despite this.

How often did this happen?					
While at the university, have you ever been in a situation where any individuals…	**Never**	**Once**	**Some times**	**Often**	**Very Often**
1. habitually told suggestive stories or offensive jokes?	□□	□□	□□	□□	□
2. made unwanted attempts to draw you into a discussion of personal or sexual matters (e.g., attempted to discuss or comment on your sex life)?	□□	□□	□□	□□	□
3. made crude and offensive sexual remarks, either publicly (e.g., in the office), or to you privately?	□□	□□	□□	□□	□
4. treated you “differently” because of your sex (e.g., mistreated, slighted, or ignored you)?	□□	□□	□□	□□	□
5. gave you unwanted sexual attention?	□□	□□	□□	□□	□

6. displayed, used, or distributed sexist or suggestive materials (e.g., pictures, stories, or pornography)?	□□	□□	□□	□□	□
7. frequently made sexist remarks (e.g., suggesting that women are too emotional to be scientists or that men should not be the primary caretakers of children because they are not nurturing?)	□□	□□	□□	□□	□
8. attempted to establish a romantic relationship with you despite your efforts to discourage this person?	□□	□□	□□	□□	□
9. "put you down" or was condescending to you because of your sex?	□□	□□	□□	□□	□
10. has continued to ask you for a date, drinks, dinner, etc., even though you have said "no"?	□□	□□	□□	□□	□
11. made you feel like you were being subtly bribed with some sort of reward or special treatment to engage in sexual behavior?	□□	□□	□□	□□	□

101

How often did this happen?					
While at the university, have you ever been in a situation where any individuals…	**Never**	**Once**	**Some times**	**Often**	**Very Often**
12. made you feel subtly threatened with some sort of retaliation for not being sexually cooperative (e.g., the mention of an upcoming evaluation, review, etc.)?	□□	□□	□□	□□	□
13. touched you (e.g., laid a hand on your bare arm, put an arm around your shoulders) in a way that made you feel uncomfortable?	□□	□□	□□	□□	□
14. made unwanted attempts to stroke or fondle you (e.g., stroking your leg or neck, etc.)?	□□	□□	□□	□□	□
15. made unwanted attempts to have sex with you that resulted in you pleading, crying, or physically struggling?	□□	□□	□□	□□	□
16. implied faster promotions or better treatment if	□□	□□	□□	□□	□

you were sexually cooperative?					
17. made it necessary for you to respond positively to sexual or social invitations in order to be well-treated on the job or at school?	□□	□□	□□	□□	□
18. made you afraid you would be treated poorly if you didn't cooperate sexually?	□□	□□	□□	□□	□
19. treated you badly for refusing to have sex?	□□	□□	□□	□□	□

If you have endorsed any of the above items,

1. What was the setting of the incident (duty hour, during lecture, mentorship meetings, other)?
2. Did you report the incident?
3. If not, what were the reasons for not reporting it?
4. Have you received any support from medical school?

5. Have you received any support from other institutions?
6. If yes, Has the support been adequate?
7. What sort of support systems do you think are necessary in the medical school to prevent harassment?
8. What do you think are the top three things the school should do?
9. How long have you been learning or working at AAU_CHS?
10. What can you say about your feeling of safety in the institution?
11. If you are a resident, was your choice of speciality training affected by the incident?
12. If yes, what did you take under consideration?
13. What kind of impact did you notice the incident having on your career advancement?

Now we are going to ask you questions about your mental health. Read each of the situations listed and then check the box that matches how often you have had this experience.

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(Use "✔" to indicate your answer)*	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____

=Total Score: _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	**Somewhat difficult**	**Very difficult**	**Extremely difficult**
☐	☐	☐	☐

The primary care PTSD screen for DSM-5 (PC-PTSD-5)

14. In the past month, have you ….

A. had nightmares about event(s) or thought about the event(s) when you didn't want to?

B. tried hard not to think about the event(s) or went out of your way to avoid situations that reminded you of the event(s)?

C. been constantly on guard, watchful, or easily started?

D. felt numb or detached from people, activities, or your surroundings?

E. felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?

Generalized anxiety disorder 2-item

15. Feeling nervous, anxious or on edge?

U not at all U several days U more than half the days
U nearly everyday

16. Not being able to stop or control worrying

U not at all U several days U more than half the days
U nearly everyday