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**SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCE
UNIVERSITY OF GHANA**



**EMERGENCY CONTRACEPTIVE USE AMONG FEMALE STUDENTS AT THE
GHANA INSTITUTE OF JOURNALISM**

BY

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(10876119)

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PARTIAL FULLFILLMENT OF REQUIREMENTS FOR THE AWARD OF
MASTER OF PUBLIC HEALTH**

INTEGRI PROCEDAMUS

OCTOBER, 2022

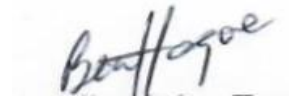
DECLARATION

I, ROSEMOND AKUA POMAA EFFAH hereby declare that except for references to other people's works which I have duly acknowledged, this work is as a result of my own original research, and that this dissertation, either in whole or in part has not been presented elsewhere for another degree in this institution or in any other university elsewhere.



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DATE: 4th October, 2022



DEDICATION

This project is dedicated to God Almighty and to my family for their support throughout the program.



ACKNOWLEDGEMENT

I am most grateful to God Almighty for His continual protection and grace to sail through this program successfully.

I am very grateful to my family for their help and to my supervisor Dr. Benedict Calys-Tago for his assistance and support throughout the research.

I would like to thank my research assistants who helped during the data collection period.

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ABSTRACT

Introduction: Emergency contraceptives prevent pregnancy after unprotected intercourse including sexual assault. Unwanted pregnancy as well as the health issues that are associated with it including maternal and infant mortality can be mitigated with the proper use of emergency contraceptives. Unsafe abortions could also be avoided with adequate knowledge and the correct use of emergency contraceptives. Many university students engage in a variety of risky sexual behaviour that sometimes results in unwanted pregnancies.

Aim: To determine the use of emergency oral contraceptives among female students at the Ghana Institute of Journalism

Methods: A descriptive cross-sectional survey was employed in the study with 348 females interviewed using self-administered questionnaires. The students were selected from three faculties through multistage sampling. Stata IC version 16 was used to analyse the data. Frequencies and percentages were used to describe the characteristics of the respondents. Pearson's chi-square test was used to assess the association between the emergency contraceptive use and the independent variables of interest. Logistics regression was also used to estimate the crude and adjusted odds ratios.

Results: Findings of the research showed that out of 348 respondents, 68.1% had ever heard of emergency contraceptives with majority having low knowledge of emergency contraceptives. The number of participants who had ever had sex were 228 and out of this number 80.7% had ever used emergency contraceptives. The barriers to the use of ECs included fear of being seen by friends, acquaintances and parents, dreading side effects, religious opposition, and embarrassment to buy from health workers. Being in an intimate relationship and having multiple casual partners was associated with use of ECs. (AOR: 3.19, 95% CI: 2.97-9.78, $p=0.005$) and (AOR: 1.43, 95% CI: 1.52-5.98, $p=0.018$) respectively.

Conclusion: Majority of the females had heard of emergency contraceptives but only few had

adequate knowledge of its correct use. There should be inter-sectoral collaboration between the Ministry of Health and the Ministry of Education to ensure students are correctly informed about emergency contraceptives.

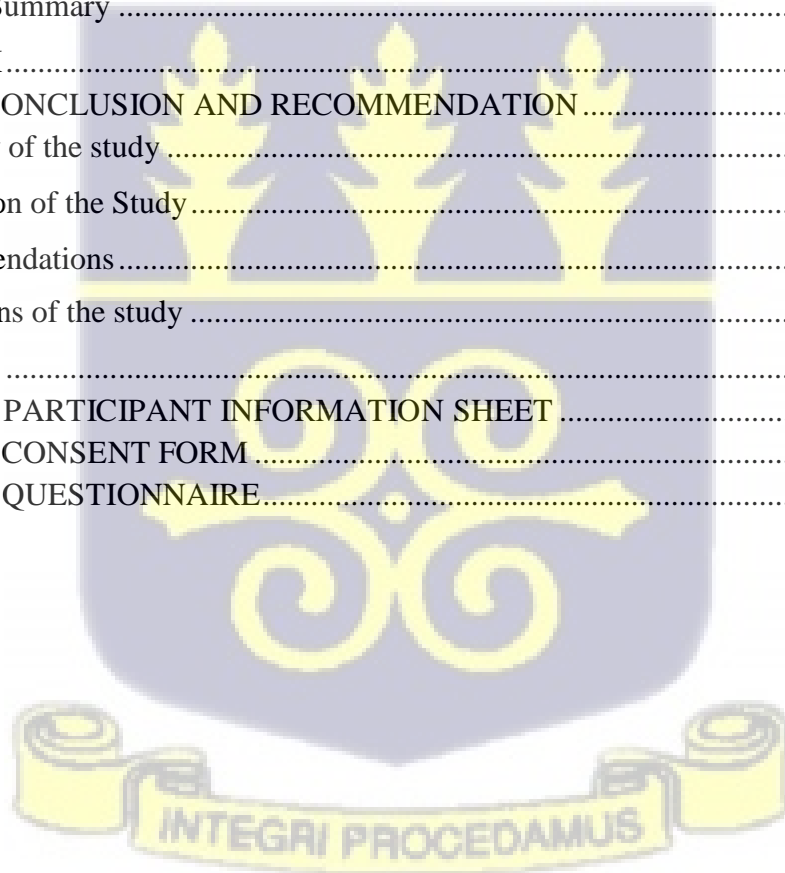


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LIST OF ABBREVIATIONS

EC	Emergency Contraceptive
ECs	Emergency Contraceptives
UN MDGs	United Nations Millennium Development Goals
IUDs	Intrauterine Devices
GDHS	Ghana Demographic Health Survey
ECPs	Emergency Contraceptive Pills



CHAPTER ONE

INTRODUCTION

1.1 Background

According to Habitu et al. (2018), more than 100 million acts of sexual activity take place every day around the world, which results in approximately 3 million pregnancies, 50% of which are unplanned and 25% of which are clearly unwanted. The ability of emergency contraceptives or post-coital contraception to reduce the number of unwanted pregnancies and therefore the abortion rate has recently received a lot of attention (Mane´et al., 2015). Hope, Hattingh, & King (2016) revealed that about 30 to 50 percent of women seeking abortion were not using contraceptives at the time of pregnancy. Access to contraceptive methods, including emergency contraception, will prevent unintended pregnancy and unsafe abortion

Kolawole, Abubakar, & Zaggi (2015) characterize emergency contraception as a method for preventing pregnancy following unprotected sexual contact. Emergency contraception is also defined by Mmari & Sabherwal (2013) as a type of modern and conventional contraception used after unprotected sex, sexual abuse, frequent contraception misuse, or the avoidance of contraception. In contrast to traditional contraceptive approaches, which are performed before the act, emergency contraception is used before the probable implantation time. If taken within 72 hours of sexual intercourse, Emergency contraceptives could reduce the risk of unintended pregnancy by 75% to 95%. Emergency contraception, according to Senunyeme (2017), decreases the risk of pregnancy for up to 120 hours after sexual intercourse without contraception or contraceptive failure. However, it works best when used during the first 24 hours of unprotected intercourse. ECs are cost-effective, medically secure, and extremely effective in reducing unwanted pregnancies and, as a result, avoiding unsafe abortion and other effects (Gross Lafortune & Low, 2013).

In developing countries an estimated 80 million unintended pregnancies occurred in 2012. As a result 40 million abortions and 10 million miscarriages occurred. According to Haeger, Lamme, & Cleland (2018), this could have been avoided if women had access to maintenance and an emergency contraceptive (EC). Contraception is also vital for managing population growth in developing countries with high fertility rates to ensure substantive human and socioeconomic progress (Ajayi et al., 2017). According to Cleland et al. (2014), contraceptive use in developing countries has reduced maternal mortality by 44%, approximately 270,000 deaths avoided in 2008, but could reduce maternal mortality by 73% if the full demand for birth control was met. As a result, contraception is vital to achieving UN Millennium Development Goal 5 (MDG 5): to reduce maternal mortality and achieve equal access to reproductive health care (Black & Hussainy, 2017). In general, young people are sexually active, and students at tertiary institutions are a major high-risk category in every community. The youth in this age group are usually only starting to explore their sexuality, are mostly unsupervised by their parents, and are heavily influenced by their peers. Contraception is a vital method for reducing unintended pregnancies and avoiding induced abortion. Emergency contraception is the last choice for achieving this goal of all contraception methods. The current study seeks to examine emergency contraceptive use among female students at Ghana Institute of Journalism.

1.2 Problem statement

Unwanted pregnancy, as well as the health issues that come with it, such as child and maternal mortality because of unsafe abortion are of worldwide public health concern. Between 2010 and 2014, it was reported globally that 44 percent of all pregnancies were unexpected (Habitue et al., 2018). Worldwide, 55.7 million abortions were conducted during the same time period.

Unsafe abortions accounted for 25.1 million of those, most of which occurred in underdeveloped countries and resulted in roughly 80,000 maternal deaths.

According to Singh, Singh and Thapa (2015), about a third of unwanted pregnancies yearly were caused by incorrect contraceptive usage or failure; as a result, many women seeking an abortion would have used ECs if they had sufficient knowledge of its availability and how to use it. Many patients and caregivers are also unaware of ECs, according to Gebremedhin et al (2018), which further restricts their use. Interestingly, sexual activity at a young age is on the rise in developing countries; 40–80% of females are sexually active by the age of 18. In comparison to developed countries, however, their understanding of emergency contraception is limited (Osei-Tutu, Aryeh-Adjei & Ampadu, 2018). In a similar vein, Hope et al (2016) emphasized how contraceptive use has received a lot of attention in most countries, including Ghana. Nonetheless, contraception use in Sub-Saharan Africa has been much lower over time than in Latin America, the Caribbean, and Europe.

University students were also discovered to have a history of engaging in a variety of risky sexual behaviours that subjected female undergraduates to unwanted pregnancy, leading them to seek induced abortion care (Mardi et al., 2018). Unwanted pregnancies were seen by students as an obstacle to their advancement and potential careers. Unintended pregnancies, according to Mane et al. (2015), can have a negative impact on students' studies and contribute significantly to disrupted and shortened education, especially among female students in Ghana.

ECs were first introduced in Ghana in 2000, but it was not until 2014 that the media began to promote them. There are currently few advertisements on ECs. Unintended pregnancy is still a major health problem, despite technical advances in modern contraceptive methods, but it can be reduced by using emergency contraception properly (Osei-Tutu, Aryeh-Adjei, & Ampadu, 2018). Emergency contraception use can help to reduce unintended pregnancies, lower the risk of unintended pregnancy, its related health effects, social problems, and economic

problems. Many of the research on ECs conducted in the developing world have primarily concentrated on their medical aspects. These are the components in the pills, how to take them, and how they work to prevent pregnancy (Davis et al., 2020). Aspects such as knowledge, understanding, and usage of ECs among students, especially in Sub-Saharan Africa have received little attention in research. Furthermore, since the implementation of ECs in the 1970s, most of the research on them have taken place in developed countries, especially the United States of America. Some research has been conducted with regard to emergency contraceptive use in some universities in the country. However, there is very little research on knowledge and use of emergency contraceptives in Journalism tertiary institutions or universities. In addition to other factors influencing human behaviour, the media may be an effective tool for influencing health behaviours such as family planning. These students with the right knowledge and behaviour towards emergency contraceptives may influence the right use of emergency contraceptives in their career as Journalists. The current study will fill the practice and knowledge gap therein and add up to the literature by examining emergency contraceptives use among female students at the Ghana Institute of Journalism.

1.3 Significance of the study

The use of emergency contraceptives has become one of the means of contraception in effectively avoiding unwanted and unplanned pregnancies. Females particularly female students can reap the benefits of using contraceptive with an uninterrupted mindset of not becoming pregnant after unprotected sexual intercourse allowing them to focus on their education and future career till they are ready to conceive. The findings of this research would be of great importance to healthcare workers, students at the Ghana Institute of Journalism, researchers and the government in general including policy makers.

To the students, it will serve as a source of reference for future studies on any topic related to the use of emergency contraceptives. The study will add to existing empirical literature and contribute to academic debate on the subject as well.

To the healthcare workers such as doctors, pharmacists, and nurses especially in reproductive health care delivery, it would help to assess the effectiveness of contraceptive education being given to the public and ways to improve on education on emergency contraceptives. It will aid government agencies, policy makers and researchers to make the right decisions and policies that should be formulated and implemented to reduce the debilitating effect of unwanted pregnancies that leads to unsafe abortions. These policies would also ensure that the concept of emergency contraception and its related subjects are well understood by the female population and the public at large.

1.4 General Objectives

The general objective of the study is to determine the use of emergency contraceptives among female students at Ghana Institute of Journalism.

1.5 Specific Objectives

1. To ascertain the knowledge regarding the use of emergency contraceptives among female students at Ghana Institute of Journalism.
2. To determine the Prevalence or use of emergency contraceptives among female student of Ghana Institute of Journalism.
3. To identify the barriers associated with the use of emergency contraceptives among female students at Ghana Institute of Journalism.

1.6 Research Questions

1. What is the level of knowledge regarding the use of emergency contraceptives among female students at Ghana Institute Journalism?
2. What is the level of emergency contraceptive use among female students of Ghana Institute of Journalism?
3. What barriers are associated with the use of emergency contraceptives among female students at Ghana Institute of Journalism?

1.7 Conceptual Framework Adapted from Theory of Planned Behaviour by Ajzen (1991) and modified by Author

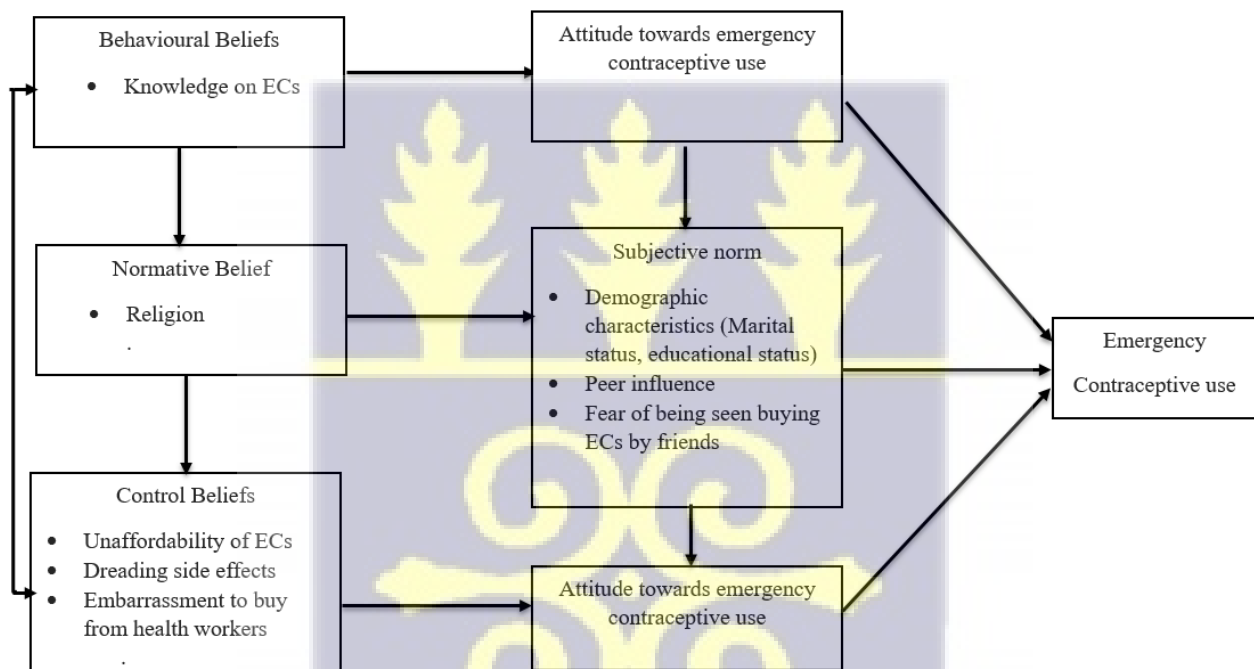
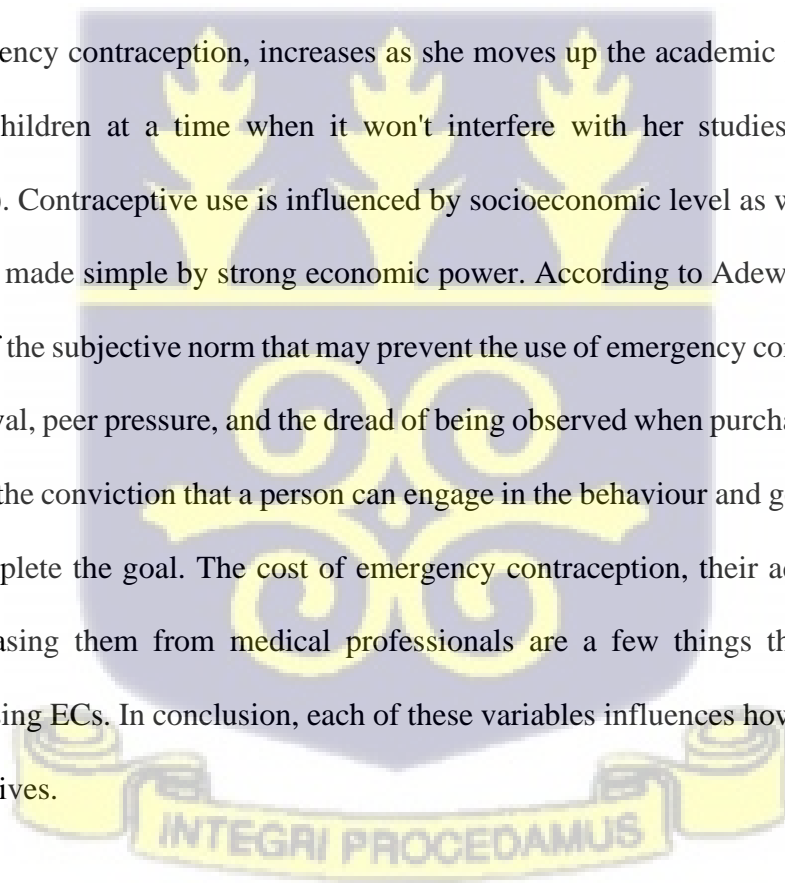


Figure 1.1 Conceptual Framework



1.8 Narrative of conceptual framework

The theory of planned behaviour (TPB) is a concept in psychology that links ideas and deeds. According to TPB, a person's likelihood of taking a particular action is inversely correlated with how strongly they intend to engage in the behaviour. Three things; attitudes, subjective norms, and perceived behavioural controls form the basis of a behavioural purpose. A person's attitude about using contraceptives will be influenced by his or her level of understanding and perception of contraceptives (Ajzen, 2015). Consequently, both religion and culture play a significant role in influencing some subjective norms, such as peer pressure and the appropriate age to start sexual activities. The use of emergency contraceptives is also influenced by demographic factors like marital status and level of education. For instance, a woman's likelihood of using contraceptives, especially emergency contraception, increases as she moves up the academic ladder because she wants to have children at a time when it won't interfere with her studies (Yazdanpanah & Forouzani, 2015). Contraceptive use is influenced by socioeconomic level as well. The buying of contraceptives is made simple by strong economic power. According to Adewunmi et al. (2012), other elements of the subjective norm that may prevent the use of emergency contraception include partner disapproval, peer pressure, and the dread of being observed when purchasing or using ECs. Control belief is the conviction that a person can engage in the behaviour and get beyond probable obstacles to complete the goal. The cost of emergency contraception, their adverse effects, and shame of purchasing them from medical professionals are a few things that can discourage someone from using ECs. In conclusion, each of these variables influences how likely women are to use contraceptives.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses a review of related studies. The purpose of a literature review is to gather a significant amount of literature, evaluate, and synthesize it in order to develop a solid knowledge and understanding of the study's findings. This chapter focuses centrally on the thematic areas of the study such as the concept of emergency contraceptives, the level of knowledge female tertiary students have on emergency contraceptive use, their level of use as well as the barriers that affect the use of emergency contraceptive. The various articles used to gather pertinent literature for the study were gathered from Google Scholar, PubMed, BioMed Central, JSTOR and Elsevier.

2.2 Review of Theoretical Framework

2.2.1 Theory of Planned behaviour (TPB)

The Theory of Planned Behaviour was proposed by Ajzen in 1985. It is a psychological paradigm that links ideas and behaviours. (Armitage & Conner, 2001). TPB states that the chances of an individual engaging in a health action (such as emergency contraceptive use) is proportional to how strong his or her intentions are in engaging in the behaviour (Yazdanpanah & Forouzani, 2015). A behavioural intention is the consequence of a numerous set of factors and demonstrates an individual's willingness to act. According to the theory of planned behaviour (Ajzen, 2015), the factors that can likely directly influence intentions to engage in a health behaviour includes the attitude of the person toward the behaviour, the perception of the person towards subjective group norms that concerns the behaviour, as well as the extent to which the person is able to perceive himself or herself in having control over their behaviour. The TPB, which has yet to be applied to the current study on consumer EC usage, suggests

that a person's actual usage of ECs is best predicted by their intentions, which are influenced by three main elements: (a) attitudes, which refer to one's positive or negative assessment of indiscriminate EC use (e.g., "the negatives of taking ECs outweigh the positives"); (b) subjective norm, which refers to one's perception of the social expectations of indiscriminate EC use, (e.g., 'my friends and family would follow recommendations for EC use'); and (c) perceived behavioural control (PBC), which reflects beliefs about how easy or difficult it is to obtain ECs (e.g., 'I would be able to get ECs if I wanted them'). (McEachan and colleagues, 2011).

2.2.2 Implication of the Theory to the Current Study

The TPB has undergone thorough testing and has been applied to a wide range of activities. The primary cognitive variables that appear to influence health behaviours include intentions, expectation values, and perceived behavioural control/self-efficacy. In addition, the model takes into account the influence of others' social pressure in the form of subjective norms. This will help identify if family members and friends also play a role. The components of the theory make it ideal to ascertain the use of emergency contraceptives among female students at Ghana Institute of Journalism.

2.3 The Concept of Emergency Contraceptive

According to Magesa, (2014) emergency contraceptive is a drug or device which is used to avoid getting pregnant post unprotected sexual activity, such as sexual assault, or after a known contraceptive failure. ECs reduce the risk of pregnancies among women who have had unprotected sexual intercourse by 75 percent to 95 percent when taken within 72 hours of the unprotected sex, according to numerous studies., even though it can be taken after 72 hours but at a lower potency (Briny1, 2016).

Emergency contraception is not meant to be used daily and can only be used in occasional or emergency situations. Circumstances that can demand the use of ECs include sexual assaults,

failed coitus interruptus as well as cases where barrier methods fail in preventing pregnancy such as misuse of condom, breakage, spillage, or two or more successive missed daily oral contraceptive pills (Adewunmi et al., 2012). Emergency contraception is only effective for the first few days (up to five days) after intercourse (Ilic, 2015). Hormonal contraceptive tablets (commonly known as morning-after pills) and intrauterine contraceptive devices are two emergency contraception options. These contraceptive pills deter conception by slowing or stopping ovulation-, but do not induce the process of abortion. By causing a chemical difference between the sperm and the egg before they touch, the copper-bearing IUD prevents conception. An existing pregnancy or a developing embryo cannot be harmed by emergency contraception. (Mooney-Somers et al., 2019).

2.4 Types of Emergency Contraceptive Use

The three types of Emergency Contraceptives (ECs) now available are copper intrauterine devices, ulipristal acetate and Levonorgestrel pills. (A single dose of levonorgestrel is available (1.5 mg levonorgestrel taken once) and a two-dose regimen (two tablets of 0.75 mg levonorgestrel taken 12 hours apart). Despite the fact that levonorgestrel was made available over-the-counter in 2013 with no age limits, availability at all pharmacies, cost, and awareness remain barriers to access. (Darroch et al., 2017). Ulipristal acetate (30 mg, once day) is only available with a prescription, however it was found to be more effective in preventing pregnancy at all time points within 120 hours (Glasier, 2014). Lastly, trained health care practitioners can put the copper IUD for up to 120 hours post engaging in unprotected intercourse and give up to 10 years of contraception following insertion.

The efficacy of ulipristal acetate and levonorgestrel might well be influenced mainly by the lady's weight, according to new research. Women who are overweight (BMI 25–29.9 kg/m²) or obese (BMI > 30 kg/m²) may find these methods less effective (Fok &

Blumenthal, 2016; Glasier et al., 2011). However, current recommendations suggest that women of all weights may use these emergency contraceptives because the benefits outweigh the risks (Trussell & Cleland, 2014). According to Fok & Blumenthal (2016) & Turok et al. (2014), the copper IUD is the most effective kind of EC because it is unaffected by a woman's weight. Access, the women's personal desire, weight and BMI, the length of time since unprotected intercourse, and normal birth control programs should all be considered when recommending emergency contraception (Stone et al., 2017).

2.5 Emergency contraceptive use in Sub-Saharan Africa

Modern contraceptives are on the rise in Sub-Saharan Africa, according to study, although there is a lot of regional variety (Tsui, Brown, & Li, 2017). Unmarried sexually active women are shown to have greater rates of use than married women. Contraceptive use is on the rise, but there are also higher rates of contraceptive cessation. Extending long-acting contraceptive options, supporting, and delivering postpartum contraceptive techniques, and depending on community health professionals for contraceptive service delivery and outreach are just a few of the recent program measures cited (Tsui, Brown, & Li, 2017).

Eight of Africa's 24 countries had lower chances of non-married women hearing about emergency contraception than currently married women (odds ratios ranging from 0.5 in Mali to 0.8 in Namibia), whereas women who had previously married had high chances of hearing about it in two of the 24 countries, Benin (1.4) and Liberia (1.4). (1.9). In Swaziland, however, unmarried women were considerably more likely to have heard of the strategy (1.5) than married women. Despite the fact that in Southern Africa and Egypt, younger females between the ages of 15 and 19 were less likely to be knowledgeable about ECs than older women, there was no correlation between awareness and female age in Liberia. Hearing about emergency contraception was positively connected with education. The chances of

hearing about emergency contraception increased with affluence in most African countries, while the distinction was blurry in some. Women in urban regions had significantly more knowledge of emergency contraception than those in rural areas. Generally, education has increased the use of emergency contraception among women who have had sexual relations (Larsson & Stanfors, 2014). Women were more likely to use the technique in urban areas than in rural regions in three countries. Contraceptive use is highly linked to education; however, the impact of a woman's education varies depending on context, society, and degree of development (Larsson & Stanfors, 2014).

In Sub-Saharan Africa, education is more important than technique selection in selecting whether to use or not to use. Furthermore, empowerment has a negligible additional effect in the context of everything else. It is necessary to comprehend the factors that mediate the influence of non-traditional empowerment and produce technique utilization discrepancies. Couple dynamics, as well as the community's impact on women's education and views, can influence a woman's reproductive behaviour (Palermo, Bleck, & Westley, 2014). A large percentage of current EC users said they used ECs more than once a month, according to the findings of a study conducted in Nigeria, highlighting the importance of better understanding the dynamics of repeat use, as well as ensuring accessibility and access to efficient, short-term, woman-controlled barriers and hormonal methods. (Morgan, Keesbury, & Speizer, 2014).

2.6 Emergency Contraceptive Use in Ghana

In Ghana, in 2017, emergency contraception was known by 80 percent of sexually active unmarried women, up from 49 percent in 2008 (Grindlay and colleagues, 2018). In 2017, ECPs were the most popular (modern or traditional) method of contraception among sexually active unmarried women aged 20–24 (Rokicki & Fink et al., 2017). Similar findings have been seen in other recent investigations. The second most preferred modern or traditional method among women were the ECPs, after condoms, according to 2018 research of Ghanaian

teenagers aged 15–24 (Grindlay et al., 2018). According to a 2016 research, 63 percent of female Ghanaian university students had heard of ECPs and 37 percent had used them, According to a 2014 study on ECP usage and awareness in Ghana's northern region, 69 percent of women aged 15–49 knew what ECPs were, and 40 percent had ever used one (Amalba et al., 2014). Despite the fact that the use of ECPs among young women has increased, SRH indicators have remained unchanged. Over half of women aged 20–24 started having sexual intercourse before the age of 18, according to the Ghana Maternal Health Study published in 2017, but only about a third of sexually active unmarried women utilize contemporary contraception (Grindlay et al., 2018). In this situation, unintended pregnancies are common: around 16% of women aged 20–24 have had an abortion, and a third of births to adult females aged 20–24 are mistimed or unplanned. About 14% of women in the 15–19 age group have begun to have children, a percentage that has remained consistent since 1998. (Darteh & Doku, 2016).

2.7 Knowledge Regarding the Use of Emergency Contraceptive

Having a basic understanding of contraceptive methods is important for obtaining access to contraceptive services and selecting a suitable contraceptive method (Ghana Demographic and Health Survey [GDHS], 2014). Contraception decreases the number of unwanted pregnancies among young people who participate in sexual activity. Several studies have been conducted on university students' awareness of emergency contraception in Sub-Saharan Africa. According to Dartey & Doku (2016), these studies revealed varying levels of EC knowledge; in Uganda (45 percent), Nigeria (50.7 percent), Cameroon (47 percent), South Africa (56.5 percent), and Ethiopia (43.5 percent). Few studies on ECs among tertiary students have been conducted in Ghana (Briny, 2016). Darteh and Doku (2016) conducted a study on the knowledge and use of emergency contraception among tertiary students, finding that 57 percent had heard of ECs and 36 percent had used it. The study underlines the necessity of

advocacy for emergency contraception education among students in universities to offer them with the option of using ECs if other types of contraception are not used.

The importance of emergency contraception has been thoroughly documented in the literature. In India, for example, girls had unprotected sex and utilized traditional remedies as post-coital contraception. The necessity for emergency contraception is further evidenced by the fact that some women have approached clinics to obtain some, and these women appear to be aware of the time limit for using ECs, since they arrived within 72 hours of having unprotected intercourse (Osei-Tutu et al., 2018). The percentage of people who know how to use ECs correctly varies from 83 percent in developed countries to less than 60% in impoverished countries (Larsson et al.,

2006). In the research conducted by Baiden, Awini, and Clerk (2002), 43.2 percent of University of Ghana students had heard of modern emergency contraception approaches. In South Africa, majority of students (56.5%) had heard of emergency contraception, but less knew about the precise methods and the proper time limit for using it.

A survey was performed at Stellen Bosch University, and the findings revealed that only 47.5 percent and 38.0 percent of the respondents knew emergency contraception as an oral contraceptive which either prevents implantation of the fertilized ovum or prevents ovulation respectively. In a study on emergency contraception knowledge in Botswana, Hoque et al. (2013) discovered that respondents in that study had generally strong knowledge or understanding of contraceptives. All the female respondents (students) were aware that using contraception was not always 100 percent successful. (Hoque & Ghuman, 2012) conducted a similar study in South Africa, but their results contradicted that of the Botswana study. The research was conducted among young women aged 15 to 24 years who attended "public sector health facilities," and the results show that only 17 percent of the women had ever heard of emergency contraception (as opposed to 100% in Botswana), with 50.2 percent having never

heard of emergency contraception . Such results, they emphasized, demonstrate the need for more education on emergency contraception and reproductive health in general.

2.8 The Level of Emergency Contraceptive Use

Contraception is a critical technique for preventing unintended pregnancies and avoiding induced abortion. ECs provide the opportunity to prevent unintended pregnancy following unprotected intercourse. Despite this, emergency contraception is said to be infrequently used (Manortey et al., 2016). According to a study by Manortey et al (2016), emergency contraceptive awareness is high (74.7 percent) but its use was low 28.4%. 67% had used emergency contraceptive pills (ECPs) more than once in the previous year. However, those with a clear understanding of ECs lacked comprehensive details about the substance, efficacy, and timing plan after unprotected sex. Rokicki & Merten (2018) in their studies opined that roughly 20% of their respondents had used emergency contraception . In contrast, Mmari & Sabherwal (2013) found that majority of the participants had ever used ECPs at least once in their research. This was mainly because participants were unable to plan for sexual encounters and chose ECPs as a comfortable post-coital approach as a result. Even though ECPs were commonly and often used, women were worried about the disruption of their menstrual cycle as well as side effects in the long-term. ECPs are sometimes used as a fallback if conventional approaches such as withdrawal were deemed ineffective.

The most recent national data on contraception available in Ghana show that, while people are aware of the benefits of contraception, they are rarely used (Darteh & Doku, 2015). It is important to increase the use of modern contraceptives, like ECs, for women to achieve their fertility goals and reduce unmet family planning needs. Despite this, massive gaps in the proportion of overall contraceptive demand still exist (Sweya et al (2016).

2.9 Access, Knowledge and Use of Emergency Contraceptives

Despite concerns that availability to ECs would lead to its abuse, research conducted by Planned Parenthood of Western Washington (PPWW) indicated that women who acquired ECs at a clinic were more likely to return for regular contraception. (Quoted in Weldon, Hutchings, McAllister) (Weldon et al., 2006). However, as Gross, Lafortune, & Low (2013) point out, the impact of access to emergency contraception has not always been favourable (Gross et al., 2013). According to them, emergency contraception access in the United States had no substantial impact on the rate of birth or abortion, but it did modify where the medicine was purchased, namely from hospitals and pharmacies. Subsequently, the use of ECs among Slovenian students has been shown to be low, and it has been linked to several factors such as objections in religion and the belief that an EC is an abortion pill. These were factors that were negatively related with its use (Pinter et al., 2009). Women in Southern Nigeria, on the other hand, prefer emergency contraception as a method of contraception. This is because they only have intercourse on occasion and thought ECs were appropriate for them. The stigma associated with the adoption of traditional procedures was also a factor in their decision. Some research, such as Achana et al (2015) have looked at both knowledge and usage of ECs and found that there is a gap between the two. Research by Sørensen, Pedersen & Nyrnberg (2000) in the United States, and Aneblom, Larsson, Odland & Tyden (2002) in Sweden opined that a higher percentage of respondents were aware of ECs than those who used it. Furthermore, just a tiny percentage of people were aware of the appropriate time frame for using it. The awareness of emergency contraception is often higher than the knowledge and application of the technology. Kang & Moneyham (2008) made similar observations in Korea, and Zeleke, Zebenay, & Weldegerina (2009) made similar observations in Nigeria. Similar findings were made by Kagashe et al (2013) in Tanzania and Roberts et al (2004) in South Africa. Most of these studies, particularly those from Nigeria, involved students, who were the subject of most of the papers. These findings indicated that the respondents used in these investigations

were quite young. These young respondents were more likely to have undesired pregnancies since they had a predisposition to be sexually active. So, why were they not using any EC if they were sexually active, aware of ECs and had a basic understanding of how to use them? This was attributed to a paucity of detailed information and misunderstandings about how they should be utilized. Palmermo, Bleck & Westley (2014) discovered that knowledge of emergency contraception among all women in Africa ranged from 1.6 percent in Chad to 40.1 percent in Kenya, while ever use among sexually active women ranged from less than 0.1 percent in Chad to 3.5 percent in Ghana. In Asia, knowledge levels ranged from 3.3 percent in Timor-Leste to 28.7% in the Maldives, with usage rates ranging from 0.1 percent in Cambodia, Nepal, and Timor-Leste to 0.6 percent in the Maldives. Again, awareness ranged from 4.6 percent in Azerbaijan to 48.5 percent in Ukraine, ever use of ECs in Europe and West Asia ranged from 0.6 percent in Turkey to 5.8 percent in Ukraine. Knowledge was high across Latin America and the Caribbean, with usage ranging from 0.4 percent in Haiti to 12.2 percent in Columbia.

2.10 Barriers to the Use of Emergency Contraceptive

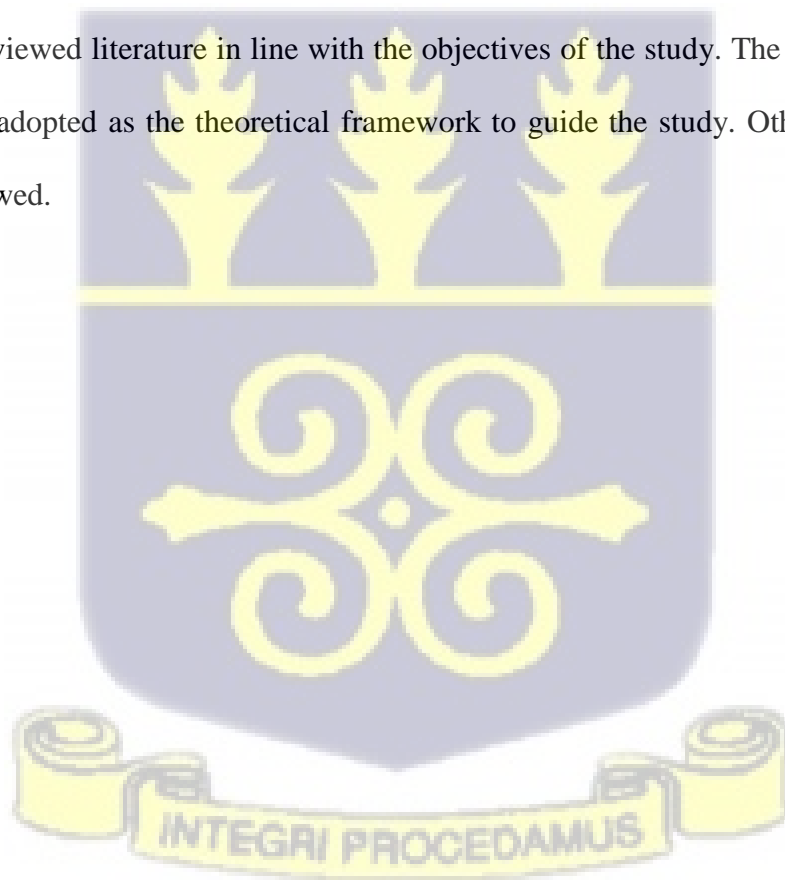
Young people, especially women, are faced with several challenges in gaining access to contraceptives and using it the correctly and consistently. These impediments may be caused by influences in the individual's immediate environment, the individual herself as well as the larger environment. Kisa et al (2012) assessed barriers to emergency contraceptive use among a sample of 318 Turkish women. According to the findings, more than 90% of the participants regarded the use of emergency contraception approaches as a sin. The study found that lack of knowledge and common misunderstandings regarding EC methods are the most significant barriers to its use. A study conducted in the United States by Haeger et al., 2018 found that, even though many women were aware of the benefits of emergency contraception,

young adults were reluctant to use it because they were ashamed or embarrassed, concerned about what others think and were concerned about side effects.

Many studies conducted in Sub-Saharan Africa show that there are multiple obstacles that discourage young people from using contraceptives. Poor awareness of contraception, concerns of potential side effects, influences of partners and family members, religion, beliefs, and costs are just a few of the obstacles (Sedgh, G., & Hussain, 2014). According to a study conducted among young adults, the most common barriers to contraceptive use were professed health risks, such as effects on menstruation, weight, and future fertility. Mistrust in contraception was another barrier, as was limited access to contraception (Chernick et al., 2015).

2.1 Chapter Summary

This chapter reviewed literature in line with the objectives of the study. The theory of planned behaviour was adopted as the theoretical framework to guide the study. Other related studies were also reviewed.



CHAPTER THREE

METHODS

3.1 Study Design

A cross sectional analytical study survey design was used to collect and analyze data. Quantitative research method was used in generating the required data for analysis.

3.2 Study Area

The study was conducted at the Ghana Institute of Journalism, a Public University located in Accra.

The University is situated at 32 Gamel Abdul Nasser Avenue in the Accra Metropolitan Assembly. The University was established in 1959 and is the premier University for media and communication training in Ghana. The institution offers diploma, degree, and master's programs in various fields.

The University has a population of about 4000 students with a female population of about 3000. About 80 percent of the students are between the ages of nineteen and twenty-six. The Ghana Institute of Journalism has five faculties namely the Public Relations, Advertising and Marketing faculty, the Journalism and media studies faculty, the integrated communication sciences faculty, the graduate studies and research school and the alternative learning school.

The study area is most ideal for the study because it has a heterogeneous mix of females mostly within the sexually active age to sample from.

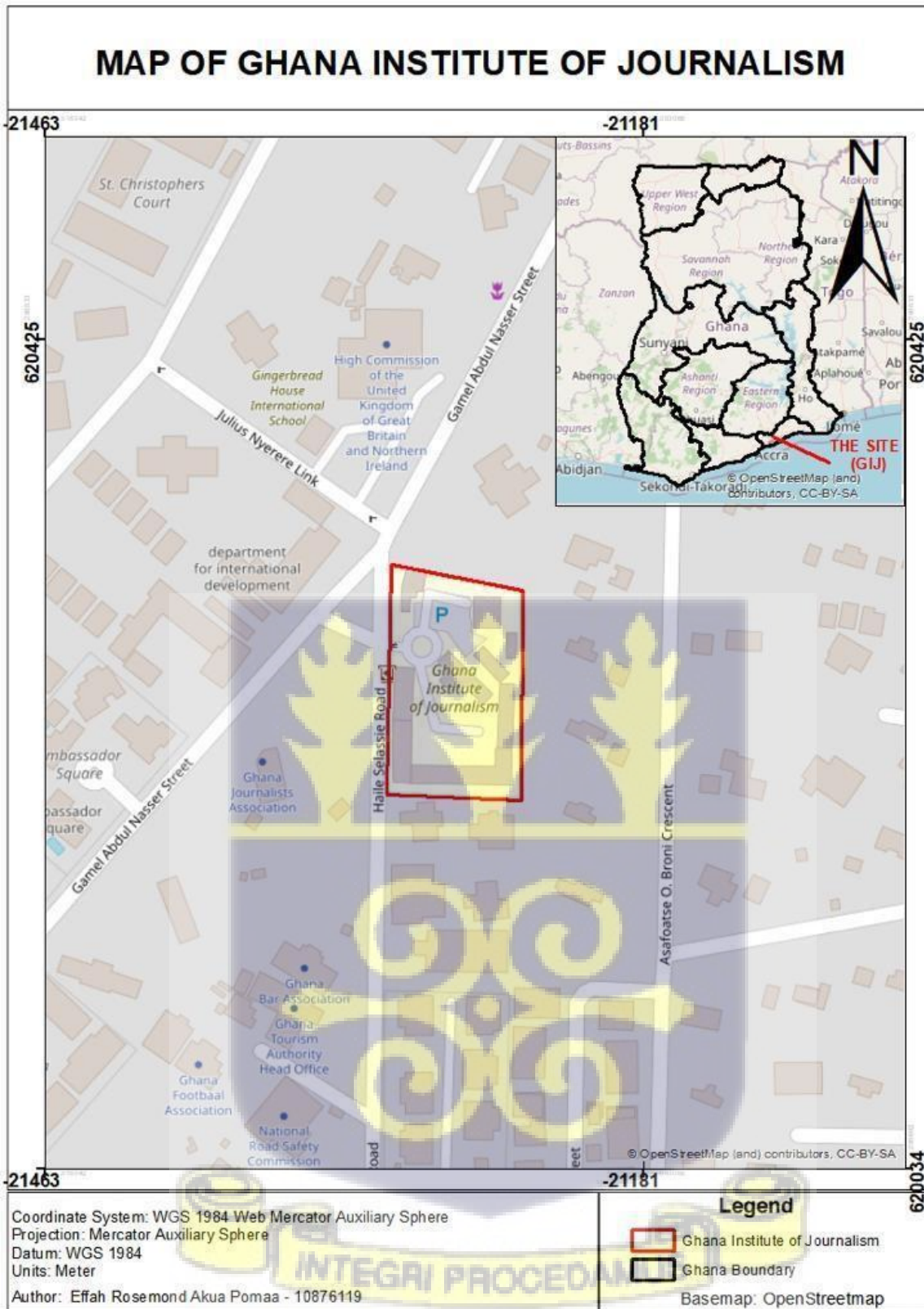


Figure 2.1 A map showing Ghana Institute of Journalism

3.3 Study Population

The study targeted the Degree and Diploma students in the Public Relations, Advertising and Marketing faculty, the Journalism and Media studies faculty and the Integrated Communication Sciences faculty.

3.4 Sampling and Sample size calculation

The Sampling was done among the degree and diploma students in the Public Relations, Advertising and Marketing faculty, the Journalism and Media studies faculty and the Integrated Communication Sciences faculty.

It was documented from a previous study that 22% of females had used Emergency contraceptives. Taking this information into consideration, the sample size was calculated using the formula adopted from Cochran (1977):

$$n = \frac{z^2 * P(1-P)}{e^2}$$
$$n = \frac{1.96^2 * 0.22 * (1-0.22)}{0.05^2} \quad 263.69 \approx 264$$

Where P = proportion of use of ECs from previous study is 22%; Z²= 95% confidence interval corresponding to the value of 1.96 and e² = proportion of sampling error tolerated at 0.05% (to increase the accuracy).

Assuming a non- response rate of about 10%, 264 x 0.1 = 26.4 ≈ 27

Actual sample size is 264 + 27 = 291

i. Sampling Technique

The study was conducted employing multistage sampling. Firstly, the population of students under study was stratified by year group and faculty. Public Relations, Advertising and

Marketing faculty, the Journalism and Media studies faculty and the Integrated Communication Sciences faculty were included with a sample selected from each level from level 100 to 400 for degree students and level 100 to 200 for diploma students. Ten classes were involved in the process. Through proportionate allocation the number of participants for each class was determined where the number of females in each stratum was divided by the total number of females under consideration multiplied by the sample size. Then systematic random sampling was used to select participants from each class. The first participant was selected at random and then the subsequent participants were selected based on the sampling interval (which is the number of people in the given population divided by the number of people to be selected). The sampling interval was added to the number chosen at random to give the next participant and the next. No name or index number was collected in order to safeguard the identity of selected students. The questionnaires were self-administered, the Principal researcher with two research assistants collected questionnaires after the students were done. The questionnaire was in English language employing closed ended questions.

3.4.1 Inclusion Criteria

To be involved in the study the individual had to be a female undergraduate student at the Ghana Institute of Journalism.

3.4.2 Exclusion Criteria

Undergraduates who were absent from class during the data collection period were excluded.

3.5 Variables

Dependent Variable

Emergency Contraceptive Use



Independent Variables

- a. Socio-demographic factors (age, marital status, number of casual sex, number of main sex partners, religion, year of study, ethnicity, employment status of parents, place of stay.)
- b. Knowledge of contraceptives
- c. Peer influence
- d. Exposure to mass media
- e. Embarrassment to buy from health workers
- f. Side effects
- g. Partner disapproval
- h. Unaffordability of ECs
- i. Infrequent sexual encounters

3.6 Data collection Technique

A questionnaire designed based on the study objectives was given to female degree and diploma students at Ghana Institute of Journalism. Research assistants were employed and trained on data collection. How questionnaires were to be answered and the aim of the study were explained to each student and after obtaining their consent they were given the questionnaires to fill.

3.7 Quality Control

The questionnaires were checked before being collected from students to ensure that they had been filled completely and accurately. The questionnaires were also numbered during data entry to avoid repetition of entry.

3.8 Data Processing and analysis

Data collected was entered in Microsoft Excel and transferred to STATA version 16c for analysis. The results were presented as proportions, frequencies, and percentages. The socio-demographic features were described using percentages and frequencies. The Pearson's Chi

Square test was used at 95% confidence Interval to determine the relationship between socio-demographic characteristics and the use of emergency contraceptives among the study population.

Knowledge of the study participants was assessed using seven knowledge questions. A correct response from each of the knowledge questions was scored 1 whilst an incorrect response was scored 0. A composited score from the seven-knowledge questions was computed and those who scored from 0 to 3 were considered to have low knowledge of emergency contraceptives whilst those who scored from 4 to 7 were considered to have adequate knowledge. The bar and pie chart were used to describe the knowledge scores and knowledge level of respondents respectively. The Pearson's chi-square test was then used to assess the association between the socio-demographic characteristic and the knowledge level of study participants on emergency contraceptives.

The use of emergency contraceptives was estimated among study respondents who had ever had sex. The Pearson's chi-square test was used to assess the socio demographic characteristics, knowledge level and barriers to the use of emergency contraceptives. The binary logistic regression model was then used to estimate the crude and adjusted odds ratios of the use of emergency contraceptives with all the variables considered in the study. The 95% confidence interval and the p-values of the various odds ratios were estimated. All statistical analysis in this study were considered at 0.05 level of significance.

3.9 Data Storage/Data Protection

The questionnaires were kept in a file and locked in a cupboard and the soft copy of the data obtained from the questionnaires was saved on the computer of the Principal researcher locked with a password.

3.10 Adherence to Covid-19 Protocols

Throughout conducting the survey there was adherence to Covid-19 protocols. The Principal researcher, the research assistants as well as all participants were obliged to properly wear their nose masks at all times during the study. Rubbing alcohol was given to each participant to sanitize their hands before being given the questionnaire. Less than one hundred participants were gathered at a time and in an open area where social distancing was observed.

3.11 Pre-test

Pre- testing of the questionnaires was done at the University of Ghana and based on the response the questionnaire was reworked on and edited where needed

3.12 Ethical Consideration.

3.12.1 Ethical approval

Ethical clearance was obtained from the Ghana Health Service Ethical Review Committee. Study participants were informed of their right to choose to participate in the study or otherwise and could withdraw from the study at any time. They were told about the nature of the study and the confidentiality of their identities assured. Written consent forms were given to participants to sign if they so wished to take part of the study.

3.12.2 Duration

The questionnaires were estimated to take about 15 to 20 minutes of the participant's time. Questionnaires consisted of questions on the knowledge and use of emergency contraceptives, socio-demographic characteristics and barriers to emergency contraceptive use.

3.12.3 Possible Benefits

Participation was entirely voluntary and there was no monetary compensation for participants. This was explained to participants before they decided to partake in the study or otherwise. The findings of the research would however add to knowledge and inform policy pertaining to emergency contraceptive use. There was no penalty for not participating.

3.12.4 Possible Risk and Discomfort

No harm was expected for participation of the study as it only involved filling questionnaires. There was no risk linked with participation in the study. Participants were free to skip any question that they felt was too sensitive or made them uncomfortable since some of the questions were related to sex and contraceptive use

3.12.5 Cost

Participants were not charged any money. However, their time was needed to answer the questions.

3.12.6 Confidentiality

Confidentiality and anonymity were ensured. Names were not requested for in filling the questionnaire neither were names used in coding or analysis of data. During the completion of the questionnaires, respondents were assured of their privacy. Apart from the Principal investigator and the two research assistants no other person had access to the information given.

3.12.7 Voluntary Participation or Withdrawal

Participants were informed that participation in this study was entirely voluntary, and that they could choose not to answer any specific questions or not to participate at all. Participants had the option to withdraw from the study at any moment during the study without being penalized.

3.12.8 Feedback to Participants

At the end of the study feedback would be given to the participants through the Registry of the Ghana Institute of Journalism.

3.12.9 Funding Information

The research was self-funded with no external funding.

3.12.10 Sharing Participants Information

The data collected is entirely for research purposes and would not be given to any organization or individual.

3.12.11 Provision of the consent form

After a female student willingly agreed to participate in this study, she was asked to sign an information sheet and a consent form, one to be kept by her and the other to be retained by the research assistant for future reference.



CHAPTER FOUR

RESULTS

4.1 Introduction

The chapter presents the results of the research on emergency contraceptive use among female students at the Ghana Institute of Journalism. Data was collected from 348 students using self-administered questionnaires.

4.2 Socio-demographic characteristics of study respondents

A total of 348 females from the Ghana institute of Journalism were interviewed. The median age of the participants was 22 years (IQR: 20-24 years) with more than half (52.6%) in the age range 21-24 years. The majority (81.1%) of the respondents were single. Nearly half (50.6%) of the participants had no casual sex partners, 36.5% had a single casual sex partner and 12.9% had multiple casual partners. Over a third (35.1%) of them had no main sex partner, 60.6% had a single main sexual partner and 4.3% had multiple main sexual partners. The majority (89.9%) were Christians. More than half of the participants were Akans (52.3%).

Almost the same proportion of the participants interviewed were in year 1 (23.0%), year 2 (26.4%), year 3 (23.9%) and then year 4 (26.7%). Most of the respondents were from the public relation, advertising and marketing faculty (37.4%) or Journalism and media faculty (36.2%).

Majority (61.5%) of the participants had both their parents employed, 10.9% had both parents unemployed and 27.6% had only one parent employed. Majority (86.8%) of the respondents lived off campus. Majority (71.8%) of them had heard of emergency contraceptives.

Table 4.1: Socio-demographic characteristics of study respondents

Factor	Frequency	Percentage (%)
N	348	
Age of respondent, median (IQR)	22 (20, 24)	
Age group		
18-20 years	99	28.4
21-24 years	183	52.6
25+ years	66	19
Marital status		
In an intimate relationship	53	15.2
Married	13	3.7
Single	282	81.1
Number of casual sex partners		
None	176	50.6
One	127	36.5
Multiple	45	12.9
Number of main sex partners		
None	122	35.1
One	211	60.6
Multiple	15	4.3
Religion		
Christianity	313	89.9
Islam	35	10.1
Year of study		
Year 1	80	23.0
Year 2	92	26.4
Year 3	83	23.9
Year 4	93	26.7
Faculty		
Integrated communication sciences	92	26.4
Journalism and Media	126	36.2
Public relations, advertising and marketing	130	37.4
Ethnicity		
Akan	182	52.3
Ewe	77	22.1
Ga/Dangme	55	15.8
Northern	34	9.8
Employment status of parents		
Both employed	214	61.5
Both unemployed	38	10.9
one employed	96	27.6
Place of stay		
Off campus	302	86.8
On campus	46	13.2
Do you know about emergency contraceptives?		
No	98	28.2
Yes	250	71.8

4.3 Knowledge assessment of participants on contraceptives

Majority (68.1%) of the participants had ever heard of emergency contraceptives. Among the 237 who had ever heard of emergency contraceptive, 44.7% heard from the media, 24.1%

from friends, 15.2% from health workers, 14.8% from their partners and 1.3% from school. (Figure 4.1).

All the respondents were asked seven questions to assess their knowledge of emergency contraceptives. Of the 348 respondents, 21.0% had all 7 questions incorrectly answered, 33.9% had 1 question correctly answered, 23.0% had 2 questions correctly answered, 14.1% answered 3 questions correctly, 6.3% answered 4 questions correctly and 1.7% had 5 questions correctly answered. None of the respondents answered six or all seven questions correctly. The overall assessment showed that 8.0% had adequate knowledge (4 or more correct answers) on emergency contraceptives. The study estimated with 95% confidence that 5.4% to 11.4% of the students had adequate knowledge on emergency contraceptives. (Figure 4.2)

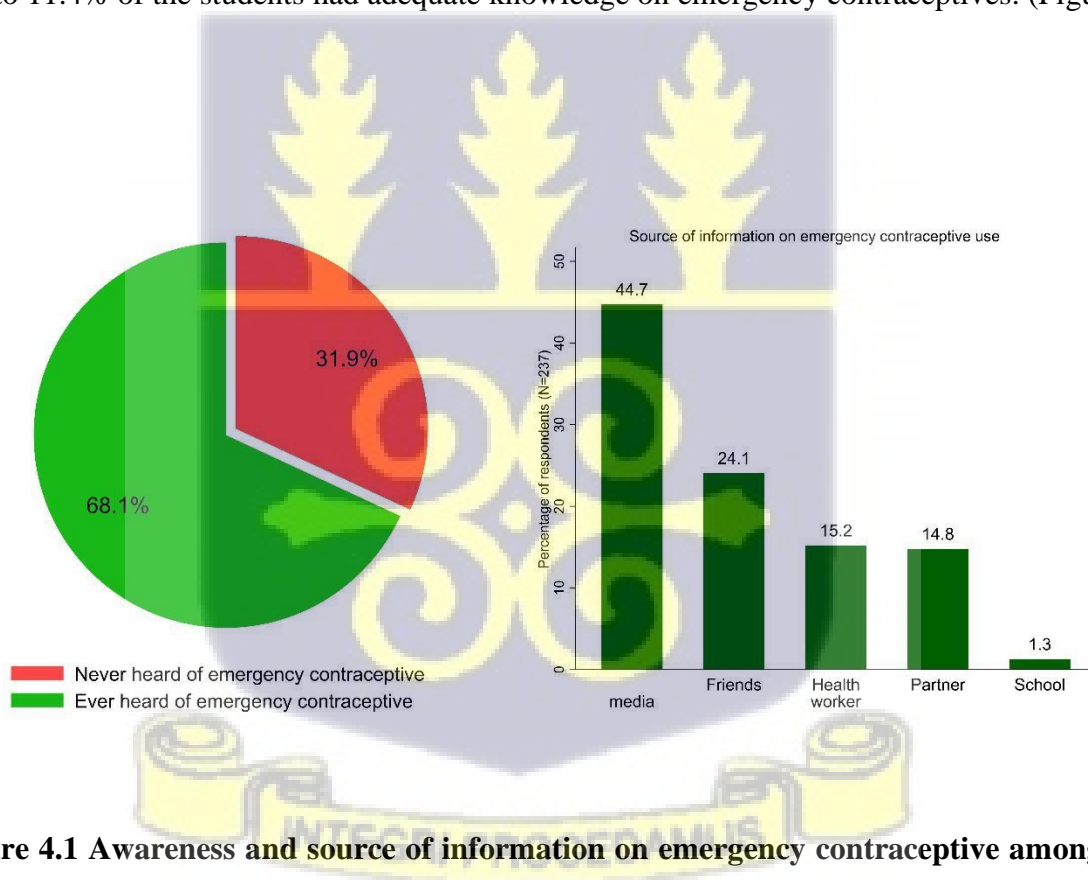


Figure 4.1 Awareness and source of information on emergency contraceptive among the study respondents

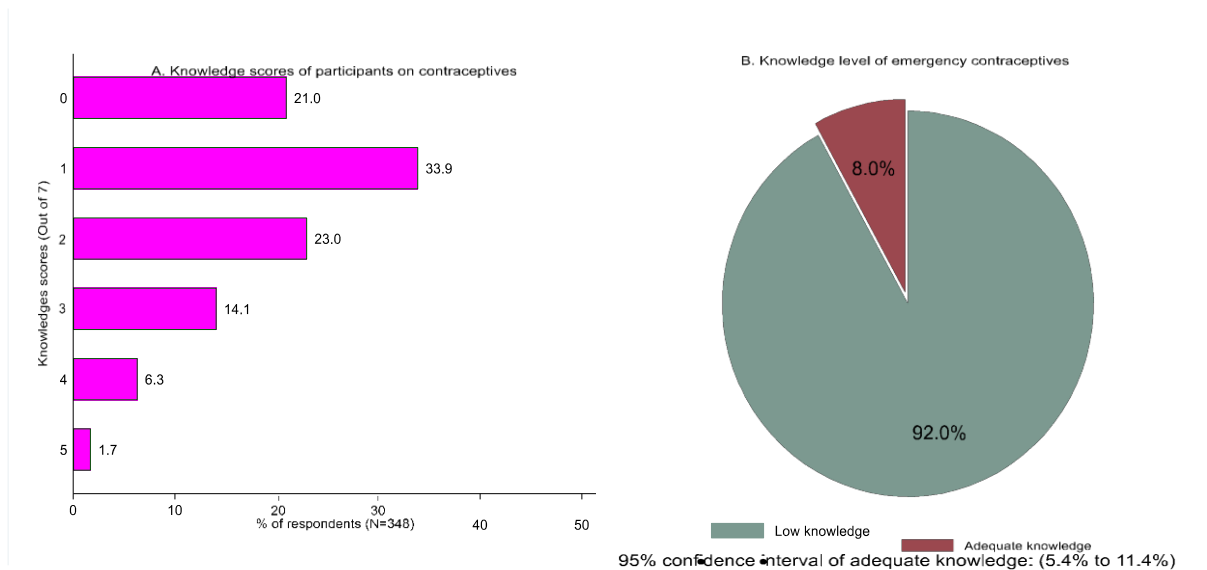


Figure 4.2 Knowledge assessment of study respondents on emergency contraceptives

4.4 Association between characteristics of respondents and knowledge level on emergency contraceptive

Table 4.2 presents on the association between the socio-demographic characteristic of study participants and the knowledge level of the study participants. The faculty ($p < 0.001$) and the place of stay ($p = 0.002$) were the only socio-demographic characteristics that were significantly associated with the knowledge level of study participants. (Table 4.2)

The percentage of respondents with adequate knowledge on emergency contraceptives was higher for those from the public relations, advertising and marketing faculty (16.2%) compared to those from the Integrated communication sciences faculty (2.2%) or journalism and media faculty (4.0%). Also, the percentage of respondents with adequate knowledge on emergency contraceptive was significantly higher among respondents who stayed on campus (19.6%) compared to those who stayed outside campus (6.3%). (Table 4.2)

Table 4.2: Bivariate association between socio-demographic characteristics of respondents and knowledge level on emergency contraceptive

Characteristics	Total	Knowledge level on emergency contraceptive		Chi-square
		Low knowledge	Adequate knowledge	
	N	n (%)	n (%)	P-value
N	348	320 (92.0)	28 (8.0)	
Age of respondent, median (IQR)		22 (20, 24)	23 (21, 24.5)	0.12
Age group				0.39
18-20 years	99	94 (94.9)	5 (5.1)	
21-24 years	183	167 (91.3)	16 (8.7)	
25+ years	66	59 (89.4)	7 (10.6)	
Marital status				0.53
In an intimate relationship	53	48 (90.6)	5 (9.4)	
Married	13	13 (100.0)	0 (0.0)	
Single	282	259 (91.8)	23 (8.2)	
Number of casual sex partners				0.64
None	176	161 (91.5)	15 (8.5)	
One	127	116 (91.3)	11 (8.7)	
Multiple	45	43 (95.6)	2 (4.4)	
Number of main sex partners				0.98
None	122	112 (91.8)	10 (8.2)	
One	211	194 (91.9)	17 (8.1)	
Multiple	15	14 (93.3)	1 (6.7)	
Religion				0.065
Christianity	313	285 (91.1)	28 (8.9)	
Islam	35	35 (100.0)	0 (0.0)	
Year of study				0.49
Year 1	80	75 (93.8)	5 (6.3)	
Year 2	92	87 (94.6)	5 (5.4)	
Year 3	83	75 (90.4)	8 (9.6)	
Year 4	93	83 (89.2)	10 (10.8)	
Faculty				<0.001
Integrated communication sciences	92	90 (97.8)	2 (2.2)	
Journalism and Media	126	121 (96.0)	5 (4.0)	
Public relations, advertising and marketing	130	109 (83.8)	21 (16.2)	
Ethnicity				0.30
Akan	182	165 (90.7)	17 (9.3)	
Ewe	77	69 (89.6)	8 (10.4)	
Ga/Dangme	55	53 (96.4)	2 (3.6)	
Northern	34	33 (97.1)	1 (2.9)	
Employment status of parents				0.46
Both employed	214	195 (91.1)	19 (8.9)	
Both unemployed	38	34 (89.5)	4 (10.5)	
one employed	96	91 (94.8)	5 (5.2)	
Place of stay				0.002
Off campus	302	283 (93.7)	19 (6.3)	
On campus	46	37 (80.4)	9 (19.6)	

4.5 Use of emergency contraceptives among participants

Of the 348 respondents in the survey, 34.5% had never had sex. Among the 228, (65.5%) of the respondents who had ever had sex, 43.8% had sex less than a month prior to the survey, 18.0% had sex 2 to 5 months prior to the survey and 38.2% of them last had sex more than 6 months prior to the survey. Majority (54.8%) of the respondents used protection during sex. (Figure 5)

Of the 228 who had ever had sex, 80.7% had ever used emergency contraceptives (Figure 4.3).

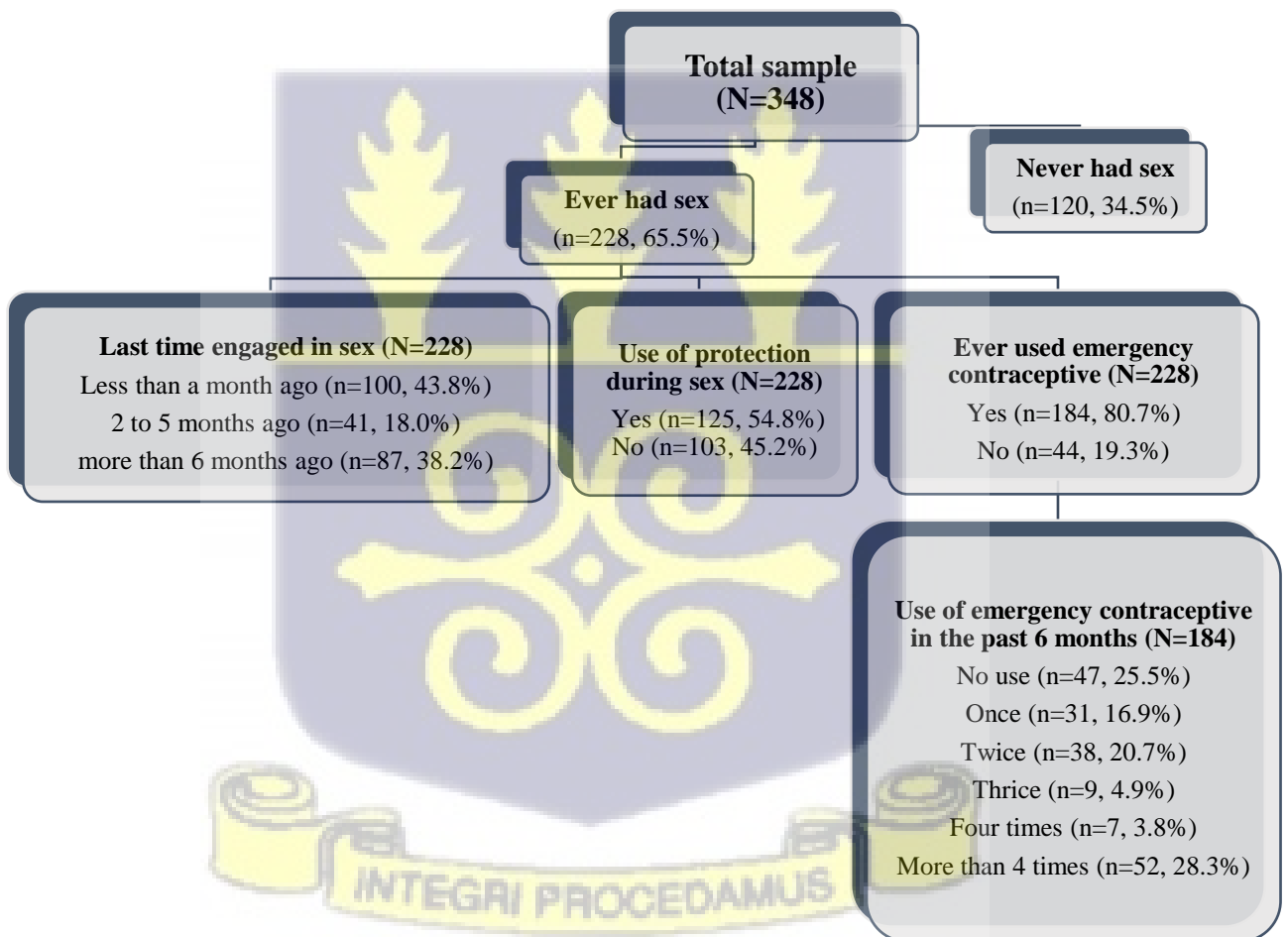


Figure 4.3 Use of emergency contraceptive among study respondents

4.6 Association between use of protection during sex and the use of emergency contraceptives

Among the 103 respondents who did not use protection during sex, 92.2% used emergency contraception after sex. Also, out of 125 respondents who used protection, 71.2% still used emergency contraceptives. The use of protection during sex was significantly associated with the use of emergency contraception. (Figure 4.4)

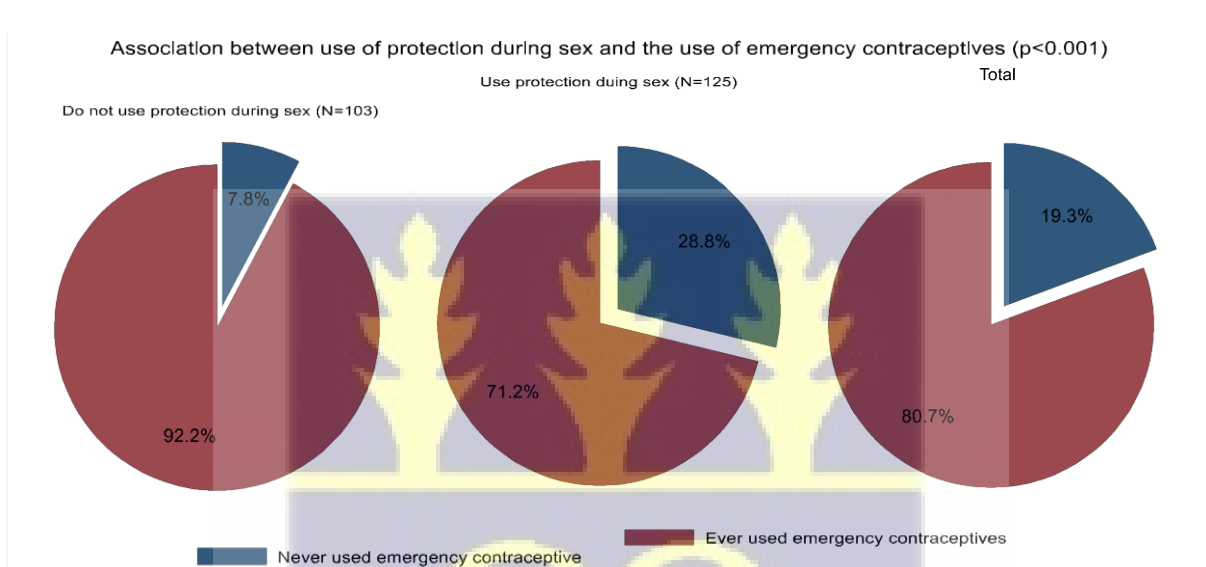


Figure 4.4 Association between the use of emergency contraception and the use of protection during sex

4.7 Association between socio-demographic characteristics and the use of emergency contraception

Table 4.3 presents on the association between the socio-demographic characteristics and the use of emergency contraceptive. Marital status ($p=0.022$) and employment status of the parents of the respondents were the only socio-demographic characteristics significantly associated with the use of emergency contraceptives.

The use of emergency contraceptives was significantly higher among respondents in intimate relationship (95.3%) compared to those who were married (83.3%) or those who were single (76.9%). Also, the use of emergency contraceptives was significantly higher among respondent's who had only one of their parents employed (92.6%) compared to those who had both parents employed (76.1%) or both parents unemployed (72.7%).



Table 4.3: Association between socio-demographic characteristics and the use of emergency contraceptives among study participants

Characteristics	Total	Ever used contraceptives		Chi-square
		No	Yes	
	N	n (%)	n (%)	P-value
N	228	44 (19.3)	184 (80.7)	
Age of respondent, median (IQR)		22 (21, 24)	23 (21, 24)	0.12
Age group				0.48
18-20 years	47	10 (21.3)	37 (78.7)	
21-24 years	129	27 (20.9)	102 (79.1)	
25+ years	52	7 (13.5)	45 (86.5)	
Marital status				0.022
In an intimate relationship	43	2 (4.7)	41 (95.3)	
Married	12	2 (16.7)	10 (83.3)	
Single	173	40 (23.1)	133 (76.9)	
Number of casual sex partners				0.93
None	93	18 (19.4)	75 (80.6)	
One	100	20 (20.0)	80 (80.0)	
Multiple	35	6 (17.1)	29 (82.9)	
Number of main sex partners				0.26
None	66	13 (19.7)	53 (80.3)	
One	148	26 (17.6)	122 (82.4)	
Multiple	14	5 (35.7)	9 (64.3)	
Religion				0.76
Christianity	199	39 (19.6)	160 (80.4)	
Islam	29	5 (17.2)	24 (82.8)	
Year of study				0.39
Year 1	37	5 (13.5)	32 (86.5)	
Year 2	57	15 (26.3)	42 (73.7)	
Year 3	61	12 (19.7)	49 (80.3)	
Year 4	73	12 (16.4)	61 (83.6)	
Faculty				0.59
Integrated communication sciences	54	8 (14.8)	46 (85.2)	
Journalism and Media	82	16 (19.5)	66 (80.5)	
Public relations, advertising and marketing	92	20 (21.7)	72 (78.3)	
Ethnicity				0.37
Akan	125	28 (22.4)	97 (77.6)	
Ewe	48	6 (12.5)	42 (87.5)	
Ga/Dangme	31	7 (22.6)	24 (77.4)	
Northern	24	3 (12.5)	21 (87.5)	
Employment status of parents				0.011
Both employed	138	33 (23.9)	105 (76.1)	
Both unemployed	22	6 (27.3)	16 (72.7)	
one employed	68	5 (7.4)	63 (92.6)	
Place of stay				0.42
Off campus	199	40 (20.1)	159 (79.9)	
On campus	29	4 (13.8)	25 (86.2)	

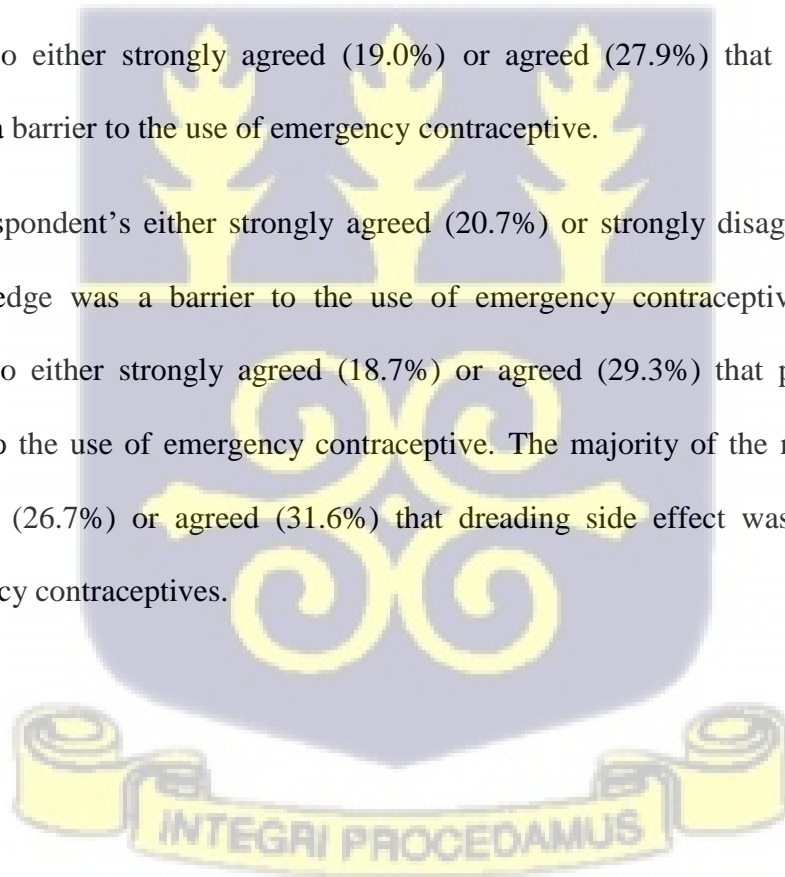
4.8 Barriers to the use of emergency contraceptives among study participants

Figure 4.5 shows the responses of the study participants concerning barriers to the use of emergency contraceptives. More than a fifth of the respondents either strongly agreed (26.4%) or agreed (21.6%) that peer influence was a barrier to the use of emergency

contraceptives whilst 23.0% were indifferent, 14.7% disagreed and 14.4% strongly disagreed. Also, most of the respondents strongly agreed (27.9%) or agreed (22.7%) that feeling embarrassed to buy emergency contraceptive from health workers was a barrier to the use of emergency contraceptive. Most of the respondents also either strongly agreed (32.2%) or agreed (29.3%) that the fear of being seen buying or using emergency contraceptive by friends, acquaintances and parents was a barrier to the use of emergency contraceptive.

Majority of the respondents either strongly agreed (25.3%) or agreed (28.4%) that religious opposition to the use of emergency contraceptives was a barrier. Less than half of the respondents either strongly agreed (11.8%) or agreed (24.1%) that the unaffordability of emergency contraceptive was a barrier to the use of emergency contraceptives. Most of the respondents also either strongly agreed (19.0%) or agreed (27.9%) that infrequent sexual encounter was a barrier to the use of emergency contraceptive.

Most of the respondent's either strongly agreed (20.7%) or strongly disagreed (25.0%) that lack of knowledge was a barrier to the use of emergency contraceptives. Many of the respondents also either strongly agreed (18.7%) or agreed (29.3%) that partner's approval was a barrier to the use of emergency contraceptive. The majority of the respondents either strongly agreed (26.7%) or agreed (31.6%) that dreading side effect was a barrier to the use of emergency contraceptives.



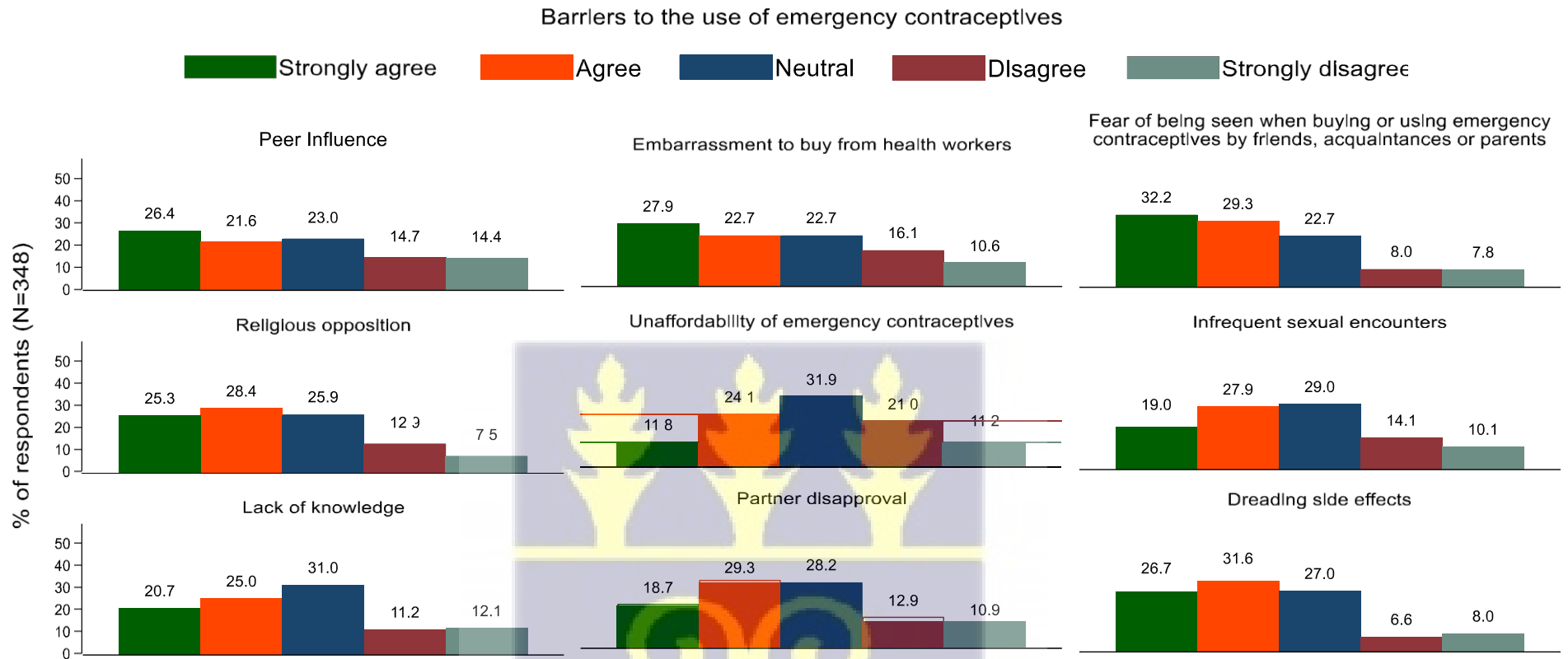


Figure 4.5 Barriers to the use of emergency contraceptives among study respondents



4.8.1 Association between barriers to the use of emergency and use of emergency contraceptives

Table 4.4 reports on the association between the use of emergency contraceptives and the barriers to the use of emergency contraceptives. The barriers to the use of emergency contraceptives that were significantly associated with the use of emergency contraceptives were peer influence (0.021), fear of being seen when buying emergency contraceptives by friends (p=0.033), religious opposition (p=0.024), infrequency sexual encounters (p=0.021) and lack of knowledge (p=0.004).

The use of emergency contraceptive was significantly higher among respondents who agreed (87.8%) that peer influence was a barrier to the use of emergency contraceptives compared to those who were neutral (75.0%) or those who disagreed (72.3%). The use of emergency contraceptives was significantly higher among those who agreed (85.7%) that fear of being seen buying or using emergency contraceptive by friends was barrier to the use of emergency contraceptive compared to those who were neutral (70.2%) or those who disagreed (73.5%).

Also, the use of emergency contraceptives was significantly higher among those who agreed (87.0%) that religious opposition is a barrier to the use of emergency contraceptives compared to those who were neutral (79.1%) or those who disagreed (79.0%). The use of emergency contraceptive was also significantly higher among respondents who agreed (90.2%) that the lack of knowledge was a barrier to the use of emergency contraceptives compared to those who were neutral (70.8%) and those who disagreed (75.9%). (Table 4.4).

Table 4.4 Association between barriers to EC use and use of emergency contraceptives

Characteristics	Ever used contraceptives			P-value
	Total	No	Yes	
	N	n (%)	n (%)	
N	228	44 (19.3)	184 (80.7)	
Peer Influence				0.021
Strongly agree/Agree	115	14 (12.2)	101 (87.8)	
Neutral	48	12 (25.0)	36 (75.0)	
Strongly disagree/Disagree	65	18 (27.7)	47 (72.3)	
Embarrassment to buy from health workers				0.37
Strongly agree/Agree	125	20 (16.0)	105 (84.0)	
Neutral	45	10 (22.2)	35 (77.8)	
Strongly disagree/Disagree	58	14 (24.1)	44 (75.9)	
Fear of being seen when buying or using emergency contraceptives by friends				0.033
Strongly agree/Agree	147	21 (14.3)	126 (85.7)	
Neutral	47	14 (29.8)	33 (70.2)	
Strongly disagree/Disagree	34	9 (26.5)	25 (73.5)	
Religious opposition				0.024
Strongly agree/Agree	123	16 (13.0)	107 (87.0)	
Neutral	55	13 (23.6)	42 (76.4)	
Strongly disagree/Disagree	50	15 (30.0)	35 (70.0)	
Unaffordability of emergency contraceptives				0.69
Strongly agree/Agree	80	13 (16.3)	67 (83.8)	
Neutral	67	14 (20.9)	53 (79.1)	
Strongly disagree/Disagree	81	17 (21.0)	64 (79.0)	
Infrequent sexual encounters				0.021
Strongly agree/Agree	111	16 (14.4)	95 (85.6)	
Neutral	65	20 (30.8)	45 (69.2)	
Strongly disagree/Disagree	52	8 (15.4)	44 (84.6)	
Lack of knowledge				0.004
Strongly agree/Agree	102	10 (9.8)	92 (90.2)	
Neutral	72	21 (29.2)	51 (70.8)	
Strongly disagree/Disagree	54	13 (24.1)	41 (75.9)	
Partner disapproval				0.89
Strongly agree/Agree	111	21 (18.9)	90 (81.1)	
Neutral	61	13 (21.3)	48 (78.7)	
Strongly disagree/Disagree	56	10 (17.9)	46 (82.1)	
Dreading side effects				0.27
Strongly agree/Agree	132	24 (18.2)	108 (81.8)	
Neutral	58	15 (25.9)	43 (74.1)	
Strongly disagree/Disagree	38	5 (13.2)	33 (86.8)	

4.9 Binary logistic regression model of factors associated with the use of emergency contraceptives

Table 4.5 shows the univariate and multivariate binary logistic regression model of factors associated with the use of emergency contraceptives.

From the multivariable analysis (adjusted model), the odds of emergency contraceptive use were over 3 times significantly higher among respondents who were in intimate relationship compared to those who were single (AOR: 3.19, 95% CI: 2.97-9.78, $p=0.005$). Also, the odds of emergency contraceptive use was 1.4 times significantly higher among respondents who had multiple casual partners compared to those who had no casual partners (AOR: 1.43, 95% CI: 1.52-5.98, $p=0.018$). On the other hand, the use of emergency contraceptives was significantly less among those with multiple main sex partners compared to those with no main partners (AOR: 0.03, 95% CI: 0.00-0.54, $p=0.017$). The use of emergency contraceptives was over 5 times significantly higher among those who had only one of their parents employed compared to those who had both parents employed (AOR: 5.59, 95% CI:

1.25-24.89, $p=0.024$). The odds of emergency contraceptive use was 93% less among respondents who used protection during sex compared to those who do not use protection during sex (AOR: 0.07, 95% CI: 0.02-0.32, $p<0.001$). (Table 4.5)

Compared to those who disagreed that infrequent sexual encounters were a barrier to the use of emergency contraceptives, the odds of emergency contraceptive use was 90% less among those who were neutral (AOR: 0.10, 95% CI: 0.02-0.55, $p=0.008$). Also, compared to those who disagreed that lack of knowledge was a barrier to the use of emergency contraceptives, the odd of emergency contraceptive use was over 5 times significantly high among those who agreed (AOR: 5.76, 95% CI: 1.26-26.29, $p=0.024$). (Table 4.6)



Table 4.5 logistic regression model of socio-demographic factors affecting the use of emergency contraceptives among respondents

Characteristics	Unadjusted logistic regression		Adjusted logistic regression	
	COR [95% CI]	P-value	AOR [95% CI]	P-value
Age group				
18-20 years	1.00 [reference]		1.00 [reference]	
21-24 years	1.02 [0.45, 2.31]	0.960	1.09 [0.21, 5.76]	0.918
25+ years	1.74 [0.60, 5.01]	0.307	1.13 [0.13, 10.13]	0.916
Marital status				
In an intimate relationship	6.17 [1.43, 26.62]	0.015	3.19 [2.97, 9.78]	0.005
Married	1.50 [0.32, 7.15]	0.608	0.66 [0.04, 11.15]	0.774
Single	1.00 [reference]		1.00 [reference]	
Number of casual sex partners				
None	1.00 [reference]		1.00 [reference]	
One	0.96 [0.47, 1.95]	0.910	2.01 [0.59, 6.80]	0.262
Multiple	1.16 [0.42, 3.21]	0.775	1.43 [1.52, 5.98]	0.018
Number of main sex partners				
None	1.00 [reference]		1.00 [reference]	
One	1.15 [0.55, 2.41]	0.710	0.34 [0.08, 1.36]	0.126
Multiple	0.44 [0.13, 1.54]	0.200	0.03 [0.00, 0.54]	0.017
Religion				
Christianity	1.00 [reference]		1.00 [reference]	
Islam	1.17 [0.42, 3.26]	0.764	0.52 [0.08, 3.55]	0.505
Year of study				
Year 1	1.00 [reference]		1.00 [reference]	
Year 2	0.44 [0.14, 1.33]	0.145	0.34 [0.05, 2.44]	0.281
Year 3	0.64 [0.21, 1.98]	0.437	0.37 [0.04, 3.39]	0.377
Year 4	0.79 [0.26, 2.45]	0.689	2.39 [0.20, 27.98]	0.487
Faculty				
Integrate communication sciences	1.00 [reference]		1.00 [reference]	
Journalism and Media	0.72 [0.28, 1.82]	0.483	0.73 [0.12, 4.34]	0.734
Public relations, advertising and marketing	0.63 [0.25, 1.54]	0.308	0.59 [0.11, 3.24]	0.546
Ethnicity				
Akan	1.00 [reference]		1.00 [reference]	
Ewe	2.02 [0.78, 5.24]	0.148	1.34 [0.31, 5.81]	0.697
Ga/Dangme	0.99 [0.39, 2.54]	0.983	0.89 [0.18, 4.27]	0.880
Northern	2.02 [0.56, 7.27]	0.282	1.31 [0.18, 9.60]	0.789
Employment status of parents				
Both employed	1.00 [reference]		1.00 [reference]	
Both unemployed	0.84 [0.30, 2.32]	0.733	2.03 [0.34, 12.13]	0.440
one employed	3.96 [1.47, 10.67]	0.006	5.59 [1.25, 24.89]	0.024
Place of stay				
Off campus	1.00 [reference]		1.00 [reference]	
On campus	1.57 [0.52, 4.78]	0.425	2.56 [0.46, 14.28]	0.284
Knowledge level on emergency contraceptives				
Low knowledge	1.00 [reference]		1.00 [reference]	
Adequate knowledge	1.39 [0.39, 4.97]	0.611	2.32 [0.29, 18.40]	0.427
Use of protection during sex				
No	1.00 [reference]		1.00 [reference]	
Yes	0.21 [0.09, 0.47]	<0.001	0.07 [0.02, 0.32]	<0.001

COR: Crude odds ratio. AOR: Adjusted odds ratio. CI: confidence interval

Barriers to the use of emergency contraceptives is controlled for in the adjusted model

Table 4.6 Logistic regression model of barriers to the use of emergency contraceptives associated with the use of emergency contraceptives

Characteristics	Unadjusted logistic regression		Adjusted logistic regression	
	COR [95% CI]	P-value	AOR [95% CI]	P-value
Peer Influence				
Agree	1.00 [reference]		3.15 [0.87, 11.44]	0.081
Neutral	0.42 [0.18, 0.98]	0.045	2.52 [0.57, 11.18]	0.224
Disagree	0.36 [0.17, 0.79]	0.011	1.00 [reference]	
Embarrassment to buy from health workers				
Agree	1.00 [reference]		1.90 [0.39, 9.26]	0.428
Neutral	0.67 [0.28, 1.56]	0.350	0.92 [0.15, 5.82]	0.931
Disagree	0.60 [0.28, 1.29]	0.191	1.00 [reference]	
Fear of being seen when buying or using emergency contraceptives by friends				
Agree	1.00 [reference]		4.88 [0.66, 36.07]	0.120
Neutral	0.39 [0.18, 0.85]	0.018	1.65 [0.20, 13.58]	0.643
Disagree	0.46 [0.19, 1.13]	0.090	1.00 [reference]	
Religious opposition				
Agree	1.00 [reference]		2.77 [0.60, 12.86]	0.193
Neutral	0.48 [0.21, 1.09]	0.080	3.78 [0.62, 23.00]	0.150
Disagree	0.35 [0.16, 0.78]	0.010	1.00 [reference]	
Unaffordability of emergency contraceptives				
Agree	1.00 [reference]		0.72 [0.16, 3.27]	0.668
Neutral	0.73 [0.32, 1.70]	0.470	1.42 [0.32, 6.25]	0.645
Disagree	0.73 [0.33, 1.62]	0.441	1.00 [reference]	
Infrequent sexual encounters				
Agree	1.00 [reference]		0.24 [0.04, 1.29]	0.096
Neutral	0.38 [0.18, 0.80]	0.011	0.10 [0.02, 0.55]	0.008
Disagree	0.93 [0.37, 2.33]	0.871	1.00 [reference]	
Lack of knowledge				
Agree	1.00 [reference]		5.76 [1.26, 26.29]	0.024
Neutral	0.26 [0.12, 0.60]	0.002	1.04 [0.23, 4.73]	0.958
Disagree	0.34 [0.14, 0.85]	0.020	1.00 [reference]	
Partner disapproval				
Agree	1.00 [reference]		0.51 [0.12, 2.23]	0.372
Neutral	0.86 [0.40, 1.87]	0.706	1.35 [0.22, 8.36]	0.750
Disagree	1.07 [0.47, 2.47]	0.868	1.00 [reference]	
Dreading side effects				
Agree	1.00 [reference]		0.45 [0.08, 2.72]	0.386
Neutral	0.64 [0.31, 1.33]	0.230	0.30 [0.04, 2.48]	0.265
Disagree	1.47 [0.52, 4.15]	0.470	1.00 [reference]	

COR: Crude odds ratio. AOR: Adjusted odds ratio. CI: confidence interval
 Socio-demographic factors are controlled for in the adjusted model

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This chapter discusses the results of the research findings and compares them with what can be found in literature. The results were discussed based on the study objectives. The study's aim is to determine the use of emergency contraceptives among female students at the Ghana Institute of Journalism, specifically to determine their knowledge and use of emergency contraceptives, and identify barriers to their use among female students at the Ghana Institute of Journalism. The chapter is in five sections. The first section presents the knowledge regarding emergency contraceptive use. Section two elaborates on the proportion of students who used emergency contraception. Section three is about barriers to the use of emergency contraceptives. Section four elaborates on the socio-economic factors that affect the use of emergency contraceptives. Section five discusses the implications of the findings of the research.

5.2 Knowledge regarding emergency contraceptive use among students

From the results 68.1% of the students had ever heard of emergency contraceptives. This indicates that the students have great awareness of emergency contraceptives. Comparatively, the knowledge regarding emergency contraceptives among participants in the current study is higher than that of a study conducted at University of Cape Coast (36%)(Darteh & Doku, 2016) .The results were also lower than that of a study at the Takoradi polytechnic in Ghana(Manortey et al., 2016). A study in Kampla, Uganda by Byamugisha et al (2006) reported an awareness of emergency contraceptives of 45% among students and another study in South Africa by Hoque & Ghumans (2012) had an awareness of 50%, all of which

are lower than the current study's awareness (68.1%). A study in Ethiopia had comparable results of 67% of knowledge of emergency contraceptive use (Gebrehiwot et al., 2013).

In the current study the media was the main outlet that provided information on emergency contraceptive use, followed by the friends, health workers and partners. A study by Manortey et al (2016) reported that 52.5% of the students heard about emergency contraceptives from electronic media and 27.5% got to know from family and friends. The 52.5% was higher than the results of 44.7% obtained from the study. Kgosiemang & Blitz (2018) reported that 40% of the students had friends recommending emergency contraceptives while 31% was through a partner and 17.8% had a health worker recommending the use of emergency contraceptives. The main source of information on ECs being the media may be due to the fact that students have easy access to more social media platforms (Facebook, twitter, Instagram e.t.c.) as well as traditional media such as radio and television, where they may hear of such issues as contraceptives. Though a considerable number of the students had heard of emergency contraceptives there was low knowledge on how to correctly use emergency contraceptives. 8% had adequate knowledge on emergency contraceptives. A study in Botswana had an overall knowledge on contraceptives to be 52.8% (Kgosiemang & Blitz, 2018). A study conducted among students at the University of Professional Studies outlined that only 19.8% of students knew when to take emergency contraceptives. A higher percentage of students (59.3%) had the correct knowledge on the timing of emergency contraceptives, according to (Manortey et al., 2016). A study conducted in Nigeria had a lower percentage of 18% (Aziken et al., 2003). In the current study only about 9% of the respondents had correct knowledge of EC timing. Also only 25.6% knew that ECs do not cause infertility. From the findings, though most of the students had heard of emergency contraceptives, very few knew how they are correctly used. This could be because their main sources of information which is the media may not be giving the right information on the correct use of these contraceptives.

There is also no overview on such matters officially from the school such as talks on emergency contraceptives during orientation. The school also lacks centers that may continually sensitize students on the right use of emergency contraceptives and reproductive health education.

From the results it was found that among the socio-demographic characteristics, the students' place of residence and their faculty were statistically significant. Students on campus had more knowledge on emergency contraceptives as compared to those who were off campus. This may be because the students on campus could easily be influenced by friends to adapt certain kind of behaviour including informing them about emergency contraceptives and using them as well. The students from the faculty of Public relations, advertising and marketing had more knowledge about emergency contraceptives as compared to the two other faculties, namely, the Journalism and media studies faculty and the integrated communication sciences faculty. This may be because they may be exposed to a wide variety of knowledge on different topics than their colleagues in other faculties.

5.3 Proportion of students who used emergency contraceptives

Out of the 348 females, 228 had ever had sex. About 92.2% of the students who did not use protection during sexual intercourse used emergency contraceptives. The high use of condoms among the respondents may be because they are tertiary students and may be well educated about the importance of using protection. The proportion of female students who had ever used emergency contraceptives from the results was 80.7%. This is high compared to a study that was conducted in Takoaradi Polytechnic (28.4%) and also in Cape Coast University where the use was 36% (Manortey et al., 2016); (Darteh & Doku, 2016) Another study conducted in Ethiopia had an emergency contraceptive use of about 82.97% (Yemaneh et al., 2018). The higher percentage of use of emergency contraceptives may be due to the fact that there are more students among the population who are sexually active. It may also be that

there is more awareness of emergency contraceptives among the student population. The media was the major source of students' information on emergency contraceptives, and this may be a reason for high use of ECs among students. The lower use of emergency contraceptives in the other studies could have been because more of the students were abstaining from sex.

5.4 Barriers to the use of emergency contraceptives

61.5% of the respondents agreed or strongly agreed that fear of being seen by friends, acquaintances or parents was a barrier to the use of ECs while 58.3% agreed or strongly agreed that dreading side effects was a barrier. Also, 53.7% strongly agreed or agreed that religion is a barrier to their use of emergency contraceptives. The major barriers to the use of emergency contraceptives were fear of being seen by friends, acquaintances, or parents, dreading side effects, religious opposition and embarrassment to buy from health workers. The results are similar to research works by (Egede et al., 2015) and (Williamson et al., 2009) which outline similar barriers to the use of emergency contraceptives.

Fear of being seen by friends, acquaintances or parents can hinder students or the youth from accessing reproductive health services of which emergency contraceptive is part. In the case where these close relations are opposed to EC use the youth would also not want to be seen using ECs even if they need it. The fear of side effects deters individuals from using emergency contraceptives. Some of the side effects such as vomiting, irregular menses, and tiredness may be uncomfortable. Some side effects that are unfounded and misconceptions also bar the use of emergency contraceptives (Nalwadda et al., 2010). Another study conducted in Greater Accra indicated that one of the most alarming reasons for not using modern contraceptives is fear of side effects from contraceptives owing to inadequate knowledge (Eliason et al., 2014).

Religion was also another hurdle with regard to contraceptive use. This agrees with a study by Takyi et al (2021) where some pastors and religious leaders also discourage their

members from using contraceptives. The Catholic Church for instance discourages the use of contraceptives and this may also have affected the use of emergency contraceptives. Embarrassment buying from health workers is another major barrier and is in consonance with a study by (Nalwadda et al., 2010). This may be due to the attitude of some health workers when the students go to buy emergency contraceptives or even their lack of confidentiality concerning such matters (Hindin et al., 2014). The use of emergency contraceptives was five times more among respondents who agreed that lack of knowledge is a barrier compared with those who disagreed. This means that such students used emergency contraceptives even though they may not have had adequate knowledge on the issue and not having enough knowledge did not deter them from using emergency contraceptives.

5.5 Socio-demographic factors associated with the use of emergency contraceptives

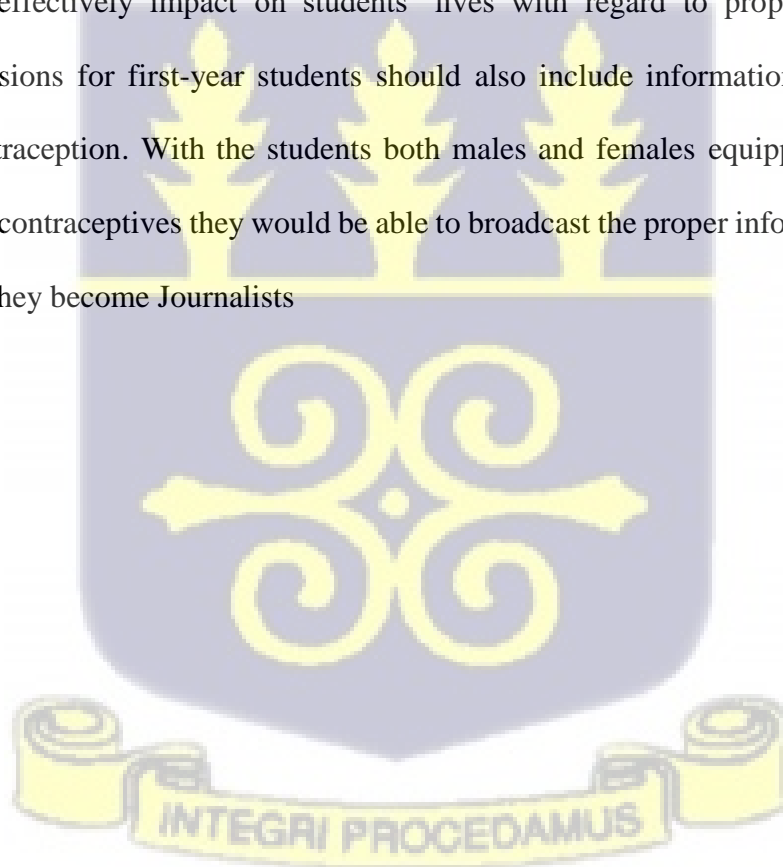
The socio-demographic factors that were statistically significant to the use of emergency contraceptives in the study were being in an intimate relationship as against being single, and having multiple casual sex partners and multiple main sex partners. People in intimate relationships were three times more likely to use emergency contraceptives compared to those who were single. This may have been because the students in the intimate relationship may have had sex frequently and needed to take contraceptives to prevent unwanted pregnancy.

Respondents with multiple casual sex partners were more likely to use ECs. According to a study conducted to determine the effects of relationship context on contraceptive use, women in casual relationships were less likely to use contraception (Upadhyay et al., 2016). The difference in observation between these two studies may be because the respondents in this study would not want to get pregnant because the relationships are just casual hence their increased use of ECs. On the other hand, respondents with multiple main partners were less likely to use ECs as compared to those who had no main partner. This may also be because respondents may be on other contraceptives with their main partners.

Students with one parent employed had more than five times higher odds of using ECs as compared to students with both parents employed. Also, those who used protection were less likely to use emergency contraceptives most likely because the respondents understood that when protection was used there was no need for emergency contraceptives.

5.6 Chapter Summary

The study found that in-depth knowledge on ECs is low though the level of use among the female students is high. The greater proportion of the students is sexually active and therefore there is the need for a proactive unit of the University that handles contraception and other reproductive health services. Guidance and counselling units should be equipped with the right tools to effectively impact on students' lives with regard to proper sex education. Orientation sessions for first-year students should also include information on reproductive health and contraception. With the students both males and females equipped with the right information on contraceptives they would be able to broadcast the proper information sometime to come when they become Journalists



CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter contains the study's summary, conclusions, and recommendations. The study's objectives were to examine female students at the Ghana Institute of Journalism's awareness of emergency contraceptive usage, to determine their use of emergency contraceptives, and to determine the impediments to emergency contraceptive use.

6.1 Summary of the study

The study sought to investigate the knowledge and use of emergency contraceptives and find out the barriers to the use of emergency contraceptives. Quantitative research method was used to collect data and the data was analysed using STATA IC version 16. Chi-square and logistics regression were employed to assess the association between the independent variables and the use of Emergency contraceptives.

6.2 Conclusion of the Study

From the research it was realized that the majority of the females at the Ghana Institute of Journalism had heard of emergency contraceptives. Their source of information on emergency contraceptives was mostly from the media and friends. On the level of knowledge about emergency contraceptives, it was realised that respondents had low knowledge. More than half of the respondents were not adequately informed about the correct time to take emergency contraceptives. Additionally, many of the respondents were not aware that emergency contraceptives do not cause infertility. From the study it was found out that many of the respondents had heard of emergency contraceptives however only a few had adequate knowledge on its correct use. The findings of the study also indicated that there was a high number of the respondents who were sexually active, and the use of emergency contraceptives was high. Major barriers to the use of emergency contraceptives were fear of

being seen by friends, acquaintances, or parents, dreading side effects, religious opposition, and embarrassment from buying from health workers.

6.3 Recommendations

Based on the research findings the following recommendations may be considered by policy makers and the healthcare agencies and professionals.

1. There should be inter-ministerial collaboration between the Ministry of Health and the Ministry of Education concerning reproductive health education. Policies should be formulated and implemented such that health practitioners provide University students as well as secondary school students with the requisite information on contraceptives, especially emergency contraceptives. This is to ensure that students are correctly informed on emergency contraceptives and other reproductive health care issues since it was found out from the study that the knowledge level on emergency contraceptives is low.
2. Health care agencies and family planning advocates should involve tertiary students in family planning education and initiatives so that they are better informed on emergency contraceptives and have correct knowledge on their use.
3. Journalists, communications experts, and media houses should be properly regulated and equipped with the right information concerning emergency contraceptives so that they can properly educate the public and students. This would encourage the proper use of ECs and improve students' knowledge on contraceptives as the media is a major source of information on contraceptive.
4. The study was only quantitative in nature; other studies that are both qualitative and quantitative in nature should be conducted
5. First year orientation programs at the Ghana Institute of Journalism should cover reproductive health and contraception so that both males and females after haven

graduated and become journalists would disseminate accurate information because they have the necessary knowledge about emergency contraceptives.

6.4 Limitations of the study

1. The research focused on female students at the Ghana Institute of Journalism therefore conclusions drawn may not apply to every university.
2. Furthermore, because a cross-sectional study was employed, the results cannot be used to explain respondents' behaviour over time. This is because cross-sectional studies are conducted at a particular point in time to compare different samples



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APPENDIX A: PARTICIPANT INFORMATION SHEET

**TITLE OF STUDY: EMERGENCY CONTRACEPTIVE USE AMONG FEMALE
STUDENTS AT GHANA INSTITUTE OF JOURNALISM**

Introduction

My name is Rosemond Akua Pomaa Effah a graduate student pursuing a master's degree in Public Health at the University of Ghana, Legon in Accra. I am conducting research on the use of emergency contraceptives at Ghana Institute of Journalism in partial fulfillment of a master's degree. You may contact me on 0245445949 and email on rosepomaa16@gmail.com

Background of the Research

The study seeks to assess the knowledge and use of emergency contraceptives among females as well as barriers to emergency contraceptives among students. The research would add to knowledge and be used in policy formulation. We humbly request that you willingly participate in the study. Your opinions and responses are very much welcome.

Nature of Research

The study seeks to determine the use of emergency contraceptives among females at the Ghana Institute of Journalism. Structured questionnaires about the knowledge and use of emergency contraceptives would be given to participants to fill. About 291 female students would take part in the study. You will be required to provide responses to questions in a questionnaire given. All responses will be kept confidential.

Duration

The questionnaire would be estimated to take about 15 to 20 minutes of the participant's time. It would consist of questions on the knowledge and use of emergency contraceptives, socio-demographic characteristics, and barriers to emergency contraceptive use.

Possible Benefits

Participation is entirely voluntary there would be no compensation for participants. There would be no penalty for not participating.

Possible Risk and Discomfort

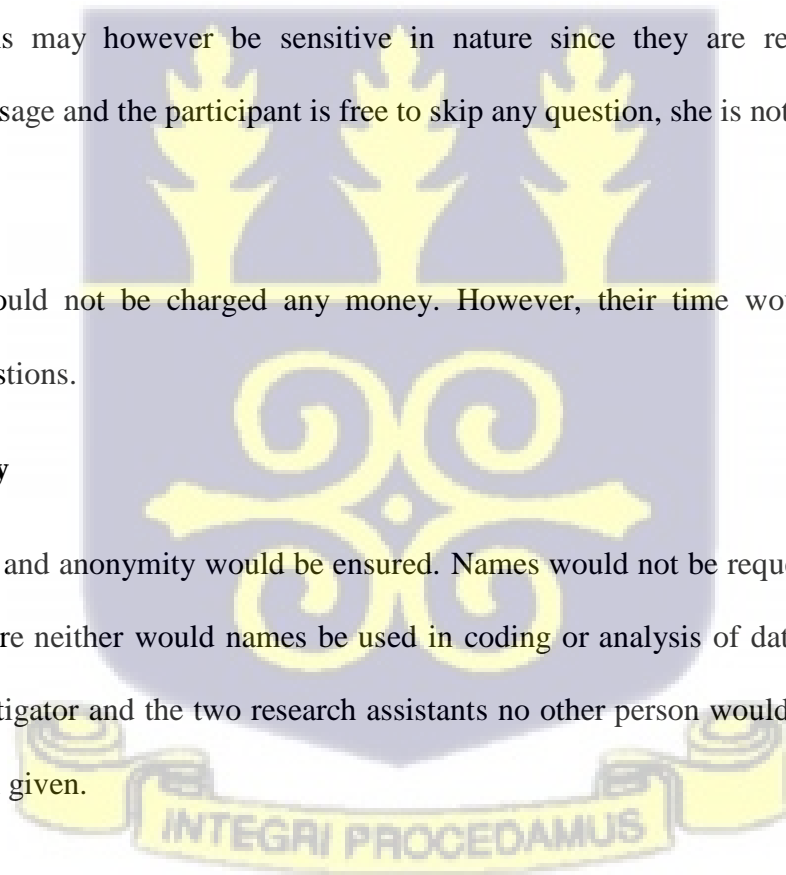
Participants would only fill questionnaires and we do not expect any harm to any participant. Some questions may however be sensitive in nature since they are related to sex and contraceptive usage and the participant is free to skip any question, she is not comfortable.

Cost

Participants would not be charged any money. However, their time would be needed to answer the questions.

Confidentiality

Confidentiality and anonymity would be ensured. Names would not be requested for in filling the questionnaire neither would names be used in coding or analysis of data. Apart from the Principal investigator and the two research assistants no other person would be able to access the information given.



Voluntary Participation or Withdrawal

The participants can skip any question they would not like to answer. They also have the right to leave the study at any time without being penalized

Feedback to Participants

At the end of the study feedback would be given to the participants through the Registry of the school.

Funding Information

The research is self-funded.

Sharing Participants Information

The data that would be collected would be entirely for research purposes and would not be given to any organization or individual.

Provision of consent form

In the event you willingly agree to participate in this study, you will be asked to sign an information sheet and a consent form, one of which you will keep and the other which will be retained by the research assistant for future reference.

Contact for Additional Information

For questions and enquiries about the study you may contact the Principal Investigator or her supervisor through the addresses below:

Rosemond Akua Pomaa Effah

School of Public Health, University of Ghana, Legon.

Email address: rosepomaa16@gmail.com

0245445949

Dr. Benedict Calys-Tagoe Department

of Community Health University of

Ghana Medical School College of

Health Sciences, Korle Bu Email

address: bcalys-tagoe@ug.edu.gh



APPENDIX B: CONSENT FORM

TITLE OF STUDY: EMERGENCY CONTRACEPTIVE AMONG FEMALE STUDENTS
AT THE GHANA INSTITUTE OF JOURNALISM

PARTICIPANTS' STATEMENT

I accept that I have read and had the study and contents of Participants' information sheet adequately explained as well to me in a language I understand. I am fully aware of the contents and any possible consequences, as well as my right to change my mind.

Even after I've signed this form, I have the option to change my mind or withdraw from the study. My participation is entirely voluntary.

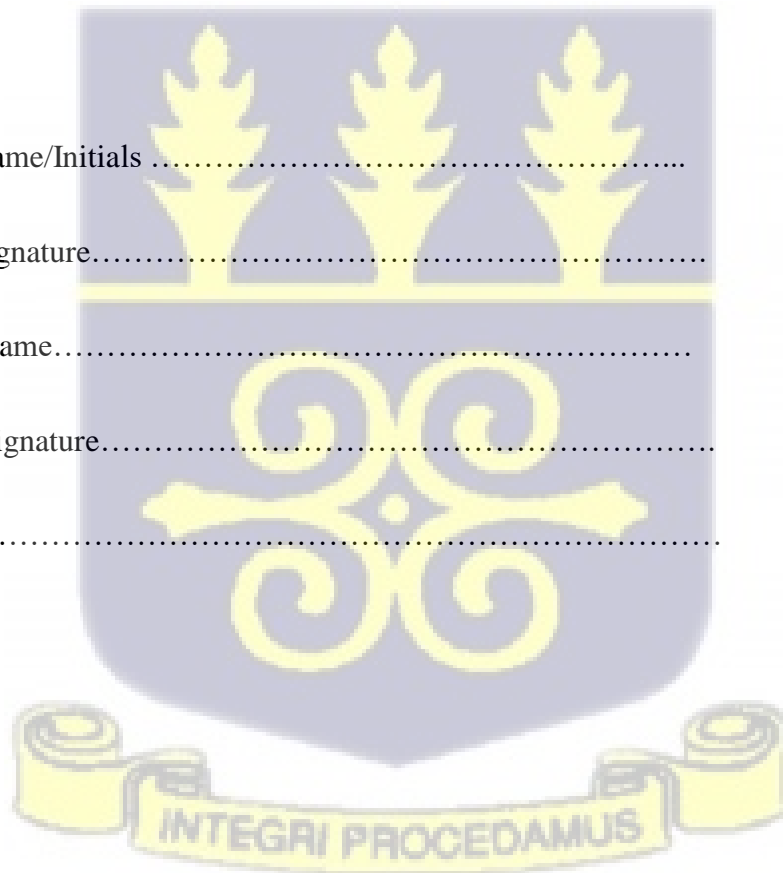
Participant's Name/Initials

Participant's Signature.....

Interviewer's Name.....

Interviewer's Signature.....

Date.....



INVESTIGATOR STATEMENT AND SIGNATURE

I certify that the participant has been given ample time to read and learn about the study. All questions and clarifications raised by the participant have been addressed.

Researcher's name.....

Signature

Date.....



APPENDIX C: QUESTIONNAIRE

I.SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENT

(Kindly circle a correct answer or write in the space provided)

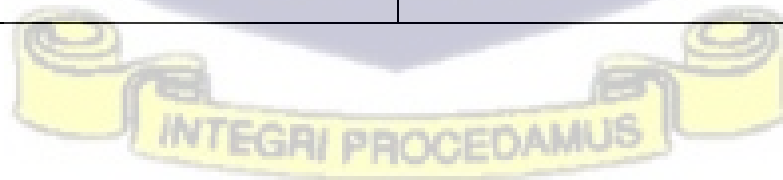
1) What is your age? (Age at last birthday)
2) What is your marital status?	A) Single B) Married C) In an intimate relationship
3) Number of casual sex partners	A) 1 B) 2 C) 3 D) Others please specify
4) Number of main sex partners	A) 1 B) 2 C) 3 D) Others please specify.....
5) What religion do you belong to?	A) Christianity B) Islam C) Traditional Believer D) Others
6) Which year are you in?	A) Year 1 B) Year 2 C) Year 3 D) Year 4
7) Which Faculty are you in?	A) Journalism and Media B) Public relations, advertising and marketing C) Integrate communication sciences D) Alternative Learning
8) Which tribe do you belong to?	A) Ewe B) Akan C) Ga/Dangme D) Northern E) Others
9) Employment status of parents	A) Both employed B) Both unemployed C) one employed
10) Where do you stay?	A) On campus B) Off campus

II.KNOWLEDGE OF EMERGENCY CONTRACEPTION

For each of the questions below, please tick the box closest to your view.	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
11) Emergency contraceptives are the best method to prevent unwanted pregnancy					
12) Emergency contraceptives are only successful if used within 72 hours of sexual activity.					
13) Do you know about emergency contraceptives?	A) Yes B) NO If no skip to question 15				
14) Where were you informed about emergency contraceptives?	A) Friends B) Health worker C) Media D) Partner E) Others (specify).....				
15) Emergency contraceptives prevent one from getting sexually transmitted diseases.					
16) Emergency contraceptives have side effects and can affect the body long and short term					
17) Sexually transmitted diseases will increase with the use of emergency contraceptives.					
18) The use of emergency contraceptives causes infertility					
19)Alcohol affects the use of emergency contraceptives					

III. USE OF EMERGENCY CONTRACEPTIVES

20) When was the last time you engaged in sexual activity?	A) Never B) Less than a month ago C) Between 2 to 5 months D) More than 6 months ago
21) Do you usually use protection during sex?	A) Yes B) No C) Not Applicable
22) Have you taken emergency contraceptives before?	A) Yes B) No
23) How often have you taken emergency contraceptives in the past 6 months?	A) Once B) Twice C) Thrice D) Four times E) More than four times F) None
24) Who recommended emergency contraception to you?	A) Boyfriend B) Friend C) Health worker C) Parents D) Adverts on social media /TV E) Others (Specify).....
25) Where do you get your supply of Emergency contraceptives?	A) Boyfriend B) Friends C) Pharmacy D) Health facility
26) Endorsement from colleagues will make it easier to use emergency contraceptives	A) Yes B) No
27) Which side-effects did you encounter with your use of the emergency contraceptives?	A) Dizziness B) Fatigue C) Headache D) Bleeding between periods E) Heavier menstrual cycle F) All the above G) None of the above I) Others Please specify
28) Affordability is important when using emergency contraceptives	A) Yes B) No



IV. BARRIERS TO THE USE OF EMERGENCY CONTRACEPTIVES

29) The following are barriers to the use of emergency contraceptives

Please tick your opinion using the scale indicated SA: Strongly agree, A: Agree, N: Neutral, D: Disgrace and SD: Strongly disagree

CODE	1	2	3	4	5
OPINION	SA	A	N	D	SD
Peer Influence					
Embarrassment to buy from health workers					
Fear of being seen when buying or using emergency contraceptives by friends, acquaintances, or parents					
Religious opposition					
Unaffordability of emergency contraceptives					
Infrequent sexual encounters					
Lack of knowledge					
Partner disapproval					
Dreading side effects					





GHANA INSTITUTE OF JOURNALISM

P.O.BOX 667, ACCRA

OFFICE OF THE DEAN OF STUDENTS

rhodalene.amartey@gij.edu.gh

Telephone: 055 858 6159

020 836 5448

15th November 2021

TO WHOM IT MAY CONCERN

RE: PERMISSION TO COLLECT DATA ON GIJ CAMPUS BY ROSE EFFAH

This is to inform your good office that **Rosemond Akua Poma Effah**, a graduate student of the University of Ghana, Public Health School was granted permission by the Ghana Institute of Journalism to collect data from the students. This was in partial fulfilment of her research titled **Emergency Contraceptive Use among Female students of Ghana Institute of Journalism**.

The duration for the collection of data was between 13th September 2021 to 24th September, 2021. The students cooperated with her and therefore data collection was successful.

Thank You.

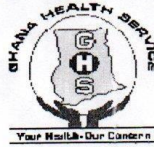
Yours faithfully,

Rhodalene Amartey (Mrs)
(Dean of Students)



GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

*In case of reply the
number and date of this
Letter should be quoted.*



Research & Development Division
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6th September, 2021

My Ref. GHS/RDD/ERC/Admin/App 121/376
Your Ref. No.

Rosemond Akua Effah
University Post Office
P.O. Box LG 1101
Legon- Accra

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	GHS-ERC 027/08/21
Project Title	Emergency Contraceptive use among Female Students at the Ghana Institute of Journalism
Approval Date	6 th September, 2021
Expiry Date	5 th September, 2022
GHS-ERC Decision	Approved

This approval requires the following from the Principal Investigator

- Submission of yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.
- Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....

Dr. James Akazili
(Head, Ethics & Research Management Department)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra