

**MEDIA EFFECTIVENESS ON HIV/AIDS MEDIA AWARENESS
CAMPAIGN AMONG COLLEGE STUDENTS IN MIZORAM**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY**

WILLIAM LALRAMHMACHHUANA

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**DEPARTMENT OF MASS COMMUNICATION
SCHOOL OF ECONOMICS, MANAGEMENT AND
INFORMATION
SCIENCES
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BY

WILLIAM LALRAMHMACHHUANA

DEPARTMENT OF MASS COMMUNICATION

Supervisor

Dr. LALREMRUATI KHIANGTE

Submitted

**In partial fulfillment of the requirement of the Degree of Doctor of Philosophy in
Mass Communication of Mizoram University, Aizawl.**

MIZORAM  **UNIVERSITY**

(A Central University accredited A 'Grade by NAAC in 2014)

Department of Mass Communication

Aizawl: Mizoram – 796 004

Post Box No:190

Phone: 0389-2330106 (O)

8974805937

CERTIFICATE

I certify that the thesis entitled “**Media Effectiveness on HIV/AIDS Media Awareness Campaign Among College Students in Mizoram**” submitted to Mizoram University for the award of the degree of Doctor of Philosophy in Mass Communication by **William Lalramhmachhuana** bearing **MZU Regn. No. 2116 of 2008-09** and **Ph.D. Regn. No. MZU/Ph.D/1399 of 25.07.2019** is a record of research work carried out during the period of 2019-2024 under my guidance and work carried out under my guidance and supervision, and that this work has not formed the basis for the award of any degree, diploma, associateship, fellowship or other titles in this university or any other university or institution of higher learning.

Date:

(Dr. LALREM RUATI KHIANGTE)

Place:

Assistant Professor & Supervisor

Mizoram University

DECLARATION

Mizoram University April, 2024

I **WILLIAM LALRAMHMACHHUANA**, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or to the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other University/Institute.

This is being submitted to the Mizoram University for the degree of **Doctor of Philosophy** in Mass Communication.

Date:

Place: Aizawl

(WILLIAM LALRAMHMACHHUANA)

Department of Mass Communication Mizoram University

(Prof. V. RATNAMALA)

Head

Department of Mass Communication

Mizoram University

Aizawl – 796004

(Dr. LALREMRUATI KHIANGTE)

Supervisor

Department of Mass Communication

Mizoram University

Aizawl – 796004

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Department of Mass Communication Mizoram University

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ABBREVIATIONS

HIV	Human Immunodeficiency Syndrome
AIDS	Acquired Immunodeficiency Syndrome
MSACS	Mizoram State Aids Control Society
NGO	Non-Governmental Organisation
WHO	World Health Organisation
UNAIDS	Joint United Nations Programme on HIV/AIDS
NACO	National AIDS Control Organisation
ART	Anti-retroviral Therapy
PLHIV	People Living With HIV/AIDS
SBCC	Social Behaviour Change Communication
SPSS	Statistical Package for Social Sciences
NACP	National AIDS Control Programme
SACS	State AIDS Control Society
STD	Sexually Transmitted Diseases
FSW	Female Sex Worker
PWID	People Who Inject Drugs
TI	Targeted Interventions
PMTCT	Prevention of Mother to Child Transmission
NHB	Non-home Based
IBBS	Integrated Biological and Behavioral Surveillance
SES	Socioeconomic Status
YMA	Young Mizo Association
PPTCT	Prevention of Parent to Child Transmission
ICTC	Integrated Counselling and Testing Center
IDU	Injecting Drug User
SNEP	Syringe and Needles Exchange Programme
RMC	Regular Medical Check-up
OST	Oral Substitution Therapy
NCA	National Council on AIDS
UNODC	United Nations Office on Drugs and Crime

CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION

This thesis reports on descriptive research that looked into the role of NGOs in Mizoram's fight against the HIV/AIDS pandemic. It focuses on examining the impact of various media awareness efforts on college-going students in Mizoram. The investigation was carried out to learn more about the knowledge, attitude, and practice of Mizoram's college students. It also seeks to learn about the target interventions carried out by various NGOs under the supervision of MSACS (Mizoram State Aids Control Society), the media strategy employed for media campaigns, and the awareness campaigns conducted throughout the entire state using various media. This chapter provides a brief explanation of the context, purpose, and significance of the study, as well as the questions.

1.2 BACKGROUND

1.2.1 HISTORY OF THE HIV/AIDS EPIDEMIC

According to Singhal and Everett (2003), no one knows the origin of the human immunodeficiency virus or the circumstances surrounding its human dissemination in the early 1980s. It might have been there for a very long time in a dormant state. At the National Cancer Institute in Bethesda, Maryland, Dr. Robert Gallo and other medical professionals discovered HIV-1 in 1983.

The Melhuish & Lewthwaite (2018) study found that HIV was found to be the cause of AIDS in 1983, after the disease was initially recognized in 1981. In 1959, plasma taken from an adult man in Kinshasa, Democratic Republic of the Congo, had the oldest known instance of HIV infection. The HIV epidemic most likely started in central Africa in the early 20th century due to several cross-species transmission episodes involving a simian lentivirus from monkeys to humans, most likely as a result of hunting practices, according to subsequent genetic sequencing. On June 5, 1981, the AIDS epidemic, sometimes known as the pandemic, formally

started. Of course, the AIDS epidemic actually began some years earlier, but the public and medical community were first informed about the recently identified illness on June 5, 1981. Though they are not the first to identify the new disease, the Los Angeles team is the first to publish a print announcement about it (Lucas, 2000).

1.2.2 HIV/AIDS A SERIOUS HEALTH ISSUE

According to HIV and AIDS (2023) on WHO, HIV continues to be a serious global public health concern, having claimed 40.4 million lives to date and continuing to spread throughout all countries. Some countries have reported rising rates of new infections after years of decline. By the end of 2022, there were an anticipated 39.0 million HIV-positive individuals worldwide, of which 25.6 million were located in the WHO African Region. In order to achieve the goals of ending AIDS, viral hepatitis B and C, and sexually transmitted infections by 2030, the health sector is guided in implementing strategically focused responses by global health sector strategies on HIV, viral hepatitis, and sexually transmitted infections for the period 2022–2030.

1.2.3 HIV/AIDS AND THE WORLD

HIV/AIDS, also known as acquired immunodeficiency syndrome, is a global health issue that has affected over 70 million people worldwide. Of those, 35 million have died, and 36.7 million are living with the illness. The Human Immunodeficiency Virus surfaced in Africa and somehow moved to the United States, where it was first detected decades later. The rate of HIV infection and deaths due to AIDS first increased rapidly during the 1980s in the United States and in Western Europe (Singhal Arvind & Rogers M. Everett, 2003). The first case of AIDS in the United States was discovered on June 5th, 1981, in a group of eight gay males in the city of Los Angeles, USA. It has now spread to every continent on the planet. There isn't a nation that is HIV/AIDS-free. Today, it has moved from urban to rural areas and from the general population at high risk to those at low risk. Communities that previously had little to do with the disease have been infiltrated by it (HIV and AIDS, 2023).

1.2.4 HIV/AIDS AND INDIA AS A WHOLE

In a report given by Sankalak (2020), the National Surveillance Data of India reported the first HIV case in India in the month of August of 1984. India has the third-highest number of HIV-positive individuals in the world; at the same time, its HIV prevalence is only 0.34 percent. 85.6 percent of HIV infections in India are contracted through sexual contact. In 2006, there were 5.6 million HIV-positive people living in India, according to UNAIDS, making it the country with the highest number of HIV-positive people worldwide. Following the first general population survey on HIV, UNAIDS and NACO concurred in 2007 that there were between 2 million and 3.1 million people living with HIV worldwide. The estimated number in 2008 was 2.31 million, and in 2009, 2.4 million people were expected to be HIV positive, making up 0.3% of the population. India is third in the world for the highest percentage of people living with HIV, despite the fact that this may appear low given the size of its population.

According to the report given in —HIV/AIDS in India (2023), the third- largest HIV epidemic in the world is in India. In India, the estimated HIV prevalence for 2016 was 0.3%. Although this number is low compared to the majority of other middle-income nations, India's enormous population (1.324 billion) makes it equal to 2.1 million people. An estimated 62,000 people perished from AIDS-related illnesses in the same year. With a 32% decrease in cases overall, India's HIV epidemic is slowing down. Heterosexual sex, which accounted for 87% of new infections in 2015, is what's causing India's HIV epidemic. However, the epidemic is focused on some vulnerable groups, such as sex workers. In many regions of the nation, different vulnerabilities fuel the epidemic. The three easternmost states—Manipur, Mizoram, and Nagaland—have the highest rates of HIV infection. Additionally, some states in the nation's north and northeast have reported increased HIV prevalence.

According to the recently published India HIV Estimate 2019 report on HIV Facts & Figures/NACO (2023), since the epidemic's peak in 2000, the estimated adult (15–49 years) HIV prevalence trend in India has been dropping, and more recently, it has

established. In 2019, this indicator's estimate ranged from 0.17 to 0.29 percent (see Figure 1). HIV prevalence was estimated to be 0.24% (0.18–0.32%) in adult males (15–49 years) and 0.20% (0.15–0.26%) in adult females in the same year.

1.2.5 HIV/AIDS AND MIZORAM

In the study conducted by Khawzawl L. Henry (2022), it was found that Mizoram witnessed the first HIV/AIDS case in October of 1990. According to the MSACS report released in March 2022, there were 23,755 people sick, and 21,727 of those were young adults aged between 15 and 49. Sex was the primary source of HIV infections, accounting for 65% of cases. In the news reported by Thangluah Lallawmkima (2022), the rate or percentage of HIV/AIDS prevalence is ten times greater than the national average. According to MSACS, 3,506 people died from the terrible disease between October 1990 and March of this year, and 25,982 people have received an AIDS diagnosis to date. Young people aged 35 to 49 had the highest incidence of AIDS (almost 27%), and 3,506 infected patients are now receiving antiretroviral therapy (ART). For the fiscal year 2021–2022, at least 1,620 people received an AIDS diagnosis, compared to 1,900 in the previous year (2020–2021) and 2,338 in the year 2019–2020.

According to the NACO report HIV Facts & Figures | National AIDS Control Organization | MoHFW | GoI (2023), the sharing of syringes and needles, which is responsible for about 39 percent of new HIV infections in Mizoram, is one of the many factors contributing to the current HIV situation in the state. It is also reported that less than one-third of regular sex partners of people living with HIV (PLHIV) had undergone HIV counseling and testing in Mizoram.

1.3 MEDIA AWARENESS CAMPAIGN

According to Rogers & Storey (1987), in the book —Communication Campaign," campaigns in the mass media are methods of trying to change the attitudes and behaviors of a large target audience about health by using communication channels to spread messages. Advertising on television and movies, radio, billboards, magazines, newspapers, and transit advertising (signs on buses and taxis) are some examples of these communication outlets. Public health campaigns involving mass media have been used in the past to improve road safety, encourage physical exercise, discourage tobacco use, improve nutrition, and improve care-seeking behaviors in various nations. The effectiveness of campaigns to discourage cigarette smoking in changing behavior has not always been consistent.

Media campaigns can run for a short while or for a very long time. They could be used in conjunction with policy changes or as a stand-alone option. Examples of additional organized program components are clinical or institutional outreach, simple access to newly available or current products or services, and outreach. If health initiatives are a component of larger social marketing campaigns, then several dissemination strategies may be employed (Kotler & Lee, 2008). According to Hornik and Yanovitzky (2003), campaigns in the mass media have the power to alter the behavior of entire populations, both directly and indirectly. Numerous advertisements seek to elicit emotional or cognitive reactions in order to directly impact specific receivers. These kinds of initiatives aim to influence personal decision-making processes. The removal or lessening of barriers to change, assistance in recognizing and embracing healthy or unhealthy social standards, and the association of positive feelings with effecting change are among the anticipated results.

1.4 RESEARCH GAP

There are several studies done in this area, but the existing literature reveals that the majority of the studies are done in other parts of India and other countries. The review of the literature shows that though many media campaigns on HIV/AIDS awareness are being conducted in the state, there have not been studies done in this area in the Mizoram context. The analysis of the HIV positive cases confirmed at the testing centers shows that there are three age groups who are most vulnerable in Mizoram: 25–34, 35–49, and 15–24. Which of the age groups is selected for the study area? The age group ranging from 15 to 24 is mostly composed of college students, and the rate of positive cases is 23.03%, so it was found that there is a need to study this age group.

1.5 STATEMENT OF THE PROBLEM

According to the National AIDS Control Organization report, in India, people in the age group of 15–29 comprise almost 25 percent of the country's population, and at the same time, they account for 31 percent of the AIDS burden. This clearly indicates that young people are at high risk of contracting HIV infection. It was also reported that almost 73 percent of young people have misconceptions about modes of HIV transmission. In the meantime, most young people become sexually active during adolescence. Therefore, the absence of the right guidance and the right information at this stage may lead to multi-partner unprotected sex with high-risk behavior groups. So, there is a need to study the effectiveness of the HIV/AIDS prevention media awareness campaign in Mizoram among the youth.

1.6 SIGNIFICANCE OF THE STUDY

There have been different types of media campaigns on HIV/AIDS in different types of media, like print (newspapers, posters, hoardings, leaflets, etc.), radio (news, talk shows, live phone-calls, speeches, etc.), TV (news, advertisements, talk shows, speeches, etc.), and the Internet. However, the previous study found that stigma towards those living with HIV/AIDS still exists and that the prevalence rate of HIV/AIDS in Mizoram is ten times greater than the national average. At the same

time, there are only a few studies conducted on the media awareness campaigns for HIV/AIDS in Mizoram. Therefore, there is a need to study whether the media campaigns that are conducted through various media outlets, along with the strategies used in the campaigns, are successful or whether there is room for improvement in the way that these campaigns are implemented among the youth in Mizoram.

1.7 AREA OF THE STUDY

College students in Mizoram will be the target audience for this study. There are 25 colleges that offer arts, science, commerce, and home science in Mizoram. The sample will be selected through stratified sampling, in which Mizoram will be divided into strata, district-wise. Then, one college will be selected according to the number of enrollments from every district. The selected colleges and the number of students enrolled in the year 2019 are given below:

Table 1.1: Selected Colleges and number of student enrollment, 2019

Sl. No	Name of College	Name of District	No. of Student Enrolled
1	Pachhunga University College	Aizawl	2561
2	Lunglei Government College	Lunglei	1199
3	Government Lawngtlai College	Lawngtlai	543
4	Government Champhai College	Champhai	839
5	Government Siaha College	Siaha	529
6	Government Kolasib College	Kolasib	751
7	Government Mamit College	Mamit	79
8	Government Serchhip College	Serchhip	508
9	Government Hnahthial College	Hnahthial	152
10	Government Saitual College	Saitual	230
11	Government Khawzawl College	Khawzawl	104

Source: Primary

1.8 OBJECTIVES

To study the effectiveness of an HIV/AIDS awareness campaign among college students in Mizoram.

1.8.1 SPECIFIC OBJECTIVES

1. To study the exposure of college students towards HIV/AIDS media awareness campaigns.
2. To study the awareness level of HIV/AIDS media campaign among college students in Mizoram.
3. To study the perception towards PLWHA through HIV/AIDS media campaign among college students in Mizoram.
4. To study the practices followed through HIV/AIDS media campaign among college students in Mizoram.

1.9 THEORETICAL FRAMEWORK

KAP theory: The theory was pioneered by John Coster, in KAP theory, human health behavioral change is achieved through the acquisition of the right knowledge, generation of attitudes and adoption of behaviors (or practices) in three successive processes. A Knowledge, Attitude, and Practices (KAP) survey is a quantitative approach that offers access to both quantitative and qualitative data through pre-formulated questions formatted in uniformed questionnaires. KAP surveys uncover misconceptions or misunderstandings that could be barriers to behavior change and to the activities we would like to carry out. Keep in mind that a KAP survey is based on the "declarative" (i.e., statements) and basically records an "opinion." Stated differently, the KAP survey shows what was said, but there might be significant discrepancies between what is said and what is actually done.

Use of KAP survey can help in the followings:

1. Measures the extent of a known situation; confirm or disprove a hypothesis; provide new tangents of a situation's reality.

2. Enhance the knowledge, attitudes and practices of specific themes; identify what is known and done about various health-related subjects.
3. Suggest an intervention strategy that reflects specific local circumstances and the cultural factors that influence them; plan activities that are suited to the perspective population involved.

1.10 CHAPTERIZATION

Chapter 1: Introduction

Chapter 1 focuses on the background of the study, the research gap, the statement of the problem, and the significance of the study. Furthermore, the researcher also covers the area in which the study will be conducted and its objectives, as well as an introduction to the media awareness campaign.

Chapter 2: Review of literature

The researcher offers a wide range of reviews of prior research on the thesis topic, as well as an explanation of concepts in this chapter. This chapter starts with the HIV/AIDS epidemiology in Mizoram, followed by the cultural and socioeconomic factors impacting awareness. In addition, an in-depth review of Mizoram's current HIV/AIDS awareness campaigns is included in this chapter, along with details concerning partnerships and collaborations with various NGOs, barriers to awareness and prevention, and innovative awareness campaign strategies. Furthermore, th

function of universities and colleges, the relationship between awareness campaigns and SBCCs (Social Behavior Change Communication), and entertainment and education were examined. Finally, this chapter deals with the challenges and future directions of HIV/AIDS awareness campaigns in Mizoram.

Chapter 3: Methodology

Chapter 3 deals with the definition of research methodology, the sampling method used for data collection, and the research analysis method employed in the study.

Chapter 4: Data analysis

Chapter 4 deals with the data analysis with the help of the Statistical Package for Social Sciences (SPSS). This chapter comprises the tables for the different tests generated from SPSS as well as their interpretations.

Chapter 5: Findings and conclusions

The findings from the data analysis were presented in this chapter, along with conclusions and suggestions on future directions for the HIV/AIDS awareness campaign in Mizoram.

CHAPTER 2 LITERATURE REVIEW

In this chapter, a comprehensive analysis of the literature related to the prevalence of HIV (human immunodeficiency virus) and AIDS (acquired immunodeficiency syndrome) in Mizoram is presented. The chapter provides a detailed discussion on the status of HIV and AIDS in Mizoram that includes the background, significance, and prevention measures for HIV and AIDS. Towards the end of this chapter, the challenges in raising awareness of HIV/AIDS in Mizoram were discussed, and suggestions regarding future directions for improving awareness campaigns were presented.

2.1. INTRODUCTION

According to Rahman et al. (2021), HIV/AIDS is rapidly and unabatedly spreading, particularly in emerging countries like India. While there are limited treatment options available for the virus, the current emphasis has shifted towards prevention rather than treatment. Prevention of this feared illness is mostly dependent on identifying the elements that contribute to its spread and identifying individuals who are susceptible and in danger, at least until a definitive treatment is discovered. AIDS has spread quickly over the globe and is probably here to stay in the twenty-first century (Fang et al., 2020). In less than 20 years, HIV/AIDS has spread from an unknown disease to a worldwide epidemic that has infected over 10 million people. According to Fang et al. (2022), several nations have previously seen severe epidemics affect specific populations or the whole populace. These healthcare systems in these countries now face additional challenges as a result of AIDS, including in Thailand, India, Burma, and Cambodia. The academic community is very concerned about the pandemic's propagation, dispersion, and susceptibility to certain demographic groups.

The Eti. et al. (2023) study shows that, under the direction of the Government of India's Ministry of Health and Family Welfare (MoHFW, GOI), the National AIDS Control Organization (NACO) develops policies and carries out therapeutic

initiatives for HIV/AIDS prevention, control, and treatment. To oversee its National AIDS Control Programme (NACP) at the state level, NACO established the State AIDS Control Society (SACS). According to Bhat et al. (2004), to strengthen its response to the HIV pandemic and hasten the reversal process, the Government of India launched the National AIDS Control Programme IV (NACP-IV) in 2012. These programs have led to a significant 32% reduction in new infections and a 49% decrease in AIDS-related deaths over the past decade. The aforementioned successes have raised the need for services related to prevention and treatment. The number of individuals anticipated to need antiretroviral medication increased from 3.79 lakh in 2007 to 14.88 lakh in 2015. People living with HIV still struggle to get access to ART medication, despite attempts. Fifty-five percent of Indian PLHIV have received HIV therapy as of March 2018. While the worldwide average for PLHIV therapy is 67%, in 2019, 62% of PLHIV were receiving it (Marsh et al., 2019).

2.1.1. Background of HIV/AIDS in Mizoram

According to Pachuau et al. (2021), Mizoram, a state in the north-eastern region of India, is grappling with a significant AIDS mortality rate, recording 23.34 cases of AIDS per 100,000 individuals, marking it as the second-highest in the country. In contrast to the overall trend in India and other states, Mizoram has witnessed an alarming 18% increase in HIV incidence between 2010 and 2017. As of 2019, an estimated 20.05 individuals per 1000 in Mizoram were living with HIV, while approximately 1.18 individuals per 1000 were without HIV. According to the study done by Lalnunfeli (2015), there are nine HIV infections identified in Mizoram on average every day. This statistic is alarming, especially when considering Mizoram's relatively small population of 1.1 million. Over the period from 2010 to 2019, Mizoram continued to grapple with a persistently high HIV prevalence rate. An estimated 69.22 thousand new infections and 4.43 deaths per 100,000 people were predicted to be connected to AIDS in 2019. In Pandey et al.'s (2017) paper, nonetheless, India has achieved notable strides in combating its pandemic, as seen by a 37% decrease in new HIV infections since 2010. The National AIDS Control Organization (NACO) is in charge of developing policies and carrying out initiatives

to stop the HIV pandemic in India (Thilakavathi et al., 2011). In an effort to curb the spread of HIV/AIDS, the National AIDS Control Programme (NACP) was also founded, encouraging the general public to adopt preventative measures and increasing public knowledge of them.

According to a study conducted by Rohmingmawii (2019), the Mizoram government established the State AIDS Cell in 1992, followed by the creation of the Mizoram State AIDS Control Society (MSACS) in 1998 as part of the Health and Family Welfare department's initiatives. Subsequently, MSACS has been actively engaged in promoting and executing awareness and education campaigns aimed at preventing and addressing the HIV/AIDS situation in Mizoram. The ongoing rise in new HIV infections, despite the diligent efforts of MSACS to combat transmission, highlights the importance of examining the general public's awareness, attitudes, and behaviors regarding HIV/AIDS.

Kabbash et al.'s (2016) studies evaluating people's attitudes, knowledge, and beliefs about HIV/AIDS in Mizoram are nonexistent. According to research conducted in India, there is an immediate need to increase public acceptance and care for those living with HIV. The primary means of doing this is by increasing public awareness of HIV and its mechanisms of transmission. The only realistic method to control HIV/AIDS is to avoid transmission through accurate understanding, a good attitude, safe conduct, and safe practices, since there is currently no treatable form of the disease (Nubed & Akoachere, 2016). The state of Mizoram in India continues to have the highest incidence and prevalence of HIV. It is thus vital to assess and ascertain adult population knowledge, attitudes, and beliefs about HIV/AIDS.

2.1.2. Significance of HIV/AIDS awareness in Mizoram

A study conducted by Breuner et al. (2016) shows that promoting condom usage, raising knowledge of HIV/AIDS, and delaying sexual orientation are all aided by sex education in schools. Worldwide, sexually transmitted infections (STDs) pose a serious threat to public health. It is frowned upon in Indian culture to discuss sex, AIDS, and associated topics. The anti-sex education stance of certain parents and

educators, along with other seniors, inhibits teenagers from learning positive information about the realities of the sex industry. It is concerning to note that there is no agreement in India about the inclusion of sex and reproductive health education in the curricula of schools and colleges. It has been shown that the HIV pandemic in Mizoram has risen due to risky sexual behaviors and the sharing of syringes and needles during drug use. Rao et al.'s (2022) study reveals that teenagers who allegedly began injecting narcotics at a relatively early age, such as heroin or "number 4," were linked to an increased risk of HIV infection.

It was also noted that a few of the female injecting drug users turned to sex work as a means of sustaining their drug usage since they were impoverished. Men and women's drug-sex interaction emerged as a critical area for intervention that needed immediate attention. In the study conducted by Zothangpuii & Mishra BB (2018), in spite of the fact that Mizoram has a high level of HIV/AIDS awareness, boys are more knowledgeable and aware of the disease than girls are. Both sexes also report that their parents rarely discuss the disease with them and that they primarily learn about it from TV shows and speakers who visit their schools. Communication obstacles pertaining to sex-related issues were found to include age inappropriacy, humiliation, and a lack of knowledge.

There have also been reports of teenagers living in constant terror of their parents learning about their extramarital affairs since the primary message parents sent their children was to avoid having sex before marriage, a decision that the parents actively supported. The teenagers also stated that parents' ought to initiate conversations about sex-related issues. These conversations should be timely, accurate, straightforward, and consistent because the teenagers believe that doing so will shield them from STDs and unwanted pregnancy, as well as empower them to make sexual decisions that are both informed and healthy, even though their parents do not see the same need. It seems that there is disagreement in India on the inclusion of sex education in the curriculum for schools and colleges. Neither an attitude study nor an attitude scale addressing sex education have been created in the state of Mizoram.

2.2. HIV/AIDS EPIDEMIOLOGY IN MIZORAM

The Moradi et al. (2022) study reveals that HIV prevalence has been rising in Mizoram, not just among FSWs and PWIDs but also in the general population. When compared to national averages, the HIV prevalence among female sex workers (FSWs) and people who inject drugs (PWID) in this particular state stands notably higher at 24.7% and 19.8%, respectively, ranking as the highest rates in the country. Drug addicts made up the majority of the State of Mizoram's prison population about ten years ago. It has been reported that up to 21% of Mizoram's jail population is HIV positive. However, Mizoram now has a 2.3% adult HIV prevalence, which is over 10 times higher than the national average. Attendees in prenatal clinics have an HIV prevalence that is higher than 1% (Singer, 2008).

2.2.1. Review on Current HIV/AIDS prevalence rates in Mizoram

The prevalence of HIV/AIDS has been rising over time, and several studies have been conducted to address this problem. The studies that show Mizoram's prevalence rates throughout time are shown below.

Over a 15-year period (2007–2021), Pachuau et al. (2023) looked at variations in and predictors of HIV among individuals who inject drugs (PWID) in Mizoram, Northeast India. From the Mizoram State AIDS Control Society's (MSACS) Targeted Intervention (TI) services, a sample of 14783 PWID was taken. The variations in HIV prevalence during the three 5-year intervals were compared using a chi-square test, and predictors were identified using multiple logistic regression analysis after sociodemographic, injecting, and sexual behavior adjustments were made. The results revealed a significant increase in HIV prevalence, with rates nearly tripling from 2012 to 2016 and nearly doubling from 2017 to 2021 compared to the period spanning 2007 to 2011.

Pachuau et al. (2023) examined the incidence of human HIV and its contributing variables among PWID, or injectable drug users. The Mizoram State AIDS Control Society (MSACS) survey during 2019–2020, which included 2695 PWID enrolled for Targeted Intervention (TI) services, served as the analysis's data

source. We used a logistic regression analysis to look at the variables related to HIV among PWID after controlling for injection habits, sexual behaviour, and sociodemographic traits. The analysis's findings revealed that 21.19% of the individuals tested positive for HIV and that the prevalence of the virus was 38.6% among female participants and 19.5% among male participants.

Pachau et al. (2021) assessed the variables pertaining to HIV/AIDS prevention, knowledge, and attitudes in Mizoram among adults aged 15 to 49. According to the findings, there was a significant likelihood of HIV/AIDS transmission from mother to child (PMTCT) among respondents who were female (AOR = 3.12, 95% CI 2.34–4.16), 35–39 years old (AOR = 1.74, 95% CI 1.05–2.87), and from other backward classes. The majority of respondents (98%) were thought to have an excellent comprehension of HIV/AIDS, which is positive given their degree of knowledge of the illness. A targeted educational intervention aimed at decreasing the proportion of HIV/AIDS-positive people in Mizoram aged 15–49 years should focus on individuals from economically disadvantaged backgrounds, non-Christian faiths, and other disadvantaged social groups.

The study conducted by Sahu et al. (2020) looked at the areas where HIV and AIDS are more prevalent. Specifically, the study focused on Mizoram, Manipur, and Nagaland, where the prevalence of the disease was found to be more than 1%, suggesting a higher incidence. In 2017, the estimated adult prevalence of HIV in the country was 0.22 percent. With over one percent, the highest frequency was seen in Mizoram, Manipur, and Nagaland. According to estimates, 2.1 million people worldwide were HIV positive in 2017, with Maharashtra having the highest percentage. In 2017, it was projected that there were 88 thousand new HIV infections countrywide and 69 thousand AIDS-related deaths. There was spatial variance in the levels and trends for all indicators between the states.

2.2.2. High-risk groups and vulnerable populations in the states

To identify the most susceptible populations in the states, Biswas et al. (2020) conducted an analysis of the population in northern India. According to this research, the prevalence of HIV was found to be greater among non-home-based female sex workers (NHB FSWs) than among home-based FSWs (7.3% vs. 4.6%). In comparison to NHB (60.2%), HB (66.7%) had a considerably greater percentage of FSW in sex work (66.7%), and NHB FSW had a higher risk of HIV infection (11.7% vs. 8.7%) as a result of injecting drug use. The risk of HIV infection was 1.73 times higher for FSWs without any other source of income. The chance of HIV positivity was four times greater among FSW responders who used injectable medications.

Using data from three successive waves of the Indian Demographic Health Survey (conducted in 2005–06, 2015–16, and 2019–21), Singh et al. (2023) and colleagues observed changes in HIV-related risk behavior among males aged 15–54 in states of India with a high HIV prevalence. Their research revealed a concerning trend of increasing high-risk sexual behavior over the years, with the prevalence rising from a lower percentage in 2005–06 to a higher percentage in 2019–21. Interestingly, across all three consecutive surveys, certain demographic factors, such as having more than ten years of education, residing in urban areas, belonging to wealthier households, and holding beliefs that women have limited sexual rights, were consistently associated with a disproportionately higher prevalence of high-risk sexual behavior and lower rates of HIV testing.

People who inject drugs (PWID) are India's third most susceptible group to HIV infection, according to research by Aridoss et al. (2022) the integrated bio-behavioral monitoring provided the data that were utilized in this investigation. Only males were included in this research since women who inject drugs were not allowed at the time of IBBS. The findings highlight the need of combination methods and stratified, region-specific treatments for PWID harm reduction. PWID's HIV prevention efforts will benefit from strengthening the policies that support cutting down on high-risk behaviors, adopting safe practices, and using HIV services.

Krishnamoorthy et al. (2021) investigated the spatial distribution and contributing factors of HIV infection in Indian individuals aged 15 to 54. Among the 230,213 participants, it was found that approximately 0.24% of the population in this age range tested positive for HIV. Several significant factors were associated with an increased risk of HIV infection, including marital status (particularly being separated, widowed, or divorced), residing in urban areas, living in certain regions of India (such as the North-Eastern, Southern, or Western regions), engaging in risky sexual behaviors (like having multiple sexual partners or a suspected STI), and self-reported tuberculosis. Furthermore, the study revealed that HIV cases exhibited positive spatial autocorrelation, indicating non-random clustering in specific geographic areas. These findings shed light on the multifaceted nature of HIV transmission and the importance of targeted interventions in high-risk regions and among vulnerable populations.

2.3. CULTURAL AND SOCIOECONOMIC FACTORS IMPACTING AWARENESS

Women are more susceptible to HIV/AIDS for a variety of reasons, many of which are rooted in their cultural and social backgrounds. Due to cultural conventions and taboos, women are more likely than men to marry young, have lower literacy rates, be less knowledgeable of HIV/AIDS and other sexually transmitted diseases, and have less control over their finances and sexual and reproductive choices. High levels of social and economic vulnerability have contributed to a higher feminization of the HIV/AIDS pandemic in India, according to the National AIDS Control Organization (NACO), where women make up around one million of the estimated 2.5 million HIV/AIDS-positive individuals.

According to Williams et al. (2005) study, compared to 2005, when women made up 32% of all HIV/AIDS diagnoses in India, there has been a notable rise. Although the HIV/AIDS pandemic is becoming increasingly gendered worldwide, this is especially evident in India, where women are more likely to be impoverished, illiterate, and socially ostracized, all of which increase their susceptibility to HIV infection. In India, individuals living with HIV often confront significant social

stigma and bias. This negative perception can stem from a lack of awareness, misconceptions, or differences in societal and cultural norms. Families with a member who is HIV-positive may harbor concerns about potential ostracism and isolation from their community, leading them to keep the diagnosis a secret, resulting in heightened stress and despair within the family unit. To combat the HIV/AIDS epidemic and address the associated stigma and prejudice, it is imperative that those living with the virus, their families, and relevant stakeholders receive extensive education and engage in behavior modification efforts. Mizoram, where a substantial 87% of the population identifies as Christians, is significantly influenced by Christianity's cultural impact (Fanai & Ag, 2022). The progression of the state's political and social landscape in Mizoram has significantly benefited from the role of the church. However, it is worth noting that a recent community needs assessment regarding HIV/AIDS in Mizoram revealed that the church did not actively engage in the dissemination of sex education or information related to HIV/AIDS prevention.

2.3.1. Cultural practices and beliefs affecting HIV/AIDS education

Cultural customs and beliefs influence HIV/AIDS education in a big way. They have the power to help or impede attempts to raise awareness and preventive measures. Cultural customs related to childbirth, adolescence, marriage, and death have been shown to affect HIV and AIDS transmission in certain areas. O'Neil et al.'s (2004) study reveals that the Devadasi tradition was widely practiced in south India. Often referred to as "temple dancers," the custom included preparing young ladies for good marriage. When these girls were old enough, they would work as attendants at nearby temples, often providing sexual services to the priests and temple clients while also engaging in dance and other artistic endeavors. Azhar et al. (2020) reveals that diverse cultural standards, religious beliefs, linguistic backgrounds, and socioeconomic statuses throughout South Asia provide widely disparate contextual frameworks for understanding gender roles and social interactions. Generalizations about PLWH outside of Hyderabad and Secunderabad are challenging since the case of cisgender, heterosexual women may not be easily transferred to communities outside of south India. While some of these societal

mores and cultural customs contribute to slowing the virus's transmission, others make it worse. Understanding the influence of customary behaviors is essential to creating culturally aware substitutes that can tackle the obstacles presented by HIV/AIDS.

Similarly, research has shown that HIV education initiatives must take cultural traditions and religious views into account (Fauk et al., 2021). Community members and demographic groups may improve their knowledge of HIV, condom usage, and the ways that cultural traditions and religious beliefs contribute to HIV transmission by recognizing and addressing these aspects. It is crucial to acknowledge the diversity and variations in cultural practices that exist across various cultures and places. Thus, it is crucial to approach HIV/AIDS education with regard for regional customs and cultural sensitivity.

2.3.2. Socioeconomic challenges influencing awareness campaigns

Socioeconomic activities shape a population's mobility, access to resources, and way of life, among other characteristics. It has a big impact on how HIV awareness programs are created. Socioeconomic status (SES) is a consistent and accurate predictor of a variety of outcomes throughout the lifetime, including physical and psychological health. SES is comprised of income, educational achievement, financial stability, and subjective views of social position and class.

According to the Gurram & Bollampalli (2020) study, innovative community awareness programs that encourage juvenile behavior modification via communication, like Red Ribbon Clubs, need quick attention. The effective implementation of social media platforms for behavior modification, debunking HIV misconceptions, and enhancing accessibility to preventive and care services have been identified as critical factors in the success of intervention programs. Furthermore, YMA should play a bigger role in promoting an atmosphere that is supportive rather than stigmatizing, as well as raising awareness of HIV and other STDs. In this sense, other nations might serve as examples. In sub-Saharan Africa,

for instance, youngsters were instrumental in the HIV program and contributed significantly.

Based on research by Gabbidon et al. (2022), it seems that HIV is intertwined with social and economic injustice, impacting those from lower socioeconomic backgrounds and disadvantaged areas at a disproportionately high incidence. Socioeconomic status may have an impact on an individual's risk of HIV infection and AIDS development. A number of socioeconomic problems, including limited economic possibilities, periods of homelessness, drug abuse, hazardous sexual behaviors, and inadequate food, might increase the risk of HIV/AIDS infection.

The Golembiewski et al. (2022) study reveals that accessing HIV/AIDS treatment and preventive programs in rural locations is hampered by institutional constraints, poverty, and limited resources. Furthermore, individuals living with HIV, young women and girls (particularly in Sub-Saharan Africa), homosexual and bisexual men, drug users, convicts, sex workers, and transgender persons all endure ongoing disparities in access to and financing for HIV prevention, care, and treatment. Reducing socioeconomic status disparities through lobbying and interventions is a key component of efforts to solve socioeconomic difficulties. Through tackling the underlying causes of socioeconomic inequality, society may endeavor to minimize health inequalities and enhance human functioning in general.

2.4. EXISTING HIV/AIDS AWARENESS CAMPAIGNS IN MIZORAM

The cornerstone of Mizoram's efforts to raise awareness and prevent HIV/AIDS is the Mizoram State AIDS Control Society (MSACS), which provides a wide variety of basic and targeted intervention (TI) services. Access to testing, counseling, and medical treatments is guaranteed through MSACS's basic services, which also include Prevention of Parent-Child Transmission (PPTCT) programs, Suraksha Clinics, and Integrated Counseling and Testing Centers (ICTCs). In addition, its TI services—such as Link Workers, Outreach Services, and Drop-In Centers—are designed to specifically target vulnerable groups. The 'Zoram Harh Rawh Campaign,' one of the organization's many media efforts, is indicative of its

dedication to raising public awareness. Concurrently, an associated group called Shalom Mizoram supports these efforts by emphasizing targeted interventions for injecting drug users (IDUs), peer education, phone counseling, church-based awareness campaigns, and developing the abilities of people living with HIV/AIDS (PLWHAs). When it comes to HIV/AIDS in Mizoram, MSACS and Shalom Mizoram work together to take a holistic and cooperative strategy that addresses community participation, prevention, awareness, and assistance. The Mizoram government has also started the "Love Brigade" campaign to raise public awareness about HIV/AIDS and provide free condoms. By launching the Love Brigade, a first-of-its-kind campaign, Mizoram has taken its fight against HIV/AIDS to a new level. Not only will bikers and taxi drivers raise awareness of the disease, which is currently incurable, but they will also readily provide condoms to the public at no cost to help stop its spread. The fact that Mizoram has a high rate of HIV infection despite being a tiny state with just 1.1 million people is largely due to the creative advertising. Campaigns to raise awareness about HIV/AIDS are essential for encouraging safe behaviors, lowering stigma, testing, and treatment. Usually, community organizations, healthcare facilities, non-governmental organizations (NGOs), and government agencies plan these initiatives.

Research done by Pachuau et al. (2023) shows that in order to address the growing HIV prevalence among People Who Inject Drugs (PWID) in Mizoram, public health interventions are desperately required. It is essential to implement HIV treatment programs that provide PWID treatment linkage and make adherence a top priority. To further prevent new infections, more testing of PWID for HIV is necessary, as is making sure that positive individuals are quickly connected to care. Additionally, in order to stop the inflow of heroin and other illegal narcotics that may have been entering the area for a while, it is advised that both the local and federal governments bolster border protection along the Myanmar border. Given the importance of churches in Mizoram and their role in forming morals, conventions, and social values, it is recommended that local churches actively support HIV/AIDS awareness and education programs as a vital component of Mizoram's efforts to prevent HIV

infections.

2.4.1. Review on past and ongoing campaigns targeting student

To stop the worrying spread of HIV/AIDS and combat the disease, Mizoram has launched a number of measures. The Syringe and Needles Exchange Programme (SNEP), Condom Promotion, Awareness Programme, Counseling, Free Regular Medical Check-ups (RMC), Oral Substitution Therapy (OST) for Injecting Drug Users, and many more services are provided by them.

Zothangpuii & Mishra (2018) assessed the knowledge of 600 male and female high school students, both from urban and rural regions, about HIV/AIDS. The results of the survey showed that Mizoram's high school students were well-informed about the negative effects of hazardous teenage behavior, including using cigarettes, alcohol, and narcotics; engaging in sexual activity; and contracting HIV/AIDS. Particularly from the teenage era forward, some parents and guardians in Mizoram often allow their children the freedom to choose their career and interests and interfere with them less. Many teenagers take advantage of their freedom to engage in dangerous activity, which ultimately leads to their victimization.

The effectiveness of media awareness campaigns on HIV/AIDS among college students in Mizoram was assessed by Lalramhmachhuana and Khiangte (2022). The research used a quantitative approach, and the chosen college students in Aizawl were given a standardized questionnaire. According to the survey, the majority of students claimed to be very certain about the preventive methods, the route of transmission, and the relevant actions that should be performed, having learned about HIV/AIDS-related campaigns via various media.

In the Hmingthansangi (2013) study on Mizoram's provision of care and assistance for children living with HIV/AIDS in light of mother-to-child transmission, the research discovered that the majority of children were tested for HIV/AIDS between 2000 and 2010, mostly at birth. Perceived adequacy was low overall, even though care and assistance were accessible from a variety of sources. Human rights, legal,

family, community, and social and economic domains reported poor quality, whereas psychological and clinical domains indicated acceptable quality.

The studies mentioned above provide a summary of previous and current awareness campaigns aimed towards children and students in Mizoram.

2.5. COLLABORATIONS AND PARTNERSHIPS

In Mizoram, the official organization in charge of HIV/AIDS awareness programs is the Mizoram State AIDS Control Society (MSACS). In addition to targeted intervention (TI) services like drop-in centers, outreach programs, and link workers, MSACS offers a variety of basic services like Integrated Counseling and Testing Centers (ICTCs), Prevention of Parent-Child Transmission (PPTCT), and Suraksha Clinics.

According to Rao et al. (2023), another group that promotes HIV/AIDS awareness in Mizoram is called Shalom Mizoram. The group offers peer educator placement, telephone counseling services, focused intervention for injecting drug users (IDUs), raising HIV/AIDS awareness in local churches, the Justice and HIV/AIDS Project, and improving the capacity of people living with HIV/AIDS (PLWHAs). The Indian government established the National Council on AIDS (NCA) in 2005 with the goal of launching proactive measures toward multisectoral cooperation in the fight against HIV. A multifaceted and multisectoral response to HIV is necessary, necessitating coordinated efforts by all public sector agencies, institutions, or organizations via their activities and programs. To combat HIV/AIDS, the Mizoram government has asked for assistance from NGOs, churches, and civil society organizations. State Minister for Health. The study done by Khawlhing et al. (2021), in addition, found that all state capital government offices have AIDS awareness campaigns conducted by the government.

The Rao et al. (2022) study reveals that numerous motivational tales exist of HIV/AIDS survivors who overcame obstacles and made important contributions to society. The same research found that information about HIV/AIDS is being disseminated across all eight districts of Mizoram via awareness programs that are

carried out through multi-media channels, including television, the distribution of pamphlets, and youth contests involving sports and music. The United Nations Office on Drugs and Crime organized awareness campaigns via Red Ribbon Clubs and churches of various religions. From October 2009 to March 2010, forty-two church leaders from eight different faiths participated in these HIV discussion sessions. These intervention discourses included details on HIV testing and the susceptibilities of same-sex partners to HIV across Mizoram. It is said that this had a beneficial effect on the young people; a few of them offered to get tested for HIV and pushed their friends to do the same. The advocacy campaign's study emphasized how crucial it is for religious leaders to become involved and for various religions to work together to solve HIV-related concerns in Mizoram.

2.6. BARRIERS TO AWARENESS AND PREVENTION

According to the study by Lalramhmachhuana and Kiangte (2022) study reveals the following points as the barriers to awareness and prevention among the youth in Mizoram.

Low self-esteem

Sexual protection practices are less common among those with poor self-esteem. A person feels useless in such situations because she is denied the freedom to make her own decisions. Prostitution and addiction are perfect settings for low self-esteem to be on full display.

Low self-efficacy and lack of behavioural skills

Inadequate communication abilities to reach a compromise on the use of condoms and low self-efficacy in using condoms. In addition to the psychological traits (poor self-esteem) already discussed, women are not able to see themselves using condoms and are instead persuaded and coerced by men's actions, financial necessities, and homelessness.

Loss of protection motivation

The individuals' lack of motivation to protect themselves against HIV and their contempt for condom usage were shown to be mostly due to the prevalence of certain demands, including emotional needs, sexual wants, and drug misuse.

Emotional needs

Other significant elements, such as the desire for closeness and love, may inhibit women's sense of danger and sometimes cause them to disregard it, which might account for why they forget to wear a condom.

Lack of threat

The individuals were often unaware of the danger involved or were unable to accurately judge the amount of risk involved, even in the context of high-risk conduct and unprotected intercourse. For most participants, a sense of safety and lack of danger is created by trust, loyalty, and appearance-based judgment; hence, the need for condom usage is not perceived.

Trust and loyalty

Condoms are used only if the couple intends to utilize contraception, as marriage is one of the reasons why most individuals put their confidence in their partner. According to the remarks made by the participants, adjectives like trust, confidence, loyalty, and safety are often used to describe showing dedication, love, and having a warm connection. Establishing a strong feeling of loyalty to the guy is also necessary, and this forms the basis for having sex without the use of condoms.

Judgment based on appearance

Some people have formed a mental association between general health, appearance, and cleanliness; those who prioritize hygiene and cleanliness are seen as healthy. As a consequence, there is a reduction in the perceived danger, and condom usage is avoided (Lotfi et al. 2012).

HIV/AIDS-related stigma in Mizoram

According to the Feyissa et al. (2012) study, the prevalence of stigmatizing beliefs and actions against people living with HIV/AIDS was alarmingly rising. This illness poses a serious risk to life and currently has no known treatment. False information on the impacted populations and the means of transmission is also widely disseminated. Those who are living with HIV/AIDS may be discouraged from being tested, treated, or cared for by stigma and prejudice. Moreover, HIV/AIDS-related deaths happen more quickly.

Access to healthcare and testing facilities

The Cruz et al. (2023) study reveals that those who live in remote locations or have limited access to healthcare facilities may find it challenging to get HIV/AIDS testing, treatment, and care. A common excuse given by women for not getting prenatal care is that they have trouble obtaining health services. Pregnant women in the area often do not seek routine prenatal care; instead, they frequently seek medical attention solely in response to symptoms. About half of the pregnant women who had not sought medical attention said in Moroccan research on mental health that they had not sought treatment because they were not experiencing any concerns.

The aforementioned obstacles underscore the necessity of all-encompassing endeavors to tackle HIV/AIDS consciousness and prevention. These endeavors should encompass education, de-stigmatization campaigns, enhanced accessibility to healthcare services, poverty alleviation initiatives, gender equality campaigns, substance abuse prevention programs, and safeguarding confidentiality in healthcare environments.

2.7. INNOVATIVE APPROACHES TO AWARENESS CAMPAIGNS

A study on social network interventions aimed at eliminating HIV transmission, conducted by Pagkas-Bather et al. (2020), highlights the potential of such interventions in an increasingly interconnected society driven by social media and networking apps. Despite not being extensively adopted by the public health

community and other stakeholders at present, network interventions for HIV prevention represent a promising avenue for expansion. These interventions offer unique opportunities to reach populations that have previously remained underserved by conventional approaches typically employed within clinical and public health settings.

The impacts of several sociodemographic characteristics on Somalian women's understanding of HIV/AIDS were examined by Mohamud et al. (2023), and the research emphasizes the significance of education, location of residence, and interventions in the mass media (radio and TV) as the most relevant determinants of women's awareness of HIV/AIDS in Somalia. According to the research, as women's educational attainment, frequency of radio listening, and television viewing increase, so does their likelihood of being aware of HIV/AIDS. Furthermore, the study shows that women who live in urban areas are almost three times more likely to be knowledgeable about HIV/AIDS than women who live in rural regions.

The impacts of these variables, which are connected to autonomy and sociodemographic traits, on Pakistani women's general knowledge and attitudes about HIV/AIDS were investigated by Iqbal et al. (2019) Only 42% of Pakistani women, according to the statistics, are aware of HIV/AIDS. The majority of these women (68%) have a solid general understanding of HIV/AIDS, and over half of them have favorable views toward those who are living with the disease. In addition, urban-dwelling women with at least a secondary education, a high degree of autonomy, membership in the highest income quintile, and exposure to mass media had favorable views and high levels of general knowledge towards individuals living with AIDS.

Kshatri et al. (2021) examined how widely used and deemed acceptable different media platforms were in Odisha for health-related messaging. Focused group discussions, in-depth interviews using a semi-structured questionnaire, and direct observation of study sites using a pre-set checklist on knowledge, awareness, and practice were used to gather the data. Television, radio, and newspapers were the three main media outlets that were recognized. Regional TV stations in the state were

airing a lot of health programs, while the state's top public radio station was airing the most health programming almost every day. The most reputable source of knowledge about maternity and child health, vaccinations, and new-born care is seen to be interpersonal communication. Folk media, direct contact, and the remove hyphen campaign have been proven to be beneficial for those with limited literacy.

The aforementioned literature tries to evaluate the efficacy of the creative ways used in HIV/AIDS awareness programs being carried out in Indian states and other nations.

2.8. THE ROLE OF COLLEGES AND UNIVERSITIES

The majority of the research shows that college students studying pharmacy had more awareness than high school students and that high school students knew more than hospital staff. To increase awareness of HIV/AIDS, the National AIDS Control Organization (NACO) started the Red Ribbon Club Program in universities and the Adolescent Education Program in schools. The main obstacles in the fight against HIV/AIDS are prejudice and stigma. An out-of-school youth program is also run in the neighborhood to include young people in raising awareness. Education is a powerful instrument for reducing the social and economic vulnerabilities that often increase the risk of HIV/AIDS infection among women and girls. In addition to its advantages in empowering women and promoting gender equality, education also delays young girls' marriages and offers a method of family planning. HIV-positive children and adolescents may stop attending school or face complete exclusion. The branded individual is overcome with crippling, deep-seated emotions of agony, remorse, dejection, self-doubt, and inadequacy. It's possible that they won't learn much in school and do badly. In educational environments, teachers who are HIV positive often face prejudice and stigma. All students, instructors, and staff are involved in prevention programs in school settings, which aim to stop bullying related to HIV/AIDS and to help young people who have previously experienced stigma and prejudice (Lalnunfeli, D 2015).

Educational institutions play a pivotal role not only in safeguarding individuals' rights to confidentiality, freedom from stigma, and equitable treatment but also in addressing the specific needs of marginalized populations, including but not limited to individuals living with HIV, key populations, indigenous communities, incarcerated individuals, migrants, and women and girls, especially adolescent girls and young women. Employing strategies such as contact-based initiatives within educational settings, such as inviting individuals living with HIV to speak at conferences or teacher training sessions, can help mitigate negative attitudes toward these groups and foster greater awareness of the repercussions of stigma. In essence, educational institutions are integral to raising awareness about HIV/AIDS in India, equipping individuals with the knowledge to contribute to the containment of this disease.

2.9. CHALLENGES AND FUTURE DIRECTIONS

❖ Mizoram has the highest prevalence of HIV/AIDS in India, with over 2.3% of its population infected. The percentage or rate of HIV/AIDS prevalence in Mizoram is 10 times higher than the national average. The following are some of the ongoing challenges specific to HIV/AIDS awareness in Mizoram that need to be addressed as per the literature review done by different researchers that focuses on Mizoram and HIV/AIDS:

❖ While there is a relatively high level of HIV/AIDS awareness in Mizoram, certain pockets of ignorance persist among specific population groups.

❖ There is a backlash from the church leaders and the Young Mizo Association toward the participants seeking HIV prevention and care services. Church leaders and the Young Mizo Association have expressed opposition to participants seeking HIV prevention and care services.

❖ The access of key population groups and the general population to HIV prevention and care services could be enhanced through community engagement and the creation of safe and welcoming physical, social, and familial spaces.

❖ The other issues of concern were stock-outs of condoms, the occasional scarcity of ART medications and HIV testing kits, the scant availability of sterile needles and syringes at the right place and at a flexible time, and the unavailability of outreach workers and peer educators.

❖ The stigma and discrimination experienced not only by the key population groups but also by the by the general population posed a hindrance to accessing HIV prevention and care services.

❖ While there is an urgent need to raise awareness about HIV and its modes of transmission in Mizoram, there have been no studies assessing people's knowledge, attitudes, and beliefs towards HIV/AIDS in the region.

❖ Influential youth organizations have shown resistance to groups and non- profits involved in HIV awareness efforts, highlighting the need to address these challenges to ensure the effectiveness of awareness campaigns.

The urgent need to raise knowledge about HIV and its modes of transmission has been highlighted. However, there have been no studies that have assessed people's knowledge, attitudes, and beliefs towards HIV/AIDS in Mizoram. Successful awareness activities conducted in the past by the United Nations Office on Drugs and Crime (UNODC), involving red ribbon clubs and church leaders, focused on promoting HIV testing among youths. The 'Friends on Friday' initiative at Grace Hospital, Aizawl, in the mid-2000s sensitized church leaders and the general population, yielding encouraging results that could serve as 'good practice' examples. Efforts are being made to make people more caring and accepting of people living with HIV (PLHIV). Stigma and resistance towards awareness programs have been observed in Mizoram. Influential youth organizations have shown resistance towards groups and non-profits creating awareness about HIV. These challenges need to be addressed to ensure effective awareness campaigns.

2.9.1 Future Directions

❖ The following are some of the future directions to improve the

awareness campaigns:

❖ **Collaboration and Partnerships:** Collaborate with other organizations, NGOs, and government agencies to pool resources, share knowledge, and reach a wider audience. Partnerships can help amplify the impact of awareness campaigns and foster a collective effort to combat HIV/AIDS.

❖ **Targeted Messaging:** Tailor awareness campaigns to specific demographics and communities. Different groups may have unique needs and concerns related to HIV/AIDS. By understanding their perspectives and cultural nuances, you can create messages that resonate with them and drive behavior change.

❖ **Leverage Digital Platforms:** Utilize social media, websites, mobile apps, and other digital platforms to disseminate information about HIV/AIDS. These channels offer a wide reach and can engage audiences through interactive content, videos, infographics, and testimonials.

❖ **Engage Influencers:** Collaborate with influencers, celebrities, and community leaders who have a significant following or influence over your target audience. Their endorsement and participation in awareness campaigns can help increase visibility and credibility.

Community Involvement: Involve local communities in the planning, implementation, and evaluation of awareness campaigns. Engaging community members as volunteers, advocates, or peer educators can enhance the relevance and effectiveness of the campaigns.

Address Stigma and Discrimination: Develop strategies to address stigma and discrimination associated with HIV/AIDS. Promote empathy, understanding, and acceptance through storytelling, testimonials, and personal narratives of people living with HIV/AIDS.

Evaluation and Monitoring: Establish mechanisms to evaluate the impact of awareness campaigns regularly. Monitor key indicators such as knowledge levels, attitudes, behavior change, and the uptake of preventive measures. Use these insights to refine future campaigns and ensure continuous improvement.

Through the diligent implementation of these initiatives, the HIV/AIDS epidemic can be effectively tackled. By fostering partnerships, crafting tailored messages, harnessing digital platforms, engaging influential figures, involving local communities, addressing stigma, and rigorously evaluating our efforts, HIV/AIDS can not only be controlled but also effectively combated and reduced. These initiatives represent a collective commitment to creating a world where the impact of HIV/AIDS is significantly diminished, offering individuals and communities a brighter and healthier future.

CHAPTER 3 METHODOLOGY

3.1 Introduction

The research challenge can be approached methodically using research methodology. It can be viewed as a science that studies how scientific research is conducted. In it, we examine the many approaches typically used by a researcher to analyze his research challenge, as well as the reasoning behind them. The researcher must be knowledgeable of both research methods and techniques. Researchers need to understand how to apply specific research techniques, develop specific indices or tests, calculate the mean, the mode, the median, the standard deviation, and the chi-square, but they also need to understand which of these methods or techniques are relevant and which are not, as well as what they would mean, indicate, and why. (Kothari, 1990) This chapter explains the research methodology for the study, including the data collection process, data collection tools, research population, and sampling procedure. The research methodology defines and describes the relationship between the research problem, data collection tools, and research analysis. The main aim of the study is to find out the effectiveness of HIV/AIDS awareness campaigns among the college students in Mizoram.

3.2 Quantitative research method

Fischler (2012) explained in his book that —quantitative research is a type of educational study wherein the researcher determines what to look at, develops specific questions, engages participants to provide measurable data, employs statistics to analyze the data, and performs the study completely and scientifically." According to Apuke (2017), —in order to produce results, a quantitative research approach deals with quantifying and measuring variables; it involves particular methods related to analyzing and making sense of numerical data in order to provide answers to questions on how, how much, what, where, when, how many, and how.

3.3 Sample size and selection method

Sampling refers to the method or approach adopted to identify a representative subset of people or instances from a given population. When it is not feasible to collect data from every member of the population, such as in biological or chemical analysis, industrial quality control, or social surveys, sampling and statistical inference are applied (Encyclopaedia, 2023). Collecting and analyzing numerical data is part of the process of conducting quantitative research. Identifying patterns and averages, generating hypotheses, examining cause and effect, and applying findings to larger populations are all possible with it.

The sample selection was conducted in the following three phases: A quantitative method in the form of a survey was conducted through questionnaires, in which the sample was selected through a three-stage stratified sampling method. The sample selection will be conducted in three phases. The total enrolment number in the year 2019-2020 is 7595, and the sample was selected according to the formula given below:

The sample size (n) is calculated according to the formula: $n = \frac{z^2 * p * (1 - p) / e^2}{[1 + (z^2 * p * (1 - p) / (e^2 * N))]}$

The sample size (n) is calculated according to the formula: $n = \frac{z^2 * p * (1 - p) / e^2}{[1 + (z^2 * p * (1 - p) / (e^2 * N))]}$ Where:

$$z = 1.96, \quad p = 0.5, \quad N = 7595, \quad e = 0.05$$

$$n = \frac{[1.962 * 0.5 * (1 - 0.5) / 0.052]}{[1 + (1.962 * 0.5 * (1 - 0.5) / (0.052 * 7595))]} n$$

$$= \frac{384.16}{365.664} = 1.0506$$

$$n = 366$$

Source: <https://goodcalculators.com/sample-size-calculator/>

Through the formula given, the expected sample number will be 366 at a marginal error of 5% for a 95% confidence interval. The 366 population was assumed to be satisfactory and representative for the data analysis.

Therefore, in this study, college students in Mizoram will be the target audience for this study. There are 25 colleges that offer arts, science, commerce, and home science in Mizoram. The sample will be selected through stratified sampling, in which Mizoram will be divided into strata, district-wise. Stratified sampling, as compared to a simple random sample, provides more accurate results by sampling within relatively homogeneous subgroups of known size (Bacon-Shone, 2022). Therefore, one college will be selected according to the number of enrolments from every district.

3.3.1 First phase:

In the first phase, college will be divided into different strata according to district wise. Colleges will be selected from every district in Mizoram. Colleges with the highest number of student enrolment in the year 2019-20 sessions from each district will be chosen for the study area, which are given in the following table:

Table 3.1: List of selected colleges and student enrolment from all the district in Mizoram.

Sl. No	Name of College	Name of District	No. of Student Enrolled
1	Pachhunga University College	Aizawl	2561
2	Lunglei Government College	Lunglei	1199
3	Government Lawngtlai College	Lawngtlai	543
4	Government Champhai College	Champhai	839
5	Government Siaha College	Siaha	529
6	Government Kolasib College	Kolasib	751
7	Government Mamit College	Mamit	79
8	Government Serchhip College	Serchhip	508
9	Government Hnahthial College	Hnahthial	152
10	Government Saitual College	Saitual	230
11	Government Khawzawl College	Khawzawl	104

Source: Examination Department, Mizoram University, 2020.

3.3.2 Second phase:

The sample was collected from each percentage of students enrolled in one college taken from the total population, which is shown in the table below:

Formula for sample selection from each college:

No. of students enrolled in one college _____ 100

Total No. of student enrolled from each college Table 3.2: List of selected samples from each district.

Sl. No	Name of College	No of student	Percent from population total	Sample For Study
1	Pachhunga University College	2561	33.72	123
2	Lunglei Government College	1199	15.79	58
3	Government Lawngtlai College	543	7.15	26
4	Government Champhai College	839	11.05	40
5	Government Siaha College	529	6.97	26
6	Government Kolasib College	751	9.89	36
7	Government Mamit College	179	2.36	10
8	Government Lawngtlai College	508	6.69	24
9	Government Serchhip College	152	2.00	7
10	Government Hnahthial College	230	3.03	11
11	Government Khawzawl College	104	1.37	5
	Total No. of Students =	7595	Total Samples=	366

Source: Primary.

3.3.3 Third phase:

In the third phase, the selected samples from each college will be divided into strata based on gender. The selected samples from each district will be divided into two groups based on gender. The list of samples divided into different strata is given below.

Table 3.3: List of samples divided into strata based on gender.

Sl. No	Name of College	No. of Samples	Male	Female
1	Pachhunga University College	123	62	61
2	Lunglei Government College	58	29	29
3	Government Lawngtlai College	26	13	13
4	Government Champhai College	40	20	20
5	Government Siaha College	26	13	13
6	Government Kolasib College	36	18	18
7	Government Mamit College	10	5	5
8	Government Lawngtlai College	24	12	12
9	Government Serchhip College	7	4	3
10	Government Hnahthial College	11	6	5
11	Government Khawzawl College	5	3	2
		Total= 366	Male= 185	Female=181

Source: Primary .

From table 5, we can see the number of selected samples from both male and female students from each selected college. The selected number of male and female students from different colleges will be chosen by using a simple random sampling method through the lottery method.

3.4 Survey Questionnaires

The survey questions were developed particularly for the purpose of this study, which was developed through an in-depth interview conducted with the IEC consultant for the Mizoram State Aids Control Society (MSACS). The questionnaires for the present study include demographics, exposure to HIV/AIDS awareness campaigns, knowledge gained from HIV/AIDS awareness campaigns, perceptions towards people living with HIV/AIDS (PLWHA), practices or actions taken through HIV/AIDS awareness campaigns, and their opinion on future HIV/AIDS awareness campaign strategies.

3.5 Data analysis

According to Taherdoost (2022), data analysis is the process of integrating collected data into valuable information. In this process, various techniques are employed, such as modeling, finding patterns, associations, and final conclusions, to address the decision-making process. To be utilized in the data analysis process, the data needs to be prepared.

The Statistical Package for Social Sciences (SPSS) was applied to perform statistical analysis in this study.

3.6 Research Hypothesis

H0: There is no significant association between the frequency of seeing HIV/AIDS awareness campaigns in a week and participation in HIV/AIDS awareness campaigns.

H0: There is no significant association between age groups of respondents and knowledge gained about HIV/AIDS from media campaigns.

H0: There is no significant association between area of residence and willingness to share a room or live with HIV-positive people.

H0: There is no significant association between the frequency of seeing HIV/AIDS awareness campaigns in a week and opinion on the good takeaways of awareness campaigns.

H0: There is no significant association between age groups and following prevention procedures given in awareness campaigns.

3.7 Generalizability

The process of analysis that involves drawing broad conclusions from particular data is referred to as generalization, and it is widely accepted as the standard for quality study in quantitative research (Polit & Beck, 2010). According to the research paper by Nikolopoulou (2022), the degree to which you may generalize your study's findings to a broader context is known as generalizability. When research findings can be applicable to most situations, most people, as well as most of the time, are considered to be generalizable. This study used the Statistical Package for Social Sciences (SPSS) in order to optimize the data analysis process, eliminate cumbersome manual calculations, and provide reliable and accurate findings.

CHAPTER 4 DATA ANALYSIS

4.1 INTRODUCTION

A brief and precise declaration of the particular objectives and goals of a research study is called a research objective. It describes the goals of the research project as well as the lessons or discoveries that the researcher intends to accomplish. Setting clear and specific goals for the study will help it stay on target and focused throughout the research process (Alam, 2023). The process of gathering and evaluating numerical data in order to measure and quantify particular phenomena is known as quantitative objectives.

4.2 : Objectives:

General objective: To study the effectiveness of HIV/AIDS media awareness campaign among college students in Mizoram.

Specific objectives:

1. To study the exposure of college students towards HIV/AIDS media awareness campaigns.
2. To study the awareness level of HIV/AIDS media campaign among college students in Mizoram.
3. To study the perception towards PLWHA through HIV/AIDS media campaign among college students in Mizoram.
4. To study the practices followed through HIV/AIDS media campaign among college students in Mizoram.

In order to conduct a study on the specific objective given above, the samples are collected through a survey, in which a survey questionnaire is formed. A number of null hypotheses were also drawn to provide a clear statement that could be tested and potentially rejected, as well as to avoid false claim. Therefore, the research objectives were studied point by point in the following, with the help of the Statistical Package for Social Sciences (SPSS).

4.2.1 Objective 1: To study the exposure of college students towards HIV/AIDS media awareness campaigns.

a) Frequency of seeing HIV/AIDS awareness campaigns in a week.

Table 4.1.1: Frequency of seeing HIV/AIDS Awareness Campaigns in a Week.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Everyday	47	12.8	12.8	12.8
	Once a Week	118	32.2	32.2	45.1
	Twice a Week	45	12.3	12.3	57.4
	Thrice a Week	59	16.1	16.1	73.5
	Never/ Do not Care	97	26.5	26.5	100.0
	Total	366	100.0	100.0	

From table 4.1.1, we can see the frequency of seeing HIV/AIDS awareness campaigns in a week by the college students. Out of 366 respondents, 47 students, or 12.8 percent, see HIV/AIDS awareness campaigns every day, and 118 students (32.2 percent) are the most exposed to HIV/AIDS awareness campaigns within a week. Furthermore, 45 (12.3%), 59 (16.1%), and 97 (26.5%) represent exposure to HIV/AIDS awareness twice a week, three times a week, and never/do not care, respectively. From the table, we can see that the number of exposures to the HIV/AIDS awareness campaign in a week is low, as the majority of the students were exposed to the campaign only once a week.

b) Medium of HIV/AIDS Awareness Campaigns

Table 4.1.2: Medium where students see HIV/AIDS Awareness Campaigns.

		Count	Column N%
Hoardings	No	327	90.8%
	Yes	33	9.2%
	Total	360	100.0%
Posters	No	146	40.6%
	Yes	214	59.4%
	Total	360	100.0%
Newspapers	No	265	73.6%
	Yes	95	26.4%
	Total	360	100.0%
Magazines	No	311	86.4%
	Yes	49	13.6%
	Total	360	100.0%
Broadcast News	No	304	84.4%
	Yes	56	15.6%
	Total	360	100.0%
Broadcast Advertisements	No	263	73.1%
	Yes	97	26.9%
	Total	360	100.0%
Social Media	No	113	31.4%
	Yes	247	68.6%
	Total	360	100.0%
Public Meetings	No	203	56.4%
	Yes	157	43.6%
Others	No	347	96.4%
	Yes	13	3.6%
	Total	360	100.0%

Table 4.1.2 reveals the frequency of the different mediums through which college students see HIV/AIDS awareness campaigns. 90.8 percent said they have not seen the HIV/AIDS awareness campaign in Hoardings, and only 9.25 percent said that they have seen the awareness campaign in Hoardings. 59.4 percent have seen the awareness campaign through posters, while 40.6 percent have not seen the campaign. In terms of newspapers, 26.4 percent of students have seen the HIV/AIDS awareness campaign in newspapers, while 73.6 percent have not seen the same, 13.6 percent have seen it in magazines, and 86.4 percent have not seen the campaign in magazines. 15.6 percent of the students have seen the campaign in broadcast news, and 84.4 percent have not seen the campaign in broadcast news. 26.9 percent of college students are exposed to HIV/AIDS awareness campaigns through broadcast

advertisements, while 73.1 percent are not exposed to the same. In terms of social media, 68.6 percent have seen the campaign on different social media, and 31.4 percent are not seeing the campaign on social media. 43.6 percent heard about HIV/AIDS through public meetings, and 56.4 percent have not heard about it from public meetings. 3.6 percent of the students have seen HIV/AIDS awareness campaigns from other kinds of mediums that are not mentioned above.

c) HIV/AIDS Awareness Campaigns attended outside college

Table 4.1.3: Attending of HIV/AIDS Awareness Campaigns outside College.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	216	59.0	59.3	59.3
	No	98	26.8	26.9	86.3
	Not Sure	50	13.7	13.7	100.0
	Total	364	99.5	100.0	
Missing	9	2	.5		
Total		366	100.0		

Table 4.1.3 shows that 59.3 percent of the respondents used to attend an HIV/AIDS awareness campaign outside the college, and 26.9 percent did not attend the awareness campaign outside the college. 50 respondents, i.e., 13.7 percent, are not sure whether they have attended an HIV/AIDS awareness campaign outside the college or not.

d) HIV/AIDS Awareness Campaigns attended in the college

Table 4.1.4: Attending of HIV/AIDS Awareness Campaigns in College.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	180	49.2	49.5	49.5
	No	135	36.9	37.1	86.5
	Not Sure	49	13.4	13.5	100.0
	Total	364	99.5	100.0	
Missing	9	2	.5		
Total		366	100.0		

In terms of the attendance of the HIV/AIDS awareness campaign inside the college, table 4.1.4 reveals that 180 respondents, that is, 49.2 percent, have attended the campaign while 36.9 percent have not. 49 students, i.e., 13.5 percent, are not sure whether they will attend the awareness campaign or not.

e) Medium of seeing HIV/AIDS awareness campaign.

Table 4.1.5: Most Frequent mode of seeing HIV/AIDS Awareness Campaigns.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Print (Posters, Hoardings, Newspapers, etc)	84	23.0	23.1	23.1
	Television (News, Advertisements, Films, etc.)	149	40.7	41.0	64.2
	Social Media (Whatsapp, Facebook, Youtube, etc)	130	35.5	35.8	100.0
	Total	363	99.2	100.0	
Missing	9	3	.8		
Total		366	100.0		

84 respondents, i.e., 23.1 percent, are exposed to the HIV/AIDS awareness campaign conducted through print media, while 149 respondents (41.0%) are exposed to the campaign through broadcast media like television in the form of news, advertisements, dramas, films, etc. 130 respondents, i.e., 35.8 percent, are exposed to the HIV/AIDS awareness campaign through social media.

f) Respondents' participation in HIV/AIDS awareness campaign

Table 4.1.6: Frequency of participation in HIV/AIDS Awareness Campaigns.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	133	36.3	36.6	36.6
	No	183	50.0	50.4	87.1
	Do Not Remember	47	12.8	12.9	100.0
	Total	363	99.2	100.0	
Missing	9	3	.8		
Total		366	100.0		

Table 4.1.6 represents the participation of the respondents in HIV awareness campaigns. 133, i.e., 36.3 percent, participated in the HIV/AIDS awareness campaigns, while 183, the majority, are not participating in the same. At the same time, 47 respondents, or 12.8 percent, claimed that they did not remember if they participated in the HIV/AIDS awareness campaign or not.

H₀: There is no significant association between age of respondents and Frequency of seeing HIV/AIDS Awareness Campaigns in a Week.

Table 4.1.7: Chi-square test on age of respondents and frequency of seeing HIV/AIDS awareness campaigns in a week.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.449 ^a	12	.337
Likelihood Ratio	11.426	12	.493
Linear-by-Linear Association	.546	1	.460
N of Valid Cases	366		

a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .12.

From the table above, Likelihood Ratio Chi-square $X^2(12) = 11.426$ and the p value = 0.493. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between age of respondents and Attending HIV/AIDS Awareness Campaign outside College.

Table 4.1.8: Chi-square test on age of respondents and attending HIV/AIDS awareness campaign outside college.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.114 ^a	6	.167
Likelihood Ratio	9.978	6	.126
Linear-by-Linear Association	4.201	1	.040
N of Valid Cases	364		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .14.			

From the table above, Likelihood Ratio Chi-square $X^2(6) = 9.978$ and the p value = 0.126. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between age of respondents and Most Frequent mode of seeing HIV/AIDS Awareness Campaigns.

Table 4.1.9: Chi-square test on age of respondents and most frequent mode of seeing HIV/AIDS awareness campaign.

3Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.942 ^a	6	.063
Likelihood Ratio	11.576	6	.072
Linear-by-Linear Association	.018	1	.893
N of Valid Cases	363		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .23.			

From the table above, Likelihood Ratio Chi-square $X^2(6) = 11.576$ and the p value = 0.072. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between age of respondents and Attending of HIV/AIDS Awareness Campaigns within College.

Table 4.1.10: Crosstabulation on age of respondents and attending of HIV/AIDS awareness campaigns within college.

Crosstab							
				Attending of HIV/AIDS Awareness Campaigns in College			Total
				Yes	No	Don't Remember	
Age Respondents	of 15-20	Count	100	101	36	237	
		Expected Count	117.2	87.9	31.9	237.0	
	21-25	Count	79	30	12	121	
		Expected Count	59.8	44.9	16.3	121.0	
	26-30	Count	1	4	0	5	
		Expected Count	2.5	1.9	.7	5.0	
	31 and above	Count	0	0	1	1	
		Expected Count	.5	.4	.1	1.0	
Total		Count	180	135	49	364	
		Expected Count	180.0	135.0	49.0	364.0	

From the above table, the expected count represents the values that we can expect to get if the two variables were independent of each other. The table denotes that the respondents belonging to the 21–25 age group have a better score in attending HIV/AIDS awareness campaigns compared to other age groups.

Table 4.1.11: Chi-square test on age of respondents and attending of HIV/AIDS awareness campaigns within college.

4Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.662 ^a	6	.000
Likelihood Ratio	25.779	6	.000
Linear-by-Linear Association	6.265	1	.012
N of Valid Cases	364		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .13.

From the table above, Likelihood Ratio Chi-square $X^2(6) = 25.779$ and the p value = 0.00024. Since the p value is less than the level of significance at 0.05, we reject the Null hypothesis and states that there is a significant association between age of respondents and Attending of HIV/AIDS Awareness Campaigns in College.

Table 4.1.12: Symmetric measures on age and attendance of HIV/AIDS awareness campaign.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.276	.000
	Cramer's V	.195	.000
N of Valid Cases		364	

The above table denotes the effect size table, and from the table above, Cramer's V = 0.195, which means that the age of the respondents has a weak effect on attending the HIV/AIDS Awareness Campaign (19.5%). The effect that the age of respondents has is significant, as the p value is 0.0002, which is less than the level of significance at 0.05.

H₀: There is no significant association between age of respondents and Participation in HIV/AIDS Awareness Campaigns.

Table 4.1.13: Chi-square test on age respondents and participation in HIV/AIDS awareness campaigns.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.959 ^a	6	.814
Likelihood Ratio	3.881	6	.693
Linear-by-Linear Association	.408	1	.523
N of Valid Cases	363		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .13.			

From the table above, Likelihood Ratio Chi-square $X^2(6) = 3.881$ and the p value = 0.693. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between gender of respondents and Frequency of seeing HIV/AIDS Awareness Campaigns in a Week.

Table 4.1.14: Chi-square test on gender and frequency of seeing HIV/AIDS awareness campaigns in a week.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.299 ^a	8	.185
Likelihood Ratio	11.891	8	.156
Linear-by-Linear Association	2.891	1	.089
N of Valid Cases	366		
a. 5 cells (33.3%) have expected count less than 5. The minimum expected count is .25.			

From the table above, Likelihood Ratio Chi-square $X^2(8) = 11.891$ and the p value = 0.156. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between gender of respondents and Attending HIV/AIDS Awareness Campaign outside College.

Table 4.1.15: Chi-square test on gender and attendance of HIV/AIDS awareness campaign outside college.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.460 ^a	4	.347
Likelihood Ratio	4.255	4	.373
Linear-by-Linear Association	.163	1	.686
N of Valid Cases	364		
a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is .27.			

From the table above, Likelihood Ratio Chi-square $X^2(4) = 4.255$ and the p value = 0.373. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between gender of respondents and Most Frequent mode of seeing HIV/AIDS Awareness Campaigns.

Table 4.1.16: Chi-square test on gender and frequent mode of seeing HIV/AIDS awareness campaigns.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.253 ^a	4	.869
Likelihood Ratio	1.701	4	.791
Linear-by-Linear Association	.020	1	.888
N of Valid Cases	363		
a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is .46.			

From the table above, Likelihood Ratio Chi-square $X^2(4) = 1.701$ and the p value = 0.791. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between gender of respondents and Attending of HIV/AIDS Awareness Campaigns in College.

Table 4.1.17: Chi-square test on gender of respondents and Attending of HIV/AIDS Awareness Campaigns in College.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.680 ^a	4	.613
Likelihood Ratio	2.942	4	.567
Linear-by-Linear Association	.787	1	.375
N of Valid Cases	364		
a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is .27.			

From the table above, Likelihood Ratio Chi-square $X^2(4) = 2.942$ and the p value = 0.567. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between gender of respondents and Participation in HIV/AIDS Awareness Campaign.

Table 4.1.18: Ch-square test on gender of respondents and Participation in HIV/AIDS Awareness Campaign.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.258 ^a	4	.262
Likelihood Ratio	5.835	4	.212
Linear-by-Linear Association	2.255	1	.133
N of Valid Cases	363		
a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is .26.			

From the table above, Likelihood Ratio Chi-square $X^2(4) = 5.835$ and the p value = 0.212. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between Frequency of seeing HIV/AIDS Awareness Campaigns in a Week and Attending HIV/AIDS Awareness Campaign outside College.

Table 4.1.19: Crosstabulation test on frequency of seeing HIV/AIDS Awareness Campaigns in a Week and Attending HIV/AIDS Awareness Campaign outside College.

Frequency of seeing HIV/AIDS Awareness Campaigns in a Week * Attending of HIV/AIDS Awareness Campaigns outside College Crosstabulation							
			Attending of HIV/AIDS Awareness Campaigns outside College			Total	
			Yes	No	Not Sure		
Frequency of seeing HIV/AIDS Awareness Campaigns in a Week	Everyday	Count	33	8	5	46	
		Expected Count	27.3	12.4	6.3	46.0	
	Once a Week	Count	73	34	11	118	
		Expected Count	70.0	31.8	16.2	118.0	
	Twice a Week	Count	34	5	6	45	
		Expected Count	26.7	12.1	6.2	45.0	
	Thrice a Week	Count	36	17	6	59	
		Expected Count	35.0	15.9	8.1	59.0	
	Never/ Do not Care	Count	40	34	22	96	
		Expected Count	57.0	25.8	13.2	96.0	
	Total	Count		216	98	50	364
		Expected Count		216.0	98.0	50.0	364.0

From the above table, the expected count represents the values that we can expect to get if the two variables were independent of each other. The table denotes that the respondents who have the frequency of seeing HIV/AIDS awareness campaigns every day, once a week, and twice a week are more likely to attend HIV/AIDS awareness campaigns outside of college.

Table 4.1.20: Chi-square test on frequency of seeing HIV/AIDS Awareness Campaigns in a Week and Attending HIV/AIDS Awareness Campaign outside College.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25.323 ^a	8	.001
Likelihood Ratio	26.160	8	.001
Linear-by-Linear Association	12.877	1	.000
N of Valid Cases	364		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.18.

From the table above, Pearson Chi-square $X^2(8) = 25.323$ and the p value = 0.001. Since the p value is less than the level of significance at 0.05, we reject the Null hypothesis and states that there is a significant association between Frequency of seeing HIV/AIDS Awareness Campaigns in a Week and Attending HIV/AIDS Awareness Campaign outside College.

Table 4.1.21: Symmetric measures on frequency of seeing HIV/AIDS Awareness Campaigns in a Week and Attending HIV/AIDS Awareness Campaign outside College.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.264	.001
	Cramer's V	.187	.001
N of Valid Cases		364	

The above table denotes the effect size table, and from the table above, Cramer's V = 0.187, which means that the frequency of seeing HIV/AIDS awareness campaigns in a week has a weak effect on attending HIV/AIDS awareness campaigns outside of college (18.7%). The effect of the frequency of seeing HIV/AIDS awareness campaigns has been significant, as the p value is 0.001, which is less than the level of significance at 0.05.

H₀: There is no significant association between Frequency of seeing HIV/AIDS Awareness Campaigns in a Week and Participation in HIV/AIDS Awareness Campaigns.

Table 4.1.22: Chi-square test on frequency of seeing HIV/AIDS awareness campaigns in a week and participation in HIV/AIDS awareness campaigns.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.689 ^a	8	.090
Likelihood Ratio	14.138	8	.078
Linear-by-Linear Association	8.718	1	.003
N of Valid Cases	363		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.83.

From the table above, Pearson Chi-square $X^2(8) = 13.689$ and the p value = 0.090. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between Most frequent mode of seeing HIV/AIDS Awareness Campaigns and Participation in HIV/AIDS Awareness Campaigns.

Table 4.1.23: Crosstabulation between Most frequent mode of seeing HIV/AIDS Awareness Campaigns and Participation in HIV/AIDS Awareness Campaigns.

Most Frequent mode of seeing HIV/AIDS Awareness Campaigns * Participation in HIV/AIDS Awareness Campaigns Crosstabulation							
			Participation in HIV/AIDS Awareness Campaigns				Total
			Yes	No	Do Remember	Not	
Most Frequent mode of seeing HIV/AIDS Awareness Campaigns	Print (Posters, Hoardings, Newspapers, etc)	Count	42	35	7	84	
		Expected Count	30.8	42.3	10.9	84.0	
	Television (News, Advertisements, Drama, Films, etc.)	Count	40	90	19	149	
		Expected Count	54.6	75.1	19.3	149.0	

	Social Media (Whatsapp, Facebook, Youtube, etc)	Count	51	58	21	130
		Expected Count	47.6	65.5	16.8	130.0
Total		Count	133	183	47	363
		Expected Count	133.0	183.0	47.0	363.0

From the above table, the expected count represents the values that we can expect to get if the two variables were independent of each other. The table denotes that the respondents with the most frequent modes of seeing HIV/AIDS awareness campaigns in print (posters, hoardings, newspapers, etc.) and social media (WhatsApp, Facebook, YouTube, etc.) are more likely to participate in HIV/AIDS awareness campaigns. The impact that television (news, advertisements, drama, films, etc.) has is comparatively low as compared to the previous two mediums of communication.

Table 4.1.24: Chi-square test on most frequent mode of seeing HIV/AIDS Awareness Campaigns and Participation in HIV/AIDS Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.740 ^a	4	.003
Likelihood Ratio	15.779	4	.003
Linear-by-Linear Association	2.753	1	.097
N of Valid Cases	363		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 10.88.

From the table above, Pearson Chi-square $X^2(4) = 15.740$ and the p value = 0.003. Since the p value is less than the level of significance at 0.05, we reject the Null hypothesis and states that there is a significant association between Most frequent mode of seeing HIV/AIDS Awareness Campaigns and Participation in HIV/AIDS Awareness Campaigns.

Table 4.1.25: Symmetric measures between most frequent mode of seeing HIV/AIDS Awareness Campaigns and Participation in HIV/AIDS Awareness Campaigns.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.208	.003
	Cramer's V	.147	.003
N of Valid Cases		363	

The above table denotes the effect size table, and from the table above, Cramer's V = 0.147, which means that the mode of seeing HIV/AIDS awareness campaigns in a week has a weak effect on participating in HIV/AIDS awareness campaigns (14.7%). The effect of the most frequent mode of seeing HIV/AIDS awareness campaigns has been significant, as the p value is 0.003, which is less than the level of significance at 0.05.

4.2.2 : Objective 2: To study the awareness level of HIV/AIDS media campaign among college students in Mizoram.

a) Recollection of campaign messages.

Table 4.2.1: Frequency of recollection of Campaign Messages.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Remember at all	40	10.9	10.9	10.9
	Remembered Some	216	59.0	59.0	69.9
	Remembered every message	98	26.8	26.8	96.7
	No attention paid to the messages	12	3.3	3.3	100.0
	Total	366	100.0	100.0	

From table 4.2.1, we can see the frequency of recollection of campaign messages by the respondents. 10.9 percent do not remember the campaign messages at all, while the majority, 59 percent, remembered some of the campaign messages

about HIV/AIDS, and 26.8 percent can recall all the HIV/AIDS campaign messages. 12 respondents, i.e., 3.3 percent, do not pay attention to the campaign messages.

b) Viewing of same message through different medium.

Table 4.2.2: Frequency of viewing of Same Message through different Mediums.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	154	42.1	42.5	42.5
	No	47	12.8	13.0	55.5
	Maybe	161	44.0	44.5	100.0
	Total	362	98.9	100.0	
Missing	9	4	1.1		
Total		366	100.0		

The frequency of viewing the same message through different media is presented in Table 4.2.2 as follows: the majority of the respondents, i.e., 154 (42.1 percent), said yes to the question, 47 respondents did not see the same message, and 161 (44.5 percent) were not sure about it.

c) Knowledge gained about HIV/AIDS from media campaigns

Table 4.2.3: Frequency of Knowledge gain about HIV/AIDS from Media Campaigns.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	295	80.6	81.3	81.3
	No	13	3.6	3.6	84.8
	Maybe	55	15.0	15.2	100.0
	Total	363	99.2	100.0	
Missing	9	3	.8		
Total		366	100.0		

Table 4.2.3 shows the frequency of knowledge gained about HIV/AIDS from the media awareness campaigns. 295 respondents, accounting for 80.6 percent of the total sample, stated that they have gained knowledge about HIV/AIDS, while the least percentage, 3.6 percent of the respondents, said they have not gained

information about it. There are another 15 percent of the respondents who are not sure whether they have gained new information about HIV/AIDS or not.

d) Opinion on the Campaign messages.

Table 4.2.4: Opinion on whether campaign messages of HIV/AIDS are good enough.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	224	61.2	62.2	62.2
	No	49	13.4	13.6	75.8
	Maybe	87	23.8	24.2	100.0
	Total	360	98.4	100.0	
Missing	9	6	1.6		
Total		366	100.0		

Table 4.2.4 represents the adequacy of campaign messages related to HIV/AIDS. 224 respondents, comprising 61.2 percent, think that the present campaign messages are good enough; 49 respondents think that there is a need for more improvement in the campaign messages; and 87 respondents, i.e., 23.8 percent, are not sure about it.

e) Knowledge on Protection of Oneself from HIV/AIDS Infection

Table 4.2.5: Knowledge on protection of oneself from HIV/AIDS infection.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	334	91.3	92.8	92.8
	No	6	1.6	1.7	94.4
	Not Sure	20	5.5	5.6	100.0
	Total	360	98.4	100.0	
Missing	9	6	1.6		
Total		366	100.0		

From the above table, we can see that the majority of the respondents, 334 (91.3 percent), know how to protect themselves from HIV/AIDS, and 6 respondents do not know it, while 20 respondents, i.e., 5.5 percent, are not sure if they know how to protect themselves from HIV/AIDS.

f) Knowledge of Testing Facilities of HIV/AIDS

Table 4.2.6: Frequency of knowledge on testing facilities of HIV/AIDS.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	277	75.7	76.9	76.9
	No	40	10.9	11.1	88.1
	Not Sure	43	11.7	11.9	100.0
	Total	360	98.4	100.0	
Missing	9	6	1.6		
Total		366	100.0		

From table 4.2.6., we can see those 277 respondents, comprising 75.7 percent, are aware of the existence of HIV/AIDS testing facilities, while 40 respondents, i.e., 10.9 percent, are not aware of it. At the same time, there are 43 respondents, and 11.7 percent are not sure about the testing facilities for HIV/AIDS.

g). Knowledge of Transmission Route of HIV/AIDS

Table 4.2.7: Frequency of knowledge of Transmission Route of HIV/AIDS.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	211	57.7	58.4	58.4
	No	50	13.7	13.9	72.3
	Not Sure	100	27.3	27.7	100.0
	Total	361	98.6	100.0	
Missing	9	5	1.4		
Total		366	100.0		

Table 4.2.7 represents the knowledge of the respondents about the transmission route of HIV/AIDS. 211 respondents, accounting for 57.7 percent, have knowledge of the transmission route of HIV/AIDS, while 50 respondents, i.e., 13.7 percent, are not aware of it. 100 respondents (27.3%) are not sure about the transmission route of HIV/AIDS.

h) Knowledge on Treatment of HIV/AIDS

Table 4.2.8: Frequency of knowledge on treatment of HIV/AIDS.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	184	50.3	51.0	51.0
	No	92	25.1	25.5	76.5
	Not Sure	85	23.2	23.5	100.0
	Total	361	98.6	100.0	
Missing	9	5	1.4		
Total		366	100.0		

Table 4.2.8 shows the frequency of knowledge on the treatment of HIV/AIDS among the respondents. 184 respondents, which represents 50.3 percent of the total responses, have knowledge on the treatment of HIV/AIDS; 92 respondents, i.e., 25.1 percent, do not have knowledge; and 23.2 percent of the total responses are not sure about the treatment of HIV/AIDS.

i) Awareness of ICTC (Integrated Counselling and Testing Center)

Table 4.2.9: Frequency of awareness on ICTC (Integrated Counselling and Testing Center).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	275	75.1	76.0	76.0
	No	52	14.2	14.4	90.3
	Maybe	35	9.6	9.7	100.0
	Total	362	98.9	100.0	
Missing	9	4	1.1		
Total		366	100.0		

From table 4.2.9, it is shown that 275 respondents have awareness of the ICTC (Integrated Counseling and Testing Center), and 52 respondents, i.e., 14.2 percent, are not aware of it. Meanwhile, 35 respondents, accounting for 9.6 percent

of the total responses, are not clear about the ICTC (Integrated Counseling and Testing Center).

j) Awareness of ART Centre

Table 4.2.10: Frequency of Awareness on ART Centre.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	240	65.6	66.7	66.7
	No	67	18.3	18.6	85.3
	Not Sure	53	14.5	14.7	100.0
	Total	360	98.4	100.0	
Missing	9	5	1.4		
	System	1	.3		
	Total	6	1.6		
Total		366	100.0		

Table 4.2.10 shows that 240 respondents, accounting for 65.6 percent, are aware of the ART center, while only 67 respondents, i.e., 18.3 percent, are not aware of the center. At the same time, there are still 53 respondents, accounting for 14.5 percent of the total responses, who are not sure about the ART center in Mizoram.

H₀: There is no significant difference between genders regarding their HIV/AIDS Awareness level.

Table: 4.2.11: Anova test on difference between genders regarding their HIV/AIDS Awareness level.

ANOVA					
Awareness Score					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.634	2	4.817	.079	.924
Within Groups	21997.476	363	60.599		
Total	22007.110	365			

From the table above, with degree of freedom 2, the F value is 0.079 and the p value is 0.924. Since the p value is greater than the level of significance at 0.05, we

accept (fail to reject) the null hypothesis, which states that there is no significant difference between genders regarding their HIV/AIDS awareness campaign.

H₀: There is no significant difference between different age groups regarding their HIV/AIDS Awareness level.

Table: 4.2.12: Anova test on difference between different age groups regarding their HIV/AIDS Awareness level.

ANOVA					
Awareness Score					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	988.898	3	329.633	5.677	.001
Within Groups	21018.212	362	58.061		
Total	22007.110	365			

From the table above, with degree of freedom 3, the F value is 5.677 and the p value is 0.001. Since the p value is less than the level of significance at 0.05, we reject the null hypothesis and state that there is a significant difference between different age groups regarding their HIV/AIDS awareness level.

H_0 : There is no significant difference between different semesters regarding their HIV/AIDS Awareness level.

Table 4.2.13: Anova test on significant difference between different age groups regarding their HIV/AIDS Awareness level.

ANOVA					
Awareness Score					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	103.252	2	51.626	.856	.426
Within Groups	21903.858	363	60.341		
Total	22007.110	365			

From the table above, with degree of freedom 2, the F value is 51.626 and the p value is 0.426. Since the p value is greater than the level of significance at 0.05, we accept (fail to reject) the null hypothesis, which states that there is no significant difference between different semester students regarding their HIV/AIDS awareness level.

Table 4.2.14: Multiple Comparisons between different semester regarding their HIV/AIDS Awareness level.

Post-Hoc ANOVA Multiple Comparisons							
Dependent Variable: Awareness Score							
	(I) Current Semester studied by Respondents	(J) Current Semester studied by Respondents	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Gabriel	1st Semester	2nd Semester	-.92220	.81927	.595	-2.8842	1.0398
		3rd Semester	3.25990	5.51990	.829	-6.9825	13.5023
	2nd Semester	1st Semester	.92220	.81927	.595	-1.0398	2.8842
		3rd Semester	4.18210	5.52658	.703	-6.1684	14.5326
	3rd Semester	1st Semester	-3.25990	5.51990	.829	-13.5023	6.9825
		2nd Semester	-4.18210	5.52658	.703	-14.5326	6.1684

The above table denotes the comparison of respondents within the groups, while the ANOVA table denotes the comparison between the groups. From the above table, we can see that there is no significant difference between any two semesters when paired into two groups.

H_0 : There is no significant difference significant difference between students who attended and who do not attend the HIV awareness campaign regarding their HIV/AIDS Awareness level.

Table 4.2.15: Anova test on difference between different students who attended and who do not attend the HIV awareness campaign regarding their HIV/AIDS Awareness level.

ANOVA					
Awareness Score					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	219.026	2	109.513	3.629	.028
Within Groups	10894.218	361	30.178		
Total	11113.244	363			

From the table above, with degree of freedom 2, the F value is 3.629 and the p value is 0.028. Since the p value is less than the level of significance at 0.05, we reject the null hypothesis and state that there is a significant difference between students who attend the HIV/AIDS Awareness Campaign in college and students that do not attend regarding their HIV/AIDS Awareness level.

Table 4.2.16: Multiple comparisons on different age groups regarding their HIV/AIDS Awareness level.

Multiple Comparisons							
Dependent Variable: Awareness Score							
	(I) Attending of HIV/AIDS Awareness Campaigns in College	(J) Attending of HIV/AIDS Awareness Campaigns in College	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Gabriel	Yes	No	.93426	.62546	.353	-.5620	2.4306
		Don't Remember	-1.49099	.88517	.217	-3.5164	.5344
	No	Yes	-.93426	.62546	.353	-2.4306	.5620
		Don't Remember	-2.42525*	.91620	.020	-4.5581	-.2924
	Don't Remember	Yes	1.49099	.88517	.217	.5344	3.5164
		No	2.42525*	.91620	.020	.2924	4.5581

*. The mean difference is significant at the 0.05 level.

The above table denotes the comparison of respondents within the groups, while the ANOVA table denotes the comparison between the groups. From the above table, we can see that there is a significant difference between students that do not participate in HIV/AIDS Awareness Campaigns and students that do not remember whether they participate or not as p value is 0.020, which is less than the level of significance at 0.05. The above table denotes the comparison of respondents within the groups, while the ANOVA table denotes the comparison between the groups. From the above table, we can see that there is a significant difference between students that do not participate in HIV/AIDS awareness campaigns and students that do not remember whether they participate or not, as the p value is 0.020, which is less than the level of significance at 0.05.

H₀: There is no significant association between age groups of respondents and recollection of Campaign messages.

Table 4.2.17: Chi-square test on different age groups regarding their HIV/AIDS Awareness Campaign.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.656 ^a	9	.673
Likelihood Ratio	7.603	9	.575
Linear-by-Linear Association	1.531	1	.216
N of Valid Cases	366		
a. 9 cells (56.3%) have expected count less than 5. The minimum expected count is .03.			

From the table above, Likelihood Ration $X^2(9) = 7.603$ and p value = 0.575. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between age groups of respondents and viewing of same messages of HIV/AIDS Awareness Campaign through different medium.

Table 4.2.18: Chi-square test on age groups of respondents and viewing of same messages of HIV/AIDS Awareness Campaign through different medium.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.111 ^a	6	.167
Likelihood Ratio	11.249	6	.081
Linear-by-Linear Association	3.143	1	.076
N of Valid Cases	362		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .13.

From the table above, Likelihood Ration $X^2(6) = 11.249$ and p value = 0.081. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between age groups of respondents and knowledge gain about HIV/AIDS from media campaign.

Table 4.2.19: Chi-square test on age groups of respondents and knowledge gain about HIV/AIDS from media campaign.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.591 ^a	6	.997
Likelihood Ratio	.947	6	.988
Linear-by-Linear Association	.007	1	.935
N of Valid Cases	363		

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .04.

From the table above, Likelihood Ratio $X^2(6) = 0.947$ and p value = 0.988. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between age groups of respondents and opinion on whether HIV/AIDS Awareness Campaign messages of HIV/AIDS are good enough.

Table 4.2.20: Crosstabulation between age groups of respondents and knowledge gain about HIV/AIDS from media campaign.

Crosstab						
			Opinion on whether campaign messages of HIV/AIDS are good enough			Total
			Yes	No	Maybe	
Age Respondents	15-20	Count	154	24	56	234
		Expected Count	145.6	31.9	56.6	234.0
	21-25	Count	67	22	31	120
		Expected Count	74.7	16.3	29.0	120.0
	26-30	Count	3	2	0	5
		Expected Count	3.1	.7	1.2	5.0
	31 and above	Count	0	1	0	1
		Expected Count	.6	.1	.2	1.0
Total		Count	224	49	87	360
		Expected Count	224.0	49.0	87.0	360.0

The above table denotes the cross-tabulation between age group of respondents and opinion on whether HIV/AIDS Awareness Campaign messages of HIV/AIDS are good enough. From the table, we can see that 15-20 age groups are more likely to have a positive opinion on the campaign messages, as the primary data collected (represented as count) is greater than the expected count in the Yes column and the count value is less than the expected count value in the No column, and vice versa for other age groups.

Table 4.2.21: Chi-square test between age groups of respondents and knowledge gain about HIV/AIDS from media campaign.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.433 ^a	6	.017
Likelihood Ratio	13.402	6	.037
Linear-by-Linear Association	1.030	1	.310
N of Valid Cases	360		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .14.

From the table above, Likelihood Ration $X^2(6) = 13.402$ and p value = 0.037. Since the p value is less than the level of significance at 0.05, the Null hypothesis is rejected and states that there is a significant association between age groups of respondents and opinion on whether HIV/AIDS Awareness Campaign messages of HIV/AIDS are good enough.

Table 4.2.22: Symmetric measures between age groups of respondents and knowledge gain about HIV/AIDS from media campaign.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.207	.017
	Cramer's V	.146	.017
N of Valid Cases		360	

The above table denotes the effect size table, and from the table above, Cramer's V = 0.146, which means that the age group of respondents has a weak effect on the opinion of whether HIV/AIDS Awareness Campaign messages are good enough (14.6%). The effect that the age group of respondents has is significant, as the p value is 0.017, which is less than the level of significance at 0.05.

H₀: There is no significant association between age groups of respondents and knowledge on protection of oneself from HIV/AIDS infection.

Table 4.2.23: Chi-square test on association between age groups of respondents and knowledge on protection of oneself from HIV/AIDS infection.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.248 ^a	6	.974
Likelihood Ratio	1.628	6	.951
Linear-by-Linear Association	.001	1	.977
N of Valid Cases	360		
a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is .02.			

From the table above, Likelihood Ratio $X^2(6) = 1.628$ and p value = 0.951. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between age groups of respondents and knowledge of testing facilities of HIV/AIDS.

Table 4.2.24: Chi-square test on association between age groups of respondents and knowledge of testing facilities of HIV/AIDS.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.476 ^a	6	.484
Likelihood Ratio	6.721	6	.347
Linear-by-Linear Association	.825	1	.364
N of Valid Cases	360		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .11.			

From the table above, Likelihood Ratio $X^2(6) = 6.721$ and p value = 0.347. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between age groups of respondents and knowledge of testing facilities of HIV/AIDS.

Table 4.2.25: Chi-square test on association between age groups of respondents and knowledge of testing facilities of HIV/AIDS.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.250 ^a	6	.160
Likelihood Ratio	11.246	6	.081
Linear-by-Linear Association	2.233	1	.135
N of Valid Cases	361		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .14.			

From the table above, Likelihood Ratio $X^2(6) = 11.246$ and p value = 0.081. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between age groups of respondents and knowledge on treatment of HIV/AIDS.

Table 4.2.26: Chi-square test on association between age groups of respondents and knowledge on treatment of HIV/AIDS.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.927 ^a	6	.243
Likelihood Ratio	9.256	6	.160
Linear-by-Linear Association	.843	1	.358
N of Valid Cases	361		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .24.			

From the table above, Likelihood Ratio $X^2(6) = 9.256$ and p value = 0.160. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between age groups of respondents and Awareness of ICTC (Integrated Counselling and Testing Centre).

Table 4.2.27: Chi-square test on association between age groups of respondents and Awareness of ICTC (Integrated Counselling and Testing Centre).

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.633 ^a	6	.853
Likelihood Ratio	2.764	6	.838
Linear-by-Linear Association	.016	1	.899
N of Valid Cases	362		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .10.			

From the table above, Likelihood Ratio $X^2 (6) = 2.764$ and p value = 0.838. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between age groups of respondents and Awareness of ART Centre.

Table 4.2.28: Chi-square test on association between age groups of respondents and Awareness of ART Centre.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.274 ^a	6	.296
Likelihood Ratio	7.385	6	.287
Linear-by-Linear Association	.022	1	.883
N of Valid Cases	360		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .15.

From the table above, Likelihood Ratio $X^2 (6) = 7.385$ and p value = 0.287. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

4.2.3 : Objective 3: To study the perception towards PLWHA through HIV/AIDS media campaign among college students in Mizoram.

a). Most effective media for HIV/AIDS Awareness Campaigns for College Students

Table 4.3.1: Frequency of opinion on the most effective media for HIV/AIDS Awareness Campaigns among College Students.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Television	32	8.7	8.9	8.9
	Social Media	278	76.0	77.0	85.9

	Newspapers	13	3.6	3.6	89.5
	College Magazines	38	10.4	10.5	100.0
	Total	361	98.6	100.0	
Missing	9	5	1.4		
Total		366	100.0		

Table 4.3.1 represents the frequency of opinion on the most effective media for an HIV/AIDS awareness campaign for college students. The table shows that the majority of the respondents (278), accounting for 76.0 percent, believed that social media would be the most effective media for an HIV/AIDS awareness campaign among college students. 32 (8.7%), 13 (3.6%), and 38 (10.4%) respondents opted for television, newspapers, and college magazines for the HIV/AIDS media awareness campaign among college students, respectively.

H₀: There is no significant association between gender and Opinion on the most effective media for HIV/AIDS Awareness Campaigns for college students.

Table 4.3.2: Chi-square test on association between gender and Opinion on the most effective media for HIV/AIDS Awareness Campaigns for college students.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18.262 ^a	6	.006
Likelihood Ratio	10.302	6	.112
Linear-by-Linear Association	.571	1	.450
N of Valid Cases	361		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .07.

From the table above, Likelihood Ratio Chi-square $X^2(6) = 10.302$ and the p value = 0.112. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between age group and Opinion on the most effective media for HIV/AIDS Awareness Campaigns for college students.

Table 4.3.3: Chi-square test on association between age group and opinion on the most effective media for HIV/AIDS awareness campaigns for college student.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.809 ^a	9	.924
Likelihood Ratio	5.082	9	.827
Linear-by-Linear Association	.955	1	.328
N of Valid Cases	361		

a. 9 cells (56.3%) have expected count less than 5. The minimum expected count is .04.

From the table above, Likelihood Ratio Chi-square $X^2(9) = 5.082$ and the p value = 0.827. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

b) Opinion on most effective strategies for HIV/AIDS awareness campaign.

Table 4.3.4: Frequency of opinion on the most effective strategies among College Students for HIV/AIDS awareness Campaigns.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Drama	74	20.2	20.2	20.2
	Music	99	27.0	27.0	47.3
	Competition based campaign	106	29.0	29.0	76.2
	Film	8	2.2	2.2	78.4
	Dance	10	2.7	2.7	81.1
	Other	69	18.9	18.9	100.0
	Total	366	100.0	100.0	

Table 4.3.4 shows the frequency of opinion on the most effective strategies among college students for an HIV/AIDS awareness campaign. 74 respondents, consisting of 20.2 percent, believed that the use of drama would be the most effective strategy for an HIV/AIDS awareness campaign among college students. 99 (27%),

106 (29%), 8 (2.2%), and 10 (2.7%) opted for music, competition-based campaigns, film, and dance as the most effective strategies for HIV/AIDS awareness campaigns among college students, respectively. At the same time, 69 respondents, i.e., 18.9 percent of the total responses, believed in other forms of strategies for HIV/AIDS awareness campaigns among college students.

H₀: There is no significant association between gender and Opinion on the most effective strategies among college students for Awareness Campaigns.

Table 4.3.5: Chi-square test on association between gender and opinion on the most effective strategies among college student for awareness campaigns.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.939 ^a	10	.895
Likelihood Ratio	5.637	10	.845
Linear-by-Linear Association	.477	1	.490
N of Valid Cases	366		
a. 9 cells (50.0%) have expected count less than 5. The minimum expected count is .04.			

From the table above, Likelihood Ratio Chi-square $X^2(10) = 5.637$ and the p value = 0.845. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between age group and Opinion on the most effective strategies among college students for Awareness Campaigns.

Table 4.3.6: Chi-square test on association between age group and Opinion on the most effective strategies among college students for Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.309 ^a	15	.127
Likelihood Ratio	16.831	15	.329
Linear-by-Linear Association	3.495	1	.062
N of Valid Cases	366		

a. 14 cells (58.3%) have expected count less than 5. The minimum expected count is .02.

From the table above, Likelihood Ratio Chi-square $X^2(15) = 16.831$ and the p value = 0.329. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

c) Most effective appeal for HIV/AIDS awareness campaigns among college students

Table 4.3.7: Frequency of opinion on the most effective appeal for HIV/AIDS awareness campaigns among college students.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fear Appeal	74	20.2	20.9	20.9
	Humour	45	12.3	12.7	33.6
	Musical Appeal	63	17.2	17.8	51.4
	Rational Appeal	46	12.6	13.0	64.4
	Others	126	34.4	35.6	100.0
	Total	354	96.7	100.0	
Missing	9	12	3.3		
Total		366	100.0		

Table 4.3.7 represents the opinion on the most effective appeal for the HIV/AIDS awareness campaign. 74 respondents, i.e., 20.2 percent, opted for the use of fear appeal, while 45 respondents, accounting for 12.3 percent, opted for humor, 63 (17.2%), and 46 (12.6%) believed that musical appeal and rational appeal were

better for HIV/AIDS awareness campaigns, respectively. At the same time, 126 respondents—the majority, accounting for 96.7 percent of the total responses—believed that other appeals would be used for the awareness campaign.

H₀: There is no significant association between gender and Opinion on the most appealing media for Awareness Campaigns among college students.

Table 4.3.8: Chi-square test on association between gender and Opinion on the most appealing media for Awareness Campaigns among college students.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.120 ^a	8	.745
Likelihood Ratio	5.625	8	.689
Linear-by-Linear Association	.000	1	.993
N of Valid Cases	354		
a. 5 cells (33.3%) have expected count less than 5. The minimum expected count is .25.			

From the table above, Likelihood Ratio Chi-square $X^2(8) = 5.625$ and the p value = 0.689. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H₀: There is no significant association between age groups and Opinion on the most appealing media for Awareness Campaigns among college students.

Table 4.3.9: Chi-square test on association between age groups and Opinion on the most appealing media for Awareness Campaigns among college students.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.501 ^a	12	.334
Likelihood Ratio	10.643	12	.560

Linear-by-Linear Association	.001	1	.971
N of Valid Cases	354		
a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .13.			

From the table above, Likelihood Ratio Chi-square $X^2(12) = 10.643$ and the p value = 0.560. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

Table: 4.3.10: Frequency on the comparison of college students from urban and rural area's attitudes towards PLWHA (People Living with HIV/AIDS).

Areas Statement	Urban areas (in %)			Rural areas (in %)		
	Yes	No	Don't know	Yes	No	Don't know
Would you be willing to work with HIV positive	69	21	10	47.8	12.2	40
Would you be willing to use the same toilet used by a HIV positive	65	18	17	42.2	16.7	41.1
Would you be willing to eat food at a company canteen prepared by HIV positive	59	21	20	35.6	15.6	48.9
Would you be willing to share room/live with HIV positive	70	15	15	41.1	15.6	43.3
Would you be willing to receive medical treatment from a healthcare worker who is HIV positive	51	21	28	30	26.7	43.3
Do you feel that HIV positive student should be allowed to stay in the same classroom	75	12	13	47.8	13.3	38.9

The above table compares the attitudes of students from urban and rural areas towards people living with HIV/AIDS. 69 percent of urban and 47.8 percent of rural areas are willing to work with HIV-positive individuals, while 21 percent of urban and 12.2 percent of rural areas do not want to work with them. While 10 percent of urbanites and 40 percent of ruralites do not have an idea about this question, 65 percent of people from urban areas and 42.2 percent from rural areas are willing to share the same toilet with people living with HIV. 18 percent of urbanites and 16.7 percent of ruralites refused to share the same toilet with them. 17 percent of urban and 41.1 percent of rural areas have no idea about it. 59 percent from urban areas and

35.6 percent from rural areas are willing to eat at the canteens run by PLWHA, and 21 and 15.6 percent from both urban and rural areas, respectively, do not want to eat there. 20 percent of urban residents and 48.9 percent of rural residents do not have an idea about it. 70 percent of urbanites and 41.1 percent of ruralites are okay with sharing a room with PLWHA. In terms of healthcare, 51 percent of people from urban areas and 30 percent from rural areas are willing to receive health care given by HIV positives. 75 percent of students from urban and 47.8 percent from rural areas are willing to study with PLWHA students. While 13 percent of urban and 38.9 percent of rural areas are unsure about it,.

H₀: There is no significant association between area of residence and willing to work with HIV positive.

Table 4.3.11: Crosstabulation test on association between area of residence and willing to work with HIV positive.

Area of residence * Willing to work with HIV positive Crosstabulation						
			Willing to work with HIV positive			Total
			Yes	No	don't know	
Area of residence	Urban	Count	69	21	10	100
		Expected Count	58.5	16.5	25.0	100.0
	Rural	Count	48	12	40	100
		Expected Count	58.5	16.5	25.0	100.0
Total		Count	117	33	50	200
		Expected Count	117.0	33.0	50.0	200.0

The table above denotes the cross-tabulation between area of residence and willingness to work with HIV positives. Respondents from urban areas are more willing to work with HIV-positive people, while respondents from rural areas are less willing to work with HIV-positive people, as the expected count is greater than the actual count.

Table 4.3.12: Chi-square test on association between area of residence and willing to work with HIV positive.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	24.224 ^a	2	.000
Likelihood Ratio	25.550	2	.000
Linear-by-Linear Association	17.903	1	.000
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 16.50.

From the table above, Pearson Chi-square $X^2(2)$ value is 24.224 and the p value is 0.00002. Since the p value is less than the level of significance at 0.05, we reject the Null hypothesis and states that there is a significant association between area of residence and willing to work with HIV positive.

Table 4.3.13: Symmetric measures between area of residence and willing to work with HIV positive.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.348	.000
	Cramer's V	.348	.000
N of Valid Cases		200	

The table above denotes the effect that area of residence has on willingness to work with HIV positives. The phi value is 0.348, which means that area of residence has a moderate effect (34.8%) on willingness to work with HIV positives, and the effect is significant as the p value is 0.00002, which is less than the level of significance at 0.05.

H_0 : There is no significant association between area of residence and willing to use the same toilet used by HIV positive.

Table 4.3.14: crosstabulation test on association between area of residence and willing to use the same toilet used by HIV positive.

		Willing to use the same toilet used by HIV positive			Total	
		Yes	No	don't know		
Area of residence	Urban	Count	65	18	17	100
		Expected Count	53.5	17.5	29.0	100.0
	Rural	Count	42	17	41	100
		Expected Count	53.5	17.5	29.0	100.0
Total		Count	107	35	58	200
		Expected Count	107.0	35.0	58.0	200.0

The table above denotes the cross-tabulation between area of residence and willingness to use the same toilet used by HIV positives. The expected count from rural areas regarding willingness to share toilets with HIV-positive people is lower than the actual count, while the rural respondent's expected count is higher than the actual count. Therefore, it is clear that respondents from urban areas are more willing to share the same toilet with HIV-positive people than respondents from rural areas.

Table 4.3.15: Chi-square test on association between area of residence and willing to use the same toilet used by HIV positive.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.904 ^a	2	.001
Likelihood Ratio	15.247	2	.000
Linear-by-Linear Association	14.366	1	.000
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.50.

From the table above, the Pearson Chi-square $X^2(2)$ value is 14.904, and the p value is 0.001. Since the p value is less than the level of significance at 0.05, we

reject the null hypothesis and state that there is a significant association between area of residence and willingness to use the same toilet used by HIV positives.

Table 4.3.16: Symmetric measure between area of residence and willing to use the same toilet used by HIV positive.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.273	.001
	Cramer's V	.273	.001
N of Valid Cases		200	

The table above denotes the effect that area of residence has on willingness to use the same toilet used by HIV positives. The phi value is 0.273, which means that area of residence has a moderate effect (27.3%) on willingness to use the same toilet used by HIV positives, and the effect is significant as the p value is 0.001, which is less than the level of significance at 0.05.

H_0 : There is no significant association between area of residence and willing to eat food at company canteen prepared by HIV positive.

Table 4.3.17: Crosstabulation test on association between area of residence and willing to eat food at company canteen prepared by HIV positive.

Area of residence * Willing to eat food at company canteen prepared by HIV positive Crosstabulation						
			Willing to eat food at company canteen prepared by HIV positive			Total
			Yes	No	don't know	
Area of residence	Urban	Count	59	21	20	100
		Expected Count	47.3	18.4	34.3	100.0
	Rural	Count	36	16	49	101
		Expected Count	47.7	18.6	34.7	101.0
Total		Count	95	37	69	201
		Expected Count	95.0	37.0	69.0	201.0

The table above denotes the cross-tabulation between area of residence and willingness to eat food at the company canteen prepared by HIV positives. The expected count is lower than the actual count in urban areas, while the expected count is higher than the actual count in rural areas. That clearly showed that respondents in urban areas are more willing to eat food at canteens prepared by HIV-positive people.

Table 4.3.18: Chi-square test on association between area of residence and willing to eat food at company canteen prepared by HIV positive.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18.428 ^a	2	.000
Likelihood Ratio	18.872	2	.000
Linear-by-Linear Association	16.833	1	.000
N of Valid Cases	201		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 18.41.			

From the table above, the Pearson Chi-square $X^2(2)$ value is 18.428 and the p value is 0.0001. Since the p value is less than the level of significance at 0.05, we reject the null hypothesis and state that there is a significant association between area of residence and willingness to eat food at the company canteen prepared by HIV positives.

Table 4.3.19: Symmetric measures between area of residence and willing to eat food at company canteen prepared by HIV positive.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.303	.000
	Cramer's V	.303	.000
N of Valid Cases		201	

The table above denotes the effect that area of residence has on willingness to eat food at the company canteen prepared by HIV-positives. The phi value is 0.303,

which means that area of residence has a moderate effect (30.3%) on willingness to eat food at the company canteen prepared by HIV positives, and the effect is significant as the p value is 0.0001, which is less than the level of significance at 0.05.

H₀: There is no significant association between area of residence and willing to share room/living with HIV positive.

Table 4.3.20: Crosstabulation test on association between area of residence and willing to share room/living with HIV positive.

Area of residence * Willing to share room/living with HIV positive Crosstabulation						
			Willing to share room/living with HIV positive			Total
			Yes	No	don't know	
Area of residence	Urban	Count	70	15	15	100
		Expected Count	55.5	15.5	29.0	100.0
	Rural	Count	41	16	43	100
		Expected Count	55.5	15.5	29.0	100.0
Total		Count	111	31	58	200
		Expected Count	111.0	31.0	58.0	200.0

The table above denotes the cross-tabulation between area of residence and willingness to share a room or live with HIV-positives. The actual count from urban areas exceeds the expected count, and the actual count from rural areas is less than the expected count, indicating that people from urban areas are more open to HIV-positive people.

Table 4.3.21: Chi-square test on association between area of residence and willing to share room/living with HIV positive.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.126 ^a	2	.000
Likelihood Ratio	21.796	2	.000
Linear-by-Linear Association	20.863	1	.000
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.50.

From the table above, the Pearson Chi-square $X^2(2)$ value is 21.126, and the p value is 0.00026. Since the p value is less than the level of significance at 0.05, we reject the null hypothesis and state that there is a significant association between area of residence and willingness to share a room or live with HIV positives.

Table 4.3.22: Symmetric measures between area of residence and willing to share room/living with HIV positive.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.325	.000
	Cramer's V	.325	.000
N of Valid Cases		200	

The table above denotes the effect that area of residence has on willingness to share a room or live with an HIV positive. The phi value is 0.325, which means that area of residence has a moderate effect (32.5%) on willingness to share a room or live with HIV positives, and the effect is significant as the p value is 0.00026, which is less than the level of significance at 0.05.

H_0 : There is no significant association between area of residence and willing to receive medical treatment from a healthcare worker who is HIV positive.

Table 4.3.23: Crosstabulation test on association between area of residence and willing to receive medical treatment from a healthcare worker who is HIV positive.

Area of residence * Willing to receive medical treatment from a healthcare worker who is HIV positive Crosstabulation						
			Willing to receive medical treatment from a healthcare worker who is HIV positive			Total
			Yes	No	don't know	
Area of residence	Urban	Count	51	21	28	100
		Expected Count	40.5	24.0	35.5	100.0
	Rural	Count	30	27	43	100
		Expected Count	40.5	24.0	35.5	100.0
Total		Count	81	48	71	200
		Expected Count	81.0	48.0	71.0	200.0

The table above denotes the cross tabulation between Area of residence and willing to receive medical treatment from a healthcare worker who is HIV positive.

Table 4.3.24: Chi-square test on association between area of residence and willing to receive medical treatment from a healthcare worker who is HIV positive.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.363 ^a	2	.009
Likelihood Ratio	9.452	2	.009
Linear-by-Linear Association	8.512	1	.004
N of Valid Cases	200		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 24.00.			

From the table above, the Pearson Chi-square $X^2(2)$ value is 9.363, and the p value is 0.009. Since the p value is less than the level of significance at 0.05, we reject the null hypothesis and state that there is a significant association between area of residence and willingness to receive medical treatment from a healthcare worker who is HIV positive.

Table 4.3.25: Symmetric measures between area of residence and willing to receive medical treatment from a healthcare worker who is HIV positive.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.216	.009
	Cramer's V	.216	.009
N of Valid Cases		200	

The table above denotes the effect that area of residence has on willingness to receive medical treatment from a healthcare worker who is HIV positive. The phi value is 0.216, which means that area of residence has a moderate effect (21.6%) on willingness to receive medical treatment from a healthcare worker who is HIV positive, and the effect is significant as the p value is 0.009, which is less than the level of significance at 0.05.

H_0 : There is no significant association between area of residence and opinion on HIV positive students should be allowed to stay in same classroom.

Table 4.3.26: Crosstabulation test on significant association between area of residence and opinion on HIV positive students should be allowed to stay in same classroom.

Area of residence * HIV positive students should be allowed to stay in same class room Crosstabulation						
			HIV positive students should be allowed to stay in same class room			Total
			Yes	No	don't know	
Area of residence	Urban	Count	75	12	13	100
		Expected Count	61.5	12.5	26.0	100.0
	Rural	Count	48	13	39	100
		Expected Count	61.5	12.5	26.0	100.0
Total		Count	123	25	52	200
		Expected Count	123.0	25.0	52.0	200.0

The table above denotes the cross tabulation between Area of residence and opinion on HIV positive students should be allowed to stay in same class room.

Table 4.3.27: Chi-square test on significant association between area of residence and opinion on HIV positive students should be allowed to stay in same classroom.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18.967 ^a	2	.000
Likelihood Ratio	19.620	2	.000
Linear-by-Linear Association	18.659	1	.000
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.50.

From the table above, the Pearson Chi-square $X^2(2)$ value is 18.967, and the p value is 0.000076. Since the p value is less than the level of significance at 0.05, we reject the null hypothesis and state that there is a significant association between area of residence and opinion on whether HIV-positive students should be allowed to stay in the same class room.

Table 4.3.28: Symmetric measures between area of residence and opinion on HIV positive students should be allowed to stay in same classroom.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.308	.000
	Cramer's V	.308	.000
N of Valid Cases		200	

The table above denotes the effect that area of residence has on having the opinion that HIV-positive students should be allowed to stay in the same classroom. The phi value is 0.308, which means that area of residence has a moderate effect (30.8%) on the opinion that HIV-positive students should be allowed to stay in the same classroom, and the effect is significant as the p value is 0.00007, which is less than the level of significance at 0.05.

4.2.4. Objective 4: To study the practices followed through HIV/AIDS media campaign among college students in Mizoram.

a). **Opinion on good takeaway of Awareness Campaigns.**

Table 4.4.1: Frequency of student's opinion on good takeaway of awareness campaign.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	142	38.8	39.3	39.3
	No	126	34.4	34.9	74.2
	Maybe	93	25.4	25.8	100.0
	Total	361	98.6	100.0	
Missing	9	5	1.4		
Total		366	100.0		

Table 4.4.1 shows that 142 respondents, representing 38.8 percent of the valid responses, expressed their willingness to participate in the campaign. While 126, accounting for 34.9 percent of the total responses, indicated that they would not participate in such campaigns, At the same time, 93 respondents (25.4%) are not sure whether they would like to participate or not.

H₀: There is no significant association between gender and Opinion on good takeaway of Awareness Campaigns.

Table 4.4.2: Chi-square test on association between gender and Opinion on good takeaway of Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.908 ^a	4	.923
Likelihood Ratio	1.403	4	.844
Linear-by-Linear Association	.001	1	.973
N of Valid Cases	361		
a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is .52.			

From the table above, the likelihood ratio chi-square $X^2(4) = 1.403$ and the p value = 0.844. Since the p value is greater than the level of significance at 0.05, we accept (fail to reject) the null hypothesis.

H₀: There is no significant association between age groups and Opinion on good takeaway of Awareness Campaigns.

Table 4.4.3: Chi-square test on association between age groups and Opinion on good takeaway of Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.282 ^a	6	.773
Likelihood Ratio	3.518	6	.742
Linear-by-Linear Association	.578	1	.447
N of Valid Cases	361		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .26.			

From the table above, the likelihood ratio chi-square $X^2(6) = 3.510$ and the p value = 0.742. Since the p value is greater than the level of significance at 0.05, we accept (fail to reject) the null hypothesis.

H_0 : There is no significant association between Most Frequent mode of seeing HIV/AIDS Awareness Campaigns and Opinion on good takeaway of Awareness Campaigns.

Table 4.4.4: Chi-square test on association between Most Frequent mode of seeing HIV/AIDS Awareness Campaigns and Opinion on good takeaway of Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.575 ^a	4	.467
Likelihood Ratio	3.656	4	.455
Linear-by-Linear Association	.136	1	.712
N of Valid Cases	361		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.64.

From the table above, Pearson Chi-square $X^2(4) = 3.575$ and the p value = 0.467. Since the p value is more than the level of significance at 0.05, we accept (fail to reject) the Null hypothesis.

H_0 : There is no significant association between Frequency of seeing HIV/AIDS Awareness Campaigns in a week and Opinion on good takeaway of Awareness Campaigns.

Table 4.4.5: Crosstabulation test between Frequency of seeing HIV/AIDS Awareness Campaigns in a week and Opinion on good takeaway of Awareness Campaigns.

Frequency of seeing HIV/AIDS Awareness Campaigns in a Week * Opinion on good takeaway of Awareness Campaigns Crosstabulation						
			Opinion on good takeaway of Awareness Campaigns			Total
			Yes	No	Maybe	
Frequency of seeing HIV/AIDS Awareness Campaigns in a Week	Everyday	Count	19	14	12	45
		Expected Count	17.7	15.7	11.6	45.0
	Once a Week	Count	53	40	24	117
		Expected Count	46.0	40.8	30.1	117.0

	Twice a Week	Count	22	11	11	44
		Expected Count	17.3	15.4	11.3	44.0
	Thrice a Week	Count	31	13	15	59
		Expected Count	23.2	20.6	15.2	59.0
	Never/ Do not Care	Count	17	48	31	96
		Expected Count	37.8	33.5	24.7	96.0
Total		Count	142	126	93	361
		Expected Count	142.0	126.0	93.0	361.0

The above table is a crosstabulation between Frequency of seeing HIV/AIDS Awareness Campaigns in a week and Opinion on good takeaway of Awareness Campaigns.

Table 4.4.6: Chi-square test on association between Frequency of seeing HIV/AIDS Awareness Campaigns in a week and Opinion on good takeaway of Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.831 ^a	8	.000
Likelihood Ratio	32.198	8	.000
Linear-by-Linear Association	7.978	1	.005
N of Valid Cases	361		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.34.			

From the table above, Pearson Chi-square $X^2(8) = 29.831$ and the p value = 0.000226. Since the p value is less than the level of significance at 0.05, we reject the null hypothesis and state that there is a significant association between the frequency of seeing HIV/AIDS awareness campaigns in a week and opinion on the good takeaways of awareness campaigns.

H_0 : There is no significant association between Participation in HIV/AIDS Awareness Campaigns and Opinion on good takeaway of Awareness Campaigns.

Table 4.4.7: Crosstabulation test between Participation in HIV/AIDS Awareness Campaigns and Opinion on good takeaway of Awareness Campaigns.

Participation in HIV/AIDS Awareness Campaigns * Opinion on good takeaway of Awareness Campaigns Crosstabulation						
			Opinion on good takeaway of Awareness Campaigns			Total
			Yes	No	Maybe	
Participation in HIV/AIDS Awareness Campaigns	Yes	Count	70	33	30	133
		Expected Count	52.3	46.4	34.3	133.0
	No	Count	61	79	42	182
		Expected Count	71.6	63.5	46.9	182.0
	Do Not Remember	Count	11	14	21	46
		Expected Count	18.1	16.1	11.9	46.0
Total		Count	142	126	93	361
		Expected Count	142.0	126.0	93.0	361.0

The table above denotes the cross-tabulation between participation in HIV/AIDS awareness campaigns and opinion on the good takeaways of awareness campaigns. Respondents who participate in HIV/AIDS awareness campaigns are more likely to have a good takeaway from awareness campaigns, as the primary data (count) is greater than the expected count in the Yes column and the primary data (count) is less than the expected count in the No column, and vice versa for other respondents.

Table 4.4.8: Symmetric measures between Participation in HIV/AIDS Awareness Campaigns and Opinion on good takeaway of Awareness Campaigns.

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.287	.000
	Cramer's V	.203	.000
N of Valid Cases		361	

The table above denotes the effect the frequency of seeing HIV/AIDS awareness campaigns in a week has on opinion on the good takeaways of awareness campaigns. Cramer's V value is 0.203, which means that the frequency of seeing HIV/AIDS awareness campaigns in a week has a moderate effect (20.3%) on the opinion on the good takeaway of awareness campaigns, and the effect is significant as the p value is 0.000226, which is less than the level of significance at 0.05.

Table 4.4.9: Chi-square test on association between Participation in HIV/AIDS Awareness Campaigns and Opinion on good takeaway of Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.344 ^a	4	.000
Likelihood Ratio	25.194	4	.000
Linear-by-Linear Association	14.551	1	.000
N of Valid Cases	361		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.85.			

From the table above, Pearson Chi-square $X^2(4) = 26.344$ and the p value = 0.000027. Since the p value is less than the level of significance at 0.05, we reject the null hypothesis and state that there is a significant association between participation in HIV/AIDS awareness campaigns and opinion on the good takeaways of awareness campaigns.

Table 4.4.10: Symmetric measures between Participation in HIV/AIDS Awareness Campaigns and Opinion on good takeaway of Awareness Campaigns.

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.270	.000
	Cramer's V	.191	.000
N of Valid Cases		361	

The table above denotes the effect Participation in HIV/AIDS Awareness Campaigns has on Opinion on good takeaway of Awareness Campaigns. Cramer's V value is 0.191, which means that participation in HIV/AIDS awareness campaigns

has a weak effect (19.1%) on the opinion on the good takeaway of awareness campaigns, and the effect is significant as the p value is 0.000027, which is less than the level of significance at 0.05.

H₀: There is no significant association between Opinion on whether campaign messages of HIV/AIDS are good enough and Opinion on good takeaway of Awareness Campaigns.

Table 4.4.11: Crosstabulation test on association between Opinion on whether campaign messages of HIV/AIDS are good enough and Opinion on good takeaway of Awareness Campaigns.

Opinion on whether campaign messages of HIV/AIDS are good enough * Opinion on good takeaway of Awareness Campaigns Crosstabulation						
			Opinion on good takeaway of Awareness Campaigns			Total
			Yes	No	Maybe	
Opinion on whether campaign messages of HIV/AIDS are good enough	Yes	Count	103	69	52	224
		Expected Count	88.0	78.0	58.0	224.0
	No	Count	19	24	6	49
		Expected Count	19.2	17.1	12.7	49.0
	Maybe	Count	19	32	35	86
		Expected Count	33.8	29.9	22.3	86.0
Total		Count	141	125	93	359
		Expected Count	141.0	125.0	93.0	359.0

The table above denotes the cross-tabulation between opinion on whether campaign messages about HIV/AIDS are good enough and opinion on the good takeaways of awareness campaigns. Respondents who have a positive opinion on whether HIV/AIDS awareness campaigns are good enough are more likely to have a good takeaway from awareness campaigns, as the primary data (count) is more than the expected count in the Yes column and the primary data (count) is less than the expected count in the No column, and vice versa for other respondents.

Table 4.4.12: Chi-square test on association between Opinion on whether campaign messages of HIV/AIDS are good enough and Opinion on good takeaway of Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.453 ^a	4	.000
Likelihood Ratio	25.066	4	.000
Linear-by-Linear Association	14.429	1	.000
N of Valid Cases	359		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.69.			

From the table above, Pearson Chi-square $X^2(4) = 24.453$ and the p value = 0.000065. Since the p value is less than the level of significance at 0.05, we reject the null hypothesis and state that there is a significant association between opinion on whether campaign messages about HIV/AIDS are good enough and opinion on the good takeaways of awareness campaigns.

Table 4.4.13: Symmetric measures between Opinion on whether campaign messages of HIV/AIDS are good enough and Opinion on good takeaway of Awareness Campaigns.

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.261	.000
	Cramer's V	.185	.000
N of Valid Cases		359	

The table above denotes the effect of opinion on whether campaign messages about HIV/AIDS are good enough on opinion on the good takeaways of awareness campaigns. Cramer's V value is 0.185, which means that opinion on whether campaign messages about HIV/AIDS are good enough has a weak effect (18.5%) on opinion on the good takeaway of awareness campaigns, and the effect is significant as the p value is 0.000027, which is less than the level of significance at 0.05.

b). Actions taken towards HIV/AIDS prevention.

Table 4.4.14: Frequency on following of Prevention Procedures given in Awareness Campaigns.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	253	69.1	70.7	70.7
	No	26	7.1	7.3	77.9
	Maybe	79	21.6	22.1	100.0
	Total	358	97.8	100.0	
Missing	9	8	2.2		
Total		366	100.0		

Table 4.4.14 reveals that 253 respondents, representing 69.1 percent of the total responses, are following the HIV/AIDS prevention procedures through the awareness campaigns; 26 responses, accounting for 7.1 percent, are not following them. At the same time, 79 (21.6%) are not sure if they are following the prevention procedures.

H₀: There is no significant association between gender and Following of Prevention Procedures given in Awareness Campaigns.

Table 4.4.15: Chi-square test on association between gender and Following of Prevention Procedures given in Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.864 ^a	4	.302
Likelihood Ratio	5.453	4	.244
Linear-by-Linear Association	3.877	1	.049
N of Valid Cases	358		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is .15.

From the table above, the likelihood ratio chi-square $X^2(4) = 5.453$ and the p value = 0.244. Since the p value is greater than the level of significance at 0.05, we accept (fail to reject) the null hypothesis.

H₀: There is no significant association between age groups and Following of Prevention Procedures given in Awareness Campaigns.

Table 4.4.16: Chi-square test on association between age groups and Following of Prevention Procedures given in Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.121 ^a	6	.908
Likelihood Ratio	2.742	6	.840
Linear-by-Linear Association	.461	1	.497
N of Valid Cases	358		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .07.

From the table above, the likelihood ratio Chi-square $X^2(6) = 2.742$ and the p value = 0.840. Since the p value is greater than the level of significance at 0.05, we accept (fail to reject) the null hypothesis.

H₀: There is no significant association between Frequency of seeing HIV/AIDS Awareness Campaigns in a Week and Following of Prevention Procedures given in Awareness Campaigns.

Table 4.4.17: Chi-square test on association between Frequency of seeing HIV/AIDS Awareness Campaigns in a Week and Following of Prevention Procedures given in Awareness Campaigns.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.804 ^a	8	.279
Likelihood Ratio	10.375	8	.240
Linear-by-Linear Association	4.727	1	.030
N of Valid Cases	358		

a. 3 cells (20.0%) have expected count less than 5. The minimum expected count is 3.12.

From the table above, Pearson Chi-square $X^2(8) = 9.804$ and the p value = 0.279. Since the p value is greater than the level of significance at 0.05, we accept (fail to reject) the null hypothesis.

c) Visit to ICTC (Integrated Counselling and Testing Centre)

Table 4.4.18: Frequency on visit to ICTC by college students.

Visit ICTC					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	112	30.6	30.6	30.6
	No	254	69.4	69.4	100.0
	Total	366	100.0	100.0	

From the table above, we can see those 112 respondents, amounting to 30.6 percent of the total responses, have visited the Integrated Counselling and Testing Centre (ICTC), while 254 respondents (69.4%) have not visited the ICTC.

d) Visit to ART Centre

Table 4.4.19: Frequency on visit to ART center by college students.

Visit ART Centre					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	7.4	7.4	7.4
	No	339	92.6	92.6	100.0
	Total	366	100.0	100.0	

From the table above, we can see those 27 respondents, accounting for 7.4 percent of the total responses, have visited the Antiretroviral Therapy (ART) Center, while 339 respondents, which is up to 92.6 percent, have not visited the ART Centre.

4.3 Conclusion

This chapter presents the analysis of the data, which were collected through a survey questionnaire. The four research objectives and questions were analyzed, starting from one to four. The researcher performed the percentage analysis with the help of the Statistical Package for Social Sciences (SPSS). Then, the null hypothesis was generated and tested with the help of SPSS by performing the chi-square test, symmetric measures, crosstabulation, and ANOVA multiple comparison.

CHAPTER – 5 FINDINGS AND CONCLUSIONS

5.1 Introduction

Chapter 5 provides conclusions based on the research findings from the data collected through the survey, as well as conclusions, recommendations, and suggestions for future studies. This chapter will address the research objectives and the findings from the previous chapter. The chapter will also include the conclusion along with recommendations for practice as well as future research.

5.2 Findings

The findings from the objective wise analysis, which was conducted in the previous chapter were presented as follows:

5.2.1 Objective 1

1. The samples collected from the population survey regarding the number of exposures in a week reveal that of the 366 respondents, 47 students, or 12.8 percent, see HIV/AIDS awareness campaigns every day, and 118 students (45.1%) are the most exposed to HIV/AIDS awareness campaigns within a week. Furthermore, 45 (12.3%), 59 (16.1%), and 97 (26.5.0%) represent exposure to HIV/AIDS awareness twice a week, three times a week, and never/do not care, respectively.

2. Table 4.1.2 on the medium used for seeing the campaigns also found that the majority of the respondents, accounting for 68.6 percent of the total responses, were exposed to social media awareness campaigns. While traditional media like newspapers, magazines, posters, and public meetings have 26.4 percent, 13.6 percent, 59.4 percent, and 43.6 percent of the audience, respectively, It can be observed from the above data that HIV/AIDS awareness campaigns carried out through social media have the highest number of exposures from college-going students. Therefore, HIV awareness campaigns through the traditional media have a smaller audience as compared to the traditional media among college-going students.

3. According to the interview conducted with the IEC consultant from the Mizoram State Aids Control Society (MSACS), every college has a —Red Ribbon Club inside their respective colleges. The blood donation camp and HIV/AIDS awareness campaign were conducted through this Red Ribbon Club as much as possible. The data collected from the survey revealed the participation of the college-going students in Mizoram in those programmes, organised inside and outside the college. 59.3 percent of the respondents used to attend the HIV/AIDS awareness campaign outside the college, while 86.3 percent did not attend the awareness campaign outside the college. At the same time, 216 respondents—that is, 59.3 percent—have attended the campaign, while 26.3 percent have not.

4. The media campaign is divided into three main categories: print, television, and social media. Then the respondents were asked in which medium of the three categories they exposed the most. The analysis from table 4.1.5 showed that 149 respondents (41.0%) are exposed to the campaign through broadcast media like television in the form of news, advertisements, dramas, films, etc., while 130 respondents, i.e., 35.8 percent, are exposed to the HIV/AIDS awareness campaign through social media. The least number of respondents, 84, accounting for 23.1 percent of the total responses, were exposed to print media.

5. The crosstabulation conducted from the exposure to HIV/AIDS awareness campaigns inside the college campus and the age group of the respondents in Table

4.1.10 found that the respondents belonging to the 21–25 age group have a better score in attending HIV/AIDS awareness campaigns compared to other age groups. The likelihood ratio chi-square test was conducted to see if the age of the respondent has a significant association with exposure to the HIV/AIDS awareness campaign in the college. The test shows that the likelihood ratio chi-square $X^2(6) = 25.779$ and the p value is 0.00024. Since the p value is less than the level of significance of 0.05, we can say that there is a significant association between the age of the respondent and their exposure to the HIV/AIDS awareness campaign on the college campus.

6. The Chi-square test is conducted in Table 4.1.15 to see if there is a significant association between gender and exposure to the HIV/AIDS awareness campaign. Likelihood Ratio Chi-square $X^2(4)$ is 4.255, and the p value is 0.373. Since the p value is greater than the level of significance at 0.05, it is found that gender has no significant association with exposure to the HIV/AIDS awareness campaign.

7. A crosstabulation and chi-square test were conducted between the number of exposures to the HIV awareness campaign in a week and participation in the HIV/AIDS awareness campaign. Pearson Chi-square $X^2(8)$ is 25.323, and the p value is 0.001. Since the p value is less than the level of significance of 0.05, it is found that there is a significant association between the frequency of seeing HIV/AIDS awareness campaigns in a week and attending an HIV/AIDS awareness campaign.

8. A crosstabulation conducted in table 4.1.23 on the mode of seeing HIV/AIDS awareness campaign and the participation in HIV/AIDS awareness campaign revealed that the expected count on the mode of social media is 47.6 and the result is 133. Therefore, it is found that there is a significant association between the mode of seeing the HIV/AIDS awareness campaign and participation in the HIV awareness campaign

5.2.2 Objective 2

9. Table 4.2.1 on recollection of the campaign messages revealed that 40 respondents, accounting for 10.9 percent of the total responses, do not remember the campaign messages about HIV/AIDS at all, while the majority, 59 percent, remembered some of the campaign messages about HIV/AIDS, and 26.8 percent can recollect all the HIV/AIDS campaign messages. 12 respondents, i.e., 3.3 percent, do not pay attention to the campaign messages.

10. Table 4.2.3 on knowledge gained about HIV/AIDS revealed that 295 respondents, accounting for 80.6 percent of the total sample, stated that they had gained knowledge about HIV/AIDS, while the least percentage, 3.6 percent of the respondents, said they had not gained information about it. It can be observed that the HIV/AIDS awareness campaign messages are informative enough to let the audience get more information about HIV/AIDS. At the same time, there are still people who do not pay attention to the awareness campaign and can only recall some of the messages.

11. The survey analysis from Table 4.2.5 also revealed that the majority of the respondents, 334 (91.3 percent), know how to protect themselves from HIV/AIDS, and 6 respondents do not know it, while 20 respondents, i.e., 5.5 percent, are not sure if they know how to protect themselves from HIV/AIDS. 277 respondents, comprising 75.7 percent, are aware of the existence of HIV/AIDS testing facilities, while 40 respondents, i.e., 10.9 percent, are not aware of it. At the same time, there are 43 respondents, and 11.7 percent are not sure about the testing facilities for HIV/AIDS.

12. The analysis from table 4.2.7 showed that 211 respondents, accounting for 57.7 percent, have knowledge of the transmission route of HIV/AIDS, while 50 respondents, i.e., 13.7 percent, are not aware of it. 184 respondents, which represents 50.3 percent of the total responses, have knowledge on the treatment of HIV/AIDS; 92 respondents, i.e., 25.1 percent, do not have knowledge; and 23.2 percent of the total responses are not sure about the treatment of HIV/AIDS.

13. Regarding the knowledge on ICTC and ART from tables 4.2.9 and 4.2.10, 275 respondents have awareness of the ICTC (Integrated Counselling and Testing center), and 52 respondents, i.e., 14.2 percent, are not aware of it. 240 respondents, accounting for 65.6 percent, are aware of the ART centre, while only 67 respondents, i.e., 18.3 percent, are not aware of the centre.

14. The ANOVA test conducted between the age group of the respondents and their HIV/AIDS awareness level from table 4.2.12 revealed that, with the degree of freedom 3, the F value is 5.677 and the p value is 0.001. Since the p value is less than the level of significance of 0.05, we can state that there is a significant difference between different age groups regarding their HIV/AIDS awareness level.

15. Table 4.2.15 shows the ANOVA test between students who attend HIV/AIDS awareness classes and those who do not. The test revealed that with a degree of freedom of 2, the F value is 3.629 and the p value is 0.028. Since the p value is less than the level of significance of 0.05, it is stated that there is a significant difference between students who attend the HIV/AIDS Awareness Campaign in college and students who do not attend regarding their HIV/AIDS Awareness level.

5.2.3 Objective 3

16. Table 4.3.1 on the study of opinion regarding the most effective media for an HIV/AIDS awareness campaign among college students revealed that the majority of the respondents (278), accounting for 76.0 percent, believed that social media would be the most effective media for an HIV/AIDS awareness campaign among college students. 32 (8.7%), 13 (3.6%), and 38 (10.4%) respondents opted for television, newspapers, and college magazines for the HIV/AIDS media awareness campaign among college students, respectively.

17. Regarding the best strategy for an HIV/AIDS awareness campaign among college students, table 4.3.4 revealed that 29 percent were the highest, followed by music accounting for 27 percent and drama with 20 percent of the total population. Therefore, a competition-based campaign in which students participate in the awareness campaign would be the best strategy for the HIV/AIDS awareness campaign among college students in Mizoram.

18. Table 4.3.10 on the comparison between college students from urban and rural areas's perceptions towards people living with HIV/AIDS shows that 69 percent from urban and 47.8 percent from villages are willing to work with HIV-positive individuals, and 21 percent from urban and 12.2 percent from rural areas did not want to work with them. While 10 percent of urbanites and 40 percent of ruralites do not have an idea about this question.

19. Table 4.3.10 revealed that 65 percent of urban residents and 42.2 percent of rural residents are willing to share the same toilet with people living with HIV. 18 per cent of urbanites and 16.7 of ruralites refused to share the same toilet with them. 17 per cent of urban and 41.1 percent of rural areas have no idea about it.

20. Table 4.3.10 revealed that 59 percent of urban areas and 35.6 percent of rural areas are willing to eat at the canteens run by PLWHA, and 21 and 15.6 percent of both urban and rural areas, respectively, do not want to eat there. 20 percent of urban residents and 48.9 percent of rural residents do not have an idea about it.

21. Table 4.3.10 revealed that 70 percent of urbanites and 41.1 percent of ruralites are okay sharing a room with PLWHA. In terms of healthcare, 51 percent of people from urban areas and 30 percent from rural areas are willing to receive health care given by HIV positives.

22. Table 4.3.10 revealed that 75 percent of urban and 47.8 percent of rural areas are willing to study with PLWHA students. While 13 percent of urban and 38.9 percent of rural areas are unsure about it.

23. A cross-tabulation was conducted between area of residence and willingness to work with HIV positives. Therefore, table 4.3.12 Chi-square test revealed that the Pearson Chi-square $X^2(2)$ value is 24.224 and the p value is 0.00002. Since the p value is less than the level of significance of 0.05, it is stated that there is a significant association between area of residence and willingness to work with HIV positives.

24. Table 4.3.15 shows the Pearson Chi-square test between the area of residents and willingness to share the same toilet with HIV positives. The chi-square $X^2(2)$ value is 14.904, and the p value is 0.001. Since the p value is less than the level of significance at 0.05, it can be stated that there is a significant association between area of residence and willingness to use the same toilet used by HIV positives.

25. A crosstabulation and chi-square test was conducted between the area of residence and willingness to receive medical treatment from a person who is HIV positive, which was shown in tables 4.3.23 and 4.2.24. The calculation found that the expected count among respondents living in urban areas is 40.5 and the count reaches 51, while the expected count conducted on respondents living in rural areas is 40.5 and the count is 30. A Pearson Chi-square reveals that the $X^2(2)$ value is 9.363 and the p value is 0.009. Since the p value is less than the level of significance at 0.05. Therefore, it is stated that there is a significant association between area of residence and willingness to receive medical treatment from a healthcare worker who is HIV positive.

26. Table 4.3.27 revealed that the Pearson Chi-square on the area of residence and the opinion on HIV-positive students being allowed in the class room depicted that the $X^2(2)$ value is 18.967 and the p value is 0.000076. Since the p value is less than the level of significance at 0.05, it can be stated that there is a significant association between area of residence and opinion on whether HIV-positive students should be allowed to stay in the same class room.

5.2.4 Objective 4

27. Table 4.4.14 from the population survey highlighted that out of 253 respondents, 69.1 percent of the total responses are following the HIV/AIDS prevention procedures through the awareness campaigns; 26 responses, accounting for 7.1 percent, are not following them. At the same time, 79 (21.6%) are not sure if

they are following the prevention procedures.

28. The Likelihood Ratio Chi-square test was conducted to see the association between gender and the following of HIV/AIDS prevention procedures. The test result from table 4.4.15 revealed that the Likelihood Ratio Chi-square $X^2(4)$ is 5.453 and the p value is 0.244. Since the p value is greater than the level of significance at 0.05, we can state that there is no significant association between gender and the following of HIV/AIDS prevention procedures by the college-going students.

29. Table 4.4.16 on the association between age group and the following HIV/AIDS prevention procedures revealed that the Pearson Chi-square $X^2(8)$ is 9.804 and the p value is 0.279. Since the p value is greater than the level of significance at 0.05, there is no significant association between the age group and the actions taken towards HIV prevention procedures among the college students.

30. A population survey from table 4.4.18 revealed that 112 respondents, amounting to 30.6 percent of the total responses, have visited the Integrated Counselling and Testing Centre (ICTC), while 254 respondents (69.4%) have not visited the ICTC. It is also found from Table 4.4.19 that 27 respondents, accounting for 7.4 percent from the total responses, have visited Antiretroviral Therapy (ART) Centre, while 339, i.e., 92.6 percent respondents have not visited the ART Centre.

5.3 Research hypothesis test

All the research hypotheses were tested with the help of the Statistical Package for Social Science (SPSS) and proven as below:

1. The Chi-square test on frequency of seeing HIV/AIDS awareness campaigns in a week and participation in HIV/AIDS awareness campaigns from table 4.1.22 revealed that Pearson Chi-square $X^2(8) = 13.689$ and the p value = 0.090. The p value is greater than the level of significance at 0.05, therefore, there is no

significant relationship between frequency of seeing HIV/AIDS awareness campaigns in a week and the participation in HIV/AIDS awareness campaigns.

2. The Chi-square test on age groups of respondents and knowledge gain about HIV/AIDS from media campaign from table 4.2.19 revealed that the Likelihood Ratio $X^2(6) = 0.947$ and p value = 0.988. The p value is more than the level of significance at 0.05, therefore, there is no significant relationship between age groups of respondents and knowledge gain about HIV/AIDS from media campaign.

3. A Crosstabulation test on association between area of residence and willing to share room/living with HIV positive given in Table 4.3.20 revealed that the actual count from urban areas exceeds the expected count, and the actual count from rural areas is less than the expected count, indicating that people from urban areas are more open to HIV-positive people. Table 4.3.21 on Chi-square test between area of residence and willingness to share room or living with HIV positive revealed that the Pearson Chi-square $X^2(2)$ value is 21.126, and the p value is 0.00026. The p value is less than the level of significance at 0.05. Therefore, it is found that there is a significant association between area of residence and willingness to share a room or live with HIV positives.

4. Table 4.4.6 on Chi-square test association between Frequency of seeing HIV/AIDS Awareness Campaigns in a week and Opinion on good takeaway of Awareness Campaigns revealed that Pearson Chi-square $X^2(8)$ is 29.831 and the p value is 0.000226. The p value from the test is less than the level of significance. Therefore, it is found that there is a significant relationship between the frequency of seeing HIV/AIDS awareness campaigns in a week and opinion on the good takeaways of awareness campaigns.

5. Table 4.4.16 on Chi-square test between age groups and Following of Prevention Procedures given in Awareness Campaigns revealed that the likelihood ratio Chi-square $X^2(6)$ is 2.742 and the p value is 0.840. Since the p value is greater

than the level of significance at 0.05, we fail to reject the hypothesis. Therefore, there is no significant relationship between age groups and Following of Prevention Procedures given in Awareness Campaigns.

5.4 Conclusions and recommendations

The study revealed that college-going students were mostly engaged in different social media handles as compared to traditional forms of media. The opinion taken from the respondents also shows that exposure to different HIV/AIDS awareness campaigns on social media, which were presented through entertainment and education, is common among college students in Mizoram. Even though the HIV/AIDS awareness campaigns were available in all types of mediums like print, television, radio, the internet, etc., there is a need for more campaigns generated through social media to capture more exposure from the college-going students in Mizoram.

The study revealed that the majority of the respondents were exposed only once a week. The second-highest percentage of the total responses being the ones who never or do not care about the exposure to the HIV/AIDS awareness campaign also indicated that there is a need for improvement in the selection of media for the campaign. Every college in Mizoram has a Red Ribbon Club. The activities of the club include a blood donation camp, an HIV/AIDS awareness campaign inside the campus, and a competition-based HIV awareness campaign in collaboration with MSACS like debate, poster making, essay writing competitions, etc. A cross-tabulation and Chi-square test conducted on the mode of seeing the HIV/AIDS awareness campaign and participation in the HIV/AIDS awareness campaign revealed that there is a significant association between the mode of seeing the HIV/AIDS awareness campaign and participation in the same.

The sample collected from the population survey also indicated that more than one-third of the total responses gained more knowledge about HIV/AIDS through the campaign. The awareness about HIV/AIDS, its prevention, the testing methods, and

the treatment also scored a significant number. At the same time, most of the respondents were exposed to social media awareness campaigns instead of traditional media. Therefore, it is advised that, in order to capture a larger audience and spread more information about HIV/AIDS, awareness campaigns through different social media platforms should be generated.

The Mizoram State Aids Control Society (MSACS) has conducted an HIV/AIDS awareness campaign throughout the state by using different kinds of media, like print (posters, hoardings, newspapers, pamphlets), broadcast channels, social media platforms, and public gatherings. But the study on the comparison between college students from urban and rural areas revealed that there is a huge gap in perceptions towards people living with HIV/AIDS.

The statistical tests conducted has shown that there is a significant association between area of residence and the perception towards people living with HIV/AIDS among the respondents. Therefore, it is recommended that there should be a revision on the selection of the medium, the strategy and the campaign messages to be disseminated as well as the HIV/AIDS awareness campaign to be more effective in Mizoram.

The IEC (Information, Education, and Communication) division under MSACS is providing all the necessary information about HIV/AIDS, its prevention, treatment, and testing facilities. The awareness campaigns were also designed to cover all of these and disseminate them to the general public. At the same time, the present study revealed that the actions taken by the respondents towards the media campaign messages were still very low, as only 112 respondents, accounting for 30.6 percent of the total responses, visited the ICTC for their HIV status, and only 7.4 percent of the study's population visited an ART center. So, this showed that there is a disconnect between the media awareness campaigns and their desired outcome in changing people's behavior towards HIV/AIDS. Therefore, it is recommended that media campaigns be created in such a way that they influence more people to take positive actions according to the campaign objectives.

5.5 Suggestions for future research

The study has revealed the effectiveness of HIV/AIDS awareness campaigns among college students in Mizoram. However, there are still few suggestions that have been brought to light from the study with the hope for more effective HIV/AIDS awareness campaigns in Mizoram.

1. More HIV/AIDS awareness campaigns are suggested to be broadcast on various social media platforms in order to capture college-going students' attention.
2. It is suggested that HIV/AIDS awareness campaigns should be carried out in a way that encourages more engagement from the intended target population.
3. It is suggested that a study be conducted on the schoolchildren regarding their HIV/AIDS awareness in order to design effective strategies for the campaign.
4. It is suggested that a comparative study on the effectiveness of HIV/AIDS awareness campaigns be made with other states in India for better campaigns.

ANNEXURE I

QUESTIONNAIRE ON EFFECTIVENESS OF HIV/AIDS MEDIA AWARENESS CAMPAIGNS AMONG COLLEGE STUDENTS IN MIZORAM

Survey Questionnaire for Respondents

Section –I Demographic Profile

1. Age
 - Below 20
 - Between 20-25
 - Above 25

2. Gender
 - Male
 - Female
 - Prefer not to say

3. Which Religion/Denomination do you follow:_____

4. Which is your home district
 - Aizawl
 - Lunglei
 - Champhai
 - Saiha
 - Lawngtlai
 - Kolasib
 - Mamit
 - Saitual
 - Serchhip
 - Khawzawl

- Hnathial

5. Which of the following best describes the area you live in?

- Urban
- Rural

❖ What is your stream of study Science

Commerce Arts Others

6. Which semester you are studying :

- 1st semester
- 2nd semester
- 3rd semester
- 4th semester
- 5th semester
- 6th semester

7. Do you have any of the following devices?

Sl.No	Device	I have	I used my family's device	I do not have
1	Desktop Computer			
2	Mobile Phone			
3	Laptop			
4	Tablet			
5	Television			

8. What kind of medium do you use the most to get information?

- Print
- Radio
- Television
- Internet

9. What kind devices do you use to get information?
- Television
 - Radio
 - Mobile phones
 - Tablets
 - Others

Section –II Media Campaigns on HIV/AIDS awareness

10. How often do you see HIV/AIDS awareness campaigns in a week?
- Everyday
 - Once a week
 - Twice a week
 - Thrice a week
 - Never or does not care

11. Where do you see HIV/AIDS awareness campaigns? (you can choose more than one)

- Hoardings
- Posters
- Newspapers
- Magazines
- Broadcast news
- Broadcast advertisements
- Social media
- Others

12. From which of the following medium you have seen HIV/AIDS

awareness campaigns the most?

- Print (Posters, Hoardings, Newspapers, etc)
- Television (News, advertisement, drama, film, etc)
- Social media (whatsapp, facebook, youtube, etc)

13. Have you attended any HIV/AIDS awareness campaign(s) outside your college?

Yes _____ No _____

14. Have you attend any HIV/AIDS awareness campaign(s) in your college?

Yes _____ No _____

15. Have you participated in any HIV/AIDS awareness campaign?

Yes _____ No _____

Section – III Effectiveness of HIV/AIDS media awareness campaigns

16. How well do you remember the campaign messages?

- Don't remember at all
- Remember some only
- Remember all of it
- Never pay attention to the messages

17. Do you see the same HIV messages in different medium?

Yes _____ No _____

18. Have you gained any knowledge about HIV/AIDS from those media campaigns?

Yes _____ No _____

19. Do you think that the campaign messages are good enough to get information about HIV/AIDS?

Yes _____ No _____

20. Have you tried to get more information after seeing the campaign?

Yes _____ No _____

21. Do you know how to protect yourself from HIV/AIDS infection?

Yes _____ No _____

22. Do you know how to get tested with HIV/AIDS?

Yes _____ No _____

23. Do you know all the transmission route of HIV/AIDS?

Yes _____ No _____

24. Do you know the treatment of HIV/AIDS?

Yes _____ No _____

25. Do you know ICTC center?

Yes _____ No _____

26. Have you visited any ICTC center after attending such program Yes
no

27. Do you know about the functions of ICTC center Yes No

26. Do you know ART center?

Yes _____ No _____

29. Have you visited any ICTC center after attending such program Yes
no

30. Do you know about the functions of ICTC center Yes No

**Section – IV Attitudes and Actions taken towards HIV/AIDS media awareness
campaign**

27. Would you be willing to work with HIV positive? Yes _____ No
_____ Don't know __

28. Would you be willing to stay in the class room with HIV positive? Yes
_____ No _____ Don't know _____

29. Would you be willing to share utensils with HIV positive? Yes _____ No _____
Don't know _____
30. Would you be willing to share toilet with HIV positive? Yes ___ No _____
Don't know _____
31. Would you be willing to buy food prepared by HIV positive? Yes ___ No _____
Don't know _____
32. Do you feel that HIV positive should be allowed to give lecture in the class room?
Yes _____ No ___ Don't know _____
33. Do you feel that HIV positive student should be allowed in the class room? Yes ___ No ___ Don't know _____
34. Do you think HIV positive people can lead normal life like yourself? Yes No Don't know

Section – V Suggestions regarding HIV/AIDS media awareness campaign

34. Which of the following medium will be most effective for HIV/AIDS media awareness campaign among college students?
- Television
 - Radio
 - Social media
 - Newspapers
 - College magazines
 - Others

35. What kind of strategy (ies) will be most effective among college students?

- Drama
- Music
- Competition based campaign
- Film
- Dance
- Others _____

36. What kind of appeal do you think will be used for media awareness campaign among college students?

- Fear appeal
- Humor
- Musical appeal
- Rational appeal
- Others

37. Do you think that more awareness campaign on stigmatization and discrimination is still needed?

Yes _____ No ___ Don't know _____.

ANNEXURE II

QUESTIONNAIRES ON KNOWLEDGE, ATTITUDES AND PRACTICES TOWARDS HIV/AIDS AMONG COLLEGE STUDENTS IN MIZORAM

Section –I Demographic Profile

1. Age
 - Below 20
 - Between 20-25
 - Above 25

2. Gender
 - Male
 - Female
 - Prefer not to say

3. Which Religion/Denomination do you follow:

4. Which is your home district
 - Aizawl
 - Lunglei
 - Champhai
 - Saiha
 - Lawngtlai
 - Kolasib
 - Mamit

- Saitual
 - Serchhip
 - Khawzawl
 - Hnahthial
5. Which of the following best describes the area you live in?
- Urban
 - Rural
6. What is your stream of study Science
Commerce Arts Others
7. Which semester you are studying:
- 1st semester
 - 2nd semester
 - 3rd semester
 - 4th semester
 - 5th semester
 - 6th semester

Section -2 HIV/AIDS knowledge and attitude and practices.

8. Have you ever heard of HIV or the disease called AIDS?
- a. Yes
 - b. No
 - c. Do not know
9. From where do you see about HIV/AIDS the most?
- Television
 - Radio
 - Mobile phones
 - Tablets

Others

10. Do you know how to keep yourself from getting HIV infection?

- Yes
- No
- Do not know

11. Do you know how to get HIV test to know your status?

- Yes
- No
- Do not know

12. Do you know the treatment for HIV/AIDS?

- Yes
- No
- Do not know

13. Do you know ICTC?

- Yes
- No
- Do not know

14. Do you know ART?

- Yes
- No
- Do not know

15. Would you be willing to work with a HIV positive?

- Yes
- No
- Do not know

16. Would you be willing to use the same toilet used by HIV positive?
- Yes
 - No
 - Do not know
17. Would you be willing to eat food at a company canteen prepared by HIV positive?
- Yes
 - No
 - Do not know
18. Would you be willing to share room/live with HIV positive?
- Yes
 - No
 - Do not know
19. Do you feel that positive student should be allowed to stay in the same classroom?
- Yes
 - No
 - Do not know
20. Have you ever visited ICTC to know your status?
- Yes
 - No
 - Do not know
21. Have you ever visited ART center?
- Yes
 - No
 - Do not know

Bibliography

Alam, M. (2023, September 8). What is a Research Objective? Definition, Types, Examples and Best Practices. *IdeaScale*. <https://ideascale.com/blog/what-is-research-objective/>

Apuke, O. (2017). Quantitative Research Methods: A Synopsis Approach. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, 6, 40–47. <https://doi.org/10.12816/0040336>

Aridoss, S., David, J. K., Jaganathasamy, N., Mathiyazhakan, M., Balasubramanian, G., Natesan, M., V M, P., Kumar, P., Rajan, S., & Arumugam, E. (2022). Spatial heterogeneity of risk factors associated with HIV prevalence among men who inject drugs in India: An analysis of the data from the integrated bio-behavioral surveillance, India. *Medicine*, 101(48), e31688. <https://doi.org/10.1097/MD.00000000000031688>

Azhar, S., Gandham, S., Vaudrey, J., Oruganti, G., & Samuel, R. S. (2020). —They Kept Away‡: Social Isolation of Cisgender Women Living with HIV in Hyderabad, India. *Clinical Social Work Journal*, 48(1), 64–76. <https://doi.org/10.1007/s10615-019-00736-w>

Bacon-Shone, J. (2022). *Introduction to Quantitative Research Methods*. Graduate School, The University of Hong Kong.

Bhat, R., Maheshwari, S., & Somen, S. (2004). *Treating HIV/AIDS patients in India with antiretroviral therapy: A management challenge*.

Biswas, S., Sinha, A., Rajan, S., Khan, P. K., Joshi, D. S., & Saha, M. K. (2020). Human immunodeficiency virus prevalence and high-risk behavior of home-based and nonhome-based female sex workers in three high-prevalent North-Eastern States of India. *Indian Journal of Public Health*, 64(Supplement), S46–S52. https://doi.org/10.4103/ijph.IJPH_100_20

Breuner, C. C., Mattson, G., COMMITTEE ON ADOLESCENCE, & COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH.

(2016). Sexuality Education for Children and Adolescents. *Pediatrics*, *138*(2), e20161348. <https://doi.org/10.1542/peds.2016-1348>

Cruz, A. X. F. da, Neto, J. C., Araújo, A. A. C., Sousa, A. R. de, Oliveira, L. B. de, Sena, I. V. de O., Sena Sousa, L., Santos, J. D., Batista, O. M. A., Mendes, I. A. C., Fronteira, I., & Sousa, Á. F. L. de. (2023). HIV testing among immigrant men who have sex with men in Brazil. *Public Health Nursing (Boston, Mass.)*, *40*(6), 826–835. <https://doi.org/10.1111/phn.13236>

E, R., P, P., Ss, P., A, D. S., Srb, D., Bs, N., Ja, N., P, D., & S, O. (2023). The utilization of systematic review evidence in formulating India's National Health Programme guidelines between 2007 and 2021. *Health Policy and Planning*, *38*(4). <https://doi.org/10.1093/heapol/czad008>

Encyclopaedia, editors. (2023, October 25). *Sampling / Random selection, Population, Estimation / Britannica*. Encyclopaedia Britanice. <https://www.britannica.com/science/sampling-statistics>

F, R., W, O., J, van den H., As, B., & Vi, A.-S. (2022). Impact of coronavirus disease (COVID-19) on HIV testing and care provision across four continents. *HIV Medicine*, *23*(2). <https://doi.org/10.1111/hiv.13180>

Fanai, L., & Ag, S. (2022). Socio-Political History Of Alcohol Use In Mizoram: A Rapid Review. *Journal of Positive School Psychology*, *6*(10), Article 10.

Fang, E. F., Xie, C., Schenkel, J. A., Wu, C., Long, Q., Cui, H., Aman, Y., Frank, J., Liao, J., Zou, H., Wang, N. Y., Wu, J., Liu, X., Li, T., Fang, Y., Niu, Z., Yang, G., Hong, J., Wang, Q., ... Woo, J. (2020). A research agenda for ageing in China in the 21st century (2nd edition): Focusing on basic and translational research, long-term care, policy and social networks. *Ageing Research Reviews*, *64*, 101174. <https://doi.org/10.1016/j.arr.2020.101174>

Fauk, N. K., Ward, P. R., Hawke, K., & Mwanri, L. (2021). Cultural and religious determinants of HIV transmission: A qualitative study with people living with HIV in Belu and Yogyakarta, Indonesia. *PloS One*, *16*(11), e0257906. <https://doi.org/10.1371/journal.pone.0257906>

Feyissa, G. T., Abebe, L., Girma, E., & Woldie, M. (2012). Stigma and discrimination against people living with HIV by healthcare providers, Southwest Ethiopia. *BMC Public Health*, *12*(1), 522. <https://doi.org/10.1186/1471-2458-12-522>

Fischler, A. S. (2012, July). (PDF) *Quantitative Research Methods—Abraham S.education.nova.edu/.../35/files/arc_doc/quantitative_research_metho...* .
Quantitative Research Methods FSEHS-ARC. Overview •Research Process.
Dokumen.Tips. <https://dokumen.tips/documents/quantitative-research-methods-abraham-s-quantitative-research-methods.html>

Gabbidon, K., Chenneville, T., Earnshaw, V., & Drake, Hu. (2022, July 16). *Intersectional stigma and developmental competence among youth living with HIV - Gabbidon—2022—Journal of Family Theory & Review—Wiley Online Library.* <https://onlinelibrary.wiley.com/doi/abs/10.1111/jftr.12468>

Golembiewski, E. H., Gravholt, D. L., Torres Roldan, V. D., Lincango Naranjo, E. P., Vallejo, S., Bautista, A. G., LaVecchia, C. M., Patten, C. A., Allen, S. V., Jaladi, S., & Boehmer, K. R. (2022). Rural Patient Experiences of Accessing Care for Chronic Conditions: A Systematic Review and Thematic Synthesis of Qualitative Studies. *Annals of Family Medicine*, *20*(3), 266–272. <https://doi.org/10.1370/afm.2798>

Gurram, S., & Bollampalli, B. (2020). A study on awareness of human immunodeficiency virus among adolescent girls in urban and rural field practice areas of Osmania Medical College, Hyderabad, Telangana, India. *International Journal Of Community Medicine And Public Health*, *7*, 706. <https://doi.org/10.18203/2394-6040.ijcmph20200453>

HIV and AIDS. (2023, July 13). <https://www.who.int/news-room/fact-sheets/detail/hiv-aids>

HIV Facts & Figures | National AIDS Control Organization | MoHFW | GoI. (2023, November). <https://naco.gov.in/hiv-facts-figures#skipCont>

HIV/AIDS in India. (2023). In *Wikipedia.*

https://en.wikipedia.org/w/index.php?title=HIV/AIDS_in_India&oldid=1172679025

Hmingthansangi, C. (2013). *CARE AND SUPPORT OF CHILDREN LIVING WITH HIV/AIDS IN AIZAWL, MIZORAM.*

Hornik, R. C., & Yanovitzky, I. (2003). Using Theory to Design Evaluations of Communication Campaigns: The Case of the National Youth Anti-Drug Media Campaign. *Communication Theory : CT : A Journal of the International Communication Association*, 13(2), 204. <https://doi.org/10.1111/j.1468-2885.2003.tb00289.x>

Iqbal, S., Maqsood, S., Zafar, A., Zakar, R., Zakar, M. Z., & Fischer, F. (2019). Determinants of overall knowledge of and attitudes towards HIV/AIDS transmission among ever-married women in Pakistan: Evidence from the Demographic and Health Survey 2012-13. *BMC Public Health*, 19(1), 793. <https://doi.org/10.1186/s12889-019-7124-3>

Kabbash, I. A., Abo Ali, E. A., Elgendy, M. M., Abdrabo, M. M., Salem, H. M., Gouda, M. R., Elbasiony, Y. S., Elboshy, N., & Hamed, M. (2018). HIV/AIDS-related stigma and discrimination among health care workers at Tanta University Hospitals, Egypt. *Environmental Science and Pollution Research International*, 25(31), 30755–30762. <https://doi.org/10.1007/s11356-016-7848-x>

Khawlhing, L., Sangpuii, Li., & Kanagaraj, E. (2021). Agencies and Mechanisms of Social Inclusion and Exclusion Among People Living With HIV/AIDS in Mizoram.

Journal of Social Inclusion Studies, 7.

Khawzawl L Henry. (2022, August 23). *HIV/AIDS in Mizoram 10 times higher than national average, 2.3% people affected*. Hindustan Times. <https://www.hindustantimes.com/india-news/hiv-aids-in-mizoram-10-times-higher-than-national-average-2-3-people-affected-101661260805629.html>

Kothari, C. R. (1990). *Research Methodology: Research and Techniques* (Second Edition). New Age International (P) Limited, Publisher.

Kotler, P., & Lee, N. (2008). *Social Marketing: Influencing Behaviors for Good*. SAGE.

Krishnamoorthy, Y., Majella, M. G., Rajaa, S., Bharathi, A., & Saya, G. K. (2021). Spatial pattern and determinants of HIV infection among adults aged 15 to 54 years in India—Evidence from National Family Health Survey-4 (2015- 16). *Tropical Medicine & International Health: TM & IH*, 26(5), 546–556. <https://doi.org/10.1111/tmi.13551>

KSHATRI, J. S., PALO, S. K., PANDA, M., SWAIN, S., SINHA, R., MAHAPATRA, P., & PATI, S. (2021). Reach, accessibility and acceptance of different communication channels for health promotion: A community- based analysis in Odisha, India. *Journal of Preventive Medicine and Hygiene*, 62(2), E455–E465. <https://doi.org/10.15167/2421-4248/jpmh2021.62.2.1929>

Lalnunfeli, D. (2015). *ATTITUDE OF STUDENTS, TEACHERS AND COMMUNITY TOWARDS SEX EDUCATION AT SECONDARY SCHOOL LEVEL IN MIZORAM*.

Lalramhmachhuana, W., & Khiangte, L. (2022). *The Effectiveness of Media Awareness Campaign on HIV/AIDS Among College Students in Aizawl*. 6(1), 29–33.

Lotfi, R., Tehrani, F. R., Yaghmaei, F., & Hajizadeh, E. (2012). Barriers to condom use among women at risk of HIV/AIDS: A qualitative study from Iran. *BMC Women's Health*, 12(1), 13. <https://doi.org/10.1186/1472-6874-12-13>

Lucas, S. (2000). The River: A Journey Back to the Source of HIV and AIDS. *BMJ : British Medical Journal*, 320(7247), 1481.

Marsh, K., Eaton, J. W., Mahy, M., Sabin, K., Autenrieth, C. S., Wanyeki, I., Daher, J., & Ghys, P. D. (2019). Global, regional and country-level 90-90-90 estimates for 2018: Assessing progress towards the 2020 target. *AIDS (London, England)*, 33 Suppl 3(Suppl 3), S213–S226. <https://doi.org/10.1097/QAD.0000000000002355>

Melhuish, A., & Lewthwaite, P. (2018). Natural history of HIV and AIDS. *Medicine*, 46(6), 356–361. <https://doi.org/10.1016/j.mpmed.2018.03.010>

Mohamud, L. A., Hassan, A. M., & Nasir, J. A. (2023). Determinants of HIV/Aids Knowledge Among Females in Somalia: Findings from 2018 to 2019 SDHS Data. *HIV/AIDS - Research and Palliative Care*, 15, 435–444. <https://doi.org/10.2147/HIV.S414290>

Moradi, G., Amini, E. E., Valipour, A., Tayeri, K., Kazerooni, P. A., Molaeipour, L., & Moradi, Y. (2022). The study of feasibility and acceptability of using HIV self-tests in high-risk Iranian populations (FSWs, MSM, and TGs): A cross-sectional study. *Harm Reduction Journal*, 19(1), 61. <https://doi.org/10.1186/s12954-022-00641-5>

Nikolopoulou, K. (2022, October 8). *What Is Generalizability? | Definition & Examples*. Scribbr. <https://www.scribbr.com/research-bias/generalizability/>

Nubed, C. K., & Akoachere, J.-F. T. K. (2016). Knowledge, attitudes and practices regarding HIV/AIDS among senior secondary school students in Fako Division, South West Region, Cameroon. *BMC Public Health*, 16(1), 847. <https://doi.org/10.1186/s12889-016-3516-9>

O'Neil, J., Orchard, T., Swarankar, R. C., Blanchard, J. F., Gurav, K., & Moses, S. (2004). Dhandha, dharma and disease: Traditional sex work and HIV/AIDS in rural India. *Social Science & Medicine* (1982), 59(4), 851–860. <https://doi.org/10.1016/j.socscimed.2003.11.032>

Pachau, L. N., Tannous, C., & Agho, K. E. (2021a). Factors Associated with Knowledge, Attitudes, and Prevention towards HIV/AIDS among Adults 15-49 Years in Mizoram, North East India: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 19(1), 440. <https://doi.org/10.3390/ijerph19010440>

Pachau, L. N., Tannous, C., & Agho, K. E. (2021b). Factors Associated with Knowledge, Attitudes, and Prevention towards HIV/AIDS among Adults 15-49 Years in Mizoram, North East India: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 19(1), 440. <https://doi.org/10.3390/ijerph19010440>

Pachau, L. N., Tannous, C., Chawngthu, R. L., & Agho, K. E. (2023a). Changes in and Predictors of HIV among People Who Inject Drugs in Mizoram, Northeast India, from 2007 to 2021. *International Journal of Environmental Research and Public Health*, 20(10), 18587. <https://doi.org/10.3390/ijerph20105871>

Pachau, L. N., Tannous, C., Chawngthu, R. L., & Agho, K. E. (2023b). HIV and its associated factors among people who inject drugs in Mizoram, Northeast India. *PLOS ONE*, 18(5), e0286009. <https://doi.org/10.1371/journal.pone.0286009>

Pagkas-Bather, J., Young, L. E., Chen, Y.-T., & Schneider, J. A. (2020). Social Network Interventions for HIV Transmission Elimination. *Current HIV/AIDS Reports*, 17(5), 450–457. <https://doi.org/10.1007/s11904-020-00524-z>

Pandey, A., Dhingra, N., Kumar, P., Sahu, D., Reddy, D. C. S., Narayan, P., Raj, Y., Sangal, B., Chandra, N., Nair, S., Singh, J., Chavan, L., Srivastava, D. J., Jha, U. M., Verma, V., Kant, S., Bhattacharya, M., Swain, P., Halder, P., ... Ammassari, S. (2017). Sustained progress, but no room for complacency: Results of 2015 HIV estimations in India. *The Indian Journal of Medical Research*, 146(1), 83–96. https://doi.org/10.4103/ijmr.IJMR_1658_16

Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, 47(11), 1451–1458. <https://doi.org/10.1016/j.ijnurstu.2010.06.004>

Rahman, M., Islam, F., Rahaman, M. S., Sultana, N., Fahim, N., & Ahmed, M. (2021). Studies on the Prevalence of HIV/AIDS in Bangladesh including other Developing Countries. *Advances in Traditional Medicine*, 21. <https://doi.org/10.1007/s13596-021-00610-6>

Rao, A., Mamulwar, M., Panda, S., Pachuau, H. Z., Vanlalvenzuali, H., Lalruatsanga, null, Roy, T., & Lalnuntlangi, N. (2023). Finding a way forward with the community: Qualitative inquiry in the generalized HIV epidemic in Mizoram, India. *Frontiers in Public Health*, 11, 1217628. <https://doi.org/10.3389/fpubh.2023.1217628>

Rao, A., Mamulwar, M., Shahabuddin, S. M., Roy, T., Lalnuntlangi, N., & Panda, S. (2022). HIV epidemic in Mizoram, India: A rapid review to inform future responses. *The Indian Journal of Medical Research*, 156(2), 203–217. https://doi.org/10.4103/ijmr.ijmr_1453_22

Rogers, E., & Storey, D. (1987). *Communication campaigns*. Sage Newbury Park. https://www.researchgate.net/profile/Douglas-Storey-2/publication/232540209_Communication_campaigns/links/5528122e0cf29b22c9bab2e9/Communication-campaigns.pdf

Rohmingmawii. (2019). *Historical Journal Mizoram*. Samaritan Printer.

Sahu, D., Kumar, P., Chandra, N., Rajan, S., Shukla, D. K., Venkatesh, S., Nair, S., Kumar, A., Singh, J., Reddy, S., Godbole, S., Elangovan, A., Saha, M. K., Rai, S., Lakshmi, P. V. M., Gambhir, T., Ammassari, S., Joshi, D., Das, A., ... Vardhana Rao, M. V. (2020). Findings from the 2017 HIV estimation round & trend analysis of key indicators 2010-2017: Evidence for prioritising HIV/AIDS programme in India. *The Indian Journal of Medical Research*, 151(6), 562–570.

https://doi.org/10.4103/ijmr.IJMR_1619_19

Sankalak. (2020). *Status of National AIDS Response* (Second Edition). Ministry of Health and Family Welfare, Government of India. [https://naco.gov.in/sites/default/files/Sankalak%20Status%20of%20National%20AIDS%20Response,%20Second%20Edition%20\(2020\).pdf](https://naco.gov.in/sites/default/files/Sankalak%20Status%20of%20National%20AIDS%20Response,%20Second%20Edition%20(2020).pdf)

Singer, M. (2008). Drugs and development: The global impact of drug use and trafficking on social and economic development. *The International Journal on Drug Policy*, 19(6), 467–478. <https://doi.org/10.1016/j.drugpo.2006.12.007>

Singh, S. K., Sharma, S., & Vishwakarma, D. (2023). Tracking changes in HIV-related risk behaviour among men aged 15–54 in high HIV prevalence states in India: Evidence from NFHSs. *Journal of Public Health*. <https://doi.org/10.1007/s10389-023-02057-2>

Singhal Arvind, & Rogers M Everett. (2003). *Combating AIDS: Communication Strategies in Action*. Sage Publications India Pvt Ltd.

Taherdoost, H. (2022). *Different Types of Data Analysis; Data Analysis Methods and Techniques in Research Projects* (SSRN Scholarly Paper 4178680). <https://deliverypdf.ssrn.com/delivery.php?ID=693102115122088124015009127108008124025033010045057018088108123064104118106065112014024027057111007030003083067084015002121024011048088035048126120000028125127112119027069071065029082078068105120116007127006096126026090098103001005086022126003096067117&EXT=pdf&INDEX=TRUE>

Thangluah Lallawmkima. (2022, January 12). *WORLD AIDS DAY PUALIN KHAWZAWLAH HUN HMANG*. <https://dipr.mizoram.gov.in/post/world-aid-day-pualin-khawzawlah-hun-hmang>

Thilakavathi, S., Boopathi, K., Girish Kumar, C., Santhakumar, A., Senthilkumar, R., Eswaramurthy, C., Ilaya Bharathy, V., Ramakrishnan, L., Thongamba, G., Adhikary,

R., & Paranjape, R. (2011). Assessment of the scale, coverage and outcomes of the Avahan HIV prevention program for female sex workers in Tamil Nadu, India: Is there evidence of an effect? *BMC Public Health*, *11*(Suppl 6), S3. <https://doi.org/10.1186/1471-2458-11-S6-S3>

Williams, B. G., Granich, R., Chauhan, L. S., Dharmshaktu, N. S., & Dye, C. (2005). The impact of HIV/AIDS on the control of tuberculosis in India. *Proceedings of the National Academy of Sciences of the United States of America*, *102*(27), 9619–9624. <https://doi.org/10.1073/pnas.0501615102>

Zothangpuii, & Mishra BB. (2018). Awareness of High School Students of Mizoram about Risky Adolescent Behaviour. *International Journal of Peace, Education and Development*, *6*(1). <https://doi.org/10.30954/2454-9525.01.2018.6>

Zothangpuii, & Mishra, B. B. (2018). Awareness of High School Students of Mizoram about Risky Adolescent Behaviour. *International Journal of Peace, Education and Development*, *6*(1). <https://doi.org/10.30954/2454-9525.01.2018.6>

BRIEF BIO-DATA OF THE CANDIDATE

Name : William Lalramhmachhuana

Father _s name : C. Lianhlira

Date of Birth : 02.05.1992

Marital status : Single

Nationality : Indian

Religion : Christian

Contact : +91-9612467192

Email ID : williamparis29@gmail.com Permanent
address : Venglai, Darlawn, Mizoram,
796111

Address for correspondence : A-I(A)41, Chaltlang, Aizawl,
Mizoram, 796012

Educational Background

Name of Exam	Year	Board/University	Subject	Percentage	Division
Class X	2006	Mizoram Board of School Education		51.8%	II
Class XII	2008	Mizoram Board of School Education	Commerce	58.4%	II
Bachelor of Arts	2011	Mizoram University	B. Com	47.5%	II
Master of Journalism & Mass Communication	2013	Mizoram University	Journalism & Mass Communication	77.75%	I

Research Publication:

1. Lalramhmachhuana, W. & Khiangte, L. . (2022). The Effectiveness of Media Awareness Campaigns on HIV/AIDS Among College Students in Aizawl. *International Journal of Current Humanities and Social Science Researches (IJCHSSR) ISSN: 2456-7205, Peer Reviewed Journal*, 6(1), 29–33.
2. Lalramhmachhuana, W. & Khiangte, L. (2023). A Comparative Study on The Stigmatization Towards People Living With HIV/AIDS Among College Students From Urban and Rural Areas in Mizoram. *A Journal of Historical Research. ISSN: 0302-9832, UGC Care List, Vol. 53-02, 8, May- August 2023*, 98-105.
3. Lalramhmachhuana, W. & Khiangte, L., (2023). Community Assessment of Mizo Youth Towards HIV/AIDS in Mizoram, India. *Journal of the Asiatic Society of Mumbai, XCVI(26)*, 1–6.

Paper Presented:

1. Presented a paper titled **“A Study on The Effectiveness of HIV/AIDS Multimedia Awareness Campaigns Among The Youth in Aizawl”** at the —International Conference on Media, Communication and Designll. organized by Faculty of Journalism & Creative Studies (FJCS), Jagran Lakecity University, Bhopal on 25th- 26th June, 2021.
2. Presented a paper titled **“A Comparative Study on The Stigmatization Towards People Living With HIV/AIDS Among College Students From Rural and Urban Areas in Mizoram”** at Two Days Virtual National Seminar on —Realities of Marginalisation and Marginality in Medial organized by the department of Mass Communication Mizoram University held on 21st-22nd April, 2022.
3. Presented a paper titled **“Challenges Faced by People Living With HIV/AIDS and Its Workers During COVID-19 Pandemic in Mizoram”** at Two day International

Conference on Borderless Communication: Reimagining Global Mediascapes at
Department of Mass Communication, Mizoram University, November 17-18, 2022.

4. Presented a paper title ***“Exploring The Linkage Between exposure to HIV/AIDS Media Awareness Campaign and Participation in The Campaign Inside and Outside Campus Among College Students in Mizoram”*** at the international seminar on —New Era of Social Responsibility, Sustainability and Innovations organized by School of Economics, Management and Information Sciences (SEMIS), Mizoram University on 4th-6th March, 2024.

The Effectiveness of Media Awareness Campaigns on HIV/AIDS Among College Students in Aizawl

William Lalramhmachhunaⁱ & Dr. Lalemruati Khiangteⁱⁱ

Abstract

There have been many health media awareness campaigns in Mizoram. However, there are very few researches done to find out the effectiveness of HIV/AIDS media awareness campaign. Looking into the Mizoram context, it has been observed that a particular age group based research is necessary. According to NACO (National AIDS Control Organization), it was reported that 73 percent of young people have misconceptions about modes of HIV transmission. Therefore, the absence of right guidance and information at this age may lead to multiple-partner and unprotected sex with high risk behavior groups. So, this study aimed to find out the awareness level of the campaigns among the college students, the perceptions towards the campaign and actions taken through the media campaigns on HIV/AIDS. The study is done through quantitative method that a structured questionnaire was distributed among the selected college student in Aizawl. The study found that most of the students were aware of the HIV/AIDS related campaigns through different types of media and claimed to be very sure of the transmission route, the prevention procedures and its related measures to be taken which were projected in the campaign. The study found that only a small number of the respondents have got tested for HIV and care about the actions to be taken when it comes to real life. It was suggested that more in-depth study is required in the age group level and there is a need of revising the HIV/AIDS related media campaign strategies among the youth in Mizoram.

Keywords: Media campaign, awareness, HIV/AIDS, youth, Mizoram,

Introduction

There have been many health media awareness campaigns in Mizoram, however only a few researches have been done on the effectiveness of those campaigns such as “Communication Needs Assessment on HIV/AIDS in Mizoram”, “Community Needs Assessment on HIV/AIDS in Mizoram”. According to NACO (National Aids Control Society), reported on 24th June 2016, “due to lack of correct information, more than 73% of young population has misconceptions about modes of HIV transmission”. In Mizoram, according to a report given by MSACS (Mizoram State Aids Control Society) the prevalence rate was highest among the age group of 25-34 and the youth aged 15-24 is in the third place (The Hindustan times). This prompted us to do a study on the effectiveness of HIV awareness campaigns among the college students in Mizoram.

Review of literature

According to A. Bandura’s work on Social Learning Theory, “In order to promote pro-social behaviors, many developing countries employed the entertainment technique to influence knowledge and foster interpersonal interactions”. The entertainment-education approach is founded on the social cognition theory, which states that people learn models by observing and imitating the conduct of others they respect.

Without a cure or vaccine, Lynch et al. (1993) confirmed that prevention through information, communication, and understanding remained the most potent intrusion. According to a study by Parker, W (1994), education is the cornerstone of AIDS education, and the capacity to integrate education and infrastructure methods is one of the tactics usually used to deal with HIV infection and AIDS prevention. He suggested that

ⁱ . Research Scholar, Department of Mass Communication, Mizoram University
ⁱⁱ . Assistant Professor, Department of Mass Communication, Mizoram University

COMMUNITY ASSESSMENT OF MIZO YOUTH TOWARDS HIV/AIDS IN MIZORAM, INDIA

William Lalramhmachhuana Research Scholar Department of Mass Communication Mizoram University : williamparis29@gmail.com

Dr. Lalremruati Khiangte Assistant Professor Department of Mass Communication Mizoram University : gkhiangte@gmail.com

Lalawmpuii Khiangte Assistant Professor Department of Management Mizoram Christian College : opi.lkhiangte@gmail.com

Dr. Ningthoujam Irina Devi Assistant Professor Department of Public Administration Mizoram University : irina.ning@gmail.com

Abstract

India has had a large number of people living with HIV/AIDS since the first case was diagnosed in the year 1987. According to the latest report by MSACS (Mizoram State Aids Control Society), there are 25,080 people infected with HIV/AIDS in Mizoram. This study was done to assess HIV/AIDS related knowledge, attitudes, and practices among the college students in Mizoram. Therefore, a quantitative survey was conducted among the Mizo youth focusing on students in the state of Mizoram. 200 samples of college students from 10 colleges of both rural and urban areas were chosen using simple random sampling. The study found that the students from urban colleges are well aware of HIV/AIDS as well as the modes of transmission. It was also found that students from Urban areas are more open towards PLWHA and lack of awareness regarding stigmatization and discrimination is more among students from rural areas. The strength of Mizoram is the strong vibrant civil society consisting of Church and other community NGOs. If all the stakeholders adapt to the contemporary needs of the society, then we can expect a change in HIV/AIDS communication and behaviour. Instead of just preaching them to abstain from sex, the civil society should come forward to teach the younger generation for protected safer sex.

Keywords: HIV/AIDS, youth, Mizoram, Awareness campaign, College students, Rural Urban.

1. Introduction

India has had a large number of people living with HIV/AIDS since the first case was diagnosed in the year 1987. According to the latest report by MSACS (Mizoram State Aids Control Society), there are 25,080 people infected with HIV/AIDS. Since the fatal virus was first diagnosed in Mizoram in 1990, almost 3,300 people have died as a result of AIDS-related illnesses. According to the National AIDS Control Organisation, Mizoram has the dubious distinction of having the highest AIDS prevalence in the country, which has 1.45 percent of its population infected with the deadly disease. According to the Mizoram State AIDS Control Society, roughly 1.19 out of every 1000 people in Mizoram have been diagnosed with HIV. According to the report, the AIDS occurrence rate was highest among youngsters aged 25 to 34, followed by adults aged 35 to 49, who had a rate of 26.49 percent. Therefore, it was felt that a study that focuses on the knowledge, attitudes and Practices among the youth is necessary for better understanding as well as the effectiveness of the present HIV/AIDS awareness campaigns in Mizoram.

2. Review of Literature

The majority of the population included in the survey had heard of HIV/AIDS and the method of transmission, according to the most recent study on HIV/AIDS knowledge, attitudes, and prevention in Mizoram. However, a focused prevention and education campaign is required among non-Christians, residents of rural areas, and members of low socioeconomic groups. Even though they appear to regularly watch HIV/AIDS awareness campaigns in the media, proper interventions and HIV/AIDS education that emphasizes prevention, transmission, stigmatization, and discrimination are still required (Pachua LN, 2021). In India, 600 young women between the ages of 20 and 40

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A COMPARATIVE STUDY ON THE STIGMATIZATION TOWARDS PEOPLE LIVING WITH HIV/AIDS AMONG COLLEGE STUDENTS FROM RURAL AND URBAN AREAS IN MIZORAM

William Lalramhmachhuana Research Scholar, Department of Mass Communication Mizoram University

Dr Lalremruati Khiangte Assistant Professor, Department of Mass Communication Mizoram University

Dr Irene Lalruatkimi Associate Professor, Department of Mass Communication Mizoram University

There have been many HIV/AIDS media awareness campaigns in Mizoram. It has been observed that there are many incidences happen till today in the form of stigmatization. Therefore, the absence of right and equal information to each and every one may lead to more stigmatization towards people living with HIV/AIDS across the State. So, a comparative study was conducted among the college students from both rural and urban areas. The study employed both qualitative and quantitative method that a structured questionnaire was distributed among the 10 selected college students, 5 each from both urban and rural areas. The sample selection was conducted through simple random sampling. In-depth interview was also conducted among 8 selected personnel from people living with HIV/AIDS, who were selected through snowball sampling method. The study found that there was a slight difference between the students from rural and urban areas on the perception towards people living with HIV/AIDS. It was suggested that more study and more awareness campaign is needed to eradicate the stigmatization in the State.

Keywords: Stigmatization, awareness campaigns, HIV/AIDS, Rural and Urban, college students.

INTRODUCTION

Mizoram was placed second in the state in terms of HIV population. Over the last few years, the HIV population has exploded. The first HIV victim in Mizoram was discovered in 1990 from a drug user, and the disease has since become well-known in the community. According to Lalthanzara, out of the 4.57 lakh persons who have been tested for HIV, 9894 have tested positive (The Indian Express 2018). As a result, it is critical to understand the true attitudes of kids regarding HIV patients, as youth are our future leaders. As a result, it is vital to determine how much knowledge they have about the disease as well as their attitudes toward HIV/AIDS patients in Mizoram.

Stigma prevents the delivery of effective social and medical care (including taking antiretroviral therapy) and also enhances the number of HIV infections. Therefore, a study on the stigmatization will help find better way for awareness campaign more effective in the state.

REVIEW OF LITERATURE

Health communication is the study and practise of passing along promotional health information, such as public health campaigns and health education, between a clinician and a patient. Sharing health information aims to increase health literacy, which will impact individual health choices. In 2013, a report from the National Communication Association (NCA) was released.

In the study HIV/AIDS Stigma in Sub-Saharan Africa: A Literature Review by Ngozi C. Mbonu, it was found that the level of prejudice and social exclusion was significantly influenced by the cultural construction of HIV/AIDS, which is based on ideas about contamination, sexuality, and religion. HIV infections rise as a result of stigma, which also makes it challenging to access appropriate social and medical care (such as antiretroviral therapy).

The World Health Organization (WHO) states that "health is a condition of total physical, mental, and social well-being, not only the absence of disease or disability," as quoted in Business Dictionary. In



**Two Days Virtual National Seminar on
Realities of Marginalisation and Marginality in Media
Certificate of Participation**



This is to certify that

MR. WILLIAM LALRAMHMACHHUANA

RESEARCH SCHOLAR, MIZORAM UNIVERSITY

has presented a paper titled

"A COMPARATIVE STUDY ON THE STIGMATISATION TOWARDS PEOPLE LIVING WITH
HIV/AIDS AMONG COLLEGE STUDENTS FROM RURAL AND URBAN AREAS IN MIZORAM"

**in the Two Days Virtual National Seminar on
Realities of Marginalisation and Marginality in Media organised by
Department of Mass Communication, Mizoram University held on 21st & 22nd of April 2022.**

Sayan Dey.

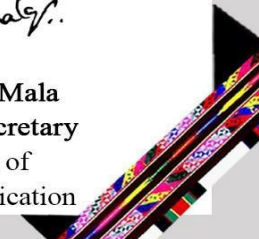
**Dr. Sayan Dey
Organising Secretary
Department of
Mass Communication**

Irene

**Dr. Irene Lalruatkimi
Head
Department of
Mass Communication**

V. Ratnamala

**Dr. V. Ratna Mala
Organising Secretary
Department of
Mass Communication**



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This is to certify that Mr/Mrs/Ms. William Lalramhmachhuana, Department of Mass Communication
Mizoram University presented a paper entitled; Exploring The Linkage Between Exposure To Hiv/aids Media Awareness
Campaign And Participation In The Campaign Inside And Outside Campus Among College Student In Mizoram
in the International Seminar on "*NEW ERA OF SOCIAL RESPONSIBILITY, SUSTAINABILITY AND INNOVATIONS*"
held on March 4th-6th, 2024 at Mizoram University.


(Prof. **BHARTENDU SINGH**)
Dean, SEMIS & Convener

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School of Economics, Management and Information Science (SEMIS)



Certificate of Presentation

Proudly Presented to

Mr. William Lalramhmachhuana

Research Scholar
Department of Mass Communication
Mizoram University

For the paper titled

CHALLENGES FACED BY PEOPLE LIVING WITH HIV/AIDS
AND ITS WORKERS DURING COVID-19 PANDEMIC IN MIZORAM

Presented at the Two day International Conference on Borderless Communication:
Reimagining global Mediascapes organised by Department of Mass Communication,
Mizoram University on November 17-18, 2022.

L. Khiangte

Dr. Lalremruati Khiangte
Organizing Secretary

Sayan Dey

Dr. Sayan Dey
Organizing Secretary

Irene

Dr. Irene Lalruatkimi
Seminar Co- Convener

V. Ratnamala

Dr. V. Ratnamala
Seminar Convener



CERTIFICATE OF PAPER PRESENTATION

This Certificate is Presented to William Lalramhmachhuana

From Mizoram University

for presenting a paper titled A Study On The Effectiveness Of HIV/AIDS Multimedia
Awareness Campaigns Among The Youth In Aizawl

in the International Conference on Media, Communication and Design
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Prof. (Dr.) Sandeep Shastri,
Vice Chancellor
Jagran Lakecity University


Prof. Diwakar Shukla,
Dean, Faculty of Journalism and Creative Studies,
Head - JLU Advancement & International Relations


Dr. Jayant Panda,
Head, Jagran School of Journalism
and Communication

PARTICULARS OF THE CANDIDATE

NAME OF THE CANDIDATE : WILLIAM LALRAMHMACHHUANA

DEGREE : DOCTOR OF PHILOSOPHY

DEPARTMENT : MASS COMMUNICATION

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(Prof. V. RATNAMALA)
HEAD
Department of Mass Communication

ABSTRACT

**MEDIA EFFECTIVENESS ON HIV/AIDS MEDIA AWARENESS
CAMPAIGN AMONG COLLEGE STUDENTS IN MIZORAM**

**AN ABSTRACT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY**

WILLIAM LALRAMHMACHHUANA

MZU REGISTRATION NO: 2116 of 2008-09

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**DEPARTMENT OF MASS COMMUNICATION
SCHOOL OF ECONOMICS, MANAGEMENT AND
INFORMATION SCIENCES**

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**MEDIA EFFECTIVENESS ON HIV/AIDS MEDIA AWARENESS
CAMPAIGN AMONG COLLEGE STUDENTS IN MIZORAM**

BY

**WILLIAM LALRAMHMACHHUANA
DEPARTMENT OF MASS COMMUNICATION**

Supervisor

Dr. LALREMRUATI KHIANGTE

Submitted

**In partial fulfillment of the requirement of the Degree of Doctor of Philosophy in
Mass Communication of Mizoram University, Aizawl.**

Media Effectiveness on HIV/AIDS Media Awareness Campaign Among College Students in Mizoram

1.1 Introduction

This thesis reports on descriptive research that looked into the role of NGOs in Mizoram's fight against the HIV/AIDS pandemic. It focuses on examining the impact of various media awareness efforts on college-going students in Mizoram. The investigation was carried out to learn more about the knowledge, attitude, and practice of Mizoram's college students. It also seeks to learn about the target interventions carried out by various NGOs under the supervision of MSACS (Mizoram State Aids Control Society), the media strategy employed for media campaigns, and the awareness campaigns conducted throughout the entire state using various media. This chapter provides a brief explanation of the context, purpose, and significance of the study, as well as the questions.

1.2 Background

1.2.1 History of the HIV/AIDS Epidemic

According to Singhal and Everett (2003), no one knows the origin of the human immunodeficiency virus or the circumstances surrounding its human dissemination in the early 1980s. It might have been there for a very long time in a dormant state. At the National Cancer Institute in Bethesda, Maryland, Dr. Robert Gallo and other medical professionals discovered HIV-1 in 1983.

The Melhuish & Lewthwaite (2018) study found that HIV was found to be the cause of AIDS in 1983, after the disease was initially recognized in 1981. In 1959, plasma taken from an adult man in Kinshasa, Democratic Republic of the Congo, had the oldest known instance of HIV infection. The HIV epidemic most likely started in central Africa in the early 20th century due to several cross-species transmission episodes involving a simian lentivirus from monkeys to humans, most likely as a result of hunting practices, according to subsequent genetic sequencing. On June 5, 1981, the AIDS epidemic, sometimes known as the pandemic, formally started. Of

course, the AIDS epidemic actually began some years earlier, but the public and medical community were first informed about the recently identified illness on June 5, 1981. Though they are not the first to identify the new disease, the Los Angeles team is the first to publish a print announcement about it (Lucas, 2000).

1.2.2 HIV/AIDS a Serious Health Issue

According to HIV and AIDS (2023) on WHO, HIV continues to be a serious global public health concern, having claimed 40.4 million lives to date and continuing to spread throughout all countries. Some countries have reported rising rates of new infections after years of decline. By the end of 2022, there were an anticipated 39.0 million HIV-positive individuals worldwide, of which 25.6 million were located in the WHO African Region. In order to achieve the goals of ending AIDS, viral hepatitis B and C, and sexually transmitted infections by 2030, the health sector is guided in implementing strategically focused responses by global health sector strategies on HIV, viral hepatitis, and sexually transmitted infections for the period 2022–2030.

1.2.3 HIV/AIDS and the World

HIV/AIDS, also known as acquired immunodeficiency syndrome, is a global health issue that has affected over 70 million people worldwide. Of those, 35 million have died, and 36.7 million are living with the illness. The Human Immunodeficiency Virus surfaced in Africa and somehow moved to the United States, where it was first detected decades later. The rate of HIV infection and deaths due to AIDS first increased rapidly during the 1980s in the United States and in Western Europe (Singhal Arvind & Rogers M. Everett, 2003). The first case of AIDS in the United States was discovered on June 5th, 1981, in a group of eight gay males in the city of Los Angeles, USA. It has now spread to every continent on the planet. There isn't a nation that is HIV/AIDS-free. Today, it has moved from urban to rural areas and from the general population at high risk to those at low risk. Communities that previously had little to do with the disease have been infiltrated by it (HIV and AIDS, 2023).

1.2.4 HIV/AIDS and India as a Whole

In a report given by Sankalak (2020), the National Surveillance Data of India reported the first HIV case in India in the month of August of 1984. India has the third-highest number of HIV-positive individuals in the world; at the same time, its HIV prevalence is only 0.34 percent. 85.6 percent of HIV infections in India are contracted through sexual contact. In 2006, there were 5.6 million HIV-positive people living in India, according to UNAIDS, making it the country with the highest number of HIV-positive people worldwide. Following the first general population survey on HIV, UNAIDS and NACO concurred in 2007 that there were between 2 million and 3.1 million people living with HIV worldwide. The estimated number in 2008 was 2.31 million, and in 2009, 2.4 million people were expected to be HIV positive, making up 0.3% of the population. India is third in the world for the highest percentage of people living with HIV, despite the fact that this may appear low given the size of its population.

According to the report given in “HIV/AIDS in India” (2023), the third-largest HIV epidemic in the world is in India. In India, the estimated HIV prevalence for 2016 was 0.3%. Although this number is low compared to the majority of other middle-income nations, India's enormous population (1.324 billion) makes it equal to 2.1 million people. Individuals with HIV. An estimated 62,000 people perished from AIDS-related illnesses in the same year. With a 32% decrease in cases overall, India's HIV epidemic is slowing down. Heterosexual sex, which accounted for 87% of new infections in 2015, is what's causing India's HIV epidemic. However, the epidemic is focused on some vulnerable groups, such as sex workers. In many regions of the nation, different vulnerabilities fuel the epidemic. The three easternmost states—Manipur, Mizoram, and Nagaland—have the highest rates of HIV infection. Additionally, some states in the nation's north and northeast have reported increased HIV prevalence.

According to the recently published India HIV Estimate 2019 report on HIV Facts & Figures/NACO (2023), since the epidemic's peak in 2000, the estimated adult (15–49 years) HIV prevalence trend in India has been dropping, and more recently, it has

established. In 2019, this indicator's estimate ranged from 0.17 to 0.29 percent (see Figure 1). HIV prevalence was estimated to be 0.24% (0.18–0.32%) in adult males (15–49 years) and 0.20% (0.15–0.26%) in adult females in the same year.

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1.2.5 HIV/AIDS and Mizoram

In the study conducted by Khawzawl L. Henry (2022), it was found that Mizoram witnessed the first HIV/AIDS case in October of 1990. According to the MSACS report released in March 2022, there were 23,755 people sick, and 21,727 of those were young adults aged between 15 and 49. Sex was the primary source of HIV infections, accounting for 65% of cases. In the news reported by Thangluah Lallawmkima (2022), the rate or percentage of HIV/AIDS prevalence is ten times greater than the national average. According to MSACS, 3,506 people died from the terrible disease between October 1990 and March of this year, and 25,982 people have received an AIDS diagnosis to date. Young people aged 35 to 49 had the highest incidence of AIDS (almost 27%), and 3,506 infected patients are now receiving antiretroviral therapy (ART). For the fiscal year 2021–2022, at least 1,620 people received an AIDS diagnosis, compared to 1,900 in the previous year (2020–2021) and 2,338 in the year 2019–2020.

According to the NACO report HIV Facts & Figures | National AIDS Control Organization | MoHFW | GoI (2023), the sharing of syringes and needles, which is responsible for about 39 percent of new HIV infections in Mizoram, is one of the many factors contributing to the current HIV situation in the state. It is also reported that less than one-third of regular sex partners of people living with HIV (PLHIV) had undergone HIV counseling and testing in Mizoram.

1.3 Media Awareness Campaign

According to Rogers & Storey (1987), in the book "Communication Campaign," campaigns in the mass media are methods of trying to change the attitudes and behaviors of a large target audience about health by using communication channels to spread messages. Advertising on television and movies, radio, billboards, magazines, newspapers, and transit advertising (signs on buses and taxis) are some examples of these communication outlets. Public health campaigns involving mass media have been used in the past to improve road safety, encourage physical exercise, discourage tobacco use, improve nutrition, and improve care-seeking behaviors in various nations. The effectiveness of campaigns to discourage cigarette smoking in changing behavior has not always been consistent.

Media campaigns can run for a short while or for a very long time. They could be used in conjunction with policy changes or as a stand-alone option. Examples of additional organized program components are clinical or institutional outreach, simple access to newly available or current products or services, and outreach. If health initiatives are a component of larger social marketing campaigns, then several dissemination strategies may be employed (Kotler & Lee, 2008). According to Hornik and Yanovitzky (2003), campaigns in the mass media have the power to alter the behavior of entire populations, both directly and indirectly. Numerous advertisements seek to elicit emotional or cognitive reactions in order to directly impact specific receivers. These kinds of initiatives aim to influence personal decision-making processes. The removal or lessening of barriers to change, assistance in recognizing and embracing healthy or unhealthy social standards, and the association of positive feelings with effecting change are among the anticipated results.

1.4 Review of Literature

According to Rahman et al. (2021), HIV/AIDS is rapidly and unabatedly spreading, particularly in emerging countries like India. While there are limited treatment options available for the virus, the current emphasis has shifted towards prevention

rather than treatment. Prevention of this feared illness is mostly dependent on identifying the elements that contribute to its spread and identifying individuals who are susceptible and in danger, at least until a definitive treatment is discovered. AIDS has spread quickly over the globe and is probably here to stay in the twenty-first century (Fang et al., 2020). In less than 20 years, HIV/AIDS has spread from an unknown disease to a worldwide epidemic that has infected over 10 million people. According to F et al. (2022), several nations have previously seen severe epidemics affect specific populations or the whole populace. These healthcare systems in these countries now face additional challenges as a result of AIDS, including in Thailand, India, Burma, and Cambodia. The academic community is very concerned about the pandemic's propagation, dispersion, and susceptibility to certain demographic groups.

The E. et al. (2023) study shows that, under the direction of the Government of India's Ministry of Health and Family Welfare (MoHFW, GOI), the National AIDS Control Organization (NACO) develops policies and carries out therapeutic initiatives for HIV/AIDS prevention, control, and treatment. To oversee its National AIDS Control Programme (NACP) at the state level, NACO established the State AIDS Control Society (SACS). According to Bhat et al. (2004), to strengthen its response to the HIV pandemic and hasten the reversal process, the Government of India launched the National AIDS Control Programme IV (NACP-IV) in 2012. These programs have led to a significant 32% reduction in new infections and a 49% decrease in AIDS-related deaths over the past decade. The aforementioned successes have raised the need for services related to prevention and treatment. The number of individuals anticipated to need antiretroviral medication increased from 3.79 lakh in 2007 to 14.88 lakh in 2015. People living with HIV still struggle to get access to ART medication, despite attempts. Fifty-five percent of Indian PLHIV have received HIV therapy as of March 2018. While the worldwide average for PLHIV therapy is 67%, in 2019, 62% of PLHIV were receiving it (Marsh et al., 2019).

According to Pachuau et al. (2021), Mizoram, a state in the north-eastern region of India, is grappling with a significant AIDS mortality rate, recording 23.34 cases of

AIDS per 100,000 individuals, marking it as the second-highest in the country. In contrast to the overall trend in India and other states, Mizoram has witnessed an alarming 18% increase in HIV incidence between 2010 and 2017. As of 2019, an estimated 20.05 individuals per 1000 in Mizoram were living with HIV, while approximately 1.18 individuals per 1000 were without HIV. According to the study done by Lalnunfeli (2015), there are nine HIV infections identified in Mizoram on average every day. This statistic is alarming, especially when considering Mizoram's relatively small population of 1.1 million. Over the period from 2010 to 2019, Mizoram continued to grapple with a persistently high HIV prevalence rate. An estimated 69.22 thousand new infections and 4.43 deaths per 100,000 people were predicted to be connected to AIDS in 2019. In Pandey et al.'s (2017) paper, nonetheless, India has achieved notable strides in combating its pandemic, as seen by a 37% decrease in new HIV infections since 2010. The National AIDS Control Organization (NACO) is in charge of developing policies and carrying out initiatives to stop the HIV pandemic in India (Thilakavathi et al., 2011). In an effort to curb the spread of HIV/AIDS, the National AIDS Control Programme (NACP) was also founded, encouraging the general public to adopt preventative measures and increasing public knowledge of them.

According to a study conducted by Rohmingmawii (2019), the Mizoram government established the State AIDS Cell in 1992, followed by the creation of the Mizoram State AIDS Control Society (MSACS) in 1998 as part of the Health and Family Welfare department's initiatives. Subsequently, MSACS has been actively engaged in promoting and executing awareness and education campaigns aimed at preventing and addressing the HIV/AIDS situation in Mizoram. The ongoing rise in new HIV infections, despite the diligent efforts of MSACS to combat transmission, highlights the importance of examining the general public's awareness, attitudes, and behaviors regarding HIV/AIDS.

Kabbash et al.'s (2016) studies evaluating people's attitudes, knowledge, and beliefs about HIV/AIDS in Mizoram are nonexistent. According to research conducted in India, there is an immediate need to increase public acceptance and care for those

living with HIV. The primary means of doing this is by increasing public awareness of HIV and its mechanisms of transmission. The only realistic method to control HIV/AIDS is to avoid transmission through accurate understanding, a good attitude, safe conduct, and safe practices, since there is currently no treatable form of the disease (Nubed & Akoachere, 2016). The state of Mizoram in India continues to have the highest incidence and prevalence of HIV. It is thus vital to assess and ascertain adult population knowledge, attitudes, and beliefs about HIV/AIDS.

1.5 Research Gap

There are several studies done in this area, but the existing literature reveals that the majority of the studies are done in other parts of India and other countries. The review of the literature shows that though many media campaigns on HIV/AIDS awareness are being conducted in the state, there have not been studies done in this area in the Mizoram context. The analysis of the HIV positive cases confirmed at the testing centers shows that there are three age groups who are most vulnerable in Mizoram: 25–34, 35–49, and 15–24. Which of the age groups is selected for the study area? The age group ranging from 15 to 24 is mostly composed of college students, and the rate of positive cases is 23.03%, so it was found that there is a need to study this age group.

1.6 Scope of the study

There have been different types of media campaigns on HIV/AIDS in different types of media, like print (newspapers, posters, hoardings, leaflets, etc.), radio (news, talk shows, live phone-calls, speeches, etc.), TV (news, advertisements, talk shows, speeches, etc.), and the Internet. However, the previous study found that stigma towards those living with HIV/AIDS still exists and that the prevalence rate of HIV/AIDS in Mizoram is ten times greater than the national average. At the same time, there are only a few studies conducted on the media awareness campaigns for HIV/AIDS in Mizoram. Therefore, there is a need to study whether the media campaigns that are conducted through various media outlets, along with the strategies used in the campaigns, are successful or whether there is room for

improvement in the way that these campaigns are implemented among the youth in Mizoram.

1.7 Research Objectives

1. To study the exposure of college students towards HIV/AIDS media awareness campaigns.
2. To study the awareness level of HIV/AIDS media campaign among college students in Mizoram.
3. To study the perception towards PLWHA through HIV/AIDS media campaign among college students in Mizoram.
4. To study the practices followed through HIV/AIDS media campaign among college students in Mizoram.

1.8 Research Methodology

In order to gather the research objectives, a quantitative research method, in the form of survey questionnaires is used. The survey questions were developed particularly for the purpose of this study, which was developed through an in-depth interview conducted with the IEC consultant for the Mizoram State Aids Control Society (MSACS). The questionnaires for the present study include demographics, exposure to HIV/AIDS awareness campaigns, knowledge gained from HIV/AIDS awareness campaigns, perceptions towards people living with HIV/AIDS (PLWHA), practices or actions taken through HIV/AIDS awareness campaigns, and their opinion on future HIV/AIDS awareness campaign strategies.

Data collection

Sampling refers to the method or approach adopted to identify a representative subset of people or instances from a given population. When it is not feasible to collect data from every member of the population, such as in biological or chemical analysis, industrial quality control, or social surveys, sampling and statistical inference are applied (Encyclopaedia, 2023). Collecting and analyzing numerical data is part of the process of conducting quantitative research. Identifying patterns and averages,

generating hypotheses, examining cause and effect, and applying findings to larger populations are all possible with it.

The sample selection was conducted in the following three phases: A quantitative method in the form of a survey was conducted through questionnaires, in which the sample was selected through a three-stage stratified sampling method. The sample selection will be conducted in three phases. In the first phase, college will be divided into different strata according to district wise. Colleges will be selected from every district in Mizoram. Colleges with the highest number of student enrolment in the year 2019-20 sessions from each district will be chosen for the study area. In the second phase, the sample was collected from each percentage of students enrolled in one college taken from the total population. In the third phase, the selected samples from each college will be divided into strata based on gender. The selected samples from each district will be divided into two groups based on gender.

1.9 Outline of the Thesis

Chapter 1: Introduction

Chapter 1 focuses on the background of the study, the research gap, the statement of the problem, and the significance of the study. Furthermore, the researcher also covers the area in which the study will be conducted and its objectives, as well as an introduction to the media awareness campaign.

Chapter 2: Review of literature

The researcher offers a wide range of reviews of prior research on the thesis topic, as well as an explanation of concepts in this chapter. This chapter starts with the HIV/AIDS epidemiology in Mizoram, followed by the cultural and socioeconomic factors impacting awareness. In addition, an in-depth review of Mizoram's current HIV/AIDS awareness campaigns is included in this chapter, along with details concerning partnerships and collaborations with various NGOs, barriers to awareness and prevention, and innovative awareness campaign strategies. Furthermore, the function of universities and colleges, the relationship between awareness campaigns and SBCCs (Social Behavior Change Communication), and entertainment and

education were examined. Finally, this chapter deals with the challenges and future directions of HIV/AIDS awareness campaigns in Mizoram.

Chapter 3: Methodology

Chapter 3 deals with the definition of research methodology, the sampling method used for data collection, and the research analysis method employed in the study.

Chapter 4: Data analysis

Chapter 4 deals with the data analysis with the help of the Statistical Package for Social Sciences (SPSS). This chapter comprises the tables for the different tests generated from SPSS as well as their interpretations.

Chapter 5: Findings and conclusions

The findings from the data analysis were presented in this chapter, along with conclusions and suggestions on future directions for the HIV/AIDS awareness campaign in Mizoram.

1.10 Findings and Conclusions

The followings are the findings and conclusions made from the study.

1.10.1 Findings for objective 1

1. The samples collected from the population survey regarding the number of exposures in a week reveal that of the 366 respondents, 47 students, or 12.8 percent, see HIV/AIDS awareness campaigns every day, and 118 students (45.1%) are the most exposed to HIV/AIDS awareness campaigns within a week.

Furthermore, 45 (12.3%), 59 (16.1%), and 97 (26.5.0%) represent exposure to HIV/AIDS awareness twice a week, three times a week, and never/do not care, respectively.

2. Table 4.1.2 on the medium used for seeing the campaigns also found that the majority of the respondents, accounting for 68.6 percent of the total responses, were exposed to social media awareness campaigns. While traditional media like

newspapers, magazines, posters, and public meetings have 26.4 percent, 13.6 percent, 59.4 percent, and 43.6 percent of the audience, respectively. It can be observed from the above data that HIV/AIDS awareness campaigns carried out through social media have the highest number of exposures from college-going students. Therefore, HIV awareness campaigns through the traditional media have a smaller audience as compared to the traditional media among college-going students.

3. According to the interview conducted with the IEC consultant from the Mizoram State Aids Control Society (MSACS), every college has a “Red Ribbon Club” inside their respective colleges. The blood donation camp and HIV/AIDS awareness campaign were conducted through this Red Ribbon Club as much as possible. The data collected from the survey revealed the participation of the college-going students in Mizoram in those programmes, organised inside and outside the college. 59.3 percent of the respondents used to attend the HIV/AIDS awareness campaign outside the college, while 86.3 percent did not attend the awareness campaign outside the college. At the same time, 216 respondents—that is, 59.3 percent—have attended the campaign, while 26.3 percent have not.

4. The media campaign is divided into three main categories: print, television, and social media. Then the respondents were asked in which medium of the three categories they exposed the most. The analysis from table 4.1.5 showed that 149 respondents (41.0%) are exposed to the campaign through broadcast media like television in the form of news, advertisements, dramas, films, etc., while 130 respondents, i.e., 35.8 percent, are exposed to the HIV/AIDS awareness campaign through social media. The least number of respondents, 84, accounting for 23.1 percent of the total responses, were exposed to print media.

5. The crosstabulation conducted from the exposure to HIV/AIDS awareness campaigns inside the college campus and the age group of the respondents in Table 4.1.10 found that the respondents belonging to the 21–25 age group have a better score in attending HIV/AIDS awareness campaigns compared to other age groups. The likelihood ratio chi-square test was conducted to see if the age of the respondent has a significant association with exposure to the HIV/AIDS awareness

campaign in the college. The test shows that the likelihood ratio chi-square $X^2(6) = 25.779$ and the p value is 0.00024. Since the p value is less than the level of significance of 0.05, we can say that there is a significant association between the age of the respondent and their exposure to the HIV/AIDS awareness campaign on the college campus.

6. The Chi-square test is conducted in Table 4.1.15 to see if there is a significant association between gender and exposure to the HIV/AIDS awareness campaign. Likelihood Ratio Chi-square $X^2(4)$ is 4.255, and the p value is 0.373. Since the p value is greater than the level of significance at 0.05, it is found that gender has no significant association with exposure to the HIV/AIDS awareness campaign.

7. A crosstabulation and chi-square test were conducted between the number of exposures to the HIV awareness campaign in a week and participation in the HIV/AIDS awareness campaign. Pearson Chi-square $X^2(8)$ is 25.323, and the p value is 0.001. Since the p value is less than the level of significance of 0.05, it is found that there is a significant association between the frequency of seeing HIV/AIDS awareness campaigns in a week and attending an HIV/AIDS awareness campaign.

8. A crosstabulation conducted in table 4.1.23 on the mode of seeing HIV/AIDS awareness campaign and the participation in HIV/AIDS awareness campaign revealed that the expected count on the mode of social media is 47.6 and the result is 133. Therefore, it is found that there is a significant association between the mode of seeing the HIV/AIDS awareness campaign and participation in the HIV awareness campaign.

1.10.2 Findings for objective 2

1. Table 4.2.1 on recollection of the campaign messages revealed that 40 respondents, accounting for 10.9 percent of the total responses, do not remember the campaign messages about HIV/AIDS at all, while the majority, 59 percent, remembered some of the campaign messages about HIV/AIDS, and 26.8 percent can recollect all the HIV/AIDS campaign messages. 12 respondents, i.e., 3.3 percent, do not pay attention to the campaign messages.

2. Table 4.2.3 on knowledge gained about HIV/AIDS revealed that 295 respondents, accounting for 80.6 percent of the total sample, stated that they had gained knowledge about HIV/AIDS, while the least percentage, 3.6 percent of the respondents, said they had not gained information about it. It can be observed that the HIV/AIDS awareness campaign messages are informative enough to let the audience get more information about HIV/AIDS. At the same time, there are still people who do not pay attention to the awareness campaign and can only recall some of the messages.

3. The survey analysis from Table 4.2.5 also revealed that the majority of the respondents, 334 (91.3 percent), know how to protect themselves from HIV/AIDS, and 6 respondents do not know it, while 20 respondents, i.e., 5.5 percent, are not sure if they know how to protect themselves from HIV/AIDS. 277 respondents, comprising 75.7 percent, are aware of the existence of HIV/AIDS testing facilities, while 40 respondents, i.e., 10.9 percent, are not aware of it. At the same time, there are 43 respondents, and 11.7 percent are not sure about the testing facilities for HIV/AIDS.

4. The analysis from table 4.2.7 showed that 211 respondents, accounting for 57.7 percent, have knowledge of the transmission route of HIV/AIDS, while 50 respondents, i.e., 13.7 percent, are not aware of it. 184 respondents, which represents 50.3 percent of the total responses, have knowledge on the treatment of HIV/AIDS; 92 respondents, i.e., 25.1 percent, do not have knowledge; and 23.2 percent of the total responses are not sure about the treatment of HIV/AIDS.

5. Regarding the knowledge on ICTC and ART from tables 4.2.9 and 4.2.10, 275 respondents have awareness of the ICTC (Integrated Counselling and Testing center), and 52 respondents, i.e., 14.2 percent, are not aware of it. 240 respondents, accounting for 65.6 percent, are aware of the ART centre, while only 67 respondents, i.e., 18.3 percent, are not aware of the centre.

6. The ANOVA test conducted between the age group of the respondents and their HIV/AIDS awareness level from table 4.2.12 revealed that, with the degree of freedom 3, the F value is 5.677 and the p value is 0.001. Since the p value is less than the level of significance of 0.05, we can state that there is a significant difference between different age groups regarding their HIV/AIDS awareness level.

7. Table 4.2.15 shows the ANOVA test between students who attend HIV/AIDS awareness classes and those who do not. The test revealed that with a degree of freedom of 2, the F value is 3.629 and the p value is 0.028. Since the p value is less than the level of significance of 0.05, it is stated that there is a significant difference between students who attend the HIV/AIDS Awareness Campaign in college and students who do not attend regarding their HIV/AIDS Awareness level

1.10.3 Findings for objective 3

1. Table 4.3.1 on the study of opinion regarding the most effective media for an HIV/AIDS awareness campaign among college students revealed that the majority of the respondents (278), accounting for 76.0 percent, believed that social media would be the most effective media for an HIV/AIDS awareness campaign among college students. 32 (8.7%), 13 (3.6%), and 38 (10.4%) respondents opted for television, newspapers, and college magazines for the HIV/AIDS media awareness campaign among college students, respectively.

2. Regarding the best strategy for an HIV/AIDS awareness campaign among college students, table 4.3.4 revealed that 29 percent were the highest, followed by

music accounting for 27 percent and drama with 20 percent of the total population. Therefore, a competition-based campaign in which students participate in the awareness campaign would be the best strategy for the HIV/AIDS awareness campaign among college students in Mizoram.

3. Table 4.3.10 on the comparison between college students from urban and rural areas's perceptions towards people living with HIV/AIDS shows that 69 percent from urban and 47.8 percent from villages are willing to work with HIV-positive individuals, and 21 percent from urban and 12.2 percent from rural areas did not want to work with them. While 10 percent of urbanites and 40 percent of ruralites do not have an idea about this question.

4. Table 4.3.10 revealed that 65 percent of urban residents and 42.2 percent of rural residents are willing to share the same toilet with people living with HIV. 18 per cent of urbanites and 16.7 of ruralites refused to share the same toilet with them. 17 per cent of urban and 41.1 percent of rural areas have no idea about it.

5. Table 4.3.10 revealed that 59 percent of urban areas and 35.6 percent of rural areas are willing to eat at the canteens run by PLWHA, and 21 and 15.6 percent of both urban and rural areas, respectively, do not want to eat there. 20 percent of urban residents and 48.9 percent of rural residents do not have an idea about it.

6. Table 4.3.10 revealed that 70 percent of urbanites and 41.1 percent of ruralites are okay sharing a room with PLWHA. In terms of healthcare, 51 percent of people from urban areas and 30 percent from rural areas are willing to receive health care given by HIV positives.

7. Table 4.3.10 revealed that 75 percent of urban and 47.8 percent of rural areas are willing to study with PLWHA students. While 13 percent of urban and 38.9 percent of rural areas are unsure about it.

8. A cross-tabulation was conducted between area of residence and willingness to work with HIV positives. Therefore, table 4.3.12 Chi-square test revealed that the Pearson Chi-square $X^2(2)$ value is 24.224 and the p value is 0.00002. Since the p value is less than the level of significance of 0.05, it is stated that there is a

significant association between area of residence and willingness to work with HIV positives.

9. Table 4.3.15 shows the Pearson Chi-square test between the area of residents and willingness to share the same toilet with HIV positives. The chi-square $X^2(2)$ value is 14.904, and the p value is 0.001. Since the p value is less than the level of significance at 0.05, it can be stated that there is a significant association between area of residence and willingness to use the same toilet used by HIV positives.

10. A crosstabulation and chi-square test was conducted between the area of residence and willingness to receive medical treatment from a person who is HIV positive, which was shown in tables 4.3.23 and 4.2.24. The calculation found that the expected count among respondents living in urban areas is 40.5 and the count reaches 51, while the expected count conducted on respondents living in rural areas is 40.5 and the count is 30. A Pearson Chi-square reveals that the $X^2(2)$ value is 9.363 and the p value is 0.009. Since the p value is less than the level of significance at 0.05. Therefore, it is stated that there is a significant association between area of residence and willingness to receive medical treatment from a healthcare worker who is HIV positive.

11. Table 4.3.27 revealed that the Pearson Chi-square on the area of residence and the opinion on HIV-positive students being allowed in the class room depicted that the $X^2(2)$ value is 18.967 and the p value is 0.000076. Since the p value is less than the level of significance at 0.05, it can be stated that there is a significant association between area of residence and opinion on whether HIV-positive students should be allowed to stay in the same class room.

1.10.4 Findings for objective 4

1. Table 4.4.14 from the population survey highlighted that out of 253 respondents, 69.1 percent of the total responses are following the HIV/AIDS prevention procedures through the awareness campaigns; 26 responses,

accounting for 7.1 percent, are not following them. At the same time, 79 (21.6%) are not sure if they are following the prevention procedures.

2. The Likelihood Ratio Chi-square test was conducted to see the association between gender and the following of HIV/AIDS prevention procedures. The test result from table 4.4.15 revealed that the Likelihood Ratio Chi-square $X^2(4)$ is 5.453 and the p value is 0.244. Since the p value is greater than the level of significance at 0.05, we can state that there is no significant association between gender and the following of HIV/AIDS prevention procedures by the college-going students.

3. Table 4.4.16 on the association between age group and the following HIV/AIDS prevention procedures revealed that the Pearson Chi-square $X^2(8)$ is 9.804 and the p value is 0.279. Since the p value is greater than the level of significance at 0.05, there is no significant association between the age group and the actions taken towards HIV prevention procedures among the college students.

4. A population survey from table 4.4.18 revealed that 112 respondents, amounting to 30.6 percent of the total responses, have visited the Integrated Counselling and Testing Centre (ICTC), while 254 respondents (69.4%) have not visited the ICTC. It is also found from Table 4.4.19 that 27 respondents, accounting for 7.4 percent from the total responses, have visited Antiretroviral Therapy (ART) Centre, while 339, i.e., 92.6 percent respondents have not visited the ART Centre.

1.10.5 Conclusions

The study revealed that college-going students were mostly engaged in different social media handles as compared to traditional forms of media. The opinion taken from the respondents also shows that exposure to different HIV/AIDS awareness campaigns on social media, which were presented through entertainment and education, is common among college students in Mizoram. Even though the HIV/AIDS awareness campaigns were available in all types of mediums like print,

television, radio, the internet, etc., there is a need for more campaigns generated through social media to capture more exposure from the college-going students in Mizoram.

The study revealed that the majority of the respondents were exposed only once a week. The second-highest percentage of the total responses being the ones who never or do not care about the exposure to the HIV/AIDS awareness campaign also indicated that there is a need for improvement in the selection of media for the campaign. Every college in Mizoram has a Red Ribbon Club. The activities of the club include a blood donation camp, an HIV/AIDS awareness campaign inside the campus, and a competition-based HIV awareness campaign in collaboration with MSACS like debate, poster making, essay writing competitions, etc. A cross-tabulation and Chi-square test conducted on the mode of seeing the HIV/AIDS awareness campaign and participation in the HIV/AIDS awareness campaign revealed that there is a significant association between the mode of seeing the HIV/AIDS awareness campaign and participation in the same.

The sample collected from the population survey also indicated that more than one-third of the total responses gained more knowledge about HIV/AIDS through the campaign. The awareness about HIV/AIDS, its prevention, the testing methods, and the treatment also scored a significant number. At the same time, most of the respondents were exposed to social media awareness campaigns instead of traditional media. Therefore, it is advised that, in order to capture a larger audience and spread more information about HIV/AIDS, awareness campaigns through different social media platforms should be generated.

The Mizoram State Aids Control Society (MSACS) has conducted an HIV/AIDS awareness campaign throughout the state by using different kinds of media, like print (posters, hoardings, newspapers, pamphlets), broadcast channels, social media platforms, and public gatherings. But the study on the comparison between college students from urban and rural areas revealed that there is a huge gap in perceptions towards people living with HIV/AIDS.

The statistical tests conducted has shown that there is a significant association between area of residence and the perception towards people living with HIV/AIDS among the respondents. Therefore, it is recommended that there should be a revision on the selection of the medium, the strategy and the campaign messages to be disseminated as well as the HIV/AIDS awareness campaign to be more effective in Mizoram.

The IEC (Information, Education, and Communication) division under MSACS is providing all the necessary information about HIV/AIDS, its prevention, treatment, and testing facilities. The awareness campaigns were also designed to cover all of these and disseminate them to the general public. At the same time, the present study revealed that the actions taken by the respondents towards the media campaign messages were still very low, as only 112 respondents, accounting for 30.6 percent of the total responses, visited the ICTC for their HIV status, and only 7.4 percent of the study's population visited an ART center. So, this showed that there is a disconnect between the media awareness campaigns and their desired outcome in changing people's behavior towards HIV/AIDS. Therefore, it is recommended that media campaigns be created in such a way that they influence more people to take positive actions according to the campaign objectives.

References

Aridoss, S., David, J. K., Jaganathasamy, N., Mathiyazhakan, M., Balasubramanian, G., Natesan, M., V M, P., Kumar, P., Rajan, S., & Arumugam, E. (2022). Spatial heterogeneity of risk factors associated with HIV prevalence among men who inject drugs in India: An analysis of the data from the integrated bio-behavioral surveillance, India. *Medicine*, *101*(48), e31688.

<https://doi.org/10.1097/MD.00000000000031688>

Azhar, S., Gandham, S., Vaudrey, J., Oruganti, G., & Samuel, R. S. (2020). “They Kept Away”: Social Isolation of Cisgender Women Living with HIV in Hyderabad, India. *Clinical Social Work Journal*, *48*(1), 64–76. <https://doi.org/10.1007/s10615-019-00736-w>

Bhat, R., Maheshwari, S., & Somen, S. (2004). *Treating HIV/AIDS patients in India with antiretroviral therapy: A management challenge*.

Biswas, S., Sinha, A., Rajan, S., Khan, P. K., Joshi, D. S., & Saha, M. K. (2020). Human immunodeficiency virus prevalence and high-risk behavior of home-based and nonhome-based female sex workers in three high-prevalent North-Eastern States of India. *Indian Journal of Public Health*, *64*(Supplement), S46–S52.

https://doi.org/10.4103/ijph.IJPH_100_20

Breuner, C. C., Mattson, G., COMMITTEE ON ADOLESCENCE, & COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH. (2016). Sexuality Education for Children and Adolescents. *Pediatrics*, *138*(2), e20161348.

<https://doi.org/10.1542/peds.2016-1348>

Cruz, A. X. F. da, Neto, J. C., Araújo, A. A. C., Sousa, A. R. de, Oliveira, L. B. de, Sena, I. V. de O., Sena Sousa, L., Santos, J. D., Batista, O. M. A., Mendes, I. A. C., Fronteira, I., & Sousa, Á. F. L. de. (2023). HIV testing among immigrant men who have sex with men in Brazil. *Public Health Nursing (Boston, Mass.)*, *40*(6), 826–835.

<https://doi.org/10.1111/phn.13236>

E, R., P, P., Ss, P., A, D. S., Srb, D., Bs, N., Ja, N., P, D., & S, O. (2023). The utilization of systematic review evidence in formulating India's National Health Programme guidelines between 2007 and 2021. *Health Policy and Planning*, 38(4). <https://doi.org/10.1093/heapol/czad008>

F, R., W, O., J, van den H., As, B., & Vi, A.-S. (2022). Impact of coronavirus disease (COVID-19) on HIV testing and care provision across four continents. *HIV Medicine*, 23(2). <https://doi.org/10.1111/hiv.13180>

Fanai, L., & Ag, S. (2022). Socio-Political History Of Alcohol Use In Mizoram: A Rapid Review. *Journal of Positive School Psychology*, 6(10), Article 10.

Fang, E. F., Xie, C., Schenkel, J. A., Wu, C., Long, Q., Cui, H., Aman, Y., Frank, J., Liao, J., Zou, H., Wang, N. Y., Wu, J., Liu, X., Li, T., Fang, Y., Niu, Z., Yang, G., Hong, J., Wang, Q., ... Woo, J. (2020). A research agenda for ageing in China in the 21st century (2nd edition): Focusing on basic and translational research, long-term care, policy and social networks. *Ageing Research Reviews*, 64, 101174. <https://doi.org/10.1016/j.arr.2020.101174>

Fauk, N. K., Ward, P. R., Hawke, K., & Mwanri, L. (2021). Cultural and religious determinants of HIV transmission: A qualitative study with people living with HIV in Belu and Yogyakarta, Indonesia. *PloS One*, 16(11), e0257906. <https://doi.org/10.1371/journal.pone.0257906>

Feyissa, G. T., Abebe, L., Girma, E., & Woldie, M. (2012). Stigma and discrimination against people living with HIV by healthcare providers, Southwest Ethiopia. *BMC Public Health*, 12(1), 522. <https://doi.org/10.1186/1471-2458-12-522>

Gabbidon, K., Chenneville, T., Earnshaw, V., & Drake, Hu. (2022, July 16). *Intersectional stigma and developmental competence among youth living with HIV - Gabbidon—2022—Journal of Family Theory & Review—Wiley Online Library*. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jftr.12468>

Golembiewski, E. H., Gravholt, D. L., Torres Roldan, V. D., Lincango Naranjo, E. P., Vallejo, S., Bautista, A. G., LaVecchia, C. M., Patten, C. A., Allen, S. V., Jaladi,

S., & Boehmer, K. R. (2022). Rural Patient Experiences of Accessing Care for Chronic Conditions: A Systematic Review and Thematic Synthesis of Qualitative Studies. *Annals of Family Medicine*, 20(3), 266–272.
<https://doi.org/10.1370/afm.2798>

Gurram, S., & Bollampalli, B. (2020). A study on awareness of human immunodeficiency virus among adolescent girls in urban and rural field practice areas of Osmania Medical College, Hyderabad, Telangana, India. *International Journal Of Community Medicine And Public Health*, 7, 706.
<https://doi.org/10.18203/2394-6040.ijcmph20200453>

Hmingthansangi, C. (2013). *CARE AND SUPPORT OF CHILDREN LIVING WITH HIV/AIDS IN AIZAWL, MIZORAM*.

Iqbal, S., Maqsood, S., Zafar, A., Zakar, R., Zakar, M. Z., & Fischer, F. (2019). Determinants of overall knowledge of and attitudes towards HIV/AIDS transmission among ever-married women in Pakistan: Evidence from the Demographic and Health Survey 2012-13. *BMC Public Health*, 19(1), 793. <https://doi.org/10.1186/s12889-019-7124-3>

Kabbash, I. A., Abo Ali, E. A., Elgendy, M. M., Abdrabo, M. M., Salem, H. M., Gouda, M. R., Elbasiony, Y. S., Elboshy, N., & Hamed, M. (2018). HIV/AIDS-related stigma and discrimination among health care workers at Tanta University Hospitals, Egypt. *Environmental Science and Pollution Research International*, 25(31), 30755–30762. <https://doi.org/10.1007/s11356-016-7848-x>

Khawlhing, L., Sangpuii, Li., & Kanagaraj, E. (2021). Agencies and Mechanisms of Social Inclusion and Exclusion Among People Living With HIV/AIDS in Mizoram. *Journal of Social Inclusion Studies*, 7.

Krishnamoorthy, Y., Majella, M. G., Rajaa, S., Bharathi, A., & Saya, G. K. (2021). Spatial pattern and determinants of HIV infection among adults aged 15 to 54 years in India—Evidence from National Family Health Survey-4 (2015-16). *Tropical*

Medicine & International Health: TM & IH, 26(5), 546–556.

<https://doi.org/10.1111/tmi.13551>

KSHATRI, J. S., PALO, S. K., PANDA, M., SWAIN, S., SINHA, R., MAHAPATRA, P., & PATI, S. (2021). Reach, accessibility and acceptance of different communication channels for health promotion: A community-based analysis in Odisha, India. *Journal of Preventive Medicine and Hygiene*, 62(2), E455–E465. <https://doi.org/10.15167/2421-4248/jpmh2021.62.2.1929>

Lalnunfeli, D. (2015). *ATTITUDE OF STUDENTS, TEACHERS AND COMMUNITY TOWARDS SEX EDUCATION AT SECONDARY SCHOOL LEVEL IN MIZORAM*.

Lalramhmachhuana, W., & Khiangte, L. (2022). *The Effectiveness of Media Awareness Campaign on HIV/AIDS Among College Students in Aizawl*. 6(1), 29–33.

Lotfi, R., Tehrani, F. R., Yaghmaei, F., & Hajizadeh, E. (2012). Barriers to condom use among women at risk of HIV/AIDS: A qualitative study from Iran. *BMC Women's Health*, 12(1), 13. <https://doi.org/10.1186/1472-6874-12-13>

Marsh, K., Eaton, J. W., Mahy, M., Sabin, K., Autenrieth, C. S., Wanyeki, I., Daher, J., & Ghys, P. D. (2019). Global, regional and country-level 90-90-90 estimates for 2018: Assessing progress towards the 2020 target. *AIDS (London, England)*, 33 Suppl 3(Suppl 3), S213–S226. <https://doi.org/10.1097/QAD.0000000000002355>

Mohamud, L. A., Hassan, A. M., & Nasir, J. A. (2023). Determinants of HIV/Aids Knowledge Among Females in Somalia: Findings from 2018 to 2019 SDHS Data. *HIV/AIDS - Research and Palliative Care*, 15, 435–444.

<https://doi.org/10.2147/HIV.S414290>

Moradi, G., Amini, E. E., Valipour, A., Tayeri, K., Kazerooni, P. A., Molaeipour, L., & Moradi, Y. (2022). The study of feasibility and acceptability of using HIV self-tests in high-risk Iranian populations (FSWs, MSM, and TGs): A cross-sectional study. *Harm Reduction Journal*, 19(1), 61. <https://doi.org/10.1186/s12954-022-00641-5>

Nubed, C. K., & Akoachere, J.-F. T. K. (2016). Knowledge, attitudes and practices regarding HIV/AIDS among senior secondary school students in Fako Division, South West Region, Cameroon. *BMC Public Health*, *16*(1), 847. <https://doi.org/10.1186/s12889-016-3516-9>

O'Neil, J., Orchard, T., Swarankar, R. C., Blanchard, J. F., Gurav, K., & Moses, S. (2004). Dhandha, dharma and disease: Traditional sex work and HIV/AIDS in rural India. *Social Science & Medicine* (1982), *59*(4), 851–860. <https://doi.org/10.1016/j.socscimed.2003.11.032>

Pachau, L. N., Tannous, C., & Agho, K. E. (2021a). Factors Associated with Knowledge, Attitudes, and Prevention towards HIV/AIDS among Adults 15-49 Years in Mizoram, North East India: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, *19*(1), 440. <https://doi.org/10.3390/ijerph19010440>

Pachau, L. N., Tannous, C., & Agho, K. E. (2021b). Factors Associated with Knowledge, Attitudes, and Prevention towards HIV/AIDS among Adults 15-49 Years in Mizoram, North East India: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, *19*(1), 440. <https://doi.org/10.3390/ijerph19010440>

Pachau, L. N., Tannous, C., Chawngthu, R. L., & Agho, K. E. (2023a). Changes in and Predictors of HIV among People Who Inject Drugs in Mizoram, Northeast India, from 2007 to 2021. *International Journal of Environmental Research and Public Health*, *20*(10), 5871. <https://doi.org/10.3390/ijerph20105871>

Pachau, L. N., Tannous, C., Chawngthu, R. L., & Agho, K. E. (2023b). HIV and its associated factors among people who inject drugs in Mizoram, Northeast India. *PLOS ONE*, *18*(5), e0286009. <https://doi.org/10.1371/journal.pone.0286009>

Pagkas-Bather, J., Young, L. E., Chen, Y.-T., & Schneider, J. A. (2020). Social Network Interventions for HIV Transmission Elimination. *Current HIV/AIDS Reports*, *17*(5), 450–457. <https://doi.org/10.1007/s11904-020-00524-z>

Pandey, A., Dhingra, N., Kumar, P., Sahu, D., Reddy, D. C. S., Narayan, P., Raj, Y., Sangal, B., Chandra, N., Nair, S., Singh, J., Chavan, L., Srivastava, D. J., Jha, U. M., Verma, V., Kant, S., Bhattacharya, M., Swain, P., Haldar, P., ... Ammassari, S. (2017). Sustained progress, but no room for complacency: Results of 2015 HIV estimations in India. *The Indian Journal of Medical Research*, *146*(1), 83–96.
https://doi.org/10.4103/ijmr.IJMR_1658_16

Rahman, M., Islam, F., Rahaman, M. S., Sultana, N., Fahim, N., & Ahmed, M. (2021). Studies on the Prevalence of HIV/AIDS in Bangladesh including other Developing Countries. *Advances in Traditional Medicine*, *21*.
<https://doi.org/10.1007/s13596-021-00610-6>

Rao, A., Mamulwar, M., Panda, S., Pachuau, H. Z., Vanlalvenzuali, H., Lalruatsanga, null, Roy, T., & Lalnuntlangi, N. (2023). Finding a way forward with the community: Qualitative inquiry in the generalized HIV epidemic in Mizoram, India. *Frontiers in Public Health*, *11*, 1217628.
<https://doi.org/10.3389/fpubh.2023.1217628>

Rao, A., Mamulwar, M., Shahabuddin, S. M., Roy, T., Lalnuntlangi, N., & Panda, S. (2022). HIV epidemic in Mizoram, India: A rapid review to inform future responses. *The Indian Journal of Medical Research*, *156*(2), 203–217.
https://doi.org/10.4103/ijmr.ijmr_1453_22

Rohmingmawii. (2019). *Historical Journal Mizoram*. Samaritan Printer.

Sahu, D., Kumar, P., Chandra, N., Rajan, S., Shukla, D. K., Venkatesh, S., Nair, S., Kumar, A., Singh, J., Reddy, S., Godbole, S., Elangovan, A., Saha, M. K., Rai, S., Lakshmi, P. V. M., Gambhir, T., Ammassari, S., Joshi, D., Das, A., ... Vardhana Rao, M. V. (2020). Findings from the 2017 HIV estimation round & trend analysis of key indicators 2010-2017: Evidence for prioritising HIV/AIDS programme in India. *The Indian Journal of Medical Research*, *151*(6), 562–570.
https://doi.org/10.4103/ijmr.IJMR_1619_19

Singer, M. (2008). Drugs and development: The global impact of drug use and trafficking on social and economic development. *The International Journal on Drug Policy*, 19(6), 467–478. <https://doi.org/10.1016/j.drugpo.2006.12.007>

Singh, S. K., Sharma, S., & Vishwakarma, D. (2023). Tracking changes in HIV-related risk behaviour among men aged 15–54 in high HIV prevalence states in India: Evidence from NFHSs. *Journal of Public Health*. <https://doi.org/10.1007/s10389-023-02057-2>

Thilakavathi, S., Boopathi, K., Girish Kumar, C., Santhakumar, A., Senthilkumar, R., Eswaramurthy, C., Ilaya Bharathy, V., Ramakrishnan, L., Thongamba, G., Adhikary, R., & Paranjape, R. (2011). Assessment of the scale, coverage and outcomes of the Avahan HIV prevention program for female sex workers in Tamil Nadu, India: Is there evidence of an effect? *BMC Public Health*, 11(Suppl 6), S3. <https://doi.org/10.1186/1471-2458-11-S6-S3>

Williams, B. G., Granich, R., Chauhan, L. S., Dharmshaktu, N. S., & Dye, C. (2005). The impact of HIV/AIDS on the control of tuberculosis in India. *Proceedings of the National Academy of Sciences of the United States of America*, 102(27), 9619–9624. <https://doi.org/10.1073/pnas.0501615102>

Zothangpuii, & Mishra, B. B. (2018). Awareness of High School Students of Mizoram about Risky Adolescent Behaviour. *International Journal of Peace, Education and Development*, 6(1). <https://doi.org/10.30954/2454-9525.01.2018.6>

Zothangpuii, & Mishra BB. (2018). Awareness of High School Students of Mizoram about Risky Adolescent Behaviour. *International Journal of Peace, Education and Development*, 6(1). <https://doi.org/10.30954/2454-9525.01.2018.6>