

Summer Internship Report

at

Population Services International (PSI)

(April 18th to June 17th, 2022)

**An Exploratory study of Determinants of Intimate partner conflict
and Gender based Violence in Bhatti mines, Chhatarpur area of
Delhi**

A Report By

Dr. Jagriti Punia

PG/21/041

PGDM (Hospital and Health Management)

2021-2023



International Institute of Health Management Research, New Delhi

FEEDBACK FORM

(IIHMR MENTOR)

Name of the Student: Jagriti Punia

Summer Internship Institution: Population Services International (PSI), Delhi

Area of Summer Internship: Bhatti mines, Delhi

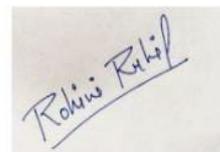
Attendance:

Objectives met: Participatory Rural Appraisal, Community needs assessment, community sensitisation.

Deliverables: 4 case studies, 1 report, 1 presentation and 2 blogs were submitted to the organization.

Strengths: She has good interpersonal skills, team work and is committed to her work.

Suggestions for Improvement: She could improve her research skills further.



Signature of the Officer-in-charge (Internship)

Date: 17th June, 2022

Place: IIHMR Delhi



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June 24, 2022

TO WHOMSOEVER IT MAY CONCERN

This is to inform you that Jagriti Punia from IIHMR, Delhi has successfully completed her internship with PSI India Private Limited under the Samagra project from 20th April 2022 to 17th June 2022.

During the internship, she contributed to data collection, community meetings, research, and data analysis on intervention areas of MNCH+A, TB, FP, NCD, and Social Determinants of Health + Environment at New Delhi.

We wish her success in future assignment

For and on behalf of PSI India Private Limited


Pooja Singh
General Manager - Human Resources

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I would also like to express my gratitude to **Mamta Chaudhary** and other team members at **MAMTA- Health Institute of Mother and Child** for providing timely guidance, inspiration and unconditional support during the summer training.

Mentors in IIHMR

I am extremely grateful to **Dr. Rohini Ruhil, Dr. Jacob Puliyeel** and all the faculty members and the staff for giving me this opportunity to learn and to add to my fruitful experience. Without their cooperation and guidance, it would not have been possible to conduct my study and complete my internship successfully.

ABBREVIATION

TB - Tuberculosis

MDR-TB - Multidrug-resistant TB

ANC - Antenatal care

PNC - Postnatal care

CLA - Collaborative Learning and Adaptive

GIS - Geographic Information System

IEC - Information Education and Communication

NGO - Non-Governmental Organization

DM - Diabetes mellitus

UNDP - United Nations Development Programme

GBV - Gender-Based Violence

WHO - World Health Organization

NFHS - National Family Health Survey

IPV - Intimate partner violence

IIPS - International Institute for Population Sciences

SRH - Sexual and Reproductive Health

HIV - Human Immunodeficiency Virus

GBHM - Gender-Based Household Maltreatment

ILV - In-laws Violence

AOR – Absolute Odds Ratio

LAC - Latin America and the Caribbean

MoHFW - Ministry of Health and Family Welfare

ANM - Auxiliary Nursing Midwifery

CAGE - Cut, Annoyed, Guilty, and Eye Opener

MPI - Multidimensional Poverty Index

DV – Domestic Violence

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SECTION 1: OBSERVATIONAL LEARNING

i. Introduction: Project SAMAGRA

The primary goal of Project SAMAGRA, a USAID-funded, PSI-led flagship initiative, is to build a resilient urban health ecosystem that is responsive, affordable, and equitable and offers the urban poor, particularly women, children, and other vulnerable populations, high-quality preventive, promotive, and curative primary healthcare.

This grant, which was awarded in late April 2020, allows PSI to provide quality healthcare to underserved populations in need. SAMAGRA aims to supplement national and state government efforts to strengthen India's urban health ecosystem.

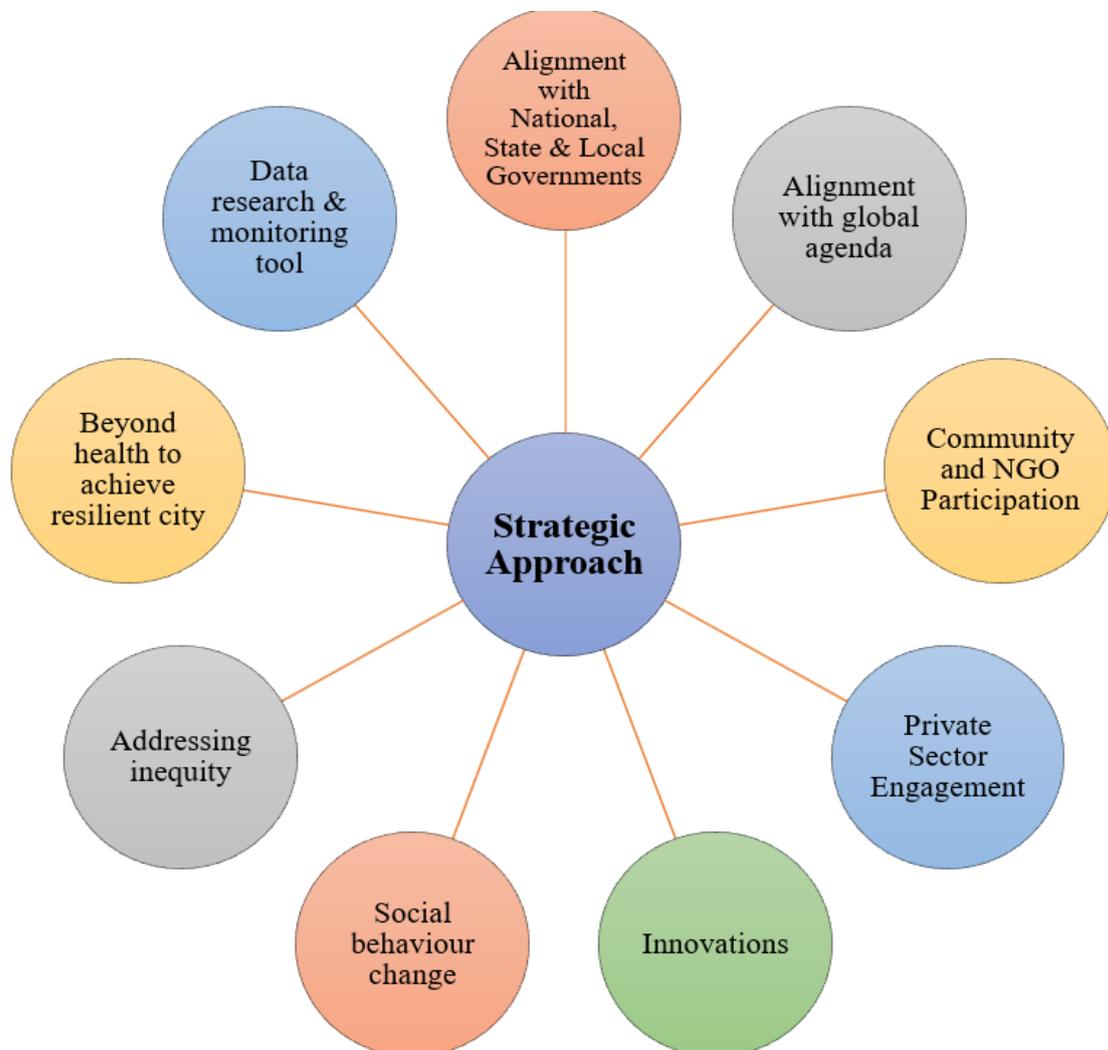
The project aims to remove obstacles associated to the social determinants of health and improve access to affordable healthcare services. The project specifically intends to improve the use of contemporary contraceptives, case detection for tuberculosis (TB), and drug-resistant tuberculosis (DR-TB) (MDR-TB). Additionally, it intends to improve maternal and child health care coverage of antenatal care (ANC), intranatal, and postnatal care (PNC) for these populations, as well as raise immunisation rates.

Project SAMAGRA is governed by predetermined principles that support stakeholder empowerment, community and organisational collaborations, scale and sustainability, cost-efficiency, and context-specific techniques. There are three tactical approaches using the social determinants of health as a lens:

1. Technical Assistance at the national, state, and city levels to urban primary care touch points;
2. Sub-Grant Management to rapidly support implementation of proven concepts and to scale up on lessons learned from previous programs; and
3. Management of a Grand Challenge Fund to test experimental concepts and models to combine new ideas and incubate promising concepts in order to generate innovative solutions.

These strategic approaches focus on two cross-cutting themes:

1. Harnessing the “Private Sector and Active Community Engagement” approach through partnerships and collaboration
2. “Collaborative Learning and Adaptive (CLA) Management Approach,” to test models for health outcomes and cost efficiency, sharing lessons learned widely through communities of practice.



ii. Introduction – PSI, MAMTA & CURE

PSI (Population Services International)



It is a nonprofit organisation that has been constructing long-lasting remedies for the world's most pressing health problems with and for the people since 1970. The goal of PSI is to make it simpler for everyone to live healthy lives and create the families they want.

SAMAGRA project:

- Act as a catalyst for project planning and implementation
- Provides technical assistance

MAMTA- Health Institute of Mother and Child



Under the Government of India's Society Registration Act of 1860, MAMTA-Health Institute of Mother and Child is a not-for-profit organisation. Working overtime to change socioeconomic and health determinants that have an impact on mother and child health.

Areas of work:

- Maternal and Child Health
- Sexual and Reproductive Health
- Communicable diseases (HIV, TB, Hepatitis B & C); and
- Non-Communicable Diseases (Hypertension, Diabetes, Obesity & Mental Health)

SAMAGRA project:

- Conducting Baseline survey at every household of Fatehpur Beri and Bhatti Mines
- Baseline survey was conducted in an online application
- Identify households with communicable and non-communicable diseases (both symptoms and history) and link them to Primary Health Centers.

SAMAGRA Project updates – Bhatti Mines

- Menstrual hygiene day celebration done & reusable pads distribution.
- Baseline survey completed in Bhatti Mines.
- IEC material being distributed.
- Analysis of baseline survey in process.

CURE (Center for Urban and Regional Excellence)



CURE is a non-profit development organisation that works with urban low-income and informal communities to find creative ways to involve and integrate people in the development of cities. They work mostly to develop social determinants.

SAMAGRA project:

- Water, sanitation and Hygiene
- Sustainable Livelihood
- Waste management
- Baseline survey at every 4th house to understand about the waste disposal, water availability, sanitation and hygiene practices, and livelihood.

SAMAGRA Project updates – Bhatti Mines

- Water quality testing was done using testing vials along the water supply lines at approximately 111 points out of which 76 have been found to be contaminated.
- Identification of pre-existing abandoned underground water tanks as a potential for rainwater harvesting.
- Mapping of the site: The mapping exercise has been started at 2 levels.
- Sukha Taal and plan for its cleaning/rejuvenation.
- Basemap with an objective to find the spatial patterns using GIS software is under process.

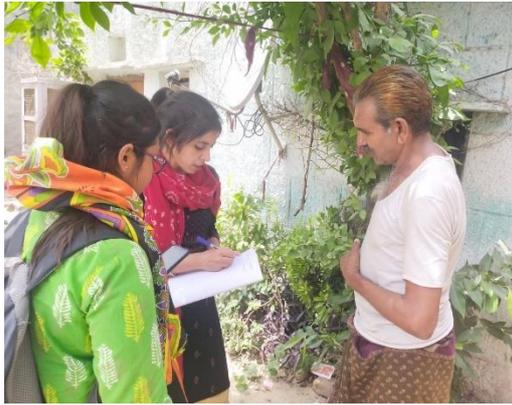
iii. Work Done During Internship

- Baseline surveys – we conducted a baseline survey in Bhatti mines for Health and non-health indicators. For health, we asked questions regarding diabetes, hypertension, COVID, TB, and Asthma and referred them to primary health centres. We found that a significant amount of people suffered from TB, and many have hypertension as well.

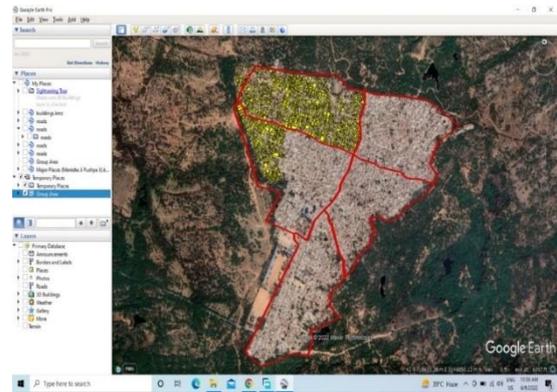
For non-health indicators, we collected data on mWater app, where questions regarding the availability of water, satisfactory water quality, defecation, hygiene, fuel used and waste segregation and disposal were asked.

- Household mapping - Basemap with an objective to find the spatial patterns using GIS software is under process.
- Data collection of Gender-based violence project.
- Case Study recording and writing on women who have faced gender-based violence.
- Writing history and profiling of Bhatti Mines with help of data collected by field co-ordinators
- Celebrated Menstrual Hygiene Day on 26th, 27th & 28th May 2022 with the population of Bhatti Mines as well as Fatehpur Beri. Educated adolescent girls and women about menstruation-related issues. Distributed reusable pads to menstruating women.
- Celebrated World's No Tobacco Day on 31st May 2022 conducted by the International Institute of Health Management Research, (IIHMR) Delhi by playing 'Nukkad Naatak' and educating the young population on the bad effects of tobacco use, healthy alternatives to tobacco as well as giving the toll-free number of Tobacco Cessation Center (1800-11-2356).
- Participated in World's Environment Day on 4th June organized by CURE. Sukha taal (it's a dried-up lake) area was cleaned for its rejuvenation.
- Interactions with Mahila Panchayat to understand issues women face in this area.
- Conducted meetings with a group of females to educate them about nutrition and women's rights.
- IEC distribution at Bhatti mines regarding various health issues, immunization, and hygiene maintenance.

iv. Evidence



Conducting baseline



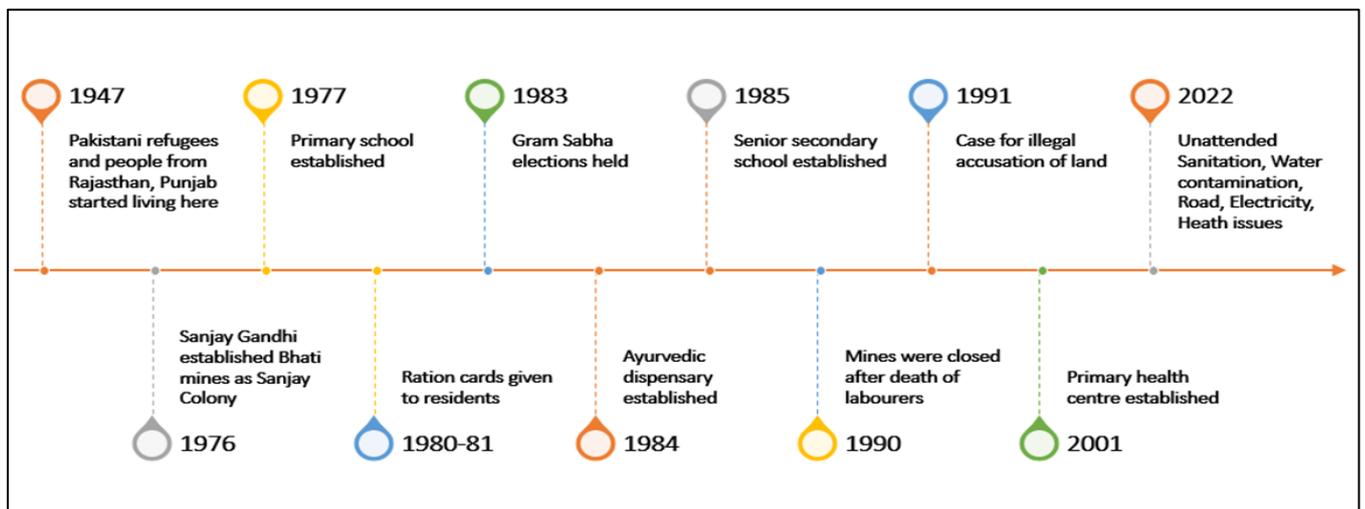
GIS Mapping of Bhatti



Preparation for
Menstrual Hygiene



IEC Distribution



Profiling of Bhatti Mines

v. General Findings on learnings

Field

General

NGOs working:

- Prayas Juvenile Aid Center works for education of children and along with Lightworkers foundation they teach women handwork skills to help them get financially independent.
- Shrushti Mahila Panchayat – Fights for women rights.
- Ramakrishna Mission Ashram sets up medical van at the premises of Prayas NGO every Tuesday to provide basic medical facilities to the population of Bhatti Mines.
- Since Bhatti Mines is a forest occupied land, there is a large number of animals present like dogs, pigs, monkeys. Since there number is so huge dog bites, pig bites and monkey bites are very common. The nearest public hospital provides vaccines for all the above. In addition, monkeys destroy household items and steal food from houses causing havoc.
- Mahanagar Readymade Garments Mazdur Union: works with localities women for women empowerment.
- Cheap and easy availability of alcohol, tobacco.

Health Determinants

- During our field visits we observed that there is high prevalence of TB, Diabetes
- Tobacco use among children is a common site.

Social Determinants

- Open drainage system
- Solid waste disposal (dry & wet garbage segregation present)
- Open defecation
- Water availability is scarce and it is contaminated at multiple sites in the Bhatti Mines area.
- Presence of Home Delivery is also pretty high.
- From Mahila Panchayat we got to know that every month they receive 40 to 60 cases regarding different types of gender-based violence.

Brief analysis – Baseline Survey

Data from Health Survey (MAMTA):

- Prevalence of communicable diseases and non-communicable diseases:

- April 2022: 10.3% TB, 16.5% Hypertensive, 13.1% DM symptomatic

- May 2022: 13.4% TB, 29.3% Hypertensive, 23.9% DM symptomatic

- Substance abuse, tobacco and alcohol dependency affected many lives (including their mental health)

- April 2022: 13% tobacco users, 11% alcoholism

- May 2022: 12% tobacco users, 10% alcoholism

Data from MWater Survey (CURE) Analysis Ongoing:

- BPL (Below Poverty Line) – 54.4% and No ration card – 21.1% (including deprived livelihood)
- Household waste disposal -79.6% in forest
- Household segregating wet and dry waste – 75.4%
- Household with separate water connection – 86%
- Satisfaction with quantity of water supply: Averagely unsatisfied 12.3%, Not satisfied 1.8%
- CURE team conducted tests to check water contamination: out of 111 points, 73 came out to be contaminated.
- Households considering borewell water portable: 80.7%
- Household treating the water before consumption: 61.4%

Gender-Based Violence

During our data collection we found that there is 43% prevalence of early marriage in Bhatti mines area, where males and female get married before their legal marriage age. 87% males and 93.5% of females have not completed matriculation.

Alcoholism and substance abuse among men is 31%. About 25% of the population is deprived according to UNDP deprivation index. The Bhatti mines area consists of mostly low-income group people with instable livelihood. We also found that around 16.8% women and 41.6% children had low body weight.

All type of Gender Based Violence prevalent – Physical, Sexual, Emotional, Mental. Children getting exposed to Gender-based violence at an early age since most of the families stay in one room houses. 78.2% women are not allowed to work outside house. 36% of females have been beaten up since they age of 15.

We also observed during our data collection on gender-based violence that there is alteration in health-seeking behavior of women due to gender-based violence (GBV). Few women have turned

towards substance abuse, most women feel isolated and depressed and low usage of health facilities due to financial issues or their families don't care much for their good health.

vi. Limitations

- Since gender-based violence is a sensitive topic, during the start of data collection probing the questions was an issue. After few community interactions women became comfortable to share details about their traumas.
- Most of the population residing in Bhatti Mines work as daily wage labourers. Since these jobs are not stable, most of the men stay home for multiple days and hence created a hurdle for us to interact with the women and collect their data.
- Hesitation of few women to report issues of GBV because of the fear that their husbands will be handed over to police and it might create more issues at their house.
- Since all the dwellings at Bhatti Mines are illegally made, there is a constant fear of getting displaced from houses. This many times increases refusals regarding sharing their details.
- During our survey we found that 76% women justify the violence and abuse shown towards them. They justify their beating and slapping by husband and in-laws as part of relationships.
- Early morning alcoholism caused hindrance in smooth data collection process.

vii. Suggestions

- Educating alone cannot help reduce the prevalence of gender-based violence, sensitizing adolescents and women about its effect on them and their children is also necessary.
- Helping the men who wants to cut off alcohol and tobacco by connecting them to rehab centres (free if possible).
- Many women are unaware about their own rights. Hence, it is to educate women about Indian laws against domestic violence as well as laws & programmes that protect and empower them.
- Introducing women to local NGOs who can help them in building up some skills so that they can earn from home.
- Making women groups for addressing the issue of gender-based violence.
- Delhi government has a plan to make Bhatti Mines a tourist spot. We recommend to involve the locals in the upcoming project which will improve their livelihood.

SECTION 2: PROJECT REPORT

xiii. Introduction

Gender-based violence (GBV) is the denial of a woman's right to live freely. One of the biggest risks to public health is violence against women, which occurs everywhere in the world. According to the WHO, one in three women (30%) worldwide encounter physical or sexual abuse at some point in their lives. (1) Mainly the female population is at higher risk of being subjected to intimate partner violence (IPV) in contrast to males. Intimate partner violence (IPV), also termed as domestic or spousal violence, has emerged as one of the most pervasive forms of gender-based violence around the world with one in three women worldwide experiencing some kind of physical or sexual violence. (2)

Violence against women is defined in the Declaration on the Elimination of Violence Against Women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual, or psychological harm or suffering to women, including threats of such acts, coercion, or arbitrary deprivation of liberty, whether occurring in public or private life." (3)

According to WHO, IPV is an extensive public health issue. (4) Women coping IPV are at increased risk for physical (including both acute and long-lasting physical injury), mental health problems (depression), and sexual and reproductive health issues. A large proportion of married women account for IPV victims in India. According to a report by IIPS, 40% of wives have reported physical and/or sexual violence in their lifetime. (5) It was found that Indian married woman who have a lower education, high number of children, belong to low wealth quintiles, and alcoholic partner are at heightened risk for IPV. (6)

National Family Health Survey (NFHS-5) data revealed that around 30% of women in India were exposed to spousal violence. The data also showed that violence was comparatively more in rural areas (31.6%) compared to urban areas (24.2%). In Delhi, violence against women were recorded at 22.6%. (7)

Despite the fact that Gender Based Violence is highly prevalent, it is one of the least reported human rights abuses. (8) Some risk factors associated with increased IPV include alcohol use, economic stressors including poverty and unemployment, changing gender norms and roles, and war-related traumas. (9) In a study, about 42% men and 52% women considered beaten by husband to be justified and only less than one percent reported complaints to police. (10) The most common reasons for non-reporting were embarrassment and a belief that there was no use in reporting. (11)

Other reasons included a belief that violence was a normal part of life that women must bear and various concerns for the well-being of others. (11)

Though the availability of data is scarce, reports from countries like UK, China and US has shown that post the emergence of COVID-19 pandemic, domestic violence against women had drastically increased. (12) Even earlier times have shown similar results were at the time of emergencies or natural disaster, there was increased violence against women. (13)

Post the implementation of lockdown in April 2020, National Commission of Women data revealed that the complaints related to violence against women were doubled. (14) This can be due to various factors such as psycho-social, socio-economic distress, lack of access to health-care services resulting women to bear brunt of violence. This violence can lead to serious physical, sexual, mental and reproductive health problems, including various Sexually transmitted diseases and unplanned pregnancies. (15)

It is suspected that there is gross underreporting of intimate partner violence given the stigma attached to it and because the reporting of violence may provoke more violence. Correlates of GBV studied in this context are likely to be misleading.

xiv. Rationale

In this study we seek to ascertain the prevalence of GBV using an intimate partner Conflict Tactics Scales which is an internationally validated scale and which has been validated previously in India (16) and may be more acceptable to the community. We seek to correlate it to unemployment/employment of either partner, education poverty using the multidimensional deprivation score and alcoholism using. In view of inaccuracies in ascertainment of alcoholism we will use validated scoring systems based on reporting by the spouse.

xv. Literature Review

The health impacts of intimate partner violence and sexual violence against women and their children are significant, including life-altering injuries, disabilities, mental disorders, sexual and reproductive health (SRH) concerns (like sexually transmitted infections and HIV), unplanned pregnancies, adverse pregnancy outcomes, disabilities, life-altering injuries, and severe mental disorders. 7.9% of maternal deaths worldwide are due to abortion. Limited number of SRH facilities prevent women from coming forward to receive family planning, which leads to unwanted pregnancies which in some cases may lead to unsafe abortion and maternal death. Roughly 38–50% of the murders of women are committed by intimate partners globally. (15) 58% of all female

homicide victims are killed by intimate partners or family members in many Asian regions. Global economic cost of GBV is estimated approximately 2% of gross domestic product. (17)

National Family Health Survey (NFHS-5) data revealed that around 30% of women in India were subjected to spousal violence. In Delhi, violence against women were recorded at 22.6%. (7) This study indicates the prevalence of gender-based violence against women in Delhi - the number of cases registered under “outrage and insult to modesty” was much higher in Delhi (40.4%) in comparison to the rest of the country (27.8%). However, cruelty by husband and in-laws was less in New Delhi (20.5%) in comparison to the whole country (34.6%). (18)

A study based on the three major slum communities in Mumbai reported that more than one in four women (28.4%) reported intimate partner violence (IPV) during their recent pregnancy and/or during the postpartum period, 2.6% reported perinatal violence from in-laws, and 49.0% reported one or more forms of perinatal gender-based household maltreatment (GBHM). (19) Another study from Mumbai slum observed that one in three women (34.0 %) reported IPV, 4.8 % reported violence from in-laws (ILV), and 48.5 % reported GBHM during the peri-pregnancy period. After adjusting for other forms of abuse, the study showed that the adjusted odds ratio (AOR) for IPV related to pain during intercourse (1.79) and GBHM remained associated with premature rupture of membranes (AOR = 2.28), pain during intercourse (AOR = 1.60), and vaginal bleeding (AOR = 1.80). (20)

Underreporting and failure to seek help occur worldwide. There are multiple hurdles associated with reporting to formal sources like shame and stigma, financial barriers, lack of awareness of available services, cultural beliefs, risk of losing children, fear of getting the offender in trouble, fear of retaliation, discriminatory and stereotypical attitudes toward victims by law enforcement, and distrust of health care workers. Additionally, many women believe that the violence is normal or not serious enough to report.

Global rates of reporting to formal sources were low (mean = 7.09%), with regional means it was found that only 2.29% in India and East Asia report for any kind of GBV. In other regions, 2.64% of women reported to police in Africa, and 1.17% reported to police in India and East Asia. Low rates of reporting to medical services: 3.57% in Latin America and the Caribbean (LAC), 0.78% in India and East Asia, 1.29% in Central Asia and Eastern Europe, and 1.14% in Africa. Reporting to social services organizations across regions ranged from 6.38% in LAC and 3.34% in Africa to less than 1% in both India and East Asia and Central Asia and Eastern Europe. (11) In a study conducted in Kerala, the general analysis of all households showed that 8.73% were subjected to domestic violence. The results for the overall analysis suggest that about 15% of households have women who suffer from violence perpetrated by their husbands during their lifetime but the rate of underreporting is 9.39% for domestic violence. (21)

Studies suggest that men living in poor neighbourhoods who experience higher levels of stress and social powerlessness would be more likely to assert their male identity and display violence against female partners. A research study has highlighted the importance of resource distribution and power imbalances within the family, women who become economically empowered but who have more gender-conservative partners may be at increased risk of violence as they become less willing to conform to patriarchal norms. Women who are financially dependent on their partners may also be at increased risk of IPV because of their inability to access independent sources of income that would allow them to leave an abusive relationship. (22) Despite the lack of evidence of clustering, women living in neighbourhoods in the middle range of the deprivation scale were twice as likely to experience IPV when compared with women living in wealthier neighbourhoods, before controlling for other factors. (23)

Qualitative results of a study done in Nairobi, Kenya showed impacts of curfews, and pandemic-related financial stress in prompting conflict and threatening traditional gender roles, and underlying conditions that enable IPV. (24)

The humanitarian crisis of protracted armed conflict has afflicted eastern Ukraine has displaced over 1.4 million residents placed women, particularly displaced women, at greater risk of gender-based violence (GBV). In Ukraine, reports of GBV were higher following the start of the conflict (22.4% in 2014 vs. 18.3% in 2007), with displaced women suffering from GBV nearly three times more than non-displaced residents (15.2% vs. 5.3%). (25)

In various studies girl child marriage has been found to be associated with increased likelihood of IPV in the woman's lifetime. South Asia records 29% girl child marriage, which is the second-highest prevalence of girl child marriage in the world. Girl child marriage has association with increased likelihood of IPV in both India and Bangladesh. There are many research studies supporting the fact that girl child marriage is associated with later IPV, along with the indication that girl child marriage increased in Sri Lanka after the conflict which implies that girl child marriage serves as a mediating factor between exposure to conflict and IPV. (9)

Results from a study conducted in Bihar demonstrates that almost half of participants (45.1%) reported IPV ever; 28.6% reported only physical IPV, while 2.3% of them had faced only sexual IPV and 14.3% had faced both physical and sexual IPV. Women reporting IPV were significantly more likely to indicate greater sociodemographic vulnerability including low to no education, a husband with low to no education, and early marriage. In terms of economic indicators, IPV was associated with lesser wealth, lack of female work force participation in the last 12 months, and not having a bank account or phone, which were all significantly correlated with each other. (26)

A study based on nationally representative data from the fourth round of India's National Family Health Survey (NFHS, 2015–2016) conducted by the International Institute for Population Sciences, Mumbai under the stewardship of the Ministry of Health and Family Welfare (MoHFW), Government of India revealed that factors such as experiencing all types of IPV, having an alcoholic husband, being sexually inactive, increased number of lifetime partners, belonging to vulnerable social groups, and urban place of residence are important risk factors of HIV infection among married women in India. The results also suggest that gender-based violence and an alcoholic husband may represent a significant factor of HIV infection among married women and interventions should focus on such vulnerable populations. (27)

Interrelation between intimate partner violence (IPV) and men's use of alcohol is a public health concern in India. Approximately one third of Indian women have suffered some kind of IPV in their lifetime and partner's alcohol use is identified as a risk factor for IPV in different Indian settings. One Kolkata based study, found that constant use of alcohol by men creates both immediate and extended family concerns surrounding money spent on alcohol and recognized negative impact of drinking on the children. Another study on Chennai-based community-level study documented significant relationship between dose of men's alcohol use and increased suicidal attempts by women of the household. (28)

In another study it was seen that compared to women whose husbands were never drunk, those whose husbands were sometimes or often drunk had significantly higher odds of experiencing physical, emotional, and sexual violence. For all types of violence, the results showed a strong linear progression in the odds of facing violence associated with an increase in the perceived frequency of husband's drunkenness. Similarly, when the husband reported drinking alcohol once a week or almost every day, it was associated with an increase in the odds of women facing all types of violence. (29)

According to earlier studies, women who experience violence often experience mental health problems. Women who are in violent relationships lose their self-confidence and are consequently more likely to experience mental health problems. In addition, due to cultural taboos, women who experience abuse often keep it a secret from others and continue to suffer until it causes mental trauma. Adolescent girls who see their father hitting their mother were more likely to report depressed symptoms, according to the findings. In the context of this study, it may also be crucial to comprehend those unmarried girls who witness IPV against mothers may later experience violence against them after marriage. The aforementioned idea has been supported by a few studies, where it was found that one of the most frequent associations linking male perpetration and female victimisation of violence in later life was exposure to intimate partner violence against mothers.

Prior researches have emphasised the value of education in reducing the onset of violence; however, there are few studies assessing the value of education in reducing violence and consequently mental health difficulties among adolescent girls. Women with higher education levels have better personal skill and employability prospects, which reduces their risk of coming into contact with violence even more. Additionally, parental education may help prevent violence against women. (30)

Gender based violence is highly prevalent all over the world, developing as well as in developed countries. Some of the gaps that came out while conducting the literature review is that there is still limited evidence on the potential role of relative neighbourhood deprivation (socioeconomic inequality) on women's risk of partner abuse. Also, studies for GBV in urban slums of Delhi are unavailable.

xvi. Research Questions

What is the prevalence and various determinants of Intimate partner conflict and Gender based Violence in Bhatti mines, Chhatarpur area of Delhi?

xvii. Explicit Objectives

The aim of the study will be to assess prevalence and determinants of gender-based violence including physical, emotional, and sexual violence in Bhatti mines, Chhatarpur area of Delhi.

1. To determine the existing status of gender-based violence including physical, emotional, and sexual violence in women aged 18-49 years in Bhatti mines, Chhatarpur, Delhi.
2. To assess the determinants of gender-based violence namely age and age at marriage, disparity in education and incomes of the partners.
3. To analyse the correlation between deprivation and intimate partner interpersonal conflict in women aged 18-49 years.
4. To analyse the correlation between alcoholism and intimate partner interpersonal conflict in women aged 18-49 years, Chhatarpur, Delhi.

xviii. Mode of data collection

Study design:

Cross sectional survey was performed using preformed prevalence questionnaire given by Murray A. Straus, University of New Hampshire (31) to assess prevalence of gender-based violence and factors affecting the same.

Study duration:

2 months (April 18th to June 17th, 2022)

Study population:

The study was conducted in the Bhatti mines, Chhatarpur area of Delhi. Women aged between 18-49 years who were ever married and were willing to participate in the study, supported by ANMs and other Health workers.

Sample Size:

Sample size was calculated by the MedCal statistical package to achieve a correlation coefficient of 0.2 and Type 1 error of 0.05 and Type 2 error of 0.2 (Power 80%), we needed to study a sample of 193 households (correlation coefficient of 0.2 and Type 1 error of 0.05 and Type 2 error of 0.2 (Power 80%). The sample size studied was 200.

Study tools (Attached as annexure):

The Conflict Tactics Scales of Murray A. Straus, University of New Hampshire (31) was used to analyze the prevalence of gender-based violence, which includes emotional, physical and sexual violence.

Screening tools for alcoholism we propose to use the 4 item CAGE (Family member report (32) (33) and the Family/Relational Drinking Conflict Questions. (33)

The 2021 Global Multidimensional Poverty Index (MPI) of UNDP was used to measure deprivation. (34)

Sampling method:

Systematic randomized sampling was used to conduct household survey. To study 200 household in a cluster of 4000 houses we included every 20th house. In case the house was found empty or consent was denied, the house immediately to the right was studied.

Method of data collection & analysis:

The data was recorded in the excel sheet followed by which data cleaning was done. The data was then analyzed using IBM SPSS Version 22 for Windows (IBM Corporate, Armonk, New York, USA). Using Open-Epi software, Chi-square test was performed to test associations between certain factors such as deprivation, educational status, employment and alcoholism with prevalence of gender-based violence. A value of $p < 0.05$ was considered as statistically significant.

xix. Results and Discussions

Results:

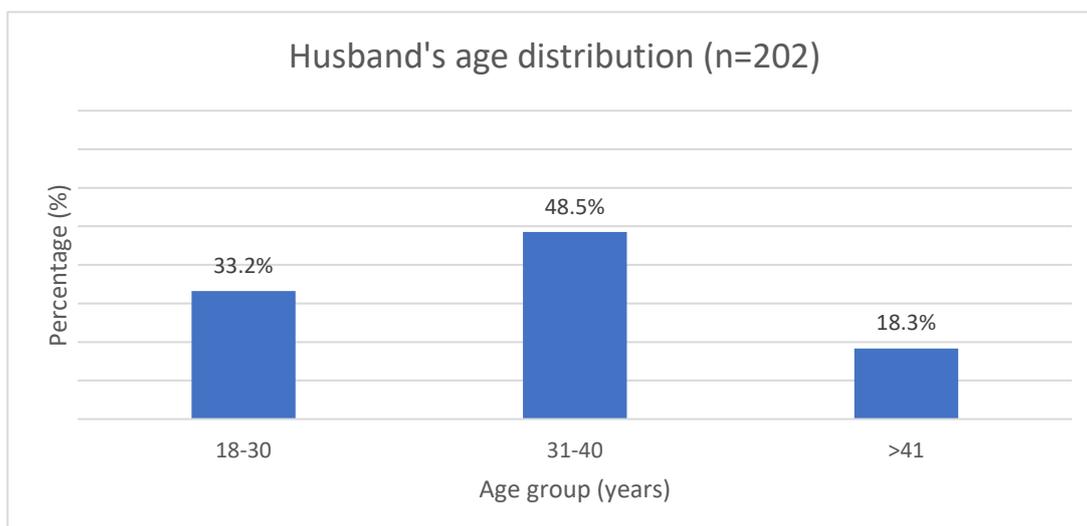
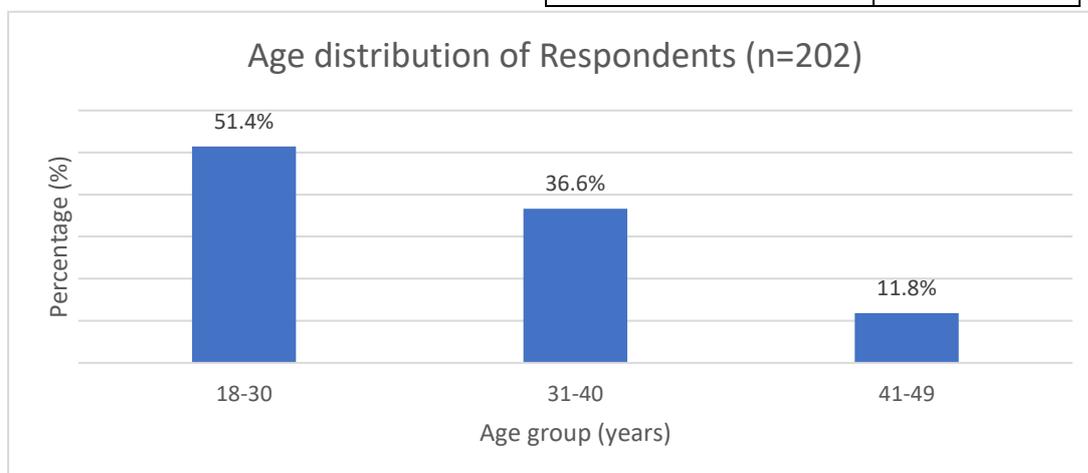
Socio-demographic Characteristics:

A total of 202 responses were collected and whole data was analyzed as there were no incomplete responses. Among them, 104 (51.4%) respondents were of 18 to 30 years, 74 (36.6%) were of 31 to 40 and 24 of them were of 41 to 49 years of age group respectively, while 67 (33.2%) of the respondent's partners belong to 18 to 30 years, 98 (48.5%) were between 31 to 40, and 37 (18.3%) were of more than 41 years of age group respectively.

Age Group:

Age group (years)	Respondents n (%)
18-30	104 (51.4%)
31-40	74 (36.6%)
41-49	24 (11.8%)

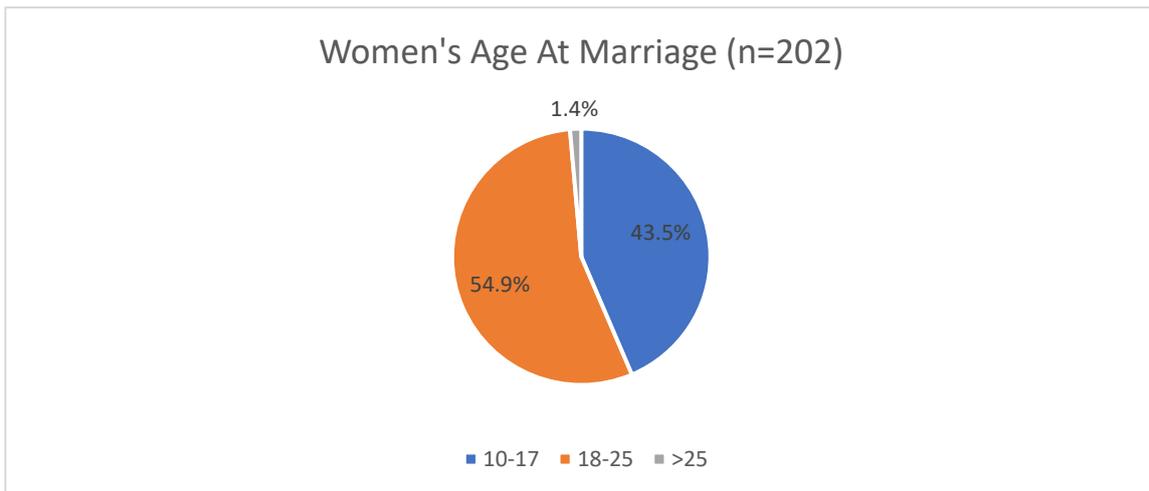
Age group (years)	Partners n (%)
18-30	67 (33.2%)
31-40	98 (48.5%)
>41	37 (18.3%)



Women's Age at marriage:

Age at marriage of both women and their partners were divided into three groups. The age groups of females were 10 to 17, 18-25 and greater than 25 years. 88 (43.5%) respondents married at the age between 10 to 17, 111 (54.9%) of them at age between 18 to 25 and 3 (1.4%) of them married after their age of 25 years.

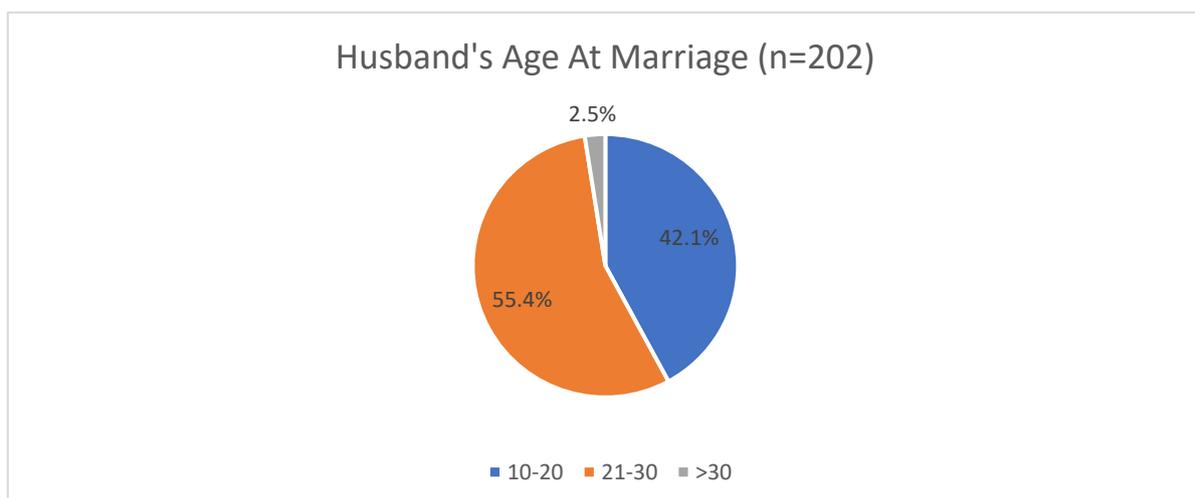
Age group (years)	n (%)
10-17	88 (43.5%)
18-25	111 (54.9%)
>25	3 (1.4%)



Husband's Age at marriage :

Partner's age at marriage were divided as 10 to 20 years, 21 to 30 and greater than 30 years of age. 42.1% among them got married between 10 to 20 years, 55.4% between 21 to 30 years and 2.5% of them got married after the age of 30.

Age at marriage (years)	n (%)
10-20	85 (42.1%)
21-30	112 (55.4%)
>30	5 (2.5%)

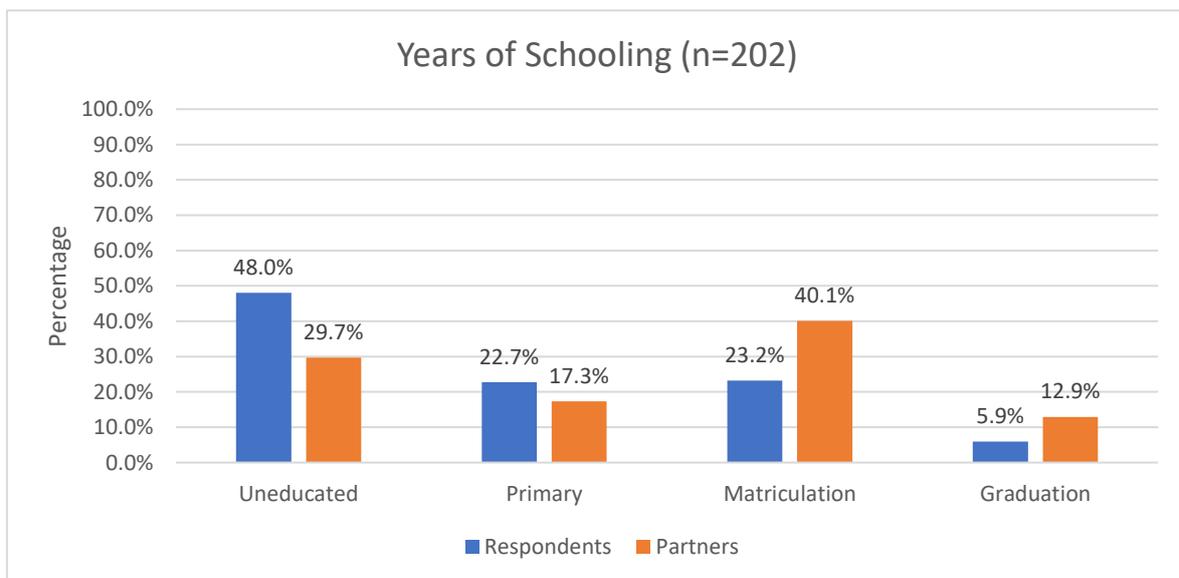


Years of schooling:

Educational status of respondents and their partners were divided into four groups based on their years of schooling. Zero year of schooling were grouped under uneducated, one to five years of schooling under primary education, 6 to 10 years of schooling under matriculation and 11 to 18 years of schooling grouped under graduation.

Among the 202 respondents, 48% were uneducated, 22.7% were under primary, 23.2% studied till matriculation, and 5.9% were grouped below graduation, while among the respondent's partners 29.7% were uneducated, 17.3% did primary schooling, 40.1% of them were under matriculation and 12.9% were below graduation.

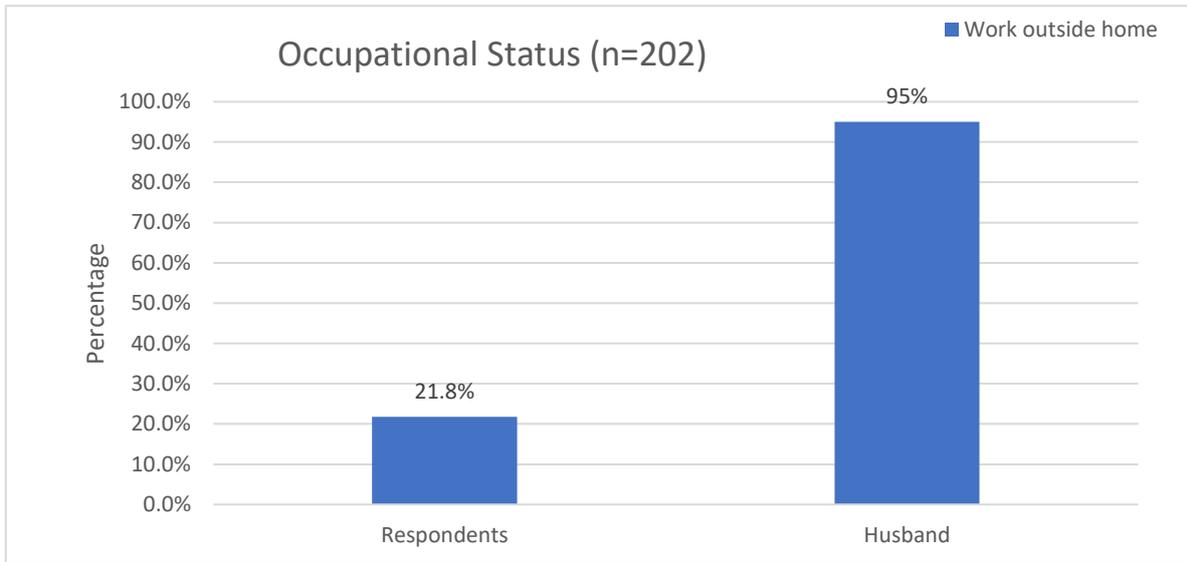
	Respondents n (%)	Partners n (%)
Uneducated	97 (48.0%)	60 (29.7%)
Primary	46 (22.7%)	35 (17.3%)
Matriculation	47 (23.2%)	81 (40.1%)
Graduation	12 (5.9%)	26 (12.9%)



Occupation status:

Among the 202 respondents, 44 (22.8%) of the women worked outside home, while 192 (95%) of the partners went outside home for their work.

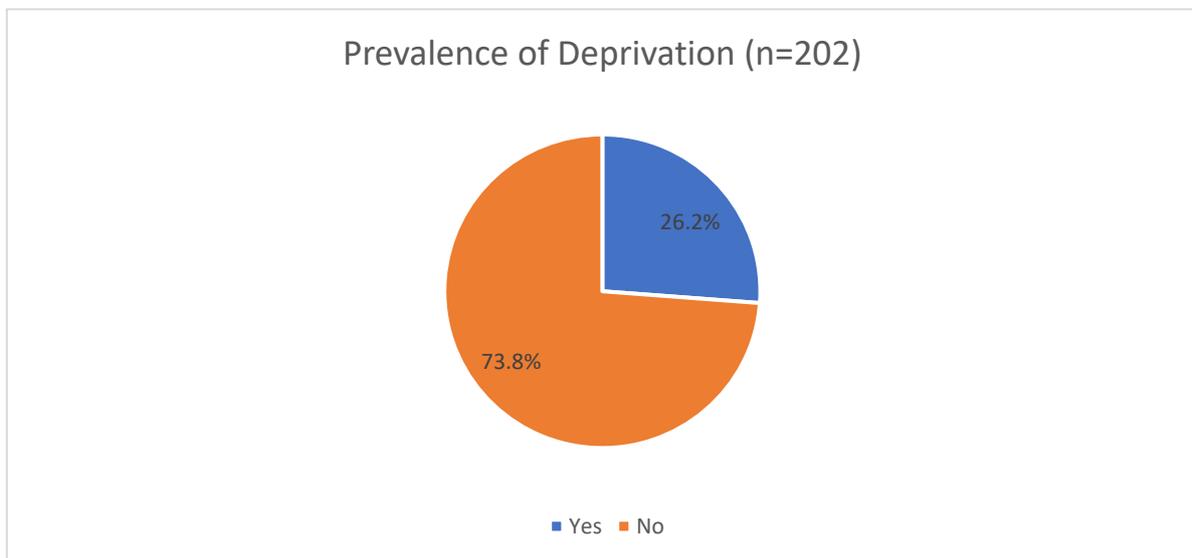
	Respondents n (%)	Partners n (%)
Work outside home	44 (21.8%)	192 (95%)



Prevalence of Deprivation:

The prevalence of deprivation was seen among 53 (26.2%) households.

	Yes n (%)	No n (%)
Deprivation	53 (26.2%)	149 (73.8%)

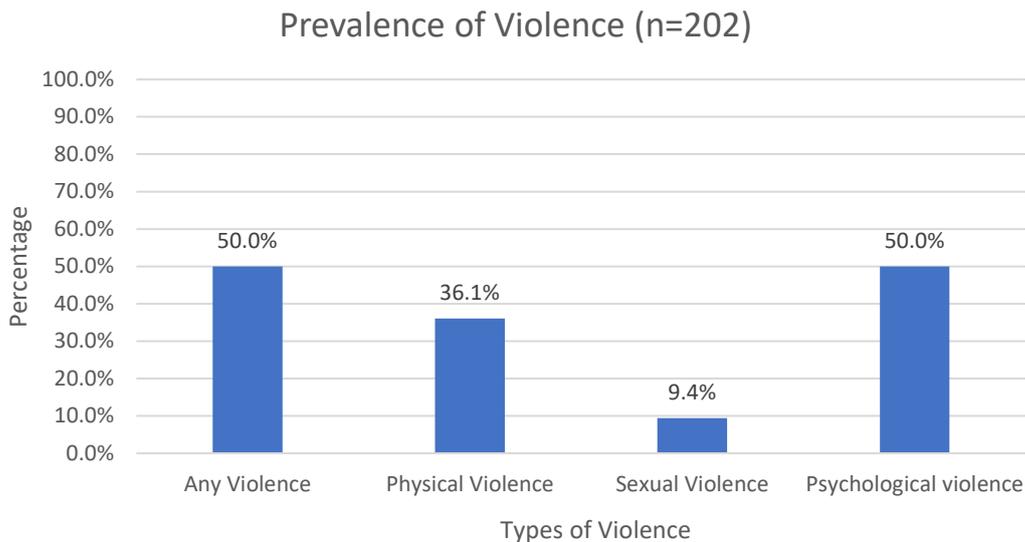


Prevalence of GBV:

The prevalence of Gender Based Violence has been assessed under four groups namely, any violence (includes any of the violence occurring either due to physical, sexual or psychological assault), physical violence, sexual violence and psychological violence.

Prevalence of any violence and psychological violence was observed in 50% respondents, while the prevalence of physical violence was 36.1% and sexual violence was 9.4%.

Prevalence Of Violence	n (%)
Any Violence	101 (50.0%)
Physical Violence	73(36.1%)
Sexual Violence	19 (9.4%)
Psychological violence	101 (50.0%)



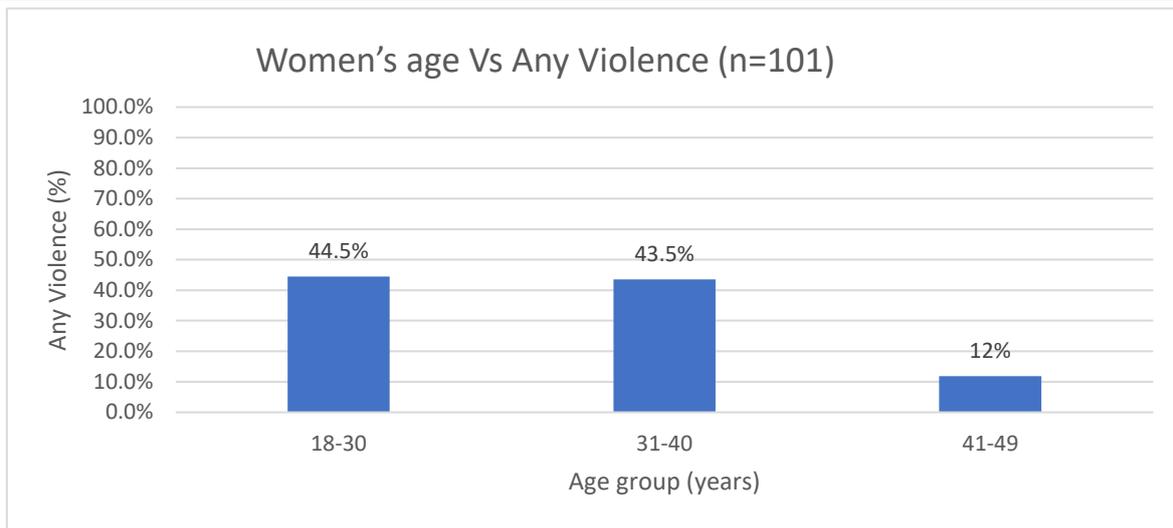
Any Violence:

To identify the various determinants affecting Gender Based Violence, each type of the violence was compared with every independent variable.

Women's age Vs Any Violence:

Any Violence was observed in 101 respondents, among which females aged between 18 to 30 years, 31 to 40 years and 41 to 49 years faced 44.5%,43.5% and 12% of any violence each respectively. The analysis of correlation between presence of any violence and women's age group showed no statistical significance.

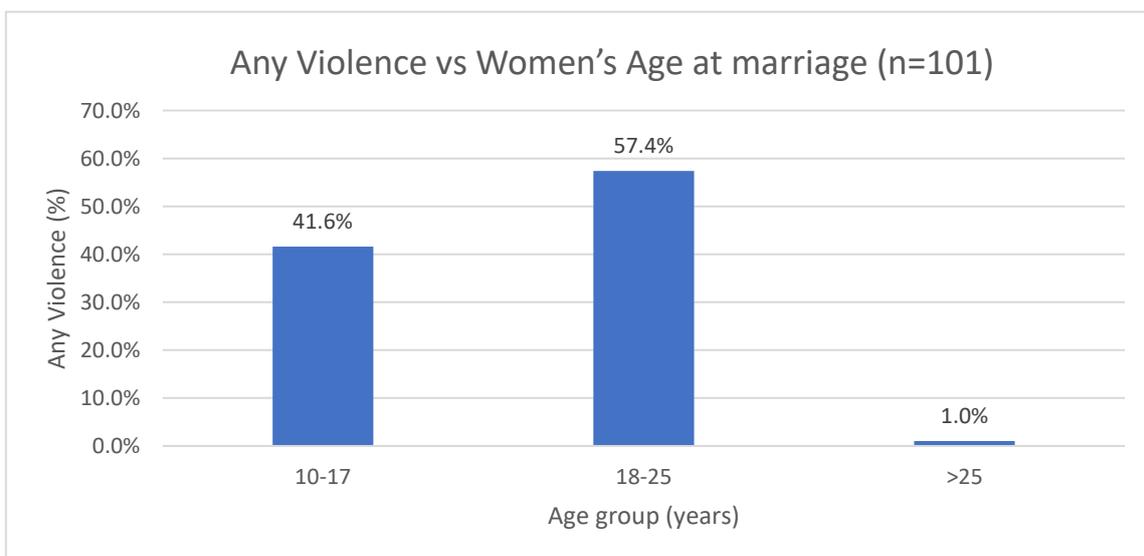
Age Group (years)	Presence of Any Violence n (%)
18-30	45 (44.5%)
31-40	44 (43.5%)
41-49	12 (12.0%)
p-Value = 0.103	



Women's Age at marriage Vs Any Violence:

Among the 101 respondents facing Any violence, 41.6% of females married at the age range of 10 to 17 years, while 58% of them at the age between 18 to 25 years and 1% above the age of 25 years. Correlation between women's age at marriage and any violence was statistically insignificant.

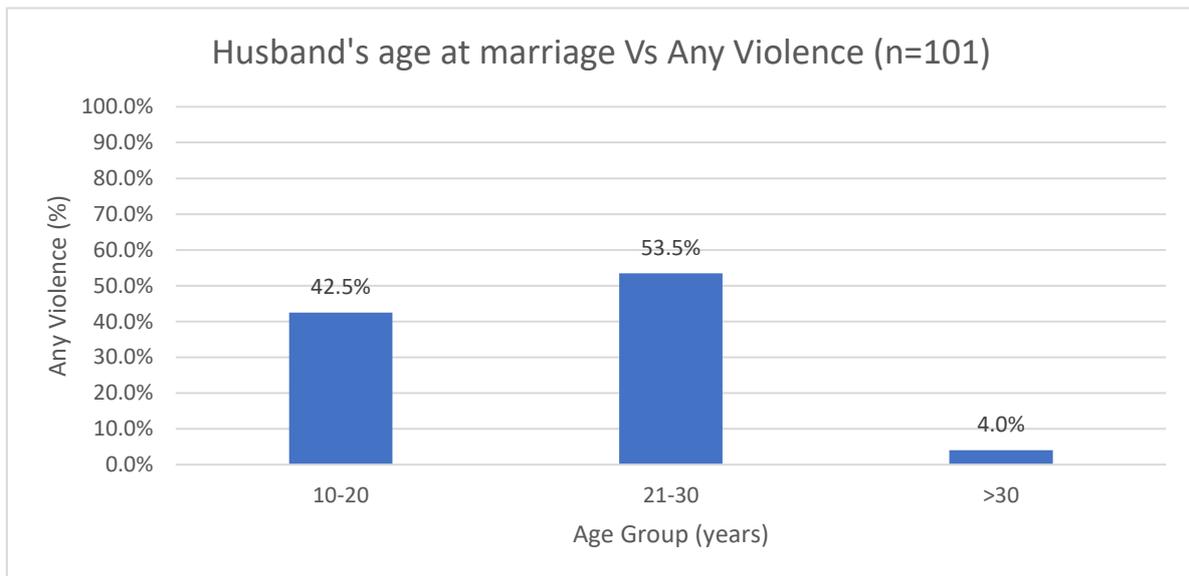
Age at marriage (years)	Presence of Any Violence n (%)
10-17	42 (41.6%)
18-25	58 (57.4%)
>25	1 (1.0%)
p-Value = 0.688	



Husband's age at marriage Vs Any Violence:

42.5% of any violence was observed among the females, whose partners married at the age range of 10 to 20 years, 53.5% between 21 to 30 years and 4% was observed above 30 years. The correlation between partner's age at marriage and presence of any violence was found to be statistically insignificant.

Age at marriage (years)	Presence of Any Violence n (%)
10-20	43 (42.5%)
21-30	54 (53.5%)
>30	4 (4.0%)
p-Value = 0.376	

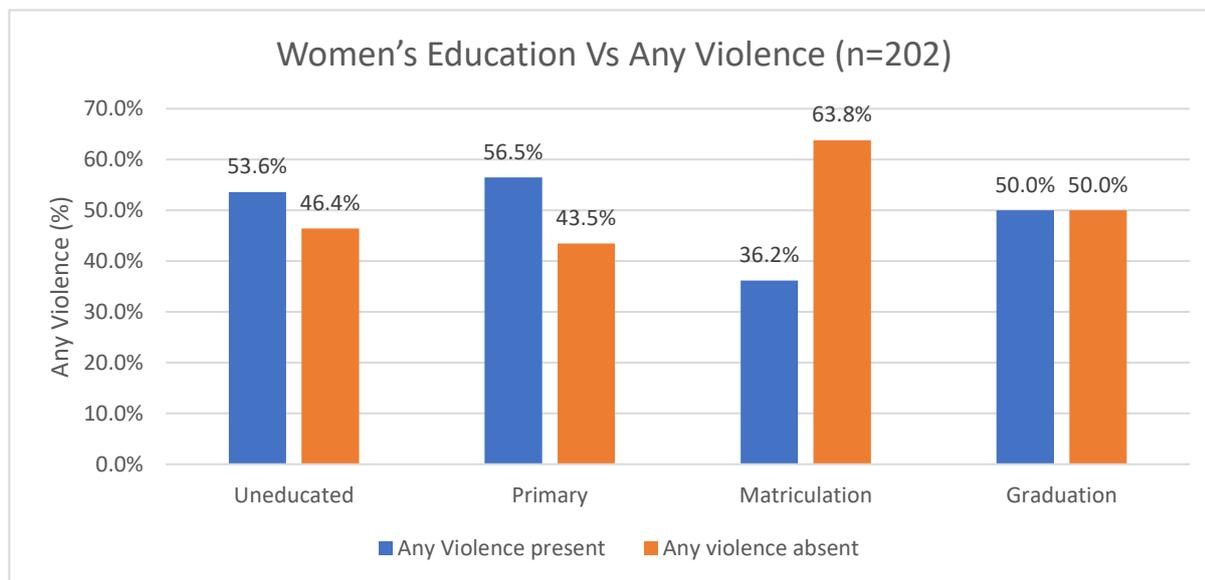


Educational Status:

Women's education Vs Any Violence:

Among the 97 respondents who were uneducated, 53.6% of them faced some kind of violence, while 26 out of 46 females with primary schooling, 17 out of 47 matriculated respondents and 6 among 12 below graduation females faced some kind of violence. Cross-tabulation between women's educational status and presence of any violence showed the p-value to be 0.177, which was statistically insignificant.

Educational status	Presence of Any Violence n (%)	Absence of Any Violence n (%)
Uneducated	52 (53.6%)	45 (46.4%)
Primary	26 (56.5%)	20 (43.5%)
Matriculation	17 (36.2%)	30 (63.8%)
Graduation	6 (50%)	6 (50%)
<u>p-value = 0.177</u>		

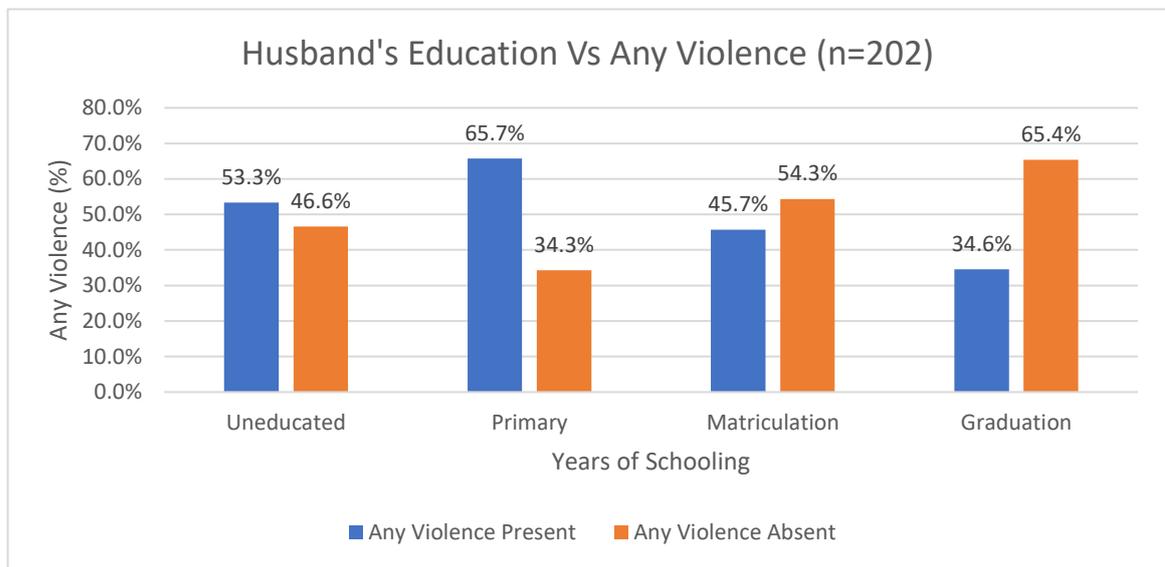


Husband's education

Vs Any Violence:

Based on the husband's educational status, it was observed that 32 out of 60 uneducated male's partners, 23 out of 35 with primary schooling, 37 out of 81 matriculated and 9 out of 26 below graduation male's partners faced some kind of violence. There was no statistically significant correlation between partner's educational status and any violence.

Educational status	Presence of Any Violence n (%)	Absence of Any Violence n (%)
Uneducated	32 (53.3%)	28 (46.6%)
Primary	23 (65.7%)	12 (34.3%)
Matriculation	37 (45.7%)	44 (54.3%)
Graduation	9 (34.6%)	17 (65.4%)
<u>p-value = 0.07</u>		

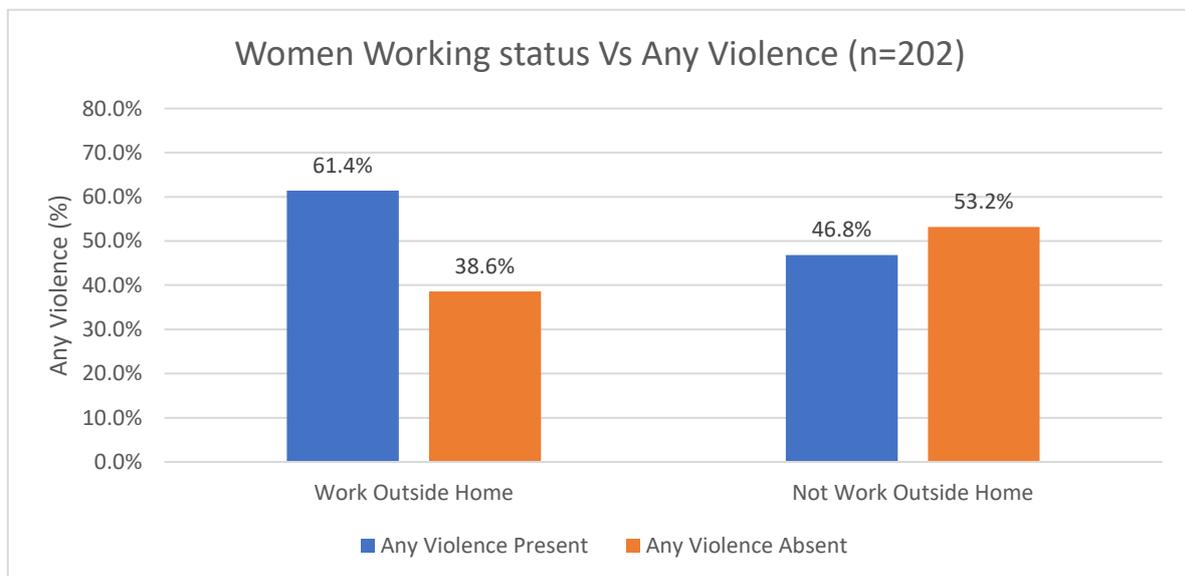


Working Status:

Women's working status Vs Any Violence:

Among the 44 respondents who worked outside home, 61.4% of them faced some kind of violence, and there was no statistically significant correlation between working status of females and the violence they were facing.

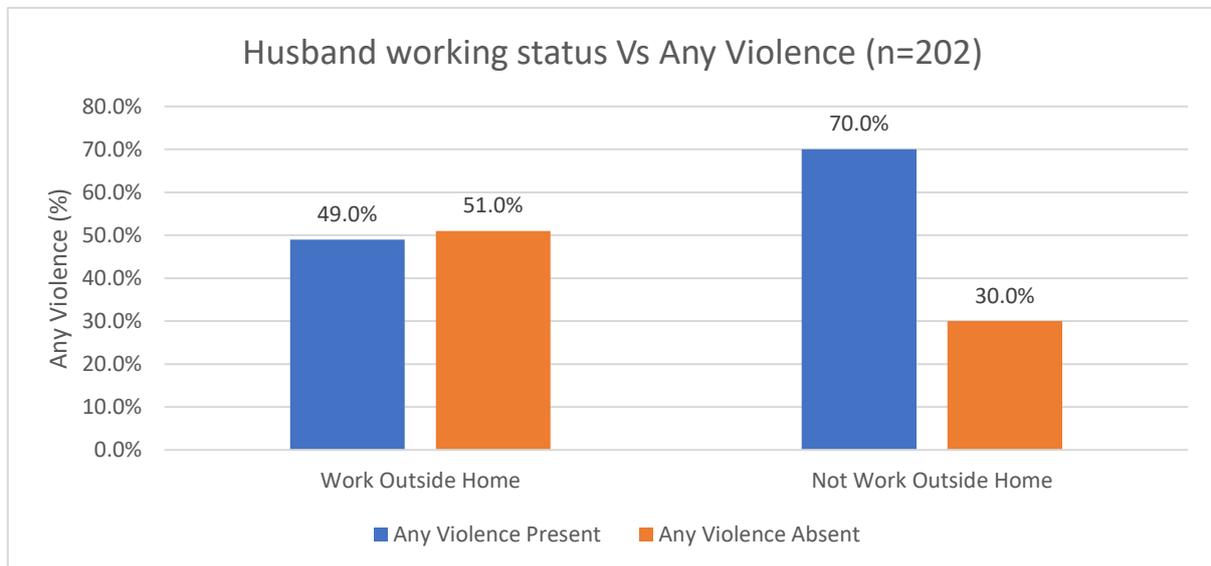
Working status	Any Violence Present n (%)	Any Violence Absent n (%)
Work Outside Home	27 (61.4%)	17 (38.6%)
Not Work Outside Home	74 (46.8%)	84 (53.2%)
p-Value = 0.088		



Husband's Working status Vs Any Violence:

Among the 192 respondent's partners working outside home, it was observed that 49% of their female partners faced some kind of violence. Husband's working status had no statistically significant correlation with the violence faced by the respondents.

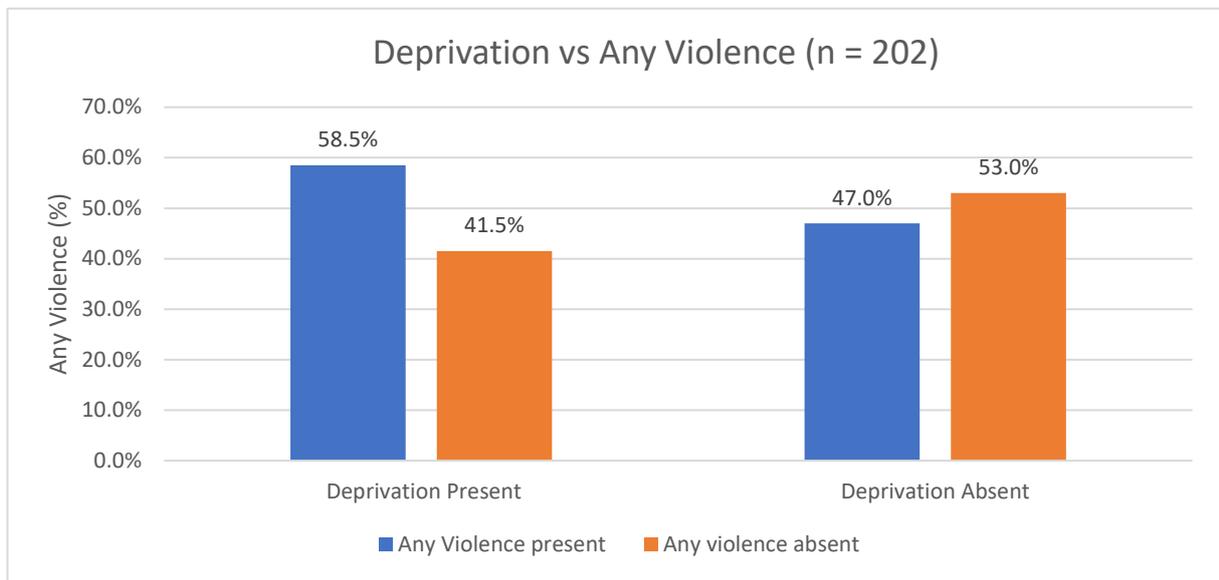
	Any Violence Present n (%)	Any Violence Absent n (%)
Work Outside Home	94 (49.0%)	98 (51.0%)
Not Work Outside Home	7 (70.0%)	3 (30.0%)
<u>p value = 0.194</u>		



Deprivation Vs Any Violence:

Out of 53 households with deprivation, it was observed that females of 58.5% household faced some kind of violence. Correlation between deprivation and any violence showed p-value of 0.15, which is statistically insignificant.

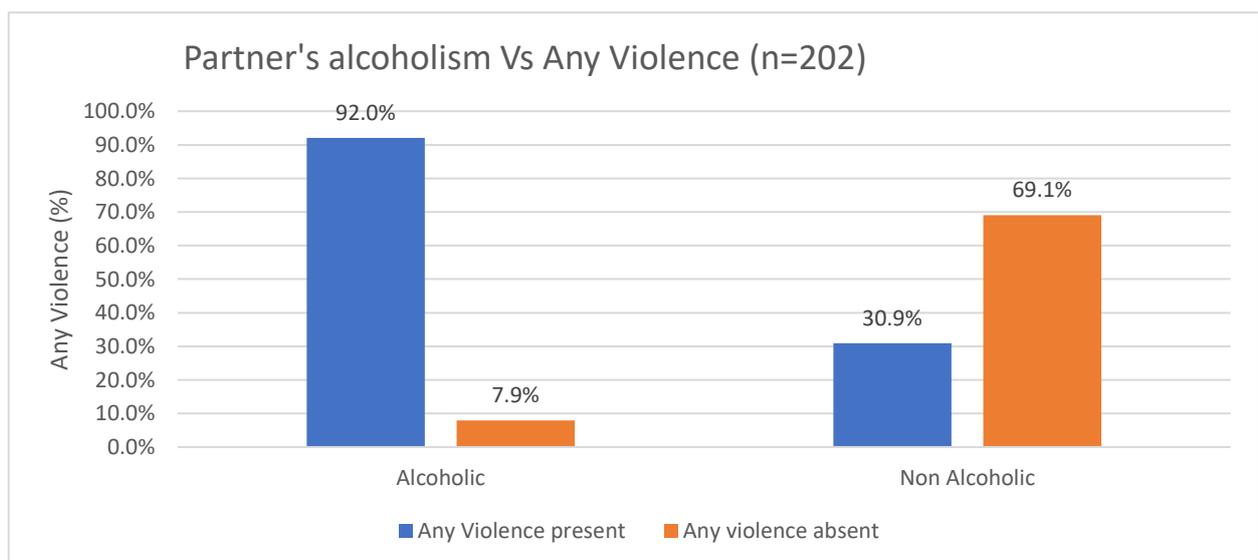
	Any Violence Present n (%)	Any Violence Absent n (%)
Deprivation	31 (58.5%)	22 (41.5%)
No Deprivation	70 (47%)	79 (53%)
<u>p-value = 0.15</u>		



Partner’s Alcoholism Vs Any Violence:

Among the 63 alcoholic partners, 92.1% of their female counterparts faced some kind of violence, while among the 139 non-alcoholic partners, 30.9% of the respondent faced violence. Correlation between partner’s alcoholism and presence of any violence showed high statistical significance with p-value less than 0.0001.

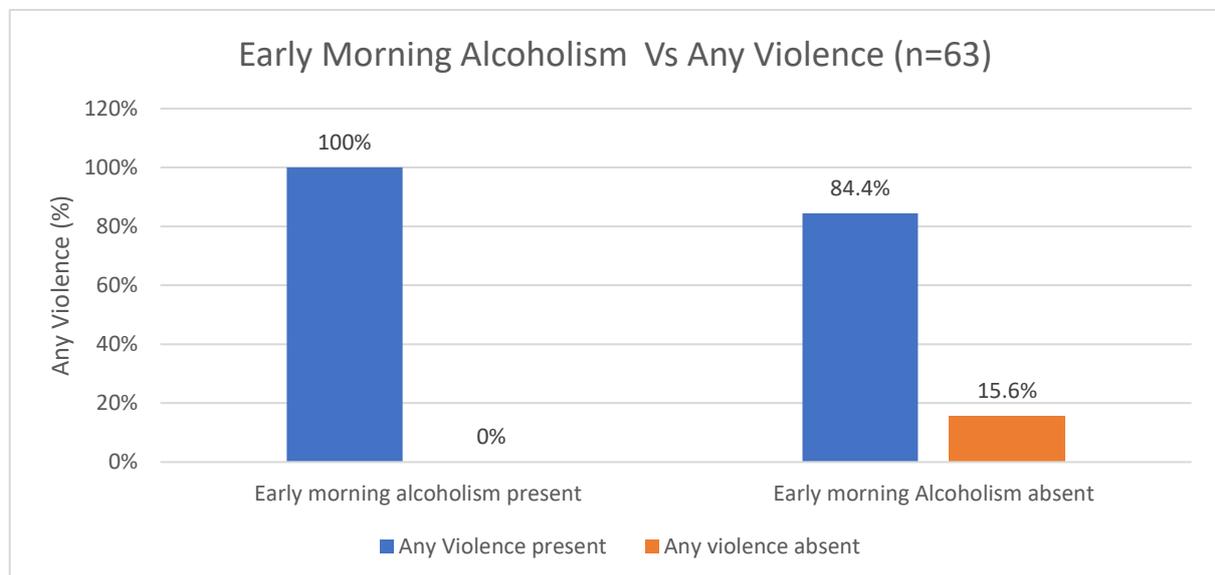
	Any Violence Present n (%)	Any Violence Absent n (%)
Alcoholic	58 (92%)	5 (7.9%)
Non-alcoholic	43 (30.9%)	96 (69.1%)
p-value = 0.0000001		



Alcohol Dependency Vs Any Violence:

Among the 63 alcoholic partners, 31 of them consumed alcohol early morning, which showed their high dependency on alcohol. All of these 31 (100%) alcohols dependent male's partners faced some kind of violence. Out of 32 individuals, who did not consume alcohol early morning, 27 (84.4%) of their female counterparts faced some kind of violence. Early morning alcoholism has a statistically significant correlation with presence of any violence faced by women.

	Any Violence Present n (%)	Any Violence Absent n (%)
Early morning alcoholism	31 (100%)	0 (0%)
No Early morning alcoholism	27 (84.4%)	5 (15.6%)
p-value = 0.028		



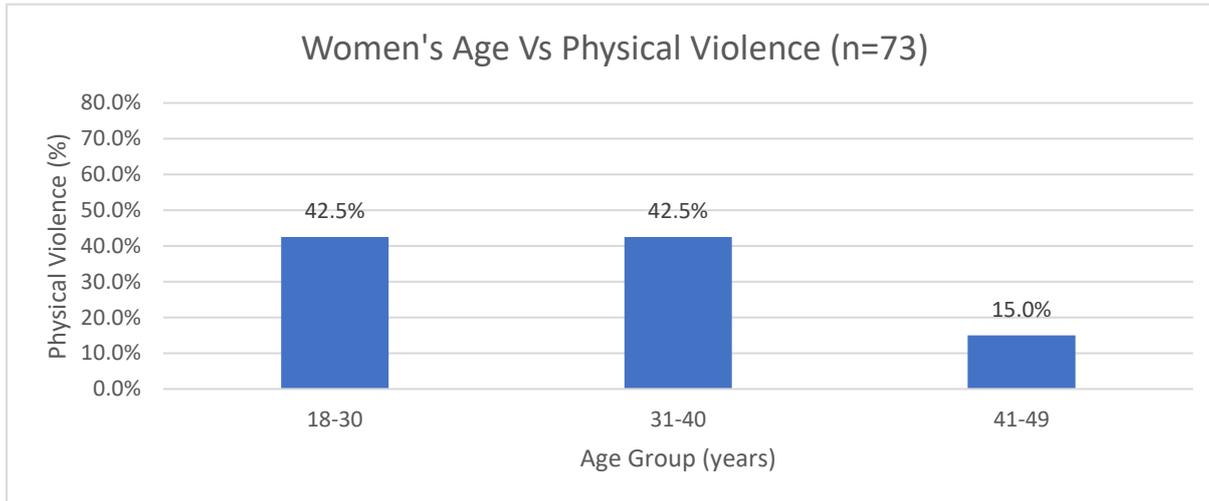
Physical Violence:

Age and Age at marriage:

Women's age Vs Physical Violence:

Physical Violence was observed in 73 respondents, among which females aged between 18 to 30 years, 31 to 40 years and 41 to 49 years faced 42.5%, 42.5% and 15% of physical violence each respectively. The analysis of correlation between presence of physical violence and women's age group showed no statistical significance.

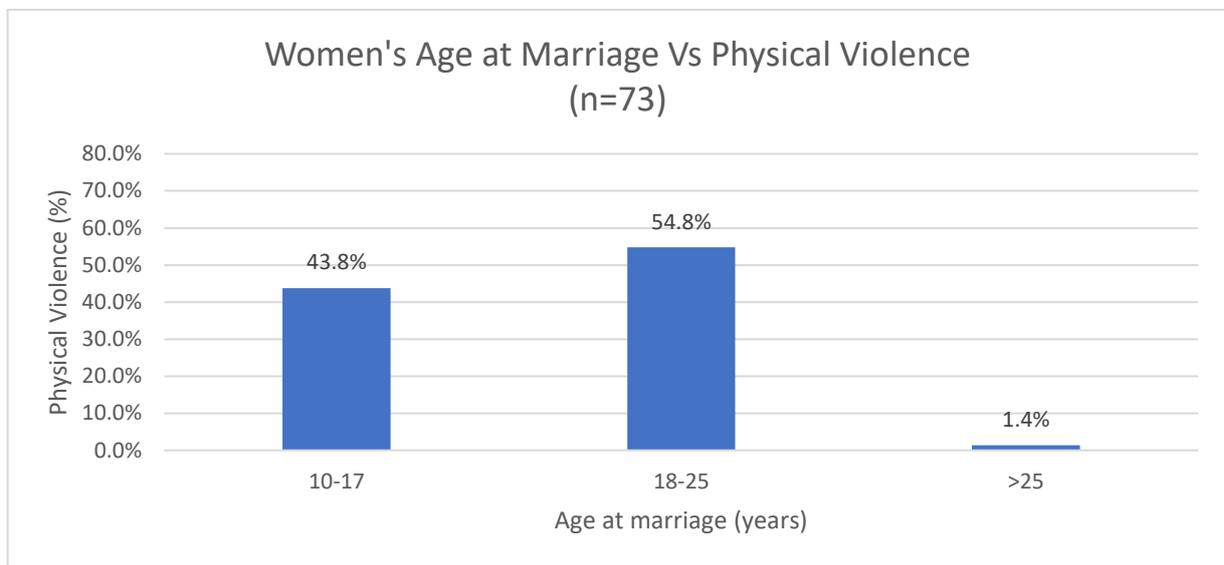
Age Group (years)	Presence of Physical Violence n (%)
18-30	31 (42.5%)
31-40	31 (42.5%)
41-49	11 (15.0%)
p-Value = 0.146	



Women's Age at marriage Vs Physical Violence:

Among the 73 respondents, 43.8% of females married at the age range of 10 to 17 years, while 54.8% of them married at the age between 18 to 25 years and 1.4% married above the age of 25 years were facing physical violence. Correlation between women's age at marriage and physical violence was statistically insignificant.

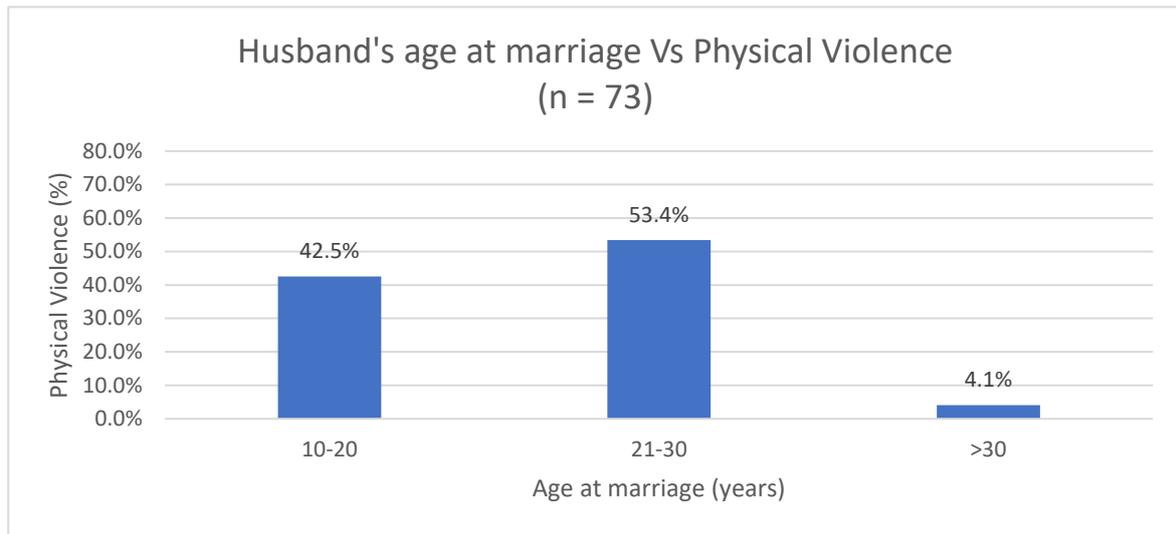
Age at marriage (years)	Presence of Physical Violence n (%)
10-17	32 (43.8%)
18-25	40 (54.8%)
>25	1 (1.4%)
p-Value = 0.994	



Husband's age at marriage Vs Physical Violence:

42.5% of physical violence was observed among the females, whose partners married at the age range of 10 to 20 years, 53.4% between 21 to 30 years and 4.1% was observed above 30 years. The correlation between partner's age at marriage and presence of physical violence was found to be statistically insignificant.

Age at marriage (years)	Presence of Physical Violence n (%)
10-20	31 (42.5%)
21-30	39 (53.4%)
>31	3 (4.1%)
p-Value = 0.516	

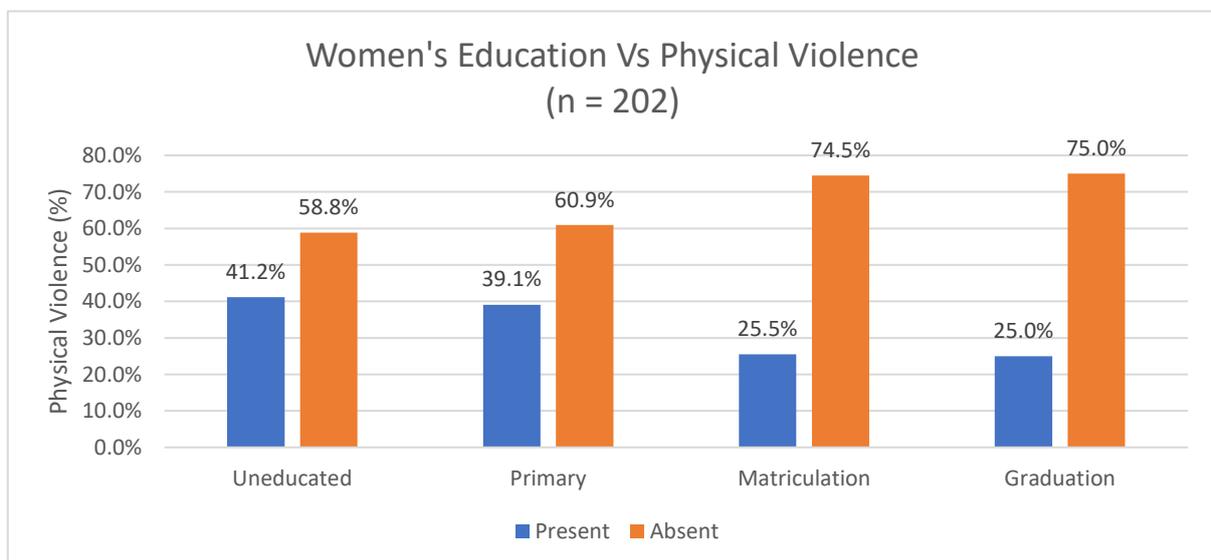


Educational Status:

Women's education Vs Physical Violence:

Among the 97 respondents who were uneducated, 41.2% of them faced physical violence, while 39.1% of 46 females with primary schooling, 25.5% of 47 matriculated respondents and 25% of 12 below graduation females faced physical violence. Cross-tabulation between women's educational status and presence of physical showed the p-value to be 0.24, which was statistically insignificant.

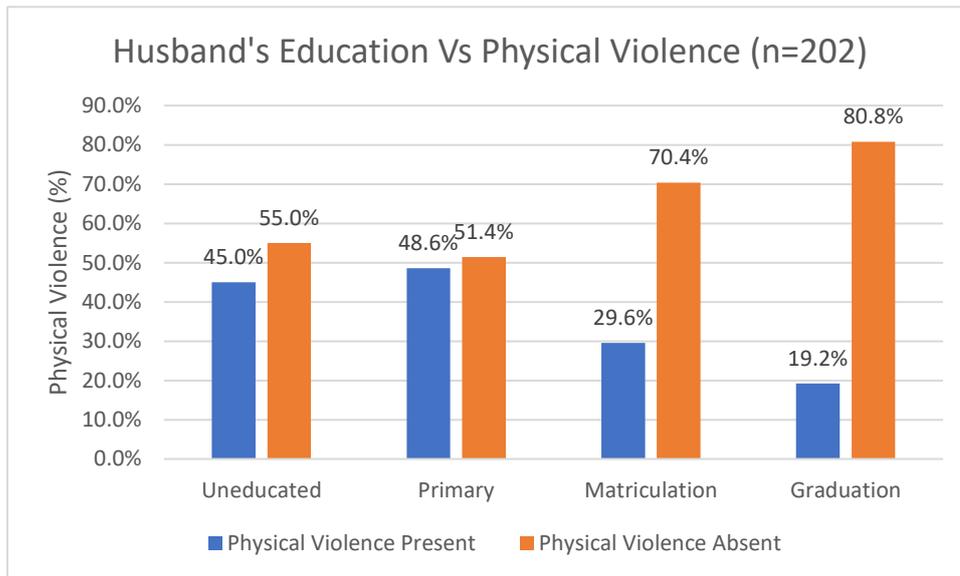
Educational status	Presence of Physical Violence n (%)	Absence of Physical Violence n (%)
Uneducated	40 (41.2%)	57 (58.8%)
Primary	18 (39.1%)	28 (60.9%)
Matriculation	12 (25.5%)	35 (74.5%)
Graduation	3 (25.0%)	9 (75.0%)
<u>p-value = 0.24</u>		



Husband's education Vs Physical Violence:

Based on the husband's educational status, it was observed that 27 out of 60 uneducated male's partners, 17 out of 35 with primary schooling, 24 out of 81 matriculated and 5 out of 26 below graduation male's partners faced some kind of violence. There was statistical significance in correlation between partner's educational status and physical violence with p value of 0.028.

	Physical Violence Present n (%)	Physical Violence Absent n (%)
Uneducated	27 (45.0%)	33 (55.0%)
Primary	17 (48.6%)	18 (51.4%)
Matriculation	24 (29.6%)	57 (70.4%)
Graduation	5 (19.2%)	21 (80.8%)
p-value = 0.028		

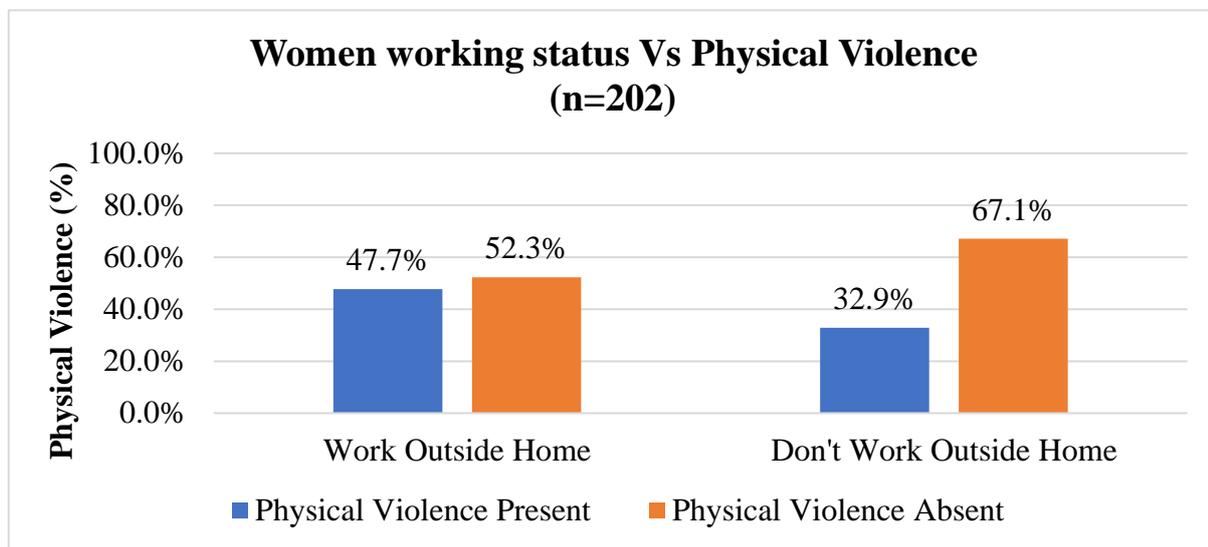


Working Status:

Women's working status Vs Physical Violence:

Among the 44 respondents who worked outside home, 47.7% of them faced physical violence, and among 158 of those who weren't working outside home, 32.9% faced physical violence. There no was statistical significance between working status of females and the violence they were facing.

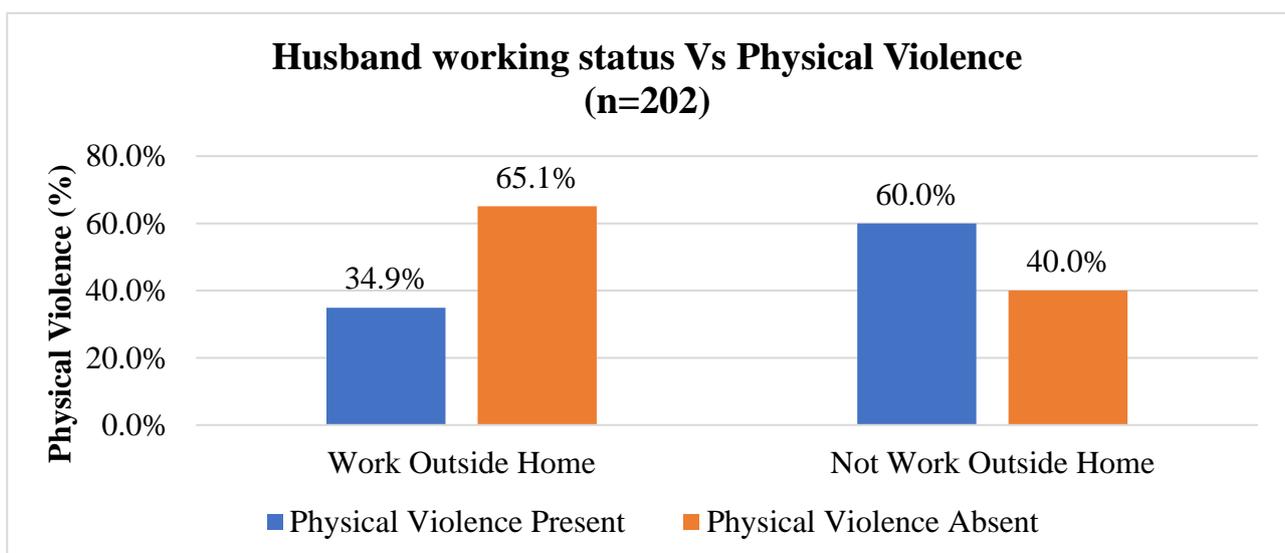
Women working status	Physical Violence Present n (%)	Physical Violence Absent n (%)
Work Outside home	21 (47.7%)	23 (52.3%)
Don't work outside home	52 (32.9%)	106 (67.1%)
p value:0.07		



Husband's working status:

Among the 192 respondent's partners working outside home, it was observed that 34.9% of their female partners faced physical violence. Husband's working status had no statistically significant correlation with the violence faced by the respondents.

Husband working status	Physical Violence Present n (%)	Physical Violence Absent n (%)
Work Outside	67 (34.9%)	125 (65.1%)
Don't work outside	6 (60%)	4 (40%)
p value:0.107		

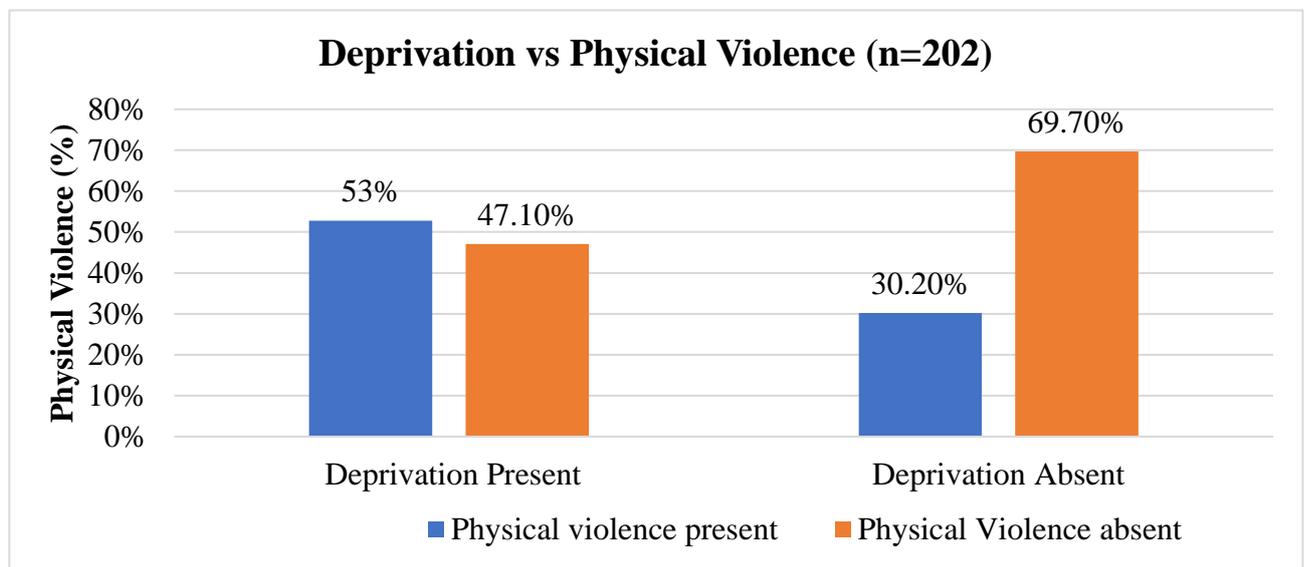


Deprivation Vs Physical violence:

Out of 53 households with deprivation, it was observed that females of 53% household faced physical violence. Correlation between deprivation and physical violence showed p-value of 0.004, which is statistically significant.

	Physical Violence Present n (%)	Physical Violence Absent n (%)
Deprivation	28 (53%)	25 (47.1%)
No Deprivation	45 (30.2%)	104 (69.7%)
p-value = 0.004		

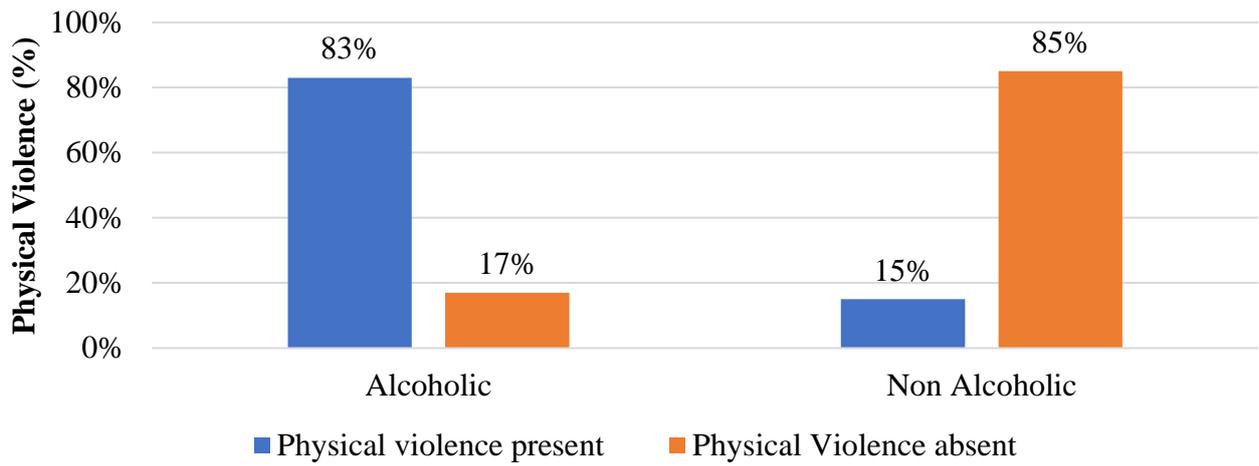
Partner’s Alcoholism Vs Physical Violence:



Among the 63 alcoholic partners, 83% of their female counterparts faced some kind of violence, while among the 139 non-alcoholic partners, 15% of their female counterparts faced violence. Correlation between partner’s alcoholism and presence of physical violence showed high statistical significance with p-value less than 0.0001.

	Physical Violence Present n (%)	Physical Violence Absent n (%)
Alcoholic	52 (83%)	11 (17%)
Non-alcoholic	21 (15%)	118 (85%)
p-value => 0.0000001		

Partner's Alcoholism Vs Physical Violence (n=202)



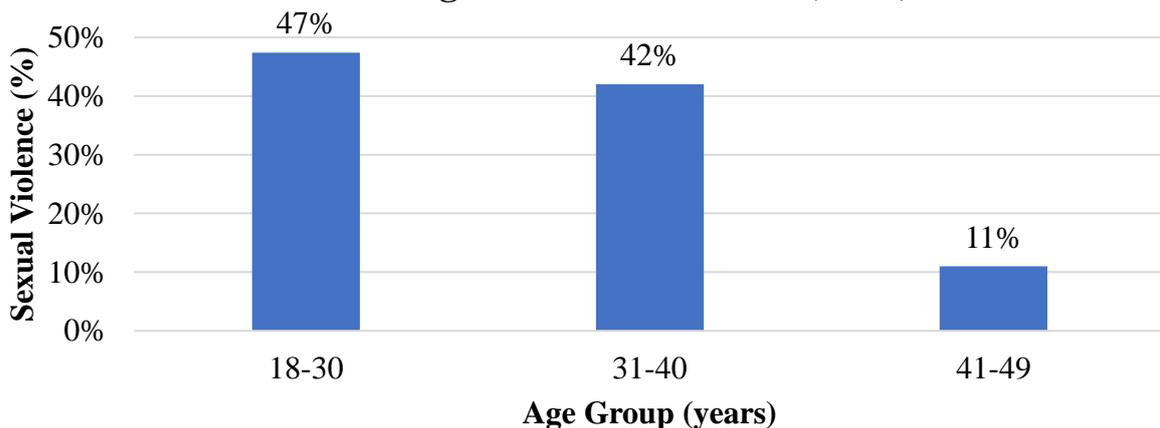
Sexual Violence:

Women's Age Vs Sexual Violence:

Sexual violence was observed in 19 respondents, among which females aged between 18 to 30 years, 31 to 40 years and 41 to 49 years faced 47%, 42% and 11% of sexual violence each respectively. The analysis of correlation between presence of sexual violence and women's age group showed no statistical significance.

Age Group (years)	Presence of Sexual Violence n (%)
18-30	9 (47%)
31-40	8 (42%)
41-49	2 (11%)
p-Value = 0.87	

Women's Age Vs Sexual Violence (n=19)

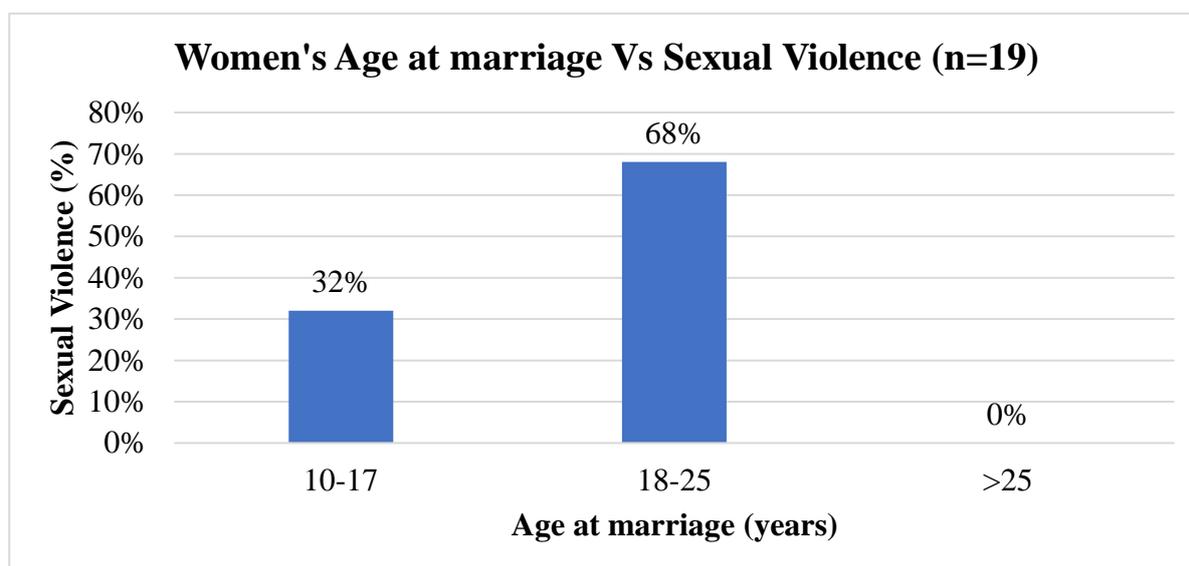


Age at marriage:

Women's age at marriage Vs Sexual Violence:

Among the 19 respondents, 32% of females married at the age range of 10 to 17 years, while 68% of them married at the age between 18 to 25 years faced sexual violence. Correlation between women's age at marriage and sexual violence was statistically insignificant.

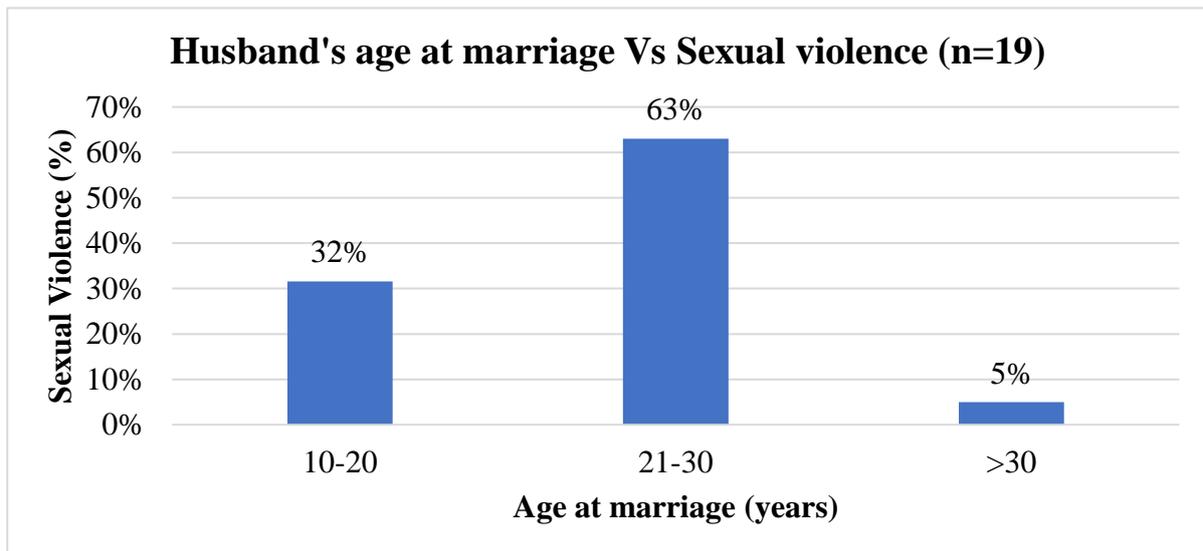
Age Group (years)	Presence of Sexual Violence n (%)
10-17	6 (32%)
18-25	13 (68%)
>25	0 (0%)
p-Value = 0.42	



Husband's age at marriage Vs Sexual Violence:

32% of sexual violence was observed among the females, whose partner's married at the age range of 10 to 20 years, 63% between 21 to 30 years and 1% was observed above 30 years. The correlation between partner's age at marriage and presence of sexual violence was found to be statistically insignificant.

Age Group (years)	Presence of Sexual Violence n (%)
10-20	6 (32%)
21-30	12 (63%)
>30	1 (5%)
p-Value = 0.48	



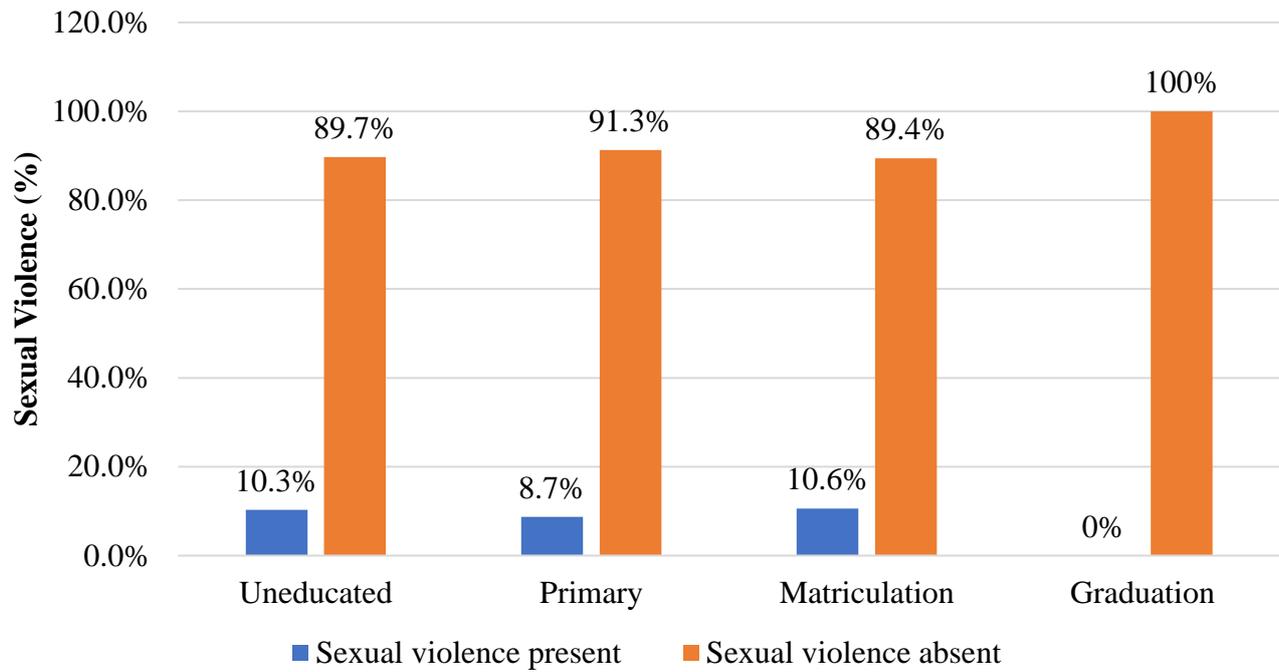
Educational status:

Women's education Vs Sexual Violence:

Among the 97 respondents who were uneducated, 10.3% of them faced sexual violence, while 8.7% of 46 females with primary schooling, 10.6% of 47 matriculated respondents faced sexual violence. Cross-tabulation between women's educational status and presence of sexual violence showed the p-value to be 0.69, which was statistically insignificant.

Educational status	Presence of Sexual Violence n (%)	Absence of Sexual Violence n (%)
Uneducated	10 (10.3%)	87 (89.7%)
Primary	4 (8.7%)	42 (91.3%)
Matriculation	5 (10.6%)	42 (89.4%)
Graduation	0 (0%)	12 (100%)
<u>p-value = 0.69</u>		

Women's education Vs Sexual Violence (n=202)

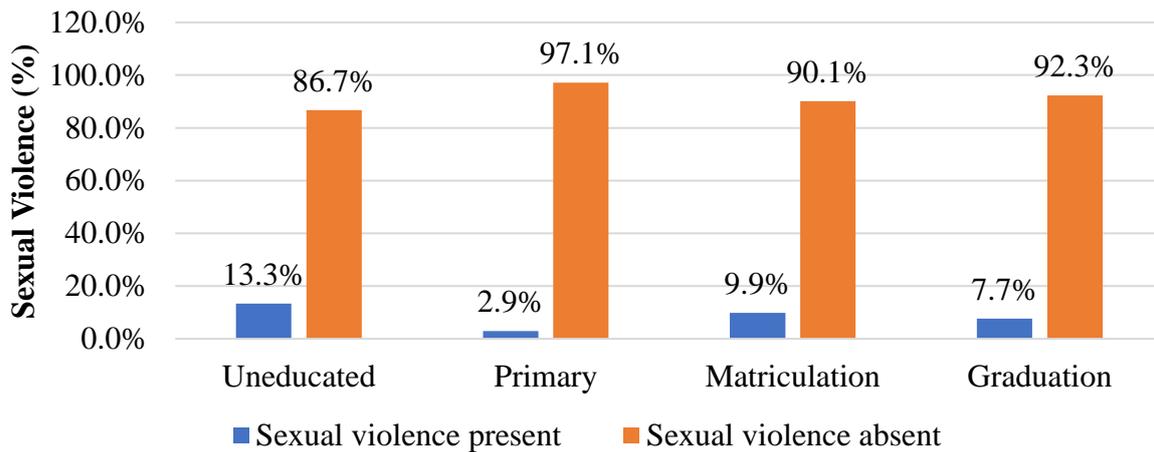


Partner's education Vs Sexual Violence:

Based on the husband's educational status, it was observed that 8 out of 60 uneducated male's partners, 1 out of 35 with primary schooling, 8 out of 81 matriculated and 2 out of 28 below graduation male's partners faced sexual violence. There was no statistical significance in correlation between partner's educational status and sexual violence.

Educational status	Presence of Sexual Violence n (%)	Absence of Sexual Violence n (%)
Uneducated	8 (13.3%)	52 (86.7%)
Primary	1 (2.9%)	34 (97.1%)
Matriculation	8 (9.9%)	73 (90.1%)
Graduation	2 (7.7%)	26 (92.3%)
p-value = 0.38		

Partner's Education Vs Sexual Violence (n=202)



Working status:

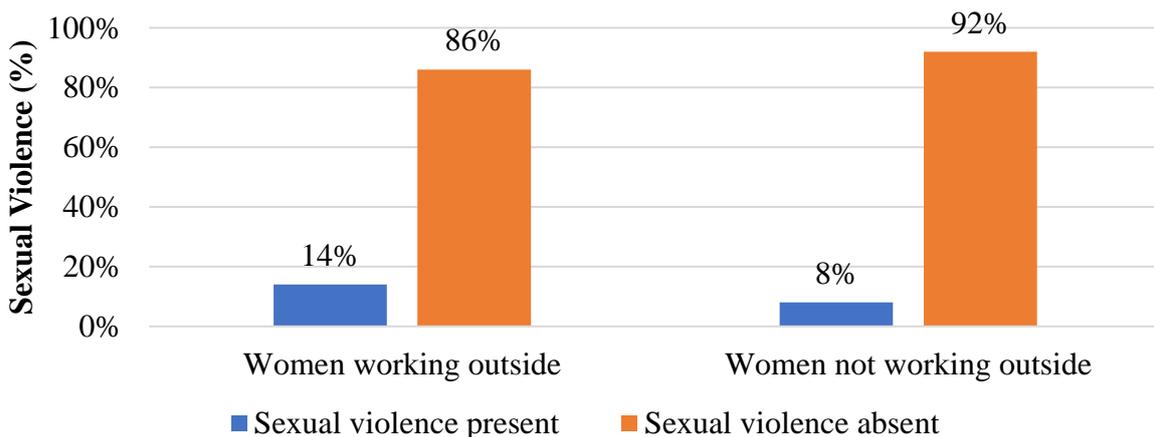
Women's working status Vs Sexual Violence:

Among the 44 respondents who worked outside home, 14% of them faced sexual violence, and among 158 of those who weren't working outside home, 8% faced sexual violence. There was no statistically significant correlation between working status of females and the violence they were facing.

	Sexual Violence Present n (%)	Sexual Violence Absent n (%)
Women Working Outside Home	6 (14%)	38 (86%)
Women Not Working Outside Home	13 (8%)	145 (92%)

p-value = 0.27

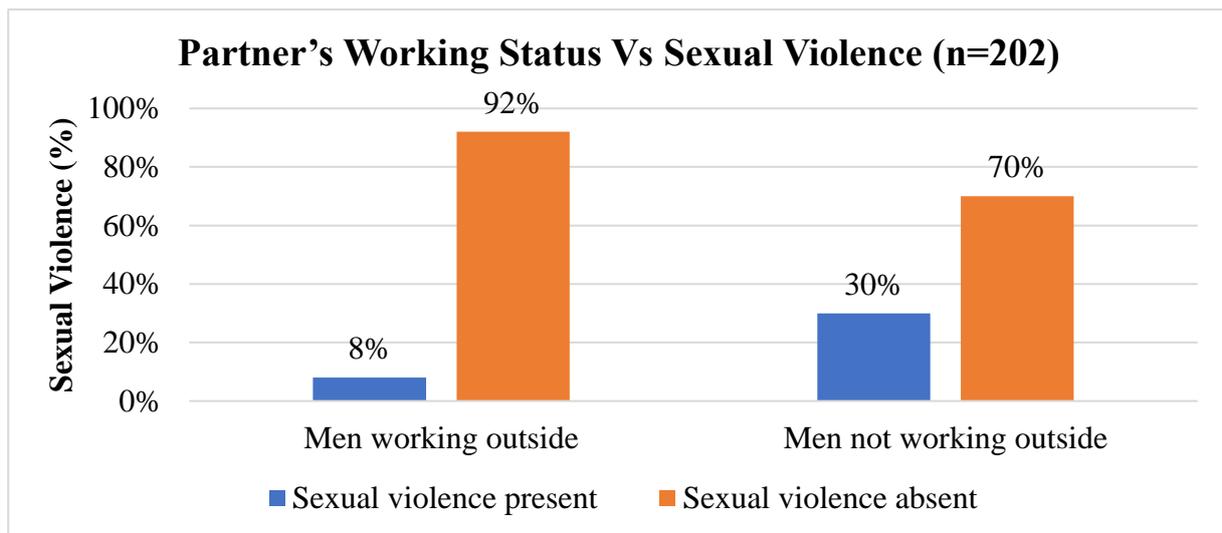
Women's Working Status Vs Sexual Violence (n=202)



Husband's working status Vs Sexual Violence:

Among the 192 respondent's partners working outside home, it was observed that 8% of their female partners faced sexual violence. Husband's working status had no statistically significant correlation with the sexual violence faced by the respondents.

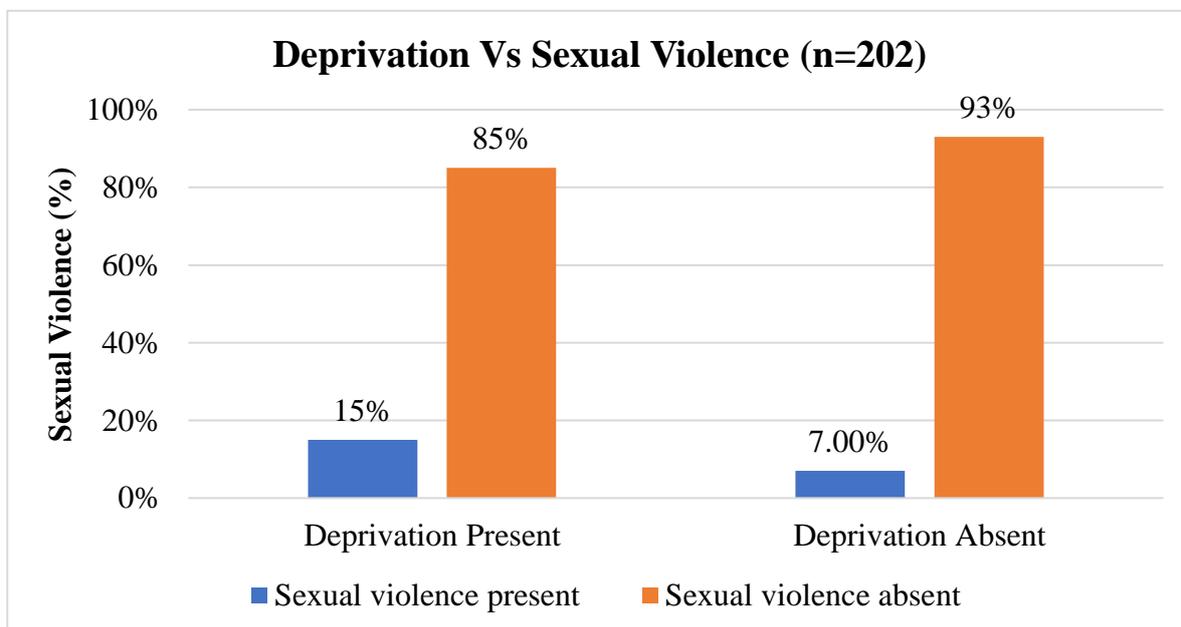
	Sexual Violence Present n (%)	Sexual Violence Absent n (%)
Work Outside Home	16 (8%)	176 (92%)
Not Working Outside Home	3 (30%)	7 (70%)
<u>p-value = 0.22</u>		



Deprivation Vs Sexual Violence:

Out of 53 households with deprivation, it was observed that females of 15% household faced sexual violence. Correlation between deprivation and sexual violence showed p-value of 0.099, which is statistically insignificant.

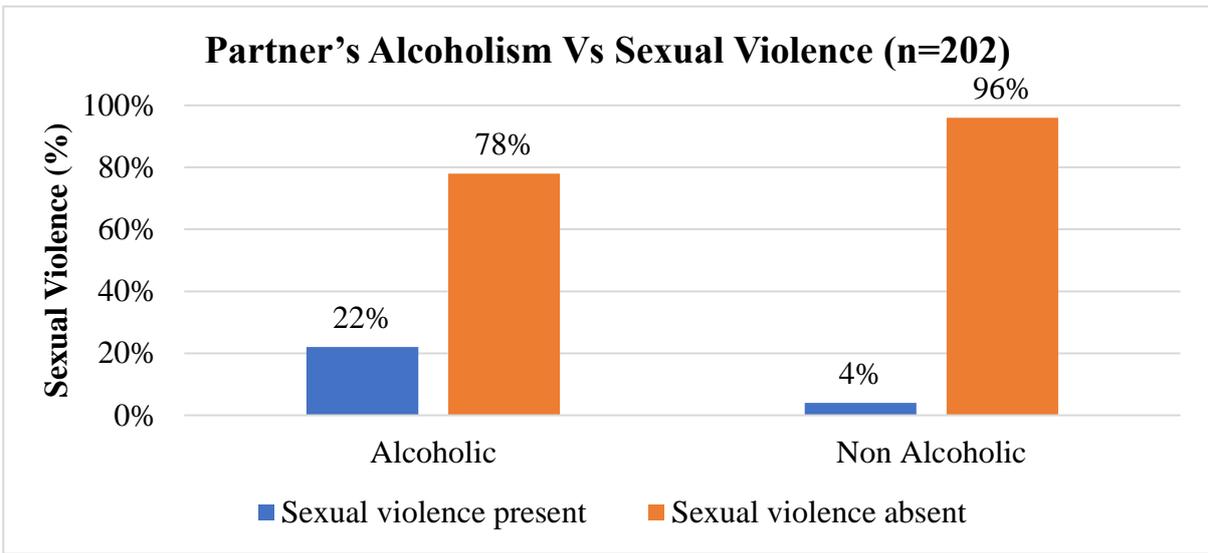
	Sexual Violence Present n (%)	Sexual Violence Absent n (%)
Deprivation Present	8 (15.00%)	45 (85.00%)
Deprivation Absent	11 (7.00%)	138 (93.00%)
p-value = 0.099		



Partner’s Alcoholism Vs Sexual Violence:

Among the 63 alcoholic partners, 22% of their female counterparts faced sexual violence, while among the 139 non-alcoholic partners, 4% of their female counterparts faced violence. Correlation between partner’s alcoholism and presence of sexual violence showed high statistical significance with p-value less than 0.001.

Alcoholism	Sexual Violence Present n (%)	Sexual Violence Absent n (%)
Alcoholic	14 (22.00%)	49 (78.00%)
Non-Alcoholic	5 (4.00%)	134 (96.00%)
p value = 0.000		

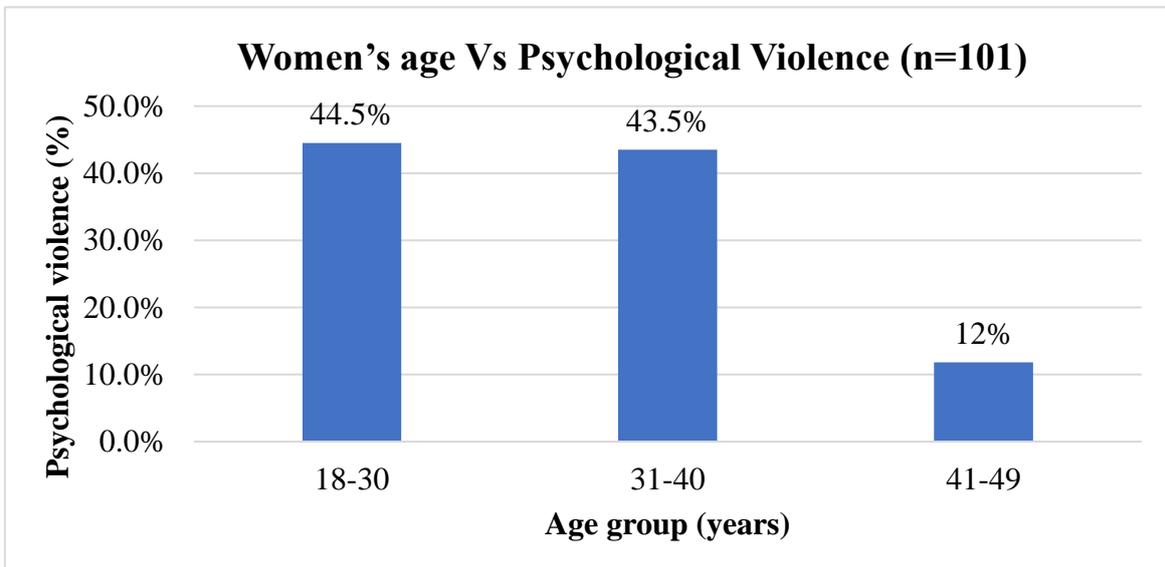


Psychological Violence:

Women's age Vs Psychological violence:

Psychological Violence was observed in 101 respondents, among which 44.5%, 43.5% and 12% of any violence was observed in females aged between 18 to 30 years, 31 to 40 years and 41 to 49 years respectively. The analysis of correlation between presence of psychological violence and women's age group showed no statistical significance.

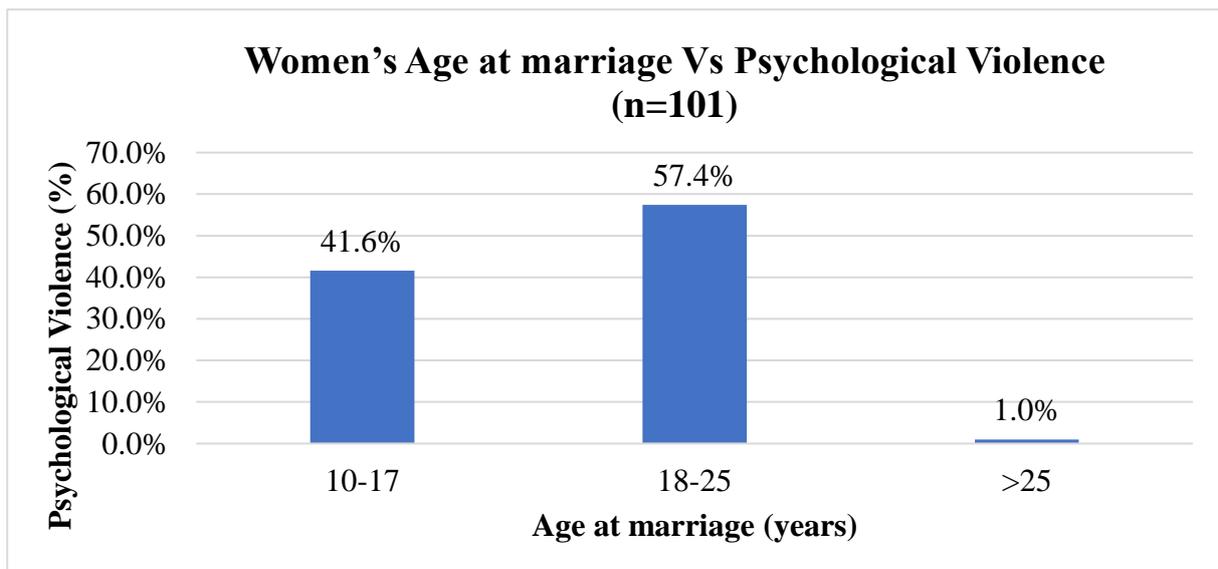
Age Group	Psychological Violence n (%)
18-30	45 (44.5%)
31-40	44 (43.5%)
41-49	12 (12%)
p value = 0.103	



Women’s age at marriage vs psychological violence:

Among the 101 respondents facing psychological violence, 41.6% of females married at the age range of 10 to 17 years, while 58% of them at the age between 18 to 25 years and 1% above the age of 25 years. Correlation between women’s age at marriage and psychological violence was statistically insignificant.

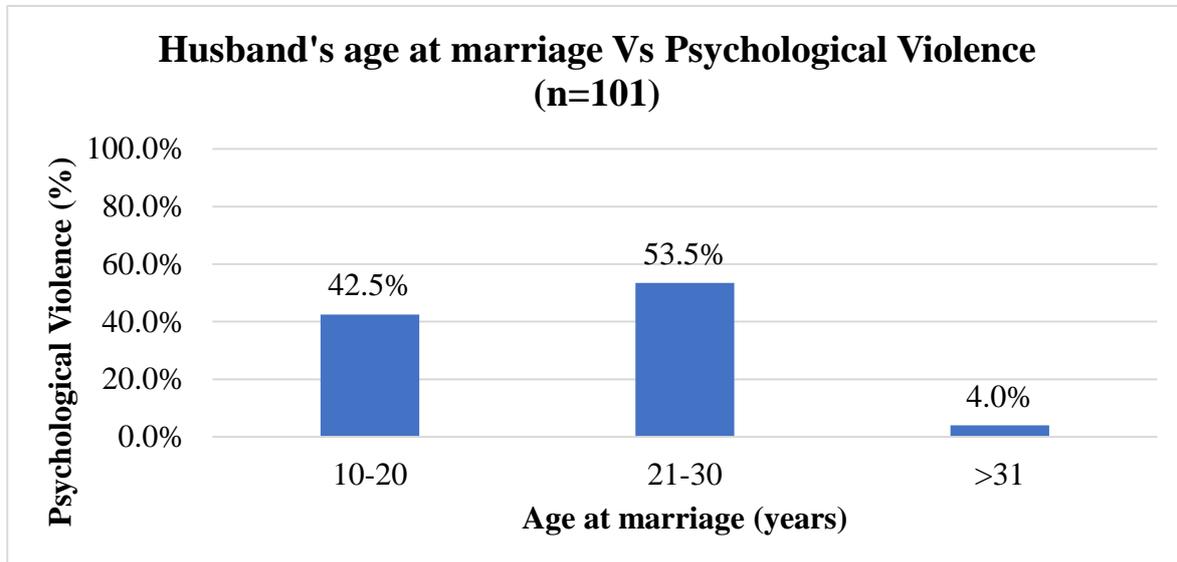
Age Group	Psychological Violence n (%)
10-17	42 (41.6%)
18-25	58 (57.4%)
>25	1 (1%)
p value = 0.688	



Husband’s age at marriage vs psychological violence:

42.5% of psychological violence was observed among the females, whose partners married at the age range of 10 to 20 years, 53.5% between 21 to 30 years and 4% was observed above 30 years. The correlation between partner’s age at marriage and presence of psychological violence was found to be statistically insignificant.

Age Group	Psychological Violence n (%)
10-20	43 (42.5%)
21-30	54 (53.5%)
>31	4 (4%)
p value = 0.376	

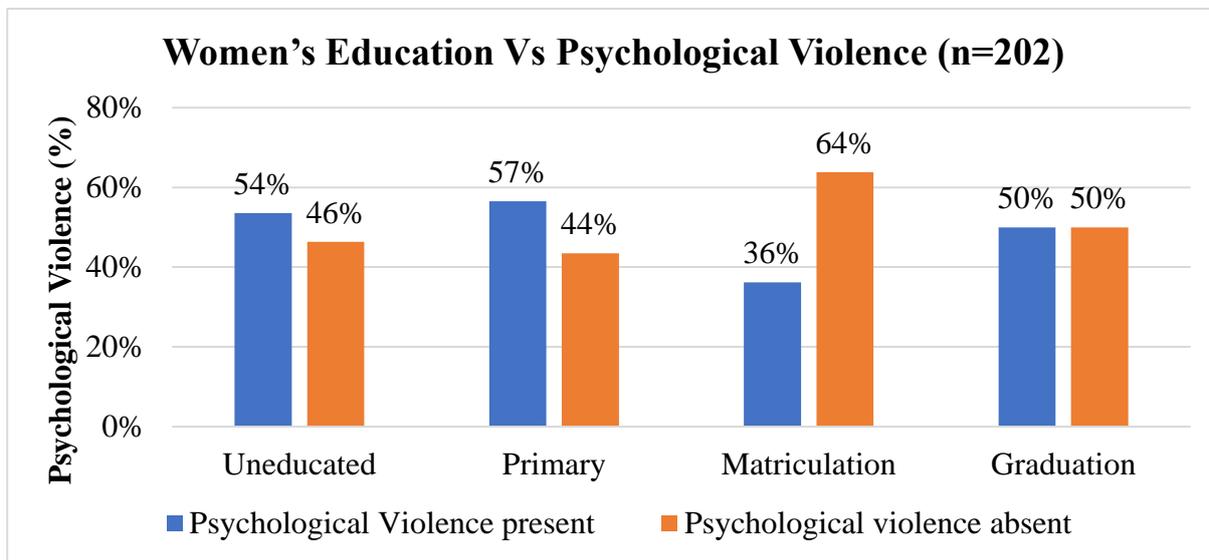


Education status:

Women's education status vs psychological violence:

Among the 97 respondents who were uneducated, 53.6% of them faced psychological violence, while 26 out of 46 females with primary schooling, 17 out of 47 matriculated respondents and 6 among 12 below graduation females faced psychological violence. Cross-tabulation between women's educational status and presence of psychological violence showed the p-value to be 0.177, which was statistically insignificant.

Educational status	Presence of Psychological Violence n (%)	Absence of Psychological Violence n (%)
Uneducated	52 (53.6%)	45 (46.4%)
Primary	26 (56.5%)	20 (43.5%)
Matriculation	17 (36.2%)	30 (63.8%)
Graduation	6 (50%)	6 (50%)
<u>p-value = 0.177</u>		

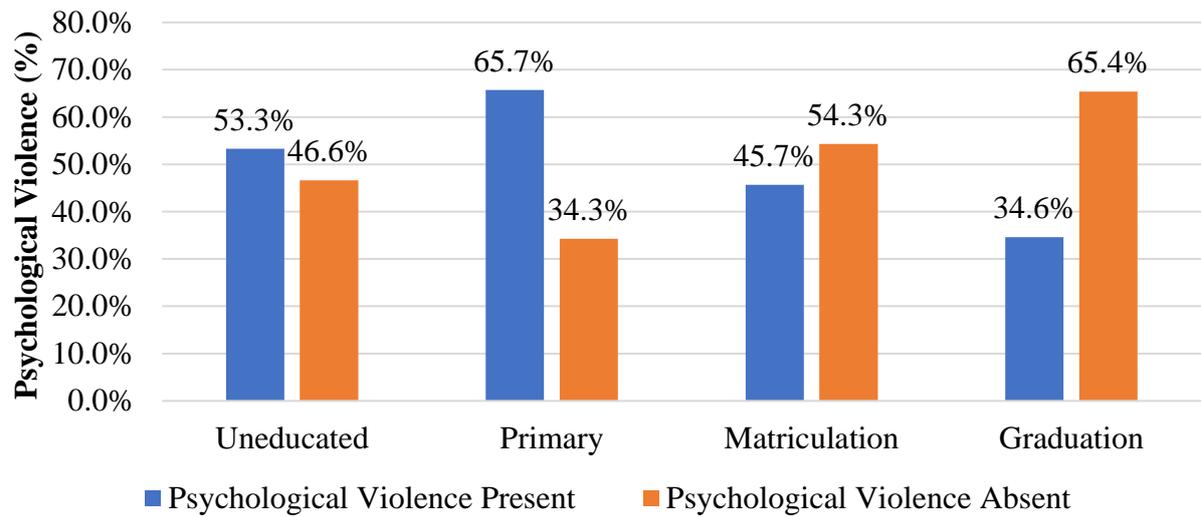


Husband's education status vs psychological violence:

Based on the husband's educational status, it was observed that 32 out of 60 uneducated male's partners, 23 out of 35 with primary schooling, 37 out of 81 matriculated and 9 out of 26 below graduation male's partners faced psychological violence. There was no statistical significance in correlation between partner's educational status and psychological violence.

Educational status	Presence of Psychological Violence n (%)	Absence of Psychological Violence n (%)
Uneducated	32 (53.3%)	28 (46.6%)
Primary	23 (65.7%)	12 (34.3%)
Matriculation	37 (45.7%)	44 (54.3%)
Graduation	9 (34.6%)	17 (65.4%)
<u>p-value = 0.07</u>		

Husband's Education Vs Psychological Violence (n=202)



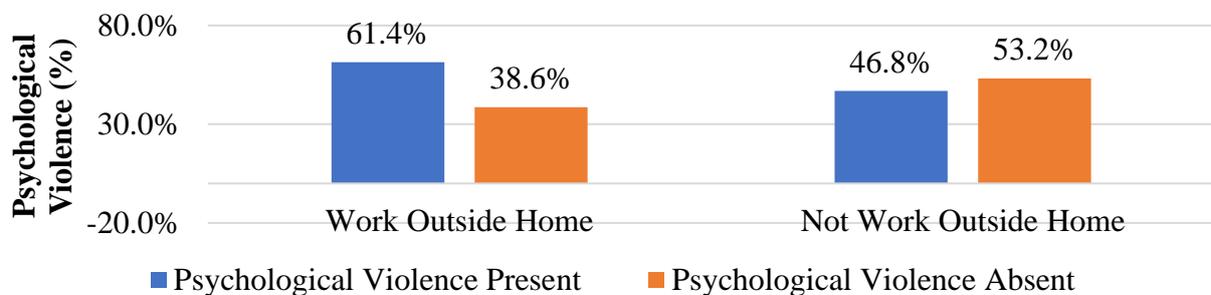
Working Status:

Women's working status Vs Psychological Violence:

Working Status	Psychological Violence Present	Psychological Violence Absent
	n (%)	n (%)
Women Work Outside Home	27 (61.4%)	74 (38.6%)
Women Not Working Outside Home	17 (46.8%)	84 (53.2%)

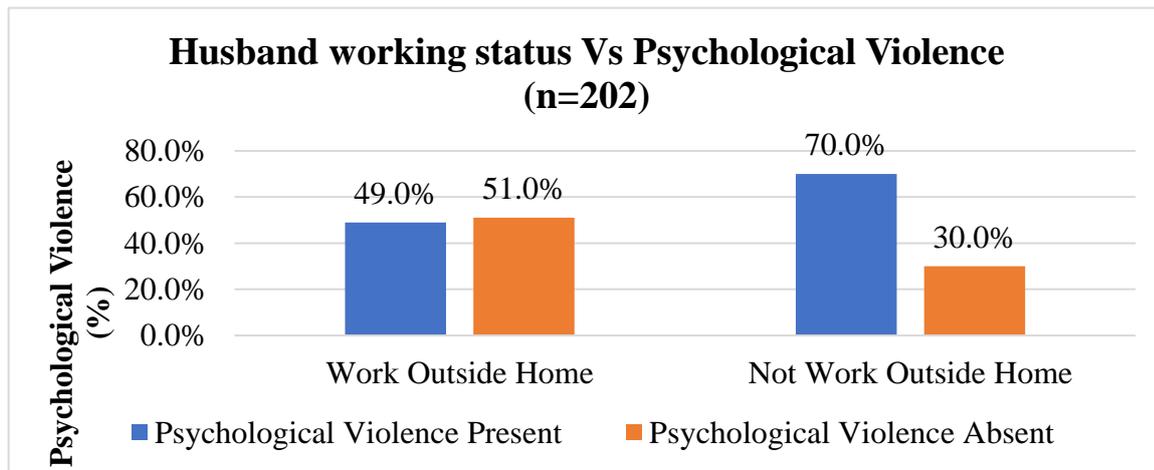
p-value = 0.088

Women Working status Vs Psychological Violence (n=202)



Husband working status Vs Psychological Violence:

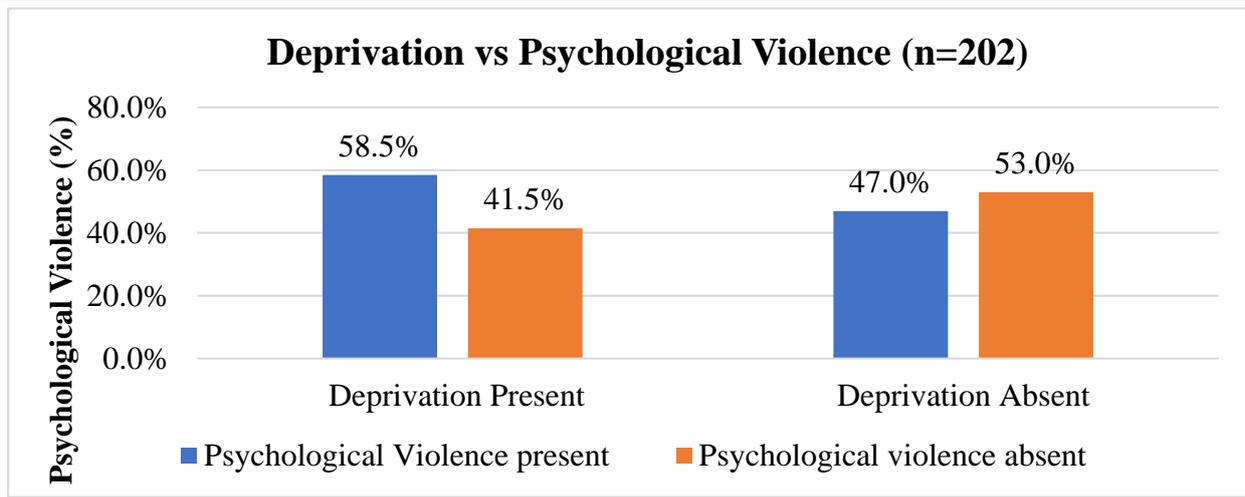
Working status	Psychological Violence Present	Psychological Violence Absent
	n (%)	n (%)
Work Outside Home	94 (49.0%)	98 (51.0%)
Not Working Outside Home	7 (70.0%)	3 (30.0%)
<u>p-value = 0.194</u>		



Deprivation Vs Psychological Violence:

Out of 53 households with deprivation, it was observed that females of 58.5% household faced psychological violence. Correlation between deprivation and psychological violence showed p-value of 0.15, which is statistically insignificant.

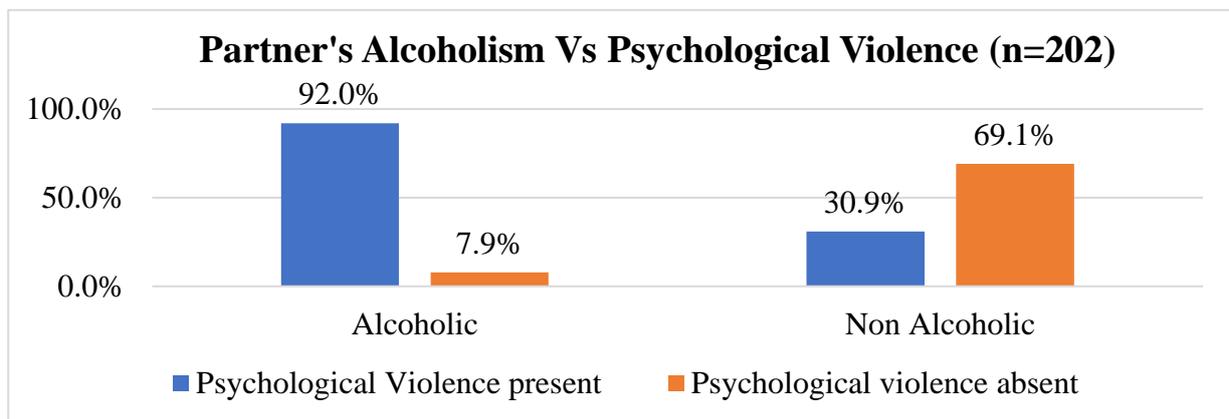
	Psychological Violence Present	Psychological Violence Absent
	n (%)	n (%)
Deprivation Present	31 (58.5%)	22 (41.5%)
Deprivation Absent	70 (47%)	79 (53%)
<u>p-value = 0.15</u>		



Partner’s Alcoholism Vs Psychological Violence:

Among the 63 alcoholic partners, 92.1% of their female counterparts faced psychological violence, while among the 139 non-alcoholic partners, 30.9% of their female counterparts faced psychological violence. Correlation between partner’s alcoholism and presence of psychological violence showed high statistical significance with p-value less than 0.0001.

Alcoholism	Psychological Violence Present n (%)	Psychological Violence Absent n (%)
Alcoholic	58 (92.02%)	5 (7.90%)
Non-Alcoholic	43 (30.90%)	96 (69.06%)
p value = <0.0000001		



Multi-Variate analysis:

Multi-variate analysis was performed to analyze the correlation between physical assault and various independent variables such as husband's education, deprivation and partner's alcohol consumption, that were statistically significant in bivariate analysis. The results obtained showed that correlation with partner's alcohol habit was highly statistically significant with p-value of less than 0.0001, while other variables namely, husband's education and deprivation were statistically insignificant with p-value of 0.729 and 0.084 respectively.

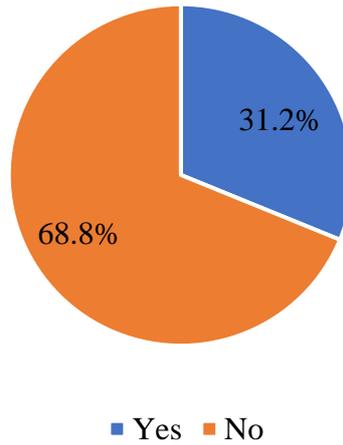
Significant parameters comparison with Physical Violence	Significance (p-value)	Odds Ratio	95% Confidence Interval for Exp(B)	
			Lower Bound	Upper Bound
Husband uneducated	.383	1.864	.461	7.542
Husband's education: Primary	.264	2.344	.526	10.450
Husband's education: Matriculation	.729	1.271	.326	4.951
Husband's education: Graduation	.	.	.	.
Deprivation absent	.084	.473	.202	1.106
Deprivation present	.	.	.	.
Absence of Partner's alcoholism	.000	.041	.018	.092
Presence of Partner's alcoholism	.	.	.	.

Prevalence of Alcoholism:

Prevalence of alcoholism was 31.2%, where 63 of the respondent's partners were alcoholic among the 202 respondents.

	Yes n (%)	No n (%)
Alcoholic Partner	63 (31.2%)	139 (68.8%)

Prevalence of Partner's Alcoholism (n=202)

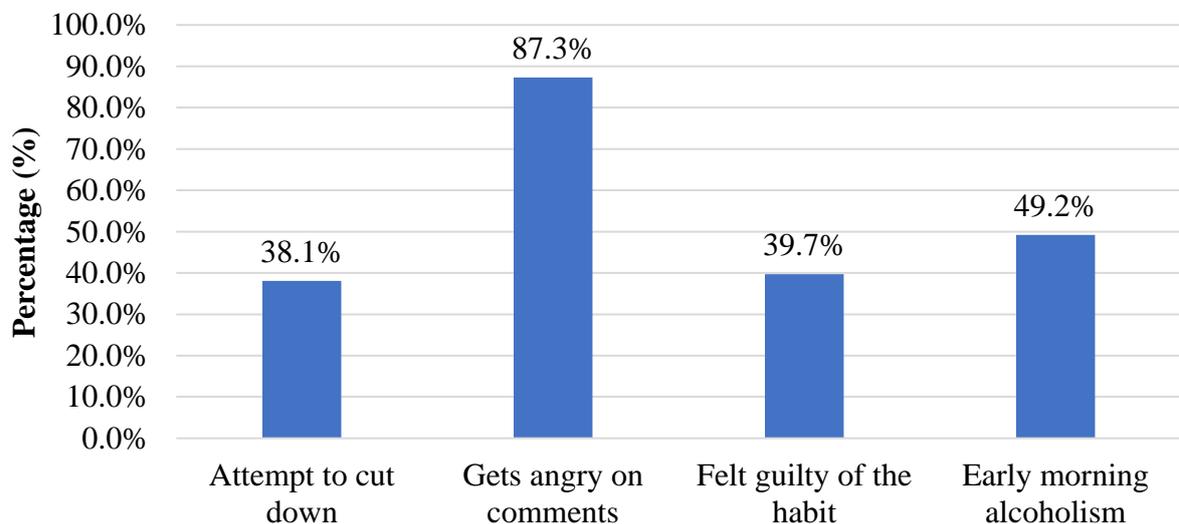


CAGE Test:

CAGE test was used to analyze the dependency on substance abuse. Among the 63 alcoholic partners, 38.1% of them attempted to cut down their alcohol habit, 87.3% of them agreed that their partner gets angry or annoyed when someone comments on their habit of drinking, 39.7% have ever felt guilty about their alcohol habit and 49.2% consumed alcohol early morning.

Questions	n (%)
Attempt to cut down	24 (38.1%)
Gets angry on comments	55 (87.3%)
Felt guilty of the habit	25 (39.7%)
Early morning alcoholism	31 (49.2%)

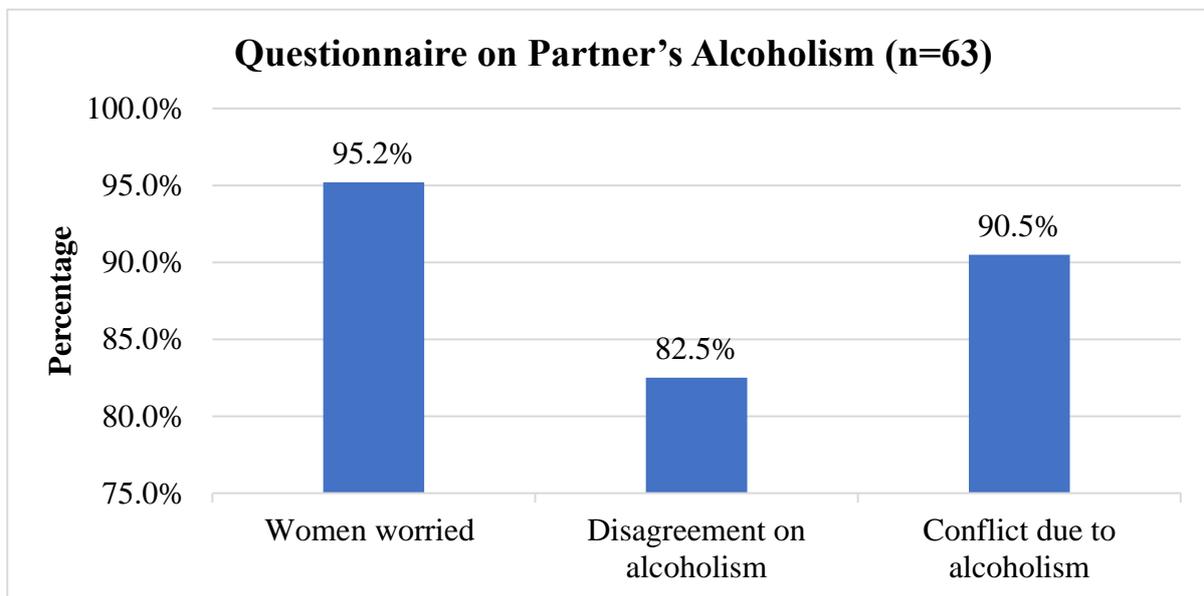
CAGE Test for alcoholism (n=63)



Issues with partner's alcoholism:

Among the 63 alcoholic partners, 95.2% of their female counter partners agreed that they felt worried about the partner's alcohol habit, about 82% of partners face disagreement on when, where and how to consume alcohol and about 90% of face conflict due to alcoholism.

Questions	Percentage	Number
Women worried	95.2%	60
Disagreement on alcoholism	82.5%	52
Conflict due to alcoholism	90.5%	57



Discussion

The present study assesses the prevalence of Gender Based Violence and various factors resulting to it.

Socio-demographic: (age and age at marriage)

In our study we assessed correlation of Gender Based Violence with women's and their husband's age, women's and their partner's age at marriage. From the findings of our study, we did not find any statistically significant correlation between age and age at marriage with the violence faced. This is in contrast with the earlier study, that showed that women who married as minors had higher odds of experiencing sexual, physical, and emotional IPV last year than women who married as adults. (9) Studies in the past have found that women defend violence against them.

Education:

In our study, the years of schooling of females had no correlation with any kind of violence faced by them. This can be due to the reason that 94.1% of females in our study were below matriculation and hence we were not able to compare it with the population who have higher degree of qualification.

In one of the earlier study it is stated that income, male unemployment, women's educational attainment, men's education, couple relative educational level, financial disparity and poverty indices are not positively associated to IPV in all sites. (35)

The correlation between partner's education and physical violence against women was found to be statistically significant in our study, with 93% of violence faced by women whose partners education was less than matriculation. Though our study did not depict correlation of GBV of all forms and education status of women and their husbands (correlation only seen between education status of husband and physical violence) but there have been studies which shows that low level of both less severe and severe domestic violence (DV) has been reported in couples with higher educated husband and wives as compared to the equally lower ones. (36)

Working status:

Analysis of occupational status of respondents' partners with gender-based violence showed that violence was greater among the females whose partners did not go for working outside home (34.9% of physical violence among whose partners worked outside home compared to 60% among whose partners did not work outside home). Our study also found that violence was greater where the husband worked outside home for less than four days compared to the counterparts who worked for more than four days per week. According to family stress theory, domestic violence is caused by the stress associated with unemployment and a lack of economic resources. This is similar to the study offers which provides compelling evidence that, women's employment in an environment of poverty and gender disparities may have significant negative effects on women and their chance of experiencing violent domestic abuse. Husbands' employment stability is also crucial in determining the risk of domestic violence; risk increased when husbands had trouble finding or keeping a job and decreased when they no longer faced such obstacles.

Women whose husbands had trouble finding or retain employment during one visit were more than twice as likely to experience violence during the next interview. Furthermore, women whose husbands had stable employment at the previous visit but newly had difficulty finding work had a 70% higher risk of violence than women whose spouses maintained the same employment status from the previous visit. In this study, as predicted, husbands' employment stability was linked to domestic violence. Working and earning for their family is a key social expectation of men once

married, and failure to meet this expectation can lead to social disapproval. Social rejection, feelings of inadequacy and frustration, as well as other stressors associated with poverty, may increase the likelihood of men perpetrating domestic violence. (37)

Deprivation:

Deprivation was assessed using the 2021 Multi-dimensional Poverty Index of UNDP, which included three variables namely, Health, Education and Standard of Living. Scores were assigned to each factor and the values ranged from 0 to 1.

For analyzing the prevalence of deprivation in our study, censored deprived score were taken into account, where the deprivation score was more than or equal to 0.3333. With bivariate analysis, our study showed that deprivation has statistically significant correlation with physical violence, where the physical violence was about 53% in deprived households in contrast to 30% of physical violence in households which were not deprived. This can be due to the reason that insecurities about livelihood and fulfilment of basic needs leads to frustration and lack of mental stability causing gender-based violence. This finding is similar to the earlier studies where potential links were explored that might influence or may have risk on partner violence, for which studies produced mixed results, varying with study site and measurement. (38)

Justification:

Among the 73 respondents who faced physical violence, around 76% of them justified getting beaten up by their partners. This can be due to the patriarchal mind-set of individuals, which makes them feel that this kind of atrocity is common and acceptable.

Alcoholism:

Findings from our study showed that correlation between partner's alcoholism and gender-based violence was highly statistically significant, with staggering 83% of physical violence seen among females whose partners were alcoholic compared to 15% of violence occurring to women whose partners were non-alcoholic. It was also seen that alcohol dependency highly increased the prevalence of violence and is strongly associated with the gender-based violence. All the respondents whose partners consumed alcohol early morning faced physical violence, which shows that alcohol dependency is one of the most important factors causing gender-based violence.

The present findings bring greater understanding of how husbands' alcohol use is associated with GBV faced by the women in her lifetime. The current research specifically shows that spouses who have alcohol-related issues are more likely to have wives who report experiencing IPV victimisation.

It has been demonstrated that the frequency of alcohol intake by the husband and the empowerment of women have a substantial impact on IPV experiences. A study showed that alcohol use by the husband was substantially correlated with IPV in all its forms, which is consistent with findings from earlier literature. (29)

When compared to women who were married to non-drinkers, women who were married to drinkers were twice as likely to suffer physical or sexual abuse. These findings are in line with earlier studies from India that indicated a strong correlation between men's alcohol use and the use of violence against wives / female companions. Adding to these findings, one study suggests that the probability of IPV increases as husbands drink more frequently. In particular, women whose husbands drank on four or more days per week reported IPV more frequently than women whose husbands drank on three or fewer days per week, implying a dose-response. (38)

xx. Conclusion

To achieve Sustainable Development Goal (SDG) 5, that works on gender equality it is important to work on the root cause factors that effects or cause gender inequality including gender-based violence. Understanding and working on various factors such as livelihood, standard of living, health, education, alcoholism, deprivation, etc. would be the most essential step for elimination of gender-based violence. Social norms and patriarchal mind-set of individuals that makes this atrocity acceptable and justified needs an earliest change to make SDG achievable.

Overall, these findings reinforce the importance of understanding social norms inclusive of gender norms and the potential value of norm-focused interventions for married girls as well as for child marriage prevention.

xxi. Limitations

Most of the population residing in Bhatti Mines work as daily wage labourers. Since these jobs are not stable, most of the men stay home for multiple days and hence created a hurdle for us to interact with the women and collect their data. Since gender-based violence is a sensitive topic, during the start of data collection probing the questions was an issue. After few community interactions women became comfortable to share details about their traumas. Hesitation of few women to report issues of GBV because of the fear that their husbands will be handed over to police and it might create more issues at their house became a barrier for collecting data and refusal of consent.

Also, all the dwellings at Bhatti Mines are illegally made, there is a constant fear of getting displaced from houses. This many times increases refusals regarding sharing their details. Early morning alcoholism caused hindrance in smooth data collection process.

We measured the independent variable (husband's recent alcohol use) using women's reports on their husband's behaviour; we did not interview male partners; which may have skewed the results to some extent. During our survey we found that 76% women justify the violence and abuse shown towards them. They justify their beating and slapping by husband and in-laws as part of relationships.

xxii. Recommendations

Despite the fact that NCRB is a passive surveillance source, efforts can be made to enhance the accuracy of the data that the police gather as part of their everyday duties in order to better utilise this information for action planning. The World Health Organization's standards for injury surveillance may offer helpful guidance on how to systematically gather data on domestic violence that is more comparable over time and space. Standardizations in data collection and data quality should be part of police training and sensitization programmes to reduce gender violence.(39)

Involvement and financial control can lower the incidence of domestic violence in rural India⁴¹. While study and intervention on such approaches have not been a top priority in India, they have shown promise in other countries, especially when combined with gender transformational approaches that help women understand that spousal abuse is unacceptable.

It is effective to change norms and beliefs for both men and women through interventions that aim to influence normative beliefs in the social environment, community-based normative change strategies that involve religious leaders, as well as workplace normative change strategies that involve employees. For these interventions, multimodal efforts (such as street theatre, festival activities, social groups, and individual counselling) in combination with participatory approaches (i.e., involving members of the community to guide the approach) were crucial to allow for various ways to engage people and change the climate. Research shows the value of governmental programmes in this regard, and resources from the government are also required to carry out these activities.(40)

Multiple-level interventions are required, including stronger enforcement of current laws against domestic violence as well as attention to marital stress and the structural factors that lead to it. However, enforcement won't be effective unless women have real protection, such as alternate housing options and adequate short- and long-term support systems.

Additionally, in the context of our study communities, it is crucial to create spaces where women may come together to connect and offer one another support. These spaces might be connected to

healthcare facilities or situated in places of worship or spiritual support. Hospitals, traditional healthcare facilities, health clinics, children's schools, and special cells for women experiencing abuse located in nearby police stations are a few potential options for intervention sites and support. Other options include temples/religious organisations, hospitals, and traditional health care providers.

Finally, there has to be an expansion of options for low-income women with little schooling to pursue economic and educational growth that will improve their employability. However, economic self-sufficiency strategies need to be proactive and empowering rather than just a reaction to the worsening economic conditions brought on by alcohol misuse.

The body of studies linking alcohol, violence, and increased sexual risk from forced sex and multiple partners is convincing. Intervention studies that concentrate on a better comprehension of how to efficiently set up and coordinate support networks for women are currently needed, as well as interventions that work with married couples, address gender norms, and are customised to address various stages in the progression of alcohol use and violence.(29)

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xxiv. Annexure

a) Consent form

Informed consent

Information by the interviewer

Namaste! We are students at a health management institute in Dwarka, New Delhi, named IIHMR. We want to ask you some questions related to a research project which we are working on under PSI. This project is regarding intimate partner conflict and how education, earning, and alcoholism among other things influence this.

Your participation in the survey is voluntary. The questions which will be asked to you usually take about 10-15 minutes. All the answers you give will be confidential and will not be shared with anyone other than the members of our survey team. Your name and identity will not be recorded. You may refuse to take part in the research or exit the survey at any time without any consequences. You are free to decline to answer any particular question you do not wish to answer for any reason. You will receive no direct or indirect benefits from participating in this research study. However, your responses may help us to learn more about the subject which may also be beneficial to you in terms of policy improvements in your area in the future. Thereby we request you to please participate in this study.

In case of any query, you may contact the institute at 01130418900 or IIHMR, Plot no 3, Sector 18 A, Dwarka Phase II, New Delhi 110075.

Informed Consent by Participant

"I understand that my participation in the study is purely voluntary, and I may choose to withdraw from the study at any point if necessary. I also understand that the information provided by me will be kept confidential and will be used for this research only.

The details of this study have been explained to me. I hereby provide my voluntary consent to participate in the above research study."

(The sign of the participant)

सूचित सहमति

साक्षात्कारकर्ता द्वारा जानकारी

नमस्ते! हम आईआईएचएमआर नामक द्वारका, नई दिल्ली में एक स्वास्थ्य प्रबंधन संस्थान में छात्र हैं। हम आपसे एक शोध परियोजना से संबंधित कुछ प्रश्न पूछना चाहते हैं, जिस पर हम पीएसआई के तहत काम कर रहे हैं। यह परियोजना अंतरंग साथी टकराव के बारे में है और अन्य बातों के अलावा शिक्षा, कमाई और शराब इसे कैसे प्रभावित करते हैं। सर्वेक्षण में आपकी भागीदारी स्वैच्छिक है। आपसे जो प्रश्न पूछे जाएंगे, उनमें आमतौर पर लगभग 10-15 मिनट का समय लगता है। आपके द्वारा दिए गए सभी उत्तर गोपनीय होंगे और हमारी सर्वेक्षण टीम के सदस्यों के अलावा किसी अन्य के साथ साझा नहीं किए जाएंगे। आपका नाम और पहचान दर्ज नहीं की जाएगी। आप बिना किसी परिणाम के किसी भी समय शोध में भाग लेने या सर्वेक्षण से बाहर निकलने से इंकार कर सकते हैं। आप किसी भी विशेष प्रश्न का उत्तर देने से इनकार करने के लिए स्वतंत्र हैं जिसका आप किसी भी कारण से उत्तर नहीं देना चाहते हैं। इस शोध अध्ययन में भाग लेने से आपको कोई प्रत्यक्ष या अप्रत्यक्ष लाभ प्राप्त नहीं होगा। हालाँकि, आपकी प्रतिक्रियाएँ हमें उस विषय के बारे में अधिक जानने में मदद कर सकती हैं जो भविष्य में आपके क्षेत्र में नीतिगत सुधारों के संदर्भ में आपके लिए फायदेमंद भी हो सकता है। अतः हम आपसे अनुरोध करते हैं कि कृपया इस अध्ययन में भाग लें।

किसी भी प्रश्न के मामले में, आप संस्थान से 01130418900 या IIMR, प्लॉट नंबर 3, सेक्टर 18 ए, द्वारका फेज II, नई दिल्ली 110075 पर संपर्क कर सकते हैं।

प्रतिभागी द्वारा सूचित सहमति

“मैं समझता हूँ कि अध्ययन में मेरी भागीदारी पूरी तरह से स्वैच्छिक है, और यदि आवश्यक हो तो मैं किसी भी समय अध्ययन से हटने का विकल्प चुन सकता हूँ। मैं यह भी समझता हूँ कि मेरे द्वारा प्रदान की गई जानकारी को गोपनीय रखा जाएगा और इसका उपयोग केवल इस शोध के लिए किया जाएगा।

इस अध्ययन का विवरण मुझे समझाया गया है। मैं उपरोक्त शोध अध्ययन में भाग लेने के लिए अपनी स्वैच्छिक सहमति प्रदान करता हूँ।”

(प्रतिभागी के हस्ताक्षर)

b) Study Tools

Pre-formed standardized questionnaire given by Murray A. Straus, University of New Hampshire will be used to analyze the prevalence of gender-based violence, which will include emotional, physical and sexual violence.

Q1 How old are you?

Q2 How old is your husband?

Q3 What was your age at marriage?

Q4 What was your husband age at marriage?

Q5 How many years of schooling/ education have you done?

Q6 How many years of schooling/ education has your partner done?

Q7 What is your income?

Q8 What is your husband's income?

Q9 (A) Do you work outside your home?

Q9 (B) If Yes, How many hours in a day, and how many days in a week?

Q10 (A) Does your husband work outside your home?

Q10 (B) If Yes, How many hours in a day, and how many days in a week?

Q 11 Since you completed 15 years of age, have you been beaten or mistreated physically by any person?"

If Yes, Q 12 Who has beaten you or mistreated you physically?

if they replied "boyfriend" or "husband" or "ex-husband."

THE CTS2S SHORT FORM

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1-800-648-8857; custsvc@wpspublish.com

Murray A. Straus, University of New Hampshire

murray.straus@unh.edu <http://pubpages.unh.edu/~mas2>

No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please mark how many times you did each to these things in the past year, and how many times your partner did them in the past year. If you or your partner did not do one of these things in the past year, but it happened before that, mark a "7" on your answer sheet for that question. If it never happened, mark an "8" on your answer sheet.

How often did this happen?

1 = Once in the past year

2 = Twice in the past year

3 = 3-5 times in the past year

4 = 6-10 times in the past year

5 = 11-20 times in the past year

6 = More than 20 times in the past year

7 = Not in the past year, but it did happen before

8 = This has never happened

1. I explained my side or suggested a compromise for a disagreement with my partner	1	2	3	4	5	6	7	8
2. My partner explained his or her side or suggested a compromise for a disagreement with me	1	2	3	4	5	6	7	8
3. I insulted or swore or shouted or yelled at my partner	1	2	3	4	5	6	7	8
4. My partner insulted or swore or shouted or yelled at me	1	2	3	4	5	6	7	8
5. I had a sprain, bruise, or small cut, or felt pain the next day because of a fight with my partner	1	2	3	4	5	6	7	8
6. My partner had a sprain, bruise, or small cut or felt pain the next day because of a fight with me	1	2	3	4	5	6	7	8
7. I showed respect for, or showed that I cared about my partner's feelings about an issue we disagreed on	1	2	3	4	5	6	7	8
8. My partner showed respect for, or showed that he or she cared about my feeling about an issue we disagreed on	1	2	3	4	5	6	7	8
9. I pushed, shoved, or slapped my partner	1	2	3	4	5	6	7	8
10. My partner pushed, shoved, or slapped me	1	2	3	4	5	6	7	8
11. I punched or kicked or beat-up my partner	1	2	3	4	5	6	7	8
12. My partner punched or kicked or beat-me-up	1	2	3	4	5	6	7	8
13. I destroyed something belonging to my partner or threatened to hit my partner	1	2	3	4	5	6	7	8
14. My partner destroyed something belonging to me or threatened to hit me	1	2	3	4	5	6	7	8
15. I went see a doctor (M.D.) or needed to see a doctor because of a fight with my partner	1	2	3	4	5	6	7	8
16. My partner went to see a doctor (M.D.) or needed to see a doctor because of a fight with me	1	2	3	4	5	6	7	8
17. I used force (like hitting, holding down, or using a weapon) to make my partner have sex	1	2	3	4	5	6	7	8
18. My partner used force (like hitting, holding down, or using a weapon) to make me have sex	1	2	3	4	5	6	7	8
19. I insisted on sex when my partner did not want to or insisted on sex without a condom (but did not use physical force)	1	2	3	4	5	6	7	8
20. My partner insisted on sex when I did not want to or insisted on sex without a condom (but did not use physical force)	1	2	3	4	5	6	7	8

Screening tools for alcoholism - CAGE (Family member report and the Family/Relational Drinking Conflict Questions)

CAGE Questions (Family Member Report)

- Has your partner ever attempted to **C**ut down on his/her drinking?
- Has your partner ever become **A**ngry or upset when others comment on his/her drinking?
- Has your partner ever felt bad or **G**uilty about his/her drinking?
- Does your partner ever have a drink first thing in the morning (**E**ye opener)?

IF there is a positive response to any of the questions, ask whether the incident(s) happened during the past year.

See the box "Interpreting Risk from the Screening Questions" above to make decisions about further assessments.

Family/Relational Drinking Conflict Questions (These questions, when asked, may be used to reference "anyone" in the family, or may be asked specifically about the spouse.)

- Have you felt worried or upset about the drinking habits of anyone in your family?
- Are there disagreements in your family about how, when, where, or why alcohol is used?
- Do the drinking habits of anyone in your family cause tension or conflict at home?

IF there is a positive response to any of the CAGE questions, ask whether the incident(s) happened during the past year.

Interpreting Risk from the Screening Questions

An individual may be at risk for alcohol-related problems if alcohol consumption is:

For adult males less than 65 years old:

- 14 or more drinks per week, or
- 5 or more drinks during any given day

For all adult females and males 65 years or older:

- 7 or more drinks per week, or
- 4 or more drinks during any given day

Or if:

One or more responses to the CAGE questions referring to the past year were positive.

2021 Global Multidimensional Poverty Index (MPI) of UNDP

The dimensions, indicators, deprivation cutoffs, and weights of the global Multidimensional Poverty Index

Dimensions of Poverty	Indicator	Deprived if living in the household where...	Weight
Health	Nutrition	Any adult under 70 years of age or any child for whom there is nutritional information is undernourished. ¹	1/6
	Child mortality	Any child under the age of 18 years has died in the family in the five-year period preceding the survey. ^{2,3}	1/6
Education	Years of schooling	No household member aged 'school entrance age + six' ⁴ years or older has completed at least six years of schooling.	1/6
	School attendance	Any school-aged child is not attending school up to the age at which he/she would complete class eight. ⁵	1/6
Standard of living	Cooking Fuel	The household cooks with dung, wood, charcoal or coal.	1/18
	Sanitation	The household's sanitation facility is not improved (according to SDG guidelines) or it is improved but shared with other households. ⁶	1/18
	Drinking Water	The household does not have access to improved drinking water (according to SDG guidelines) or improved drinking water is at least a 30-minute walk from home, round trip. ⁷	1/18
	Electricity	The household has no electricity. ⁸	1/18
	Housing	At least one of the three housing materials for roof, walls and floor are inadequate: the floor is of natural materials and/or the roof and/or walls are of natural or rudimentary materials. ⁹	1/18
	Assets	The household does not own more than one of these assets: radio, television, telephone, computer, animal cart, bicycle, motorbike or refrigerator, and does not own a car or truck. ¹⁰	1/18

1. Adults 19 to 70 years of age (229 to 840 months) are considered undernourished if their Body Mass Index (BMI) is below 18.5 kg/m². Those 5 to 19 years (61 to 228 months) are identified as undernourished if their age-specific BMI values are below minus two standard deviations from the median of the reference population (<https://www.who.int/growthref/en/>). In the majority of the countries, BMI-for-age covered people aged 15 to 19 years, as anthropometric data was only available for this age group; if other data were available, BMI-for-age was applied for all individuals 5 to 19 years. Children under 5 years (60 months and under) are considered undernourished if their z-score for either height-for-age (stunting) or weight-for-age (underweight) is below minus two standard deviations from the median of the reference population (<https://www.who.int/childgrowth/software/en/>). Nutritional information is not provided for households without members eligible for measurement, these households are assumed to be not deprived in this indicator.
2. All reported deaths are used if the date of child's death is not known.
3. Child mortality information is typically collected from women of reproductive ages 15-49 years. Households without women of such ages do not provide information about child's deaths and are assumed to be not deprived in this indicator.
4. This country-specific age cutoff was introduced in 2020. Previously, the age cutoff was 10 years which did not recognize the fact that by age 10 children do not normally complete 6 years of schooling.
5. Source for official entrance age to primary school: United Nations Educational, Scientific and Cultural Organization, Institute for Statistics database. Education systems [UIS, <http://data.uis.unesco.org/?ReportId=163>].
6. A household is considered to have access to improved sanitation if it has some type of flush toilet or latrine, or ventilated improved pit or composting toilet, provided that they are not shared. If the survey report uses other definitions of improved sanitation, we follow the survey report.
7. A household has access to improved drinking water if the water source is any of the following types: piped water, public tap, borehole or pump, protected well, protected spring or rainwater, and it is within 30 minutes' walk (round trip). If the survey report uses other definitions of improved drinking water, we follow the survey report.
8. A few countries do not collect data on electricity because of 100% coverage. In such cases, we identify all households in the country as non-deprived in electricity.
9. A household is considered deprived if the dwelling's floor is made of mud/clay/earth, sand or dung; or if the dwelling has no roof or walls or if either the roof or walls are constructed using natural materials such as cane, palm/trunks, sod/mud, dirt, grass/reeds, thatch, bamboo, sticks or rudimentary materials such as carton, plastic/ polythene sheeting, bamboo with mud/stone with mud, loosely packed stones, uncovered adobe, raw/reused wood, plywood, cardboard, unburnt brick or canvas/tent.
10. Television (TV) includes smart TV and black and white TV, telephone includes cell phones, computer includes tablets and laptops, and refrigerator includes freezers.

c) Case Study

A WARRIOR'S BATTLE AGAINST DOMESTIC VIOLENCE

Dr. Jagriti Punia

INTRODUCTION



Delhi being the capital of India, is often associated with luxury, education, development, etc. Still, there is an area on the outskirts that does not seem to be a part of the city. The reason being this area is highly backward and under-developed. The area we are here talking about is the Bhatti mines located in the Southern part of Delhi. One major hurdle in the development of this area is domestic violence. since the age of 15. To study the intensity of domestic violence, a study was done on one of the woman residents of this area name Maya (name changed), who is 30 years old. Maya suffered verbal, physical and financial abuse at the hands of her husband and her in-laws.

National Family Health Survey (NFHS-5) data revealed that around 30% of women in India were exposed to spousal violence. The data showed that violence was comparatively more in rural areas (31.6%) compared to urban areas (24.2%). In Delhi, violence against women were recorded at 22.6%.

THE REASONS I CHOSE THIS FOR THE CASE STUDY:

I came across Maya while collecting the data for the Gender based violence study in Bhatti mines. She is not just a victim, but a warrior who has fought bravely against the physical violence that she has been subjected to and is still fighting. She is someone who is not ready to give up on her fight against the violence and harassment that she is facing from her husband and her in-laws. Her husband is a drunkard and do not support the family, financially. There have been times when she has slept empty stomach. Her husband is influenced by her in-laws, the reason being that they

want to have control over him so that they can take over their property in the Bhatti mines. This is how there are multiple people she has to fight with for herself and for the safety of her kids. She cannot even go back to her parents as her father himself is a drunkard who also gets influenced by her in-laws.

One day her husband and her in-laws started beating her up, the assault caused her forehead to bleed. She was asked to leave the house but she refused and said that it's her house too and she wouldn't leave it no matter what. After this incident, her husband left the house and is not living with them but her in-laws continue to trouble her. Her husband visits them once a month but only to physically abuse her and say hurtful things. Now, Maya has decided to fight her own battle and has started working as a daily wage worker to support herself and her kids.

INTERVENTIONS THAT HAVE BEEN DONE AND THAT COULD BE DONE:

A few days back, when her husband, along with her in-laws attacked her, she took the help of the Mahila panchayat of the area and also reported the incident to the police. The officials gave a stern warning to the in-laws. But the warnings are not enough as her in-laws leave no stone unturned to trouble her in one way or the other. This way, she, along with her kids, is always under threat.

Maya is in search of a permanent solution to this issue for which she has reached out to her sister. Her sister has suggested her to sell the house, so that she can move to a different location and start afresh.

I gave her counselling regarding her problem. I suggested her that she should separate from her husband if he is not ready to improve and continuously goes on harassing her.

OTHER OBSERVATIONS, REFLECTIONS, AND LEARNINGS:

For Maya, the saga of abuse was an everyday event until she took a firm stand against it and refused to leave the house, followed by calling the police. Of the women surveyed under the NFHS-5, those from 18 states across the country, 52% women considered beaten by husband to be justified and only less than 1% reported complaints to police. So, the first step for women is to realise that any sort of violence is not justifiable and that they should take a firm stand against it.

In case of Maya, it was observed that the fights worsened to physical abuse often when her husband was drunk. Women, living in vulnerable situations, both economically and otherwise, have to contend with the alcoholic male member of the family who abuse, beat and drain his earnings down a bottle of hooch. To deal with this, the governing bodies should look into the reorientation of the de-addiction strategies. Also, an intervention that is focused on improving a couple's relationship (such as a couple-empowerment programme) is needed to address this issue.

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