

#### **Centre for Alcohol Policy Research** School of Psychology and Public Health

ALCOHOL'S IMPACT ON THE RIGHTS OF WOMEN AND CHILDREN IN THE GLOBAL SOUTH

## A literature review

Anne-Marie Laslett and Megan Cook

ENQUIRIES
Anne-Marie Laslett
Research Fellow
La Trobe University
Victoria 3086

T +61 3 9479 8726 E a.laslett@latrobe.edu.au latrobe.edu.au

Published by FORUT - Campaign for Development and Solidarity

This publication is a part of FORUT's information campaign, funded by the Norwegian Agency for Development Cooperation (NORAD).

Text: Dr Anne-Marie Laslett, La Trobe University and Curtin University and Ms Megan Cook, La Trobe University

FORUT contact: Øystein Bakke, oystein.bakke@forut.no

FORUT webpage: www.forut.no

ISBN 978-82-999754-8-3

© FORUT, Gjøvik, Norway, November 2019

Please appropriately reference and cite document contents if utilised in other publications and materials.

Can be downloaded from www.forut.no and www.oljefondetsalkoholproblem.no

#### **FORUT**

FORUT is a Norwegian aid organisation and its mission is to create conditions – through mobilisation, facilitation and organization – under which people, especially women and children are able to reach their full potential. Believing that people should be able to claim their rights and fight poverty, injustice and oppression by democratic and peaceful means FORUT works with people in need to develop tools for change and the power to change their lives for the better. FORUT's work in development and cooperation is divided into five programme areas; 1) Women and gender equality, 2) Children's rights, and 3) Alcohol, Drugs and Development (ADD); 4) Livelihoods (LH); and 5) Civil Society & Good Governance (CSGG).

FORUT views alcohol as an obstacle to sustainable development, especially to the achievement of the following Sustainable Development Goals, related to the rights of women and children;

- SDG 3 Ensure healthy lives and promote wellbeing for all at all ages
- SDG 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- SDG 5 Achieve gender equality and empower all women and girls, especially, but not limited to;
  - 5.1 End all forms of discrimination against all women and girls everywhere
  - 5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation
- SDG 16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build
  effective, accountable and inclusive institutions at all levels; especially, but not limited to;
  - 16.1 Significantly reduce all forms of violence and related death rates everywhere.
  - 16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children.

#### **About the Centre for Alcohol Policy Research**

The Centre for Alcohol Policy Research (CAPR) is a world-class alcohol policy research institute, led by Professor Emmanuel Kuntsche. The Centre, which receives funding from the Foundation for Alcohol Research and Education (FARE) and La Trobe University, examines alcohol-related harms and the effectiveness of alcohol-related policies. CAPR not only contributes to policy discussions in Australia but also contributes to international studies of significance for the World Health Organization.

### **About the National Drug Research Institute**

The National Drug Research Institute (NDRI) is one of the largest centres of alcohol and other drug research expertise in Australia. NDRI is based at Curtin University in Perth, Western Australia, with a satellite office in Melbourne, Victoria. NDRI is an integral part of the national strategy aimed at minimising the harm associated with legal and illegal drug use in Australia. NDRI's role is to conduct and disseminate high quality research that contributes to effective policy, strategies and practice to prevent and reduce harmful alcohol and other drug use. NDRI's mission is to conduct and disseminate research that supports evidence informed policy, strategies and practice approaches to prevent and minimise alcohol and other drug-related health, social and economic harms among individuals, families and communities in Australia.

#### PURPOSE OF THIS REPORT

The report produced will be used to support FORUT's ongoing advocacy work to build increased understanding of the effect of alcohol in developing societies.

#### Disclaimer

The information contained in this publication is indicative only. While every effort is made to provide full and accurate information at the time of publication, the University does not give any warranties in relation to the accuracy and completeness of the contents. The University reserves the right to make changes without notice at any time in its absolute discretion, including but not limited to varying admission and assessment requirements, and discontinuing or varying courses. To the extent permitted by law, the University does not accept responsibility of liability for any injury, loss, claim or damage arising out of or in any way connected with the use of the information contained in this publication or any error, omission or defect in the information contained in this publication.

La Trobe University is a registered provider under the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS). CRICOS Provider 00115M

## Table of contents

EXECUTIVE SUMMARY	2
ACRONYMS & ABBREVIATIONS	4
1. BACKGROUND	5
1.1 Alcohol's harm to women and children	5
1.2 Alcohol's impact on the rights of women and children	5
2 PURPOSE OF THIS REPORT	6
3. METHODS OF THE LITERATURE REVIEW	6
4. REVIEW FINDINGS: THE IMPACT OF ALCOHOL ON WOMEN AND CHILDREN IN THE GLOBAL SOUTH	9
4.1 ALCOHOL'S IMPACT ON THE WELLBEING AND QUALITY OF LIFE OF WOMEN IN THE GLOBAL SOUTH	10
4.1.1 How women's own drinking and others' drinking affects their wellbeing and quality of life	10
4.2 ALCOHOL-RELATED HARMS TO THE HEALTH OF WOMEN	11
4.2.1 How women's own drinking affects their own physical and mental health	11
4.2.2 How others' drinking affects women's physical and mental health	13
4.3 ALCOHOL-RELATED HARMS TO THE HEALTH OF ADOLESCENTS	14
4.4 ALCOHOL-RELATED HARMS TO CHILDREN FROM OTHERS' DRINKING	15
4.4.1 How others' drinking affects children's physical and mental health	15
4.5 ALCOHOL'S IMPACT ON WOMEN AND CHILDREN'S RISKS OF AND HARMS FROM HIV/AIDS AND OTHER SEXUALLY TRANSMISSABLE DISEASES	18
4.6 DOES DRINKING IN THE FAMILY AFFECT THE EDUCATION OF WOMEN AND CHILDREN?	20
4.7 IS ALCOHOL RELATED TO GENDER EQUALITY AND EMPOWERMENT OF WOMEN AND GIRLS?	20
4.7.1 Gender–based violence and discrimination against women and girls	20
4.7.2 Intimate partner violence	21
5. DISCUSSION	27
6. REFERENCES	30

## **EXECUTIVE SUMMARY**

This report aims to build increased understanding of the effects of alcohol on women and children in the Global South. The scope of the report includes harms from one's own and others' drinking and seeks to identify the types of health and social harms experienced by women and children (including adolescent children), and the ways in which one's own drinking and others' drinking may have impacted upon women's and children's rights to health, wellbeing, safety and their potential for development. Hence the focus of this report is to identify the:

- impacts of one's own and others' drinking on the wellbeing and quality of life of women and children
- impact of drinking on educational outcomes for women and children
- harms to women's physical and mental health due to their own and others' drinking
- violence against women and children due to others' drinking.

A rapid review of qualitative, quantitative and mixed methods studies published between January 2008 and July 2018 (inclusive) was undertaken in October-December 2018 to identify harms to women and children due to alcohol in countries in the Global South<sup>1</sup>. From the 4,811 articles ascertained, the review identified 275 publications about harms to women and children from their own and others' drinking in the Global South. The following themes or sub-groupings of harm emerged: harms to women; harms to adolescents; harms to children; harms to families; intimate partner and gender-based violence; the impact of drinking (own or others' drinking) on HIV AIDS; traffic deaths and injuries; and miscellaneous social harms, e.g., initiating sex work to pay for alcohol, stigma, urbanization and community impacts.

Women's own drinking results in a range of physical and mental health problems; for instance, women are at greater risk of overdose from alcohol intoxication and breast cancer because of biological sex differences. The increased risk of many of these harms for women is seldom elucidated in LMIC. Women in LMIC are often unaware of the risks to their own and their children's health associated with drinking. Women are not fully informed of the risks and consequences associated with the alcoholic products they consume.

Parental drinking also has the potential to increase the risks of problems for their children and others in their family, work and community networks. Fetal Alcohol Spectrum Disorder (FASD) is a significant problem for children of heavy drinking mothers, and the prevalence of FASD, because of its serious and long-term effects, deserves special attention. Children and adolescents who live with heavy drinking parents or other family members are at greater risk of health and social problems, more likely to be abused and neglected and less likely to complete school or succeed at it. Across the world an estimated 275,000,000 children are victims of violence in their homes. Parental heavy drinking, along with heavy drinking of others in the family, increases the risk of child abuse and neglect, both directly from drinking caregivers, and from others whom children are not protected from as they are less well supervised. Children are also at greater risk of injury and disease if their needs are not met by caregivers whose care is compromised by drinking.

Adolescents and young people are highlighted in this report as a group with increased alcohol-related problems. Young people have lower tolerance to alcohol and alcohol compromises decision making. Young people are also at risk in LMICs, where drinking age and serving practices are often unregulated and, even if regulated, unenforced. Early initiation of drinking among adolescents is associated with increased risk of dependence and other alcohol-related problems in adulthood, and contexts in which adolescents in LMIC drink are likely to bring higher risks, for example of sexual risk taking and consequent exposure to sexually transmissible diseases and sexual abuse.

In HIC, women are more likely to be at risk of homicide and other forms of severe violence from their intimate partners than men and drinking by male partners and both partners appears to increase the risk of severe intimate partner violence. Moreover, the prevalence and severity of violence against women appears to be greater in LMIC than in HIC. Women and

<sup>&</sup>lt;sup>1</sup> The Global South has come into use primarily as an alternative to classifying countries only according to levels of development. This review includes countries with low or middle incomes according to their gross national income per capita in US dollars as reported in the Global Status Report on Alcohol 2018.

<sup>1.</sup> World Health Organization, Global status report on alcohol and health 2018. 2018: World Health Organization.

girls have the right to be safe from violence, regardless of their own drinking patterns, yet in some circumstances one's own intoxication compromises one's ability to negotiate safe sex. More saliently, alcohol consumption by men increases the prevalence of perpetration against women and the severity of injury that results. The intersection of drinking with aggressive traits and entitled gendered attitudes results in increased prevalence and severity of harm to women in LMIC.

Alcohol was associated with a vast number of health and social problems that substantially affect women, adolescents and children in the Global South. These health and social problems cause death and disability and cut short or compromise the quality of life of women and children. For instance, the health of women in the Global South is affected by both their own drinking and that of others in their families and communities. The Global Burden of Disease Studies identified numerous ways in which alcohol is attributed to the death, disease and injury of women, including by increased risk of exposure to HIV-AIDs and gender-based violence. Children and adolescents who live with heavy drinking parents or other family members, or who begin drinking early themselves, are at greater risk of health and social problems, more likely to be abused and neglected and less likely to complete school or succeed at it. In these ways the consumption of alcohol compromises the rights women and children have to health, safety and development to their full potential.

A key way in which the United Nations' sustainable development goals (SDGs 3, 4, 5 and 16 in particular), can be met, is to reduce health-related and social harms, including gender-based violence of women and abuse of children due to alcohol in the Global South. Reduction of heavy drinking in the Global South – of both one's own drinking and others' drinking – will support attainment of women's and children's rights to health, wellbeing, safety and their potential for development to the fullest.

## **ACRONYMS & ABBREVIATIONS**

FAS Fetal Alcohol Syndrome

FASD Fetal Alcohol Spectrum Disorder

HIC High Income Countries

LMIC Low and Middle Income Countries

PTSD Post-Traumatic Stress Disorder

SDG Sustainable Development Goals

UN United Nations

WHO World Health Organization

## 1. BACKGROUND

#### 1.1 ALCOHOL'S HARM TO WOMEN AND CHILDREN

Alcohol has a range of negative impacts on women and children. In 2016, the harmful use of alcohol resulted worldwide in 3 million deaths (5.3% of all deaths), with women experiencing 0.7 million deaths and 26.1 disability-adjusted life-years (DALYs) attributable to alcohol [1]. Drinking by women and children themselves can result in greater relative physiological, psychological and pathological effects because of their lighter bodyweight, and because of physiological sex and age differences in body composition. Perhaps partly as a consequence of these factors, near universally women are more likely to be abstainers, and more likely to drink less than men do if they do drink. And, while drinking by children underage is a large and significant problem globally, children are also less likely to drink than young adults. Women and children are not only physically affected by alcohol in different ways to adult men; women and children are affected differentially by the impact of others' drinking. So, while men are more likely to be harmed (by other men) than women in heavy drinking situations in public, because men drink alcohol more commonly (and more heavily), women and children are often affected by men's drinking, regardless of their own drinking patterns.

Women's own drinking results in a range of physical and mental health problems, for instance women are more at risk of overdose from alcohol intoxication, and any drinking increases the risk of breast cancer because of biological sex differences. The increased risk of many of these harms for women is likely to be similar in high-income countries (HIC) and low- and middle-income countries (LMIC)<sup>2</sup>, yet knowledge of the prevalence of a range of alcohol-related health conditions is seldom a part of the public debate in LMIC. Early initiation of drinking among children is associated with increased risk of dependence and other alcohol-related problems in adulthood, and contexts in which children in LMIC drink are likely to bring higher risks. Women's drinking also has the potential to increase the risks of problems for their own children and others in their family, work and community networks. Fetal Alcohol Spectrum Disorder (FASD) is a significant problem for children of heavy drinking mothers; the prevalence of FASD, because of its serious and long-term effects, deserves special attention, particularly when it is combined with ongoing exposure to child abuse and neglect.

In HIC, women are more likely to be at risk of severe problems, including homicide and violence, from men than from women, and drinking by male partners and both partners increases the risk of severe intimate partner violence. Moreover, substantial proportions of child abuse and neglect cases are associated with alcohol abuse, and the percentage of cases of child maltreatment that involve alcohol abuse increases with severity of the outcome [2]. Whether the same patterns are evident in LMIC will be explored in the discussion section of this report.

#### 1.2 ALCOHOL'S IMPACT ON THE RIGHTS OF WOMEN AND CHILDREN

The range of ways in which women and children may be affected by alcohol are manifold and the magnitude and severity of this harm vary substantially across the world. Attention in this report is directed to harms which have the potential to impact on the health and human rights of women and children. Accordingly, the preamble of the United Nation's Universal Declaration on Human Rights is germane here. It states that human beings shall enjoy freedom of speech and belief and freedom from fear and want. Regarding equality of human rights, it adds,

"All human beings are born free and equal in dignity and rights" and that "everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status..." [3].

The United Nations' Convention on the Rights of the Child also crucially spells out the basic human rights that children have everywhere:

<sup>&</sup>lt;sup>2</sup> Throughout this report we consistently describe our findings in terms of those from low and middle income countries (LMIC), although we use the term, the Global South, both in our aims, executive summary and our discussion.

"the right to survival; to develop to the fullest; to protection from harmful influences, abuse and exploitation; and to participate fully in family, cultural and social life" [4, p.1].

In a variety of ways, one's own drinking and others' drinking may impact upon the rights of women and children, particularly where the safety of women and children is threatened, and the development of children may be compromised. Problematic drinking has the potential to affect oneself and others, including in parenting, relationships, family and community life.

FORUT has previously identified alcohol as a potential obstacle to sustainable development, especially to the achievement of a number of the United Nation's Sustainable Development Goals (SDG) related to the rights of women and children. This report focuses on identifying literature relevant to the SDGs that seek to:

- Ensure healthy lives and promote wellbeing for all at all ages (SDG 3)
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. (SDG4)
- Achieve gender equality and empower all women and girls (SDG 5)-, especially, but not limited to those that seek to
  - o 5.1 End all forms of discrimination against all women and girls everywhere
  - 5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation
- Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build
  effective, accountable and inclusive institutions at all levels (SDG 16); especially, but not limited to goals that aim to -
  - o 16.1 Significantly reduce all forms of violence and related death rates everywhere.
  - o 16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children.

## 2 PURPOSE OF THIS REPORT

This report aims to build increased understanding of the effects of alcohol on women and children in the Global South. The scope of the report includes harms from one's own and others' drinking and seeks to identify the types of health and social harms experienced by women and children (including adolescent children), and the ways in which one's own drinking and others' drinking may have impacted upon women's and children's rights to health, wellbeing, safety and their potential for development. Hence the focus of this report is to identify the:

- Impacts of one's own and others' drinking on the wellbeing and quality of life of women and children
- The impact of drinking on educational outcomes for women and children
- Harms to women's physical and mental health due to their own and others' drinking
- Violence against women and children due to others' drinking.

## 3. METHODS OF THE LITERATURE REVIEW

#### 3.1 Search overview

A rapid review of studies published between January 2008 and July 2018 (inclusive) was undertaken in October-December 2018 using the Medline, CINAHL, PsycInfo and Web of Science databases. Only academic peer-reviewed studies were included, excluding books and theses. Studies not published in the English language were excluded, as were studies carried out in high income countries. Countries were classified as low, middle or high income status according to their gross national income per capita in US dollars as reported in the Global Status Report on Alcohol 2018 [1]. Qualitative, quantitative and mixed methods publications were included.

#### 3.2 Search Strategy

The strategy was conducted as two searches as outlined in Tables 1 and 2. The first search combined alcohol and drinking terms in the Global South with terms relating to harms experienced by women and children. The second search focussed on alcohol studies undertaken in the Global South and 'harm to others' generally, not necessarily referring to women and children. The second search enabled identification of papers in which both men and women were affected, although only papers that reported harms to women separately were included in the final dataset.

Table 1 Search terms and concepts - harms to women and children

KEY TERMS (PICO) SEARCH 1					
Concept 1	Concept 2	Concept 3	Concept 4		
Alcohol	Global South	Women	Types of harm		
Drinking	Developing countries	Children	Financial stress		
Drinker	LMIC or LAMI	Spouse	Violence		
Drunk	Low and middle income	Parent	Human rights		
Alcoholics	countries		Stigma		
Intoxication	Africa, Asia, South America		Health impacts		
			Psychological impacts		

#### Table 2 Search terms and concepts - alcohol's harm to others

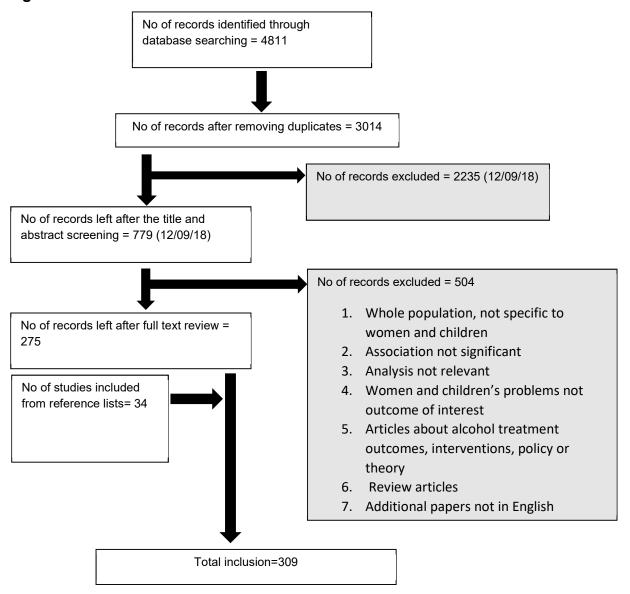
KEY TERMS (PICO) SEARCH 2						
Concept 1	Concept 2	Concept 3	Concept 4			
Alcohol Drinking	Global South Developing countries	Harm to others Alcohol (adjacent to) others,	N/A			
Drinker Drunk Alcoholics Intoxication	LMIC or LAMI Low and middle income countries Africa, Asia, South America	second-hand, passive Alcohol-related violence				

The two searches generated 4,811 records (see Table 3) and the process for sorting the identified literature is depicted in Figure 1. Two researchers screened all titles and abstracts to identify eligible articles for full-text review. Only those publications that were not directly relevant to the inclusion criteria were disregarded. Any ambiguous publications were discussed between the two researchers until a consensus was reached. A total of 779 publications were retained following abstract and title review. Researchers completed a full-text review, again removing those publications not relevant to the inclusion criteria and discussing any uncertain inclusions. An additional 34 articles were found through hand searches of reference lists and from existing knowledge of the literature. Reviews were excluded from the two primary searches manually but used to identify additional references and are drawn on in the discussion. The final data set comprised 275 publications.

**Table 3 Summary of search results** 

DATABASE	TOTAL ARTICLES
Medline	1631
PsycInfo	759
CINAHL	324
Web of Science Core Collection	2097
Total before duplicates removed	4811
Duplicates removed by Endnote = 1194 Duplicates removed by hand = 603	
Total after duplicates removed	3014

Figure 1: PRISMA Flow chart



# 4. REVIEW FINDINGS: THE IMPACT OF ALCOHOL ON WOMEN AND CHILDREN IN THE GLOBAL SOUTH

The review identified 779 publications that identified harms to women and children from their own and others' drinking in LMIC. These studies were sorted manually into different types of harm. The following themes or sub-groupings of harm emerged. Studies that included alcohol and intimate partner violence constituted the largest proportion of the literature search. The final number of records left after full text review was 275. To this number 34 additional articles were added.

#### Harms to women

- 1. Quality of marital relationship/life (n=11)
- 2. Health conditions and injuries <u>from one's own drinking</u> to women (n=38), as well as homicide (n=4), mental health concerns (n=20), pre-natal and post-partum depression and drinking association (n=8)
- 3. Health harms to women from others' drinking, including health conditions and injuries, including suicide and self-harm <u>due to others' drinking</u> (n=4), emergency department attendance and injuries due to others' drinking (n=6), mental ill-health due to others' drinking (n=8)
- 4. Drinking problems (own drinking related to progression to dependence, etc.) (n=25)
- 5. Alcohol and sexual risk taking, including increased risk and incidence of HIV (n=52)

#### Harms to adolescents

6. Adolescent health and social problems associated with own and others' drinking, e.g., bullying, teen pregnancy, mental disorders, antisocial behaviour and drinking problems; includes impact of parental drinking on adolescents (for instance transition from drinking to alcohol disorders and other drugs) (n=28)

#### Harms to children

- 7. FASD (n=16)
- 8. Child abuse and neglect and other alcohol-related adverse outcomes for children (n=29)
- 9. Educational outcomes (n=5)

#### Harms to families

- 10. Family problems and range of other harms from others' drinking (n=35)
- 11. Food insufficiency and economic hardship (n=6)
- 12. Elderly affected (n=2)

#### Intimate partner and gender-based violence

- 13. Intimate partner violence (n=121)
- 14. Gender-based violence include with IPV (n=51)

#### Miscellaneous harms

- 15. The impact of drinking (own or others' drinking) on HIV AIDS (n=18)
- 16. Traffic deaths and injuries (n=4)
- 17. Miscellaneous social harms, e.g., initiating sex work to pay for alcohol (n=2), stigma (n=3), urbanization and community impacts (n=5), Violence unspecified (n=1), orofacial and dental injuries from own or others' drinking (n=3)

The seventeen content areas were then grouped into seven sections in Chapter 4. Sections 4.1 to 4.7 address the ways in which alcohol affects: the wellbeing and quality of life of women; the health of women; the health of adolescents; a range of harms to children; the education of women and children; and gender equality and empowerment of women and girls. As alcohol was implicated in the impact of HIV/AIDS on women and adolescents due to their own and others' drinking, these impacts have been considered together and are presented in Section 4.5 of the report.

#### 4.1 ALCOHOL'S IMPACT ON THE WELLBEING AND QUALITY OF LIFE OF WOMEN

#### IN THE GLOBAL SOUTH

## 4.1.1 How women's own drinking and others' drinking affects their wellbeing and quality of life

Only a small number of papers focussed on how women's overall quality of life is affected by their own or others' drinking. Four papers, including studies from South Africa, India, Iran, Thailand and Lao PDR reported relationships between drinking and various impacts on women's quality of life. In a South African study of women hospitalised for a range of reasons, alcohol dependence was associated with poorer quality of life in three areas of functioning (physical functioning, general health and mental health) compared with patients not meeting the criteria of alcohol dependence [5]. In India drinking behaviour of husbands was commonly reported by women, alongside intimate partner violence and poor communication, as factors leading to poor quality of their marital relationships [6]. In Thailand and Lao PDR respondents who were exposed to a larger number of heavy drinkers in their lives were more likely to experience reduced personal wellbeing. In Thailand respondents suffered most when they were exposed to heavy drinkers in their households, while Lao respondents experienced more negative effects from exposure to heavy drinkers outside the household [7]. Riskier alcohol use was associated with unintended versus intended pregnancies and lower health related quality of life scale among women in Iran [8]. That the relationship between drinking and quality of life of women has been little studied, is surprising, given the body of evidence that has accumulated on the health and social impacts of women's own and others' drinking. This report highlights many such alcohol-related harms to women. A recent paper including seven LMIC found that "women with a harmful heavy drinking partner reported significantly lower mean satisfaction with life than those with a partner that did not drink heavily" [9].

Reducing heavy drinking in LMICs will help to ensure healthy lives and promote wellbeing for all at all ages (UN SDG 3).

"Women with a harmful heavy drinking partner reported significantly lower mean satisfaction with life than those with a partner that did not drink heavily".

#### 4.2 ALCOHOL-RELATED HARMS TO THE HEALTH OF WOMEN

#### 4.2.1 How women's own drinking affects their own physical and mental health

Among women in 2016, worldwide, an estimated 0.7 million deaths and 26.1 million disability adjusted life years (DALYs³) were attributed to alcohol consumption [1]. The largest proportion of deaths due to alcohol was evident in the African region and among women worldwide the leading causes of alcohol-attributable deaths and DALYs were cardiovascular diseases, digestive diseases and injuries [1]. These figures relate largely to harms from women's own drinking and harms from others' drinking that are incompletely factored in. For example, deaths from traffic crashes due to someone else's drinking are now included in some calculations, but even in this case not injuries. Nevertheless, within the Global Burden of Disease (GBD) program of studies, women's own drinking has been shown to contribute to a range of different health problems, including cardiovascular disorders, liver disorders, cancer and brain and neurocognitive implications, as well as behavioural and social consequences of binge drinking, including alcohol-impaired driving and elevated risk of HIV-AIDS [10]. More generally, with regard to the literature and this review, while women's own drinking (and their partner's) has been associated with higher risks of intimate partner violence, and intimate partner violence does involve physical and sexual assault and results in a range of physical and mental health consequences for women, intimate partner violence will be largely addressed separately in Section 4.5.

Physical health problems experienced by women due to drinking are in many cases similar to those experienced by their male counterparts, but women are at greater risk for a number of conditions, with some of these associated with alcohol consumption, e.g., breast cancer. Thirty-one studies documented physical and mental health alcohol-related harms to women from their own drinking. Many of these focused on fatal and non-fatal injuries, including suicide and self-harm injuries.

Reducing heavy drinking in LMICs will help to ensure healthy lives and promote wellbeing for all at all ages (UN SDG 3).

"Among women in 2016, worldwide, an estimated 0.7 million deaths and 26.1 million disability adjusted life years (DALYs) were attributed to alcohol consumption. The largest proportion of deaths due to alcohol was evident in the African region and among women worldwide the leading causes of alcohol-attributable deaths and DALYs were cardiovascular diseases, digestive diseases and injuries."

#### Death

A third of all deaths of women aged 15–54 years and 12% of women aged 55–74 years were attributed to excessive alcohol consumption in a Russian retrospective case-control study. The main conditions responsible for deaths in women were aerodigestive cancers and liver cancers, liver diseases, pancreatic disease, tuberculosis, pneumonia, ill-specified diseases, acute ischaemic heart disease other than myocardial infarction and external causes (including transport accidents, other accidents, alcohol poisonings, suicide, and assault) [11]. Strong associations between drinking frequency and all-cause mortality were also found in cohort studies in Russia, Belarus and Hungary, with the greatest increase in risk associated with the combination of high drinking frequency with both binge and risky drinking [12]. A study looking at the

<sup>&</sup>lt;sup>3</sup> In simpler terms DALYs can be expressed as years of compromised health, with a year of good health being 0 and a year after early death being 1, with the degree of compromise of health in the year being expressed as a fraction between 0 and 1.

presence of alcohol in a sample of fatally injured victims in Brazil found that traffic accidents showed a greater association with alcohol use than other injuries [13].

#### Disease

Increased risk of cancers diagnoses among females who drank was reported in LMIC (Taiwan and China) for breast cancer [14] and oesophageal cancers [15, 16]. In a study addressing the prevalence of risk factors of non-communicable diseases (NCD's) – including strokes, most heart diseases, most cancers, diabetes, etc. – among women in sub-Saharan African countries, alcohol was identified as a common risk factor among those in the higher socio-economic groups [17]. Binge drinking was found to cause stroke in women in Argentina [18]. Alcohol was identified as a cause of acute pancreatitis in 15% of South African cases [19]. Excessive alcohol consumption among women was found to be a predictor of chronic pain in Brazil [20] and gout in Turkey [21].

Genitourinary and pregnancy-related problems were located in the literature quite often as the search terms focussed on harms to women. In Ethiopia, female students with a history of alcohol use were at a higher risk of having an induced (often unsafe) abortion than those who did not consume alcohol [22]. Alcohol use was associated with prior abortions among female sex workers in China [23] and was a risk factor for overactive bladder function among women in a general population study in China [24]. Maternal alcohol consumption was also reported to cause fetal loss among women in India [25]. A review of alcohol-related harms in south Asian countries found that women who drank were more likely to have comorbid reproductive disorders such as anovulation, amenorrhea and early menopause, antisocial personality disorder and to be admitted to a hospital with alcoholic liver disease and alcoholic cardiomyopathy [26]. Although purely a descriptive study, a high prevalence of genitourinary health problems, including irregular menstrual cycles, sexual dysfunction, unwanted pregnancies and abortions, and sexually transmissible diseases, was also identified in alcohol-dependent women in Turkey [27].

#### Injury

Synthesising studies of the impact of drinking patterns on the burden of physical injury in China, Ghana, India, Mexico, Russia and South Africa, high risk drinking by women increased the risk of violent injury, specifically, the risk of being hit or stabbed [28]. A multi-national case-cross-over study in emergency departments (EDs) in the Dominican Republic, Guatemala, Guyana, Nicaragua and Panama, also found that in a case control study of women presenting to EDs, (comparing the drinking situation on presentation with their drinking pattern at the same time in the prior week) drinking alcohol increased the likelihood of sustaining an injury -- whether intentional or unintentional – more than fivefold [29]. Traffic injuries have been shown to particularly highly correlated with alcohol use in Brazil [13].

#### Mental health

Seven studies in Brazil, China, Colombia, India, Mexico, Mongolia and South Africa were identified that mentioned alcoholrelated mental health problems among women associated with their own drinking. Being female and having a current alcohol and substance use disorder were found to be independent predictors of borderline personality disorder in a sample of Chinese patients hospitalised for recent deliberate self-harm [30]. Even if their drink was at a "low risk" level, college student drinkers (both males and females) in India were found to have higher odds of more severe psychological distress and suicidal thoughts [31]. In a large cross-sectional survey undertaken in Brazil in 2005-6 alcohol dependence and the presence of one or more problems related to alcohol consumption in women were associated with higher risks of major/severe depressive symptoms [32]. In a small general population survey in Brazil, female gender and alcohol use were identified as risk factors for suicide risk [33]. Alcohol was consumed prior to 49% of suicide attempts (two-thirds of the attempts were by females) in Bogota, Colombia [34]. In smaller specific sub-populations, for example, among sex workers in Mexico, the frequency of depression and suicide risk was higher than for women in the general population (39.8% and 3.0%, respectively) and higher for women who reported negative health effects due to alcohol use [35]. In studies of higher-risk groups in other countries, for example among sex-workers in China and Mongolia, alcohol use was an independent predictor of mental health problems after accounting for both partner violence and illicit drug use [10, 11]. In South Africa (in a rare longitudinal study of outcomes for women that include alcohol consumption as a risk factor in LMICs), alcohol, partner violence, and depression were significantly related over time, with alcohol use related to depression and HIV status at each assessment and partner violence at 36 months [36]. In a small study of caregivers of children living with HIV AIDS in India, alcohol use by the caregiver was reported as a predictor of psychological distress. Drinking may be a marker of one way in which caregivers attempted (relatively unsuccessfully) to cope with the stigma and their situation [37].

Six additional articles addressed alcohol's involvement in women's post-partum mental health, including postpartum depression, postnatal depression and post-traumatic stress disorder (PTSD). The majority of studies found maternal

alcohol consumption to be a significantly associated with post-partum health, with the Edinburgh Postnatal Depression Scale used to assess postnatal depression [38-41]. The direction of the association was not clear. For instance, mothers experiencing postnatal depressed mood in South Africa were more likely to report problematic alcohol consumption [42]. Drug and alcohol use influenced HIV postpartum care for mothers in Russia [43]. Additionally, partner's alcohol use was found to be associated with postnatal depression [38].

Alcohol's impact upon other conditions experienced by women and women's overall estimates of self-rated health Mothers who drank alcohol had decreased odds of exclusively breastfeeding their infants for six months compared to non-drinkers in Tanzania [44]. Self-rated poor health was associated with being both a current drinker and a former drinker, with females more likely than males to rate their health as poor in Malaysia [45].

#### 4.2.2 How others' drinking affects women's physical and mental health

For many conditions, only the woman's own drinking has been studied as a factor in her physical and mental health outcomes. However, where a partner's drinking has been asked about, there is evidence that the heavy drinking of a partner has the potential to affect women's physical health as well as their mental health, for instance when it is associated with aggression, and by increasing the stress and strain women experience in their lives as they react to their partner's behaviour -- including in the course of caring for them due to their drinking. Common mental disorders (CMDs) were observed in 11% of married women in an Indian survey, with husband's alcohol use associated with an elevated risk of CMDs [46]. Partners' alcohol use was found to affect postnatal depression in women experiencing IPV in Malaysia [38]. In India a partner's alcohol use was associated with the mother's experience of postpartum depression [39]. Three studies from India and Uganda identified alcohol as a risk factor in deliberate self-harm among women. In India, a quantitative study indicated that deliberate self-harm was more common in women who reported that their husband had an alcohol use disorder [47], and a qualitative study reported that

"Alcohol was a frequent factor for men who victimized others in the household, which made problem drinking by men a serious problem for women living in that household with a husband, other partner or father. Problem drinking [of marital partners] often led to financial difficulties and a shift of household economic responsibilities from men to women. Various kinds of victimization of women ranged from domestic violence to indirectly humiliating experiences." [47]

In a larger quantitative study, spousal alcohol abuse was identified as a precipitant of suicidal behaviour in married women in India [48]. Problem drinking by a partner in Uganda was associated with suicidal ideation in women in Uganda [49]. Gender based violence and intimate partner violence, some of which is attributed to others' drinking [50], adversely affects women physically and mentally in a range of ways. These impacts are addressed in Section 4.7. It should also be noted that often it is only the impact of the women's own drinking that is assessed in health and social settings -- the impact of others' drinking is rarely assessed and recorded in hospital, emergency department and other healthcare settings [51]. More research on the harms to others that affects women and children is required both in LMICs and HICs.

#### 4.3 ALCOHOL-RELATED HARMS TO THE HEALTH OF ADOLESCENTS

In LMIC, underage drinking among adolescents is associated with a range of health and social problems. In many LMIC, regulations that exist to limit adolescent drinking are rarely enforced. In India alcohol was found to increase the risk of NCDs among young people (10-24 years) [52]. A psychosocial functioning index (developed to measure optimism and coping strategies, behaviour and relationship problems, and general psychosocial dysfunction) was elevated among adolescents who reported alcohol use compared to non-users in Benue state in Nigeria [53]. Alcohol use was found to be associated with suicidal ideation among youth in several African countries, including a comparison between students in Botswana, Kenya, Uganda and Zambia [54]. Mental health concerns were also identified. Female gender and drinking were factors associated with deliberate self-harm behaviours among Taiwanese adolescents [55]. In Turkey, substance use was a found to be a predictor of self-harm behaviour among 10<sup>th</sup> grade students [56]. Female gender and drinking alcohol were factors associated with deliberate self-harm behaviours among Taiwanese adolescents [55] and alcohol was significantly associated with deliberate self-harm among Malaysian adolescents aged 17-18 years old [57]. In Mexico adolescents who initiated alcohol use before 15 years also had a high risk of attempting suicide [58].

Thirteen studies from Argentina, Brazil, China, Chile, Namibia, Nigeria, Philippines, Puerto Rico, Romania, Russia, Taiwan and Vietnam reported on social problems by which adolescents and young people were affected associated with drinking in LMIC. Adolescent alcohol use was associated with physical violence [59, 60], bullying, peer victimisation [59-61], and teenage pregnancy [62, 63]. In two Brazilian studies respondents who reported drinking more often also reported skipping more classes, getting involved in fights more often, suicidal ideation, being sexually more active and admittedly taking greater risks regarding HIV infection [64, 65]. In Argentina adolescent female drinkers were nearly twice as likely as non-drinkers to have reported being physically attacked, being in a physical fight, and having had thoughts about self-directed violence [66]. In northern Russia adolescent heavy episodic drinking was associated with different forms of substance use and violent behaviour [67]. Alcohol consumption by adolescents in Vietnam was associated with tobacco smoking, involvement in violence, not wearing safety helmets and failure to access health services [68]. Drinking among adolescent mothers during pregnancy was associated with increased likelihood of experiencing physical violence from the baby's father [69]. In the Philippines, China, Chile, and Namibia, a measure of "global" psychosocial distress for girls and boys in all four countries was significantly associated with adolescent substance-use behaviours, with adolescents who reported using substances indicating that they were more often lonely, worried, sad/hopeless, and that they had a suicide plan [70].

Reducing heavy drinking in LMICs will help to ensure healthy lives and promote wellbeing for all at all ages (UN SDG 3).

"Thirteen studies from Argentina, Brazil, China, Chile, Namibia, Nigeria, Philippines, Puerto Rico, Romania, Russia, Taiwan and Vietnam reported on social problems by which adolescents and young people were affected associated with drinking in LMIC. Adolescent alcohol use was associated with physical violence, bullying, peer victimisation and teenage pregnancy. In two Brazilian studies respondents who reported drinking more often also reported skipping more classes, getting involved in fights more often, suicidal ideation, being sexually more active and admittedly taking greater risks regarding HIV infection."

In a large study in China, adolescent drinking problems are considered major public health problems, with current drinking associated with alcohol-related problems, poor classmate relations, poor relationships with teachers, below average academic achievement, depression and suicidal ideation [71]. Among adolescents aged 12-18 years in China, alcohol consumption was one of a number of factors associated with poly-victimisation (i.e., adolescents self-reporting multiple harms, including crime, child maltreatment, peer and sibling victimization, sexual victimization, and witnessing/indirect

victimisation) [72]. Alcohol use among adolescents in India was associated with significantly higher tobacco and illicit drug use, suicidal thoughts, attention deficit hyperactivity disorder symptom-scores, history of non-contact sexual abuse and poor academic performance [73]. In Uganda, youth who consumed alcohol were involved in alcohol-related harm, and those engaged in problem drinking were more likely to report being in an accident, going to hospital, experiencing problems with friends and family, and being robbed [74]. A relatively large number of additional studies identified that adolescent drinking was associated with other health risk behaviours, including problematic drinking and other substance use [73, 75-84], which increase the risk of later health-related problems[85]. Many studies have identified links between adolescents' own alcohol use and a range of harms, yet studies of harms to adolescents (vs. children) from others' drinking appear to have been rare. The lack of studies of HTO between adolescents is worth some emphasis, since late adolescence may well be the period when AHTO is at its highest. (A lot of the studies cited earlier include late adolescents.) Turning to studies that seek to identify how parental drinking may be associated with adolescent drinking, as has been reported in HIC, a number of studies reported upon the influence of parental drinking on adolescent drinking patterns in LMIC [75, 86-94]. Adolescents are at a time in their life when parental influence while lessening, is still strong. Younger children are in a more vulnerable position than adolescents if they are exposed to problematic drinking within their families. The next section of this report turns to analyses of the ways in which children are affected by others' drinking in LMIC.

#### 4.4 ALCOHOL-RELATED HARMS TO CHILDREN FROM OTHERS' DRINKING

Thirty-six articles were identified as relevant to the ways in which children had been harmed by others' drinking. The articles were from LMIC in Oceania, South America, Africa, Asia and Europe and included articles on the ways in which children were affected by others' drinking. Papers that identified drinking by adolescent children as a concern have been included separately, in Section 4.3. Harms from adults' drinking included fetal alcohol syndrome (FAS) and fetal alcohol spectrum disorder (FASD), as well as a number of other physical and mental health effects that were linked to others' drinking. Child abuse and neglect associated with others' drinking were commonly reported, and included physical and emotional harms, exposure to family violence and neglect. Surveys of specific populations were more common, but a few general population surveys were identified. Studies involving cases handled by response agencies were less commonly detected in the search strategy.

A recent study summarised a number of more general harms children experienced due to others' drinking in six LMIC and reported that the prevalence of alcohol-related harms to children varied from a low of 4% in Lao PDR to 14% in Vietnam. The harms reported upon included physical harms, verbal abuse, exposure to family violence and being left unsupervised or in unsafe situations due to others' drinking in the past year. In this study, alcohol-related harms to children were dispersed socio-demographically and concentrated in families with heavy drinkers [95]. Other papers provided overall estimates of the harm's children experienced in LMIC in specific communities, often communities further disadvantaged than the population as a whole. For example, in slums in Kampala, Uganda, around 12% of children reported being beaten by a parent who was drunk and 20% of children surveyed reported that their parents or caregivers were unable to take care of them because they had been drunk [96].

#### 4.4.1 How others' drinking affects children's physical and mental health

#### Fetal alcohol spectrum disorder

Thirteen studies across Africa, Brazil, China, Iran and Russia explored the effects of prenatal alcohol exposure on a child's health, with the large majority identifying Fetal Alcohol Spectrum Disorder (FASD) as the main harm stemming from maternal alcohol consumption during pregnancy. Harms to the child were assessed in utero and later, in some studies up to nine years of age. A review of research on FASD in Africa suggests that South Africa has the world's highest reported rates [97]. The specific harms to children from prenatal exposure highlighted in the studies found included low birth weight [98, 99], neural tube defects [100], lower verbal IQ scores [101], general developmental delays [102], and a range of birth defects, including to the baby's nervous and cardiovascular systems [103]. A qualitative paper in South Africa noted that stigma associated with women's drinking and fear of removal of children combined to discourage women from entering treatment, potentially increasing the likelihood of poorer outcomes for children, including FASD [104]. A study conducted in Southern Brazil evaluated the clinical features of FAS in adolescents convicted of criminal behaviour. Researchers found that despite a large number of mothers admitting maternal alcohol use, no clear diagnosis of FAS could be made, although signs suggestive of FASD were common in institutionalised adolescents [105]. A study by Choi et al. [106] highlighted that

women who had experienced intimate partner violence, child abuse and other forms of trauma were more likely to continue to drink at high risk once they found that they were pregnant, suggesting that trauma-

Reducing heavy drinking in LMICs will help to ensure healthy lives and promote wellbeing for all at all ages (UN SDG 3).

"The specific harms to children from prenatal exposure highlighted in the studies found included low birth weight, neural tube defects, lower verbal IQ scores, general developmental delays, and a range of birth defects, including to the baby's nervous and cardiovascular systems. A qualitative paper in South Africa noted that stigma associated with women's drinking and fear of removal of children combined to discourage women from entering treatment, potentially increasing the likelihood of poorer outcomes for children, including FASD."

In summary, rates of FASD are of particular concern in some countries in the Global South. Some of the highest rates in the world of FASD have been identified in South Africa, with groups of heavy drinking women in disadvantaged settings at higher risk. There is evidence in the literature that knowledge of the effects of alcohol on the fetus are commonly little known in LMIC. For instance, a Russian study which aimed to describe women's knowledge and attitudes regarding consuming alcohol while pregnant found that many women were ambivalent or unsure about whether or not it was safe to consume alcohol, and only a small percentage had accurate knowledge of Fetal Alcohol Syndrome (FAS) [107]. Problematically, the researchers found that more ambivalent attitudes were strongly associated with greater alcohol use among pregnant women [107].

#### Other health impacts on children from others' drinking

In a study of children aged less than 18 years hospitalised for traumatic injury in Malawi, alcohol (potentially including adults' drinking) was significantly more likely to be associated with intentional injuries than non-intentional injuries (8% vs 1%), although how well alcohol was recorded apart from when it was consumed by the children admitted is not clear [108]. In a study in South Africa, the risk of child behaviour disorders was associated with IPV and any psychiatric diagnosis, PTSD, or binge drinking by a caregiver [109]. In Belarus, deficits in childhood cognition and an increased risk of negative externalizing behaviours at 6.5 years of age were associated with fathers' moderate and heavy drinking, as compared with light drinking by the father [110]. Child mental health in a sample of children (including many children orphaned due to HIV-AIDS) was measured and assessed in South Africa. Caregiver alcohol problems as measured using the AUDIT score were independently associated with poorer mental health of the child as assessed using child, caregiver and teacher reports [111].

In a qualitative study in a Thai refugee camp (of primarily Karenni refugees), particular risks for Burmese children were identified. Alcohol use by adults was identified as part of a constellation of problems including fighting, instability, material deprivation, child abuse and neglect in the camp that were interrelated [112]. Youth with disabilities in Vietnam were at greater risk of injury from family violence than non-disabled young people, with alcohol abuse among family members increasing this risk [113]. In a South African township, parental intoxication, drinking venue attendance and expenditures on alcohol were linked to exposure to a heavy drinking culture and long-term outcomes such as fractured parent-child relationships and problematic youth behaviours [114]. Contextual risks of poverty and violence maintained and exacerbated the impact of parental drinking on children in the township.

#### Child abuse and neglect

A large number of studies in LMIC focussed upon the causes and correlates of child abuse and neglect. Nineteen studies were included in this review from LMIC in Oceania, South America, Africa, Asia and Europe. These articles focussed on how children were affected by others' drinking (and their own drinking in fewer instances). In an Indian population study of men, both non-heavy episodic and heavy episodic drinkers, compared with current abstainers, had significantly greater

odds of reporting alcohol-related physical abuse, psychological harm and neglect to children [115]. In sub-Saharan Africa, perceived risk factors for child abuse and neglect among orphaned children in 15 qualitative studies were reviewed. In five of these studies caregiver alcohol abuse was identified, including alcohol abuse being a risk factor for neglect, physical abuse and sexual exploitation [116]. A study in Ghana described how care was compromised by the drinking of caregivers [117]. Self-reported aggressive parenting behaviours in war-torn areas of Uganda were associated with guardians' own experiences of child maltreatment and male but not female guardians' PTSD symptoms and alcohol-related problems [118].

Fathers' alcohol use was identified as a cause of children running away and using inhalants in India [119], and linked to children living on the streets of Izmir in Turkey [120]. In Sri Lanka, fathers' use of alcohol was associated with more common use of alcohol by their children [121]. In Zimbabwe, the majority of children reported being physically punished, with the most common forms of child physical abuse being to be hit or beaten (78.9 %), threatened (55.2 %) and chased (47.2 %). Alcohol abuse was identified in this Zimbabwean study, along with economic hardship, abuse of power by adults, and lack of education, as a major risk factors for child physical abuse. This study recommended the introduction of Child Rights Education and use of alternative methods of firm discipline that do not involve physical violence [122].

In Sri Lanka, fathers were exposed to traumatic war events which were linked to PTSD and substance abuse. A study in this context investigating child maltreatment adjusted for these factors simultaneously, and found that father's alcohol intake was independently associated with the amount of maltreatment reported by children [123]. In a separate study, fathers' alcohol use was the strongest predictor of paternal perpetration of family violence, as reported by the father [124]. In Mexico City, substance abuse by the father was associated with abusive head trauma in small descriptive study of children admitted into hospital for serious head trauma [125]. In Hanoi, Vietnam, parental alcohol abuse was associated with child physical abuse, but not neglect in a population sample of families [126].

Reducing heavy drinking in LMICs will help to ensure healthy lives and promote wellbeing for all at all ages (UN SDG 3).

"Fathers' alcohol use was identified as a cause of children running away and using inhalants in India and linked to children living on the streets of Izmir in Turkey.... In Sri Lanka, fathers were exposed to traumatic war events which were linked to PTSD and substance abuse. A study in this context investigating child maltreatment adjusted for these factors simultaneously and found that father's alcohol intake was independently associated with the amount of maltreatment reported by children."

Mothers' problematic alcohol use was less commonly listed as a risk factor for child maltreatment and less often addressed as a separate risk factor. However, in Henan, China, the drinking pattern of the mother was a significant risk factor for emotional abuse, emotional neglect, and physical neglect among junior high school students [127]. In addition, in Brazil, women who reported their own harmful drinking (but not alcohol use or hazardous drinking) reported higher levels of physical maltreatment (but not psychological aggression or corporal punishment) of children [128].

In a study of sexually abused children in Thailand, those with a parent who had a mood disorder or alcoholism were significantly more likely to be classified as children in need of urgent separation in comparison with other management strategies [129]. In South African townships, parental intoxication, drinking venue attendance and expenditures on alcohol were linked by participants in a qualitative study to child neglect and abuse [114]. Parental neglect due to alcohol use was associated with youth victimisation in violence involving a weapon in Uganda [130]. Parental neglect due to alcohol use is associated with suicide ideation and attempts among youth (aged 14-24) in Uganda [130].

In many LMICs, child protection systems have not been developed and consequently, systematised recording of child abuse and neglect cases is uncommon. In Tunisia in a ten-year retrospective study of 3736 referrals to Tunisia's chid

protection agency, 2212 were screened and investigated and 317 cases substantiated. Of those substantiated, alcohol addiction of one or both parents was identified in 6.6% of cases [131].

#### Child sexual abuse

Specific studies identified a range of other less often mentioned but important issues. For example, in Botswana, the context of drinking in the community was mentioned: drinking depots in Botswana were identified as places where children were at greater risk of sexual abuse [132]. In A Brazilian study of sexual offenders, identified history of perpetrator alcohol abuse was associated with sexual abuse of children, with the strength of the relationship reported as stronger for perpetration against boys than girls [133]. In Senegal in 15% of reports of cases of sexual assault of minors, the perpetrator was identified as intoxicated in the case notes [134].

#### 4.5 ALCOHOL'S IMPACT ON WOMEN AND CHILDREN'S RISKS OF AND HARMS

#### FROM HIV/AIDS AND OTHER SEXUALLY TRANSMISSABLE DISEASES

Alcohol and sexual risk-taking, particularly that which increases the risk or adverse outcomes of HIV Alcohol is associated with sexual risk-taking by men and women, for instance unprotected sex and sex with multiple partners [135]. In turn these risky behaviours are associated with increased prevalence of HIV-AIDS, with the risk for women often influenced by men's drinking behaviours rather than their own [136]. Recent estimates indicate that 7000 or 2.2% of HIV-AIDS cases in women in South Africa are attributable to alcohol [137] and WHO has recognised that the incidence of HIV-AIDS is partially attributable to drinking worldwide with alcohol estimated to cause 33,000 deaths from HIV-AIDS [1]. In addition, drinking is associated with poorer adherence to treatment, including treatment for HIV-AIDS, which means there is greater likelihood of spread of HIV-AIDS associated with poorer control of HIV and increased viral loads. Additionally, alcohol compromises health immunity, increasing the susceptibility of the drinker to a range of other diseases [1]. Researchers note, over and above HIV-AIDS and adherence to treatment, the range of other infections which alcohol increases the susceptibility to (including tuberculosis, pneumonia and hepatitis C); for those suffering from HIV-AIDS, these further undermine the immune system [138, 139]. While some studies have questioned the causality of the association between alcohol and HIV-AIDS [140], Gmel and colleagues were able to estimate alcohol-attributable fractions for one mechanism of relationship, non-adherence to antiretroviral treatment in the African Global Burden of Disease Regions, finding effects ranging from 0 to 0.17% among females [141].

Reducing heavy drinking in LMICs will help to ensure healthy lives and promote wellbeing for all at all ages (UN SDG 3).

"Alcohol is associated with sexual risk-taking by men and women, for instance unprotected sex and sex with multiple partners. In turn these risky behaviours are associated with increased prevalence of HIV-AIDS, with the risk for women often influenced by men's drinking behaviours rather than their own."

The GBD also factors one's own alcohol consumption into estimates of sexual-risk taking and consequential impacts on HIV-AIDs and other STDs. The way harms from others' drinking, and particularly the way men's and partners' drinking affect women, is not included in the current GBD estimates. A number of studies were identified in this review that outline the effects of own and others' drinking on the health and social problems women experience, particularly in terms of sexual risk and sexual health [142-153]. Sexually transmissible infections have been associated with drinking among higher-risk population groups, for example among Female Sex Workers (FSWs) [142-144], and drinking has been linked to early sexual debut among youth (thereby increasing exposure to sexually transmitted infections) [154-156] and to engaging in sex work [151, 157]. Women's own alcohol consumption was found to be a factor contributing to the use of condoms and engaging in unprotected sex among several different population groups in Tanzania [158], Turkey [27], South Africa [Schneider et al. 2014] [148, 159], Brazil [160], Kenya [144] and India [161]. Among Costa Rican students aged 12-19 years old, most felt that alcohol would impair their ability to stop someone they like from having sex and to ask their partner to wear a condom [162]. In a study exploring the drivers of HIV transmission in a fishing village in Uganda, female participants cited alcohol as leading to unprotected sex [163], and in another study of homeless youth in Uganda, alcohol was identified as a risk factor for HIV-AIDS [96]. Alcohol use was independently associated with risky sexual behaviours, including unprotected sex, multiple partners and engaging in survival sex, among homeless youth in Ghana [164]. In Nigeria the association between women who had suffered child sex abuse and riskier sexual behaviour was found to be partially mediated by alcohol use [165]. Several studies identified that those women who engaged in alcohol consumption and other risky behaviours such as illicit drug use were more likely to report a history of or engage in HIV-AIDS testing, indicating that although these women are more likely to engage in risky sexual behaviours they are aware of this risk and consequently more likely to make an effort to engage in testing to determine their status [166, 167]. In a similar vein, a study in South Africa found that couples-based interventions are important for HIV prevention among women, and suggested that this is a result of being able to reduce alcohol consumption and increase condom use among males [168]. In summary, women reported that their own drinking affected whether they were more likely to have sex and whether they were able to negotiate condom use.

A second thread of articles on this topic focused on male alcohol use and sexual harms/risk to women. Alcohol intoxication featured heavily in Ugandan women's narratives regarding their experiences of sexual violence [169], particularly in being forced to participate in unprotected sex with HIV-positive partners [170]. Studies conducted in India illustrated that when men consume alcohol there was a higher likelihood of unprotected sex with female partners [171], and that while among HIV-infected FSWs there was no association between alcohol use and risky sexual behaviours, among their HIV-infected male clients, those with heavy alcohol use reported more unprotected transactional sex encounters [172]. Another study with FSWs in India found that alcohol led to coercion in terms of condom use, with men plying women with alcohol, leaving them vulnerable to rape and multiple unwanted partners, and thus increasing the risk of HIV infection [173]. As described above, alcohol's role in unprotected sex and condom use was a common finding among these studies, including among Nepalese males, who reported that their (own) alcohol consumption contributed to liaisons with FSWs, increasing both men's risk of HIV infection and their wives' risk of infection through unprotected sexual intercourse [174]. A study of the most recent sexual encounter reported by women who use substances in South Africa found an association between alcohol use by both partners and multiple rounds of sex, and alcohol use and less likely condom use during all rounds of sex [175]. In Brazil individuals (either male or female) who had a partner with alcohol and/or drug problems were more likely to engage in unsafe sex not using a condom [176]; andt alcohol-dependent patients (both male and female) were more likely to engage in high risk sexual behaviours than other substance-dependent patients [177]. In many of these studies, researchers identified power imbalances that left women vulnerable to harms, particularly when alcohol was involved. Participants in a study in South Africa also noted that gender roles and cultural expectations adversely influence the power women have, for example in terms of economic dependency on males and condom use during sex, and that alcohol and other drugs were independently associated with their capacity to mitigate sexual risk (e.g., negotiate condom use), finding poly-drug use including alcohol, more risky than alcohol and marijuana use alone [178, 179]. Similarly, migrant FSWs on the Guatemala-Mexico border identified a range of ways in which external pressures to drink during sex work were perceived 'as undermining their capacity to negotiate safer sexual practices with clients' [180]. Finally, the literature indicates that women are put at increased risk of HIV-AIDS as a result of the intersection between alcohol and intimate partner or gender-based violence; this will be discussed in detail in section 4.6.

#### Alcohol and adherence to treatment [HIV specific]

A small body of literature also addressed alcohol's role in hindering antiretroviral therapy (ART): 'alcohol-abusing patients may delay testing for HIV, accessing appropriate medical care, and initiating antiretroviral therapy, which may hasten disease progression to full-blown AIDS' [181]. Studies identified alcohol as a predictor of poor or non-adherence to ART [43, 182-193] and as a barrier to seeking treatment or as a factor in late presentation to treatment/care [194]. Alcohol use

was found to predict missing ART sessions, which in turn is associated with a decrease in CD4 counts and more rapid HIV-AIDS progression, leading to poorer health outcomes [195]. Alcohol use by caregivers was found to be associated with decreased viral HIV load in Brazilian children [196]. For FSWs in Uganda, advice to avoid alcohol while seeking ART conflicted with their desire to consume alcohol while working (to facilitate negotiating the price for sex and condom use) and consequently impacted their adherence to treatment [197].

#### 4.6 DOES DRINKING IN THE FAMILY AFFECT THE EDUCATION OF WOMEN AND

#### CHILDREN?

Five studies used large student samples to report on the adverse educational outcomes faced by women and children from their own or others' drinking in Thailand<sup>4</sup>, China, Morocco and South Africa. Consumption left students vulnerable to a range of harms, including unintended pregnancies [152, 198], sexually transmitted diseases including the risk of HIV infection [64, 198], other drug use [199] and unhealthy dietary behaviour [198]. Respondents who consumed alcohol were more likely to skip classes [64] and obtain below average grades [199], with the pressure and stress faced by students at school, particularly in older samples, was found to increase their likelihood of having alcohol-related problems [71]. While acknowledging the potential positive motivations and outcomes for alcohol use among female tertiary students (i.e., for fun and enjoyment), a recent study in South Africa also found that heavy alcohol use in a tertiary environment could lead to sexual assault, fatal and non-fatal injuries and negatively affect academic performance [152].

There is insufficient evidence to know whether reducing heavy drinking in LMICs will ensure inclusive and equitable quality education and promote lifelong opportunities for all (UN SDG 4). However, "a recent study in South Africa also found that heavy alcohol use in a tertiary environment could lead to sexual assault, fatal and non-fatal injuries and negatively affect academic performance."

#### 4.7 IS ALCOHOL RELATED TO GENDER EQUALITY AND EMPOWERMENT OF

#### **WOMEN AND GIRLS?**

#### 4.7.1 Gender-based violence and discrimination against women and girls

In Ethiopia nearly a quarter of male college students reported committing acts of physical or sexual violence against an intimate partner or non-partner, with alcohol consumption reported as a common contributing factor to gender-based violence [200]. In Uganda, Zablotska et al. noted,

"Alcohol use before sex (by men or both men and women, and mostly within intimate partner relationships) was associated with physical violence and sexual coercion, and both are jointly associated with HIV infection risk in young women." [201].

In a qualitative cross-national study in seven countries including Argentina, Nigeria, Uganda, Uruguay, Sri Lanka, most of the groups of participants perceived intoxication as a culturally acceptable excuse for men, and alcohol's pharmacological

<sup>&</sup>lt;sup>4</sup> This reference is a thesis but was kept as very few articles relating to education were identified in the search.

effects were perceived to make violent behaviour more likely. Heavy drinking was seen as affecting relationships in a negative way, and the victim's drinking (as well as the perpetrator's) as increasing the risk of violence [202, 203]. The intersection of unequal power relations and drinking for particular groups of women was described in India eloquently,

"Sexual coercion and forced group sex in the context of alcohol use [by clients] posed formidable barriers for condom use negotiation by sex-workers" [173].

In Africa, women who reported a higher frequency and consumption of alcohol were more likely to report experience with gender-based violence. For instance, in Nigeria women who reported consuming alcohol also reported being at higher risk of experiencing courtship and dating violence [204]. Girls and young women in the slums of Kampala, Uganda who reported drunkenness were statistically more likely to report having been raped [205]. Being a problem drinker was associated with a higher likelihood of gender-based violence. For instance, meeting sex partners in a drinking venue and engaging in transactional sex were significantly associated with gender-based violence. However, among women in these settings, alcohol alone did not significantly account for gender-based violence, although alcohol use partially helped to account for women's sexual risk behaviors [206]. While recognising that women's drinking may increase the risk of GBV, this type of study can be problematic. Such studies do not take into account the perpetrator's drinking or other perpetrator characteristics. Nevertheless, these studies can highlight, in conjunction with other evidence, that men may be likely to target women who have been drinking, or target women because they have been drinking, and that drinking may also be associated with greater reported perpetration of sexual violence.

Reducing heavy drinking in LMICs will assist countries to achieve gender equality and empower all women and girls, with this goal especially focussed on ending all forms of discrimination against all women ang girls everywhere and to eliminating all forms of violence against women and girls (UN SDG 5).

"In a qualitative cross-national study in seven countries including Argentina, Nigeria, Uganda, Uruguay, Sri Lanka, most of the groups of participants perceived intoxication as a culturally acceptable excuse for men, and alcohol's pharmacological effects were perceived to make violent behaviour more likely. Heavy drinking was seen as affecting relationships in a negative way, and the victim's drinking (as well as the perpetrator's) as increasing the risk of violence."

#### 4.7.2 Intimate partner violence

A few multi-country studies provide comparable data across a number of LMICs and are summarised at the beginning of this section prior to sections discussing alcohol and IPV in different parts of the world. The WHO Multi-country Study on Women's Health and Domestic Violence surveyed woman from Bangladesh, Brazil, Ethiopia, Japan, Namibia, Peru, Republic of Tanzania, Samoa, Serbia and Montenegro, and Thailand aged 15-49 years between 2000 and 2003, finding that men's drinking consistently increased the risk of IPV, and that this risk was elevated when both the woman and the spouse drank. In five of the 14 sites women's drinking was significantly associated with increased risk of IPV, but the odds of increased violence were lower than when men drank problematically [207]. In a related study, male perpetration of IPV was focused on in the UN Multi-country Cross-sectional Study on Men and Violence in Asia and the Pacific, including samples of men aged 18-49 years in nine sites in Bangladesh, China, Cambodia, Indonesia, Sri Lanka, and Papua New Guinea between January 2011 and December 2012. On the basis of population-attributable fractions for intimate partner violence perpetration reported by men, this study showed factors related to gender and relationship practices to be most important, followed by experiences of childhood trauma, alcohol misuse and depression, low education, poverty, and involvement in gangs and fights with weapons [208]. In a study of 13 HIC and LMIC, severity ratings were significantly higher for IPV incidents in which one or both partners had been drinking compared to incidents in which neither partner had been drinking [209].

In some LMIC, war and poverty intersect to complicate and worsen situations for countries and their citizens. Refugees and migrants may be disadvantaged by the difficult circumstances they find themselves in and be more vulnerable to the effects of alcohol. In a qualitative cross-national study of the effects of alcohol in countries with a history of recent warfare, use of alcohol was widespread, particularly, in Kenya, Liberia, Uganda, and Thailand, and believed by participants to be linked to a range of health, social and protection problems, including illness, injury (intentional and unintentional), gender-based violence, risky behaviour for HIV-AIDS and other sexually transmitted infection and blood-borne virus transmission, as well as detrimental effects to household economies. Along with changing social norms and networks, displacement experiences, including dispossession, livelihood restriction, hopelessness and an uncertain future, may make communities particularly vulnerable to substance use and its impact [147]. In North-eastern Uganda a survey of 605 women demonstrated that male partner alcohol misuse was associated with exposure to armed conflict and intimate partner violence [210]. In Tanzania, among men, having ever consumed alcohol and experience of childhood violence were associated with increased risk of perpetrating all forms of IPV [211].

#### Africa

Nationally representative data from 86,024 women that participated in the Demographic and Health Surveys undertaken in 14 countries in sub-Saharan Africa were used to study the relationship between male partner alcohol use and women experiencing IPV. The prevalence of partner alcohol use (3-62%) and IPV (11-60%) ranged substantially across countries. Using multilevel mixed-effects models, partner alcohol use was associated with a significant increase in the odds of reporting IPV for all of the 14 countries. Furthermore, the relationship between alcohol use and IPV, although largely explained at the individual level by partner alcohol use, was also related to overall prevalence of alcohol use in a given country [212]. The individual studies demonstrated that a partner's use of alcohol was quantitatively associated with intimate partner physical violence among women in the Congo [213], Rwanda [214-216], Egypt [217], Ethiopia [218, 219] and Nigeria [204, 220-222]. A large quantitative study in the Congo identified partner's use of alcohol as a risk factor that doubled the risk of physical and sexual IPV [213]. Women going to hospitals (n=343) were surveyed in Nigeria; those who reported that their partner consumed alcohol were more likely to report IPV [223]. Many studies assessed multiple risk factors and studied how different risk factors intersected to contribute to incidents of IPV. Alcohol consumption by the respondent's spouse, being a victim of childhood abuse, and witnessing IPV between parents all predicted severe physical IPV in Nigeria [224]. Alcohol was also a commonly identified factor, among other factors including negative attitudes of men towards women, lower levels of education and polygamous union, in a number of studies of IPV in Nigeria [225], Kenya [226, 227] and Malawi [228]. In Tanzania, women who reported that their husbands used alcohol were more likely to experience IPV [229, 230]. In a study of women in Gauteng, South Africa, factors associated with recent IPV experience included being in a controlling relationship and having a partner who regularly consumed alcohol [231]. Also, in a survey of women at 'shebeens' (drinking establishments) in disadvantaged townships in South Africa, substantial proportions of those surveyed reported pregnancy and IPV, with rates of binge drinking among women associated with increasing rates of IPV [232]. At all assessments over a five-year period after pregnancy, mothers in South Africa who experienced IPV had more than twice the likelihood of drinking alcohol compared to mothers who had not experienced IPV [36]. In Kenya, among HIV-positive women who engaged in transactional sex, those who reported severe alcohol problems were more likely to report IPV [233]. In Uganda, women who reported that their partner drank before sex or that they and their partner drank before sex were more likely to report physical violence and sexual coercion [201]. In a second study in Uganda, women whose partners got drunk often were six times more likely to report physical IPV compared to those whose partners never drank alcohol [234], and in two further studies of married women, those who reported that their husbands sometimes or often got drunk were at greater risk of IPV [235, 236]. In a longitudinal study of Ugandan women, alcohol use before sex by women and by their partners was associated with IPV [237].

#### Which women in Africa are at greater risk?

The relationship between alcohol use and IPV was moderated by socioeconomic status (SES) in African studies. Among women with a partner who used alcohol, those with lower SES had higher odds of experiencing IPV than women with higher SES [212]. Among women with HIV-AIDS, alcohol use by the partner was associated with higher risk of IPV (primarily physical and emotional violence) in Nigeria [238]. In an Ethiopian study in a refugee camp, women who reported that their husband was a drunkard [sic] were twice as likely to report experiencing intimate partner physical violence [239]. Findings from studies in three refugee camps in South Sudan and Kenya (also Iraq in the Middle East) revealed interrelated factors that triggered and perpetuated IPV: gendered social norms and roles, destabilization of gender norms and roles, men's substance use, women's separation from family, and rapid remarriages and forced marriages. These factors paint a picture of individual, family, community and societal processes that exacerbate women's risk of IPV in extreme conditions created by displacement [240]. In a planned intervention study in Mombasa, Kenya, participants who

reported higher AUDIT scores in the last 30 days had greater risk of recent IPV than participants who reported lower AUDIT scores for alcohol use in the same timeframe [241]. In Nigeria and some other countries, qualitative studies also highlighted the impact of alcohol on different groups of women, for example, one study remarked, concerning the northern Uganda conflict zone, that

"the frequent mention of alcohol in domestic violence stresses the importance of addressing substance use as part of violence prevention. Heavy alcohol use in this region is unsurprising; substance use is known to increase after exposure to traumatic events, especially among those with PTSD [203]".

Respondents in South Africa who acknowledged their own alcohol abuse or dependence were more likely to report being a victim (women) and perpetrator (men and women) of IPV [242]. In follow-up interviews, men who reported at baseline a history of childhood sexual abuse, binge drinking and more difficulty controlling sexual impulses in order to use a condom were more likely to report intimate partner violence perpetration in the past year and at subsequent time points [243]. In Tanzania younger men, men who reported gender-inequitable attitudes, childhood trauma, multiple sexual partners, and alcohol use were significantly more likely to report IPV perpetration in the past three months [244]. In a study of South African men who have multiple female sexual partners, problem alcohol use was associated with physical IPV, and with any abuse of women [245]. In a study of young women in South Africa, hazardous drinking was associated with six times the odds of experiencing physical and/or sexual abuse, both with and without emotional abuse [246].

Reducing heavy drinking in LMICs will assist countries to achieve gender equality and empower all women and girls, with this goal especially focussed on ending all forms of discrimination against all women ang girls everywhere and to eliminating all forms of violence against women and girls (UN SDG 5).

"A partner's use of alcohol was quantitatively associated with intimate partner physical violence to pregnant women in Rwanda, Egypt, Ethiopia, Kenya, South Africa and Zimbabwe."

Pregnant women were also affected by IPV. In a review completed in 2015 of 10 studies undertaken in Ethiopia between 2000 and 2004, women's lifetime experience of domestic physical violence by husband or intimate partner ranged from 20% to 78%, with a significant number experiencing IPV while pregnant [247]. In a review of 19 studies of women attending health care services in South Africa conducted between 2000 and 2010, including a meta-analysis of 13 studies, 15% of women experienced IPV while they were pregnant. In five of these studies a partner drinking too much (OR 4.50, CI 2.49 - 8.00) was significantly associated with physical partner violence in the past six months [248]. Partner's use of alcohol was quantitatively associated with intimate partner physical violence to pregnant women in Rwanda [214-216], Egypt [217], Ethiopia [218, 219], Kenya [249], South Africa [250] and Zimbabwe [251]. Further studies illustrate this: a study in an antenatal clinic in Ethiopia found that a husband's alcohol consumption was associated with a four-fold increase in IPV against a pregnant wife [252]. Among pregnant women in Rwanda, of all risk factors asked about, a husband's drinking was associated with the highest odds of IPV (a four-fold increase in risk) [214, 215]. In a study of women attending antenatal clinics in Kenya, greater levels of overall IPV while pregnant were associated with higher partner alcohol intake [249]. In Zimbabwe, women's drinking and male partner problem drinking were associated with greater risk of IPV among pregnant women [251]. Women attending antenatal care clinics in Capetown, South Africa who reported any alcohol use and hazardous alcohol use prior to pregnancy were more likely to report having experienced IPV [250].

In Ghana in a qualitative study of patrilineal women (who experience unequal inherited economic power) found that

"participants attributed violence to several factors including gendered domestic relations, cultural and marital rites and alcohol use. Abused women reported health problems such as feelings of worthlessness, sleeplessness, suicidal ideation, eye injuries, bodily weakness, hypertension, genital sores and the premature termination of pregnancy" [253].

In the Congo a small qualitative study of men and women identified that IPV was linked to the husband's alcohol consumption [254]. In Zimbabwe, a national survey of men showed that IPV perpetration in the last 12 months was associated with binge drinking, PTSD and the exercise of power in the sexual relationship [255]. In Kenya, Liberia, Uganda, (and Thailand), drinking was identified in a cross-national qualitative study as a concern that exacerbated gender-based violence [147]. A number of these studies highlighted that "programs for the prevention and reduction of partner violence against women need to address high levels of hazardous drinking in men as well as women's prior traumatization" [256]. Although the evidence regarding the relationship between drinking and male perpetration of IPV is overwhelming, researchers also discussed the potential for solutions in South Africa with some hope, suggesting that

"alcohol and sexual relationship skills may be useful levers for future violence prevention efforts, and that intimate partner violence may be a tractable issue as men learn new skills for enacting masculinities in their household and in intimate relationships." [257]

#### Middle-East

In Iran, one in three women reported IPV from their husbands, with alcohol abuse identified as a factor that increased this risk in the study [258]. In Saudi Arabia, 12% of surveyed women attending primary health care centres reported IPV. Alcohol addiction of the perpetrator was identified as a significant risk factor in 10 of 59 cases of IPV reported [259]. In a second study of women attending healthcare centres in 2017, 45% of women experienced IPV and husband-specific risk factors identified included alcohol or drug addiction, unemployment, control of wealth in the family, and physical aggression toward other men [260]. In Turkey, 29% of men reported beating their wives in their lifetime, and men who reported consuming alcohol reported double the prevalence of doing so [261]. In Jordan among women attending reproductive health clinics, partner alcohol use was identified as a risk factor for IPV during pregnancy, with this reported by 15% of pregnant women [262].

#### Asia

In Bangladesh alcoholic husbands were nearly three times more likely to physically and verbally abuse their wives [263], and the relationship between alcohol and IPV was confirmed in additional studies [264]. In the Philippines among women surveyed, the most common reason cited for hurting a partner was drunkenness or alcohol intake of the partner [265]; likewise, data from a nationally representative survey conducted in 2013 found that husband/partner intoxication was significantly associated with physical, sexual, and emotional types of intimate partner violence [266]. In Mongolia, near 40% of women reported some form of IPV in the previous 6 months, with women with unemployed drinking partners significantly more likely to report IPV [267]. In Vietnam, using data from the national survey on violence against women, the risk of IPV significantly increased with husbands' extra-marital relationships, fighting with other men and alcohol use [268]. The odds of reporting IPV increased consistently with increasing frequency of partner's drinking [268]. In Nepal, if the husband drank more than once a week (vs once or less per week or not at all) the risk of IPV was greater, both in general and in poor urban areas [269]. Excessive drinking (husband drank and got drunk vs drank but did not get drunk) was also associated with a greater risk of IPV among young married Nepalese women [270]. A relationship between poverty and IPV was also evident in Nepal, but this relationship was weaker than that identified between the husband's drinking frequency and IPV. Also in Nepal, a more recent study showed that women with alcoholic husbands were more likely to experience IPV [271, 272]. Women working in Nepalese garment and carpet factories were also surveyed and, in this group, alcohol consumption of the husband was likewise associated with IPV [273]. In a qualitative study a number of young pregnant women from Nepalese slums described their experiences of IPV by their husbands with alcohol use disorders [271-273].

In a large national family study undertaken in India, alcohol consumption by the husband was positively associated with the experience of IPV by women (P<0.05) [274], and a husband's problem drinking was related to an increased likelihood of women experiencing severe IPV and injuries [275]. Another study found that the wives of alcoholics reported higher levels of conflict, perceived more danger and experienced more apprehension in relating with their spouses, than subjects in a matched control group. In a study of women in southern India, ever use of alcohol by men was associated with sexual IPV but not physical IPV, but the alcohol variable was a very rough measure [276]. In other studies in Mysore, in southern India, women reporting IPV who stated that their husband was a drinker were more likely to report physical IPV [277]. In Pune, a moderate correlation was identified between an IPV score reported by women and the AUDIT score (measuring problematic drinking) reported by the women's partners [278]. In yet another study in India, women who reported that their husbands were drinkers were more likely than those with abstaining husbands to report IPV in rural and urban areas of Tamilnadu [279], identifying micro factors, such as individual alcohol consumption, in an ecological framework as more critical than larger systemic factors. Also in India, in a study undertaken in Mumbai slums, IPV was more likely to be reported by women from poorer families and when husbands used alcohol [280]. Men also reported on their own

behaviour: in Kerala, India, men who reported perpetrating IPV ("batterers") scored significantly higher on childhood abuse, drinking, depression, and marital dissatisfaction, with all of these factors significantly correlated with male-to-female IPV (abuse in childhood emerged as the strongest predictor of current IPV) [281]. Women who lived with a husband who drank alcohol were twice as likely as those with an abstaining husband to report postpartum IPV [282].

Qualitative studies in a rural Indian community also described a causal relation and the ubiquity of alcohol-related intimate partner violence [283], and ways in which "socially condoned violence perpetrated by a husband against his wife and unjustified violence [sic]" and "socially prohibited violence perpetrated by a husband against his wife [sic]" was associated with alcohol [284]. Women in Bangalore, India, who reported having an alcoholic and/or abusive husband and who experienced intimate partner violence appeared to be more susceptible to severe and prolonged periods of depression and suicide attempts [285]. In Sri Lanka, IPV was more commonly reported by women who indicated that their partners abused alcohol [286]. Alcohol consumption of the husband was associated with sexual violence within marriage in Nepal [287].

#### Which women are at greater risk in Asia?

Commonly there are intersections of problems, with for instance gender inequity and alcohol combining to worsen IPV. Thus, women in India who are working reported being exposed to IPV because of the jealousy and insecurity of the husband who resented their empowerment. When they were also exposed to a partner's alcoholism, this increased the IPV they experienced [288]. In a Vietnamese study of pregnant women and their husbands, after controlling for other psychosocial risk factors, comorbid perinatal common mental disorders and alcohol dependence in husbands increased by 4.7 times the probability of perinatal common mental disorders in their wives via intimate partner violence (the reverse was not true, i.e., women's perinatal common mental disorders did not impact on men's outcomes) [289]. In a qualitative study of alcohol use in a conflict-displaced population in a refugee camp on the Thai-Burma border, intimate partner violence (IPV) was identified as a key concern. Alcohol use changed under the pressures of displacement, and IPV was an emergent alcohol-related harm, with the relationship between IPV and alcohol complex and gendered [290]. For sexworkers in India there was evidence of a cycle of IPV and alcohol problems, with some sex-workers describing how their husband's use of alcohol and unemployment led to pressure to do sex-work. Many of these women reported that they then experienced IPV from their intimate partners that was worse than the violence they experienced from their clients [173]. In China, in a study of sex-workers, partner's frequent alcohol use was associated with greater risk of IPV [291]. HIV positive women who reported severe alcohol problems were more likely to report IPV in Kazakhstan [292].

#### Latin America

In Mexico, one in four women reported intimate partner abuse, and alcohol use by the partner was associated with 2.5 times the odds of abuse. Among a range of factors, the most important predictor of severe IPV in this study was partner's alcohol consumption (daily or almost daily, OR 14.7, 95% CI 13.25-16.46) [293]. These findings are consistent with other studies in Mexico; for instance, more frequent alcohol consumption by the partner was found to be associated with IPV in a national survey undertaken in 2006 [294]. In a study undertaken across eight indigenous regions of Mexico, severe IPV (such as pointing a gun or threatening the partner with a sharp object, inflicting burns, firing a gun, attempting to choke or suffocate the partner, or forcing sexual intercourse) in the previous 12 months was 10%. In this study, high frequency of partner alcohol use (daily or weekly) was associated with seven times the odds of severe IPV [295]. In Peru, heavy drinking by the woman's partner was associated with an eight-fold increase in IPV [296].

The partner's excessive alcohol use was also an important predictor of experiencing IPV in Sao Paolo, Brazil, with proximal factors more strongly associated than community factors [297]. In Brazil in a sample of mothers attending primary healthcare services, alcohol use by the mother or her partner was associated with physical intimate partner violence [298]. In a related study, looking specifically at the interaction when partners misused alcohol, the probability of post-partum depression progressively and steeply increased, reaching almost sevenfold risk and involving up to six cumulative physical IPV events as opposed to none when alcohol was involved [299]. Also in Brazil, in a sample of men in treatment for substance abuse, hazardous drinking in the previous 12 months, as assessed by the AUDIT score, was associated with increased self-reporting of any perpetration of IPV (emotional, physical or sexual) in the previous 12 months [300].

#### Europe

Participants in a Russian study of attendees at a sexual health clinic who reported alcohol misuse were more than three times as likely as those who did not misuse alcohol to perpetrate IPV. Both alcohol misuse and certain drinking contexts (e. g., drinking on the streets or at parks) were associated with IPV [301]. In Ukraine, a nationally representative survey found that women who reported that their partners were frequently intoxicated and also exhibited marital controlling behaviours were more likely to experience emotional, physical and sexual IPV [302]. In a large sample of currently married

women of reproductive age in five post-soviet countries (n=3932 in Azerbaijan, n=4053 in Moldova, n=1932 in Ukraine, n=4361 in Kyrgyzstan, and n=4093 in Tajikistan) partner's problem drinking was the strongest risk factor associated with spousal violence [303]. A study in Russia of women attending clinics for sexually transmissible diseases identified an association between women's drinking and perpetration of and victimization from IPV [304].

## 5. DISCUSSION

Impacts on women's quality of life and wellbeing

Alcohol causes many health and social problems that substantially affect women, adolescents and children in LMIC. These health and social problems cause death and disability and cut short or compromise the quality of life of women and children. In these ways the consumption of alcohol compromises the rights women and children have to health and safety.

Reducing alcohol-related harm from heavy drinkers in the lives of women and children should improve the wellbeing and quality of life of women and children [305]. In this way reducing alcohol-related harm should contribute to the UN SDG 3 – to ensure healthy lives and promote wellbeing for all at all ages.

Impacts on women's health

Women's own drinking results in a range of physical and mental health problems, extending beyond the risks for men; for instance, women are more at risk of overdose from alcohol intoxication and any drinking increases the risk of breast cancer because of biological sex differences. The increased risk of many of these harms for women is likely to be similar in high-income countries (HIC) and low- and middle-income countries (LMIC), yet knowledge of the prevalence of a range of alcohol-related health conditions is seldom elucidated in LMIC. Many women in LMIC are unaware of the risks to their own and their children's health associated with drinking. Women have a right to be fully informed of the risks and consequences associated with the products they consume.

The health of women in LMIC is affected by both their own drinking and that of others in their families and communities. The Global Burden of Disease Studies identify numerous ways in which alcohol is attributed to the death, disease and injury of women [306-309]. One way in which the UN SDG 3 – to ensure healthy lives and promote wellbeing for all at all ages – can be met, is to reduce health-related harms of women due to alcohol in LMIC.

Harms to children because of others' drinking

Women's drinking also has the potential to increase the risks of problems for their own children and others in their family, work and community networks. Fetal Alcohol Spectrum Disorder (FASD) is a significant problem for children of heavy drinking mothers, and the prevalence of FASD, because of its serious and long-term effects, deserves special attention. Children and adolescents who live with heavy drinking parents or other family members are at greater risk of health and social problems, more likely to be abused and neglected and less likely to complete school or succeed at it. Across the world an estimated 275,000,000 children are victims of violence in their homes -- and these numbers are considered underestimates [310]. Sixteen per cent of cases of child abuse and neglect injuries are attributed to alcohol worldwide [1], although the estimates for LMIC need to be better estimated. Across LMIC, huge numbers of children have been physically hurt, verbally or emotionally abused, neglected and exposed to domestic violence because of others' drinking [95].

Parental heavy drinking, along with heavy drinking of others in the family, increases the risk of child abuse and neglect, both directly from drinking caregivers, and from others whom children are not protected from as they are less well supervised. Children are also at greater risk of injury and disease if their needs are not met by caregivers whose care is compromised by drinking.

Children are afforded special protections and rights under the United Nations Convention on the Rights of the Child. Reductions in adult problematic drinking, particularly of that by parents, will reduce the risk of a range of harms to children, thereby contributing to SDG3 at all ages. Such reductions will also increase the likelihood that children are able to develop to their fullest potential, protected from harmful influences, abuse and exploitation and better enabled to participate fully in family, cultural and social life (as spelled out in the UN Convention on the Rights of the Child [311]).

Harms to adolescents due to their own and others' drinking

Adolescents and young people are highlighted in this report as a group with increased alcohol-related problems. As young people move into the adult world and take part in society they are introduced to social worlds associated with new workplaces, rites of passage and ways of socialising that often involve heavy drinking. But young people have lower tolerance to alcohol and alcohol compromises decision making. Young people are also at risk in LMICs, where drinking age and serving practices are often unregulated and, even if regulated, unenforced. Early initiation of drinking among adolescents is associated with increased risk of dependence and other alcohol-related problems in adulthood, and contexts in which adolescents in LMIC drink are likely to bring higher risks, for example of sexual risk taking and consequent exposure to sexually transmissible diseases and sexual abuse.

As a group at particular risk, reducing heavy drinking among young people and that of others drinking in the environments young people gather in, should reduce both their health risks and violence they are exposed to. In these ways reducing alcohol consumption in LMIC will enable adolescents and young people to develop to their fullest, and ensure their health and wellbeing is protected and promoted (SDG-3).

Addressing alcohol-related harm to empower women and reduce gender-based alcohol-related violence

In HIC, women are more likely to be at risk of severe problems, including homicide and violence from men, and drinking by male partners and both partners increases the risk of severe intimate partner violence. This is also true in LMIC, and the prevalence and severity of violence against women appears to be greater than in HIC. Women and girls have the right to be safe from violence, regardless of their own drinking patterns, yet it is unarguable that one's own intoxication compromises one's ability to look after oneself. More importantly, alcohol consumption by men is both a factor that increases the prevalence of perpetration against women and the severity of injury that results. The intersection of drinking with aggressive traits and entitled gendered attitudes results in increased prevalence and severity of harm to women in LMIC.

Rape of women and children is recognized as a health and human rights issue internationally [312, 313]. Alcohol is implicated in both gender-based violence and intimate partner violence, affecting both the ways in which men behave towards women and the capacity women have to protect themselves. Studies of the relationship of alcohol and intimate partner violence constituted the largest proportion of the literature found in our search. In LMIC there was a near-overwhelming body of literature that indicated women were violently affected by men's drinking. Numerous examples where alcohol was associated with harm in LMIC were identified, including rape of women and children and intimate partner violence. This violence included violence during pregnancy.

The UN SDGs aim to ensure discrimination against all women and girls everywhere does not occur and seek to eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual or other types of exploitation [3]. In multiple ways the production, sale and consumption of alcohol in LMIC impinges on the human rights of women and children. Reducing heavy drinking, particularly by men, should promote gender equality and empowerment of women by helping to reduce harassment and discrimination (SDG 5.1) and alleviate violence against women (SDG 5.2).

Intersecting problems: alcohol and other risk factors for women and children

The effects of alcohol on women and children also intersect with other problems in LMIC. For instance, in a qualitative study of the effects of alcohol in countries with a history of recent warfare, use of alcohol was widespread, particularly in Kenya, Liberia, Uganda, and Thailand, and believed by participants to be linked to a range of health, social and protection problems, including illness, injury (intentional and unintentional), gender-based violence, risky behaviour for HIV and other sexually transmitted infection and blood-borne virus transmission, as well as detrimental effects on the household economy. Displacement experiences, including dispossession, livelihood restriction, hopelessness and uncertainty about the future, may make communities particularly vulnerable to substance use and its impact [147].

SDG -16 seeks to promote sustainable, just, peaceful and inclusive societies, with well-functioning institutions. Alcohol, particularly where heavy drinking by many members of a community occurs, can drain family and community resources, taking up resources that could be better spent elsewhere, and potentially affecting the critical and fragile bonds within communities. Heavy-drinking related street violence can make places unsafe and community members fearful. Reducing harmful alcohol consumption will assist in reducing violence and related deaths, making communities safer for their members.

#### Future research

While many studies have been identified and included in this review, there are patent gaps in the literature. There are ways in which women and children, sadly, can experience multiple types of health and social harms. In China a study took a novel approach and analysed co-occurrence of child victimization, intimate partner violence (IPV) between parents, and elder abuse within a family. The lifetime and the past-year prevalence of family poly-victimization was 2.5% and 1.1%, respectively. Parents from a poly-victimized family were more likely to report alcohol dependence [314].

Economic impacts on families have been little discussed in this review, yet the drinking of family members can cause and exacerbate poverty for other family members, particularly in LMIC, where there are seldom social services available to supplement family incomes. There was limited literature on how children's educational outcomes were affected. Associative stigma, too, may mean that families are reluctant to seek external help, and children and women are ashamed and isolated because of the drinking of their partner or father [315].

SDG 4 which seeks to ensure inclusive and equitable education and promote lifelong educational opportunities for all may indirectly be impacted upon by heavy drinking. While there are few studies which have shown a direct link between alcohol consumption and educational attainment in LMIC, particularly in situations, where parents drink heavily their ability to ensure their children attend school is reduced. This review has identified a number of studies that have shown associations between young people's drinking and school attendance and performance. In this way drinking can affect the educational outcomes of young people. This has potential ripple effects for their future opportunities and outcomes.

The GBD studies incompletely include harms from others' drinking, yet in the few studies that do include some such harms, it seems the extent of problems associated with others' drinking substantially affects women and children. In China, using data from both the Global Burden of Disease Study 2015 and Hubei Disease Surveillance Points system, Disability Adjusted Life Years (DALYs) for men and women for self-harm were calculated. A total of 2% of suicides of women were associated with their own alcohol use, yet 24% of suicides were attributed to IPV [316], which in turn has been associated with partners' drinking across LMICs.

There were few articles that identified how alcohol impacted on the quality of family life, and the ways in which heavy drinking by one or both parents can impact on couple and family relationships, although recent evidence suggests that the quality of life of women who live with heavy drinkers is markedly affected [305]. There is strong evidence that heavy drinking leads to marital instability, which in turn may have an impact on child development long before it leads to family breakdown. Studies show that drinking is strongly associated with other forms of family disruption and conflict which would destabilize the child's environment and encourage behavioural problems. As researchers emphasize,

"Little attention has been given to the iceberg of non-fatal damage to families and children caused by heavy drinking." [317]

There other subtle ways in which alcohol can reinforce discrimination and aggressive forms of masculinity. Marketing that uses male stereotypes and promotes heavy drinking plays a role in cultural attitudes towards alcohol, and in turn has a responsibility for the expression and development of negative attitudes and adverse outcomes associated with gendered violence, including IPV, stereotypical gender roles and caregiving roles of men and children. Women's roles can be limited by these attitudes, particularly in LMIC when gendered roles and heavy drinking intersect. This is seen in marital relationships but also experienced by female sex workers who are given a lower place in society, fewer rights and exposed to men's sense of entitlement and disrespect (from both clients and their partners). Many vulnerable women may begin to drink heavily in response to difficult family and work situations, with the intention to diminish the stress and strain they experience in their daily lives.

Finally, there are few studies of the ways in which alcohol interacts with and may hinder sustainable development. Countries affected by multiple intersecting problems like unemployment, poverty, war, refugee crises, etc. are quintessentially more vulnerable. Alcohol consumption does not cause these problems, but people in these situations have increased vulnerability. Alcohol misuse in these situations is both a symptom of the situation and something that worsens it. Reducing alcohol consumption could be an important way forward that results in the promotion of effective, peaceful, inclusive, sustainable and just societies (SDG 16).

## 6. REFERENCES

- 1. World Health Organization, Global status report on alcohol and health 2018. 2018: World Health Organization.
- 2. Laslett, A.-M.L., P.M. Dietze, and R.G. Room, *Carer drinking and more serious child protection case outcomes.* British journal of social work, 2012. **43**(7): p. 1384-1402.
- 3. United Nations General Assembly, Paris, Resolution 217A. 1948. p. 71-79.
- 4. UNICEF, *United Nations Convention on the Rights of the Child* 1989, United Nations International Children's Emergency Fund: Paris.
- 5. Peltzer, K. and S. Pengpid, *Alcohol use and health-related quality of life among hospital outpatients in South Africa.* Alcohol & Alcoholism, 2012. **47**(3): p. 291-5.
- 6. D'Souza, M.S., et al., Women's well-being and reproductive health in Indian mining community: need for empowerment. Reproductive Health, 2013. **10**: p. 24.
- 7. Jankhotkaew, J., et al., *The impact of heavy drinkers on others' health and well-being in Lao PDR and Thailand.* Journal of Substance Use, 2017. **22**(6): p. 617-623.
- 8. Khajehpour, M., et al., *Health status of women with intended and unintended pregnancies*. Public Health, 2013. **127**(1): p. 58-64.
- 9. Callinan, S., et al., Harms from a partner's drinking: an international study on adverse effects and reduced quality of life for women. American J of Drug and Alcohol Abuse, in press: p. Accepted 17/10/2018.
- 10. Wilsnack, R.W., et al., *Gender differences in binge drinking: Prevalence, predictors, and consequences.* Alcohol research: current reviews, 2018. **39**(1): p. 57.
- 11. Zaridze, D., et al., Alcohol and cause-specific mortality in Russia: a retrospective case-control study of 48,557 adult deaths. Lancet, 2009. **373**(9682): p. 2201-14.
- 12. Horvat, P., et al., Alcohol, pattern of drinking and all-cause mortality in Russia, Belarus and Hungary: a retrospective indirect cohort study based on mortality of relatives. Addiction, 2018. **113**(7): p. 1252-1263.
- 13. Andreuccetti, G., et al., *Alcohol use among fatally injured victims in Sao Paulo, Brazil: Bridging the gap between research and health services in developing countries.* Addiction, 2017. **112**(4): p. 596-603.
- 14. Gao, C.M., et al., *Active and passive smoking, and alcohol drinking and breast cancer risk in chinese women.*Asian Pacific Journal of Cancer Prevention: Apjcp, 2013. **14**(2): p. 993-6.
- 15. Sun, X., et al., *Population-based case-control study on risk factors for esophageal cancer in five high-risk areas in China.* Asian Pacific Journal of Cancer Prevention: Apjcp, 2010. **11**(6): p. 1631-6.
- 16. Tai, S.Y., et al., Cigarette smoking and alcohol drinking and esophageal cancer risk in Taiwanese women. World Journal of Gastroenterology, 2010. **16**(12): p. 1518-21.
- 17. Yaya, S., et al., Socioeconomic Inequalities in the Risk Factors of Noncommunicable Diseases Among Women of Reproductive Age in Sub-saharan Africa: A Multi-Country Analysis of Survey Data. Frontiers in Public Health, 2018. **6**: p. 307.
- 18. Bardach, A.E., et al., *Impact of level and patterns of alcohol drinking on coronary heart disease and stroke burden in Argentina*. PLoS ONE [Electronic Resource], 2017. **12**(3): p. e0173704.
- 19. Anderson, F., et al., *Acute pancreatitis: demographics, aetiological factors and outcomes in a regional hospital in South Africa.* South African Journal of Surgery, 2008. **46**(3): p. 83-6.
- 20. Sa, K.N., et al., Chronic pain and gender in Salvador population, Brazil. Pain, 2008. 139(3): p. 498-506.
- 21. Ozturk, M.A., et al., *Demographic and clinical features of gout patients in Turkey: a multicenter study.* Rheumatology International, 2013. **33**(4): p. 847-852.
- 22. Gelaye, A.A., K.N. Taye, and T. Mekonen, *Magnitude and risk factors of abortion among regular female students in Wolaita Sodo University, Ethiopia.* BMC Women's Health, 2014. **14**: p. 50.
- 23. Zhang, X.D., et al., *High rates of abortion and low levels of contraceptive use among adolescent female sex workers in Kunming, China: a cross-sectional analysis.* European Journal of Contraception & Reproductive Health Care, 2014. **19**(5): p. 368-78.
- 24. Wang, Y., et al., *Prevalence, risk factors, and impact on health related quality of life of overactive bladder in China.* Neurourology & Urodynamics, 2011. **30**(8): p. 1448-55.
- 25. Rajaram, S., L.K. Zottarelli, and T.S. Sunil, *An assessment of fetal loss among currently married women in India.* Journal of Biosocial Science, 2009. **41**(3): p. 309-27.
- 26. Balhara, Y.P.S. and S. Mathur, *Alcohol: A major public health problem-South Asian perspective*. Addictive Disorders & Their Treatment, 2012. **11**(2): p. 101-120.
- Dissiz, M., U.Y. Oskay, and N.K. Beji, Use of alcoholic beverages and other psychoactive substances among women in Turkey: medical, biological, and social consequences. A pilot study. Substance Use & Misuse, 2010. 45(7-8): p. 1060-76.
- Clausen, T., et al., Alcohol Consumption at Any Level Increases Risk of Injury Caused by Others: Data from the Study on Global AGEing and Adult Health. Substance Abuse, 2015. 9(Suppl 2): p. 125-32.
- 29. Borges, G., et al., *Risk of injury after alcohol consumption from case-crossover studies in five countries from the Americas*. Addiction, 2013. **108**(1): p. 97-103.

- 30. Wong, H., et al., *Prevalence of borderline personality disorder and its clinical correlates in Chinese patients with recent deliberate self-harm.* Journal of Personality Disorders, 2010. **24**(6): p. 800-811.
- 31. Jaisoorya, T., et al., *Correlates of high-risk and low-risk alcohol use among college students in Kerala, India.* Journal of Psychoactive Drugs, 2018. **50**(1): p. 54-61.
- 32. Coelho, C.L., et al., *Depressive symptoms and alcohol correlates among Brazilians aged 14 years and older: a cross-sectional study.* Substance Abuse Treatment, Prevention, & Policy, 2014. **9**: p. 29.
- 33. Barbosa, L.P., et al., Childhood trauma and suicide risk in a sample of young individuals aged 14-35 years in southern Brazil. Child Abuse & Neglect, 2014. **38**(7): p. 1191-6.
- 34. Perez-Olmos, I., et al., [Factors associated with suicide attempts and persistent suicidal ideation at a Primary Care Unit in Bogota, 2004-2006]. Revista de Salud Publica, 2008. **10**(3): p. 374-85.
- 35. Singh, V.D. and S.L. Lathrop, *Youth suicide in New Mexico: a 26-year retrospective review.* Journal of Forensic Sciences, 2008. **53**(3): p. 703-8.
- 36. Davis, E.C., et al., *Patterns of Alcohol Abuse, Depression, and Intimate Partner Violence Among Township Mothers in South Africa Over 5 Years*. AIDS & Behavior, 2017. **21**(Suppl 2): p. 174-182.
- Asadullah, M., et al., Psychological impact on caregivers of HIV-infected children in Udupi district, Karnataka. AIDS Care, 2017. 29(6): p. 787-792.
- 38. Ahmed, N.A., et al., *Postnatal depression and intimate partner violence: a nationwide clinic-based cross-sectional study in Malaysia.* Bmj Open, 2018. **8**(5).
- 39. Savarimuthu, R.J., et al., *Post-partum depression in the community: a qualitative study from rural South India.* International Journal of Social Psychiatry, 2010. **56**(1): p. 94-102.
- 40. Matos, M.L.L., J.S. Pielago, and A.L. Figueroa, *Major depression in pregnant women served by the National Materno-Perinatal Institute in Lima, Peru.* Revista Panamericana De Salud Publica-Pan American Journal of Public Health, 2009. **26**(4): p. 310-314.
- 41. Ana, M.P.F., et al., *Prevalence and risk factors associated with postpartum depression in puerperal women consulting in primary care.* Revista Medica De Chile, 2008. **136**(1): p. 44-52.
- 42. Rotheram-Fuller, E.J., et al., *Maternal patterns of antenatal and postnatal depressed mood and the impact on child health at 3-years postpartum.* Journal of Consulting & Clinical Psychology, 2018. **86**(3): p. 218-230.
- 43. King, E.J., I. Evdokimova, and J. Godunova, 'If she gave birth to a healthy child, then she may forget about her own health': Postpartum engagement in HIV care and treatment among women living with HIV in Russia. Global Public Health, 2018: p. 1-12.
- 44. Mgongo, M., et al., Prevalence and predictors of exclusive breastfeeding among women in Kilimanjaro region, Northern Tanzania: a population based cross-sectional study. International Breastfeeding Journal, 2013. 8(1): p. 12.
- 45. Chan, Y.Y., et al., Lifestyle, chronic diseases and self-rated health among Malaysian adults: results from the 2011 National Health and Morbidity Survey (NHMS). BMC Public Health, 2015. **15**: p. 754.
- 46. Shidhaye, R. and V. Patel, Association of socio-economic, gender and health factors with common mental disorders in women: a population-based study of 5703 married rural women in India. International Journal of Epidemiology, 2010. **39**(6): p. 1510-1521.
- 47. Parkar, S.R., B. Nagarsekar, and M.G. Weiss, *Explaining suicide in an urban slum of Mumbai, India: a sociocultural autopsy.* Crisis: Journal of Crisis Intervention & Suicide, 2009. **30**(4): p. 192-201.
- 48. Vijayakumar, L., Suicide in women. Indian journal of psychiatry, 2015. 57(Suppl 2): p. S233.
- 49. Culbreth, R., et al., *Suicidal Ideation among Youth Living in the Slums of Kampala, Uganda.* International Journal of Environmental Research & Public Health [Electronic Resource], 2018. **15**(2): p. 09.
- 50. Leonard, K.E. and B.M. Quigley, *Thirty years of research show alcohol to be a cause of intimate partner violence:* Future research needs to identify who to treat and how to treat them. Drug and Alcohol Review, 2016.
- 51. Laslett, A.-M., et al., *Scoping response system management of alcohol's harm to others in lower middle income countries.* Nordic Studies on Alcohol and Drugs, 2016. **33**(5-6): p. 515-536.
- 52. Sunitha, S. and G. Gururaj, *Health behaviours problems among young people in India: Cause for concern call for action.* Indian Journal of Medical Research, 2014. **140**: p. 185-208.
- 53. Akpa, O.M., *Multilevel analysis of psychosocial functioning of Adolescents in families affected by HIV/AIDS in Benue state*, *Nigeria*. African Journal of Biomedical Research, 2018. **21**(2): p. 123-131.
- 54. Swahn, M., et al., *Prevalence and correlates of suicidal ideation and physical fighting: a comparison between students in Botswana, Kenya, Uganda, Zambia and the USA.* International Journal of Public Health, 2010. **2**(2): p. 195-206.
- 55. Tsai, M.H., et al., *Deliberate self-harm by Taiwanese adolescents*. Acta Paediatrica, 2011. **100**(11): p. e223-6.
- 56. Evren, C., et al., *Non-suicidal self-harm behavior within the previous year among 10th-grade adolescents in Istanbul and related variables.* Nordic Journal of Psychiatry, 2014. **68**(7): p. 481-487.
- 57. Chan, L.F., et al., Sexual abuse and substance abuse increase risk of suicidal behavior in Malaysian youth. Asia-Pacific psychiatry: Official Journal of the Pacific Rim College of Psychiatrists, 2013. **5 Suppl 1**: p. 123-6.
- 58. Borges, G., et al., Alcohol, cannabis and other drugs and subsequent suicide ideation and attempt among young Mexicans. Journal of Psychiatric Research, 2017. 91: p. 74-82.
- 59. Andrade, S., et al., Association between physical violence, consumption of alcohol and other drugs, and bullying among Brazilian adolescents. Cadernos De Saude Publica, 2012. **28**(9): p. 1725-1736.

- 60. Reyes-Pulliza, J.C., et al., *Binge drinking as a risk factor for violence among secondary school students in a nationally representative sample in Puerto Rico*. Puerto Rico Health Sciences Journal, 2015. **34**(1): p. 20-4.
- 61. Huang, Z., et al., Risk Factor's Associated with Peer Victimization and Bystander Behaviors among Adolescent Students. International Journal of Environmental Research & Public Health [Electronic Resource], 2016. **13**(8): p. 27.
- 62. Faler, C.S., et al., Family psychosocial characteristics, tobacco, alcohol, and other drug use, and teenage pregnancy. Cadernos De Saude Publica, 2013. **29**(8): p. 1654-1663.
- 63. Dimitriu, M., et al., *The problems associated with adolescent pregnancy in Romania: A cross-sectional study.*Journal of Evaluation in Clinical Practice, 2018. **17**: p. 17.
- 64. Giacomozzi, A.I., et al., Survey on Drug Use and Vulnerabilities among Students from Public Schools Participating in the School Health Program/Health and Prevention in Schools in the City of Florianopolis. Saude E Sociedade, 2012. **21**(3): p. 612-622.
- 65. Schafer, J.L., et al., *Exposure to physical and sexual violence and suicidal ideation among schoolchildren*. Jornal Brasileiro de Psiquiatria, 2017. **66**(2): p. 96-103.
- 66. Pierobon, M., et al., *Alcohol consumption and violence among Argentine adolescents*. Jornal de Pediatria, 2013. **89**(1): p. 100-7.
- 67. Stickley, A., et al., Adolescent binge drinking and risky health behaviours: Findings from northern Russia. Drug and Alcohol Dependence, 2013. **133**(3): p. 838-844.
- 68. Thoa, L.T.K., et al., *Alcohol Use, Risk Taking, Leisure Activities and Health Care Use Among Young People in Northern Vietnam.* Central Asian Journal of Global Health, 2013. **2**(2): p. 10.
- 69. Viellas, E.F., et al., Factors associated with physical aggression in pregnant women and adverse outcomes for the newborn. Jornal de Pediatria, 2013. **89**(1): p. 83-90.
- 70. Page, R.M., et al., *Psychosocial distress and substance use among adolescents in four countries: Philippines, China, Chile, and Namibia.* Youth & Society, 2011. **43**(3): p. 900-930.
- 71. Guo, L., et al., Alcohol use and alcohol-related problems among adolescents in China: A large-scale cross-sectional study. Medicine, 2016. **95**(38).
- 72. Dong, F., et al., *Prevalence and associated factors of poly-victimization in Chinese adolescents.* Scandinavian Journal of Psychology, 2013. **54**(5): p. 415-22.
- 73. Jaisoorya, T., et al., *Prevalence and correlates of alcohol use among adolescents attending school in Kerala, India.* Drug and Alcohol Review, 2016. **35**(5): p. 523-529.
- 74. Swahn, M.H., et al., *Problem Drinking, Alcohol-Related Violence, and Homelessness among Youth Living in the Slums of Kampala, Uganda.* International Journal of Environmental Research & Public Health [Electronic Resource], 2018. **15**(6): p. 24.
- 75. Rozin, L. and I.P.S. Zagonel, *Risk factors for alcohol dependence in adolescents*. Acta Paulista De Enfermagem, 2012. **25**(2): p. 314-318.
- 76. Benjet, C., et al., Chronic childhood adversity and stages of substance use involvement in adolescents. Drug & Alcohol Dependence, 2013. **131**(1-2): p. 85-91.
- 77. Sanchez, Z.M., et al., Childhood alcohol use may predict adolescent binge drinking: A multivariate analysis among adolescents in Brazil. The Journal of Pediatrics, 2013. **163**(2): p. 363-368.
- 78. Chen, C.Y., et al., *Transition from alcohol to other drugs among adolescents in Taiwan: the first drinking context matters.* Journal of Studies on Alcohol & Drugs, 2008. **69**(3): p. 378-87.
- 79. Amiri, Z.M., A.J. Shakib, and A.K. Moosavi, *Prevalence and risk factors of ecstasy use among college students in Astara, Islamic Republic of Iran.* Eastern Mediterranean Health Journal, 2009. **15**(5): p. 1192-200.
- 80. Ayo-Yusuf, O.A., et al., Longitudinal association of smoking-related attitude to oral health with adolescents' smoking onset. Journal of Public Health Dentistry, 2009. **69**(1): p. 29-33.
- 81. Mohtasham-Amiri, Z., A. Jafari-Shakib, and A. Khalili-Moosavi, *Prevalence and factors associated with Ecstasy use among college undergraduates in north of Iran-2005.* Asian Journal of Psychiatry, 2011. **4**(1): p. 31-4.
- 82. Fuhr, D.C., et al., Alcohol and other psychoactive substances in Africa and the Americas: Results from the WHO Global School-based Student Health Survey. Journal of Substance Use, 2014. **19**(3): p. 274-282.
- 83. Hallal, A., et al., *The use of other tobacco products among Brazilian school children (PeNSE 2012)*. Cadernos De Saude Publica, 2017. **33**.
- 84. Cakici, M., et al., *The prevalence and risk factors of psychoactive substance use among secondary school students in Turkish Republic of Northern Cyprus*. Anadolu Psikiyatri Dergisi-Anatolian Journal of Psychiatry, 2018. **19**(6): p. 586-592.
- 85. Caman, O.K. and H. Ozcebe, *Adolescents living in orphanages in Ankara: Psychological symptoms, level of physical activity, and associated factors.* Turk Psikiyatri Dergisi, 2011. **22**(2): p. 93-103.
- 86. Vieira, P.C., et al., *Alcohol, tobacco, and other drug use by teenage students in a city in Southern Brazil.* Cadernos De Saude Publica, 2008. **24**(11): p. 2487-2498.
- 87. Xiao, Q., et al., Parental alcoholism, adverse childhood experiences, and later risk of personal alcohol abuse among Chinese medical students. Biomedical & Environmental Sciences, 2008. **21**(5): p. 411-9.
- 88. Assanangkornchai, S., A. Mukthong, and T. Intanont, *Prevalence and patterns of alcohol consumption and health-risk behaviors among high school students in Thailand.* Alcoholism: Clinical & Experimental Research, 2009. **33**(12): p. 2037-46.

- 89. Kabiru, C.W., et al., Self-reported drunkenness among adolescents in four sub-Saharan African countries: Associations with adverse childhood experiences. Child and Adolescent Psychiatry and Mental Health Vol 4 2010, ArtID 17, 2010. 4.
- 90. Ramiro, L.S., B.J. Madrid, and D.W. Brown, *Adverse childhood experiences (ACE) and health-risk behaviors among adults in a developing country setting.* Child Abuse & Neglect, 2010. **34**(11): p. 842-55.
- 91. Tsering, D., R. Pal, and A. Dasgupta, *Licit and illicit substance use by adolescent students in eastern India:*Prevalence and associated risk factors. Journal of Neurosciences in Rural Practice, 2010. 1(2): p. 76-81.
- 92. Cano, A.M.T., A.P. Gomez, and O.S. Diaz-Granados, *Social context variables and their influence on the occurrence of problematic situations associated with alcohol use in adolescents.* Adicciones, 2011. **23**(4): p. 349-356.
- 93. Salaam, A.O. and J. Brown, *Lagos "Area Boys", Substance Usage and Potential Risk Factors*. International Journal of Mental Health and Addiction, 2012. **10**(1): p. 83-96.
- 94. Pengpid, S. and K. Peltzer, *Parental involvement and health risk behaviours among school-going adolescents in six african countries.* Journal of Psychology in Africa, 2018: p. No Pagination Specified.
- 95. Laslett, A.M., et al., *A Multi-Country Study of Harms to Children Because of Others' Drinking.* Journal of Studies on Alcohol & Drugs, 2017. **78**(2): p. 195-202.
- 96. Swahn, M.H., et al., *Alcohol-Related Physical Abuse of Children in the Slums of Kampala, Uganda.* International Journal of Environmental Research & Public Health [Electronic Resource], 2017. **14**(10): p. 26.
- 97. Adnams, C.M., Fetal alcohol spectrum disorder in Africa. Current Opinion in Psychiatry, 2017. 30(2): p. 108-112.
- 98. Donald, K.A.M., et al., *The developmental effects of HIV and alcohol: a comparison of gestational outcomes among babies from South African communities with high prevalence of HIV and alcohol use.* Aids Research and Therapy, 2017. **14**.
- 99. Carter, R.C., et al., Effects of heavy prenatal alcohol exposure and iron deficiency anemia on child growth and body composition through age 9 years. Alcoholism: Clinical & Experimental Research, 2012. **36**(11): p. 1973-82.
- Zaheri, F., et al., Risk factors associated with neural tube defects in infants referred to western Iranian obstetrical centers; 2013-2014. Electronic Physician [Electronic Resource], 2017. **9**(6): p. 4636-4642.
- 101. May, P.A., et al., Breastfeeding and maternal alcohol use: Prevalence and effects on child outcomes and fetal alcohol spectrum disorders. Reproductive Toxicology, 2016. **63**: p. 13-21.
- 102. Stromland, K., et al., *Fetal alcohol spectrum disorders among children in a Brazilian orphanage.* Birth Defects Research, 2015. **103**(3): p. 178-85.
- 103. Pei, L., et al., *The Association of Maternal Lifestyle with Birth Defects in Shaanxi Province, Northwest China.* PLoS ONE [Electronic Resource], 2015. **10**(9): p. e0139452.
- Jacobs, L. and J. Jacobs, 'Bad' mothers have alcohol use disorder: Moral panic or brief intervention? Gender & Behaviour, 2014. 12(1): p. 5971-5979.
- 105. Momino, W., et al., *Maternal drinking behavior and Fetal Alcohol Spectrum Disorders in adolescents with criminal behavior in southern Brazil.* Genetics and Molecular Biology, 2012. **35**(4): p. 960-965.
- 106. Choi, K.W., et al., *Drinking before and after pregnancy recognition among South African women: the moderating role of traumatic experiences.* BMC Pregnancy & Childbirth, 2014. **14**: p. 97.
- 107. Balachova, T., et al., *Do attitudes and knowledge predict at-risk drinking among Russian women?* American Journal of Drug & Alcohol Abuse, 2016. **42**(3): p. 306-15.
- 108. Gallaher, J.R., et al., *Intentional injury against children in Sub-Saharan Africa: A tertiary trauma centre experience.* Injury, 2016. **47**(4): p. 837-41.
- 109. Chander, P., et al., *Intimate Partner Violence and Child Behavioral Problems in South Africa.* Pediatrics, 2017. **139**(3).
- 110. Yang, S. and M.S. Kramer, *Paternal alcohol consumption, family transition and child development in a former Soviet country.* International journal of epidemiology, 2012. **41**(4): p. 1086-1096.
- 111. Jardin, C., et al., Caregiver alcohol use and mental health among children orphaned by HIV/AIDS in South Africa. AIDS Care, 2017. **29**(3): p. 399-407.
- 112. Meyer, S., et al., *The nature and impact of chronic stressors on refugee children in Ban Mai Nai Soi camp, Thailand.* Global Public Health, 2013. **8**(9): p. 1027-47.
- 113. Berg, K.L., C.-S. Shiu, and H. Nguyen, *Prevalence of victimization, and associated risk factors, impacting youth with disabilities in Vietnam: A population-based study.* International Journal on Disability and Human Development, 2015. **14**(2): p. 179-186.
- 114. Choi, K.W., et al., "Wine you get every day, but a child you can't replace": The perceived impact of parental drinking on child outcomes in a South African township. Journal of Child & Adolescent Mental Health, 2015. 27(3): p. 173-87.
- Esser, M.B., et al., *Harms from alcohol consumption by strangers in five Indian states and policy implications.*Drug and Alcohol Review, 2017. **36**(5): p. 682-690.
- 116. Morantz, G., et al., *Child abuse and neglect among orphaned children and youth living in extended families in sub-Saharan Africa: What have we learned from qualitative inquiry?* Vulnerable Children & Youth Studies, 2013. **8**(4): p. 338-352.
- 117. Yarney, L., C. Mba, and E. Asampong, *Qualitative study on the socio-cultural determinants of care of children orphaned by AIDS in the Ashanti and Eastern regions of Ghana*. BMC Public Health, 2015. **15**: p. 6.

- 118. Saile, R., et al., Does war contribute to family violence against children? Findings from a two-generational multiinformant study in Northern Uganda. Child Abuse & Neglect, 2014. **38**(1): p. 135-46.
- 119. Praharaj, S.K., P. Verma, and M. Arora, *Inhalant abuse (typewriter correction fluid) in street children.* Journal of Addiction Medicine, 2008. **2**(4): p. 175-7.
- 120. Yilmaz, H.B. and S. Dulgerler, *Children who work in the street in Izmir, Turkey.* Social Behavior and Personality, 2011. **39**(1): p. 129-144.
- 121. Fernando, A.D. and W. Karunasekera, *Juvenile victimisation in a group of young Sri Lankan adults.*[Erratum appears in Ceylon Med J. 2009 Dec;54(4):127]. Ceylon Medical Journal, 2009. **54**(3): p. 80-4.
- 122. Gwirayi, P. and A. Shumba, *Child physical abuse among urban secondary school pupils in Zimbabwe.* Journal of Psychology in Africa, 2009. **19**(1): p. 113-118.
- 123. Catani, C., E. Schauer, and F. Neuner, *Beyond individual war trauma: domestic violence against children in Afghanistan and Sri Lanka*. Journal of Marital & Family Therapy, 2008. **34**(2): p. 165-76.
- 124. Sriskandarajah, V., F. Neuner, and C. Catani, *Predictors of violence against children in Tamil families in northern Sri Lanka*. Social Science & Medicine, 2015. **146**: p. 257-65.
- 125. Diaz-Olavarrieta, C., et al., *Abusive head trauma at a tertiary care children's hospital in Mexico City. A preliminary study.* Child Abuse & Neglect, 2011. **35**(11): p. 915-23.
- 126. Emery, C.R., H.T. Nguyen, and J. Kim, Understanding Child Maltreatment in Hanoi: Intimate Partner Violence, Low Self-Control, and Social and Child Care Support. Journal of Interpersonal Violence, 2014. 29(7): p. 1228-1257.
- 127. Shen, L., et al., *Investigation of child maltreatment: survey among junior school pupils in Henan province of China*. Asia-Pacific psychiatry: Official Journal of the Pacific Rim College of Psychiatrists, 2015. **7**(1): p. 85-90.
- 128. Gebara, C., et al., *Psychosocial factors associated with mother-child violence: a household survey.* Social Psychiatry & Psychiatric Epidemiology, 2017. **52**(1): p. 77-86.
- 129. Jengtee, S., et al., The study of familial history and associated risks of sexually abused children at Ramathibodi Hospital. Journal of the Medical Association of Thailand, 2014. **97**(9): p. 923-31.
- 130. Swahn, M.H., et al., Serious violence victimization and perpetration among youth living in the slums of Kampala, Uganda. Western Journal of Emergency Medicine, 2012. **13**(3): p. 253.
- 131. Braham, M.Y., et al., *Epidemiological aspects of child abuse and neglect in Sousse, Tunisia: A 10-year retrospective study.* Journal of Forensic & Legal Medicine, 2018. **54**: p. 121-126.
- 132. Alao, A.A. and M.B. Molojwane, *Childhood sexual abuse: The Botswana perspectives*. Smith, Megan J [Ed] (2008) Child sexual abuse: Issues and challenges (pp 9-18) xii, 236 pp Hauppauge, NY, US: Nova Science Publishers; US, 2008: p. 9-18.
- 133. Baltieri, D.A. and A.G. de Andrade, *Alcohol and drug consumption among sexual offenders*. Forensic Science International, 2008. **175**(1): p. 31-5.
- Leye, M.M.M., et al., Study of determinants of rape in minors in the Kolda region of Senegal. Sante Publique, 2014. **26**(1): p. 131-138.
- 135. Scott-Sheldon, L.A.J., et al., *Alcohol Use Predicts Sexual Decision-Making: A Systematic Review and Meta- Analysis of the Experimental Literature*. AIDS and Behavior, 2016. **20**(1): p. 19-39.
- 136. Kalichman, S.C., et al., Alcohol Use and Sexual Risks for HIV/AIDS in Sub-Saharan Africa: Systematic Review of Empirical Findings. Prevention Science, 2007. **8**(2): p. 141.
- 137. Rehm, J., et al., Does alcohol use have a causal effect on HIV incidence and disease progression? A review of the literature and a modeling strategy for quantifying the effect. Population health metrics, 2017. **15**(1): p. 4-4.
- Michel, J., et al., Collective patient behaviours derailing ART roll-out in KwaZulu-Natal: perspectives of health care providers. AIDS Research & Therapy [Electronic Resource], 2013. **10**(1): p. 20.
- 139. Schneider, M., et al., *The impact of alcohol on HIV prevention and treatment for South Africans in primary healthcare.* Curationis, 2014. **37**(1): p. 1137.
- 140. Shuper, P.A., et al., *Causal Considerations on Alcohol and HIV/AIDS A Systematic Review.* Alcohol and Alcoholism, 2010. **45**(2): p. 159-166.
- 141. Gmel, G., K.D. Shield, and J. Rehm, Developing a method to derive alcohol-attributable fractions for HIV/AIDS mortality based on alcohol's impact on adherence to antiretroviral medication. Population health metrics, 2011. **9**(1): p. 5.
- 142. Tsai, L.C., et al., "There is no other option; we have to feed our families...who else would do it?": The financial lives of women engaging in sex work in Ulaanbaatar, Mongolia. Global Journal of Health Science, 2013. **5**(5): p. 41-50.
- 143. Vandepitte, J., et al., *Alcohol use, mycoplasma genitalium, and other STIs associated With HIV incidence among women at high risk in Kampala, Uganda.* Journal of Acquired Immune Deficiency Syndromes: JAIDS, 2013. **62**(1): p. 119-26.
- . Chersich, M.F., et al., *Effects of hazardous and harmful alcohol use on HIV incidence and sexual behaviour: a cohort study of Kenyan female sex workers*. Global Health, 2014. **10**: p. 22.
- 145. Bohora, S., et al., Latent Class Analysis of HIV Risk Behaviors Among Russian Women at Risk for Alcohol-Exposed Pregnancies. AIDS & Behavior, 2017. **21**(Suppl 2): p. 243-252.
- 146. De Dieu Longo, J., et al., Spectrum of female commercial sex work in Bangui, Central African Republic. SAHARA-J: Journal of Social Aspects of HIV / AIDS, 2017. 14(1): p. 171-184.

- 147. Ezard, N., et al., Six rapid assessments of alcohol and other substance use in populations displaced by conflict. Conflict & Health [Electronic Resource], 2011. **5**(1): p. 1.
- 148. Kalichman, S.C., L.C. Simbayi, and D. Cain, *HIV transmission risk behaviours among HIV seropositive sexually transmitted infection clinic patients in Cape Town, South Africa.* European Journal of Public Health, 2010. **20**(2): p. 202-6.
- 149. Vasquez, C., et al., *Gender Disparities in HIV Risk Behavior and Access to Health Care in St. Petersburg, Russia.* AIDS Patient Care & STDs, 2013. **27**(5): p. 304-310.
- 150. Bryant, K.J., et al., Integrating HIV/AIDS and alcohol research. Alcohol Research & Health, 2010. 33(3): p. 167.
- 151. Swahn, M.H., et al., *Prevalence of HIV and associated risks of sex work among youth in the slums of Kampala.* AIDS research and treatment, 2016. **2016**.
- 152. Govender, I., K. Nel, and X.M. Sibuyi, *An exploration of alcohol use amongst undergraduate female psychology students at a South African university.* The South African Journal Of Psychiatry: SAJP: The Journal Of The Society Of Psychiatrists Of South Africa, 2017. **23**: p. 1022.
- 153. Seth, P., G.M. Wingood, and R.J. DiClemente, *Exposure to alcohol problems and its association with sexual behaviour and biologically confirmed Trichomonas vaginalis among women living with HIV.* Sexually Transmitted Infections, 2008. **84**(5): p. 390-392.
- Doku, D., Substance use and risky sexual behaviours among sexually experienced Ghanaian youth. BMC Public Health, 2012. **12**(1): p. 571.
- 155. Stephenson, R., C. Simon, and C. Finneran, *Community Factors Shaping Early Age at First Sex among Adolescents in Burkina Faso, Ghana, Malawi, and Uganda.* Journal of Health Population and Nutrition, 2014. **32**(2): p. 161-175.
- 156. Guilamo-Ramos, V., et al., *HIV Risk Behavior among Youth in the Dominican Republic: The Role of Alcohol and Other Drugs*. Journal of the International Association of Physicians in AIDS Care: JIAPAC, 2011. **10**(6): p. 388-95.
- 157. Loza, O., et al., Correlates of early versus later initiation into sex work in two Mexico-U.S. border cities. Journal of Adolescent Health, 2010. **46**(1): p. 37-44.
- 158. Akarro, R.R., *Some factors associated with condom use among bar maids in Tanzania*. Journal of Biosocial Science, 2009. **41**(1): p. 125-37.
- Myers, B., et al., Ethnic differences in alcohol and drug use and related sexual risks for HIV among vulnerable women in Cape Town, South Africa: implications for interventions. BMC Public Health, 2013. **13**: p. 174.
- 160. Sanchez, Z.M., et al., Sexual behavior among high school students in Brazil: alcohol consumption and legal and illegal drug use associated with unprotected sex. Clinics (Sao Paulo, Brazil), 2013. **68**(4): p. 489-94.
- Heravian, A., et al., *Alcohol consumption patterns and sexual risk behavior among female sex workers in two South Indian communities.* International Journal of Drug Policy, 2012. **23**(6): p. 498-504.
- 162. Rios-Zertuche, D., et al., Alcohol abuse and other factors associated with risky sexual behaviors among adolescent students from the poorest areas in Costa Rica. International Journal of Public Health, 2017. **62**(2): p. 271-282.
- 163. Lubega, M., et al., Risk Denial and Socio-Economic Factors Related to High HIV Transmission in a Fishing Community in Rakai, Uganda: A Qualitative Study. PLoS ONE [Electronic Resource], 2015. **10**(8): p. e0132740.
- 164. Asante, K.O., A. Meyer-Weitz, and I. Petersen, *Mental Health and Health Risk Behaviours of Homeless Adolescents and Youth: A Mixed Methods Study.* Child & Youth Care Forum, 2016. **45**(3): p. 433-449.
- 165. Yahaya, I., et al., Childhood sexual abuse among girls and determinants of sexual risk behaviours in adult life in sub-Saharan Africa. Journal of Aggression, Conflict and Peace Research, 2015. **7**(2): p. 67-75.
- 166. Norman, L.R., et al., *HIV-Testing Practices and a History of Substance Use among Women Living in Public Housing in Puerto Rico.* Journal of the International Association of Physicians in AIDS Care: JIAPAC, 2011. **10**(4): p. 260-5.
- Luseno, W.K. and W.M. Wechsberg, Correlates of HIV testing among South African women with high sexual and substance-use risk behaviours. Aids Care-Psychological and Socio-Medical Aspects of Aids/Hiv, 2009. 21(2): p. 178-184.
- 168. Wechsberg, W.M., et al., *The male factor: Outcomes from a cluster randomized field experiment with a couples-based HIV prevention intervention in a South African township.* Drug & Alcohol Dependence, 2016. **161**: p. 307-315
- Swahn, M., M. Haberlen, and J.B. Palmier, *Alcohol and drug use and other high-risk behaviors among youth in the slums of Kampala, Uganda: Perceptions and contexts obtained through focus groups.* The International Journal of Alcohol and Drug Research, 2014. **3**(4): p. 289-295.
- 170. Emusu, D., et al., Experience of sexual violence among women in HIV discordant unions after voluntary HIV counselling and testing: a qualitative critical incident study in Uganda. AIDS Care, 2009. **21**(11): p. 1363-70.
- 171. Chakrapani, V., et al., *Prevalence and contexts of inconsistent condom use among heterosexual men and women living with HIV in India: implications for prevention.* AIDS Patient Care & Stds, 2010. **24**(1): p. 49-58.
- 172. Samet, J.H., et al., Alcohol use and sex risk behaviors among HIV-infected female sex workers (FSWs) and HIV-infected male clients of FSWs in India. AIDS & Behavior, 2010. **14 Suppl 1**: p. S74-83.
- 173. Panchanadeswaran, S., et al., Intimate partner violence is as important as client violence in increasing street-based female sex workers' vulnerability to HIV in India. International Journal of Drug Policy, 2008. **19**(2): p. 106-12.

- 174. Thapa, S., et al., Vulnerability of wives of Nepalese labor migrants to HIV infection: Integrating quantitative and qualitative evidence. Women & Health, 2016. **56**(7): p. 745-66.
- 175. Zule, W.A., et al., Condom Use, Multiple Rounds of Sex, and Alcohol Use Among South African Women Who Use Alcohol and Other Drugs: An Event-Level Analysis. Sexually Transmitted Diseases, 2018. **45**(12): p. 786-790.
- 176. Cardoso, L.D. and A. Malbergier, *Who is not using condoms among HIV-positive patients in treatment in the largest city in Brazil?* AIDS Care, 2015. **27**(5): p. 629-36.
- 177. Diehl, A., et al., Sexual risk behaviors in non-injecting substance-dependent Brazilian patients. Adicciones, 2014. **26**(3): p. 208-20.
- 178. Wechsberg, W.M., et al., Substance use, gender inequity, violence and sexual risk among couples in Cape Town. Culture, Health & Sexuality, 2013. **15**(10): p. 1221-36.
- 179. Wechsberg, W.M., et al., *The Relationship of Alcohol and Other Drug Use Typologies to Sex Risk Behaviors among Vulnerable Women in Cape Town, South Africa.* Journal of AIDS & Clinical Research. S1, 2012. **15**: p. 20.
- 180. Goldenberg, S.M., et al., *Influence of indoor work environments on health, safety, and human rights among migrant sex workers at the Guatemala-Mexico Border: a call for occupational health and safety interventions.* Bmc International Health and Human Rights, 2018. **18**.
- 181. Bryant, K.J., et al., Integrating HIV/AIDS and Alcohol Research. Alcohol Research & Health, 2010. **33**(3): p. 167-178.
- 182. Do, N.T., et al., Psychosocial Factors Affecting Medication Adherence Among HIV-1 Infected Adults Receiving Combination Antiretroviral Therapy (cART) in Botswana. Aids Research and Human Retroviruses, 2010. **26**(6): p. 685-691.
- 183. Kekwaletswe, C.T. and N.K. Morojele, *Alcohol use, antiretroviral therapy adherence, and preferences regarding an alcohol-focused adherence intervention in patients with human immunodeficiency virus.* Patient preference & adherence, 2014. **8**: p. 401-13.
- 184. Kader, R., et al., *Hazardous and harmful use of alcohol and/or other drugs and health status among South African patients attending HIV clinics.* AIDS and Behavior, 2014. **18**(3): p. 525-534.
- 185. Lifson, A.R., et al., Barriers to retention in care as perceived by persons living with HIV in rural Ethiopia: focus group results and recommended strategies. Journal of the International Association of Providers of AIDS Care, 2013. **12**(1): p. 32-8.
- 186. Lyimo, R.A., et al., Determinants of antiretroviral therapy adherence in northern Tanzania: a comprehensive picture from the patient perspective. BMC Public Health, 2012. 12: p. 716.
- 187. Lyimo, R.A., et al., Stigma, Disclosure, Coping, and Medication Adherence Among People Living with HIV/AIDS in Northern Tanzania. Aids Patient Care and Stds, 2014. **28**(2): p. 98-105.
- 188. Morojele, N.K., C.T. Kekwaletswe, and S. Nkosi, Associations between alcohol use, other psychosocial factors, structural factors and antiretroviral therapy (ART) adherence among South African ART recipients. AIDS & Behavior, 2014. **18**(3): p. 519-24.
- 189. Wandera, B., et al., Alcohol Consumption among HIV-Infected Persons in a Large Urban HIV Clinic in Kampala Uganda: A Constellation of Harmful Behaviors. PLoS ONE [Electronic Resource], 2015. **10**(5): p. e0126236.
- 190. Conroy, A.A., et al., "If She is Drunk, I Don't Want Her to Take it": Partner Beliefs and Influence on Use of Alcohol and Antiretroviral Therapy in South African Couples. AIDS & Behavior, 2017. **21**(7): p. 1885-1891.
- 191. Magidson, J.F., et al., Relationship between depressive symptoms, alcohol use, and antiretroviral therapy adherence among HIV-infected, clinic-attending patients in South Africa. Journal of Health Psychology, 2017. **22**(11): p. 1426-1433.
- 192. Adeniyi, O.V., et al., Factors affecting adherence to antiretroviral therapy among pregnant women in the Eastern Cape, South Africa. BMC Infectious Diseases, 2018. **18**(1): p. 175.
- 193. Sharma, S., et al., *Medication adherence to antiretroviral therapy among patients visiting antiretroviral therapy center at Tribhuvan University Teaching Hospital, Kathmandu Nepal.* Kathmandu University Medical Journal, 2013. **11**(41): p. 50-3.
- 194. Abaynew, Y., A. Deribew, and K. Deribe, Factors associated with late presentation to HIV/AIDS care in South Wollo ZoneEthiopia: a case-control study. AIDS Research & Therapy [Electronic Resource], 2011. 8: p. 8.
- 195. Kader, R., et al., *Understanding the Impact of Hazardous and Harmful Use of Alcohol and/or Other Drugs on ARV Adherence and Disease Progression.* PLoS ONE [Electronic Resource], 2015. **10**(5): p. e0125088.
- 196. Cruz, M.L., et al., *Viral suppression and adherence among HIV-infected children and adolescents on antiretroviral therapy: results of a multicenter study.* Jornal de Pediatria, 2014. **90**(6): p. 563-71.
- 197. Mbonye, M., et al., *Test and treat: the early experiences in a clinic serving women at high risk of HIV infection in Kampala.* AIDS Care, 2016. **28 Suppl 3**: p. 33-8.
- 198. Nintachan, P., Resilience and risk-taking behavior among Thai adolescents living in Bangkok, Thailand. Dissertation Abstracts International: Section B: The Sciences and Engineering, 2008. **68**(9-B): p. 5861.
- 199. El Omari, F., et al., *Prevalence of substance use among moroccan adolescents and association with academic achievement.* World Journal of Psychiatry, 2015. **5**(4): p. 425-31.
- 200. Philpart, M., et al., *Prevalence and risk factors of gender-based violence committed by male college students in Awassa, Ethiopia.* Violence & Victims, 2009. **24**(1): p. 122-36.
- 201. Zablotska, I.B., et al., *Alcohol use, intimate partner violence, sexual coercion and HIV among women aged 15-24 in Rakai, Uganda.* AIDS & Behavior, 2009. **13**(2): p. 225-33.

- 202. Holmila, M., et al., Gender, alcohol and intimate partner violence: Qualitative comparative study. Drugs-Education Prevention and Policy, 2014. 21(5): p. 398-407.
- 203. Annan, J. and M. Brier, The risk of return: intimate partner violence in Northern Uganda's armed conflict. Social Science & Medicine, 2010. 70(1): p. 152-159.
- 204. Umana, J.E., O.I. Fawole, and I.A. Adeoye, Prevalence and correlates of intimate partner violence towards female students of the University of Ibadan, Nigeria. BMC Women's Health, 2014. 14: p. 131.
- 205. Swahn, M.H., et al., Girls and young women living in the slums of Kampala: Prevalence and correlates of physical and sexual violence victimization. SAGE Open, 2015. 5(2): p. 2158244015580853.
- 206. Pitpitan, E.V., et al., Gender-based violence, alcohol use, and sexual risk among female patrons of drinking venues in Cape Town, South Africa. Journal of Behavioral Medicine, 2013. 36(3): p. 295-304.
- 207. Abramsky, T., et al., What factors are associated with recent intimate partner violence? findings from the WHO multi-country study on women's health and domestic violence. Bmc Public Health, 2011. 11.
- 208. Fulu, E., et al., Prevalence of and factors associated with male perpetration of intimate partner violence: findings from the UN Multi-country Cross-sectional Study on Men and Violence in Asia and the Pacific. Lancet Global Health, 2013. 1(4): p. E187-E207.
- 209. Graham, K., et al., Alcohol May Not Cause Partner Violence But It Seems to Make It Worse: A Cross National Comparison of the Relationship Between Alcohol and Severity of Partner Violence. Journal of Interpersonal Violence, 2011. 26(8): p. 1503-1523.
- 210. Mootz, J.J., et al., Armed conflict, alcohol misuse, decision-making, and intimate partner violence among women in Northeastern Uganda: a population level study. Conflict & Health [Electronic Resource], 2018. 12: p. 37.
- 211. Mulawa, M., et al., Perpetration and Victimization of Intimate Partner Violence Among Young Men and Women in Dar es Salaam, Tanzania. Journal of Interpersonal Violence, 2018. 33(16): p. 2486-2511.
- 212. Greene, M.C., J.C. Kane, and W.A. Tol, Alcohol use and intimate partner violence among women and their partners in sub-Saharan Africa. Global Mental Health, 2017. 4.
- 213. Tlapek, S.M., Women's Status and Intimate Partner Violence in the Democratic Republic of Congo. Journal of Interpersonal Violence, 2015. 30(14): p. 2526-40.
- 214. Ntaganira, J., et al., Factors associated with intimate partner violence among pregnant rural women in Rwanda. Rural & Remote Health, 2009. 9(3): p. 1153.
- Ntaganira, J., et al., Intimate partner violence among pregnant women in Rwanda. BMC Women's Health, 2008. 215.
- 216. Thomson, D.R., et al., Correlates of intimate partner violence against women during a time of rapid social transition in Rwanda: analysis of the 2005 and 2010 demographic and health surveys. BMC Women's Health, 2015. **15**: p. 96.
- 217 Ibrahim, Z.M., et al., Intimate partner violence among Egyptian pregnant women: incidence, risk factors, and adverse maternal and fetal outcomes. Clinical and Experimental Obstetrics & Gynecology, 2015. 42(2): p. 212-
- Dibaba, Y., Prevalence and correlates of intimate partner physical violence against women in Kofale District, 218 Ethiopia. Tropical Doctor, 2008. **38**(1): p. 52-4. Abeya, S.G., M.F. Afework, and A.W. Yalew, *Intimate partner violence against women in western Ethiopia:*
- 219. prevalence, patterns, and associated factors. BMC Public Health, 2011. 11: p. 913.
- 220. Fawole, A.O., K.I. Hunyinbo, and O.I. Fawole, Prevalence of violence against pregnant women in Abeokuta, Nigeria. Australian & New Zealand Journal of Obstetrics & Gynaecology, 2008. 48(4): p. 405-14.
- 221. Balogun, M.O., E.T. Owoaje, and O.I. Fawole, Intimate partner violence in southwestern Nigeria: are there ruralurban differences? Women & Health, 2012. 52(7): p. 627-45.
- 222. Onigbogi, M.O., K.A. Odeyemi, and O.O. Onigbogi, Prevalence and Factors Associated with Intimate Partner Violence among Married Women in an Urban Community in Lagos State, Nigeria. African Journal of Reproductive Health, 2015. 19(1): p. 91-100.
- Tanimu, T.S., S. Yohanna, and S.Y. Omeiza, The pattern and correlates of intimate partner violence among 223. women in Kano, Nigeria. African Journal of Primary Health Care & Family Medicine, 2016. 8(1): p. e1-e6.
- Dim, E.E. and P. Elabor-Idemudia, Social Structure, Social Learning, and the Severity of Physical Intimate 224. Partner Violence Against Women in Nigeria. Journal of Interpersonal Violence, 2018: p. 886260518764384.
- 225. Fawole, O.I., L.W. Abass, and A.O. Fawole, Prevalence of violence against pregnant women in Ibadan, Nigeria. African Journal of Medicine & Medical Sciences, 2010. 39(4): p. 293-303.
- Kimuna, S.R. and Y.K. Djamba, Gender based violence: Correlates of physical and sexual wife abuse in Kenya. 226. Journal of Family Violence, 2008. 23(5): p. 333-342.
- 227. Makayoto, L.A., et al., Prevalence and associated factors of intimate partner violence among pregnant women attending Kisumu District Hospital, Kenya. Maternal & Child Health Journal, 2013. 17(3): p. 441-7.
- 228. Mandal, M. and M.J. Hindin, Men's controlling behaviors and women's experiences of physical violence in Malawi. Maternal & Child Health Journal, 2013. 17(7): p. 1332-8.
- 229. Vyas, S., et al., Exploring the association between women's access to economic resources and intimate partner violence in Dar es Salaam and Mbeya, Tanzania. Social Science & Medicine, 2015. 146: p. 307-315.
- Reese, B.M., et al., Prevalence and Risk Factors of Women's Past-Year Physical IPV Perpetration and 230. Victimization in Tanzania. Journal of Interpersonal Violence, 2017: p. 886260517738775.

- 231. Machisa, M.T., N. Christofides, and R. Jewkes, *Mental ill health in structural pathways to women's experiences of intimate partner violence.* PLoS ONE [Electronic Resource], 2017. **12**(4): p. e0175240.
- Eaton, L.A., et al., *Pregnancy, alcohol intake, and intimate partner violence among men and women attending drinking establishments in a Cape Town, South Africa township.* Journal of Community Health, 2012. **37**(1): p. 208-16.
- Wilson, K.S., et al., *Prevalence and correlates of intimate partner violence in HIV-positive women engaged in transactional sex in Mombasa, Kenya.* International Journal of Std & Aids, 2016. **27**(13): p. 1194-1203.
- 234. Tumwesigye, N.M., et al., *Problem drinking and physical intimate partner violence against women: evidence from a national survey in Uganda.* BMC Public Health, 2012. **12**: p. 399.
- 235. Kwagala, B., et al., *Empowerment, partner's behaviours and intimate partner physical violence among married women in Uganda.* BMC Public Health, 2013. **13**: p. 1112.
- 236. Wandera, S.O., et al., *Partners' controlling behaviors and intimate partner sexual violence among married women in Uganda.* BMC Public Health, 2015. **15**: p. 214.
- 237. Kouyoumdjian, F.G., et al., *Risk factors for intimate partner violence in women in the Rakai Community Cohort Study, Uganda, from 2000 to 2009.* BMC Public Health, 2013. **13**: p. 566.
- 238. Olowookere, S.A., et al., *Patterns and correlates of intimate partner violence to women living with HIV/AIDS in Osogbo, Southwest Nigeria.* Violence Against Women, 2015. **21**(11): p. 1330-1340.
- 239. Feseha, G., G.m. A, and M. Gerbaba, *Intimate partner physical violence among women in Shimelba refugee camp, northern Ethiopia.* BMC Public Health, 2012. **12**: p. 125.
- 240. Wachter, K., et al., *Drivers of Intimate Partner Violence Against Women in Three Refugee Camps.* Violence against Women, 2018. **24**(3): p. 286-306.
- 241. Pack, A.P., et al., *Intimate partner violence against female sex workers in Mombasa, Kenya.* Culture, Health & Sexuality, 2013. **11**: p. 11.
- 242. Gass, J.D., et al., Gender differences in risk for intimate partner violence among South African adults. Journal of Interpersonal Violence, 2011. **26**(14): p. 2764-89.
- 243. Teitelman, A., et al., Childhood Sexual Abuse and Sociodemographic Factors Prospectively Associated with Intimate Partner Violence Perpetration Among South African Heterosexual Men. Annals of Behavioral Medicine, 2017. **51**(2): p. 170-178.
- 244. Messersmith, L.J., et al., *Childhood Trauma, Gender Inequitable Attitudes, Alcohol Use and Multiple Sexual Partners: Correlates of Intimate Partner Violence in Northern Tanzania.* Journal of Interpersonal Violence, 2017: p. 886260517731313.
- 245. Townsend, L., et al., *HIV risk behaviours and their relationship to intimate partner violence (IPV) among men who have multiple female sexual partners in Cape Town, South Africa.* AIDS & Behavior, 2011. **15**(1): p. 132-41.
- 246. Jina, R., et al., Adverse mental health outcomes associated with emotional abuse in young rural South African women: a cross-sectional study. Journal of Interpersonal Violence, 2012. **27**(5): p. 862-80.
- 247. Semahegn, A. and B. Mengistie, *Domestic violence against women and associated factors in Ethiopia; systematic review.* Reproductive Health, 2015. **12**: p. 78.
- 248. Matseke, G., K. Peltzer, and G. Mlambo, *Partner violence and associated factors among pregnant women in Nkangala district, Mpumalanga.* Sajog-South African Journal of Obstetrics and Gynaecology, 2012. **18**(3): p. 77-81.
- 249. Owaka, I.O., M.K. Nyanchoka, and H.E. Atieli, *Intimate partner violence in pregnancy among antenatal attendees at health facilities in West Pokot county, Kenya.* Pan African Medical Journal, 2017. **28**.
- 250. Brittain, K., et al., Factors associated with alcohol use prior to and during pregnancy among HIV-infected pregnant women in Cape Town, South Africa. Drug & Alcohol Dependence, 2017. **173**: p. 69-77.
- 251. Shamu, S., et al., *Intimate partner violence during pregnancy in Zimbabwe: a cross-sectional study of prevalence, predictors and associations with HIV.* Tropical Medicine & International Health, 2013. **18**(6): p. 696-711.
- 252. Gebrezgi, B.H., et al., Factors associated with intimate partner physical violence among women attending antenatal care in Shire Endaselassie town, Tigray, northern Ethiopia: a cross-sectional study, July 2015. Reproductive Health, 2017. **14**(1): p. 76.
- 253. Sedziafa, A.P., E.Y. Tenkorang, and A.Y. Owusu, "... he always slaps me on my ears": the health consequences of intimate partner violence among a group of patrilineal women in Ghana. Culture, Health & Sexuality, 2016: p. 1-14.
- 254. Kohli, A., et al., Family and community driven response to intimate partner violence in post-conflict settings. Social Science & Medicine, 2015. **146**: p. 276-84.
- 255. Machisa, M. and S. Shamu, *Mental ill health and factors associated with men's use of intimate partner violence in Zimbabwe.* BMC Public Health, 2018. **18**(1): p. 376.
- 256. Saile, R., et al., Prevalence and predictors of partner violence against women in the aftermath of war: a survey among couples in northern Uganda. Social Science & Medicine, 2013. **86**: p. 17-25.
- 257. Hatcher, A.M., et al., Intimate partner violence among rural South African men: alcohol use, sexual decision-making, and partner communication. Culture, Health & Sexuality, 2014. **16**(9): p. 1023-39.
- 258. Rabiei, M.A.S. and M. Nikooseresht, *Wife abuse prevalence and predisposing factors in women.* Journal of Research in Health Sciences, 2009. **9**(2): p. 32-35.

- 259. Alzahrani, T.A., B.A. Abaalkhail, and I.K. Ramadan, *Prevalence of intimate partner violence and its associated risk factors among Saudi female patients attending the primary healthcare centers in Western Saudi Arabia.* Saudi Medical Journal, 2016. **37**(1): p. 96-9.
- 260. Eldoseri, H.M. and P. Sharps, *Risk Factors for Spousal Physical Violence Against Women in Saudi Arabia.*Journal of Interpersonal Violence, 2017: p. 886260517696861.
- Ozcakir, A., et al., *Attitudes of Turkish men toward wife beating: A study from Bursa, Turkey.* Journal of Family Violence, 2008. **23**(7): p. 631-638.
- 262. Clark, C.J., et al., *Violence during pregnancy in Jordan: its prevalence and associated risk and protective factors.* Violence Against Women, 2009. **15**(6): p. 720-35.
- 263. Dalal, K., F. Rahman, and B. Jansson, *Wife abuse in rural Bangladesh*. Journal of Biosocial Science, 2009. **41**(5): p. 561-73.
- 264. Sambisa, W., et al., *Physical and sexual abuse of wives in urban Bangladesh: husbands' reports.* Studies in Family Planning, 2010. **41**(3): p. 165-78.
- Ansara, D.L. and M.J. Hindin, *Perpetration of intimate partner aggression by men and women in the Philippines: prevalence and associated factors.* Journal of Interpersonal Violence, 2009. **24**(9): p. 1579-90.
- 266. Kerridge, B.T. and P. Tran, *Husband/Partner Intoxication and Intimate Partner Violence Against Women in the Philippines*. Asia-Pacific Journal of Public Health, 2016. **28**(6): p. 507-518.
- 267. Oyunbileg, S., et al., *Prevalence and risk factors of domestic violence among Mongolian women.* Journal of Women's Health (15409996), 2009. **18**(11): p. 1873-1880.
- 268. Jansen, H., et al., Exploring risk factors associated with intimate partner violence in Vietnam: results from a cross-sectional national survey. International Journal of Public Health, 2016. 61(8): p. 923-934.
- 269. Oshiro, A., et al., *Intimate partner violence among general and urban poor populations in Kathmandu, Nepal.*Journal of Interpersonal Violence, 2011. **26**(10): p. 2073-92.
- 270. Pandey, S., *Physical or sexual violence against women of childbearing age within marriage in Nepal: Prevalence, causes, and prevention strategies.* International Social Work, 2016. **59**(6): p. 803-820.
- 271. Atteraya, M.S., S. Gnawali, and I.H. Song, *Factors associated with intimate partner violence against married women in Nepal.* Journal of Interpersonal Violence, 2015. **30**(7): p. 1226-46.
- 272. Deuba, K., et al., Experience of intimate partner violence among young pregnant women in urban slums of Kathmandu Valley, Nepal: a qualitative study. Bmc Womens Health, 2016. **16**.
- 273. Dhungel, S., et al., *Is economic dependence on the husband a risk factor for intimate partner violence against female factory workers in Nepal?* BMC Women's Health, 2017. **17**(1): p. 82.
- 274. Patrikar, S., et al., Association between intimate partner violence & HIV/AIDS: Exploring the pathways in Indian context. Indian Journal of Medical Research, 2017. **145**(6): p. 815-823.
- 275. Sabri, B., et al., *Risk factors for severe intimate partner violence and violence-related injuries among women in India.* Women & Health, 2014. **54**(4): p. 281-300.
- 276. Chibber, K.S., et al., *Examining the determinants of sexual violence among young, married women in Southern India.* Journal of Interpersonal Violence, 2012. **27**(12): p. 2465-83.
- 277. Madhivanan, P., K. Krupp, and A. Reingold, *Correlates of intimate partner physical violence among young reproductive age women in Mysore, India.* Asia-Pacific Journal of Public Health, 2014. **26**(2): p. 169-81.
- 278. Ramadugu, S., et al., *Understanding intimate partner violence and its correlates*. Industrial Psychiatry Journal, 2015. **24**(2): p. 172-8.
- 279. Chokkanathan, S., Wife abuse in Tamil Nadu. Journal of Family Violence, 2012. 27(4): p. 275-285.
- 280. Das, S., et al., Intimate partner violence against women during and after pregnancy: a cross-sectional study in Mumbai slums. Bmc Public Health, 2013. **13**.
- Jin, X., et al., Factors contributing to intimate partner violence among men in Kerala, India. Journal of Family Violence, 2014. **29**(6): p. 643-652.
- 282. Wagman, J.A., et al., *Husband's Alcohol Use, Intimate Partner Violence, and Family Maltreatment of Low-Income Postpartum Women in Mumbai, India.* Journal of Interpersonal Violence, 2018. **33**(14): p. 2241-2267.
- 283. Kaur, R. and S. Garg, *Domestic violence against women: a qualitative study in a rural community.* Asia-Pacific Journal of Public Health, 2010. **22**(2): p. 242-51.
- 284. Ragavan, M.I., K. Iyengar, and R.M. Wurtz, *Physical intimate partner violence in northern India.* Qualitative Health Research, 2014. **24**(4): p. 457-73.
- 285. Travasso, S.M., D. Rajaraman, and S.J. Heymann, *A qualitative study of factors affecting mental health amongst low-income working mothers in Bangalore, India.* BMC Women's Health, 2014. **14**: p. 22.
- 286. Jayasuriya, V., K. Wijewardena, and P. Axemo, *Intimate partner violence against women in the capital province of Sri Lanka: prevalence, risk factors, and help seeking.* Violence Against Women, 2011. **17**(8): p. 1086-102.
- 287. Puri, M., J. Tamang, and I. Shah, *Suffering in silence: consequences of sexual violence within marriage among young women in Nepal.* BMC Public Health, 2011. **11**: p. 29.
- 288. Biswas, C.S., Spousal Violence against Working Women in India. Journal of Family Violence, 2017. **32**(1): p. 55-
- Tran, T.D., et al., Interactions among alcohol dependence, perinatal common mental disorders and violence in couples in rural Vietnam: a cross-sectional study using structural equation modeling. BMC Psychiatry, 2012. **12**: p. 148.

- 290. Ezard, N., It's Not Just the Alcohol: Gender, Alcohol Use, and Intimate Partner Violence in Mae La Refugee Camp, Thailand, 2009. Substance Use & Misuse, 2014. **49**(6): p. 684-693.
- 291. Zhang, C., et al., Alcohol and other drug use, partner violence, and mental health problems among female sex workers in southwest China. Health Care for Women International, 2014. **35**(1): p. 60-73.
- 292. Jiwatram-Negron, T., et al., *Gender-Based Violence Among HIV-Positive Women in Kazakhstan: Prevalence, Types, and Associated Risk and Protective Factors.* Violence against Women, 2018. **24**(13): p. 1570-1590.
- 293. Avila-Burgos, L., et al., Factors associated with severity of intimate partner abuse in Mexico: Results of the first national survey of violence against women. Canadian Journal of Public Health, 2009. **100**(6): p. 436-441.
- 294. Mojarro-Iniguez, M., et al., *No more! Women reporting intimate partner violence in Mexico.* Journal of Family Violence, 2014. **29**(5): p. 527-537.
- 295. Valdez-Santiago, R., et al., *Prevalence and severity of intimate partner violence in women living in eight indigenous regions of Mexico.* Social Science & Medicine, 2013. **82**: p. 51-57.
- 296. Castro, R.J., L.P. Cerellino, and R. Rivera, *Risk factors of violence against women in Peru.* Journal of Family Violence, 2017. **32**(8): p. 807-815.
- 297. Kiss, L., et al., Gender-based violence and socioeconomic inequalities: does living in more deprived neighbourhoods increase women's risk of intimate partner violence? Social Science & Medicine, 2012. **74**(8): p. 1172-9.
- 298. Moraes, C.L., et al., *Physical violence between intimate partners during pregnancy and postpartum: a prediction model for use in primary health care facilities.* Paediatric and Perinatal Epidemiology, 2011. **25**(5): p. 478-486.
- 299. Lobato, G., et al., *Alcohol misuse among partners: a potential effect modifier in the relationship between physical intimate partner violence and postpartum depression.* Social Psychiatry & Psychiatric Epidemiology, 2012. **47**(3): p. 427-38.
- 300. Gilchrist, G., et al., The prevalence and factors associated with ever perpetrating intimate partner violence by men receiving substance use treatment in Brazil and England: A cross-cultural comparison. Drug and Alcohol Review, 2017. **36**(1): p. 34-51.
- 301. Zhan, W.H., et al., *Alcohol misuse, drinking contexts and intimate partner violence in St. Petersburg, Russia: results from a cross-sectional study.* Bmc Public Health, 2011. **11**.
- 302. Barrett, B.J., N. Habibov, and E. Chernyak, Factors Affecting Prevalence and Extent of Intimate Partner Violence in Ukraine: Evidence From a Nationally Representative Survey. Violence against Women, 2012. **18**(10): p. 1147-1176.
- 303. Ismayilova, L., Spousal Violence in 5 Transitional Countries: A Population-Based Multilevel Analysis of Individual and Contextual Factors. American Journal of Public Health, 2015. **105**(11): p. e12-22.
- 304. Zhan, W., et al., *History of childhood abuse, sensation seeking, and intimate partner violence under/not under the influence of a substance: a cross-sectional study in Russia.* PLoS ONE [Electronic Resource], 2013. **8**(7): p. e68027
- 305. Callinan, S., et al., *Harms from a partner's drinking: an international study on adverse effects and reduced quality of life for women AU Callinan, S.* The American Journal of Drug and Alcohol Abuse, 2018: p. 1-9.
- 306. Rehm, J., et al., *Alcohol as a risk factor for the Global Burden of Disease*. European Addiction Research, 2003. **9**(4): p. 157-164.
- 307. Wang, H., et al., *Age-specific and sex-specific mortality in 187 countries, 1970–2010: a systematic analysis for the Global Burden of Disease Study 2010.* The Lancet, 2012. **380**(9859): p. 2071-2094.
- 308. Gakidou, E., et al., Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet, 2017. **390**(10100): p. 1345-1422.
- 309. Wang, H., et al., Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. The Lancet, 2016. **388**(10053): p. 1459-1544.
- 310. Larrain, S. and C. Bascunan, *Child abuse: A painful reality behind closed doors*. Challenges: Newsletter on progress towards the Millennium Development Goals from a child rights perspective, 2009. **9**: p. 4-9.
- 311. United Nations International Children's Emergency Fund, *United Nations Convention on the Rights of the Child.* 1989, United Nations International Children's Emergency Fund: Paris.
- 312. Abeid, M., et al., Community perceptions of rape and child sexual abuse: a qualitative study in rural Tanzania. BMC International Health & Human Rights, 2014. **14**: p. 23.
- 313. Watts, C. and C. Zimmerman, *Violence against women: global scope and magnitude.* The lancet, 2002. **359**(9313): p. 1232-1237.
- 314. Chan, K.L., Family Polyvictimization and Elevated Levels of Addiction and Psychopathology Among Parents in a Chinese Household Sample. Journal of Interpersonal Violence, 2017. **32**(16): p. 2433-2452.
- 315. Tamutiene, I. and A.-M. Laslett, *Associative stigma and other harms in a sample of families of heavy drinkers in Lithuania.* Journal of Substance Use, 2017. **22**(4): p. 425-433.
- 316. Pan, J., et al., Sharply Reduced but Still Heavy Self-Harm Burdens in Hubei Province, China, 1990-2015. International Journal of Environmental Research & Public Health [Electronic Resource], 2018. **15**(2): p. 24.
- 317. Leon, D.A. and K. Keenan, *Commentary: Alcohol, child development and harm to others: a 'hard' problem.* International Journal of Epidemiology, 2012. **41**(4): p. 1097-1100.