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# Domestic violence against women: higher tax on alcohol could protect women

John Simister

## Abstract

Domestic violence against women is a very widespread problem, thought to affect about a third of women worldwide: hence, there may be a billion victims. The consequences of violence within the home can be devastating – often leaving women permanently injured, and sometimes resulting in her death. This paper reports recent evidence on the problem, confirming the link between alcohol consumption and violence. Governments can do more to support women: a new tax on alcohol could pay for services to protect violence.

**Key words:** Gender-Based Violence, alcohol, DHS

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## Introduction

This paper studies physical violence of men against women: focusing on married or cohabiting heterosexual couples, where the husband attacks his partner (whether she is married or not). Various terms are used to describe domestic violence, such as ‘Intimate Partner Violence’; this paper uses the term ‘Gender-Based Violence’ (GBV) – which implies many men use violence to control their wife/partner. There are other types of violence within families: such as violence against husbands, and child abuse. Physical violence is not the only problem: there are other forms of violence and control – such as threats, withholding financial support, and sexual violence. All such violence is widely considered unacceptable, but limiting the scope of this paper has advantages. The use of questionnaires to gain information on GBV is also controversial: researchers from a qualitative background may consider in-depth interviewing is more reliable. Due to the severity and complexity of domestic violence, it is appropriate for many researchers (from different backgrounds) to carry out research.

## Literature review

This paper investigates Gender-Based Violence. Morrison & Orlando [1] claim ‘The adjective “gender-based” is frequently used to highlight the role that women’s subordinate status in society plays in increasing the risk that they will be impacted by violence’. This paper uses a different view of GBV: that it refers to male use of violence to control his wife/partner. Morrison & Orlando imply a woman is likely to be a victim of violence because she is subordinate to her husband (subordination causes violence); whereas this paper assumes a woman is likely to be subordinate because her husband/partner uses violence (violence causes subordination).

There have been numerous studies of GBV in recent decades; this paper investigates quantitative methods (while acknowledging that qualitative methods are also essential, to improve our understanding). Quantitative research has many uses, such as to identify which countries have the greatest problems – and hence are most in need of funding, to support victims and reduce GBV in future. However, García-Moreno et al. [2] wrote “There were many differences in the way violence was defined, measured and presented. For example, some studies of partner violence include only physical violence, while others may also include sexual or emotional violence [...] Studies also differ in other important respects, such as the definition of the study population (for example, in terms of the age range and partnership status of the women), the forms of violence considered, the range of questions asked, and whether measures were taken to ensure privacy and confidentiality of interviews. Such factors have since been shown to greatly affect prevalence estimates”. To reduce the risk that such differences may give a misleading impression, it may be appropriate for some researchers to limit their analysis to one method of collecting data.

Department of Economic and Social Affairs [3] wrote ‘In a survey situation, a detailed list of different acts of physical violence (without using the term “violence”) is better able to capture physical violence than a general question about physical violence, the interpretation of which is dependent on subjective perceptions’. The ‘Conflict and Tactics Scale’ (CTS) is widely used for researching domestic violence (as part of a questionnaire): Alhabib et al. [4] report that CTS is the most widely-used approach, in their analysis of global domestic violence research. A key advantage of this approach is that surveys using CTS are available from many countries.

This paper analyses DHS data on GBV, assuming the questionnaires are close enough to permit comparison between countries. There are slight differences between countries: for example, hair-pulling is included in the list of physical violence in some countries surveyed by DHS, but not others. Another issue is translation of the questionnaire between languages: there seems no way to assess how much this influences results. Readers may be sceptical about comparing data from different surveys, as implied by this quote from some leading researchers: “Although the DHS and IVAWS are internationally comparable, in practice, there are slight methodological variations between the individual surveys, which may limit comparability” [5].

To improve reliability of estimates, it is useful that surveys analysed in this paper are nationwide (including urban and rural locations, and different regions of each country studied). For simplicity, this paper only considers evidence from interviewing women (only a few surveys ask such questions of men). The age-range of women varies to some extent – for example, usually interviewing women age 15 to 49 years in DHS. Some surveys are more recent than others, so a misleading impression could be given if there are rapid changes in GBV prevalence. The experience of GBV in the 12 months before interview may change from year to year, in response to current events; we might expect the lifetime prevalence would change less from one year to the next.

Several writers report that surveys (and other ways to estimate GBV) understate the prevalence of GBV: “because of the sensitivity of the subject, violence against women is almost universally under-reported” [6]. This is a concern, because it may make some politicians complacent about GBV. It may be a good idea for researchers who analyse GBV prevalence to remind readers that the true figures are probably even worse than estimates reported by surveys.

Previous research makes it clear that alcohol causes many problems, including domestic violence [7]. For example, Katikireddi, Bond & Hilton [8] state “Regular heavy alcohol consumption and binge drinking are associated with physical problems, antisocial behaviour, violence, accidents, suicide, injuries and road traffic crashes”. Morrison, Ellsberg & Bott [9] studied household survey data from nine countries: “Mirroring the results of many other studies, alcohol abuse by the male partner is strongly associated with violence. Women with male partners who “come home drunk frequently” are four to seven times more likely to suffer violence”. Similarly, Morrison & Orlando [1] wrote “Alcohol abuse by the partner significantly raises the probability of violence in the two countries—Peru and Haiti—where this variable is available; in Peru, it increases the probability of violence more than nine times”. World Health Organization [10] state “Strong links have been found between alcohol use and the occurrence of intimate partner violence in many countries. Evidence suggests that alcohol use increases the occurrence and severity of domestic violence”; a plausible mechanism is that alcohol affects a drinker’s cognitive function, reducing his self-

control. This paper highlights quantitative evidence; but links between alcohol and GBV have also been confirmed by qualitative researchers, such as O'Brien et al. [11]. GBV and excessive alcohol use also appear to harm children in the same household [12].

To reduce 'Violence Against Women and Girls' (VAWG), ActionAid [13] make three recommendations for governments and international agencies: show leadership in combatting GBV; support women's organisations, including their unique role in implementing and holding governments to account on VAWG commitments; and ensuring finance is available to eradicate VAWG. "Violence against women and girls is prevalent worldwide but historically has been overlooked and condoned. Growing international recognition of these violations creates opportunities for elimination, although solutions will not be quick or easy. Governments need to address the political, social, and economic structures that subordinate women, and implement national plans and make budget commitments to invest in actions by multiple sectors to prevent and respond to abuse" [14]. Among other interventions, García-Moreno et al. [14] recommend governments "promote the reduction of alcohol use" to reduce GBV.

Some governments support domestic violence victims. For example, the United States government pays for activities of the 'Family Violence Prevention and Services Act' (FVPSA): "These funds reach 1,505 domestic violence shelters and 1,129 nonresidential service sites, providing both a safe haven and an array of supportive services to intervene in and prevent abuse. Each year, FVPSA-funded programs serve 1.3 million survivors and their children and respond to 2.7 million crisis calls" [7]. In 2014, the U.S. government spent over \$89 Million to deal with domestic violence [7], but such expenditure may be difficult for poor countries to afford. An alternative is to use revenue from alcohol taxes, to reduce the problem of GBV – by discouraging excessive alcohol consumption, and by supporting GBV victims.

How can governments reduce GBV? To reduce the harmful effects of alcohol on GBV, it may be appropriate for taxes on alcohol to be increased. One approach is a tax like 'Value Added Tax', which could make alcoholic drinks more expensive. But Katikireddi, Bond & Hilton [8] recommend raising the minimum price of alcohol, to achieve various health improvements; they claim a minimum alcohol price is more effective than general taxes on alcohol, as a way to discourage excessive alcohol consumption. A minimum price can be achieved by a 'specific excise tax' on alcohol, rather than using an 'ad valorem' tax [7].

There is considerable evidence that taxing alcohol is an effective way to reduce alcohol consumption [15]. Increasing the price of alcohol is generally effective in reducing violence; "in the USA it has been estimated that a 1% increase in the price of alcohol will decrease the probability of intimate partner violence towards women by about 5%" [10].

This paper does not advocate a complete ban on alcohol, for various reasons. Moderate drinking can have health benefits, such as reduced blood pressure. If alcohol were made illegal, it would continue to be sold illicitly – but might lead to other problems, such as encouraging organised crime (as associated with USA experience of 'prohibition' in 1920s).

## **Data and methods**

All data in this paper are from Demographic and Health Surveys (DHS), which have been carried out in numerous low-income countries for decades. DHS is funded largely by USAID; surveys are carried out in cooperation with the government of the country studied. Sampling methods vary to some extent between surveys, but the majority of respondents are women age 15 to 49 years of age (in most countries, DHS also question a smaller sample of men).

DHS use large, nationally-representative, samples of people. Households are selected randomly, using two-stage cluster sampling: the first stage selects a list of locations, and the second stage selects districts in these locations.

Households are then randomly chosen in the selected districts. In households containing more than one woman, a woman is selected for interview. Interviews were conducted face-to-face by trained interviewers; care is taken to ensure the safety of interviewees (so that women who disclose GBV are not then punished by their spouse). DHS sampling and interviewing methods are explained in [16]. In my opinion, DHS is the best global source of GBV data. In 2014, the author downloaded all DHS surveys that included data on GBV, which were available at the time. Since then, more DHS surveys have become available; and DHS continues to collect data. For this paper, the sample is limited to women (DHS do not usually ask GBV-related questions, when they interview men). Table A1 in the appendix reports the number of women who answered two of the questions on GBV, among the surveys analysed for this paper.

The following types of GBV are from the DHS India survey in 2005 [17], and are based on the CTS scale discussed above:

“(Does/did) your (last) husband ever do any of the following things to you:

- a. Slap you?
- b. Twist your arm or pull your hair?
- c. Push you, shake you, or throw something at you?
- d. Punch you with his fist or with something that could hurt you?
- e. Kick you, drag you or beat you up?
- f. Try to choke you or burn you on purpose?
- g. Threaten or attack you with a knife, gun, or any other weapon?”

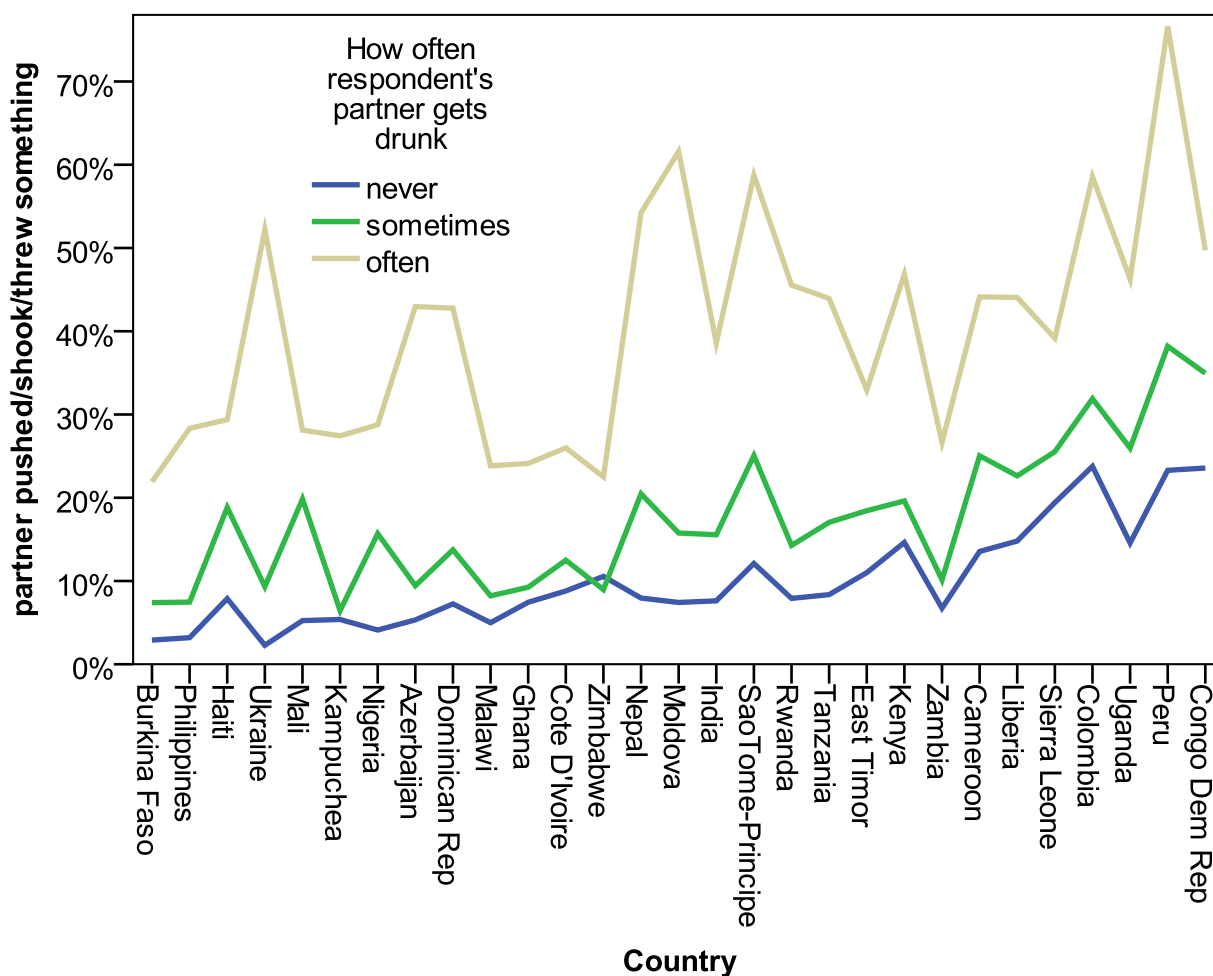
Other DHS surveys analysed in this paper have a similar list of questions, but there are small differences – for example, ‘pulling hair’ is sometimes added as another form of GBV. Figure 4 (in the appendix) shows part of the DHS questionnaire for the Liberia 2007 DHS survey.

To represent information in DHS surveys, countries are arranged on the horizontal axis of each figure in ascending order of GBV prevalence. The exact order of countries is arbitrary: for this paper, GBV prevalence is measured as the average of the fraction of women in each country who were slapped, or were pushed, by her partner (changing this measure of average prevalence would only affect the order in which countries are shown in figures). For this paper, the term ‘partner’ is used to describe a woman’s husband or cohabiting partner; the sample includes women in a polygamous marriage. Women in lesbian relationships are excluded from analysis in this paper.

## Results

The following Figures show countries arranged from lower GBV prevalence on the left, to higher prevalence on the right, as discussed in the ‘Data and methods’ section above. Three lines are shown on each Figure, to represent the extent to which the (female) respondent’s (male) partner gets drunk.

**Figure 1: Fraction of women pushed or shaken, or had something thrown at them, by their partner**

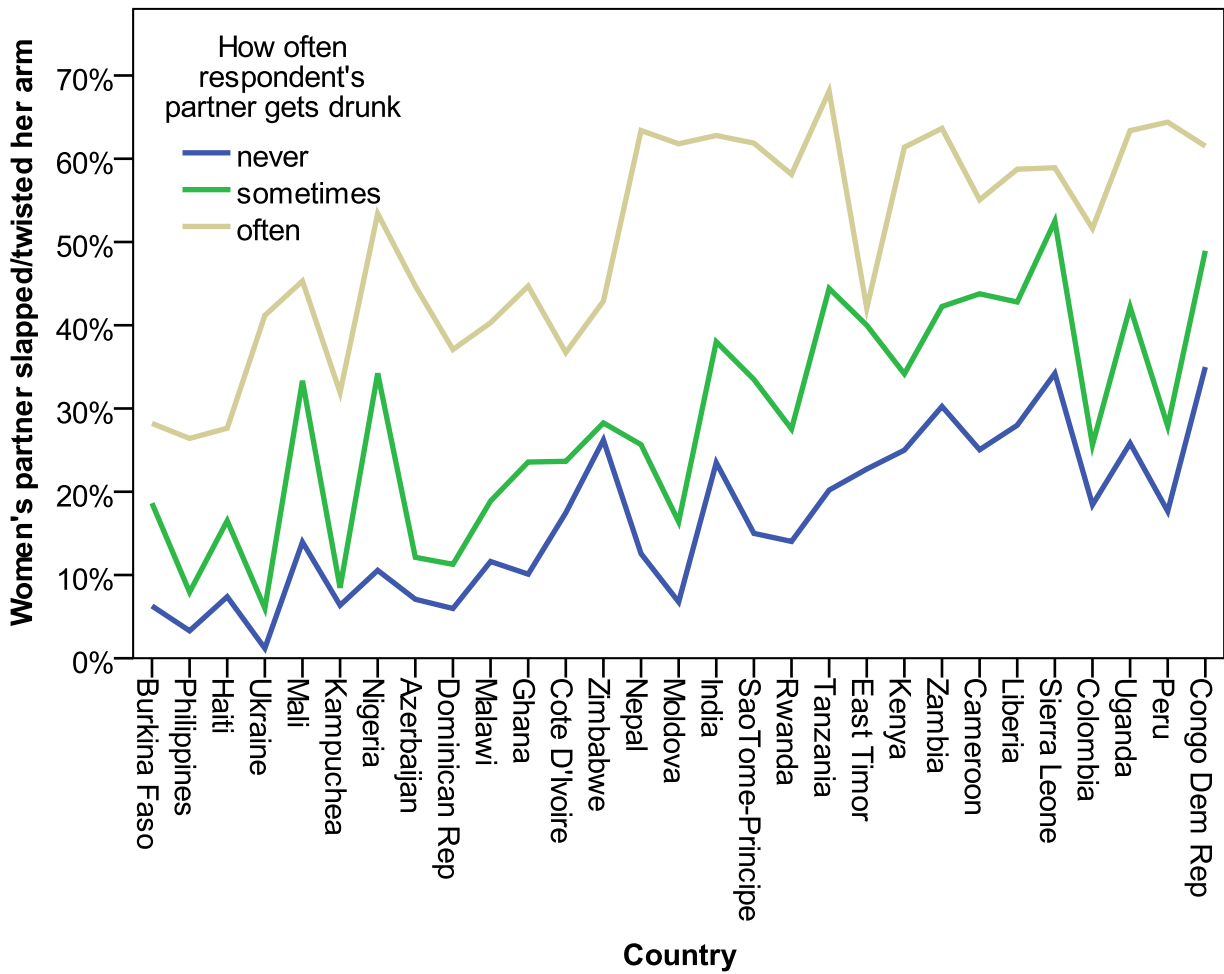


Source: DHS (author's analysis).

The three lines in Figure 1 (showing alcohol consumption) tend to be higher on the right than on the left, because countries are arranged in increasing prevalence (the pattern is not linear, because countries are arranged in order of the average of the GBV variables in Figures 1 and 2). The high levels of GBV shown in Figure 1 are unacceptable, and are a reminder to politicians of the need for intervention.

A key point of Figure 1 is that where the male partner tends to get drunk 'often', there tends to be much more domestic violence: the grey line is much higher than the green and blue lines. The meaning of the terms 'drunk' and 'often' are interpreted by the female respondent herself, in each DHS survey. Overall, Figure 1 shows strong support for a relationship between excessive alcohol use, and increased GBV risk (as reported by previous research, summarised in the 'Literature review' section above).

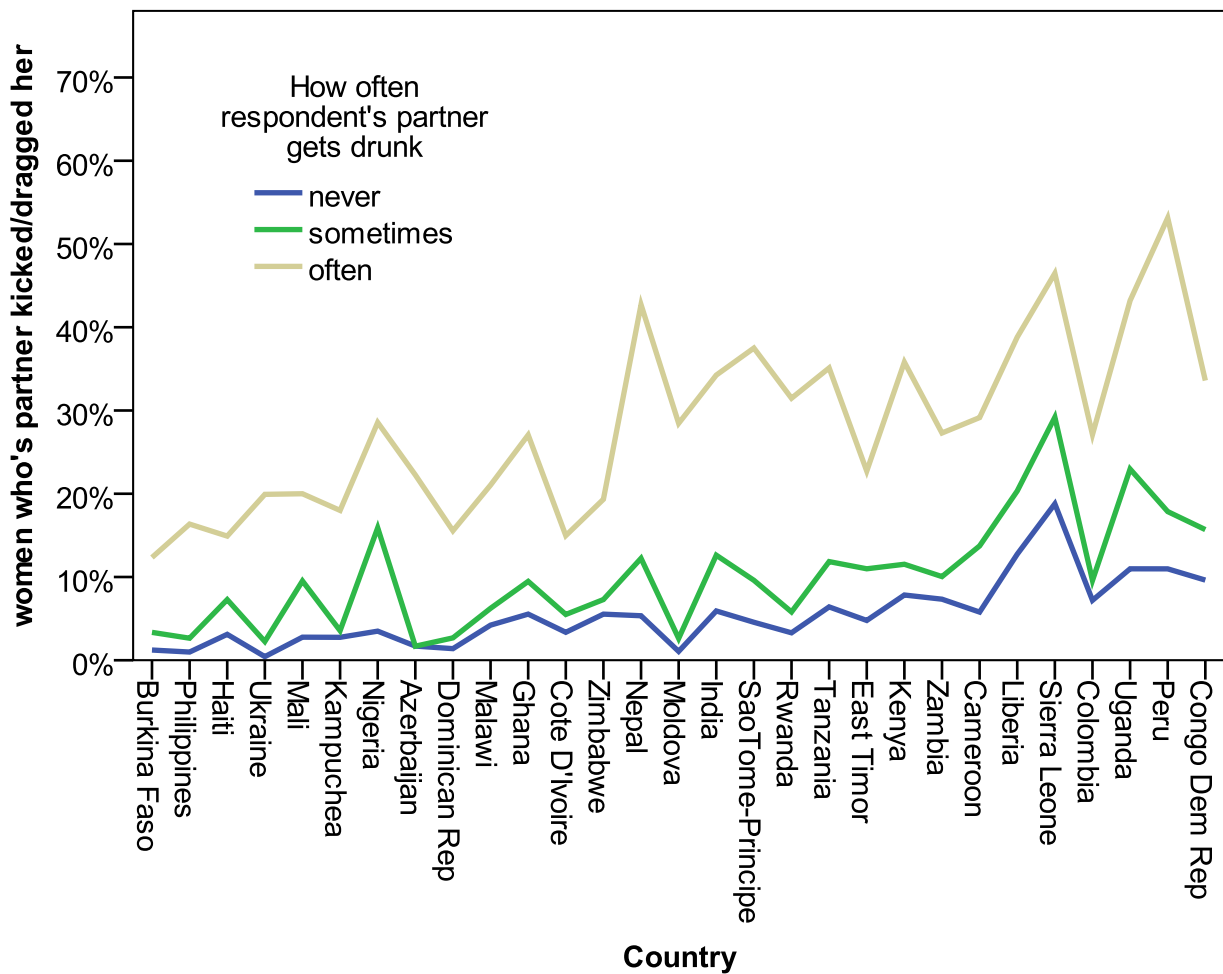
**Figure 2: Fraction of women slapped, or had their arm twisted, by their partner**



Source: DHS (author's analysis).

The horizontal axis of Figure 2 shows countries arranged in the same order as Figure 1, from lower to higher GBV prevalence; hence, there is a tendency for all three lines to be higher on the right than on the left of Figure 2. For this paper, though, the key point is that there tends to be much more domestic violence in homes where the male partner tends to get drunk 'often': the grey line (husband gets drunk often) is much higher than the blue line (husband never gets drunk).

**Figure 3: Fraction of women kicked or dragged by their partner**



Source: DHS (author's analysis).

Figure 3 indicates a similar pattern to Figures 1 and 2: the key point is that men who 'often' get drunk are much more likely to use GBV against their partner. Hence, all three Figures in this paper make clear that excessive alcohol consumption by men is associated with increased risk of women experiencing domestic violence. Reducing alcohol consumption seems likely to reduce the prevalence of violence; hence, it may be appropriate to increase taxes on alcohol.

In a few DHS surveys, respondents were asked if their partner was drunk when he beat them; these responses are shown in Table 1. In the Bolivian and South African surveys, about two-thirds of women report their husband was drunk (or on drugs) when she was beaten by him; but there was a much smaller fraction, 5%, in Egypt. This difference may reflect Egypt being a mainly Muslim country: drinking alcohol is forbidden by Islam. South Africa is not included in the three Figures above, because detailed CTS questions were not included in the 1998 DHS South Africa survey. The figures of 67% in Bolivia and 63% in South Africa in Table 1 can be compared to other research on this topic. According to studies reported in World Health Organization [10], 55% of GBV victims in USA felt their partner had been drinking prior to a physical assault; the equivalent was 32% in England & Wales. Similar links between alcohol and GBV have been found in India, Uganda, Vietnam, and Zimbabwe [10].



**Table 1: extent to which a woman’s partner was drunk, when he beat her**

	<b>When women was beaten, was her partner drunk/on drugs?</b>			Number of women interviewed
	no, never	sometimes	frequently or always	
<b>Bolivia</b> (2003 & 2008)	<b>33%</b>		<b>67%</b>	8,169
<b>South Africa</b> (1998)	<b>37%</b>	<b>26%</b>	<b>37%</b>	1,586
<b>Egypt</b> (1995)	<b>95%</b>	<b>4%</b>	<b>1%</b>	2,498

Source: DHS (author’s analysis); sample limited to women who had experienced GBV.

Previous research indicates there can be lasting harm to women, as a result of GBV [14]. Some DHS surveys asked if respondents (who had experienced GBV) felt certain types of long-term effects from the violence; results are shown in Table 2. For many women, GBV can lead to long-term fear, anxiety, and suicidal thoughts. In extreme cases, GBV can lead to the victim’s death; but such cases are beyond the scope of this paper.

**Table 2: long-term effects of GBV**

	<b>Result of physical violence from partner:</b>			<b>Number of women interviewed</b>
	<b>Constantly fearful of partner</b>	<b>Anxious and depressed</b>	<b>Thought about committing suicide</b>	
<b>Bolivia</b> (2003 & 2008)	<b>67%</b>	<b>61%</b>		5,951
<b>Colombia</b> (2005 & 2010)		<b>40%</b>	<b>23%</b>	22,896
<b>Philippines</b> (2008)		<b>47%</b>	<b>8%</b>	2,432

Source: DHS (author’s analysis); sample limited to women who had experienced GBV.

The above evidence confirms that GBV has extremely harmful effects on women, and hence more intervention is needed – from governments, and other organisations such as United Nations agencies. One possibility is to discourage (excessive) alcohol use, by increasing taxes on alcoholic drinks. The precise details of how alcohol should be taxed may vary from one country to another.

## Conclusion

This paper adds to the considerable amount of evidence that alcohol consumption by men is a ‘risk factor’ which tends to increase domestic violence against women. The use of DHS data from many countries confirms that this link is not specific to a particular country or culture, but is part of a global pattern. “With increased recognition on how many women’s, men’s and children’s lives are affected by violence, and growing evidence on how to respond to and prevent violence against women and girls, there is no excuse for inaction” [14].

This paper advocates raising taxes on alcohol, and using the money to pay for government interventions to reduce the problem of GBV. This could achieve three aims: firstly by making alcohol more expensive, it may reduce the number of men who get drunk and beat their partner. Secondly, by increasing public awareness of the link between alcohol and GBV, it may help women protect themselves from male violence – for example, by leaving home when her husband is drunk. And thirdly, revenue from alcohol taxes can pay for interventions such as advertising the problems of GBV, and funding refuges for battered women. Governments are not the only agencies which can help: for example, medical professionals could tell injured patients about help available for GBV victims, and counselling services for men addicted to alcohol. Schools, colleges and universities could educate students on the problems of excessive drinking, and on the risks of GBV.

Literature reported in this paper shows that alcohol is not the only risk factor relevant to GBV. Researchers, campaigners, activists and governments must continue working hard to reduce GBV prevalence.

## Bibliography

- [1] Morrison A.R. & Orlando M.B. (2004), 'The costs and impacts of gender-based violence in developing countries: methodological considerations and new evidence', Washington, DC: World Bank Working paper 36151, November 2004, <http://documents.worldbank.org/curated/en/2004/11/6816749/cost-impacts-gender-based-violence-developing-countries-methodological-considerations-new-evidence> downloaded 25<sup>th</sup> March 2016.
- [2] García-Moreno C., Jansen H.A.F.M., Ellsberg M., Heise L. & Watts C. (2005), WHO Multi-country study on Women's Health and Domestic Violence against Women: initial results on prevalence, health outcomes and women's responses, Geneva: World Health Organization.
- [3] Department of Economic and Social Affairs (2014), 'Guidelines for producing statistics on violence against women – statistical surveys', ST/ESA/STAT/SER.F/110 United Nations, Statistics Division: New York. [http://unstats.un.org/unsd/gender/docs/Guidelines\\_Statistics\\_VAW.pdf](http://unstats.un.org/unsd/gender/docs/Guidelines_Statistics_VAW.pdf) downloaded 24<sup>th</sup> March 2016.
- [4] Alhabib S., Nur U. & Jones R. (2010), 'Domestic violence against women: systematic review of prevalence studies', Journal of Family Violence 25: 369-82. doi: 10.1007/s10896-009-9298-4
- [5] Devries K.M., Kishor S., Johnson H., Stöckl H., Bacchus L.J., Garcia-Moreno C. & Watts C. (2010), "Intimate partner violence during pregnancy: analysis of prevalence data from 19 countries", Reproductive Health Matters 18(36): 158-70.
- [6] Watts C. & Zimmerman C. (2002), 'Violence against women: global scope and magnitude', The Lancet 359: 1232-7.
- [7] SAMHSA (Substance Abuse and Mental health Services Administration) (2015), 'Report to Congress on the Prevention and Reduction of Underage Drinking', PEP14-RTCUAD, Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD), U.S. Government: Rockville MD, [https://www.stopalcoholabuse.gov/media/ReportToCongress/2015/report\\_main/2015\\_RTC\\_Volume\\_I.pdf](https://www.stopalcoholabuse.gov/media/ReportToCongress/2015/report_main/2015_RTC_Volume_I.pdf) downloaded 25<sup>th</sup> March 2016.
- [8] Katikireddi S.V., Bond L. & Hilton S. (2014), 'Changing policy framing as a deliberate strategy for public health advocacy: a qualitative policy case study of minimum unit pricing of alcohol', The Milbank Quarterly 92(2): 250-83.

- [9] Morrison A., Ellsberg M. & Bott S. (2007), 'Addressing Gender-based Violence: a critical review of interventions', *World Bank Research Observer* 22(1): 25-51. [www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/04/22/000442464\\_20130422151702/Rendered/PDF/767690JRN0WBRO00Box374387B00PUBLIC0.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/04/22/000442464_20130422151702/Rendered/PDF/767690JRN0WBRO00Box374387B00PUBLIC0.pdf) downloaded 25<sup>th</sup> March 2016.
- [10] World Health Organization (2006), 'Intimate Partner Violence and alcohol fact sheet', [www.who.int/entity/violence\\_injury\\_prevention/violence/world\\_report/factsheets/ft\\_intimate.pdf?ua=1](http://www.who.int/entity/violence_injury_prevention/violence/world_report/factsheets/ft_intimate.pdf?ua=1) downloaded 25<sup>th</sup> March 2016.
- [11] O'Brien J.E., Ermentrout D., Rizo C.F., Li W., Macy R.J. & Dababnah S. (2015), '“I never knew which way he would swing...”: exploring the roles of substances in the lives of system-involved Intimate Partner Violence survivors', *Journal of Family Violence* 31(1): 61-73. doi: 10.1007/s10896-015-9747-1
- [12] Klostermann K.C. & Fals-Stewart W. (2006), 'Intimate partner violence and alcohol use: exploring the role of drinking in partner violence and its implications for intervention', *Aggression and Violent Behavior* 11(6): 587-97.
- [13] ActionAid (2015), 'Fearless: standing with women and girls to end violence', London: ActionAid, [www.actionaid.org.uk/sites/default/files/publications/fearless-standing\\_with\\_women\\_and\\_girls\\_to\\_end\\_violence\\_actionaiduk.pdf](http://www.actionaid.org.uk/sites/default/files/publications/fearless-standing_with_women_and_girls_to_end_violence_actionaiduk.pdf) downloaded 25<sup>th</sup> March 2016.
- [14] García-Moreno C., Zimmerman C., Morris-Gehring A., Heise L., Amin A., Abrahams N., Montoya O., Bhat-Deosthali P., Kilonzo N. & Watts C. (2015), 'Addressing violence against women: a call to action', *The Lancet* 385(9978): 1685-95. [http://dx.doi.org/10.1016/S0140-6736\(14\)61830-4](http://dx.doi.org/10.1016/S0140-6736(14)61830-4)
- [15] Xuan Z., Chaloupka F.J., Blanchette J., Nguyen T., Heeren T., Nelson T.F. & Naimi T.S. (2015), 'The relationship between alcohol taxes and binge drinking: evaluating new tax measures incorporating multiple tax and beverage types', *Addiction* 110(3): 441-50. doi: 10.1111/add.12818.
- [16] ICF International (2012), 'Survey Organization Manual for Demographic and Health Surveys'. MEASURE DHS, Calverton, Maryland: ICF International. <http://dhsprogram.com/Publications/Publication-Search.cfm?type=35> downloaded 25<sup>th</sup> March 2016.
- [17] IIPS (International Institute for Population Sciences) and Macro International (2007), *National family health survey (NFHS-3), 2005-06: India: Volume II*. Mumbai: IIPS. <http://dhsprogram.com/publications/publication-FRIND3-DHS-Final-Reports.cfm> downloaded 25<sup>th</sup> March 2016.
- [18] LISGIS (Liberia Institute of Statistics and Geo-Information Services) [Liberia], Ministry of Health and Social Welfare [Liberia], National AIDS Control Program [Liberia], and Macro International Inc. (2008), *Liberia Demographic and Health Survey 2007*. Monrovia, Liberia: Liberia Institute of Statistics and Geo-Information Services (LISGIS) and Macro International Inc. <https://dhsprogram.com/pubs/pdf/FR201/FR201.pdf> downloaded 2<sup>nd</sup> April 2016.

**Appendix**

The questions below are part of the DHS Liberia 2007 questionnaire [18], showing the way DHS implement CTS questions on GBV; the questionnaire varies slightly between DHS surveys. Information on how frequently the violence occurred (on the right-hand-side of Figure 4) is not used for this paper.

**Figure 4: part of the Liberia 2007 questionnaire referring to GBV questions**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																																																															
1005	A (Does/did) your (last) husband/partner ever do any of the following things to you:	<b>B</b> <span style="border: 1px solid black; padding: 2px;">CHECK 604: ASK ONLY IF RESPONDENT IS NOT A WIDOW</span> How often did this happen during the last 12 months: often, only sometimes, or not at all?																																																																																																
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th></th> <th style="text-align: center;"><u>OFTEN</u></th> <th style="text-align: center;"><u>SOME-TIMES</u></th> <th style="text-align: center;"><u>NOT AT ALL</u></th> </tr> </thead> <tbody> <tr> <td>a) push you, shake you, or throw something at you?</td> <td>YES 1 →</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td>NO 2 ↓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>b) slap you?</td> <td>YES 1 →</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td>NO 2 ↓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c) twist your arm or pull your hair?</td> <td>YES 1 →</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td>NO 2 ↓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d) punch you with his fist or with something that could hurt you?</td> <td>YES 1 →</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td>NO 2 ↓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>e) kick you, drag you or beat you up?</td> <td>YES 1 →</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td>NO 2 ↓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>f) try to choke you or burn you on purpose?</td> <td>YES 1 →</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td>NO 2 ↓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>g) threaten or attack you with a knife, gun, or any other weapon?</td> <td>YES 1 →</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td>NO 2 ↓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>h) physically force you to do men business with him even when you did not want to?</td> <td>YES 1 →</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td>NO 2 ↓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>i) force you to do any sexual acts you did not want to?</td> <td>YES 1 →</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td>NO 2 ↓</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			<u>OFTEN</u>	<u>SOME-TIMES</u>	<u>NOT AT ALL</u>	a) push you, shake you, or throw something at you?	YES 1 →	1	2	3		NO 2 ↓				b) slap you?	YES 1 →	1	2	3		NO 2 ↓				c) twist your arm or pull your hair?	YES 1 →	1	2	3		NO 2 ↓				d) punch you with his fist or with something that could hurt you?	YES 1 →	1	2	3		NO 2 ↓				e) kick you, drag you or beat you up?	YES 1 →	1	2	3		NO 2 ↓				f) try to choke you or burn you on purpose?	YES 1 →	1	2	3		NO 2 ↓				g) threaten or attack you with a knife, gun, or any other weapon?	YES 1 →	1	2	3		NO 2 ↓				h) physically force you to do men business with him even when you did not want to?	YES 1 →	1	2	3		NO 2 ↓				i) force you to do any sexual acts you did not want to?	YES 1 →	1	2	3		NO 2 ↓				
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Source: [18].

**Table A1: Effective sample sizes in DHS surveys.**

<b>Country</b>	<b>Year of survey</b>	<b>Number of women who reported if their partner pushed/shook her, or threw something at her</b>	<b>Number of women who reported if their partner wounded her, or broke her bone or tooth</b>
Burkina Faso	2010	10,003	
Philippines	2008	8,476	2,431
Haiti	2000	2,586	
	2005	2,676	469
Ukraine	2007	2,417	298
Mali	2006	9,035	1,681
	2012	3,120	1,079
Kampuchea	2000	2,401	
	2005	2,294	2,294
Nigeria	2008	19,226	3,475
	2013	22,267	3,780
Azerbaijan	2006	4,299	631
Dominican Republic	1999	743	
	2002	7,426	
	2007	8,421	1,379
Malawi	2004	8,291	
	2010	5,372	1,529
Ghana	2008	1,835	430
Jordan	2007	3,444	782
Cote D'Ivoire	2005		5,181
	2011	5,004	1,275
Zimbabwe	2005	4,960	1,721
	2010	5,280	1,809
Nepal	2011	3,505	1,008
Moldova	2005	4,591	1,019
Nicaragua	1997	8,440	
India	2005	69,419	22,544
Sao Tome-Principe	2008	1,729	510
Rwanda	2005	2,546	
	2010	3,468	
Tanzania	2010	5,688	2,068
East Timor	2009	2,162	757
Egypt	2005	5,612	
Kenya	2003	4,312	
	2008	4,901	1,877
Zambia	2007	4,226	2,068
Cameroon	2004	2,572	
Liberia	2007	3,911	1,507
Sierra Leone	2013	4,308	1,866
Colombia	2000	7,716	3,136
	2005	25,669	10,157
	2010	34,681	12,744
Uganda	2006	1,746	984

<b>Country</b>	<b>Year of survey</b>	<b>Number of women who reported if their partner pushed/shook her, or threw something at her</b>	<b>Number of women who reported if their partner wounded her, or broke her bone or tooth</b>
	2011	1,702	834
Peru	2000	18,183	
	2004-8	22,919	9,504
Congo Dem Rep	2007	2,850	
Bangladesh	2007	4,467	
Bolivia	2003	14,657	

*Source: author's analysis of DHS data.*