UNDERSTANDING HELP-SEEKING BEHAVIORS FOR INTIMATE PARTNER VIOLENCE IN HONDURAS: A MULTI-METHODS ANALYSIS

Dissertation
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Dissertation Committee:

Dr. Dominique Meekers (chair)

Dr. Paul Hutchinson (co-chair)

Dr. Katherine Andrinopoulos

Dr. Xiaojin Chen

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Acronyms

CDC	Centers for Disease Control
DHS	Demographic and Health Surveys
EFA	Exploratory Factor Analysis
INE	National Institute of Statistics
IP	Intimate Partner
IPV	Intimate Partner Violence
LAC	Latin America and the Caribbean
LCA	Latent Class Analysis
NGO	Non-Governmental Organization
TNSB	Theory of Normative Social Behavior
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
UNAH	Universidad Nacional Autónoma de Honduras
WHO	World Health Organization

Abstract

Honduras is the Latin American country with the lowest proportion of women seeking any type of help for an Intimate Partner Violence (IPV) episode. However, there is a lack of information about the determinants of IPV help-seeking behaviors in these settings. Specifically, there is the need to analyze structural and social normative factors associated with these behaviors to design and implement more effective interventions and public policy aiming to improve the lives of IPV victims and their families. Therefore, this study uses a three-paper format and a multi-methods approach (i.e., qualitative and quantitative techniques) to explore the characteristics and determinants of IPV and IPV help-seeking behaviors among women living in Honduras.

In the first paper, and using data from the Demographic Health Survey (DHS) 2011-2012, a Latent Class Analysis is conducted to describe IPV as a phenomenon of co-occurrent and cumulative violence, analyzing how different IPV patterns are associated with women's structural and situational characteristics. From the results obtained, a picture emerges of physical and non-physical IPV as common and present in overlapping forms. Specifically, the results evidence five distinctive patterns of lifetime exposure to IPV and only a few sociodemographic characteristics that are associated with any pattern characterized by experiences of violence. These results evidence the heterogeneity of experiences of violence among IPV victims and the need to use more nuanced approaches to replace the "one size fits all" approach currently used when working with IPV victims.

In the second paper, and using the same dataset, we study the association between experiencing different patterns of IPV and the likelihood of seeking help from formal or informal sources. The results of this study confirm that a minority of IPV victims seek help from any source, with only 11.7% seeking help from formal sources. Using the Andersen model of health care utilization, we show that predisposing and enabling factors such as employment status and education are positively associated with women's likelihood of seeking help. However, the most important determinants of help-seeking behaviors were those associated with the perceived need to seek help (i.e., characteristics of the violence, past experiences with violence), as opposed to structural characteristics of the victim (e.g., wealth).

Finally, in the third paper, we use the Theory of Normative Social behavior to explore social norms related to IPV help-seeking behaviors. Four focus group discussions were conducted with 30 women in Tegucigalpa, Honduras. In this study, findings depicted a situation in which informal norms of society disincentive help-seeking behaviors from formal and informal sources, and women are left alone to endure

or end the violence by themselves. Policy and research recommendations are presented for each of these studies.

Paper 1: Patterns of lifetime exposure to Intimate Partner Violence in Honduras: An exploratory latent class analysis

Introduction

Intimate Partner Violence (IPV) is widespread across countries and among all socioeconomic, religious, and cultural groups. Data from different low- and middle-income countries show that the prevalence of physical or sexual violence by an intimate partner within the last year is between 16% to 75% worldwide,[1] between 17% to 53% in Latin American countries,[2] and 22.4% in Honduras.[3] Despite numerous studies describing the prevalence of overall IPV or specific types of IPV, most literature does not account for the lifetime accumulation and/or co-occurrence of different forms of IPV. Patterns of lifetime exposure to IPV can be defined based on different typologies and severity of violence (e.g., emotional, sexual, mild physical, severe physical); violence over different timeframes (e.g., last episode of violence more than a year ago versus last episode within the last year); and by the experience of violence by different partners (e.g., violence by a current/last partner only versus violence by ex-partners as well).

Describing IPV as the occurrence of separate types of violence ignores the fact that episodes of IPV rarely take place in isolation.[4] For example, among a sample of Norwegian IPV victims seeking care, only 2.6%, 7.7%, and 0% were exposed exclusively to physical, emotional, and sexual violence, respectively;[5] while 35.2% were exposed to all three types of violence.[5] Furthermore, most studies have merely examined whether or not IPV occurred, which obscures the effects of chronic (i.e., for longer periods) or more frequent violence. The chronicity or duration of violence can greatly differ among women. One U.S. study found that the years in adult women's lives encompassed by IPV ranged from an average of 3.9 to 8.2.[6] Another study showed that 23% of IPV victims had been victimized by previous partners as well.[5] Defining IPV as patterns of lifetime exposure, rather than merely whether it occurred or not, takes into account this co-occurrent and cumulative nature of IPV and can help us better understand the spectrum of violence women experience.

In Honduras, anecdotical evidence suggests that women are often exposed to several types of violence in parallel.[7] However, no studies are reporting the cumulative nature of violence, nor the prevalence and characteristics of these phenomena at the national level. Furthermore, to better identify women at risk of experiencing different forms of violence, it is important to understand how violence differs by background and sociodemographic characteristics of women, including their area of residence, marital status, household wealth, age, ethnicity, education, age at first cohabitation, parity, and IPV in the family of origin.

Shortcomings of literature aiming to identify, measure, and describe patterns of co-occurrent and cumulative IPV have been identified. First, most of the available literature has taken an additive approach to the construction of indicators of experiences of violence.[8] Under this approach, the number of different victimizations is summed, assuming that all events have equal weight and oversimplifying the abuse. Following this summative approach, the co-occurrence of multiple types of violence has been labeled as a higher severity of violence.[9,10] Second, studies measuring patterns of violence have been conducted mostly among non-representative populations and convenience samples, such as female sex workers,[11] nurses,[12] socially excluded women,[13] pregnant women,[14] and incarcerated women.[15] Third, surveys about IPV are rare and their periodicity is inconsistent. Therefore, most of the data about IPV comes from more general surveys or routine crime statistics with limited information about the characteristics of the violence.

To date, interventions have failed to recognize violence as heterogeneous and complex, therefore they have used a "one size fits all" approach when preventing and treating violence. For example, evidence shows that changing social norms at the community level has been a popular strategy to reduce IPV in developing countries; however, this strategy does not affect the incidence of sexual IPV.[16] Similarly, psycho-behavioral interventions can reduce minor and physical IPV only, with no effect on sexual or more severe physical violence.[17]

The present study aims to identify and characterize empirically derived patterns of lifetime exposure to IPV. Using national-level data, this study explores the co-occurrent and cumulative nature of these victimizations, shedding light on the complexity of IPV against women in Honduras. This study moves beyond over-simplistic approaches that collapse different patterns of IPV as one severity scale. Instead, it relies on a person-centered statistical approach to determine and describe groups of women with similar patterns of lifetime exposure to violence. Studying IPV as patterns of co-occurrent and/or cumulative abuse can help advance our understanding of the burden women experience inside their homes. Furthermore, by studying the background and social characteristics associated with different patterns of IPV, this study unveils attributes that link what otherwise could seem as random offenses. A better definition of women's experiences of IPV and their associated factors is the first step towards the development of better tailored and evidence-driven interventions for battered women.

Background

Theoretical considerations

There is not a universally accepted theory that describes the complexity of IPV and its characteristics.[18] However, theories under the feminist perspective (e.g., feminist theory, power, and

control, patriarchy) state that IPV against women is not a strategy used to resolve conflict, but a way for males to exercise control and dominance over women.[19] Therefore, IPV can be understood as a social phenomenon determined by the patriarchal structure of a society, which justifies the use of "physical, psychological, sexual, and economic abuse as control tactics"[19] and permits forced sex as a coercive practice. Under this perspective, it would be expected that in societies with patriarchal norms, different forms of IPV would tend to co-occur (e.g., physical, emotional, and sexual) and IPV could be perpetrated by multiple partners.

Patterns of lifetime exposure to Intimate Partner Violence

To date, each particular form of violence has been studied in relative isolation.[20] Consequently, language, theories, empirical findings, and approaches to prevention and interventions are specific to each type of violence.[20] However, there are strong indications that women may experience co-occurring types of violence, often over a long period, and inflected by different partners. A summary table of studies describing patterns of co-occurrent and cumulative abuse against women, including intimate partner violence, is presented in Appendix 1. The types of abuse included in these studies have varied depending on the objective of the study and the sample population used. However, commonalities can be observed, with the majority of studies including different types of IPV;[11-14,21-27] while few studies included different severities of IPV,[24,28] IPV during different timeframes, and IPV in previous relationships.[26,28] For this paper, we identify empirically derived patterns of lifetime exposure to IPV based on different types and severities of violence (i.e., emotional, mild physical, severe physical and sexual), the timing of the last event (i.e., within the last year versus before the last year) and the recurrence of violence by a different intimate partner (i.e., violence by ex-partners versus violence by latest/current partner only).

Existing evidence about the co-occurrent and cumulative nature of IPV

A growing body of work reports the co-occurrence of different types of IPV (i.e., physical, sexual, psychological/emotional). For example, a study among Latinas in the U.S. found that for each type of IPV victimization, women faced 1.5 to 3.5 times the risk of experiencing a second type of victimization, as opposed to experiencing only one type.[29] In Ethiopia, few women experience only one type of violence. According to one study, only 2.5%, 0.9% and 2.5% of women experienced emotional, physical and sexual violence, respectively; while the majority of women (56.9%) experienced all three forms of violence.[30] Within types of victimization, evidence suggests that the overlap between psychological IPV and other types of IPV is the most common form of overlap.[31] For example, a longitudinal analysis found that physical

IPV was 64 times more likely to occur during days in which psychological IPV occurred.[32] A study conducted in the U.S. showed that psychological aggression was highly common among those suffering from sexual IPV (89.3%) and physical IPV (93.0%).[31] Moreover, a different U.S.-based study found that an increase in an emotional abuse score was associated with not only higher prevalence, but also a higher frequency of physical IPV.[33] Similar findings were found among a Honduran sample of women attending health facilities, where 91.2% of victims of sexual and/or physical violence were also exposed to verbal violence.[34]

While the overlap between emotional violence and other forms of IPV is common, the overlap between sexual violence and other forms of IPV is not. In fact, a study identifying patterns of IPV among women in Nepal identified a group of women characterized by exposure to sexual IPV only, excluding other forms of abuse.[27] Similarly, an analysis of data from different low and middle-income countries shows that there is a group of women who are exposed to sexual violence mainly, with occasional acts of physical abuse and infrequent emotional aggression.[35] Results from a different study show that co-occurring physical and sexual IPV is the least frequently co-occurring type and that it never co-occurs in the absence of psychological IPV.[32]

IPV victimization can significantly vary by its frequency, chronicity (i.e., duration of the exposure to violence), or timing of the events. While 33% to 50% of victims of IPV experience a single episode of abuse or for a brief period (<1 year), a small proportion of women (5% to 9%) experience violence for more than 20 years.[6] Women may also experience episodes of IPV in more than one relationship. A sizable proportion of women with recent experiences of IPV (27% – 59%) also experienced IPV by a previous partner.[36] In fact, a longitudinal study with women obtaining protective orders against a violent partner found that one year after obtaining the protective order, 35% of those with a new partner had been abused by their new partner too.[37] Results from the U.S. show that between 10.7% to 21.0% of abused women reported abuse by two or more partners.[6]

Correlates with patterns of lifetime exposure to IPV

Most literature describing sociodemographic factors associated with exposure to IPV has exclusively focused on IPV episodes that occurred within the last year. Therefore, there is scarce evidence about factors associated with more complex patterns of IPV, such as co-occurrent or cumulative violence over the years. Under the sociological perspective of IPV, victimization is shaped by the characteristics of the individuals and their social surroundings.[19] Therefore, there is no single factor that can explain why violence is more prevalent among some women than among others.[30] Instead, individual- community- and

societal-level factors interplay to predict women's likelihood of experiencing IPV.[38] Following this ecological approach, the following paragraphs describe existing evidence about the factors associated with life-time experiences of IPV at different levels of the ecological framework.

At the household level, area of residence (i.e., rural versus urban) has been studied as a potential determinant of IPV. Specifically, studies in Ghana and Kenya have found no association between the area of residence and exposure to lifetime experiences of IPV.[39,40] However, results from Ethiopia show that living in urban areas is positively associated with lifetime experience of IPV.[30] This finding is consistent with family stress theories that highlight the association between economic hardship and stress with the likelihood of experiencing IPV.[41] In fact, in many Central American countries, urban areas have been associated with economic hardship and stress, due to higher rates of alcohol consumption, substance use, and unemployment. Consistent with the theories of family stress, household wealth is also an important factor associated with lifetime exposure to IPV[30,39,42] with women from wealthier households experiencing less IPV.

Factors associated with IPV at the individual level also depict a situation consistent with theories of family stress, in which women of unprivileged backgrounds face a higher risk of experiencing IPV. For example, being illiterate or uneducated is positively associated with women's likelihood of experiencing IPV during their lifetime.[30,39,40] Being aged 35-49, as opposed to 15-19, has been found to be positively associated with lifetime experiences of IPV.[30] Cohabitation before the age of 18 can also place women at higher risk of lifetime exposure to IPV;[43,44] however, one study found that early marriage (between the ages of 10 and 14) was a protective factor against the experience of IPV.[30] Having children or the presence of children in the household increases the likelihood of lifetime exposure to physical IPV.[39] Finally, episodes of violence between a woman's parents have been consistently associated with a higher likelihood of experiencing IPV herself.[30,40]

A person-centered approach for the study of IPV patterns

"Person centered-approach" is a term used in the social sciences literature to describe a group of statistical techniques used to group and synthesize information. The name can be deceiving and can suggest an association with the type of data being used or the way we are approaching a problem. However, it is exclusively associated with the statistical approach used during the analysis. Specifically, person-centered approaches have been increasingly popular in the literature about violence, due to their advantage of identifying individuals with particular combinations of characteristics.[45] Theoretically, this

feature aligns best with IPV, since it is a phenomenon that might have unique characteristics for each woman.

To date, most research on the co-occurrence and accumulation of violence has relied on variable-centered approaches.[46] Using a variable-centered approach, patterns of victimization have been defined based on the sum of individual types of violence (i.e., the unweighted sum of different types of abuse).[8] This approach is over simplistic[8] and it does not provide information about important differences that may exist within a group of women experiencing the same number of violent episodes. The second disadvantage of a variable-centered approach is that it typically assumes linearity;[47] implying that women can be ordered along a linear continuum of exposure to different forms of violence, which in many cases is not true.

Recognizing the need to consider the multidimensional characteristics of abuse, a person-centered approach assumes that individuals are "unique, and their uniqueness is knowable."[46] When using a person-centered approach, researchers rely on specific statistical techniques (e.g., latent class analysis and cluster analysis) to decompose a sample into meaningful groups based on individuals' characteristics. In this case, a person-centered approach can be used to identify and understand which groups of women are at the greatest risk of suffering different patterns of co-occurrent and cumulative violence.

To date, several papers analyzing patterns of victimization against women have used person-centered approaches.[11,12,14,21-24,26,27] However, few of these provide evidence from low and middle-income countries,[11,14,23,27] and none of these papers have used data from nationally representative samples. Commonalities and differences within studies using person-centered approaches to define patterns of IPV can be observed. First, results consistently show a large class or group of women that experience none to low levels of any form of violence.[12,14,22-24,26,27] Furthermore, they have consistently identified a small class of women that are exposed to a clear pattern of co-occurrent forms of violence.[11,12,14,21-24,26,27] Interestingly, while some studies show that women who experience sexual violence do not experience other types of IPV,[11,27] other studies have contradicted these results.[22,23] Finally, and to the best of our knowledge, there is no evidence about patterns characterized by the experience of IPV by more than one partner, despite the need to understand if violence is a cumulative process among different relationships.

Research questions and hypotheses

The present paper aims to answer the following research questions:

1. Which groups/patterns represent the heterogeneity of lifetime exposure to IPV among a national sample of women of reproductive age in Honduras?

a. How do these patterns differ between each other?

2. Which sociodemographic characteristics are associated with specific patterns of lifetime exposure to IPV?

Hence, hypotheses that will be tested are:

1. Within the general population of women of reproductive age living in Honduras, there will be groups of women that have experienced different patterns of IPV during their lifetime (based on the occurrence and timing of different types of IPV by current and previous partners).
2. Sociodemographic factors representing conditions of vulnerability for women will be associated with patterns characterized by experiences of violence.

Methods

Data and population

The analysis is based on secondary cross-sectional data from the 2011-2012 Honduras Demographic Health Survey, conducted by the National Institute of Statistics (INE) from September 2011 to July 2012. The survey sample was drawn from all women of childbearing age (15 to 49 years) residing in private dwellings. A multistage cluster sample of primary sampling units (based on Census 2001) was stratified by department (18 departments) and area of residence (i.e., urban and rural). From 24,414 eligible women, the survey obtained a final sample of 22,757 women with completed interviews (response rate of 93%).

A sub-group of interviewed women was selected for participation in the domestic violence module of the survey. An aleatory process (i.e., a random number table with the last digit of the questionnaire id as rows and the number of eligible women in the household as columns) was used to select one woman per household to participate in this module. In total, 15,833 ever-in-a-union women were selected for the domestic violence module and 12,494 women completed the module. Women with incomplete answers were not considered in this study. In Honduras, women responded to questions related to prevalence, severity, frequency, help-seeking behaviors, and consequences of violent episodes. Complete descriptions of the Honduras DHS sampling, questionnaire validation, data collection methods, and data validation procedures are published elsewhere.[3]

Measures

IPV characteristics used to define patterns of lifetime exposure

Patterns of IPV are identified based on six indicators characterizing women's lifetime exposure to IPV. Specifically, experiences of violence are measured by the DHS domestic violence module using a modified Conflict Tactics Scale (CTS).[48] Women who were ever-married or in a union were asked about the occurrence and frequency of different emotional, physical, and sexual violent behaviors that their current (if the respondent was currently married or living together) or most recent partner (if divorced, separated, or widowed) may have ever perpetrated against them. Information about physical and sexual violence by a previous partner was also collected. Unfortunately, no information about emotional violence by an ex-partner was collected. Table 1 presents a detailed description of the six variables used in this study to identify lifetime patterns of IPV.

Table 1 Description of the six variables used to measure lifetime exposure to IPV

Indicator	Survey question
1. Any emotional/psychological violence by current/last IP (0=no; 1=yes, but not in the last year; 2=yes, and at least once in the last year)	*Has your latest husband/partner ever...* Done or said something to humiliate you in front of other people Threatened you or someone close to you with harm.
2. Any mild physical violence by current/last IP (0=no; 1=yes, but not in the last year; 2=yes, and at least once in the last year)	*Has your latest husband/partner ever...* Pushed, shook or threw something Slapped you Punched you with a fist or something harmful Arm twisted or hair pulled
3. Any severe physical violence by current/last IP (0=no; 1=yes, but not in the last year; 2=yes, and at least once in the last year)	*Has your latest husband/partner ever...* Kicked or dragged you Strangled or burned you Threatened you with knife/gun or another weapon Attacked you with knife/gun or another weapon
4. Any sexual violence by current/last IP (0=no; 1=yes, but not in the last year; 2=yes, and at least once in the last year)	*Has your latest husband/partner ever...* Physically forced sex when not wanted Forced other sexual acts when not wanted
5. Any physical violence by a previous IP (0=no; 1=yes)	*Has your previous husband/partner ever...* Punched you, slapped you, kicked you, or did anything else to physically hurt you
6. Any sexual violence by a previous IP (0=no; 1=yes)	*Has your previous husband/partner ever...* Forced you to have sexual relations or perform sexual acts against your will

IP=Intimate partner

Background and sociodemographic characteristics associated with patterns of lifetime exposure to IPV

Based on previous evidence and postulates from theories of family stress, the following variables were selected to study their potential association with patterns of lifetime exposure to IPV: area of

residence, age, education, ethnicity, age at first cohabitation, parity, marital status, wealth tertile, and whether there was IPV between the respondent's parents. In Table 2, we present a detailed description of how these variables are coded.

Table 2 Description of variables potentially associated with patterns of IPV

Variable name	Categories
Area of residence	Rural
	Urban
Age	15-24
	25-49
Education	No education/incomplete primary
	Complete primary
	Incomplete secondary
	Complete secondary/Higher
Ethnicity	None
	Indigenous
	Other
Age at first cohabitation	Before the age of 18
	After the age of 18
Parity	Count variable
Wealth tertile	Poorest
	Middle
	Wealthiest
Marital status	Married
	Previously married or in a union
	In a union
Father ever beat the mother	No/don't know
	Yes

Analytical strategy

Descriptive statistics

Descriptive statistics presented in this study include the characteristics of the sample as well as the prevalence of lifetime exposure to different types of IPV. The analysis is conducted with Stata 15.0;[49] using the 'svy' command to account for the cluster sampling design, sampling weights, stratification, and the calculation of standard errors. Standard errors are computed using the linearized variance estimator — so called because it is based on a first-order Taylor series linear approximation.[50]

Latent Class Analysis (LCA)

To identify different patterns of lifetime exposure to IPV, we use Latent Class Analysis (LCA). LCA groups our population of interest (i.e., women in Honduras) into mutually exclusive and exhaustive latent classes or groups[51] based on multiple dimensions or characteristics of a phenomenon (i.e., lifetime exposure to IPV). LCA is a person-centered technique that has been widely used in other fields to identify homogeneous groups, such as groups of women with similar symptoms of the post-traumatic disorder, groups of people with similar eating disorders, and groups of adolescents with similar sexual risk behaviors. Methodologically, LCA is similar to Exploratory Factor Analysis (EFA), with the difference that EFA models group forms of violence along a number of axes, while LCA groups people into latent classes. While EFA cannot be conducted with non-binary categorical variables, this is possible with LCA.

LCA model building is conducted in a stepwise fashion, beginning with two latent classes, three latent classes, and so on until achieving the desired model fit. The model fit was assessed based on the relative fit of two or more competing models,[51] and interpretability of the classes. Relative fit was assessed based on several different information criteria, including the Akaike Information Criterion (AIC),[11,14,23,24,26,51,52] the Corrected Akaike Information Criterion (CAIC)[11], the Bayesian Information Criterion (BIC),[11,12,23,24,26,27,51-53] and entropy.[11,12,14,23,24,26,27,52,53] For AIC, CAIC and BIC, a lower value suggests a more optimal balance between model fit and parsimony.[51] It is important to note that BIC has proved to have a better performance to identify the correct number of classes when compared to AIC and other likelihood ratio tests.[54] Entropy was used to measure how well women are classified with each approach. Entropy uses a zero to one scale for assessing the precision of assigning latent class membership with a value of one indicating that individuals are perfectly classified into classes.[55] Finally, because it is imperative to have a theoretical reason that explains the meaning and utility of the groups/classes formed;[56] we gave preference to models that not only had a good fit, but that also resulted in classes that could be clearly interpreted.

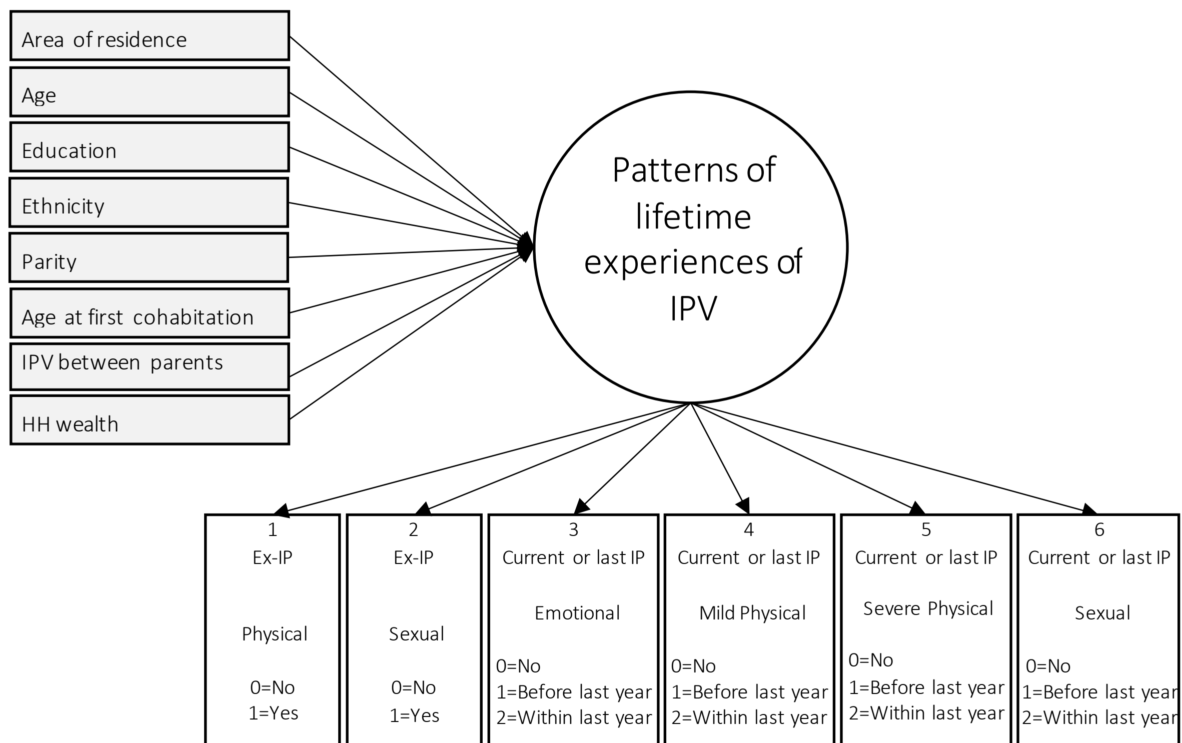
Posterior probabilities or the probability of class membership/classification into each class was determined for each woman (e.g., a woman has a 0.6 probability of belonging to class 1). Based on each participant's highest probability of class membership, women were assigned to a class. This step produces a categorical variable representing women's membership in mutually exclusive classes or groups characterized by similar patterns of lifetime exposure to IPV. We also report the probability of experiencing a particular type of violence given a woman's class membership. This information allows us to describe the characteristics of each class or group based on the probability of experiencing violence (e.g., 98% of women in class 1 have experienced severe physical violence in the last year). The analysis was conducted using Stata 15 and the LCA plug in version 1.2,[57] considering sample weights and the clustered nature of the data.

Factors associated with patterns of lifetime exposure to IPV

Given that our outcome measure represents patterns of lifetime exposure to IPV, whereas our independent variables are observations at one point of time only, we examine the strength of the associations rather than causation. To evaluate whether LCA-determined IPV patterns differ by sociodemographic characteristics, class membership was treated as an exact observed categorical variable.[52] Multinomial logistic regression models with robust standard errors were used to measure the potential association between patterns of lifetime exposure to IPV and sociodemographic characteristics. Associations are presented as adjusted relative-risk ratios (RRR).

To summarize, Figure 1 presents the conceptualization of patterns of lifetime experiences of IPV and their associated factors within Latent Class Analysis. The boxes at the bottom represent the observed categorical variables describing different characteristics of the violence women may have experienced. These observed variables are then used to construct a categorical latent variable representing "Patterns of lifetime experiences of IPV." The gray boxes on the left are sociodemographic variables that may be associated with specific patterns of IPV.

Figure 1 A LCA model for the definition of groups of women based on their experiences of IPV, and associated factors



IP=Intimate partner

Results

Sample characteristics

The analytical sample consisted of 12,494 women of reproductive age who have ever been in a union and who were selected for the domestic violence module. Descriptive statistics are depicted in Table 3 and show that 61.5% of women lived in urban settings. One in four women (24.8%) were younger than 25 years old. Eight in ten women declared 'non-indigenous' as their ethnicity. Most women (70%) had not completed secondary education. Almost half of the sample cohabitated for the first time before the age of 18 (48.1%); and on average, women had 2.7 children. Finally, a quarter of the sample (25.7%) declared that their father ever beat their mother.

Table 3 Sample descriptive statistics, Honduras 2011-2012

	Percent	Number
Age		
15 to 24 years old	24.8	3,096
25-49 years old	75.2	9,398
Ethnicity		
Non-indigenous	80.6	10,065
Indigenous	16.2	2,019
Other	3.3	410
Education		
None/incomplete primary	38.4	4,795
Complete primary	31.0	3,869
Incomplete secondary	16.0	2,005
Complete secondary/Higher	14.6	1,825
First cohabitation		
Before the age of 18	48.1	6,010
After the age of 18	51.9	6,484
Parity (mean)	2.7	12,494
Household wealth tertile		
Poorest	33.3	4,165
Middle	33.3	4,165
Wealthiest	33.3	4,164
Father ever beat the mother		
No/Don't know	74.3	9,287
Yes	25.7	3,207
Area of residence		
Rural	38.5	4,810
Urban	61.5	7,684
Marital status		
Married	31.6	3,947
Previously married or in union	16.6	2,075
In union	51.8	6,472

Note: Unweighted results

Prevalence of different forms of IPV

In Table 4 we present the prevalence of IPV by the perpetrator, timing of the last episode, and type and severity of violence. At the national level, four in ten women (40.5%) have experienced some type of IPV during their lifetimes. The most common form of IPV was emotional violence by a current partner within the last 12 months (20.9%), followed by emotional violence by a current partner more than 12 months ago (11.2%). Sexual violence was the least frequent type of violence reported (3.2%-3.3%). Physical and sexual violence by an ex-partner was experienced by 7.8% and 4.9% of the sample, respectively. While this

information is useful, analyzing these statistics solely cannot offer an overview of the potential overlap between these forms of violence, a limitation that will be overcome with the LCA analysis.

Table 4 National level prevalence of IPV, by perpetrator, timing, type, and severity of the violence, Honduras 2011-2012

Perpetrator	Type and severity of the violence	Timing of the last violence episode	National level prevalence and 95% CI		
Ex-partner	Physical	N/A	7.82	[7.15	; 8.55]
	Sexual	N/A	4.87	[4.34	; 5.47]
Current partner	Emotional	Before the last 12 months	11.19	[10.4	; 12.03]
		Within the last 12 months	20.89	[19.89	; 21.93]
	Mild physical	Before the last 12 months	9.90	[9.15	; 10.71]
		Within the last 12 months	9.72	[9.03	; 10.46]
	Severe physical	Before the last 12 months	4.23	[3.73	; 4.79]
		Within the last 12 months	3.31	[2.89	; 3.78]
	Sexual	Before the last 12 months	3.29	[2.88	; 3.75]
		Within the last 12 months	3.23	[2.85	; 3.66]
Lifetime experience of any type of violence by an intimate partner			40.46	[39.22	; 41.71]

Note: Weighted results
N/A=information not available

Latent Class Analysis fit statistics

Five consecutive latent class models were estimated (2-6 classes). Fit statistics for each model are presented in Table 5. The lowest AIC was observed for the 6-class solution, while the lowest CAIC and BIC were observed for the 5-class solution. Given existing evidence that BIC has a better performance when compared to AIC and other likelihood ratio tests,[54] the 5-class solution was selected as the optimal balance between model fit and parsimony. The highest entropy was observed with the 4-class solution, suggesting the highest precision of assignment under this specification. However, the entropy for the selected 5-class model suggests that women were appropriately classified in their groups 89% of the time, which is higher than the cut-off point of 80%.[58]

Table 5 LCA Fit Statistics (N=12,494)

Number of classes	AIC	CAIC	BIC	Entropy
2	5118.90	5295.99	5274.99	0.90
3	2792.54	3062.40	3030.40	0.92
4	864.22	1226.84	1183.84	0.93
5	711.30	1166.68	1112.68	0.89
6	651.72	1199.86	1134.86	0.87

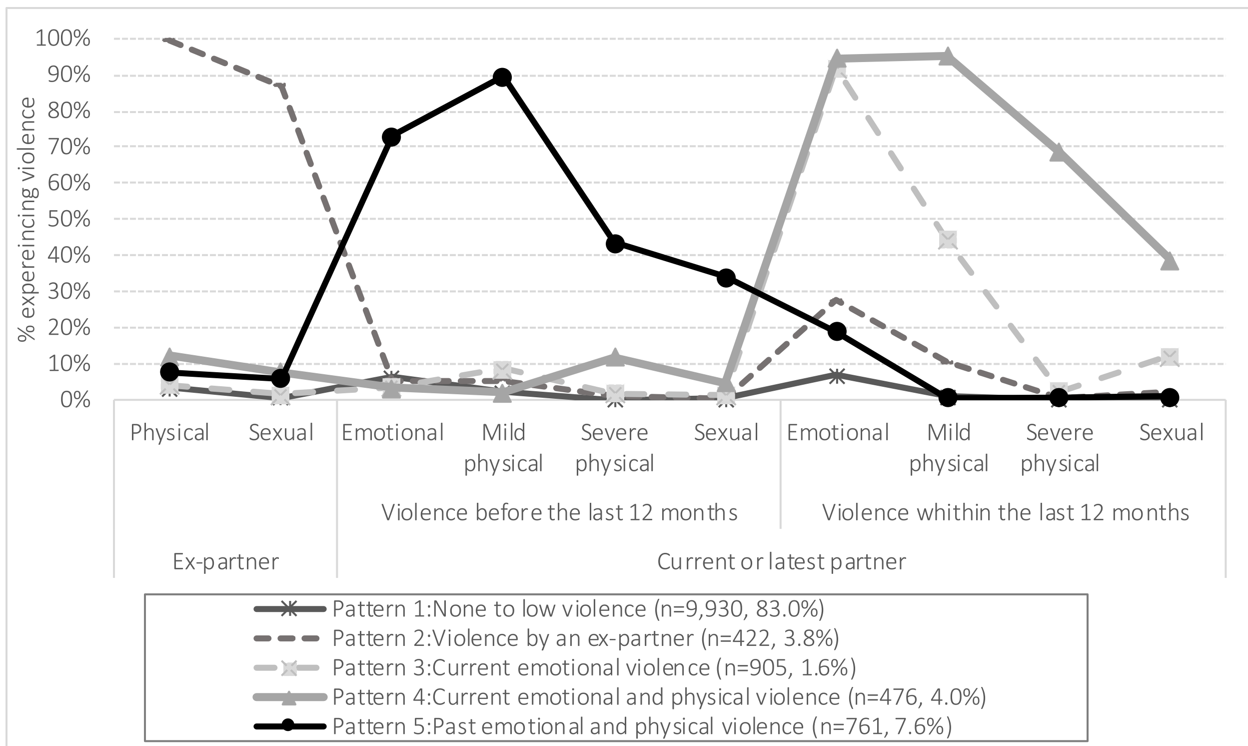
Note: Weights and clusters are considered, therefore, the inference was done using the "pseudo" or "weighted" log-likelihood function. Similar results are obtained when considering the unweighted data.

Latent Class Analysis results

Based on LCA fit statistics we determined that there are five distinct groups of women who share similar lifetime patterns of IPV (Figure 2). These patterns were labeled based on the group's average estimated probability of experiencing different types of violence. A 0.5 probability is used as a cut-off point to determine the experience of a particular type of violence by the group or pattern.[59] This first pattern identified was labeled as 'None to low violence' and it is characterized by the absence of physical or sexual violence by a current or an ex-partner. The second pattern identified was labeled as 'Violence by an ex-partner' and it is characterized by experiences of co-occurrent physical and sexual violence by an ex-partner. A third pattern identified was labeled as 'Current emotional violence' and represents women who have experienced emotional violence by the current partner and within the last 12 months. The fourth pattern was named 'Current emotional and physical violence' and it is characterized by the experience of co-occurrent physical and emotional violence within the last 12 months. The last group was labeled as 'Past emotional and physical (non-sexual) violence' and it is characterized by the co-occurrence of physical and emotional violence by the current partner but that did not take place within the last 12 months.

Some IPV patterns are more common than others. (Figure 2). Pattern 1 (none to low violence) was observed among the majority of women in the sample (83.0%). A pattern of exposure to physical and sexual violence by an ex-partner (pattern 2) was prevalent among 3.8% of women. Pattern 3 (current emotional violence) was observed among 1.6% of women. Finally, pattern 4 (current emotional and physical violence) and pattern 5 (past violence of all types) were observed among 4.0% and 7.6% of women, respectively.

Figure 2 Exposure to different forms of IPV by latent class or pattern



Factors associated with class membership

Multinomial logistic regressions were used to measure the associations between sociodemographic characteristics and patterns of lifetime exposure to IPV. Pattern 1 (none to low violence) was used as the reference category and the results are presented in Table 6. Results indicate that sociodemographic characteristics associated with one specific IPV pattern were not necessarily associated with others. This result implies that not all forms of violence have the same sociodemographic determinants.

The likelihood of experiencing a pattern of 'Violence from an ex-partner' (pattern 2) was higher than the likelihood of experiencing a pattern of 'None to low violence' (pattern 1) for older women (those 25-49 years old as opposed to 15-24) (RRR=4.8), women starting cohabitation before the age of 18 (RRR=4.6); those having an additional child (RRR=1.1), those whose father ever beat their mother (RRR=1.8), those residing in urban areas (RRR=1.6), and those currently separated (RRR=4.2) or in a union (RRR=4.4) (as opposed to married).

Factors associated with a higher likelihood of experiencing a pattern of 'Current emotional violence' (pattern 3), as opposed to experiencing 'None to low violence' included: starting cohabitation before the age of 18 (RRR=1.3); having an additional child (RRR=1.1), having a father that ever beat their

mother (RRR=2.0), residing in an urban area (RRR=1.3), and being in a union (as opposed to married) (RRR=1.5).

The likelihood of experiencing 'Current emotional and physical violence' (pattern 4) was higher than the likelihood of experiencing 'None to low violence' among women starting cohabitation before the age of 18 (RRR=1.5), those with a higher number of children (RRR=1.1), women whose father ever beating her mother (RRR=2.5), women residing in an urban area (RRR=1.8), and those previously married/in union (RRR=3.4) or currently in a union (RRR=2.1) (as opposed to married). Women aged 25-49 years old were 0.7 times as likely to experience 'Current emotional and physical violence' than to experience 'None to low violence when compared to their younger counterparts (15-24 years old).

Finally, factors associated with a higher likelihood of experiencing 'Past emotional and sexual violence' (pattern 5) rather than experiencing 'None to low violence' included: being older than 25 years old (RRR=2.3); being indigenous (RRR=1.4); starting cohabitation before the age of 18 (RRR=1.4), having an additional child (RRR=1.2); being in higher wealth tertiles (RRR=1.4 and RRR=1.8 for middle and rich wealth tertiles, respectively); having a father that ever beat her mother (RRR=2.1), residing in an urban area (RRR=1.2); and being previously married/in a union, as opposed to married (RRR=10.6).

Table 6 Results of the Multinomial logistic regression, Honduras 2011-12 (N=12,494)

	Violence by an ex-partner vs. None to low violence		Current emotional violence vs. None to low violence		Current emotional and physical violence vs. None to low violence		Past emotional and physical violence vs. None to low violence	
	RRR	Std. Err.	RRR	Std. Err.	RRR	Std. Err.	RRR	Sud. Err.
Age								
15 to 24 years old (R)								
25-49 years old	4.477***	(2.717 - 7.376)	0.916	(0.717 - 1.168)	0.724**	(0.528 - 0.993)	2.310***	(1.650 - 3.233)
Ethnicity								
Non-indigenous (R)								
Indigenous	1.084	(0.746 - 1.576)	0.964	(0.724 - 1.283)	1.149	(0.817 - 1.615)	1.351*	(0.996 - 1.832)
Other	1.005	(0.503 - 2.010)	0.960	(0.568 - 1.625)	1.573	(0.793 - 3.119)	0.795	(0.335 - 1.886)
Education								
None/incomplete primary (R)								
Complete primary	1.215	(0.856 - 1.724)	1.083	(0.859 - 1.366)	0.961	(0.707 - 1.307)	1.158	(0.849 - 1.580)
Incomplete secondary	1.293	(0.809 - 2.067)	1.113	(0.831 - 1.490)	1.010	(0.685 - 1.489)	0.874	(0.595 - 1.283)
Complete secondary/Higher	1.042	(0.593 - 1.833)	1.021	(0.718 - 1.452)	0.722	(0.428 - 1.216)	0.774	(0.506 - 1.184)
First cohabitation								
After the age of 18 (R)								
Before the age of 18	4.627***	(3.314 - 6.459)	1.337***	(1.073 - 1.667)	1.556***	(1.191 - 2.034)	1.447***	(1.143 - 1.832)
Parity	1.127***	(1.036 - 1.225)	1.055*	(0.994 - 1.120)	1.153***	(1.073 - 1.238)	1.242***	(1.169 - 1.319)
Household wealth tertile								
Poorest (R)								
Middle	1.284	(0.911 - 1.812)	1.128	(0.906 - 1.405)	1.032	(0.729 - 1.461)	1.423**	(1.031 - 1.963)
Wealthiest	0.984	(0.638 - 1.518)	0.953	(0.703 - 1.292)	0.618**	(0.394 - 0.972)	1.796**	(1.129 - 2.857)
Father ever beating the mother								
No/Don't Know (R)								
Yes	1.794***	(1.327 - 2.425)	2.003***	(1.661 - 2.415)	2.537***	(1.973 - 3.263)	2.077***	(1.641 - 2.629)
Area of residence								
Rural (R)								
Urban	1.620***	(1.128 - 2.328)	1.298**	(1.059 - 1.591)	1.816***	(1.290 - 2.557)	1.123	(0.816 - 1.547)
Marital status								
Married (R)								
Previously married or in union	4.192***	(2.512 - 6.996)	0.999	(0.730 - 1.366)	3.376***	(2.209 - 5.158)	10.591***	(7.896 - 14.208)
In union	4.369***	(2.840 - 6.719)	1.349**	(1.070 - 1.701)	2.134***	(1.515 - 3.006)	1.131	(0.830 - 1.542)

RRR=relative risk; (R) reference category; * p<.05 ** p<.01 *** p<.001; Weights and clustered errors used.

Discussion

The objective of this study was to define and analyze patterns of lifetime experiences of Intimate Partner Violence that reflect the potential cumulative and/or co-occurrent nature of violence. Using data from the Honduras 2011-12 DHS, a Latent Class Analysis was conducted to identify those IPV patterns that are most likely to occur. Additionally, multinomial logistic regressions were used to identify sociodemographic characteristics associated with the identified patterns.

From the results obtained, a picture emerges of physical and non-physical IPV as common and present in overlapping forms. Specifically, there are five distinctive patterns or classes of lifetime experiences of IPV among women of reproductive age who have ever been in a union: (1)'none to low violence', (2)'violence by an ex-partner', (3)'current emotional violence', (4)'current emotional and physical violence', and (5)'past emotional and physical violence by the current partner'. These results suggest that women's experiences with violence are highly heterogeneous. Conclusions that can be derived from these IPV patterns are: (1) co-occurrent forms of violence are very common and only emotional IPV can take place without any other form of IPV; (2) it is not common for women to experience IPV by more than one partner; (3) sexual violence co-occurs with physical violence; and (4) women who are not currently experiencing IPV, might have experienced co-occurrent forms of violence by the current partner but in the past (before the last year).

Although there has been some evidence that different types of IPV tend to co-occur,[11,12,21-24,26] our findings show that co-occurrence is a phenomenon highly prevalent among IPV victims in Honduras. It is likely that co-occurring violence has much more severe consequences than single, isolated forms of IPV. Hence, there is an important need for future research to understand the emotional, health, social and economic consequences of experiencing co-occurrent forms of IPV.

We found no evidence that women in Honduras experience violence by multiple partners. In fact, the group of women who experienced both sexual and physical violence by an ex-partner did not get together with a new partner or did not experience violence by a new partner. Cole et al. (2008)[37] found that revictimization by multiple partners is prevalent only among women with specific characteristics, such as substance abuse, cumulative lifetime victimizations and those who start the subsequent relationship sooner.[37] Therefore, possible explanations for this finding is that substance abuse among Honduran women is not common.[60,61] Also, traditional social and gender norms in Honduras might delay women's initiation of a new relationship after separation.

In Honduras, sexual IPV often co-occurs with physical IPV. Among women exposed to violence by an ex-partner, physical and sexual IPV was highly co-occurrent. However, among women reporting violence by the most recent partner within the last year, sexual and physical violence was not always co-occurrent. Assuming that IPV patterns are stable across time, this finding could be suggesting under-reporting of sexual violence by current partners (but not by ex-partners). Evidence shows that women tend to underreport violence when they are more dependent on their abusive partners,[62] therefore, it wouldn't be surprising to see differential reporting rates depending on whether the person is still with the perpetrator of IPV or not. Furthermore, in Latin American countries many women still believe that having sexual relations with their partners is part of their duty.[63] Therefore, and considering the high prevalence of self-reported co-occurrent sexual and physical violence by ex-partners, there is the possibility that the prevalence of co-current sexual and physical violence by current partners is higher than the one reported in the survey. Health providers and social workers suspecting that a woman is being physically and/or emotionally victimized need to carefully asses if sexual violence is also present, to enable the provision of relevant help (e.g., access to sexual and reproductive health services, information about the prevention of sexually transmitted diseases).

Results from the multivariate analysis do not show clear demographic profiles of women experiencing each of the IPV patterns. Furthermore, characteristics that have been traditionally associated with IPV, such as age, ethnicity, education, and household wealth, were associated with experiencing few IPV patterns. However, some associations between sociodemographic characteristics and IPV patterns are worth discussing. For example, educational attainment was not associated with the likelihood of experiencing any IPV pattern. Traditionally, it has been found that lower education or illiteracy is positively associated with experiences of IPV.[30,39,40] Therefore, our finding is controversial. A possible explanation for this non-significant association is the lack of violence prevention curriculums in most education systems in Latin America. Therefore, even if girls attend school and receive information, they might still lack practical information about IPV prevention and healthy relationship practices.

Being in the highest wealth tertile reduces the likelihood of currently experiencing co-occurrent physical and emotional violence. However, when compared to women in the poorest wealth tertile, women in the wealthiest tertile were more likely to suffer emotional and physical violence by the current partner in the past (before the last year), than to suffer none to low violence. Wealthier women have fewer possibilities of currently suffering highly co-occurrent forms of violence and have more opportunities to

discontinue violence after experiencing it. Future research should examine the mechanisms through which wealth can help women discontinue violence or a violent relationship.

Only three sociodemographic characteristics were consistently associated with membership in one of the four groups characterized by experiences of IPV: parity, IPV between the participant's parents, and first cohabitation before the age of 18. Having an additional child is positively associated with an increased likelihood of experiencing violence. This may be explained by the fact that women with more children are more dependent on their partners, also women in violent relationships are less likely to use family planning.[64] However, additional studies should be conducted to better understand the association between the number of children and intimate partner violence in Honduras, including the role of coercive sex, family planning use, and women's economic independence.

Witnessing IPV in the family of origin is associated with all patterns characterized by experiences of IPV. These results are consistent with other studies analyzing the effects of witnessing parental IPV on IPV victimization.[6,30,40,65,66] Children learn how to manage conflict through imitation of their parents' behaviors, and they are more likely to model the behavior of the same-sex parent. Hence, girls learn the victim role by watching their mothers in this role.[66] Furthermore, a study in Honduras found that members in the same household showed the strongest correlation of acceptance to IPV.[67] This could imply that Honduran women form their attitudes about violence based on those of their parents and other household members. A programmatic implication of this finding is the need to include older adults and men living in the household as targets of any communication campaign that highlights the unacceptability of violence against women.

Cohabitating with a partner before the age of 18 increases the likelihood of experiencing some type of IPV, as opposed to no violence. There is evidence that starting cohabitation before the age of 18 may be associated with an unstable childhood. For example, for some women in developing settings, early marriage is a way to avoid selling sex, escape abuse in the family of origin, and/or seek protection in contexts of urban violence.[68] Furthermore, in Latin America, the factors that usually lead women to start cohabitation earlier include the expectation of higher stability, better defined economic obligations, and responsibility for their children.[69] Therefore, women who start cohabitation earlier might be more dependent on their partners and hence, more likely to tolerate violence. From this perspective, securing the safety, emotional and financial stability of girls can have spillover effects on IPV prevention.

Strengths and limitations

Most available literature examined individual forms of IPV, paying little attention to the fact that women may simultaneously experience multiple types of violence, and that they may have re-occurring experiences during their lifetime. Given that violence tends to co-occur and accumulate, the main strength of this study is the comprehensive definition of IPV as patterns characterized by different typologies and severity of violence, the timing of the last episode, and their recurrence by different intimate partners. A second important strength of this study is the use of national-level data; therefore, our findings are representative of the entire population of women of reproductive age living in Honduras.

Several limitations are recognized. Since DHS data is cross-sectional (i.e., data collected at one period of time), it is difficult to establish causality or temporal sequence of events. Longitudinal data may be better to study the structural and situational factors that might lead to the likelihood of experiencing specific IPV patterns. Second, our measures of violence are self-reported and could be affected by recall bias or social desirability bias. Third, our variable representing the different patterns of IPV is latent, as opposed to observed. Therefore, misclassification error is present in the analysis of the association between this latent variable and the socio-demographic characteristics of women. Finally, although many indicators of violence were measured in the DHS survey, we do not have measures of (1) emotional violence by an ex-partner; (2) duration of the violence; and/or (3) an indicator of stalking by an intimate partner, which has been found to be highly correlated with other forms of IPV.[31] Hence, there may be additional patterns of IPV that we were unable to detect. Finally, although this study used national data, only one woman per household could participate in the domestic violence module (following ethical recommendations).[70] Therefore, the sample was not big enough for more nuanced analyses of the experienced violence, such as studying moderating effects of age or area of residence.

Research implications

Studying IPV as lifetime patterns of co-occurrent and/or cumulative abuse can help advance our understanding of the burden women experience inside their homes. Our study shows that women in Honduras experience highly heterogeneous patterns of violence, and therefore, a “one size fits all” approach when preventing and treating IPV will not be the best alternative for all victims. Future studies should consider the use of more nuanced definitions of IPV, and in order to do this, surveys need to collect high-quality information about the nature and the characteristics of the violence experienced throughout women’s lifetime. Understanding and correctly defining the patterns of violence women experience is the first step to better target and serve IPV victims; however, this information alone is not sufficient. Studying

the association between different IPV patterns and sociodemographic characteristics had the potential of identifying commonalities among women experiencing the same IPV pattern. This evidence could have facilitated the identification of victims and the best strategies to help them; however, our results did not show associations that could help target victims. Therefore, further analyses are needed to better understand the characteristics of women exposed to different IPV patterns and the best way to target and provide services for them. For example, it will be important for future studies to investigate how these patterns are associated with help-seeking strategies, to link these theoretical findings to more practical implications.

Appendices

P1 Annex 1: Studies analyzing patterns of victimization against women, including IPV

Authors & Year	Study Context	Study Design & Sample Population	Measurement of Multiple Victimization	Independent Variables	Analytic Approach	Results: MV patterns
STUDIES USING A PERSON-CENTERED APPROACH						
Clark et al., 2019	Nepal	Random sample of Nepalese married women of reproductive age (N=1440) living in 72 communities in three districts (Nawal-parasi, Chitwan, and Kapilvastu)	Psychological, physical, and sexual IPV in the prior 12 months	Outcomes Depressive symptoms	To define MV Latent class analysis (BIC, Mendell-Rubin likelihood ratio test, entropy)	Four classes: 1. Systematic (7.01%) All forms of violence 2. Moderate (6.60%) Emotional and less severe physical 3. Sexual (9.03%) 4. Low exposure (77.36%)
McNaughton Reyes et al., 2018	South African	Data from and HIV counseling RCT among pregnant South African women (n = 1,480) a	Six indicators were created for use in defining the latent IPV classes: (a) moderate physical IPV, (b) severe physical IPV, (c) moderate psychological IPV, (d) severe psychological IPV, (e) sexual IPV, and (f) male controlling behavior. Binary indicators despite availability of data about frequency.	Sociodemographic Age Education Relationship length Lives with current partner Experienced childhood abuse Experienced forced first sex Outcomes Emotional distress (baseline and postpartum)	To define MV Latent class analysis (AIC, ssBIC, LMR-LRT, Lo-Mendell-Rubin likelihood ratio test, entropy)	Three classes: 1. Nonvictims (72%) 2. Moderate IPV (24%) 3. Multiform Severe Controlling IPV (4%)
Gupta et al., 2018	Mexico	Women (18-44) from an RTC with 42 community health clinics for low-	14 variables indicating: past-year physical IPV (6 binary variables), past-year sexual IPV (3 binary variables), and Injuries from IPV (5 binary variables)	Socio demographics Age Number of children Birthplace	To define MV Latent class analysis (AIC BIC aBIC, G2, entropy)	Four classes: 1. Low physical and sexual IPV and low injuries(39.1%)

		income women in Mexico City (n=947)		Occupation Educational status Relationship status Reason for healthcare visit IPV screening <u>Outcomes</u> Work-related disruptions	Separate multilevel risk regression analysis was used to examine adjusted and unadjusted	2. High physical and Low sexual IPV and injuries(36.5%) 3. High physical and sexual IPV and Injuries (14.8%) 4. High Sexual and low physical and low injuries (9.6%)
Roberts et al., 2018	Mombas a, Kenya	Female sex workers (n=283)	Lifetime prevalence of: 1. Physical partner violence (none, moderate, severe) 2. Sexual partner violence (none, once or twice a few times, many times) 3. Emotional partner violence (none, moderate, once, moderate, many times, severe, any frequency) 4. Non-partner violence (none, physical only, sexual)	<u>Socio demographics</u> Age Education Income Occupation Workplace Financial situation <u>Outcomes</u> Depressive symptoms PTSD, disordered alcohol and drug use, and sexual risk factors	<u>To define MV</u> Latent Class analysis (G^2, AIC, BIC aBIC CAIC, entropy, parsimony, class size, scientific interpretation) <u>To find associations between MV and outcomes</u> Multivariable regression models with robust standard errors (Poisson) They applied the modified BCH approach to account for uncertainty in class assignment.	Four classes of patterns of GBV: 1. Low (20.9%) 2. Sexual (23.0%) 3. Physical/moderate emotional (17.5%) 4. Severe (38.6%) No differences in socio-demographic characteristics, except income
Cale et al., 2017	Australia and New Zealand	Female university students (n=293)	<u>Experience of IPV</u> 1. Minor psychological aggression 2. Severe psychological aggression 3. Minor physical assault 4. Severe physical assault 5. Minor physical injury 6. Severe physical injury 7. Sex pursuant to insisting	<u>Socio demographics</u> Age Relationship status Country <u>Outcomes</u> <u>Child maltreatment</u> Neglect history (continuous), violent	<u>To define MV</u> Latent Class analysis (G^2, AIC, BIC aBIC, entropy) <u>To find associations between MV and outcomes</u> Chi square and analysis of variance (ANOVA)	Three classes of IPV experiences: 1. Low-level IPV (53%) 2. Moderate-level IPV (35%) 3. High-level IPV (12%)

				socialization (continuous), and childhood sexual abuse experiences (continuous)	Multinomial regression	
Young-Wolff et al., 2013	The U.S.	Female IPV victims in an urban community (n=412)	Experience of violence 1-3. Psychological, Sexual or Physical IPV 4-6. Psychological, Sexual or Physical Past IPV 7-11. Childhood abuse 12. Witnessing parental violence	<u>Socio demographics</u> Cohabiting status, employment, race/ethnicity, education, age in years, number of children <u>Outcomes</u> Resource utilization, including social support, counseling/support group, criminal justice services, substance abuse treatment, health care services, IPV hotline/infoline, religious or spiritual services, and shelter.	<u>To define MV</u> Latent class analysis (AIC, BIC, Lo-Mendell-Rubin likelihood ratio test, entropy <u>To find associations between MV and outcomes</u> Multinomial regression analyses	Three classes: 1. Low cumulative IPV (n=121) 2. High past/low current IPV ((n=258) 3. High cumulative IPV class (n=33) Childhood victimization was prevalent across all classes
Cavanaugh et al., 2011	The U.S.	Nurses and nursing personnel in a metropolitan area (n=1,424)	Nine types of violence against women: 1. Childhood physical abuse 2. Childhood sexual abuse 3. Physical abuse between parents during childhood 4. Psychological intimate partner violence 5. Physical IPV 6. Sexual IPV 7. Adult physical or sexual assault by a non-intimate partner	<u>Socio demographics</u> Age Race/ethnicity Marital status Children <u>Outcomes</u> Depression PTSD	<u>To define MV</u> Latent class analysis (BIC, aBIC, Lo-Mendell-Rubin likelihood ratio test of model fit, entropy, absolute and relative frequency for smallest class)	Four classes: 1. Low violence (63.1%) 2. High psychological and physical IPV (15.6%) 3. High physical and psychological workplace violence (12.4%) 4. High childhood abuse (9%) Class 2 (IPV) were more likely to have children at home, and being older, but less likely to being married

			8. Physical workplace violence 9. Psychological workplace violence			Significant differences between classes and mental health status
Campbell & Raja, 2008	The U.S.	Female veterans randomly sampled from an urban Veterans Affairs hospital women's clinic (n=268)	1. Childhood sexual abuse 2. Adult sexual assault 3. Intimate partner Violence 4. Sexual harassment	<u>Socio demographics</u> <u>Outcomes</u> PTSD	<u>To define MV</u> hierarchical and iterative cluster analysis	Four groups: 1. LOW: The 1st cluster experienced relatively low levels of all 4 forms of violence 2. HIGH ALL: 2nd group, high levels of all 4 forms 3. HIGH SA: the 3rd, sexual revictimization across the lifespan with adult sexual 4. Harassment 5. HIGH IPV: and the 4th, high intimate partner violence with sexual harassment.
Dutton et al., 2005	The U.S.	Help-seeking women from a Mid-Atlantic city (n=406)	Four scores: 1. Physical IPV 2. Psychological IPV 3. Stalking 4. Sexual IPV	<u>Socio demographics</u> Race/ethnicity Employment Site of recruitment <u>Outcomes</u> Revictimization PTSD Depression Quality of life IPV threat appraisal	<u>To define MV</u> Cluster analysis	Three patterns: 1. Moderate levels of Physical violence, psychological abuse, and stalking, but little sexual violence 2. High levels of physical violence, psychological abuse, and stalking but low levels of sexual violence 3. High levels of all violence types
STUDIES USING A VARIABLE-CENTERED APPROACH						
Cho & Kwon, 2016	The U.S.	A nationally representative sample of adults aged 18 or older, a subsample of IPV victims (n=416)	1. Cumulative violence Exposure (number of types of cumulative violence: child abuse, witnessing parental violence, victimization in past intimate relationships)	<u>Socio demographics</u> Age Race Gender Education Financial security Health insurance	<u>To define MV</u> Summation of events	The severity of IPV did not affect the victim's use of mental health services IPV victims with CVE were more likely to use mental health services

			2. The severity of Intimate partner violence (binary violence indicating severe vs. less severe physical IPV)	Outcomes Mental health service use		
Simmons et al., 2015[25]	Sweden	Hospital clinics (women=2439, men n=1767) Random from the general population (women n=1168, men n=2924)	Tow categorical variables: 1. Type of violence (No violence, Physical, Emotional, Sexual, Emotional and physical, Emotional and sexual, Physical and sexual, Emotional, physical and sexual 2. Type of perpetrator (No violence, Family, Partner, Acquaintance/ stranger, Family and Partner, Family and Acquaintance/ stranger, Partner and Acquaintance/stranger Family, partner and Acquaintance/ stranger	Socio demographics Civil state Education Occupation Age group Outcomes Symptoms of psychological ill-health	To define MV Multiple victimizations were analyzed as one categorical variable for all possible types of violence and as another categorical variable for all possible perpetrators. To find associations between MV and outcomes Multinomial regression analysis.	No prevalence of each variable was presented Emotional violence, violence by an IP, or any of the combinations including these kinds of violence had higher OR for reporting symptoms of psychological ill health Reporting a higher number than types of violence and a higher number of perpetrators were positively associated with psychological ill health
Matos et al., 2014	Portugal	Excluded women 15-59 years old (n=41)	These types of victimization: 1. Psychological violence 2. Physical violence 3. Vicarious violence 4. Discrimination 5. Sexual violence 6. Negligence 7. Institutional violence For each of these life stages: 1. Childhood 2. Adolescence 3. Adulthood		To define MV Only descriptive study of the prevalence of each type of violence at each stage of life	Adulthood was the period of time in which there was a major frequency of the victimization experience, with a mean value of 6.73 types of victimization. In childhood, the average was 3.78 and in adolescence 3.32.

Paper 2: Population-level factors associated with help-seeking behaviors among Intimate Partner Violence victims in Honduras

Introduction

In Honduras, male-perpetrated Intimate Partner Violence (IPV) is a rising concern. Despite data from the 2011-2012 Demographic Health Survey (DHS) showing that 40.5% of women have ever been emotionally, physically, or sexually victimized by an Intimate Partner (IP), data from smaller studies suggest that the lifetime prevalence of IPV is significantly higher. In fact, a study conducted in urban neighborhoods exposed lifetime prevalence rates of up to 65%,[7] and data from five communities in the political regions of Francisco Morazán and Olancho show that the prevalence rate of lifetime IPV is between 36% and 66%.[71] Furthermore, the nature of the violence that battered women experience is not homogeneous. Instead, evidence from other countries show that women experience complex patterns characterized by the co-occurrence and accumulation of different forms of violence.[11,12,15,21]

Seeking help for IPV, whether from formal or informal sources, has the potential to provide a sense of security,[13] reduce levels of distress,[72] improve victim's mental health,[73] reduce repeated victimizations,[74] and improve victims' health outcomes.[75] Nonetheless, the majority of Honduran women who are physically or sexually victimized by their partners do not seek help (50.2%).[3] In fact, a qualitative assessment of violent neighborhoods in Honduras evidenced that seeking help for IPV is seen as an "audacity" or a "bravery act", as opposed to a normal step.[76] Furthermore, two analyses using pooled data from different low- and middle-income countries[2,77] presented Honduras as the country with the lowest proportion of women seeking any type of help for an IPV episode.

Previous studies have identified several factors as important determinants of women's decision to seek help for IPV, such as the type[78] and severity of the violence experienced,[78-80] exposure to violence during childhood,[81] witnessing parental IPV,[82] women's age,[83,84] education level,[85] employment status,[82,86] marital status,[82] abuse towards the victim's children,[80] and household wealth.[82] However, most of these studies have used non-representative samples (e.g., women from shelters),[83,87,88] samples from the U.S.[81,85,89] and other high-income countries, or have failed to distinguish between the source of help sought (i.e., informal vs. formal sources).[82,84,86,90] Most importantly, the majority of the research on help-seeking behaviors has assessed IPV as a unidimensional construct, ignoring the role of victims' experiences of co-occurrent and/or cumulative abuse.

The characteristics of the IPV experienced can be a decisive factor when deciding to seek help or not. However, it is still unclear how different types of abuse can affect women's decisions. On the one hand, research has demonstrated that women have a threshold, of either frequency or severity, up to which they tolerate abuse. Hence, an increase in the frequency or severity of the abuse experienced would prompt victims to seek help. Consistent with this hypothesis, several studies have evidenced that women exposed to more severe, frequent or repeated violence are more likely to seek help.[78,79,91,92] On the other hand, constant exposure to violence can normalize violence,[93] reducing the likelihood that a woman would label the abuse as a problem and seek help for it.[93,94]

The present study builds on the limited research about IPV help-seeking behaviors in developing countries.[82,84,86,95-101] Using a national sample of women 15-49 years old exposed to IPV in Honduras, it (i) describes different sources of help currently used by IPV victims and (ii) analyzes factors associated with different help-seeking strategies. Specifically, and given the inconsistent evidence about the role of the type of experienced violence on women's decision to seek help, this study (iii) analyzes how different patterns of co-occurrent and cumulative IPV shape victim's help-seeking decisions. Results from this study can help to improve the design of services for victims of different forms of IPV.

Conceptual framework

To study the factors associated with different help-seeking strategies we use a comprehensive conceptual framework that integrates different theories of help and healthcare-seeking behaviors. Specifically, our conceptual framework combines constructs and concepts from the Andersen's model of health care utilization,[102] Liang's process model for IPV help-seeking,[103] the survivor theory[104] and the learned helplessness theory.[105] Andersen's model[102,106] provides a useful basis for understanding and exploring predictors of help-seeking behaviors. Therefore, it underpins this study and posits that help-seeking behaviors are influenced by external factors related to the environment (e.g., existing laws, protocols, social norms) and population-level characteristics (e.g., sociodemographic) that influence women's decision to seek help (Figure 3).

Despite the importance of studying the role of external factors when shaping help-seeking behaviors, the data required to measure these factors (e.g., disaggregated national-level data) is not available in Honduras. Therefore, and for this paper, we focus exclusively on the behavior of interest (help-seeking for IPV) and population-level characteristics that shape women's decision to seek help. Concretely, and following Andersen's model, we analyze the role of (i) predisposing characteristics, (ii) enabling factors, and (iii) perceived need factors.

Behaviors

Seeking help for IPV is not a yes/no concept; instead, women use a variety of support options after a violent episode, including seeking help from informal and formal sources. Seeking help from informal sources is the most common strategy among female victims[78,79] and it typically includes support from friends and relatives in the form of "emotional sustenance (e.g. advice, encouragement, or affirmation) and material assistance (e.g. financial help, babysitting, or a place to stay)".[103] On the other hand, formal sources of help include criminal enforcement forces (e.g., the police), legal services, services offered at the health system, counselors and social services.

Specific informal and formal sources of help have weaknesses and strengths. However, seeking help from any source has the potential to provide a sense of security,[13] reduce levels of distress,[72] reduce repeated victimizations,[74] and improve victims' health outcomes.[75] Furthermore, once women have sought help from one source, they are more likely to seek help from other sources as well.[91,94,107] In fact, evidence shows than among people seeking both formal and informal sources of help, 50% of them disclosed that the informal sources influenced them to talk with the formal source.[108] Therefore, and for this paper, help from formal as well as informal sources is considered desirable.

Predisposing characteristics

A broad array of socio-demographic characteristics determines the status of a woman in her community and her ability to cope with problems, including IPV. Additionally, socio-demographic factors can influence how women perceive the costs and benefits of seeking help for IPV. Hence, measures that have been traditionally used to assess the predisposition of an IPV victim to seek help include age, marital or cohabiting status,[82,109] race or ethnicity, education level,[85] and parity.[110,111] Age is an important determinant when deciding to seek help, while evidence shows that young women are less likely to seek help,[84] old women often depend more on their family and community, and may, therefore, also be less likely to seek help as a way of avoiding uprooting the current living situation.[112] A victim's level of education might affect her awareness and knowledge of available resources, rights, and laws; which in turn affects her help-seeking behaviors.[113-115] In South Carolina, education was a determinant of help-seeking behaviors for IPV;[85] however, no significant associations were found in Nicaragua,[80] Afghanistan,[84] and Nigeria.[82]

Women living with their partners and those suffering abuse from the same perpetrator are less likely to notify the police when compared to women living apart from their partners.[109] Married women might be less able to negotiate forced sex and/or other forms of IPV or might be more likely to hide the

violence as a way of protecting their formal partners. The number of children a woman has is an important predisposing factor for help-seeking behaviors; for example, participants in a qualitative study reported that the responsibility for their children's welfare was a major factor when deciding to seek help.[115] In quantitative studies, having children was also positively associated with the likelihood of seeking all forms of help.[81] However, while some women seek help because of fear that the perpetrator may harm their children,[115,116] others feel that they have to protect the perpetrator because he is the father of their children.[115] Other studies have found no association between number of children and help-seeking behaviors.[80,84]

Enabling resources

Enabling factors represent a woman's financing and logistical ability to seek help, including her area of residence (e.g., geographical access to formal help providers), household wealth, the ability of a woman to earn her own money, health insurance coverage (e.g., to access medical care or psychological services), and access to information about available services through exposure to media. In the existing help-seeking behaviors literature, limited financial resources[81,94,117] has been cited as a main barrier to seeking counseling and other sources of formal help. Hence, women earning their own money (e.g., currently employed) may have a broader freedom of movement or access to services. This positive association between employment and help-seeking has been evidenced in Nigeria, Tanzania and India.[82,86,90] However, being employed was not significantly associated with help-seeking behaviors among Mexican[110] nor Kenyan women.[107]

Perceived Need

According to the Andersen's model, the perceived need for help is represented by the victim's perception of her situation, functional state, and distress symptoms. Consistent with this model, Liang's theory of help-seeking behavior[103] states that the first step to seek help is for the victim to recognize her situation as a problem. Therefore, a victim's assessment of the severity and the potential consequences of the experienced violence will be important determinants of her decision to seek help.[103] Factors associated with women's perceived need of seeking help will include the characteristics of the experienced violence (i.e., frequency, recurrence, and type); previous exposure to episodes of IPV (e.g., witnessing IPV when growing up), the woman's perceived severity of the violence (e.g., being afraid of her partner), and a woman's justification of IPV as a normal way of solving conflict in the household.

The direction of the association between the characteristics of the experienced violence and the likelihood of seeking help can be positive or negative. First, it has been widely stated that co-occurrent and/or cumulative IPV is positively associated with help-seeking behaviors. Specifically, the survivor theory[104] posits that battered women become more eager to attempt stopping the violence as it grows more frequent or severe. In other words, more severe or more frequent violence from an intimate partner can increase the urge for women to seek help. Data from Nigeria show that women experiencing violence both by the husband and at least one other person were significantly more likely to seek help than women who only experience violence from their husband.[82] Data from Mexico show that experiencing physical and sexual victimization, as opposed to moderate physical violence only, increases the likelihood of seeking help.[110] Evidence from Bangladesh also indicated that higher severity of violence as well as the interaction between physical and sexual violence increased help-seeking behaviors.[95] Similarly, evidence from India[101] and Kenya[107] suggest that injury is the strongest correlate of help-seeking. Research findings from Spain,[118] Nicaragua,[80] and India[90,101] show that higher severity of violence increased the likelihood of seeking help for it.

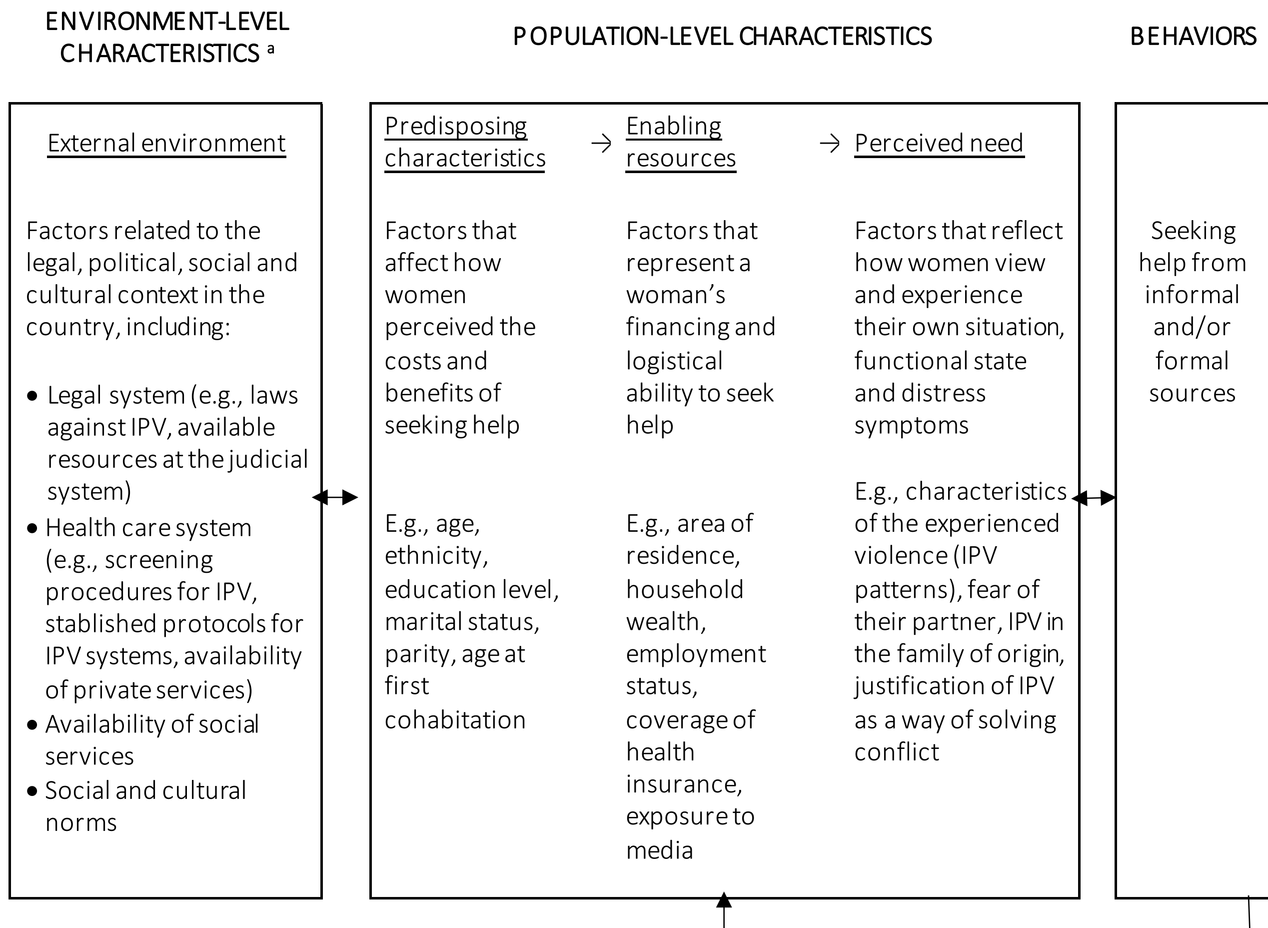
On the other hand, IPV characterized by cumulative violence and/or previous experience with IPV can be negatively associated with help-seeking behaviors. According to the theory of learned helplessness,[105] when a woman becomes accustomed to violence and perceives her situation as uncontrollable, it creates the expectation that nothing can be done. This is likely to cause her to give up and fail to initiate any action to control or change her situation.[119] In other words, constant victimization, and revictimization create an environment that “blinds people to abuse,”[120] which might in turn prompt feelings that nothing can be done. Therefore, either during childhood or adulthood, previous or constant exposure to violence can normalize violence,[93,115] and the normalization of violence within individuals, families, or communities is an important threat to the ability of a woman to define IPV as a problem.[93,94] Following this theory, a study of older women in the U.S. found that there is a form of “inertia that developed in the course of a long, abusive relationship…. and change seemed virtually unimaginable”.[112]

Under the theory of learned helplessness, we can argue that being directly or indirectly exposed to IPV while growing up (e.g., father ever beating the mother) can normalize violence and will have a negative effect on the likelihood of seeking help for an IPV episode. In fact, evidence from the U.S. and Mexico support this theory by showing that the presence or number of childhood victimizations (i.e., witnessing IPV is considered a victimization against children) is negatively associated with the likelihood of seeking

formal and informal help for IPV.[81,110] However, other evidence from developing countries has shown that witnessing parental IPV is associated with an increased likelihood of seeking help for IPV.[82]

Finally, it is important to recognize that patterns of co-occurrent or cumulative IPV might affect the likelihood of seeking informal versus formal sources of help differently. Women with past victimizations may have already exhausted the support of friends and family; therefore, they might be more likely to seek formal help in the future. A Canada-based study shows that the use of informal help was consistent across groups of women experiencing different patterns of IPV,[26] while the use of formal help increased as the severity of violence increased.[79]

Figure 3 IPV help-seeking decision-making model



a. The analysis of environment-level factors is not included in this study

Research questions and hypotheses

This paper aims to answer the following research questions:

1. Which help-seeking behaviors are the most common/uncommon among female IPV victims of reproductive age in Honduras?
2. Among female IPV victims in Honduras, what are population-level characteristics associated with the likelihood of seeking help for IPV?
3. Specifically, what is the role of the type of violence experienced on the likelihood of seeking help?
   a. What is the role of experiencing co-occurrent forms of violence?
   b. What is the role of experiencing more severe forms of violence?
   c. What is the role of experiences of cumulative violence?
4. Are factors associated with informal help-seeking different from those associated with formal help-seeking?

Specific hypotheses that will be tested in this study are:

1. Among Honduran women, seeking help from informal sources is more common than seeking help from formal ones
2. A pattern of co-occurrent and/or more severe IPV is associated with increased likelihood of seeking informal or formal help
3. A pattern of cumulative IPV is associated with decreased likelihood of seeking informal and/or formal help
4. Factors associated with seeking help from formal sources will differ than those associated with seeking help from informal sources only

Methods

Data and population

The analysis is based on cross-sectional secondary data from the 2011-2012 Honduras Demographic Health Survey, conducted by the National Institute of Statistics (INE) from September 2011 to July 2012. From a total of 22,757 interviewed women, a sub-group was selected for participation in the domestic violence module of the survey. A random selection process was used to identify one woman per household to participate in this module. In total, 12,494 women completed the domestic violence module and responded to questions related to prevalence, severity, and frequency of episodes of violence, as well as help-seeking strategies used (incomplete interviews were not included in the dataset). Information about help-seeking behaviors for IPV was only collected among respondents who reported at least one act of physical (i.e., ever pushed, shook or threw something, slapped, punched with a fist or something harmful, arm twisted or hair pulled, kicked or dragged, strangled or burned, threatened and/or attacked with knife/gun or another weapon) or sexual violence (i.e., physically forced sex when not wanted and/or forced other sexual acts when not wanted) by a current/latest intimate partner. Therefore, help-seeking behavior were measured for 2,517 participants. Complete descriptions of the Honduras DHS sampling, questionnaire validation, data collection methods, and data validation procedures are published elsewhere.[3]

Measures

Outcome variable: Help-seeking behaviors

Help-seeking is assessed among victims of physical and/or sexual IPV with the question "*have you ever tried to seek help?*" and "*whom did you seek help from?*" Women could report more than one source of help sought. Therefore, our outcome of interest is defined as a three-category variable: no help sought/

no response, help from informal sources only, and help from at least one formal source. Informal sources included "*own family, partner's family, current/former husband, current/former boyfriend, neighbor, friend, and religious leader*"; while formal sources included "*police, lawyer, doctor, NGO, court, woman's prosecutor and social service organization*."

Predictor variables: Predisposing and enabling factors

Considering our conceptual framework and previous literature about the determinants of IPV help-seeking behaviors, the following socio-demographic variables were selected as potential predisposing factors: women's age,[81,82,84,86,88,89,110] ethnicity, education,[81,82,86,110] marital status,[81,82,86,110] parity,[81,86,110] and first cohabitation before the age of 18. The following variables were selected as potential enabling factors: area of residence, wealth,[81,82,84,88,89,110] employment,[81,82,86,110] health insurance coverage, and access to media.[84]

Predictor variables: Perceived need factors

Perceived need factors are variables representing the victim's perceived situation, functional state, and level of distress, as well as their previous experiences with violence. Therefore, variables included are patterns of IPV experienced, participant's father ever beating the mother, being afraid of the current/latest partner, and justification of IPV as a way of solving conflict.

Patterns of IPV experienced is a 5-category variable representing different patterns of lifetime experience of IPV among women in Honduras (see Table 7). These patterns were defined using Latent Class Analysis among the entire Honduran population (i.e., including IPV victims and non-victims); therefore, these patterns are nationally representative. The definition of these patterns took into consideration different typologies and severity of violence (e.g., emotional, sexual, mild physical, severe physical); violence over different timeframes (e.g., last episode of violence more than a year ago versus the last episode within the last year); and by the experience of violence by different partners (e.g., violence by a current/latest partner only versus violence by ex-partners too).

Table 7 Patterns of the IPV experienced by women, Honduras 2011-12 (N=12,494)

Pattern number	Name	Description	% women exposed to each pattern[a]
1	Low violence	Absence of physical or sexual violence by a current or an ex-partner; however, a small proportion of women in this group (less than 10%) experienced emotional violence before and within the last 12 months.	79.5
2	Violence by an ex-partner	High levels of exposure to co-occurrent physical and sexual violence by an ex-partner, but significantly less physical violence (only 10% of women in this class experienced mild physical violence) and no sexual violence by the current/latest partner.	4.2
3	Current emotional violence	Experience of emotional violence only, with 44% of them suffering mild physical violence as well.	7.2
4	Current emotional and physical violence	Experience of co-occurrent mild physical and emotional violence within the last 12 months.	3.8
5	Past emotional and physical violence	Co-occurrence of severe physical, mild physical and emotional violence by the current partner but that did not take place within the last 12 months.	6.1

a. At the national level

Witnessing IPV when growing up was defined as a binary variable based on the question: "*As far as you know, has your father ever beaten your mother?"*. Fear of one's partner was also defined as a binary variable based on the question *"Are you afraid of your partner most of the time, some of the time or never?* Justification of wife-beating as a way of resolving conflict is a continuous variable, which is the summation of five binary items: (1) beating is justified if the wife goes out without telling husband; (2) beating is justified if wife neglects the children; (3) beating is justified if wife argues with husband; (4) beating is justified if the wife refuses to have sex with husband, and (5) beating justified if wife burns the food. A complete list and description of all independent variables used in this study are presented in Table 8.

Table 8 Categories and characteristics of all independent variables used in the analysis

	Variable name	Categories
Predisposing factors	Age	15-24 25-39 40-49
	Ethnicity	None Indigenous Other
	Education	No education/incomplete primary Complete primary/incomplete secondary Complete secondary/higher
	Marital status	Married Separated Living together
	Number of living children	Count variable (range 0-15)
	Age at first cohabitation	Before the age of 18 After the age of 18
Enabling factors	Area of residence	Rural Urban
	Wealth tertile	Poorest Middle Wealthiest
	Employment status	Not working Working
	Number of media channels exposed to	Count variable (range 0-3)
	Health insurance	Not covered Covered
Perceived need factors	The pattern of the IPV experienced by women	1.None to low violence 2.Violence by an ex-partner 3.Current emotional violence 4.Current emotional and physical violence 5.Past emotional and physical violence
	Fear of their current/latest partner	Never Some or most of the times
	Father ever beat the mother	No or don't know Yes
	Number of justifications of wife-beating/IPV	Count variable (range 0-5)

Analytical strategy

Descriptive and bivariate analysis

We conduct univariate analysis to describe the characteristics of the sample as well as women´s help-seeking behaviors by source of help sought. Bivariate analysis is used to identify predisposing,

enabling, and perceived need factors associated with different help-seeking behaviors. For the bivariate analysis, a chi-square test is used for categorical variables and one-way ANOVA for continuous variables.

Multivariate analysis

Considering that we have a dependent variable with three alternatives ((0=no help sought, 1=informal help only, and 2=formal help), the model for help-seeking behaviors can be defined as:

$$Prob\ (Y_i = j) = \frac{e^{\beta'_j x_i}}{\sum_{k=0}^{2} e^{\beta'_k x_i}}, \quad j = 0,1,2 \qquad (1)$$

Therefore, the estimated equations provide a set of probabilities for the $J + 1$ help-seeking choices for a woman with characteristics x_i.[121] To estimate these equations, a maximum-likelihood multinomial logit model was used. Multinomial logistic regression allows the effects of the independent variables to differ for each outcome while handling the non-independence of the categories of the dependent variable by simultaneous estimating the models for all outcomes, except one outcome that is “omitted” to serve as a reference category (0=no help, in this case). The results of the multinomial model are presented as relative risk ratios. The multinomial model assumes “independence of irrelevant alternatives (IIA)”, which assumes that the relative risk ratios in the multinomial logit model are independent of the other alternatives.[121] To test this assumption, and given the clustered nature of the data, we used the ‘suest’ command. All analyses are conducted using Stata 15.0.[49]

Results

Sample characteristics

The final sample consisted of 2,517 15-49-year-old women who have ever been physically or sexually victimized by their current or past intimate partner (Table 9). Most of the women in the sample were between the ages of 25 and 39 (51.6%) and cited “none” as their ethnicity (84.7%). Breakdown by the level of education shows that only 13.6% of women finished secondary school. Most women started cohabitation before the age of 18 (54.8%), with their marital status being: 21.4% married, 34.7% separated, and 43.9% living together with a partner. On average, women had 3 children. A higher proportion of women in the sample lived in rural areas (56.8%) and a higher proportion of women were in the highest wealth tertile of the population (43.2%). Two-thirds of women (67%) worked, and the overwhelming majority were not covered by health insurance (88.5%). On average, women accessed 1.6 media channels per week.

When analyzing perceived need variables, we observe that the majority of participants reported that their father ever beat their mother (60.5%). By definition, all women in the sample had experienced IPV by the current/latest partner; however, they had experienced different patterns of violence. Specifically, 13.3% of women experienced low violence (pattern 1), 3.6% (94 women) experienced violence by an ex-partner (pattern 2), 32.5% experienced emotional violence by their current/latest partner (pattern 3), 17.7% experienced physical, emotional and sexual violence by the current/latest (pattern 4), and 33.0% experienced emotional and physical violence by the current/latest partner but in the past (pattern 5). Finally, 51.1% of women declared being afraid of their partners and the average number of justifications towards wife-beating was low (0.33 out of 5 possible justifications).

Table 9 Sample characteristics (all women of reproductive age who have experienced physical or sexual IPV by the current/latest partner), Honduras 2011-2012

		Weighted %	n
Predisposing factors	Age		
	15-24	21.4	557
	25-39	51.6	1,386
	40-49	27.0	574
	Ethnicity		
	None	84.7	2,005
	Indigenous	11.7	434
	Other	3.6	78
	Education		
	No education/incomplete primary	36.1	1,047
	Complete primary	50.4	1,159
	Incomplete secondary	13.6	311
	Marital status		
	Married	21.4	561
	Separated	34.7	751
	Living together	43.9	1,205
	Number of living children	2.98	2,517
	Age at first cohabitation		
	Before the age of 18	54.8	1,392
	After the age of 18	45.2	1,125
Enabling factors	Area of residence		
	Rural	56.8	1,110
	Urban	43.2	1,407
	Wealth tertile		
	Poorest	20.9	771
	Middle	35.9	900
	Wealthiest	43.2	846
	Employment status		
	Not working	33.0	917
	Working	67.0	1,600
	Number of media channels exposed to	1.63	2,517
	Health insurance		
	Not covered	88.5	2,339
	Covered	11.5	178
Perceived need factors	The pattern of experienced IPV		
	1.None to low violence	13.3	340
	2.Violence by an ex-partner	3.6	94
	3.Current emotional violence	32.5	846
	4.Current emotional and physical violence	17.7	476
	5.Past emotional and physical violence	33.0	761
	Fear of their current/latest partner		
	Never	51.1	1,237
	Some or most of the times	48.9	1,280
	Father ever beat the mother		
	No/don't know	60.5	1,553
	Yes	39.5	964
	Number of justifications of wife-beating	0.33	2,517

A detailed description of the outcome of interest, help-seeking behaviors for IPV is presented in Table 10 and shows that the majority of women in Honduras did not seek help after being victimized by a partner (54.6%). It is also worth noting that 5.5% (140 women) did not want to provide an answer to the question "*have you ever tried to seek help?*". Overall, 40% of women had sought help from any source, with the majority of victims seeking help from informal sources (32.1% of all victimized women). Among women seeking help from informal sources, the most common source was the woman's own family, followed by friends. Although Honduras is a very religious country, only 2.4% (63 women) sought help from a religious leader. Seeking help from formal sources was not common. Only 11.7% of women sought help from a formal source, with the most common source being legal services (8.9% of women sought help from the police, free judicial services, a court, or the woman´s prosecutor).

Table 10 Prevalence of help-seeking behaviors, Honduras 2011-2012

	Weighted (%)	Unweighted (n)
No response	5.5	140
No help sought	54.6	1340
Any help sought	40.0	1037
Any informal source	32.1	852
Own family	24.1	655
Neighbor	4.3	118
Friend	6.3	168
Religious leader	2.4	63
Any formal source	11.7	289
Social service organization[a]	1.4	36
Legal[b]	8.9	221
Family counselor	0.9	20
Physician	2.0	50

Note: Participants could report seeking help from more than one source
a. Institute for women, NGO, other
b. Free judicial services, court, police, the woman´s prosecutor

Results from the bivariate analysis (Table 11) show that most of the variables selected in our model were significantly associated with help-seeking behaviors, except for women's ethnicity, women's parity, and health insurance coverage. Women aged 15-24 and 40-49 were less likely than those aged 35-39 to seek any type of help. Higher educational attainment was associated with formal help-seeking only, with women with complete secondary education being most likely to seek formal help after experiencing IPV. Breakdown by marital status shows that separated women were most likely to seek informal help, while married women had the highest probability of seeking formal help. Women starting cohabitation after the age of 18 were less likely to seek informal help but more likely to seek formal help. Women living in urban

places were more likely than women living in rural areas to seek formal help. Women in the highest wealth tertile were the group with the highest probability of seeking formal help but the ones with the lowest probability of seeking informal help only. Being employed was associated with a higher likelihood of seeking any type of help. Those seeking formal help had access to a higher number of media channels. Women suffering physical and emotional violence by the current partner (pattern 4) were the most likely to seek informal help, and those who suffered violence by an ex-partner (pattern 2) were the group with the highest likelihood of seeking formal help (21.4%). Participants who declared being afraid of their partners some or most of the time were also more likely to seek any form of help. Finally, women whose father ever beat their mothers were more likely to seek any type of help than those whose father never beat their mother. Women who sought informal help only had the highest average number of justifications towards wife-beating.

Table 11 Bivariate results of the association between IPV help-seeking behaviors and population-level characteristics, Honduras 2011-2012

			No help	Informal only	Formal help	*p-value*
Predisposing factors	Age					
		15-24	62.1	31.6	6.3	*0.000*
		25-39	56.5	29.7	13.8	
		40-49	65.1	22.8	12.1	
	Ethnicity					*0.333*
		None	60.0	28.7	11.3	
		Indigenous	62.5	25.2	12.3	
		Other	52.1	27.6	20.3	
	Education					*0.012*
		No education/incomplete primary	61.5	29.0	9.5	
		Complete primary	59.0	29.4	11.6	
		Incomplete secondary	59.9	21.8	18.3	
	Marital status					*0.001*
		Married	64.9	21.0	14.1	
		Separated	55.4	30.8	13.8	
		Living together	61.3	29.7	9.0	
	Number of living children		3.00	2.85	3.23	*0.095*
	Age at first cohabitation					*0.038*
		Before the age of 18	57.9	31.0	11.1	
		After the age of 18	62.6	24.9	12.5	
Enabling factors	Area of residence					*0.000*
		Rural	59.8	25.9	14.3	
		Urban	60.3	31.3	8.3	
	Wealth tertile					*0.013*
		Poorest	62.6	30.1	7.3	
		Middle	57.0	30.7	12.3	
		Wealthiest	61.3	25.2	13.5	
	Employment status					*0.000*
		Not working	65.0	27.5	7.5	
		Working	57.6	28.6	13.8	
	Number of media channels exposed to		1.62	1.60	1.76	*0.002*
	Health insurance					*0.766*
		Not covered	60.4	28.0	11.6	
		Covered	57.0	30.1	12.9	
Perceived need factors	Pattern of IPV					*0.000*
		1.None to low violence	74.9	19.2	5.9	
		2.Violence by an ex-partner	61.9	16.7	21.4	
		3.Current emotional violence	63.0	28.0	9.0	
		4.Current emotional and physical violence	48.7	33.9	17.5	
		5.Past emotional and physical violence	57.0	30.4	12.7	
	Fear of their current/latest partner					*0.000*
		Never	65.3	24.7	10.0	
		Some or most of the times	54.5	31.9	13.6	
	Father ever beat the mother					*0.018*
		No/don't know	62.4	27.4	10.2	
		Yes	56.3	29.5	14.1	
	Number of justifications of wife-beating		0.34	0.38	0.20	*0.004*

In our multinomial logistic regression, we expect no systematic change in the coefficients if one of the categories of the dependent variable was excluded (assuming IIA). The results of the McFadden–Hausman specification test for IIA suggested that excluding 'formal help' or 'informal help only' did not change the coefficients of the other categories (Prob > F =0.9841 and Prob > F =0.9651), confirming that this model did not violate the IIA assumption, and therefore is appropriate.

In Table 12 we present the results of the multinomial logistic regression as relative risk ratios. Some of the variables included in our model were not significantly associated with any help-seeking outcome, including wealth status, exposure to media channels, and health insurance coverage. When analyzing predisposing and enabling factors associated with the likelihood of seeking informal help (as opposed to no help), only two variables were significantly associated: being 25-39 years old (as opposed to 40-49, RRR=0.71) and starting cohabitation at or after the age of 18 (RRR=0.76).

Three predisposing and enabling factors were significantly associated with the likelihood of seeking help from a formal source (as opposed to no help), including age (women aged 25-39 were 2.06 times more likely to seek formal help than those aged 15-24), education (women with completed secondary education were 1.89 times more likely to seek formal help than those with no/incomplete primary education) and employment status (working women were 1.68 times more likely to seek formal help than non-working women).

When analyzing predisposing and enabling factors associated with the likelihood of seeking formal help (as opposed to informal help only), four variables were significantly associated: education (women with completed secondary education or higher were 2.00 times more likely to seek formal help than those with no/ incomplete education), cohabitation status (women living with a partner were 0.53 times as likely to seek formal help when compared to married women), parity (each additional children a woman has made her 1.13 times more likely to seek formal help), and area of residence (women living in rural places are 0.59 times as likely to seek formal help when compared to women living in urban areas).

When analyzing the role of perceived need factors, the pattern of IPV experienced by the victim showed the strongest association with informal and formal help-seeking. First, women who experience emotional, mild, and severe physical violence by the current partner (pattern 4) were more likely to seek informal help when compared to women experiencing low violence (pattern 1) and women who experienced IPV by an ex-partner (pattern 2). Women who experienced emotional, mild and severe physical

violence (pattern 4) were also more likely to seek formal help than women who experienced low violence (pattern 1); women who experienced emotional violence only (pattern 3), and those who experienced violence in the past by the current/latest partner (pattern 5).

Women who experienced physical and sexual violence by an ex-partner were more likely to seek formal help when compared to women who experienced low violence. Specifically, women who experienced violence by an ex-partner were 3.29 times more likely to seek formal help than no help, and 3.57 times more likely to seek formal help than to seek informal help only.

Another important result to note is that women who experienced violence in the past (i.e., before the last year) by the current/latest partner (pattern 5) had a higher likelihood of seeking informal help when compared to those experiencing low violence (pattern 1) and those who experienced violence by an ex-partner (pattern 2). Finally, women experiencing emotional violence only (pattern 3) had a higher likelihood of seeking informal help than those experiencing low violence (pattern 1).

Among other perceived need factors, being afraid of the current partner was associated with an increased likelihood of seeking informal help (RRR=1.35). Women who reported that their father ever beat their mother were 1.57 times more likely to seek formal help than those with no history of family IPV. The number of justifications to wife-beating was not associated with the likelihood of seeking informal or formal help. Finally, suggestive associations are highlighted in Table 12 with one asterisk and are discussed in the discussion section.

Table 12 Results of the multinomial logistic regression for IPV help-seeking behaviors (n=2,517), Honduras 2011-2012

		Informal help only vs. No help		Formal help vs. No help		Formal help vs. Informal help only	
		RRR	SE	RRR	SE	RRR	SE
Predisposing factors	Age (Ref=25-39)						
	15-24	0.791	(0.13)	0.483***	(0.13)	0.611*	(0.168)
	40-49	0.706**	(0.11)	0.667*	(0.15)	0.945	(0.227)
	Ethnicity (Ref=none)						
	Indigenous	0.898	(0.17)	0.996	(0.25)	1.109	(0.315)
	Other	1.269	(0.43)	1.72	(0.78)	1.355	(0.617)
	Education (Ref=No education/incomplete primary)						
	Complete primary/Incomplete secondary	1.143	(0.18)	1.207	(0.28)	1.056	(0.258)
	Complete secondary/higher	0.941	(0.24)	1.889**	(0.60)	2.008**	(0.679)
	Marital status (Ref=Married)						
	Separated	1.390*	(0.27)	0.989	(0.23)	0.712	(0.180)
	Living together	1.333*	(0.21)	0.702*	(0.15)	0.527***	(0.124)
	Parity	0.96	(0.04)	1.086*	(0.05)	1.131**	(0.0638)
	Age at first cohabitation (Ref=Before the age of 18)						
	At or after the age of 18	0.762**	(0.11)	0.899	(0.16)	1.180	(0.231)
Enabling factors	Area of residence (Ref=Urban)						
	Rural	1.265	(0.20)	0.745	(0.16)	0.589**	(0.129)
	Wealth tertile (Ref=Poorest)						
	Middle	1.159	(0.19)	1.516*	(0.38)	1.308	(0.326)
	Wealthiest	0.94	(0.21)	1.217	(0.38)	1.295	(0.400)
	Employment status (Ref=Not working)						
	Working	1.173	(0.16)	1.683***	(0.32)	1.435*	(0.303)
	Health insurance (Ref=Not covered)						
	Covered	1.361	(0.37)	0.81	(0.23)	0.595	(0.203)
	Number of media channels exposed to	0.966	(0.07)	1.029	(0.11)	1.065	(0.119)
Perceived need factors	Pattern of IPV (Ref=1.None to low violence) [b]						
	2.Violence by an ex-partner	1	(0.36)	3.286***	(1.41)	3.574**	(1.882)
	3.Current emotional violence	1.682**	(0.36)	1.852*	(0.63)	1.101	(0.408)
	4.Current emotional and physical violence	2.271***	(0.56)	4.269***	(1.48)	1.880*	(0.712)
	5.Past emotional and physical violence	1.931***	(0.45)	2.150**	(0.72)	1.114	(0.416)
	Fear of their current/latest partner (Ref=Never)						
	Some or most of the times	1.355**	(0.17)	1.346*	(0.22)	0.994	(0.171)
	Father ever beat the mother (Ref=No/don't know)						
	Yes	1.218*	(0.14)	1.566***	(0.26)	1.286	(0.229)
	Number of justifications to wife-beating	1.008	(0.06)	0.864	(0.09)	0.857	(0.101)

RRR=Relative Risk Ratios; SE=Standard Error; (R) reference category ***p<0.01, ** p<0.05, * p<0.1

b. Significant associations when using other categories as reference category include:
Outcome is informal help vs. none and Ref=Pattern 2: 4.Current emotional & physical violence (RRR=2.467**); 5.Past emotional & physical violence (RRR=2.099**)
Outcome is formal help vs. none and Ref=Pattern 3: 4.Current emotional & physical violence (RRR=2.306***)
Outcome is formal help vs. none and Ref=Pattern 4: 5.Past emotional & physical violence (RRR=0.503***)

Discussion

The aims of this study were three-fold: first, to describe help-seeking behaviors among female victims of IPV in Honduras. Second, to understand the population-level determinants of these behaviors (emphasizing the role of the type of violence experienced by women). And finally, to distinguish between the determinants of seeking help from informal versus formal sources. Specifically, four hypotheses were stated: (1) seeking help from informal sources is more common in Honduras than seeking help from formal ones; (2) a pattern of co-occurrent and/or more severe IPV is associated with an increased likelihood of seeking informal and/or formal help; (3) a pattern of cumulative IPV is associated with a decreased likelihood of seeking informal and/or formal help; (4) factors associated with help-seeking from formal sources will differ from those associated with seeking help from informal sources.

The results found in this study confirm previous evidence that in Honduras the majority of IPV victims do not seek IPV help (54.6%). Furthermore, while 32.1% of victimized women sought help from informal sources (e.g., friends and family), only 11.7% sought help from a formal source (e.g., legal, health, and/or social services). This finding confirms our first hypothesis and is consistent with findings from other Latino populations.[78] The lack of help-seeking behaviors among Honduran women can be explained by structural factors, such as the availability of formal services for IPV victims and barriers when accessing these services (e.g., cost and distances to the service, stigmatizing attitudes on the part of service providers[122]) and societal norms. However, the present paper focused only on the study of population-level factors that could be associated with different help-seeking strategies.

Population-level determinants of help-seeking behaviors were analyzed following the Andersen's model of health care utilization.[102] Therefore, we distinguish between predisposing, enabling and perceived need factors associated with the likelihood of seeking help. Within predisposing characteristics, being 25-39 years old was associated with higher likelihood of seeking informal help (when compared to women aged 40-49 years) and with higher likelihood of seeking formal help (when compared to women aged 15-24 years). This result is consistent with other studies indicating that very young women face lower probabilities of seeking formal help,[84] and consistent with evidence that older women are more likely to adhere to family and community roles that discourage changes in their situation despite the presence of violence.[112] Taken together, these findings might show the increased vulnerability of very young women, as well as generational differences in beliefs. In Honduras, a new law against Domestic Violence (2016)[123] and the first National plan against Violence Against Women (2006-2010)[124] were released as part of

national-level efforts to modify the sociocultural patterns observed in unequal power relations between men and women. It is possible that these new strategies (that incentivized help-seeking behaviors, the rejection of emotional violence, and the punishment to IPV perpetrators) were better assimilated by younger rather than older women.

Marital status was significantly associated with the likelihood of seeking help from formal sources (when compared to informal sources only) and a suggestive association was observed with formal and informal sources of help (when compared to no help). Women separated or living together, as opposed to married, were more likely to seek informal help only (suggestive association). On the other hand, being married was associated with a higher likelihood of seeking formal help, when compared to informal help. It could be the case that talking with friends and family about experiences of violence might be easier when you are no longer with the perpetrator (i.e., separated) or when you have an open relationship with him. However, married women might prefer to talk with formal as opposed to informal sources, to avoid.

Our findings indicate that women's parity is positively associated with their likelihood of seeking formal, as opposed to informal help only. This pattern is consistent with the previous qualitative studies highlighting the important role of children in the decision to seek help for violence (e.g., women seek help to protect their children[115] or women don't seek help to prevent social services from taking their children[125]). Having completed secondary education (or higher) was associated with an increased likelihood of seeking formal help when compared to no help and informal help only. This result is consistent with evidence from the U.S.[85] and could be explained by the idea that higher educational achievement helps women better understand and navigate the complex legal and social systems providing help for IPV victims in Honduras.

Honduran women who started cohabitation after the age of 18 were less likely to seek informal help when compared to those who started cohabitation before the age of 18. This is an unexpected finding and a possible explanation is that teenage childbearing is increasing in Latin America, and pregnant teenagers tend to remain in their family household.[126] Therefore, adolescent mothers living with their family of origin might be more likely to talk with them about episodes of violence. However, it is important to note that although less likely to seek informal help, women who start cohabitation at or after the age of 18 are at a significantly lower risk of experiencing intimate partner violence.[127]

When assessing the effect of enabling resources on help-seeking, living in an urban versus an rural area was positively associated with the likelihood of seeking formal help when compared to informal help

only. This is consistent with the fact that most formal sources of help for IPV victims (e.g., legal and counseling services) are available in urban areas exclusively. Household wealth was not a significant determinant of formal nor informal help-seeking. However, there is a suggestive association (p-value=0.094) indicating that women in the middle wealth tertile were more likely than those in the lowest wealth tertile to seek formal help. This finding could be associated with higher availability of resources to access and navigate formal services.

Employment status was an important factor associated with formal help-seeking behaviors. Women who worked were more likely to seek formal help, highlighting the importance of women's economic freedom as a way of empowering them in different areas. This is consistent with results from another low- and middle-income countries.[82,86,90] Exposure to mass media was not a significant predictor of help-seeking behaviors. Similar results were found elsewhere,[84] and this might indicate a lack of interventions using mass-media to provide relevant information to IPV victims. In fact, evidence from El Salvador shows that mass-media is still used to enforce unequal gender roles that can incentive violence.[128] Health insurance coverage was not a significant predictor of any help-seeking behavior. Most of the time, and in Latin America specifically, women do not perceive the health system as a source of help for IPV; despite experts suggesting that the health sector provides a more effective referral pathway to shelters than the police and judicial system.[129]

Women who experience emotional, mild physical, and severe physical violence by the current/latest partner (pattern 4) present a higher likelihood of seeking formal help when compared to women with patterns 1,3, and 5). This pattern was characterized by co-occurrent forms of violence (i.e., emotional and physical) and by the presence of severe physical violence (including the use of weapons). Therefore, these results support our second hypothesis and provide evidence aligned with the survivor theory, that emphasizes how women's help-seeking attempts increase as the severity of violence escalate. In Honduras, the possibility that a man could severely hurt and even kill his partner is common; therefore, when the victim's life is at risk, factors that usually hinder help-seeking behaviors (i.e., stigma, shame, or fear) would become a secondary concern for the victim. Aligned with the survivor theory, women who fear their husbands had a higher likelihood of seeking informal help and a suggestive higher likelihood of seeking formal help (p-value=0.069). Women experiencing patterns characterized by less severe forms of violence (none to low violence and emotional violence only) presented the lowest likelihood of seeking formal help. This raises important concerns about how to best help women facing patterns of less severe violence.

Although less severe, violence can quickly escalate, and there is evidence that emotional violence creates "fear and anxiety, removes social support, impoverishes, and undermines self-esteem"[130] among victims.

The group of women who experienced violence by an ex-partner (pattern 2) had a higher likelihood of seeking formal help when compared to women who experienced low violence. However, they did not show a higher likelihood of seeking formal help when compared to women with patterns 3, 4, and 5. It could be the case that women with previous experiences with violence learn from those experiences and are more likely to seek formal help. However, with the small sample size of women with this pattern, we cannot test this hypothesis. Witnessing your father ever beat your mother was associated with an increased likelihood of seeking help from formal sources. This result can be also interpreted as women learning from past experiences, int his case, from their mother's experience. Women probably learn from their mothers how to seek help in the formal system or receive encouragement from their mothers to change the situation.

Evidence from other low-and middle-income settings found that justifying wife-beating is associated with less likelihood of seeking help for IPV.[100] In our study, the number of justifications towards wife-beating was not associated with any help-seeking behavior. However, it is possible that the approval of wife-beating among the victim's community members is associated with her help-seeking decisions. In other words, it is possible that a woman does not think the beating is justifiable, but if her family thinks that it is, it is less likely that she would seek help from them. Therefore, future studies need to account for the level of wife-beating approval within the victim's community as a possible determinant of IPV help-seeking behaviors.

Finally, consistent with hypothesis 4, many factors associated with informal help-seeking differed from those associated with formal help-seeking. In the present study, we assume that seeking help from formal or informal sources is desirable. However, we need to acknowledge that qualitative research suggests that informal sources of help (e.g., friends and family) could be either ambivalent or negative for the victim. For example, "family members may condone the man's violence, or…prioritize the well-being of the family unit over the woman's safety." [122] Future studies need to better study the advantages and disadvantages of seeking help from formal versus informal sources, to better identify if women are seeking and accessing the right help for them.

Strengths and limitations

The main strength of this study is the analysis of different patterns of IPV as potential determinants of women's help-seeking behaviors in a country with high exposure to violence. A second strength is the analysis of different strategies of help-seeking behaviors (i.e., formal vs. informal) in the same study. A third strength is the integration of different behavior theories to better describe help-seeking behaviors among battered women, including the use of the Andersen's model of health care utilization, which has been used in few IPV studies.[83] However, and given the limitations of the data, information about the external and institutional environment (as described by Andersen) was not included in this study.

Other limitations are also recognized; first, since this is cross-sectional data it is difficult to establish causality or temporal sequence of events. As suggested by Ansara (2010) help-seeking research would be highly enhanced with panel data measuring changes in IPV type and timing of help-seeking.[79] Related to our measures of violence, these are self-reported exposures, which could be affected by recall bias or social desirability bias. It is also important to note that DHS data lack measures of social support, which has proved to be a strong determinant of help-seeking behaviors.[86]

Help-seeking behaviors are only observed among a subgroup of women who have experienced violence, generating concerns of sample selection bias. Two-stage models could have tested for selection bias. However, the statistical package used in this paper is not equipped to estimate a two-stage multinomial logistic model. Furthermore, future studies should also explore the use of two-stage models to test the potential endogeneity between marital status and help-seeking behaviors.

Related to the availability of data, information about help-seeking for psychological or emotional abuse was not collected; therefore, help-seeking processes for emotional violence is still an important gap in the literature.
The survey also lacked important constructs that would be important determinants of help-seeking behaviors such as mental health status, access to specific resources such as transportation or childcare Identifying such factors might be particularly useful in informing policy.[91]

Recommendations

In Honduras, women are still reluctant to seek help for IPV. Moreover, findings from this study show that women's likelihood of seeking help is highly dependent on the type of violence they have experienced. Specifically, only when violence is severe enough and/or co-occurrent, victims would consider this option. Therefore, interventions need to reach out to women exposed to non-severe forms of violence

too (e.g., emotional violence, less severe forms of physical violence). Women, and the community in general, need to be reached out with messages highlighting that any form of violence is unacceptable. Related to informal help-seeking, women experiencing less severe forms of violence (e.g., emotional violence) mainly relied on family and friends as a way of coping with or trying to discontinue the abuse. Therefore, future studies need to further study the role of informal sources of help and how these can help (or not) IPV victims.

Higher education and employment opportunities among victims increased their likelihood of seeking help. Therefore, interventions promoting training and job opportunities for women will have positive effects on their responses to violence. Women's number of children increases the likelihood of them seeking formal help, therefore, interventions need to be prepared to offer services for the children of IPV victims and to talk with victims about the best way of helping them and their children. Women whose father ever beat their mother were more likely to seek help, future research needs to further explore this association to better understand if women are learning coping and help-seeking strategies from their mothers and/or if mothers are more likely to offer support to their daughters when they experienced and understand violence themselves.

Paper 3: A qualitative assessment of social norms related to seeking help for Intimate Partner Violence in Tegucigalpa, Honduras

Introduction

When experiencing Intimate Partner Violence (IPV), women respond in myriad ways, such as defending themselves, avoiding the abuser, or seeking help from informal and formal sources.[131] Seeking help from informal or formal sources has the potential to provide a sense of security,[13] reduce levels of distress,[72] reduce repeated victimizations[74] and improve victims' health outcomes.[75] Nonetheless, the majority of Honduran women physically or sexually victimized by their partners do not seek help (50.2%).[3] As a result, Honduras is one of the Latin American countries[2] and worldwide countries[77] with the lowest proportion of women seeking any type of help for an IPV episode.

To date, women's use of IPV help-seeking strategies has been mostly studied using structural models. Structural models maintain that socioeconomic deprivation or uneven resource distribution are the main determinants of behavioral differences across groups of individuals.[109] Hence, these models emphasize that help-seeking behaviors are shaped by limited access to quality social services. However, structural factors fail to explain all differences in help-seeking behaviors between groups. For example, a study in Kenya found that none of the demographic characteristics included in the study (e.g., age, marital status, education, parity, employment status) were associated with women's help-seeking behaviors.[107] Furthermore, help-seeking behaviors are a complex process that not even victims themselves can or are willing to explain. In Honduras, data from the DHS survey show that when asked to describe the reasons for not seeking help, a striking proportion of women were unwilling to respond to the question (49.7%),[71] or indicated "other reasons" outside all the DHS-standardized alternatives listed in the survey (24.4%).[3]

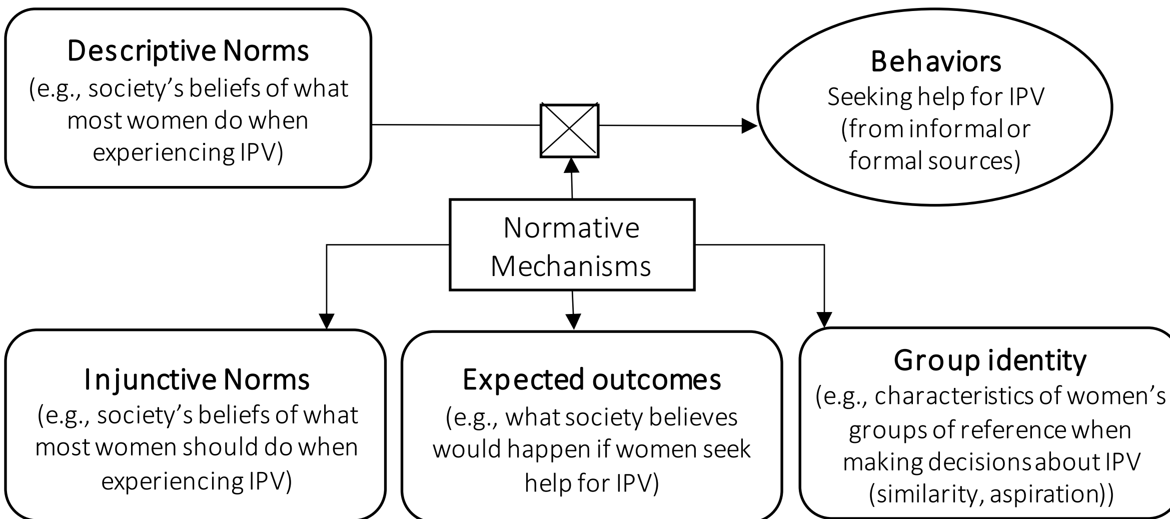
The decision to seek help for IPV is also influenced by cultural and attitudinal differences in women's social environment. For example, cultural constructs influencing Latinas help-seeking behaviors include *familyism* (i.e., places the well-being of the family and community over the well-being of the individual), *marianism* (i.e., women's responsibility for remaining chaste and pure), and *simpatia* (i.e., emphasizes the avoidance of conflict).[132] Beliefs held by the victim's social context can also influence her likelihood of seeking help. Specifically, social norms are defined as informal rules that spur and guide behavior within a society. In the field of behavior change, social norms have been widely analyzed as strong determinants of behavior. However, different theoretical perspectives have been used to analyze them,[133] leading to unclear conclusions about the mechanisms of their influence on behavior. Most importantly, there is no evidence about the role of social norms in shaping help-seeking behaviors for IPV.

The current study has a two-fold purpose. First, to identify and describe social norms associated with women's decision to seek help for an IPV episode. Second, to identify and describe components that influence, reinforce, or modify existing social norms associated with women's decision to seek help. By considering the role of society's expectation when shaping women's decisions, we will greatly advance the understanding of the determinants of IPV help-seeking behaviors among women in low- and middle-income countries.

Conceptual framework

The Theory of Normative Social Behavior (TNSB)[134] explains how cultural and social constructs affect behavior when these are conceived as informal norms of society. Specifically, it states that the informal norms of society will affect the individual's own behavior. However, the magnitude and direction of the association between these informal norms of society and behavior will depend on conceptual refinements to their definition, such as the recognition of descriptive norms (i.e., beliefs about what most people do) versus injunctive norms (i.e., beliefs about what most people should do) and the need to analyze all the conditions surrounding these norms (e.g., group identity with a community and expected outcomes).[135] Therefore, the TNSB describes a scenario in which the association between descriptive social norms and behaviors is moderated by injunctive social norms, expected outcomes, and group identity.[134] Figure 4 is a graphic representation of the components and associations described by the TNSB using IPV help-seeking as the studied behaviors.

Figure 4 Components of the Theory of Social Normative Behavior



Descriptive and Injunctive norms

Descriptive norms are the beliefs about what behaviors are prevalent in a society or group (e.g., belief that most women in Honduras don't seek help). Because descriptive norms signal typical behaviors within a group, they

are considered a good prudential response to do something like the rest would do.[136] Conformity to a descriptive norm might be especially relevant under situations of uncertainty or ambiguity.[136] For example, if a woman has to make a quick decision about how to respond to her partner's violence without information about the environment or her available options, it is likely that she will follow the existing descriptive norm of how to cope with the abuse.

Injunctive norms refer to beliefs about what behaviors are usually approved/disapproved within a society or group (e.g., belief that most women in Honduras should not seek help)[135] Injunctive social norms orient individuals away from a concern about how others have behaved in a particular setting and toward concern about what others approve or disapprove.[137] Conforming to an injunctive social norm is usually accompanied by the belief that defying these norms will lead to a social sanction (e.g., gossip, stigma). Distinguishing between injunctive and descriptive norms is crucial for the understanding of behavior because both types can exist simultaneously in a setting and can have either congruent or contradictory implications for behavior.

Outcome expectations

Outcome expectations, also called sanctions, can be positive or negative.[136] Following Rimal & Real (2005) outcome expectations are defined as an individual's expected outcomes of performing the behavior and/or following a social norm. Sanctions to social norms are different than those to legal rules, and they include less severe responses such as gossip, open censure, ostracism, or dishonor.[136] A literature review of stigma-related barriers to IPV help-seeking behaviors in the United States evidences that victims, especially those that stay with the partner, have strong expectations about the sanctions of seeking help from formal and informal sources, such as judgmental attitudes, gestures, actions that provoke embarrassment and shame, to be looked down, and to be ridiculed.[138]

Group identity or group of reference

Following Rimal & Real (2005) we define group identity as the extent to which individuals perceive similarities between themselves and their community, group of reference, or social network.[134] For this paper, we use the term 'group of reference' to describe the groups of people influencing an individual's behavior (either because the individual aspires to become one of them or because the individual needs/desires to be similar to others). As people's identity with their group of reference grows stronger, there is an implicit understanding that their "compliance with the group behavior will be observable to other group members."[134] Therefore, proximity with the group of reference and the characteristics of these relationships will influence the conformity to the norm.[139] Studying which groups influence women's behaviors and the characteristics of these groups can help us understand how to modify these behaviors.

Research questions

This paper aims to answer the following research questions:

1. **(Descriptive norms)** Which descriptive norms influence women's decision to seek informal or formal help after experiencing IPV?
    a. Are these descriptive norms incentivizing or disincentivizing help-seeking behaviors?
2. **(Injunctive norms)** Which injunctive norms influence women's decision to seek informal or formal help after experiencing IPV?
    a. Are these injunctive norms incentivizing or disincentivizing help-seeking behaviors?
3. **(Expected outcomes)** What are the expected outcomes associated with different help-seeking strategies?
    a. Are these expected outcomes incentivizing or disincentivizing help-seeking behaviors?
4. **(Group of reference)** Which stakeholders conform, participate, or influence women's decisions when experiencing IPV? In other words, who are part of the victim's group of reference when deciding whether to seek help for IPV? Who are the groups potentially influencing women's behaviors?
    a. Are the members of the victim's group of reference incentivizing or disincentivizing help-seeking behaviors?
5. Finally, which associations can be observed between injunctive norms, descriptive norms, expected outcomes, and a group of reference?

Methods

Study design

This qualitative study is cross-sectional and exploratory, using focus groups with women in Tegucigalpa to examine perceptions of women's group of reference when dealing with IPV, beliefs about what most women do and should do when experiencing IPV, and perceptions about the expected outcomes when using different help-seeking strategies.

Focus group discussions are guided discussions with a small and homogeneous group of people to gain an in-depth understanding of a topic of interest. This method provides data that are not generated by any other method,[140] including information about group interactions and how people phrase their ideas considering the presence of others. For example, the presence of disclaimers and/or apologies within a focus group discussion provides insight into possible mismatches between individual attitudes and group believes (social norms).[140]

Study setting

This study collected information from women attending a populous Primary Health Center (PHC) in the city of Tegucigalpa. Tegucigalpa is the capital of the country and the main city in the region Francisco Morazán, which has the second-highest rate of IPV in Honduras.[3] The selected PHC receives around 600 patients per day and it is classified as a Health Center with Physician and Dentistry (CESAMO), one of the 436 CESAMOS in the country.[141] However, many Hondurans travel to Francisco Morazán seeking healthcare, given that this regions has an average of 23.8 doctors per 10,000 inhabitants (compared to Lempira and Santa Barbara with only 2 doctors per 10,000 habitants).[141] Finally, it is important to note that the selected PHC provides priority services for victims of violence.

Participants

Eligible participants were women attending or visiting the selected PHC in Tegucigalpa. Eligibility requirements included being between the ages of 18 and 49 years at the time of screening and having access to a phone to schedule a time for the focus group. It is important to clarify that despite this being an intimate partner violence study, participants of the focus groups did not have to be victims of IPV. Because this study aimed to describe social norms or societal beliefs, any woman could provide information about beliefs and perceptions that were prevalent in her community. Furthermore, given that IPV is a prevalent phenomenon in urban Honduras, it was expected that all women would have beliefs and perceptions about the topic. Not all participants who were invited to participate enrolled in the study. All women who declined the invitation mentioned time constraints as the main reason for not participating. From all participants that scheduled a date and time for the focus group, two did not show up.

Sampling and sample size

Convenience sampling was used to select the participants. Specifically, we focused on selecting cases that were "most available and easiest to recruit."[142] Sample size was determined using sampling to saturation. That means that we kept sampling and analyzing data until no new information was generated. Although this is a very flexible approach, the experience of most qualitative researchers is that a saturation point is typically achieved after analyzing about 15 interviews, provided that the group is homogeneous.[142] It has been suggested that the ideal number of participants per focus groups should be between 10 and 12;[143] however, Krueger (2014) suggests that when complex issues are being discussed the size of the focus groups should be reduced.[143] Our final sample size consisted of four focus groups with 6-9 participants per focus group, totaling 30 participants.

Recruitment

Screening of eligible participants took place in the main waiting room of the PHC. Women who were in the waiting room by themselves or in the company of other females were approached and invited to participate. Recruitment was conducted by two female researchers (the principal investigator and an experienced collaborator).

Participants in the study received the local equivalent of 5 US dollars to compensate for their transportation costs when attending the focus group discussion. Complete lunch with snacks was provided on the day of the focus group discussion.

Data collection

The focus group discussions were semi-structured. An interview guide was developed by the principal investigator based on the study's research questions. The guide was pilot tested with women working in a hotel in Tegucigalpa (cleaning personnel) and refinements were made accordingly. The interview guide included open-ended questions covering the following domains: understanding a woman's group of reference when facing problems with a partner, women's definitions of IPV, perceived social norms related to help-seeking behaviors for IPV (descriptive and injunctive norms), and expected outcomes for different IPV help-seeking behaviors. The guide was designed so any participant could respond to the questions (whether she experienced IPV or not). None of the questions in the guide asked about personal experiences, all questions were worded so participants could provide their perceptions about what others in their communities think or believe about IPV and its help-seeking behaviors.

Focus groups were conducted in Spanish and in a private room inside the PHC facility. All windows were blinded in the room so no outside person could see that the focus group was taking place in that room. Two female researchers conducted all focus groups. One researcher led the discussion by asking open-ended questions and interactively probing responses. The second researcher served as the observer and note taker, taking notes about the dynamics of the group and the names of the participants discussing the topics. Both researchers had experience conducting qualitative data collection. Participants had only met the researchers when being recruited. Each session began with participants completing a brief questionnaire about their demographic characteristics (e.g., age, marital status, area of residence). Once the group was complete, the discussions started with a general introduction and an overview of the confidential and anonymous nature of the focus group. This was followed by informed consent procedures and by the introduction of each participant to the group (participants shared their name and neighborhood they lived at). Each session lasted between 60 and 100 minutes.

Analytical strategy

All focus groups were audiotaped and transcribed verbatim. Fieldnotes were collected for each session. Transcripts and fieldnotes were analyzed using thematic analysis. Thematic analysis focuses on "identifying and describing both implicit and explicit ideas within the data, that is, themes."[144] A theme represents some level of patterned response within our data and they were identified in two ways: inductive or 'bottom-up' and theoretical or 'top-down'.[145] Top-down identification means that themes were defined based on our research questions and

theory exclusively (i.e., theoretical); bottom-up identification means that themes were defined based on observed associations within the data (i.e., inductive).

To conduct the thematic analysis, we followed the six-step approach suggested by Braun and Clarke (2006).[145] These steps consist of becoming familiar with the data and noting down initial ideas, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report.[145] To ensure rigor and credibility, the principal investigator coded the data at two different points in time (to help identify shortcomings of the coding frame)[146] using NVivo 12 Plus.[147]

Results

In total, 30 women participated in one of the four focus group discussions. All participants had similar socio-demographic characteristics (Table 13). The overwhelming majority were housewives, with an average age of 28.5 years (with 47% of the sample being in their 20's and 40% in their 30's). Most women had at least one child (only one woman didn't have children), with the average number of children being 2 and with 23.3% of the sample being currently pregnant. Only one woman in the sample completed secondary education and the majority of women were living together with a partner (66.7%). Self-rated alcohol consumption was low (only two women consumed alcohol) and only 23.3% of participants declared not having a religion.

Table 13 Descriptive information of all women participating in any of the four focus groups (n=30)

Age (mean)	28.5
Parity (mean)	2.1
Education attainment	
None/primary incomplete	8
Primary complete/Secondary incomplete	21
Secondary complete	1
Occupation	
Housewife	24
Other (cleaning, sales, nurse, nanny)	6
Marital status	
Married	5
Separated	5
In a union	20
Currently pregnant	7
Participant consumes alcohol	2
Religion	
Evangelic	13
None	7
Other	6
Catholic	4

The initial stages of the thematic analysis produced a list of codes within each of the components of the Theory of Normative Social Behavior (deductive approach). These are presented in Appendix 1. Themes were searched within the codes (i.e., inductive approach) and four main themes emerged: (1) social norms and expected outcomes that discourage IPV help-seeking, (2) factors that change the direction of a norm from discouraging to encouraging help-seeking; (3) groups of reference for IPV victims; and (4) society sets women up for failure. Sub-themes were defined for each theme.

Theme 1: Social norms and excepted outcomes that discourage IPV help-seeking

In general, narratives from the focus groups revealed a context in which different components of the TNSB interact to discourage help-seeking behavior from formal and informal sources. First, a descriptive norm indicates that most women in Tegucigalpa stay silent about the experienced violence and endure it. Second, injunctive norms support this inertia by suggesting that women should keep marital matters private and prioritize their family over themselves. Third, expected outcomes of telling informal and formal sources about the violence include gossip, ignoring, and mocking the victim.

Sub-theme: Descriptive norms

Under uncertainty, descriptive norms or the belief of what most women do after experiencing violence is often considered a good prudential strategy for other women to follow. Data from our focus groups evidence two major descriptive norms. First, most women in Tegucigalpa do not seek any type of help after an IPV episode. Violence is seen as a normal phenomenon in the lives of women; therefore, most women stay silent, ignore the violence, and stay in the relationship.

> *I'm just saying, there are women who first receive a blow with a fist and from there they will go make dinner. [FG=2, P=7]*

> *I did not tell anybody, I would stay calladita [silent]. [FG=2, P=7]*

Second, when talking about seeking help from formal sources (e.g., the police), there is the perception that while some women do report a violence episode to the police, most of them will abandon the process, as opposed to ratifying the report. Therefore, the descriptive norm is that most women don't seek (or access) help from the police (either because they don't seek help from the beginning or because they change their minds during the process).

> *In one month, they took him to jail five to six times and she never went to ratify the police report, instead, she would go [to the police station] taking food for him. [FG=2, P=1]*

In the following narrative, a woman describes how she called the police when her partner was abusing her while being pregnant. However, when the police came to her house, she changed her mind and protected her partner:

> *"They called me from here saying that they are beating a pregnant woman" [said the police officer]. The truth is that nothing happened [replied the woman]. Are you sure madam? [asked the police officer] Yes, nothing is going on. [FG=3, P=1]*

Sub-theme: Injunctive norms

Although women did suggest that help-seeking strategies can be helpful (to be discussed below), the deep-rooted belief that women should keep marital problems private was constantly mentioned across focus group discussions and constitute an important injunctive norm in Tegucigalpa.

> *Problems between a couple are only between a couple, the problem is that you don't have to tell everyone, it is only the couple, not even his family because one is the donkey that ignores [or does not obey] him. [FG=4, P=3]*

Furthermore, women talked about the idea that women should keep the family united and/or stay with only one man. This injunctive norm will indirectly disincentivize any help-seeking behavior, given that separation from the violent partner is many times the outcome of seeking help. The quote below illustrates this injunctive norm, by

describing how the victim's family prioritized their daughter having only one partner despite receiving abuse from that partner.

> *"You made that decision [to be with that partner], therefore, you need to endure, and we want you to be woman of only one man" [woman repeating what was told by her parents after a victimization]. [FG=3, P=7]*

Similarly, the quote below illustrates how women prioritize their children having only one father (or one paternal figure), despite being victimized by that person.

> *There are sometimes that we stay silent because of our kids, that means, I don't want a father for my child today and tomorrow another and so on, then it becomes a custom for me. [FG=3, P=7]*

Sub-theme: Expected outcomes

The overwhelming majority of stories told during the focus group discussion included negative consequences as a result of trying to or seeking help for an IPV episode. Specifically, when talking about informal sources of help, women across focus group discussions recognized that the outcome of talking to someone or venting about the violence will be negative for them.

> *Even when you would like to vent with your family, but sometimes, that seems to be a dagger for yourself. [FG=2, P=2]*

Specifically, the most common expectation of seeking help from an informal source (e.g., friends, neighbors, and family members) was gossip:

> *I've talked with family members and it didn't work out for me because they start telling, [you tell them] with trust and they divulge after. [FG=4, P=4]*

Gossip was not the only negative outcome of seeking help from friends and family. Other negative responses and/or reactions perceived by women included the person not being able to protect the victim. In the story below, a woman would seek physical protection from her family, however, the strategy was not efficient, and the perpetrator would still be able to find her.

> *I would go to my mom's and he would go there to pull me out from my hair. [FG=3, P=6]*

Informal sources would minimize the victim's situation and give oversimplistic advice. For example, women would constantly describe the challenges victims face when leaving a partner (i.e., safety concerns and economic challenges). However, despite these economic challenges being almost universal, women would describe how family members and friends would suggest for them to leave the partner without giving practical advice on how to do that.

And then a person [will tell you] "ohh leave him!" instead of giving you good advice, they want you to decide that one sometimes cannot. [FG=1, P=8]

Making fun of the victim was described as a frequent response from informal sources. The first quote listed below was described by the participant with sarcasm, implying that killing a man is not a feasible strategy. The second quote listed below describes a scene where neighbors made fun of the victim after listening to her screaming on the streets during the night. Particularly, this woman described how she cried on the streets when her partner took her child in his car after a fight.

"Go kill him" that is what you are being told. [FG=1, P=4]

The neighbors made fun of me after [the violence episode], and they would tell me, instead of giving me advice, instead of telling me to seek support in someone. [FG=3, P=7]

When seeking help from the police, the expectation was that a woman would be ignored, blamed, and/or humiliated. Women who talked about these experiences referred to the police with dismay. As described in the following quotes, the expected outcome of calling the police will be to be blamed or ignored:

If one goes [to the police] because the husband hit you, the policeman says "this one is because of flirtatious for sure, you cheated on your husband". [FG=3, P=7]

Where is the service if they are the authority? [when talking about the police] There is no service, they won't pay attention to you, they ignore you. [FG=3, P=6]

Another expected outcome of seeking help from the police is that the perpetrator could become even more aggressive and seek revenge:

The men leave the police [station] being more aggressive, the lady [at the police station] told me "that man can go kill you when he leaves this place" and that is true. [FG=1, P=3]

Theme 2: Factors that determine the direction of a norm, either help-seeking discouraging or encouraging

In the previous section, we described how descriptive norms, injunctive norms, and expected outcomes disincentivized help-seeking behaviors (formal or informal) among victims. However, there are situations under which participants talked about the importance and need to seek help. These cases included: (i) when facing the violence of high severity, (ii) when children were involved in the violence, (iii) when a source of help that respects the privacy of the victim was available, and (iv) when the victim successfully received help in the past.

Sub-theme: Severity of the violence

Women will perceive the need to seek help when the severity of the violence reached certain levels. For example, in the next narrative, the participant explains how she sought medical help from a primary health center for sexual IPV when the violence was putting her pregnancy at risk.

> *If I would have kept silent, or I would have not told anyone, I would have aborted my baby, he/she would not be born. [FG=3, P=7]*

Other examples of women seeking help almost always described a scene of severe violence:

> *My friend [female] would call [to the police] because he was strangling her [FG=4, P=6]*

> *I felt he turned on the stove [to burn her hair] so I pushed him and started strangling him, when I saw he was on the ground [not being able to move] I grabbed my six months baby and ran" [FG=3, P=6]*

In Honduras, the severity of the violence plays an important role in women's decisions given the increasingly brutal and sexualized nature of IPV. In fact, cases of men killing their partners is a daily problem in the country. In this context, seeking help under the risk of severe violence becomes a survival strategy. The following narratives describe the severity of the violence women experiences in Honduras.

> *Now you see in the news that they even kill them, in the news very often, lately, it has been seen that many women who have been victimized for years [referring to IPV victimization] now it turns out that death comes to them. [FG=2, P=1]*

> *I don't know what he was consuming, he would lose his mind, I thanked God when they killed him [the partner was killed by the gangs while working as a police officer] because if he wouldn't be under [death] I think he would have killed me. [FG=2, P=2]*

> *[My ex] would tell me "if you tell someone I will kill you", he would say that and put the gun on me. [FG=4, P=3]*

Similarly, and when talking about expected outcomes of seeking help, it is expected that the police will come and help if the violence is severe enough or if there is the risk of death:

> *My mom said "they will come when people are made a chanfaina [a stew made with animal organs cut into small pieces]" then they move, then you will see that the police move when there is a death. [FG=3, P=6]*

> *Well, when you call the police, they will come, because [my neighborhood] is a hot place, dangerous [many homicides] [FG=3, P=2]*

Sub-theme: Presence of children

The involvement of children in the violence triggers beliefs that accept and support help-seeking behaviors. If a woman realizes that her children are being affected by IPV, she would be more likely to make the decision to seek help:

> *My son would shake, my son would shake every time he would look at his father, he left him traumatized, so what I did, I had to jail him and leave him. [FG=1, P=3]*
>
> *If there is no remedy [for the relationship], they have to break up… otherwise, the children are watching that and then sometimes the children grab that and say "if they hit my mom then I will also hit my schoolmates…" [FG=2 P=6]*

Most of the time, participants blamed IPV victims in their narratives. However, children were seen as true victims of violence. Therefore, when children were involved in violent episodes, other women would consider the need to intervene, as exemplified in the next quote:

> *If I don't hear children's screaming, I won't intervene, you know a child can't defend against the strength of an adult, but if she [the victim] is screaming, she can keep screaming. [FG=2, P=1]*

Another example is this participant describing how she intervened on a violence episode between her brother and his partner only because their son was witnessing the episode:

> *I intervened twice on my brother's situation [IPV against his partner] because they were in front of the kid and my dad never taught us that… I don't think it is agreeable what he was doing…a child will grow up with all that in his head. [FG=4, P=4]*

Despite children's wellbeing being an important determinant of the victim's decision to seek help, most pamphlets advertising services for IPV victims (collected during the fieldwork) were solely targeting the woman and did not advertise the services that were available for the victim's children. As part of the fieldwork, the principal investigator visited providers of services of IPV victims to gather information about the breadth and depth of services being offered to IPV victims. Therefore, at the end of each focus group discussion, the principal investigator would advertise all services to participants who would be interested in referring a friend or attending themselves. Most participants would show interest when finding out that both facilities offered psychological services for children.

Sub-theme: Availability of a place where your privacy is respected

Another factor that would modify existing injunctive norms or the belief of what most women should do when facing violence is the availability of a service/person that will respect the privacy of the victim.

> *Thank god she has been a good friend and does not share the things you tell her….if you have someone you trust, yes [tell her/him about the violence]…because it is something intimate of the household and you cannot share it with neighbors nor friends. [FG=4, P=5]*

In fact, visiting a psychologist was considered a good option for victims since he or she would be professional and discreet:

> *[the psychologist] won't criticize you, he/she won't be making a scandal around the neighborhood, but like that, it will be confidential [FG=1, P=3]*
>
> *[M:] Did you like the conversations with the psychologist? [P:] Yes, because it clears your mind a lot and you think differently, that is, there are a lot of things that you learn from them. [FG=3, P=6]*

Sub-theme: Successfully receiving help in the past

A final factor that would modify how women perceived the expected outcomes of seeking help is successfully receiving help in the past. Going through the process once empowered victims as well as informed them about available options for them:

> *Man, me, as I say to him [participant looked proud while talking], if one day he touches me again or tries to hit me, I will go back to court, I will open the file again and I will bring a citation again and he will go back [to jail] [FG=1, P=5]*

Theme 3: Groups of reference for IPV victims

This third theme discusses the group of reference for women facing violence by an intimate partner. Studying which groups influence women's behaviors and the characteristics of these groups can help us understand their behavior and how to modify it. In general, women's narratives described a scenario where women only talk with a few family members or friends about issues with their partners. In general, most women were left out without any guidance or support. Therefore, women's responses to violence were in most cases a response to the indifference of their groups of reference. Furthermore, it was observed that women's behavior was consistent with the behavior and or beliefs of their group of reference. However, this informal compliance did not come from admiration to the group, but from perceiving themselves similar to that group and the environment they lived in. Within this theme, we discuss the role of four potential groups of reference for a victim: neighbors, friends and family, other IPV victims, and church members.

Sub-theme: Neighbors geographically

Many studies about domestic violence have relied on the geographical community as a place to conduct and promote violence prevention campaigns and interventions. Therefore, during the focus groups we specifically

explored the potential role of the neighborhood as a group of reference for women. However, the high mobility of Hondurans migrating to the U.S. and other parts of the country has created a scenario where neighborhoods are constantly changing, and neighbors cannot trust each other. Therefore, neighborhoods are geographical communities in which women feel isolated and insecure.

> *The majority of people from the neighborhood have emigrated and left their homes rented and they do not investigate the type of people they are renting it to, and they rent to any person, do you get it? [FG=2, P=1]*

In this scenario women's neighbors are depicted as betrayers and gossipmongers, disincentivizing any decision to seek help from this group:

> *The neighbors will have you from mouth to mouth [implying that the neighbors will talk about you with everybody]. [FG=4, P=3]*

> *I have advised my kids to never get used to go from house to house [referring to the neighborhood], if we have food, we eat, if we don't, we go to bed. [FG=1, P=6]*

Sub-theme: Family of origin and friends

This section describes mixed feeling about the role of family of origin and friends as groups of reference for IPV victims. First, many participants talked about how their families would not support victims when facing violence, depicting a scenario where victims are left alone.

> *I say there are no friends, friend only God [FG=4, P=2]*
> *She [when talking about a victim] feels very unsupported, not the mom, not the dad, no one supports her, the mom and the dad treat her only from "whore" up. [FG=4 P=6]*

> *The first partner I had was resistolero [street children who sniffs glue], weed consumer, drug user, therefore, he couldn't see me talking with anyone because he would come and beat me and because I had no support from my mom nor my brothers. [FG=3, P=2]*

However, many participants also described good relationships with their mothers, sisters, or a close friend. Explanations for these discrepancies are described in the next section, when talking about the bonding with women who have experienced violence too.

> *Sometimes in the home there are problems, and instead of me venting with someone else it is better to go to my mom [FG=1, P=8]*

Sub-theme: Other victims of IPV

Participants would describe stories in which their only support or source of advice would be women close to them (e.g., sisters, friends, sisters in law) who also experienced violence from an intimate partner. In other words, women learn their behaviors from other women in the same situation, having no examples of how to do better. Stories from participants evidence how women learn from their own mistakes as well as from the experiences of other victims.

I believe that when someone goes through this then has more experience, has a different way of seeing life [FG=2, P=5]
We support each other in how little we can [a participant describing her relationship with the sister in law, both were victims of IPV] [FG=2, P=3]

Sub-theme: The church as a place where you can trust people

Some participants declared attending a church regularly. Therefore, stories about the role of the church in their lives became frequent. Most of these women attended the church because of the violence they were experiencing, as a way of finding answers and a solution. Among women who sought help in the church, they all considered that the pastor and other church members were wise or fair.

I started attending church when there were verbal aggressions [FG=1, P=9]
[M]: Do the pastor give good advice? [Participants]: Yes! [FG=1]

Although the church constituted a source of help for women, the help they would get was never associated with legal solutions and/or access to social services. Instead, women seeking help in the church would be encouraged to avoid violence by staying quiet and avoiding future violence.

If we look at our partners and they are mad, then you stay quiet, you must stay quiet and prostrate to God and ask God for direction on how to direct our homes [a woman describing the advice that women would receive from the pastor] [FG=3, P=7]

I took her to the church, here there is the solution for him to change, but the first one who needs to change is you for him to do it. [FG=1, P=9]

Theme 4: Society sets women up for failure

This final theme describes the situation of women in Honduras in general. In this theme, we observe how more general social norms related to the role of women in society set them up for failure when seeking any type of help. Most women are surrounded by violence and lack of economic opportunities throughout their lifespans, this

situation makes them economically dependent on a romantic partner or the father of their children to survive. With no economic opportunities, women are forced to tolerate violence and stay with that person despite the violence. Furthermore, the constant exposure to other forms of violence (e.g., gang, crime) has normalized violence in the lives of these women, which blinds them to the possibility of a better life. Finally, there is a societal belief (or social norm) that women are responsible for most problems in the household, including the violence.

Sub-theme: Women are surrounded by violence

When asked to describe the main problems for women in Honduras, all participants cited gang violence, crime, and overall violence. In Honduras, women experience violence since childhood, inside and outside their own homes. Therefore, when being surrounded by overwhelming violence, it is possible that women will consider IPV as a secondary problem and consider that seeking help is not worth it. Although this (IPV as a secondary problem) was not the scenario that was presented in this paper until now, all focus group discussions started with the question "what is the main problem for women in Honduras?" and domestic violence was not always part of participants' answers. However, gang violence, crime, and poverty were consistently the most common responses across focus group discussions. Once conversations about domestic violence would start, all these stories of severe abuse and isolation by intimate partners would come up.

When talking about the overwhelming violence women experience since growing up, participants describe how they experienced other forms of violence during childhood, suggesting the possibility of these women normalizing violence and marginalization during adulthood.

> *I remember when I was a child, my dad would arrive without drinks and my mom would arrive very drunk and we would get under the bed and she would take us out of there beating us with the broom, only to beat us [FG=3, P=3]*

> *We all have different problems, in my case I was raped, my mom never believed me and… (silence) when I told her she removed my underwear on the street to see if it was true. [FG=1, P=6]*

Sub-theme: Women have no economic opportunities

An important factor that sets women up for failure is the lack of economic opportunities for women and their poverty-related vulnerability.

> *To me, [the main problems in Honduras] are the job opportunities, the education is dreadful, the health dreadful if you don't have a peso and you get sick you better die and the adolescents are being kidnapped because of lack of opportunities. [FG=3, P=7]*

> *The hard part is that we can't find a job to maintain our children, because having a job it would be a different thing… [GF=2, P=2]*

> *She said "how can I leave him? [when talking about her violent partner]", she had to find a job, she has three kids, she doesn't have anywhere to live. [FG=3, P=4]*

In many cases, women got together and stayed in a violent relationship because of economic needs:

> *She is a child that lives with a 65-year-old man, because of hunger she got together with that old man….he grabs her with a machete, not to cut her but with the back of the machete…[FG=3, P=7]*

> *My sister in law would tell me "Don't leave XX, do it for your kids, when you see him coming drunk, go away, but don't leave him, stay with him so he can help you [financially]. [FG=2, P=2]*

Sub-theme: The gangs are an additional threat to women's opportunities for succeeding

Honduras is not only a poor country with high levels of inequality and unemployment but also a country severely affected by gang presence and violence. Throughout women's narratives, it was evident how gangs control the lives of women and their opportunities for succeeding, directly and indirectly. In the following narrative, this woman describes how gangs demand a "war tax", which is a tax every person with a business (of any size) needs to pay to the gang members (including taxi drivers and street vendors).

> *The gangs are in every corner, at the doors of the houses, if we start a business of selling tortillas, they will ask for a tax, if we don't pay we are threatened and we die [FG=1; P=7]*

Sub-theme: Women are blamed for the experienced violence

A descriptive norm that was observed across focus group discussions is the belief that victims start the violence, and therefore, are responsible for it. Such a pervasive social norm will affect women's beliefs that they deserve lives without violence. In the narrative below, the participant describes how the woman is usually the one who provokes the violence and then tries to blame the perpetrator.

> *Instead of one reducing the problems, it is like you rummage instead, then when you see that the man is mad and about to beat them then they say it is his fault, but actually is hers for starting the problem. [FG=4, P=6]*

Discussion

Honduras is the country with the lowest proportion of women seeking help for IPV. However, there has not been a study that examines the role of perceived social norms as determinants of women's behavior. The present

study aimed to describe the social environment influencing women's decision to seek help using the Theory of Normative Social Behavior and focus group discussions with women attending a populous primary health center in Tegucigalpa. Taken together, our findings depict a situation in which society disincentives help-seeking behaviors and women are left-out alone to endure or end the violence by themselves.

An initial and unexpected finding of this study is the fact that the majority of the participants self-identified as IPV victims and shared personal stories. During the focus groups, women were never asked about their own experiences with violence. In fact, the discussion guide was designed to assess perceived social norms only (e.g., beliefs of what others do or should do). However, the overwhelming majority of women shared personal stories, evidencing the high prevalence of IPV in Tegucigalpa and the victims' need to share these stories.

Through the thematic analysis of the focus groups data, four themes related to social norms influencing help-seeking behaviors were identified: (1) social norms and expected outcomes that discourage IPV help-seeking; (2) factors that determine the direction of a social norm, either help-seeking discouraging or encouraging; (3) groups of reference for IPV victims; and (4) society sets women up for failure.

The first theme described several components of the TNSB that discourage IPV help-seeking strategies, including (i) the belief that most women accept violence and don't do anything about it; (ii) the belief that women should keep household matters private; (ii) the expected outcome that friends and neighbors will blame, mock, ignore, or talk about the victim; (iii) the belief that most women who start the legal process against a perpetrator will abandon the process; and (iv) the belief that police officers ignore IPV victims. These findings describe a social scenario in which the default option for IPV victims in Honduras is to stay quiet and endure the violence without asking for help. Given that most women won't seek help for IPV, a strategy that should be considered is the use of a "routine inquiry" protocol (i.e., asking women about IPV in all health-care encounters).[148] The relevance of this recommendation will depend on the ability of the system to protect the woman after disclosing the violence. IPV assessments should be conducted only within the context of other sensitive assessments, such as HIV testing and counseling among pregnant women.

The second theme identified in the analysis describes conditions under which the social norms are accepting or encouraging help-seeking behaviors. These conditions include: (i) experiencing violence of high severity; (ii) realizing that a child is being affected by the violence; (iii) having access to a source of help that will respect the privacy of the victim; and (iv) successfully receiving help in the past. These are valuable findings for the design of interventions that can take advantage of these norms and increase victims' access to help. For example, health communication campaigns providing information about available services for IPV victims need to include

information about the availability of services for the children of the victim as well. Similarly, health communication campaigns preventing IPV, need to highlight the specific consequences of IPV on children's lives. Despite women's awareness of violence affecting their children, they did not have a comprehensive idea of all how violence could affect their children's wellbeing. Additionally, services for the victim's children should be offered in more primary health centers. Specifically, the World Health Organization suggests that children exposed to IPV should receive a psychotherapeutic intervention, including sessions with and without the mother.[148]

Another policy implication that can be drawn from this theme is that not all formal sources of help are considered negative for women. While the police are often considered corrupt and/or inefficient; the health and social service sectors are seen as professionals that will respect the privacy of the victim and won't make fun of them. Therefore, interventions providing help to IPV victims need to consider the health system as an entry point for victims. Furthermore, these interventions can focus on enhancing safety for the victim as well as treating the physical and emotional consequences of violence.

The third theme identified in the analysis describes women's groups of reference when facing IPV. It is observed that: (i) neighbors are not a good group of reference for victims; (ii) family of origin and friends are not a good group of reference for victims (they don't offer a good example); and (iii) female friend and family members who have or are currently experiencing violence are an important group of reference for victims (even when they don't offer a good example, necessarily). As explained by Jewkes (2002), having few public roles for women[149] increases their vulnerability to violence. Similarly, our results suggested that having few public roles for women disincentives help-seeking behaviors. Currently, women only learn from those similar to them (other victims), therefore, reinforcing negative social norms. Having role models within their communities could inspire women to put themselves before the wellbeing of others and try strategies to end the violence they experience.

A final subtheme identified when talking about victim's groups of reference is that members of the church are a trusted and respected group of reference for victims. Given the important role of the church for Honduran women, interventions should collaborate with pastors and church members to better help women facing IPV and their children. Information about available legal, health, or social services should be advertised within church settings, considering that many participants declared attending a church when violence takes place.

The final theme identified described descriptive and injunctive norms about women's role in society, including (i) women are constantly exposed to violence throughout their lifespans; (ii) women have limited economic opportunities; and (iii) women are responsible for all the problems in the household, including the violence. These findings are consistent with studies describing Honduran women's living conditions as "a social

milieu where physical and psychological mistreatment become part of the way things are".[150] Similarly, Menjívar and Walsh (2017) continue their descriptions of the Honduran context by emphasizing the overwhelming social and economic marginalization of women: "routinized daily acts of control, humiliations, and stigmatization of women and their bodies, and the naturalized acceptance of women's manifold forms of social exclusion in education, health, and employment."[150]

Changing the social context that sets women up for failure requires a multisectoral approach. As a first step, Honduras needs to change the government and social institutions that reinforce violence through the neglect and the lack of implementation of the law. Second, the education and social protection sectors need to secure job opportunities for women, especially for those who are mothers and need to sustain a household by themselves. These policy changes need to take place using a gender transformative approach, and this includes addressing gender issues, violence, and no-violent conflict resolutions in school life-skills programs.[149]

Finally, a major recommendation is that funds need to be allocated to assess and evaluate current interventions helping IPV victims in Honduras. Although services were offered in different facilities, there is no evidence about the effectiveness of their services, about the challenges they face when serving women, or the challenges women face when accessing these services. Quantitative and qualitative evaluations of these programs will be essential, and it is consistent with recommendations for Latin America describing that the main gap in the region (in terms of IPV National guidelines) is the lack of monitoring and evaluation strategies.[151]

Strengths and limitations

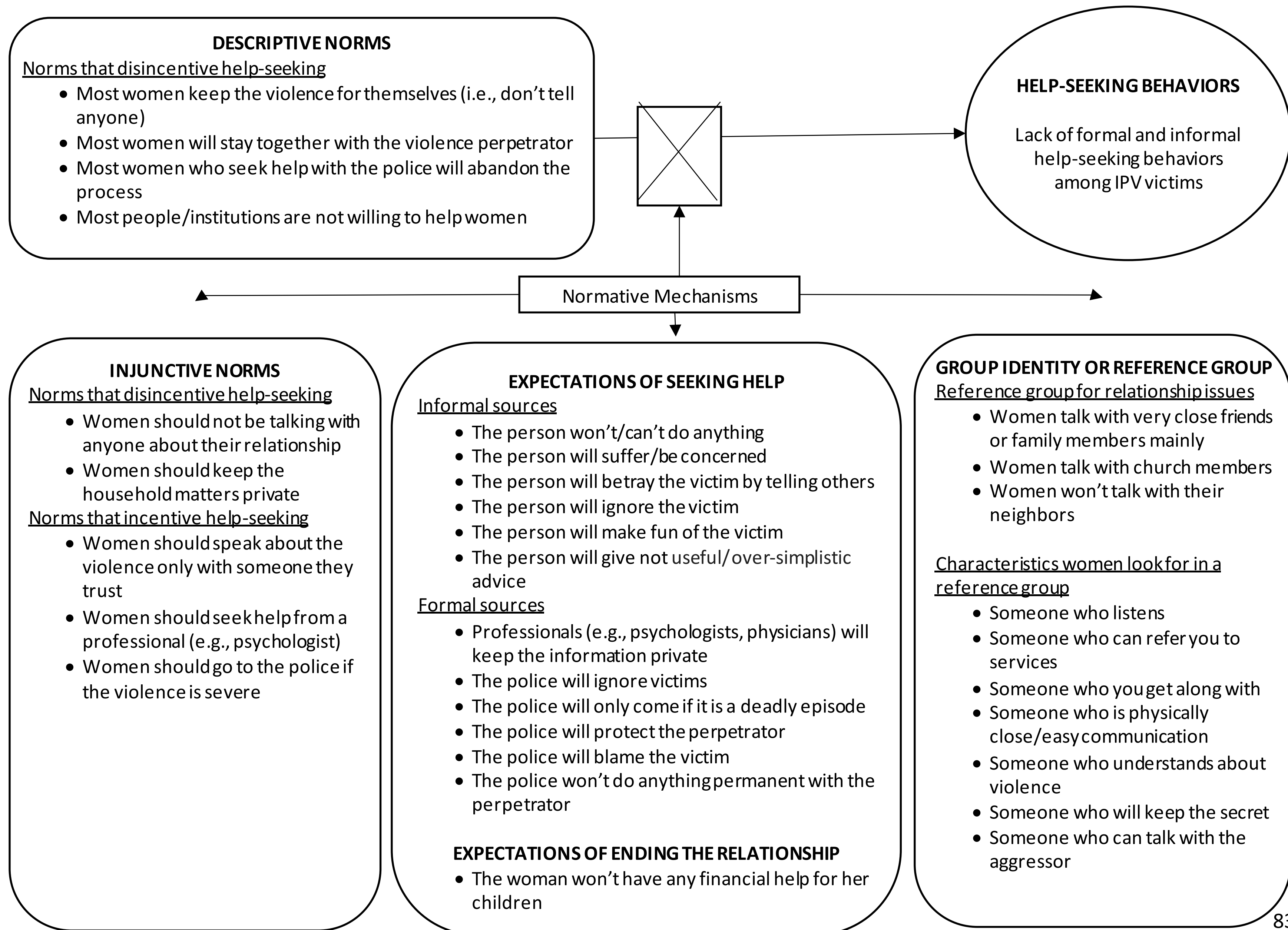
This study has several strengths and limitations. Prior work in the field has broadly considered structural factors (e.g., age and education level) as determinants of women's lack of help-seeking behaviors for IPV. The current study expands on this work by analyzing social factors that complement, rather than compete with, previous findings on structural determinants. Studying the determinants of IPV help-seeking behaviors through a qualitative exploration of normative influences is a more nuanced approach to understanding the decision-making process of women seeking help.

Like other empirical studies, this study is not without its limitations. The first limitation is the possibility of selection bias. It is possible that women who accepted to participate in this study were those willing to talk about violence. Therefore, these findings might not be generalizable to women who would not talk with strangers about violence. The second limitation was the challenge to elucidate existing descriptive and injunctive norms in the community. Social norms are abstract concepts easy to explain under theoretical backgrounds but challenging to

measure among a group of women with low levels of education. Therefore, there might be characteristics of a norm that were not captured by this study

Also, some researchers argue that focus groups are better than individual interviews when eliciting sensitive themes.[152] This is counterintuitive, however, participants might feel better revealing sensitive information when surrounded by other individuals with a similar socio-cultural background than when having an intimate one-on-one conversation with a researcher. [152]

Appendix 1 Coding scheme based on the TNSB



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