

A Multi-Level Analysis Of Help-Seeking Behaviour Of Male Victims Of Intimate Partner Violence.

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ABSTRACT

Globally, many men are victims of intimate partner violence but not many seek help to stop the violence. This study sought to identify the factors associated with the help-seeking behavior of male victims of intimate partner violence (IPV) in Uganda. This was done using ordinary and mixed-effects regression models with logit, probit, and complementary log-log link functions and secondary data from the 2016 Uganda Demographic and Health Survey. Most males (70.6 percent) never sought help after experiencing intimate partner violence. Marital status, listening to the radio, physically hurt partner, experienced physical injury, number of control issues, father ever beat mother, and severity of violence were significantly associated with the help-seeking behavior of male victims of IPV. There is a need to come up with interventions that encourage males to report IPV, especially among the married, and also sensitize males not to wait until they have experienced physical injuries or any other severe violence before they seek help. Given that the sampling methodology used in demographic and health surveys introduces nesting in the data, researchers should consider using multilevel models.

Keywords: Help-seeking, Violence, Regression, Multilevel Analysis, AIC

1 Introduction

Help-seeking by male victims of intimate partner violence (IPV) has been reported to be lower compared to that of female victims (Taylor et al., 2021).

There have been several studies exploring the help-seeking behavior of female victims of IPV (Barrett and Pierre, 2011; Dufort et al., 2013; Fanslow et al., 2010; Rowan et al., 2018; Shen, 2011) with only a few studies focusing on the help-seeking behavior of male victims of IPV (Choi et al., 2015; Lysova and Dim, 2020; Machado et al., 2016; Reis et al., 2020; Tsang et al., 2021). Still, the majority of the studies focusing on the help-seeking of male victims have been carried out in developed countries (Hogan et al., 2021; Machado et al., 2016; Taylor et al., 2021; Tsui, 2014), and only a limited number in the developing world such as Sub-Saharan Africa (Gubi and Wandera, 2022; Kgatle and Mafa, 2021; Tenkorang et al., 2017).

According to the 2016 Uganda Demographic and Health Survey, 44 percent of ever-married men in Uganda reported having experienced IPV (UBOS and ICF, 2018). Reporting violence and seeking help can be the first step toward ending violence and receiving support to prevent the reoccurrence of IPV (Okenwa et al., 2009; Tenkorang et al., 2017, 2021). However, only 30 percent of males who experienced violence sought help to end the violence they were experiencing (UBOS and ICF, 2018). Male victims of IPV can seek help from both formal and informal sources. Formal sources include professional counselors, religious leaders, health facilities, the police and courts of law. However, studies have found a reluctance to report to the police due to fear of being ridiculed, not being believed, risk of being arrested instead, etc. (Dim and Lysova, 2021; Hogan et al., 2021; Tenkorang et al., 2021). Informal sources include family members, friends, co-workers, and other community members (Tenkorang et al., 2021).

Several interventions involving men have been developed, implemented, and studied to reduce IPV cases and encourage help-seeking among victims (Falb et al., 2014; McGinn et al., 2016; Stephens-Lewis et al., 2021; Van Gelder et al., 2020). However, male involvement especially in Sub-Saharan Africa in these interventions has been on the basis of them being the perpetrators or potential perpetrators and not as victims or potential victims of IPV (Abramsky et al., 2014; Gibbs et al., 2020; Hossain et al., 2014; John et al., 2022; Kajula et al., 2016). Some of the interventions included education or literacy programs, communal health services, mobilization, and legal and security interventions among others (Gibbs et al., 2020; Idriss-Wheeler et al., 2021; John et al., 2022).

Factors that have been reported to increase the likelihood of seeking help by male victims of IPV include the severity of violence, high education level, lower levels of alcohol abuse, and surviving severe physical violence (Douglas et al., 2011; Lysova and Dim, 2020; Tenkorang et al., 2021). Barriers to help-seeking include fear of disclosing abuse, its challenge to one's masculinity, commitment to the relationship, low confidence, denial, shame, embarrassment, post-traumatic stress disorder, unemployment, staying with young children, negative expectations, etc. (Dim and Lysova, 2021; Douglas et al., 2011; Huntley et al., 2019; Lysova and Dim, 2020; Tsui et al., 2010).

There is a need for more studies regarding the help-seeking behaviors of male victims of IPV in Sub-Saharan Africa since males also experience IPV (Gubi and Wandera, 2022) (Gubi & Wandera, 2022). Furthermore, IPV has serious negative consequences on males such as physical injuries, and mental health issues such as anxiety, depression, drug and alcohol abuse, etc. (Hines and Douglas, 2018; Kolbe and Büttner, 2020; Scott-Storey et al., 2022) and therefore need to be addressed. Given that most studies on help-seeking have been done in the developed world, this study will help to fill the literature gap regarding determinants of help-seeking among male victims of IPV in Uganda a developing country found in Sub-Saharan Africa. This will help in formulating policies and interventions aimed at boosting help-seeking among male victims of IPV specially tailored to the country's context.

2 Methodology

2.1 Source of data

The study used data from the 2016 Uganda Demographic and Health Survey (UDHS). The sample was selected using a two-stage stratified sampling design. Uganda was grouped into 15 regions. Each region was stratified in rural/urban areas resulting into 34 sampling strata. Firstly, 697 enumeration areas (EAs) were selected from both urban (162 EAs) and rural (535 EAs) areas (UBOS and ICF, 2018). Secondly, a sample of households was randomly selected from each EA. In total, a representative sample of 20,791 households was selected from all the EAs (UBOS and ICF, 2018), and 19,588 households were successfully interviewed. All men aged 15-54 years in a third of the sampled households qualified for personal interviews. Still, from each of the selected households, one man aged 15-54 years was chosen to respond to the domestic violence module during their interview (UBOS and ICF, 2018).

Of the 5336 males selected for the domestic violence module, 2478 were dropped because they had missing information with regards to whether they had ever experienced violence. Still, 1246 males who had experienced violence were dropped since they had no information regarding whether they sought help after experiencing violence. Therefore the final analysis for the study included only 1612 males who responded when asked if they had experienced violence and whether they sought help after experiencing violence.

2.2 Dependent and independent variables

The help-seeking status of a male was the dependent variable. This was measured on a nominal scale and had only two possible responses i.e. yes or no. Males were asked to respond to the question "Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?" The independent variables for the study were selected based on published literature about the determinants of helping seeking among male and female victims of IPV. These included age group in

years, residence, education level, religion, marital status, wealth index, employment status, frequency of listening to radio, partner drinks alcohol, physically hurt partner, ever experienced physical injury, number of partner control issues, age at first cohabitation, respondent's father ever beat her mother, severity violence, number of living children.

2.3 Statistical analysis

Analysis of the data was carried in three stages. STATA Version 14.2 software was used at each stage to carry out the analysis. At the univariate level, frequencies and percentages were used to describe the variables included in the study. At the bivariate level, Pearson's chi-square test (Eqn. 1) was used to test for the association between each independent variable and the dependent variable at a 5% level of significance.

$$\chi^2 = \sum_{i=1}^n \left[\frac{(O_i - E_i)^2}{E_i} \right] \quad (1)$$

Variables found to have a significant association with the help-seeking status of a male at the bivariate level were considered for analysis at the multivariate level. Given the binary nature of the outcome variable, three models were plausible at the multivariate level with a consideration of sample stratum variations. These were the mixed-effects logistic regression model (Eqn. 2), the mixed-effects probit regression model (Eqn. 3), and the mixed-effects complementary log-log (cloglog) regression model (Eqn. 4).

Five models were fitted in total for each link function. These included model 1 (null/empty model) which had no predictors), model 2 which was an adjustment of model 1 to include individual-level variables only, model 3 which was an adjustment of model 1 to include contextual-level variables only, model 4 which was an adjustment of model 1 to include both individual and contextual-level variables simultaneously, and finally the ordinary or single-level model which is the ordinary multiple regression minus taking into consideration the nesting or clustering in the data.

Let y_{ij} be the binary outcome variable, $j = 1, \dots, 34$ clusters (sample strata) with every cluster comprising of $i = 1, \dots, n_j$ observations, the $(1 \times p)$ row vector x_{ij} are the covariates for the fixed effects, β the regression coefficients (fixed effects), the $(1 \times q)$ vector z_{ij} are covariates for the random effects, and u_j the random effects following a multivariate normal distribution with mean 0 and variance matrix Σ (StataCorp, 2017). Given that the study intended to estimate random intercept models, z_{ij} is equal to one.

For a logit link function, the logistic cumulative distribution function $H(\cdot)$ maps the linear predictor to the probability of success ($y_{ij} = 1$) with $H(v) = \left(\frac{e^v}{1+e^v} \right)$ (StataCorp, 2017).

$$\Pr(y_{ij} = 1 | x_{ij}, u_j) = H(x_{ij}\beta + z_{ij}u_j) \quad (2)$$

For a probit link function, the standard normal cumulative distribution function $H(\cdot)$ maps the linear predictor to the probability of success $y_{ij} = 1$ with $H(v) = \Phi(v)$ (StataCorp, 2017).

$$\Pr(y_{ij} = 1 | x_{ij}, u_j) = H(x_{ij}\beta + z_{ij}u_j) = \Phi(x_{ij}\beta + z_{ij}u_j) \quad (3)$$

For a cloglog link function, the inverse of the cloglog function $H(\cdot)$ maps the linear predictor to the probability of success $y_{ij} = 1$ with $H(v) = 1 - \exp\{-\exp(v)\}$ (StataCorp, 2017).

$$\Pr(y_{ij} = 1 | x_{ij}, u_j) = H(x_{ij}\beta + z_{ij}u_j) = 1 - \exp\{-\exp(x_{ij}\beta + z_{ij}u_j)\} \quad (4)$$

The Akaike Information Criteria (AIC) (Eqn. 5) was used to determine which model fitted the data best. The model with the lowest AIC value was considered the best-fitting model. In addition to the multilevel models, the AIC for their corresponding ordinary regression models (single level) was also presented.

$$AIC = -2\ln L + 2k \quad (5)$$

Where $\ln L$ is the maximized log-likelihood, k is the number of estimate parameters (StataCorp, 2017).

The Likelihood ratio (LR) test was used to check if the sample stratum level variance was significant to favor the use of multilevel or mixed-effects models instead of ordinary regression models for all possible link functions. A caterpillar plot was also used to graphically display the estimates of the sample stratum effects or residuals obtained from the empty model. Still, the Variance Partition Coefficient (VPC) was presented to show a summary of the degree of clustering in the data. This section often shows major developments of the study in detail.

3 Results and Discussion

From Table 1, the majority of males (70.6%) never sought help after experiencing IPV. Only 29.4% of the males sought help after experiencing IPV. The highest proportion of males was aged 30-34 years (21.9%) followed by those aged 25-29 (18%) and those aged 45 and above (17.6%). The majority of males resided in rural areas (80.5%), had attained at most primary education (60.8%), were married (57%), and listened to the radio at least once a week (74.4%). The highest proportion of males belonged to the Catholic denomination (45.4%), was in the poorer wealth index category (22.2%), and were employed all year (63.4%). The majority of males reported that their partner didn't drink alcohol (72.2%), never physically hurt their partner when she was not hurting them (64%) and had not experienced physical injury (86.6%). The highest proportion of males reported that their partner had three control issues

(29.9%), first cohabited aged 21 years and above (59.7%), had 3 to 4 living children (27.1%), and whether one's father ever beat his mother (47.9%). Only a few males had ever experienced severe violence (19.2%).

Table 1: Characteristics of study respondents

Variables	Frequency	Percent (%)
Help-seeking status		
No help sought	892	70.6
Help sought	372	29.4
Age group		
Below 25	156	12.3
25-29	228	18.0
30-34	277	21.9
35-39	194	15.4
40-44	187	14.8
45+	222	17.6
Residence		
Urban	246	19.5
Rural	1,018	80.5
Education level		
No education	69	5.5
Primary	769	60.8
Secondary	275	21.8
Higher	151	11.9
Religion		
Anglican	415	32.8
Catholic	574	45.4
Muslim	135	10.7
Pentecostal	108	8.5
Others	32	2.5
Marital status		
Married	721	57.0
Cohabiting	398	31.5
Widowed	5	0.4
Divorced/separated	140	11.1
Wealth index		
Poorest	274	21.7
Poorer	281	22.2
Middle	258	20.4
Richer	249	19.7
Richest	202	15.9
Employment status		
All year	801	63.4

Variables	Frequency	Percent (%)
Seasonal	369	29.2
Occasional	79	6.3
None	15	1.2
Listen to radio		
Not at all	128	10.1
Less than once a week	196	15.5
At least once a week	940	74.4
Partner drinks alcohol		
No	913	72.2
Yes	351	27.8
Physically hurt partner		
No	809	64.0
Yes	455	36.0
Experienced physical injury		
No	1,094	86.6
Yes	170	13.5
Number of Control issues		
None	116	9.2
One	195	15.4
Two	316	25.0
Three	379	29.9
Four	170	13.5
Five	88	6.9
Age at first cohabitation		
<18 years	166	13.1
18-20 years	344	27.2
21+ years	754	59.7
Father ever beat mother		
No	573	45.3
Yes	605	47.9
Don't know	86	6.8
Severity of violence		
No	1,022	80.9
Yes	242	19.2
Number of living children		
None	75	5.9
1-2	309	24.5
3-4	343	27.1
5-6	247	19.5
7+	290	22.9

From Table 2, the independent factors that didn't have a significant association ($p>0.05$) with a male's HSS included age group, residence, education

level, religion, wealth index, age at first cohabitation, and number of living children. The independent factors that had a significant association ($p \leq 0.05$) with a male's HSS included marital status, employment status, listening to the radio, whether one's partner drinks alcohol, whether one ever physically hurt their partner when she was not hurting them, whether one experienced physical injury, number of control issues one's partner had, whether one's father ever beat his mother, whether one experienced severe violence.

Married males (72.7%) had the highest proportion who didn't seek help against IPV followed by those cohabiting (70.9%). Regarding employment status, males who were not employed (86.7%) had the highest proportion of seeking help against IPV. Males who didn't listen to the radio at all (80.5%) had the highest proportion who didn't seek help while males who listened to the radio at least once a week (31.7%) had the highest proportion who sought help against IPV. Males who reported that their partner didn't drink alcohol (74.0%) had the highest proportion that didn't seek help while males who reported that their partner drank alcohol (38.5%) had the highest proportion that sought help. The majority of males who reported never physically hurting their partner when she was not hurting them (76.1%) had the highest proportion not seeking help against IPV. Males who experienced physical injury had the highest proportion seeking help (58.8%) while males who never experienced physical injury had the highest proportion not seeking help (75.1%). Regarding the number of control issues one's partner had, the proportion of males not seeking help generally reduced with an increase in the number of control issues reported and vice-versa. Males who never witnessed their father beat their mother had the highest proportion seeking help (75.7%). Males who had experienced severe violence (53.3%) from their partner had the highest proportion that sought help whereas males who didn't experience severe violence (76.2%) had the highest proportion that didn't seek help.

Table 2: Bivariate analysis of male characteristics by HSS.

Variables	Help-seeking status		p-value
	No help sought	Help sought	
Age group			
Below 25	74.4	25.6	0.26
25-29	73.7	26.3	
30-34	67.9	32.1	
35-39	72.2	27.8	
40-44	72.2	27.8	
45+	65.3	34.7	
Residence			
Urban	73.9	26.0	0.19
Rural	69.7	30.3	
Education level			

Variables	Help-seeking status		p-value
	No help sought	Help sought	
No education	81.2	18.8	0.16
Primary	69.8	30.2	
Secondary	72.0	28.0	
Higher	66.9	33.1	
Religion			0.79
Anglican	68.7	31.3	
Catholic	71.4	28.6	
Muslim	72.6	27.4	
Pentecostal	72.2	27.8	
Others	65.6	34.4	
Marital status			0.02
Married	72.7	27.3	
Cohabiting	70.9	29.2	
Widowed	60.0	40.0	
Divorced/separated	59.3	40.7	
Wealth index			0.80
Poorest	71.5	28.5	
Poorer	69.8	30.3	
Middle	69.4	30.6	
Richer	69.1	30.9	
Richest	73.8	26.2	
Employment status			0.03
All year	72.9	27.1	
Seasonal	65.9	34.2	
Occasional	65.8	34.2	
None	86.7	13.3	
Listen to radio			0.01
Not at all	80.5	19.5	
Less than once a week	75.0	25.0	
At least once a week	68.3	31.7	
Partner drinks alcohol			0.00
No	74.0	25.9	
Yes	61.5	38.5	
Physically hurt partner			0.00
No	76.1	23.9	
Yes	60.7	39.3	
Experienced physical injury			0.00
No	75.1	24.9	
Yes	41.2	58.8	

Variables	Help-seeking status		p-value
	No help sought	Help sought	
Number of Control issues			
None	81.9	18.1	0.00
One	75.4	24.6	
Two	72.2	27.9	
Three	69.6	30.3	
Four	61.2	38.8	
Five	61.4	38.6	
Age at first cohabitation			
<18 years	69.3	30.7	0.37
18-20 years	68.0	31.9	
21+ years	72.0	27.9	
Father ever beat mother			
No	75.7	24.3	0.00
Yes	67.4	32.6	
Don't know	58.1	41.9	
Severity of violence			
No	76.2	23.8	0.00
Yes	46.7	53.3	
Number of living children			
None	80.0	20.0	0.28
1-2	71.8	28.2	
3-4	71.1	28.9	
5-6	67.6	32.4	
7+	68.6	31.4	

The caterpillar plot (Figure 1) shows the estimated residuals for all 34 sample strata in the dataset. For the first sample stratum, the 95% confidence interval is below the horizontal line at zero indicating that the help-seeking of male victims of IPV in this sample stratum is significantly below average. For the third last, second last, and last sample strata, the 95% confidence interval is above the horizontal line at zero indicating that the help-seeking of male victims of IPV in these sample strata is significantly above average.

Table 3 presents summarized results for the AIC of the possible models for a binary outcome i.e. the mixed-effects logistic regression model (melogit), the mixed-effects probit regression model (meprobit), and the mixed-effects complementary log-log regression model (mecloglog). Since the meprobit (individual) had the lowest AIC (1378), it fitted the data better than the rest and the results are presented in Table 4. Still, the meprobit (individual) had a VPC

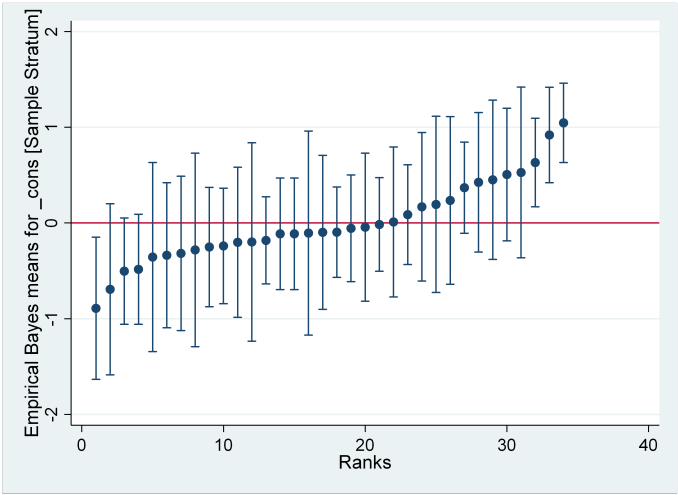


Fig. 1: Caterpillar plot for estimates of sample stratum effects for the null model.

of 0.08 which meant that 8 percent of the variations in males’ help-seeking behavior could be attributed to variation across sample strata.

Still from Table 3, the models with the second and third lowest AIC values were the meprobit (Individual & Contextual) and melogit (Individual) with AIC values of 1379.1 and 1379.6 respectively.

Table 3: Comparison of plausible mixed-effects models

Link function	Model	VPC	AIC	LR test comparing mixed effects models to ordinary models	
				LR test statistic	p-value
melogit	Empty	0.08	1497.0	38.87	0.00
	Individual	0.07	1379.6	22.96	0.00
	Contextual	0.08	1498.6	37.57	0.00
	Individual & Contextual	0.06	1380.6	21.82	0.00
	Ordinary		1400.5		
meprobit	Empty	0.09	1497.2	38.79	0.00
	Individual	0.08	1378.0	23.38	0.00
	Contextual	0.09	1498.6	37.49	0.00
	Individual & Contextual	0.07	1379.1	22.28	0.00
	Ordinary		1399.4		
mecloglog	Empty	0.10	1496.9	38.89	0.00

Link function	Model	VPC	AIC	LR test comparing mixed effects models to ordinary models	
				LR test statistic	p-value
	Individual	0.08	1387.1	22.27	0.00
	Contextual	0.10	1498.5	37.60	0.00
	Individual & Contextual	0.08	1387.3	20.50	0.00
	Ordinary		1407.4		

Table 4 presents the results of the mixed-effects probit regression model (individual) and the estimated variance component corresponding to the random effects at the sample stratum level. The estimated variance of the random intercept is 0.08 with a standard error of 0.04. This meant that 8 percent of the variation in help-seeking of male victims of IPV lay between sample strata. The reported likelihood-ratio test ($\chi^2(01) = 23.38, p \geq \chi^2 = 0.00$) showed that there is enough variability between males across sample strata to favor a mixed-effects probit regression model over an ordinary probit regression model.

From the results presented in Table 4, the likelihood of help-seeking increased by 0.26 among divorced or separated males compared to their married counterparts. For males who listened to the radio at least once a week, their likelihood of seeking help increased by 0.32 compared to males who never listened to the radio. The likelihood of help-seeking increased by 0.24 for males who reported ever physically hurting their partner when she was not hurting them compared to those who reported otherwise. The likelihood of help-seeking increased by 0.51 among males who had experienced physical injury compared to males who had not experienced physical injury. For males whose partners had more than one control issue, the likelihood of help-seeking increased compared to males whose partners had no control issues. For males who didn't know whether their father ever beat their mothers, the likelihood of help-seeking increased by 0.39 compared to males who reported that their fathers never beat their mothers. Finally, for males who experienced severe violence, the likelihood of help-seeking increased by 0.55 compared to males who never experienced severe violence.

Still for the meprobit (Individual & Contextual) which had the second lowest AIC, the significant independent variables ($p \leq 0.05$) were marital status (divorced/separated), listening to radio (at least once week), whether one ever physically hurt partner when she was not hurting them, if one experienced physical injury, whether partner exhibited control issues (two and above), whether their father ever beat their mother (don't know), and whether one experienced severe violence. As for the melogit (Individual) which had the third lowest AIC value, the significant independent variables ($p \leq 0.05$)

were the same as for the meprobit (Individual & Contextual) but with varying values for the coefficients and probability values.

Table 4: Multilevel mixed-effects probit regression analysis of factors associated with HSS

Variables	Coeff.	z	P>z	[95% CI]	
Marital status					
Married	0.00 (ref.)				
Cohabiting	0.12	1.28	0.20	-0.07	0.31
Widowed	0.47	0.75	0.46	-0.77	1.72
Divorced/separated	0.26	2.00	0.05	0.01	0.52
Employment status					
All year	0.00 (ref.)				
Seasonal	0.11	1.16	0.25	-0.07	0.29
Occasional	0.01	0.04	0.97	-0.32	0.34
None	-0.73	-1.55	0.12	-1.66	0.20
Listen to radio					
Not at all	0.00 (ref.)				
Less than once a week	0.12	0.68	0.50	-0.23	0.47
At least once a week	0.32	2.11	0.04	0.02	0.61
Partner drinks					
No	0.00 (ref.)				
Yes	0.17	1.90	0.06	-0.01	0.36
Physically hurt partner					
No	0.00 (ref.)				
Yes	0.24	2.80	0.01	0.07	0.41
Experienced physical injury					
No	0.00 (ref.)				
Yes	0.51	4.30	0.00	0.28	0.75
Number of Control issues					
None	0.00 (ref.)				
One	0.28	1.55	0.12	-0.08	0.64
Two	0.36	2.16	0.03	0.03	0.69
Three	0.43	2.60	0.01	0.11	0.76
Four	0.58	3.22	0.00	0.23	0.94
Five	0.60	2.81	0.01	0.18	1.01
Father ever beat mother					
No	0.00 (ref.)				
Yes	0.13	1.49	0.14	-0.04	0.30
Don't know	0.39	2.38	0.02	0.07	0.71
Severity of violence					

Variables	Coeff.	z	P>z	[95% CI]	
No	0.00 (ref.)				
Yes	0.55	5.15	0.00	0.34	0.76
Constant	-1.79	-8.03	0.00	-2.23	-1.35

(ref.) – reference category, p - probability value, Coeff. - Coefficient

Using data from the 2016 UDHS, this paper examined the factors associated with the help-seeking behavior of male victims of intimate partner violence in Uganda. The results show that the majority of men in Uganda who were exposed to IPV never sought help. Divorced or separated males were more likely to seek help compared to their married counterparts. This could be attributed to them being free to make decisions without worrying about the reaction of their partner compared to their married counterparts who may be afraid of the perpetrator and hence not seek help. For the married, perpetrators could threaten to humiliate or shame them, inflict more harm, or even separate or divorce them in case they seek help against IPV (Hulley et al., 2022). The significance of listening to the radio at least once a week shows the influence of mass media on health-seeking behavior. Regarding help-seeking against IPV, although this study found a positive influence of media i.e. radio, other studies have reported a negative influence of media due to the portrayal of men as being violent or abusive towards women (Bates, 2020; Kgatele and Mafa, 2021). The increased likelihood of help-seeking among males who had experienced severe violence was consistent with findings by Lysova and Dim (2020). This could be attributed to the victim considering the situation serious or frightening enough to necessitate help to stop IPV (Domenech and Sirvent, 2019; Fugate et al., 2005). The study also found a significant and higher likelihood of IPV when one’s partner exhibited more than three control issues. A study reported a higher likelihood of verbal aggression and involvement in violence by previous partners who exhibited controlling behaviors (Felson and Outlaw, 2007). Therefore, progression in the severity of IPV experienced by a victim could be positively related to the increase in the number of controlling behaviors exhibited by their partner. This could eventually translate into a higher likelihood of help-seeking by the victim.

4 Conclusion

For this paper, multilevel models were fitted. The mixed-effects regression model with a probit link function fitted the data best since it had the lowest AIC compared to the logit and cloglog link functions. There was also significant variation across sample strata to support the use of multilevel or mixed effects models over the ordinary regression models for binary outcomes. Marital status (divorced/separated), listening to the radio (at least once a week),

physically hurt partner, experienced physical injury, number of control issues (two and above), father ever beat mother (don't know), and severity of violence were significantly associated with the help-seeking behavior of male victims of IPV. There is a need to come up with interventions that encourage males to report IPV, especially among the married whose help-seeking was significantly lower than that of the divorced or separated males. There is a need to sensitize and encourage males not to wait until they have experienced physical injuries or any other severe violence before they seek help since in extreme cases, one may lose their life. Finally, given that the study found significant variations in help-seeking across geographical sample strata, interventions aimed at boosting the help-seeking behaviors of male victims of IPV should be tailored to the different geographical locations in the country. Given that the sampling methodology used in demographic and health surveys introduces nesting in the data, researchers should consider using multi-level models. Still, most public health studies involving binary outcomes use logistic regression, and yet other link functions can be used to model the relationship between outcome variables and selected predictors. In the case of this study, the probit link function fitted the data best which shows that the logit link is not always the best based on the results of the AIC.

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