

# Prevalence, socio-demographic and economic determinants of violence against ever-married women in Morocco

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## Abstract

**Background:** Violence against women is a public health issue worldwide, affecting the physical and mental wellbeing of women, children and families.

**Aim:** To determine the socio-demographic and economic factors contributing to violence against women in Morocco and offer recommendations for the prevention and reduction of violence.

**Methods:** Data for this study was obtained from the 2018 National Population and Family Health Survey. We applied the Chi-square test and t-test to study the possible associations between some socio-demographic and economic variables and violence against women. We performed a logistic regression to indicate the simultaneous association of the variables.

**Results:** Among 9969 ever-married women aged 15–49, 15.0% [CI (95%): 14.3–15.7%] had suffered an act of violence in the last 12 months preceding the survey (17.0% in urban and 11.9% in rural areas). Violence against women depended significantly on age, age at first marriage, marital status, total children ever born, educational level, wealth index, being a household head, employment status, decision-maker regarding employment, number of marriages ever had, smoking, relationship with the husband, husband's age, husband's educational level, husband's polygamy, area of residence, and region of residence ( $P < 0.05$ ).

**Conclusion:** Violence against women has reached endemic proportions in Morocco and this has serious consequences for population health and the country's economy. There is a need to reinforce and better structure public health programmes to sustainably prevent or reduce violence against women in the country. It is also important to take actions to mitigate the risk factors and provide adequate and quality care for victims.

Keywords: violence, women's health, ever-married women, demography, Morocco.

Citation: Asraoui A, Khassouani C-E, Soulaymani A. Prevalence, socio-demographic and economic determinants of violence against ever-married women in Morocco. *East Mediterr Health J.* 2023;29(12):944–953. <https://doi.org/10.26719/emhj.23.122>

Received: 13/02/23; Accepted: 31/08/23

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## Introduction

Global estimates for 2018 show that 26% (~641 million) of ever-married/partnered women aged  $\geq 15$  years and 27% (~753 million) of those aged 15–49 years have been subjected to physical and/or sexual violence from a current or former husband or male intimate partner at least once since the age of 15 years (1). Similarly, 10% (~245 million) of ever-married/partnered women aged  $\geq 15$  years and 13% (~307 million) of those aged 15–49 years have been subjected to physical and/or sexual intimate partner violence at some point within the past 12 months. Violence against women is a flagrant violation of human rights and a worldwide public health issue (2, 3). Physical and mental health and well-being of women, children, and families are adversely affected by violence against women in the short, medium, and long terms (4–6). There are also serious social and economic repercussions for countries and societies (7).

Over 3 decades ago, violence against women was acknowledged on a global scale as a severe and ubiquitous scourge on women's lives, health, and rights (8). Women's health and rights organizations have long

been calling for elimination of violence against women. These appeals have their roots in many international agreements and consensus texts; most notably, the 1993 United Nations Declaration on the Elimination of Violence Against Women and the 1995 Beijing Platform for Action. Thus, WHO resolution WHA69.5 encourages all countries to engage on the path to achievement of the Sustainable Development Goals (SDGs), including Target 5.2: "Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation"; Target 16.1: "Significantly reduce all forms of violence and related death rates everywhere"; and Target 16.2: "End abuse, exploitation, trafficking, and all forms of violence against and torture of children".

Health systems can play a role in preventing and combating all forms of interpersonal violence, particularly against women and children, which remains hidden (9).

The battle against violence against women in Morocco is relatively recent (10); however, several achievements have been made (11). Morocco has acceded

to international human rights instruments, including the main international conventions and programmes. Morocco has shown its willingness to reduce social, territorial, and gender inequalities and democratize the system of governance. Individuals' rights are protected by dedicated independent institutions and civil society organizations, supported by the rule of international law, as set out in the Moroccan Constitution.

The Moroccan Ministry of Health and Social Protection has been involved in all these changes. The ministry has institutionalized the National Health Program for the Care of Women and Children Victims of Violence, which focuses on 4 strategic areas: (1) quality care delivery at multiple levels of the care system; (2) prevention as an important means of reducing new cases; (3) advocacy, communication, promotion of gender equality, and strengthening coordination; and (4) research, knowledge development, and evaluation to strengthen the scientific evidence around violence. The inclusion of issues related to violence against women in the 2018 National Survey of Population and Family Health was an important step towards realizing this final area.

The survey for ever-married women aged 15–49 years contained several questions about violence against women; whether they had experienced physical, sexual, or psychological abuse, including domestic violence, in the last 12 months. The survey showed that 15% of women aged 15–49 years had experienced violence in the 12 months preceding the survey (12). This proportion exceeds the WHO estimate of 10% for Morocco in 2018 (1). Abuse was reported by 17% of urban and 11.9% of rural women. Women in the Casablanca–Settat Region reported the highest prevalence of violence (22.5%), followed by those in Rabat–Salé–Kénitra Region (17.1%). Verbal abuse was the most prevalent (89.8%), followed by psychological (34.5%) and physical (20.2%) abuse. Nonfamily members were claimed to have assaulted women the most (40.8%), followed by spouses (38.4%), and 65.1% of women reported being abused at home, while 27.5% reported being abused on the street (12). There were some differences according to sociodemographic and economic variables such as age group, educational level, and well-being quintile.

This study was an in-depth analysis of the 2018 National Survey of Population and Family Health to test the significance of observed differences and identify the main sociodemographic and economic determinants of violence against women in Morocco. The issue of violence against women is now more topical than ever, given its epidemic proportions and its consequences on population health and the country's economy. The main objective of this study was to contribute to the prevention and reduction of violence against women in Morocco through increased awareness of the explanatory sociodemographic and economic factors.

## Methods

### National Population and Family Health Survey

The Moroccan Ministry of Health and Social Protection uses an internationally recognized standard methodology to conduct periodic demographic and health surveys (13). These surveys are justified by the need to carry out periodic assessments of population health and to evaluate the impact of the policies and programmes implemented. They provide up-to-date statistics to the government, civil society, and development partners in Morocco to better estimate the extent of health problems and assess progress. The National Population and Family Health Survey also assesses progress in implementing Morocco's international commitments, particularly in the context of the SDGs. Questions about violence against women were included for the first time in the 2018 survey.

This study was based on data from the 2018 National Population and Family Health Survey. The methodology, results, and more details on the survey can be found in the final report available on the website of the Ministry of Health and Social Protection ([www.sante.gov.ma](http://www.sante.gov.ma)).

### Variables and data analysis

We investigated the possible associations between sociodemographic and economic variables and violence against women. For categorical variables, we conducted a  $\chi^2$  test to verify the significance of observed differences between groups (14). In the case of continuous variables, we determined the significance of the associations using Student's independent sample *t* test (15). After performing the  $\chi^2$  test, *t* test, and screening the independent variables that had a significant association with violence against women, we performed logistic regression analysis to indicate the simultaneous association of the variables and calculated the odds ratios (ORs) and 95% confidence intervals (CIs). Continuous variables were: age; total number of children birthed; husband's age; wife–husband age difference; age at first marriage; and duration of marriage. Categorical variables were: marital status; educational level; wealth index; being household head; employment status; health insurance (yes, no); decision-maker regarding work; number of marriages; smoking (yes, no); relationship with husband; husband's educational level; polygamous husband; husband with a permanent income; area of residence; and region of residence.

The prevalence of violence against women was calculated as the proportion of ever-married women aged 15–49 years who had suffered an act of violence in the last 12 months (16). This proportion was presented according to the selected sociodemographic and economic variables. The 95% CI was calculated using standard error (SE):

$$SE(p) = \sqrt{\frac{p(1-p)}{n}}$$

with  $p$  the estimated prevalence and  $n$  the sample size. Thus, 95% CI =  $p \pm 1.96 SE(p)$

Questions about the type, place, and perpetrator of violence had multiple answers, which corresponded to as many dichotomous questions (no/yes) as there were methods of response. Therefore, they were coded in several dichotomous variables (0/1). The questions were analysed based on the number of observations in the final report of the survey. Thus, the number of responses for each modality and the percentage of responses were calculated relative to the number of respondents (not responses). The total percentage could be > 100% because several answers were possible. This percentage could be interpreted by noting that each respondent has an average of appendices. In contrast, the questions were analysed according to the number of responses in our study. This method showed different results from the published results, but it allowed us to quantify the weight of each response modality relative to the other modalities because the sum of the percentages was 100%.

### Data source

The database of the 2018 National Population and Family Health Survey is not publicly available. However, it can be requested by contacting the Moroccan Department of Studies and Health Information ([dpeseis@gmail.com](mailto:dpeseis@gmail.com)). Dr. Ahmed Abdelmonem (demographic and health surveys expert), who made a significant contribution to the execution of the 2018 and previous surveys in Morocco and other Arab countries, provided the data.

### Data analysis

SPSS version 26.0 and Microsoft Excel 2016 were used to analyse the data.

## Results

### Sociodemographic and economic characteristics of respondents

The 2018 National Population and Family Health Survey was completed by 9969 women aged 15–49 years, with a response rate of 99.5%. Most of the women surveyed (72.0%) were aged 25–44 years, 15.1% were < 25 years and 12.8% were 45–49 years (Table 1). For marital status, 93.3% were married, 4.4% divorced, and 2.3% widowed. At the national level, the women were evenly distributed according to wealth index (~20.0% for each quintile). However, poverty was more common in rural than in urban areas.

At the national level, 13.0% of ever-married women aged 15–49 years were employed at the time of the survey. The percentage of employed women differed depending on where they lived, with 17.8% in urban and 5.8% in rural areas. According to educational level, 42.0% of women with a secondary level or higher education were employed, compared with 12.0% of those with a basic level (primary and college) of education, and 9.3% of those with no education. The distribution of employed women according to the household wealth index showed some disparities, with 21.8% of women from the richest families employed compared with 14.5% from the fourth

**Table 1** Distribution (in %) of non-single women aged 15-49 according to some socio-demographic and economic characteristics, Morocco, 2018

		Area of residence		National	N
		Urban	Rural		
<b>Age group, years</b>	15-19	1.5	3.7	2.4	239
	20-24	8.3	13.6	10.4	1034
	25-29	15.1	19.3	16.7	1669
	30-34	18.6	17.5	18.2	1813
	35-39	19.8	18.6	19.3	1925
	40-44	19.7	15.1	17.8	1779
	45-49	17.1	12.3	15.1	1510
<b>Marital status</b>	Married	92.0	95.2	93.3	9301
	Widowed	2.5	1.8	2.3	226
	Divorced	5.4	2.9	4.4	442
<b>Wealth index</b>	Poorest	3.3	47.5	20.9	2083
	Second	10.7	32.8	19.5	1945
	Medium	24.7	14.6	20.7	2064
	Fourth	31.8	3.9	20.7	2064
	Richest	29.5	1.1	18.2	1813
<b>Total</b>		100.0	100.0	100.0	9969

Source: 2018 National Survey of Population and Family Health final report. Results presented as percentages.

quintile, 13.9% from the third quintile, 9.4% from the second quintile, and 6.5% from the poorest households.

### Type, place, and perpetrator of violence against women

The type of violence experienced by ever-married women aged 15–49 years in the 12 months before the survey was verbal (60.0%), psychological (23.0%), physical (14.0%), sexual (3.0%), and other types (1.0%). Women were subjected to violence at home (61%), on the street (26%), at work (6%), at the market or an educational institution (1% each), and other locations (5%). In most cases, the perpetrator of violence was someone outside the family (38.0%), followed by the husband (35.0%), a family member (23.0%), and in 4.0% of cases, violence was perpetrated by another person.

### Sociodemographic and economic determinants of violence against women

The average age of women included in the study was 34.8 (0.16) years ( $P < 0.05$ ) (Table 2). The average age of husbands was 42.6 (0.20) years ( $P < 0.05$ ). The average wife–husband age difference was 7.9 (0.13) years ( $P > 0.05$ ). The average age at the first marriage was 21.2 (0.10) years ( $P < 0.05$ ). Each woman gave birth to an average of 2.5 children ( $P > 0.05$ ). The average duration of marriage was 13.3 (0.17) years ( $P > 0.05$ ).

Violence during the 12 months preceding the survey was experienced by 15.0% (95% CI: 14.3–15.7%) of ever-married women aged 15–49 years. This violence mainly affected divorced (30.1%) and married women (14.3%) (Table 3). The prevalence of violence against women increased significantly with age ( $P = 0.003$ ), from 6.2% at 15–19 years to 16.3% at  $\geq 40$  years. Violence increased significantly with women's educational level ( $P < 0.001$ ), from 12.8% of women without any education to 20.8% of women with higher education (20.0%). Similarly, the

prevalence of violence depended significantly on the husband's educational level ( $P = 0.004$ ), with the highest among women whose husbands had a primary education (16.0%). Women from wealthy households (17.0%) reported violence more frequently than their counterparts from poor households (10.6%) ( $P < 0.001$ ). Women who were heads of households, employed, married more than once, smokers, and married to a polygamous husband seemed more likely to experience acts of violence (22.5%, 23.8%, 23.0%, 31.5%, and 22.3% respectively). Women living in urban areas were more affected by violence than women in rural areas (17.0% vs 11.9%) ( $P < 0.001$ ). The highest prevalence of violence was recorded in the Casablanca–Settat Region (22.5%), followed by Rabat–Salé–Kénitra (17.1%) and Tangier–Tétouan Al Hoceima (14.3%). There was a more balanced distribution in the other regions, except in the south of the country, where the lowest prevalence was recorded (4.4–8.9%).

The variables significantly associated with violence against women were subjected to logistic regression analysis (Table 4). The following variables simultaneously and significantly influenced the probability of violence against women: educational level, employment status, decision-maker regarding work, number of marriages, husband's educational level, polygamous husband, area of residence, and region of residence ( $P < 0.05$ ).

### Discussion

We investigated the possible associations between sociodemographic and economic factors and the prevalence of violence against ever-married women aged 15–49 years in Morocco. The 2018 National Population and Family Health Survey final report revealed that the overall prevalence of violence against ever-married women of reproductive age in the past 12 months preceding the survey was 15.0% (12). This prevalence exceeded the WHO global prevalence estimate (13.0%)

**Table 2** Descriptive statistics and independent sample t-test of continuous variables, Morocco, 2018

	Descriptive statistics				Student independent sample t-test					
	Violence	N	Mean		Equal variances assumed	Levene's Test for Equality of Variances	P-value	t	df	p-value
<b>Woman's age</b>	No	8478	34.7	34.8	Yes	0.980	0.322	-2.794	9967	0.005
	Yes	1491	35.4		No	–	–	-2.835	2074.234	0.005
<b>The husband's age</b>	No	7948	42.5	42.6	Yes	1.297	0.255	-2.657	9279	0.008
	Yes	1333	43.3		No	–	–	-2.616	1785.132	0.009
<b>Wife-husband age difference</b>	No	7948	8.0	7.9	Yes	0.728	0.393	0.230	9279	0.818
	Yes	1333	7.9		No	–	–	0.226	1780.159	0.821
<b>Age at first marriage</b>	No	8478	21.2	21.2	Yes	2.902	0.088	-2.828	9967	0.005
	Yes	1491	21.6		No	–	–	-2.817	2042.457	0.005
<b>Total children ever born</b>	No	8478	2.5	2.5	Yes	10.339	0.001	1.388	9967	0.165
	Yes	1491	2.4		No	–	–	1.406	2070.171	0.160
<b>Duration of marriage</b>	No	8478	13.3	13.3	Yes	4.391	0.036	-0.862	9967	0.389
	Yes	1491	13.5		No	–	–	-0.878	2081.934	0.380

**Table 3 Prevalence of violence against women according to the studied socio-demographic and economic variables, Morocco, 2018**

		Prevalence of violence against women					N
		n	%	P-value	CI (95%)		
					Lower bound	Upper bound	
<b>Age group (years)</b>	15–19	15	6.2	0.003	3.8	10.1	235
	20–24	146	14.1		12.1	16.4	1033
	25–29	241	14.4		12.8	16.2	1667
	30–34	283	15.7		14.0	17.4	1808
	35–39	274	14.2		12.7	15.8	1925
	40–44	282	15.9		14.2	17.6	1775
	45–49	247	16.3		14.6	18.3	1509
<b>Marital status</b>	Married	1334	14.3	<0.001	13.6	15.1	9301
	Widowed	24	10.5		7.1	15.1	226
	Divorced	133	30.1		26.0	34.5	442
<b>Educational level</b>	None	511	12.8	<0.001	11.8	13.8	3998
	Primary	400	14.6		13.3	15.9	2744
	Middle School	279	17.3		15.5	19.2	1611
	Secondary	159	17.1		14.8	19.6	929
	Higher	143	20.8		17.9	24.0	687
<b>Wealth index</b>	Poorest	221	10.6	<0.001	9.3	12.0	2083
	Second	288	14.8		13.3	16.4	1945
	Medium	350	17.0		15.4	18.6	2064
	Fourth	323	15.6		14.1	17.3	2064
	Richest	309	17.0		15.4	18.8	1813
<b>Household head</b>	No	1386	14.6	<0.001	13.9	15.3	9504
	Yes	105	22.5		19.0	26.5	465
<b>Employment status</b>	No	1181	13.6	<0.001	12.9	14.4	8669
	Yes	310	23.8		21.6	26.2	1300
<b>Health coverage</b>	No	731	14.8	0.687	13.8	15.8	4936
	Yes	760	15.1		14.1	16.1	5033
<b>Decision-maker regarding work</b>	Myself	912	14.7	0.047	13.8	15.6	6199
	My husband	302	14.9		13.4	16.5	2026
	Both	236	16.2		14.4	18.2	1452
	Another person	22	22.0		14.9	31.1	99
	I don't know	20	10.1		6.6	15.2	194
<b>Number of marriages</b>	One time	1399	14.6	<0.001	13.9	15.3	9571
	More than one time	92	23.0		19.2	27.4	398
<b>Smoking</b>	No	1460	14.8	<0.001	14.1	15.5	9871
	Yes	31	31.5		23.1	41.3	98
<b>Relationship with husband</b>	No	1232	16.1	<0.001	15.3	17.0	7637
	Yes	259	11.1		9.9	12.4	2332
<b>Wife-husband age difference (years)</b>	The wife is older than the husband	105	13.3	0.335	11.0	15.7	795
	1-5	418	15.4		14.0	16.8	2721
	6-15	667	14.0		13.0	15.0	4763
	16-30	130	13.9		11.7	16.1	941
	31 &+	11	18.7		10.2	29.5	60
<b>Age at first marriage (years)</b>	Under 18	343	14.6	0.037	13.2	16.0	2355
	18-29	1017	14.7		13.9	15.5	6918
	30-44	129	18.8		16.0	21.8	688
	45 &+	1	15.2		1.4	45.4	8

**Table 3 Prevalence of violence against women according to the studied socio-demographic and economic variables, Morocco, 2018 (concluded)**

		n	%	P-value	Prevalence of violence against women		N
					CI (95%)		
					Lower bound	Upper bound	
<b>Duration of marriage (years)</b>	0–3	183	13.3	0.299	11.6	15.1	1378
	4–12	562	15.2		14.1	16.4	3687
	13–22	485	15.4		14.1	16.6	3159
	≥ 23	262	15.0		13.4	16.7	1745
<b>The husband's educational level</b>	None	370	12.8	0.004	11.6	14.0	2896
	Primary	497	16.0		14.7	17.3	3108
	Middle School	279	15.8		14.2	17.6	1762
	Secondary	193	15.7		13.7	17.8	1232
	Higher	152	15.6		13.5	18.0	971
<b>Polygamous husband</b>	No	1294	14.2	0.001	13.5	14.9	9118
	Yes	42	22.3		17.0	29.0	186
<b>Husband have a permanent income</b>	No	888	14.9	0.873	14.0	15.8	5955
	Yes	603	15.0		13.9	16.2	4014
<b>Area of residence</b>	Urban	1020	17.0	<0.001	16.1	18.0	6005
	Rural	471	11.9		10.9	12.9	3964
<b>Region of residence</b>	Tanger-Tétouan-Al Hoceima	152	14.3	<0.001	12.3	16.5	1062
	Oriental	93	13.4		11.0	16.1	694
	Fès- Meknès	186	14.3		12.5	16.3	1299
	Rabat - Salé - Kénitra	218	17.1		15.1	19.3	1272
	Béni Mellal - Khénifra	36	4.9		3.5	6.7	730
	Casablanca- Settat	430	22.5		20.6	24.4	1913
	Marrakech-Safi	197	13.4		11.7	15.2	1471
	Dâa-Tafilalet	62	13.4		10.5	16.7	464
	Souss-Massa	98	12.5		10.3	14.9	786
	Guelmim-Oued Noun	5	4.4		1.7	9.3	115
	Laâyoune - Sakia El Hamra	9	7.5		3.7	13.0	122
	Ed Dakhla - Oued ed Dahab	4	8.9		3.3	21.1	42
	<b>Total</b>		1491	15.0		14.3	15.7

and Moroccan estimate for the same year (10.0%). In contrast, it was below the WHO Eastern Mediterranean and African Regions prevalence estimates, where 17.0% and 20.0% of ever-married/partnered women aged 15–49 years were subjected to physical and/or sexual violence from a current or former husband or male partner in the past 12 months (1).

Our results showed that violence was mainly among women aged ≥ 20 years (> 14.0%). This is similar to WHO estimates that showed that 10.0–16.0% of women aged 20–44 years had experienced violence in the past 12 months (1). Our analysis showed that violence against women in Morocco increased significantly with age. This was also reported by Ennaji in 2011 (17) and Boughima et al. in 2018 (18). In contrast, Peters and colleagues discovered that rates of domestic violence decreased as women's age decreased, and younger reproductive-

age women have roughly 10 times the risk of domestic abuse than older women have (19). The link between age and violence against women has been demonstrated in several countries, including Morocco (17, 18), India (20), Turkey (21), Sweden (22), and the United States of America (23). We found that the prevalence of violence increased significantly with women's level of education. The 12.8% reported by women with no education increased to > 17.0% among women with a middle or secondary school level of education, and > 20.0% among women with higher education. Similarly, the prevalence of violence was higher among women in richer than poorer households. Some of these findings seem paradoxical because it has been demonstrated worldwide that prevalence of violence is significantly associated with lower well-being conditions (24). They may reflect a different tolerance of violence against women, taking into account their level of

**Table 4 Logistic regression estimates and odds ratio, Morocco, 2018**

	B	S.E.	Wald	P-value	OR	95% C.I. for OR	
						Lower	Upper
Woman's age	0.002	0.007	0.046	0.829	1.002	0.987	1.016
Age at first marriage	0.004	0.008	0.205	0.651	1.004	0.988	1.019
Total children ever born	0.033	0.028	1.406	0.236	1.033	0.979	1.091
Educational level	-0.408	0.143	8.074	0.004	0.665	0.502	0.881
Wealth Index	-0.037	0.097	0.149	0.700	0.963	0.797	1.165
Household head	-0.095	0.204	0.216	0.642	0.909	0.609	1.357
Employment status	-0.759	0.094	65.185	<0.001	0.468	0.389	0.563
Decision-maker regarding work	1.281	0.472	7.371	0.007	3.602	1.428	9.085
Number of marriages	-0.467	0.147	10.150	0.001	0.627	0.470	0.836
The husband's Age	0.005	0.005	1.113	0.292	1.005	0.996	1.015
The husband's educational level	0.487	0.134	13.217	<0.001	1.628	1.252	2.117
Polygamous husband	-0.401	0.190	4.455	0.035	0.669	0.461	0.972
Area of residence	-0.204	0.091	5.059	0.025	0.815	0.682	0.974
Region of residence	1.519	0.694	4.785	0.029	4.565	1.171	17.799

CI = confidence interval; OR = odds ratio.

education, standard of living, age, and place of residence, and not simply a reflection of violence experienced. Many women were of the opinion that a husband has the right to hit his wife if he considered that she had behaved improperly (24). Kebede et al. also showed that women in lower socioeconomic categories may not necessarily face higher rates of violence (25).

We found that verbal violence predominated (60.0%) among ever-married women aged 15–49 years who experienced violence in the 12 months preceding the survey, followed by psychological (23.0%), physical (14.0%), and sexual (3.0%) violence. According to the 2018 WHO global combined estimates, 31.0% of women aged 15–49 years and 30.0% of women aged  $\geq 15$  years experienced physical and/or sexual violence from current or former husbands or male intimate partners, and/or men who were neither husbands nor intimate partners (1). We found that most cases (61.0%) of violence against women took place at home, which confirmed the findings of many other studies (5, 26–29). Street violence is not a trivial phenomenon in Morocco and accounted for 26.0% of attacks against women. The perpetrators of violence were mostly husbands (35.0%) and family members (23.0%). Even though violence against women is mainly inflicted by husbands and intimate partners, it also occurs in a family or community context, as well as economic, social or political violence. We can even find self-inflicted violence as a consequence of psychological violence suffered by women.

The World Bank has shown that violence against women is estimated to be a more common cause of death and disability worldwide than cancer among women of childbearing age, and causes more health problems than traffic accidents and malaria combined (30). Similarly, our study showed that violence against women in Morocco was a serious public health issue.

Several other studies worldwide have provided evidence of a correlation between exposure to violence and effects on the physical, mental, sexual and reproductive health of women, as well as their children's health (2, 31–34). Several consequences can occur, such as: teenage and unwanted pregnancies, miscarriages, and stillbirths; sexually transmitted infections; intrauterine haemorrhage; nutritional deficiencies; abdominal pain and gastrointestinal disorders; neurological disorders; chronic pain; disabilities; anxiety and post-traumatic stress; hypertension; cancer; and cardiovascular diseases. There are reports of a close link between exposure to violence and physiological mechanisms, explaining certain harmful effects on health through complex neural, neuroendocrine, and immune responses of the body when it is exposed to stressful situations (5, 35).

One limitation of our study was that several potentially important variables were ignored, such as: the state of the relationship between the aggressor and victim; history of mental illness in both partners; history of substance use disorders; and history of criminality. Those variables were not present in the 2018 National Population and Family Health Survey, so we could not add them to our analysis. The strength of this study was that it was an in-depth analysis of the 2018 survey with a representative sample of 9969 women from 15 022 households. This large nationwide sample means that the results can be generalized to all Moroccan women.

Despite the efforts already made to combat violence against women in Morocco, more needs to be done. The issue is more topical now than ever, given its epidemic proportions and its health and economic consequences. Based on the results of our study we call upon decision-makers in Morocco to: create and enact legislation that supports gender equality; invest in and empower independent organizations that advocate women's rights;

review discriminatory norms and attitudes towards women and girls, especially concerning the legitimacy of violence against women; strengthen related data collection, communication, and use; maintain and enhance local and national prevention programmes and strategies based on solid evidence; and strengthen the comprehensive, easily available, and high-quality survivor-centred services for victims of violence.

## Conclusion

Our study shows that violence against women depends significantly on sociodemographic and economic factors related to women as well as the perpetrators of violence, such as: age; age at first marriage; marital status; number of children birthed; educational level; wealth index, being household head; employment status; decision-maker regarding work; number of marriages; smoking; relationship with husband; age at first marriage;

husband's age; husband's educational level; husband's polygamy; area of residence; and region of residence. Our study demonstrates that violence is a socioeconomic phenomenon that affects the fringes of society in Morocco, particularly the most vulnerable populations. The 2018 National Population and Family Health Survey shows that violence against women in Morocco is a public health problem that is reaching worrying proportions, with 15.0% of ever-married women aged 15–49 years affected, and a predominance in the large conurbations. Therefore, preventive programmes should be directed towards the large urban centres. It is worth stressing the particularly high frequency of domestic violence against young, rural, and uneducated women. This violence has a psychological impact in particular, is perpetrated mainly by husbands or family members, does not necessarily leave physical traces, and could explain, along with the profile of the abused woman, the reluctance to seek help.

## Acknowledgement

We express our thanks to Dr. Ahmed Abdelmonem for providing the data from National Population and Family Health Survey and for his unconditional advice and guidance.

**Funding:** None.

**Competing interests:** None declared.

## Prévalence, déterminants socio-démographiques et économiques des violences à l'égard des femmes mariées ou l'ayant déjà été au Maroc

### Résumé

**Contexte :** La violence à l'égard des femmes constitue un problème de santé publique dans le monde entier, qui a des conséquences sur le bien-être physique et mental des femmes, des enfants et des familles.

**Objectif :** Déterminer les facteurs socio-démographiques et économiques contribuant à la violence envers les femmes au Maroc et formuler des recommandations afin de prévenir et de réduire ces violences.

**Méthodes :** Les données utilisées pour cette étude ont été obtenues à partir de l'enquête nationale sur la santé de la population et de la famille menée en 2018. Nous avons appliqué le test du chi-carré et le test T pour étudier les associations possibles entre certaines variables socio-démographiques et économiques et la violence à l'égard des femmes. Nous avons procédé à une régression logistique pour déterminer l'association simultanée des variables.

**Résultats :** Sur 9969 femmes âgées de 15 à 49 ans mariées ou l'ayant été, 15,0 % [IC à 95 % : 14,3-15,7 %] avaient subi un acte de violence au cours des 12 mois précédant l'enquête (17,0 % en milieu urbain et 11,9 % en milieu rural). La violence à l'égard des femmes dépendait considérablement des éléments suivants : l'âge ; l'âge au moment du premier mariage ; le statut matrimonial ; le nombre total d'enfants nés ; le niveau d'éducation ; l'indice de richesse ; le fait d'être chef de famille et décideur en matière d'emploi ; le statut professionnel ; le nombre de mariages ; la consommation de tabac ; la relation avec le mari ; l'âge, le niveau d'éducation, la polygamie de ce dernier ; ainsi que la résidence en milieu urbain/rural et la région de résidence (valeur  $p < 0,05$ ).

**Conclusion :** La violence à l'égard des femmes a atteint des proportions endémiques au Maroc, ce qui a de graves conséquences sur la santé de la population et sur l'économie du pays. Il est nécessaire de renforcer et de mieux structurer les programmes de santé publique afin de prévenir ou de réduire les violences exercées à l'égard des femmes dans le pays et de rendre ces programmes plus durables. Il est également important de prendre des mesures pour limiter les facteurs de risque et fournir des soins adéquats et de qualité aux victimes.



## انتشار العنف ضد النساء اللائي سبق لهن الزواج ومحدداته الاجتماعية والسكانية والاقتصادية في المغرب

عبد الغني العسراوي، شمس الضحى الخسواني، عبد المجيد السليمان

## الخلاصة

الخلفية: يمثل العنف ضد المرأة قضية من قضايا الصحة العامة في جميع أنحاء العالم، ويؤثر على السلامة البدنية والنفسية للنساء والأطفال والأسر. الأهداف: هدفت هذه الدراسة الى تحديد العوامل الاجتماعية والسكانية والاقتصادية التي تسهم في العنف ضد المرأة في المغرب، وتقديم توصيات لمنع العنف والحد منه.

طرق البحث: جرى الحصول على بيانات هذه الدراسة من المسح الوطني للسكان وصحة الأسرة لعام 2018. وطبقنا اختبار مربع كاي واختبار t-test لدراسة الروابط المحتملة بين بعض المتغيرات الاجتماعية والسكانية والاقتصادية والعنف ضد المرأة. وأجرينا انحدارًا لوجستيًا للإشارة إلى الارتباط المتزامن للمتغيرات.

النتائج: من بين 9969 امرأة سبق لهن الزواج وتراوح أعمارهن بين 15 و49 عامًا، تعرضت 15,0% [فاصل الثقة (95%): 14,3-15,7%] لأعمال عنف في الأشهر الاثني عشر التي سبقت إجراء المسح (17,0% في المناطق الحضرية و11,9% في المناطق الريفية). ويتوقف العنف ضد المرأة بشكل كبير على عمر المرأة وسنها عند الزواج الأول، وحالتها الاجتماعية، وإجمالي عدد أطفالها الذين ولدوا، سواء أكانوا أحياء أم لا، ومستواها التعليمي، ومؤشر الثروة، وهل المرأة هي رب الأسرة المعيشية، وحالتها الوظيفية، والمسؤول عن اتخاذ القرار بشأن عملها، وعدد زيجاتها التي حدثت على الإطلاق، والتدخين، وعلاقتها بالزوج وعمره ومستواه التعليمي وتعدد زوجاته، ومنطقة الإقامة، وإقليم الإقامة (القيمة الاحتمالية > 0,05).

الاستنتاجات: بلغ العنف ضد المرأة نسبًا متفشية في المغرب، وهو ما ترتب عليه عواقب وخيمة على صحة السكان واقتصاد البلد. وهناك حاجة إلى تعزيز برامج الصحة العامة وتحسين هيكلها لمنع العنف ضد المرأة أو الحد منه في البلد وجعلها أكثر استدامة. ومن المهم أيضًا اتخاذ إجراءات للتخفيف من عوامل الخطر وتوفير الرعاية الكافية والجيدة للضحايا.

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