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Violence Reported by the Immigrant Population Is High as Compared With the Native Population in Southeast Spain

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Abstract

Immigrants constitute a population vulnerable to the problem of violence. This study sought to ascertain the prevalence of violence reported by the immigrant population in the Murcian Region of Spain and characterize the related factors, taking the country population as reference. A cross-sectional study was carried out based on a representative population sample of Latin American (n = 672; 48% women), Moroccan (n = 361; 25% women), and Spanish origin (n = 1,303; 66% women), aged 16 to 64 years. Using a specific questionnaire, the prevalence of violence in the preceding year was assessed. The results were compared with the Spaniards using the 2006 National Health Survey (NHS). Multivariate logistic regression models were used to study the factors associated with violence having been reported in each group, both separately and in immigrants versus Spaniards. Finally, the

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cause and place of last aggression were studied. The prevalence of violence was 6.5% in Latin Americans, 12.0% in Moroccans, and 2.7% in Spaniards. Discrimination was the principal violence-related factor in all three groups. Among Latin Americans, low educational level was also associated with violence. Among Moroccans, those who had perceived discrimination showed the greatest differences in prevalence of violence compared with natives. Intimate partner violence (IPV) registered a prevalence of below 2%. As a conclusion, in this study, violence was little reported and higher among immigrants. The principal violence-related factor was discrimination. More studies of this type are called for to characterize the problem in other population-representative samples.

Keywords

aggression, interpersonal violence, intimate partner violence (IPV), immigrants, Spain

Interpersonal violence is a public health problem owing to its repercussions on the physical, sexual, reproductive, and mental health of victims (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2003). Factors such as young age, low educational level, financial insecurity, deficient social support, and discrimination, more frequently found among immigrants, have been associated with a greater likelihood of suffering violence (Escribá-Agüir, Barona-Vilar, Calvo-Mas, Carpio-Gesta, & Fullana-Montoro, 2006; Llácer et al., 2009; Ruiz-Pérez, Plazaola-Castaño, & del Río-Lozano, 2006c; Vives-Cases et al., 2009a, 2009b).

Spanish studies on the prevalence of violence among economic immigrants have exclusively addressed intimate partner violence (IPV), thus only in women. The results suggest that immigrant populations suffer more violence than natives in different geographical settings (Samsó, Faro, Costés, & Burballa, 2007; Vives-Cases et al., 2009a, 2009b). In Spain, prevalence of IPV in the immigrant population has been estimated at 27.3% versus 14.3% in Spaniards (Vives-Cases et al., 2009b). Nevertheless, the estimation depends on the type of study, methodology used, study population, and the geographical and cultural context.

Migration has played a significant role in the demographic dynamic of some European countries, particularly Spain. The Region of Murcia, in southeast Mediterranean Spain, has become a destination for Latin American and North African economic immigration. In 2010, foreigners accounted for

16.5% of the total regional population, one of the highest proportions across regions in Spain. The principal foreign groups in Murcia were Moroccans (28.5%) and Ecuadorians (18.9%), drawn by the offer of employment, as farm workers in the former case and in the service sector in the latter. The marked growth in the immigrant population means that health professionals must acquire in-depth knowledge of factors such as violence, which render this population more vulnerable to specific health problems. The aim of this study was to ascertain the prevalence of reported violence in a representative sample of immigrants from the Murcian Region, and to characterize the related factors, taking the country population as reference.

Method

Participants

This study is a cross-sectional analysis of a representative sample of the immigrant population in the Murcian Region, which included immigrants of Latin American and Moroccan origin not holding Spanish nationality. The estimated sample size was 1,588 persons of both sexes aged 16 to 64 years, 937 Latin Americans and 651 Moroccans, for a 95% confidence level and a precision of 3% and 2%, respectively. Stratified, multistage, cluster sampling was carried out, targeting the immigrant population registered in the local health card database. This individual health card (IHC) is a document issued, under demand, by the regional health authorities to all local residents (98% coverage of the regional population) and gives holders access to health care. The immigrant population was divided into 12 strata, which group together the Region's health centers. In each stratum, health centers were selected with a probability proportional to the number of immigrants attending each centre in that stratum. Persons at each center were then selected at random until the preestablished number of individuals, proportional to the origin, sex, and age of each stratum, was reached. In view of this population's high rate of residential mobility—an aspect not constantly updated in the IHC database—we prepared an a priori list of substitutions. The search results were thus classified into the following four categories: (a) substitutions, when the designated person was discovered to be no longer living at the given address and impossible to locate by letter, telephone, or home visit; (b) impossible to locate, that is, immigrants who were not contacted but as regards whom there was no evidence of their having changed their address; (c) refusal or nonresponse; and (d) interviews. The final study sample comprised 1,033 participants, 672 of Latin American origin, and 361 of Moroccan

origin, for a 72% response rate among Latin Americans and 56% among North Africans.

Information on the native population was concurrently obtained from freely accessible microfiches drawn from the 2006 NHS (National Statistics Institute [INE], 2009), containing the file on the technical study undertaken in the following two stages: first, a group study targeting a sample of households and second, an individual study targeting one person in each household. A total of 1,303 interviews (440 men and 863 women) were obtained from the Murcian Region. Although women were more frequently located in the home, overrepresentation in the sample was corrected by adjusting and applying the relevant sampling weights.

Written consent was given by all participants, the confidentiality of all individual information gathered was guaranteed, prevailing security measures for protection of personal data were implemented, and ethical approval was obtained from the Ethics Committee of the Virgen de la Arrixaca University Hospital.

Data Collection

Data were collected by face-to-face questionnaire administered by trained interviewers, many of whom were social mediators and interpreters, with an effort being made throughout to ensure that interviewers held the same nationality and sex of the interviewees. The questionnaire was drawn up on the basis of the 2006 NHS (INE, 2009) and included a number of questions specifically addressing the migratory process. The questionnaire was translated into Arabic, with back translation into Spanish by bilingual native personnel. In the event of disagreement, differences were settled with the researcher in charge of fieldwork, a Spanish speaker. Interviews were mostly carried out at the health center nearest the participant's residence. Fieldwork was undertaken from November 2006 to February 2008.

A victim of violence was defined as any person who responded affirmatively to the question, "In the last year, have you suffered from any type of aggression or abuse?" Where applicable, participants were asked about the type of aggressor (partner, known person or unknown person) via the question, "The person/s who assaulted or abused you was/were . . . ," and about the place of the last aggression (street, workplace, home, other) via the question, "And with reference to the last (assault), where did it take place?" IPV was defined as that experienced by any person who responded affirmatively to the question on aggression and reported that the aggressor had been his or her partner. Data were also collected on the following sociodemographic variables: sex; age; educational level; marital status; occupational status in

the preceding week; monthly household income; and a feeling of discrimination during the preceding year for any reason (sex, ethnicity, country of origin, religion, educational level, social class, or sexual preferences).

Statistical Analysis

The distribution of characteristics of the sample was calculated by group of origin and sex, and differences were analyzed using the chi-square test. We then estimated prevalences of violence in the year preceding the interview according to the origin of the participants, and the distribution of cases according to the variables studied. To recompose the sample, sampling weights were applied, taking nonresponse into account. Distribution by type of aggressor and place of last assault was also obtained.

A multivariate logistic regression analysis was performed to identify violence-related factors for each group, adjusting for sex and age. Variables such as age (<35 and ≥35 years), educational level ("secondary or higher," "primary or no formal education"), marital status ("single," "married," and "separated, divorced, or widowed"), occupational status in the preceding week ("employed" and "unemployed"), and monthly household income (>900 and ≤900 euros) were pooled to facilitate the analyses.

Last, logistic regression models were constructed to compare the frequency of violence in each group, taking the native population as reference (n = 1,303). The analysis was repeated stratifying by the remaining study variables.

All analyses were performed using STATA, Version 10.0. Estimates are shown with their 95% confidence intervals. The svy command was used in all the calculations, with weights specified as "probability weights."

Results

Table 1 shows the distribution of the principal characteristics of the sample, by origin and sex. Compared with Spaniards, immigrants were younger, had lower financial resources, and reported a greater perception of discrimination. Besides, Latin American women were mostly employed (78.1%) as opposed to Spanish (45.6%) and Moroccan women (35.6%). Over 40% of Moroccans versus less than 5% of Latin Americans lacked formal education. Broken down by sex, Latin American women suffered more unemployment, more discrimination, and had less household income. One third of Moroccan women were housewives and perceived less discrimination than did men. The distribution of cases of violence and their prevalence according to the study variables are shown in Table 2. Reported prevalence of violence was

Table 1. Characteristics of the Study Sample, According to Sex and Origin

	Spaniards				Latin Americans				Moroccans			
	N = 1,303				*N* = 672				*N* = 361			
	Men		Women		Men		Women		Men		Women	
	440		863		351		321		269		92	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Age (years)												
16-24	49	20.0	62	16.7	46	16.2	48	16.5	35	15.8	26	24.9
25-34	86	22.7	166	22.4	147	43.0	136	45.2	108	44.6	32	37.3
35-44	131	25.0	261	25.2	108	29.3	97	28.9	86	27.5	22	28.9
45-64	174	32.3	374	35.7	50	11.6	40	9.4‡	40	12.1	12	9.0‡
Educational level												
No formal education	46	8.8	125	13.7	11	3.3	17	4.8	122	40.2	40	46.9
Primary education	210	45.4	437	46.7	162	47.7	134	42.3	87	37.7	42	43.8
Secondary education	106	27.2	202	27.4	146	41.0	138	41.1	38	15.4	6	4.7
University	78	18.6	99	12.2†	32	8.1	32	11.8‡	22	6.7	4	4.7‡
Marital status												
Single	275	57.0	624	64.7	182	49.8	140	42.2	167	58.6	61	70.8
Married	141	40.0	154	28.1	153	45.2	141	45.0	97	40.0	23	21.2
Separated/divorced/ widowed[a]	23	3.0	83	7.2†	16	5.0	40	12.7†‡	5	1.4	8	8.0†
Unknown[b]	1		2		0				0			
Occupational status												
Employed	327	72.1	390	44.6	309	87.6	246	78.1	220	79.8	35	35.6
Unemployed	30	4.9	60	7.5	27	7.0	41	12.1	35	13.9	3	2.0
Retiree/pensioner/ other	56	10.5	48	4.2	0	0.0	3	0.7	7	2.8	2	1.3
Housewife/husband	0	0.0	332	35.0	0	0.0	12	3.7	0	3.5	45	33.2
Student	26	12.5	32	8.7†	15	5.4	19	5.3†‡	7		7	8.4†‡
Unknown[b]	1		1		0				0			
Monthly household income (euros)												
≤900	68	12.0	157	15.6	34	11.3	69	23.9	47	19.6	17	20.0
901-1,800	230	55.1	469	54.2	208	66.7	178	60.7	168	72.2	48	71.1
>1,800	133	32.9	217	30.1	69	22.0	46	15.4†‡	29	8.2	5	9.0‡
Unknown[b]	9		20		40		28		25		22	
Perceived discrimination												
Yes	12	2.0	33	3.3	64	17.2	80	27.3	58	20.0	9	6.6
No	428	98.1	830	96.8	287	82.8	240	72.7†‡	210	80.0	83	93.4†‡
Unknown[b]	0						1		1			

Note: Weighted percentage distribution. *N* = 2,336.
[a]Widowed: Only three persons of Moroccan origin out of the total sample.
[b]Unknown, don't know, refused: Excluded from the weighted percentage distribution.
†$p < .05$ for chi-square, by sex. ‡$p < .05$ for chi-square, by origin, with respect to Murcia.

Table 2. Distribution and Prevalence of Reported Violence According to Sociodemographic Characteristics and Origin

	Spaniards			Latin Americans			Moroccans		
	Distribution of Cases (%)	Prevalence (%)	95% CI	Distribution of Cases (%)	Prevalence (%)	95% CI	Distribution of Cases (%)	Prevalence (%)	95% CI
Total		2.7	[1.5, 3.9]		6.5	[4.1, 8.9]		12.0	[7.4, 16.7]
Gender									
Male	52.9	2.8	[0.7, 4.8]	61.1	7.5	[2.9, 12.2]	91.5	14.0	[7.6, 20.4]
Female	47.1	2.6	[1.4, 3.8]	38.9	5.4	[0.9, 9.9]	8.5	4.9	[0.0, 11.4]
Age (years)									
16-34	40.7	2.7	[0.3, 5.2]	75.3	8.2	[3.9, 12.5]	68.2	13.6	[6.8, 20.4]
35-64	59.3	2.7	[1.5, 3.9]	24.7	4	[0.7, 7.4]	31.8	9.7	[5.6, 13.8]
Educational level									
Secondary or higher	53.0	3.3	[1.0, 5.6]	30.9	3.9	[1.2, 6.7]	26.3	16.2	[4.3, 28.2]
Primary or no formal education	47.0	2.2	[1.1, 3.4]	69.1	9.2	[4.0, 14.4]	73.7	11.0	[6.3, 15.7]
Marital status									
Married	46.1	2.1	[0.9, 3.2]	38.2	5.4	[2.0, 8.8]	56.2	11.0	[6.6, 15.4]
Single	41.3	3.2	[0.3, 6.1]	46.5	6.7	[2.0, 11.5]	40.3	13.6	[4.4, 22.8]
Separated/divorced/ widowed	12.6	6.4	[1.5, 11.2]	15.3	11.4	[0.5, 22.3]	3.5	14.8	[0.0, 43.9]
Occupational status									
Employed	63.7	2.8	[1.6, 4.1]	84.3	6.6	[3.3, 10.0]	77.4	12.7	[7.7, 17.7]
Unemployed[a]	36.3	2.6	[0.0, 5.2]	15.7	6.1	[1.5, 10.8]	22.6	9.6	[1.2, 17.9]
Monthly household income (euros)									
>900	68.3	2.2	[0.9, 3.5]	75.8	4.7	[2.5, 7.0]	77.4	11.7	[6.9, 16.5]
≤900	31.7	6.2	[2.4, 10.0]	24.3	7.3	[3.3, 11.3]	22.7	13.9	[0.2, 27.7]
Perceived discrimination									
No	87.2	2.4	[1.2, 3.6]	52.8	4.42	[2.5, 6.3]	41.1	6.0	[0.2, 11.8]
Yes	12.8	12.9	[2.5, 23.4]	47.2	13.9	[5.8, 22.0]	58.9	41.2	[24.5, 57.9]

Note: 95% CI = 95% confidence interval.

[a]Unemployed, students, and housewives/husbands (retirees excluded).

Table 3. Logistic Regression Analysis to Identify Violence-Related Factors by Origin

	Spaniards			Latin Americans			Moroccans		
	Cases	*OR*	95% CI	Cases	*OR*	95% CI	Cases	*OR*	95% CI
Gender									
Male	11	1		24	1		38	1	
Female	24	0.93	[0.39, 2.22]	15	0.69	[0.19, 2.51]	4	0.31	[0.07, 1.39]
Age (years)									
16-34	9	1		27	1		26	1	
35-64	26	0.93	[0.36, 2.79]	12	0.47	[0.15, 1.45]	16	0.68	[0.38, 1.20]
Educational level									
Secondary or higher	16	1		13	1		12	1	
Primary or no formal education	19	0.66	[0.28, 1.55]	26	2.5	[1.03, 6.10]	30	0.74	[0.30, 1.84]
Marital status									
Married	17	1		17	1		24	1	
Single	8	1.84	[0.56, 6.06]	17	0.95	[0.31, 2.91]	17	0.93	[0.38, 2.26]
Separated/ divorced/ widowed	10	3.28	[1.18, 9.12]	5	3.36	[0.52, 21.68]	1	2.31	[0.19, 27.87]
Occupational status									
Employed	23	1		33	1		32	1	
Unemployed[a]	11	0.92	[0.23, 3.73]	6	0.85	[0.30, 2.43]	8	1.00	[0.37, 2.71]
Monthly household income (euros)									
>900	21	1		23	1		29	1	
≤900	14	3.00	[1.30, 6.93]	7	1.72	[0.85, 3.48]	9	1.25	[0.48, 3.26]
Perceived discrimination									
No	7	1		18	1		27	1	
Yes	28	6.27	[2.27, 17.29]	21	3.85	[2.11, 7.02]	15	9.91	[2.19, 44.93]

Note: *OR* = Odds ratio; 95% CI = 95% confidence interval. Models adjusted for sex and age.
[a]Unemployed, students, and housewives/husbands (retirees excluded).

6.5% in Latin Americans and 12.0% in Moroccans versus 2.7% in Spaniards. A higher prevalence in immigrants was, as with Spaniards, associated with the feeling of discrimination. Finally, despite the fact that violence was more frequent among men, no statistically significant differences were found in prevalence of violence by sex (Table 3). In this study, the factors associated with violence in immigrants were low educational level (Latin Americans) and discrimination (both groups). Unlike Spaniards, neither marital status nor income level was associated with violence. Table 4 shows the frequency

Table 4. Odds Ratios of Violence Among Foreigners Versus Spaniards, Stratified By Sociodemographic Variables

	Spaniards	Latin Americans		Moroccans	
	OR (95% CI)	*OR* (95% CI)		*OR* (95% CI)	
Total	1 (ref.)	2.46	[1.26, 4.81]	4.65	[2.12, 10.17]
Gender					
Male	1 (ref.)	2.58	[0.91, 7.26]	5.27	[1.99, 13.95]
Female	1 (ref.)	2.42	[0.92, 6.39]	2.17	[0.54, 8.75]
Age (years)					
16-34	1 (ref.)	3.27	[1.14, 9.42]	4.82	[1.47, 15.75]
35-64	1 (ref.)	1.55	[0.62, 3.86]	4.19	[2.10, 8.35]
Educational level					
Secondary or higher	1 (ref.)	1.28	[0.46, 3.53]	4.81	[1.19, 19.38]
Primary or no formal education	1 (ref.)	4.03	[1.80, 9.04]	5.54	[2.58, 11.89]
Marital status					
Married	1 (ref.)	2.71	[1.04, 7.08]	5.69	[2.50, 12.97]
Single	1 (ref.)	2.32	[0.75, 7.22]	4.14	[1.08, 15.85]
Separated/ divorced/widowed	1 (ref.)	1.9	[0.53, 6.84]	—	—
Occupational status					
Employed	1 (ref.)	2.43	[1.26, 4.71]	5.96	[2.93, 12.16]
Unemployed[a]	1 (ref.)	2.00	[0.51, 7.78]	3.07	[0.66, 14.33]
Monthly household income (euros)					
>900	1 (ref.)	2.11	[0.91, 4.90]	4.84	[1.88, 12.46]
≤900	1 (ref.)	1.02	[0.42, 2.49]	3.45	[0.85, 14.06]
Perceived discrimination					
No	1 (ref.)	1.77	[0.84, 3.73]	2.29	[0.74, 7.09]
Yes	1 (ref.)	1.23	[0.43, 3.51]	18.02	[5.27, 61.62]

Note: *OR* = Odds ratio; 95% CI = 95% confidence interval. Models adjusted for sex and age.
[a]Unemployed, students, and housewives/husbands (retirees excluded).

of violence among immigrants and Spaniards. Latin Americans reported having suffered 2.5 times more violence than did Spaniards, with the greatest differences in the younger groups, participants with low educational level and married persons. Among Moroccans, violence was 4.7-fold that registered for Spaniards, with important differences in almost all studied variables. A notable result in this group was the fact that, among those who reported

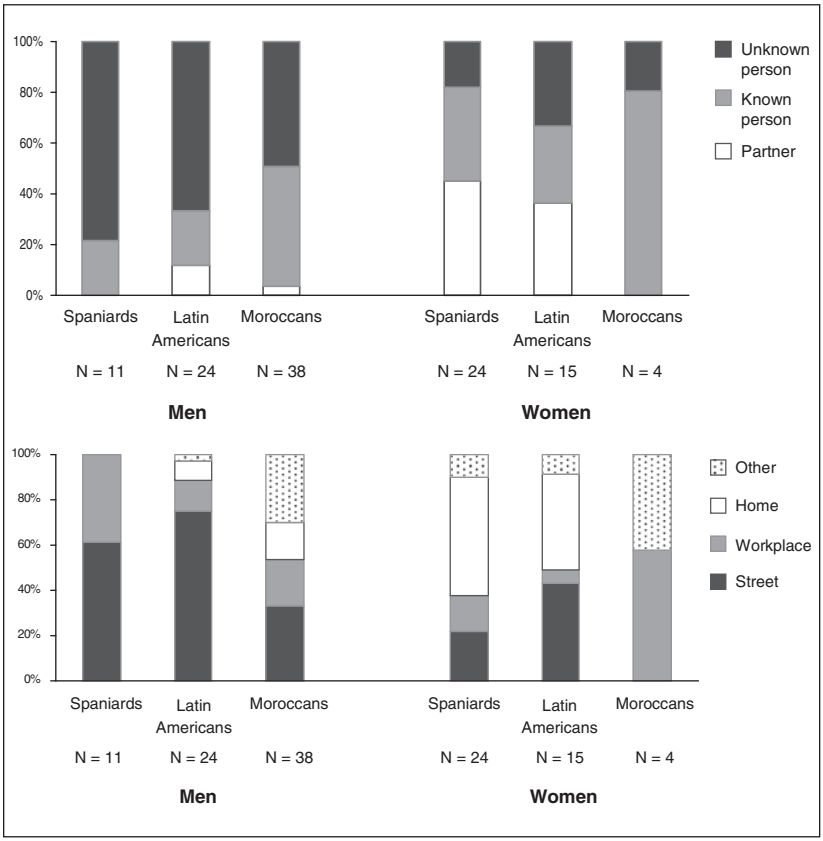

Figure 1. Profile of last aggression by type of aggressor (a) and place (b), by sex and origin (16-64 years)

feeling discriminated, frequency of violence was 20 times higher than in Spaniards. Figure 1 shows the distribution of aggressor and place of last aggression, respectively, by group of origin and sex. Among immigrants, a higher proportion of violence in men was caused by unknown persons, and very seldom in the home, whereas, in women, most aggression was caused in the immediate environment by known persons or partners. Regarding place of aggression, while most assaulted Latin Americans reported aggression in the home, no Moroccans reported having suffered domestic violence.

The frequency of IPV was 1.1% (95% CI [0.4, 1.8]) in Spanish women, and 1.9% (95% CI [0, 4.4]) in Latin Americans. In men, violence committed

by their partner was reported by 0.9% (95% CI [0, 2.7]) of Latin Americans, and 0.5% (95% CI [0, 1.4]) of Moroccans. No cases were reporter neither by Spanish men nor by Moroccan women.

Discussion

In this study, the prevalence of violence was significantly higher among immigrants than among the native population, up to three times more frequent in Latin Americans and almost 6 times more frequent in the Moroccan population, figures that are moderately attenuated bearing in mind the age and sex of the different populations. This finding of immigrants' greater vulnerability to violence is consistent with previous results (Samsó et al., 2007; Vives-Cases et al., 2009a, 2009b).

Identification of factors associated with violence is important for characterizing and preventing this problem. Perception of discrimination was found to be the variable most consistently associated with violence in natives and immigrants alike, though the direction of such association could not be established because of the study design. Other variables, such as low educational level among Latin Americans and low monthly income and marital status (separated/divorced) among the native population, proved to be more frequent among the abused population, as has also been reported by systematic reviews on the topic (Ruiz-Pérez et al., 2006b; Ruiz-Pérez, Mata-Pariente, & Plazaola-Castaño, 2006a; Vives-Cases et al., 2009a). Remarkably, discrimination was the only variable to be associated with violence in the Moroccans. Taking the native population as reference, while abused Latin Americans differed in terms of some of the study variables—excluding discrimination—Moroccans differed in all respects, and in terms of discrimination in particular, with the result that a Moroccan who reported perceiving discrimination was likely to be subjected to aggression almost 18 times more frequently than was a native. As no data for comparison are available, more research in this area is warranted. Furthermore, if perception of discrimination is a good indicator of social integration, it can be surmised, though not proved, that effective measures of integration in the Moroccan population could help to reduce the prevalence of violence. In-depth—for example, qualitative—studies, some already conducted in the workplace but without being linked to violence (Agudelo-Suárez et al., 2009; García et al., 2009), could provide more clues, however.

This analysis has detected a very low rate of IPV, which was similar in the native and Moroccan populations and higher in the Latin American population. The absence and/or low number of reports prevented us from conducting a

more in-depth analysis, beyond a mere description by place and type of aggressor. The low case numbers may be due to the fact that the designated study objective, a wide-ranging health survey, and the measuring instrument used, a 65-item questionnaire, only three items of which addressed violence in general (and that perpetrated by partners in particular), are not best suited to a specific study of this type of violence. An earlier study, also based on the 2006 NHS, reported a very low prevalence of IPV in the female population of Spain as a whole (1%; Vives-Cases et al., 2009a), a figure that was practically the same as ours (1.1%). Nevertheless, studies undertaken with more sensitive instruments specifically designed to analyze gender violence, such as the Index of Spouse Abuse (Plazaola-Castaño, Ruiz-Pérez, & Hernández-Torres, 2008), record higher overall prevalences in immigrants than in Spaniards (27.3% vs. 14.3%; Vives-Cases et al., 2009b). These instruments are more sensitive (91.4%) than specific (76.2%), however, and results must be interpreted with caution (Plazaola-Castaño et al., 2008). Hence, the question used in our study might have been less sensitive than it was specific, thus likely registering reports of situations perceived as serious physical violence while failing to register less serious situations that went unperceived and underreported (Campbell, Martin, Moracco, Manganello, & Macy, 2006). Furthermore, recent immigrants were observed to report violence against their partners more seldom than did natives, yet these differences disappeared among immigrants who had been in the country longer, and even increased in cases where prolonged stay was associated with inability to speak the local language (Gupta et al., 2010). Our study included recent immigrants (from the year 2000 onward), and it is possible that perceived violence attributable to the migratory process might attenuate other perceptions, though our study cannot answer this conjecture. It is noteworthy that Moroccan women reported violence less frequently than did Moroccan men, in contrast to the similar reporting rate registered by both sexes in the other two community groups. In view of the fact that violence was self-reported and that culture may influence perception of violence, a possible culturally related reporting bias in Moroccan women cannot be ruled out (García-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006).

In contrast, this study's generic approach enabled the prevalence of IPV in large population groups of both sexes and different origins to be estimated. Whereas no violence against native men was reported, this was reported—albeit at a low rate—by Latin American and Moroccan men, though the low numbers prevent more detailed analyses from being undertaken. Indeed, in its multinational study on gender violence (García-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005), the World Health Organization (WHO) recommended

that violence against men also warranted attention, though logistic and financial problems prevented this from being done. However, even though this aspect has been addressed by some studies (Ansara & Hindin, 2010; Bair-Merritt et al., 2010; Field & Caetano, 2005; Stuart et al., 2006a, 2006b; Whitaker, Haileyesus, Swahn, & Saltzman, 2007), the principal criticism is the lack of a conceptual scheme that would account for it (Reed, 2008), as that used to explain IPV against women, based on inequality in gender relations, would not uphold it.

When it comes to considering these results, some study's limitations must be borne in mind. As mentioned, the study's cross-sectional nature precludes making any causal inference about the associations found. Besides, the low frequency of the phenomena studied allows for limited analysis or none at all, as in the case of IPV. The questionnaire included a generic question to ask about violent experiences so it was not possible differentiating between distinct types of violence (physical, sexual or psychological) in the analyses. Furthermore, it is conceivable that the interpretation of what constitutes aggression or abuse could be different for some of the groups included, thus affecting the prevalence estimation in those groups. Besides, dealing with emotionally charged behaviors or stigmatizing experiences as IPV or abuse in general is difficult in population surveys, and the possibility of a reporting bias in some participants cannot be ruled out. In spite of that, survey research has been shown to provide a reliable method of determining the extent of health problems such as IPV in other multicultural settings facing similar limitations (Field & Caetano, 2005). Last, a further limitation was the low response rate among Moroccans, though this was higher than that obtained for this same group by other studies (Fassaert, Hesselink, & Verhoeff, 2009) and similar to that obtained by our team in other studies of the native population in which a blood specimen was requested in addition to the interview (Valverde et al., 2006). Despite the above limitations, this study can claim to have made important contributions. To our knowledge, it is the first in Spain to report data on prevalence of violence in both sexes, in a representative sample of the native and immigrant populations, because until now analyses published on violence in Spain have concentrated exclusively on the female gender (Aguar-Fernández, Delgado-Sánchez, Castellano-Arroyo, & Luna del Castillo, 2006; Escribá-Agüir et al., 2006; Plazaola-Castaño, Ruiz-Pérez, Escribá-Agüir, Montero-Pinar, & Cases, 2011; Ruiz-Pérez, Blanco-Prieto, & Vives-Cases, 2004; Ruiz-Pérez et al., 2006a, 2006b, 2006c, 2010; Vives-Cases et al., 2009a, 2009b). Likewise, our study shows results broken down by group of origin, an aspect of interest in view of the fact that culture has a widely varying influence on the incidence of abuse (Samsó et al., 2007),

whereas most of the studies (Samsó et al., 2007; Vives-Cases et al., 2009a, 2009b) address and investigate violence among immigrants as a uniform group, without paying attention to the social, cultural, historical, and political heterogeneity of each group. The inclusion of the general population and especially vulnerable groups, such as immigrants, is one of the objectives of epidemiological research into violence and its magnitude (Ruiz-Pérez, Plazaola-Castaño, & Vives-Cases, 2007).

In Spain, prevention of violence in general and of IPV in particular is approached from different standpoints, including informing/educating the public; placing health staff under a duty to notify reported/suspected aggression to the authorities when attending to end users of the country's public, universal health system (Escribá-Agüir et al., 2006); passing purpose-designed legislation; and informing/raising awareness about the Spanish legal system. Since 2004, specific health laws and programs have been introduced to promote equality between the sexes, with this being one of the government's innovative policies (LO 1/2004, 2004; Ministry of Equality, 2009). More specifically, measures of proven effectiveness (education, counseling) have been taken by the health system to combat the problem, with the exception of early detection or screening targeted at the risk population, something that has shown no great effectiveness when implemented (Nelson, Nygren, McInerney, & Klein, 2004).

This study highlights the greater vulnerability of the immigrant population to the problem of violence, and the latter's association with social (discrimination) and individual factors (educational level). By targeting the factors identified, social integration policies can make a decisive contribution to reducing the problem.

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