

Impact of economic crisis on mental health of migrant workers: what happened with migrants who came to Spain to work?

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Abstract

Objectives To assess changes in mental health in a sample of migrant workers after the eruption of the economic crisis in Spain.

Methods 318 migrant workers were interviewed. Mental health, sociodemographic, and economic crisis related variables were obtained through face-to-face (2008) and phone (2011) interviews. Prevalence of poor mental health (PMH) was compared (2011–2008) and multivariate logistic regression models were fitted.

Results Change in prevalence of PMH was higher in men (aOR 4.63; 95 % CI 2.11–10.16). Subgroups of men showing the largest detrimental mental health effects were: unemployed, with low salaries ($\leq 1,200$ euros) and those reporting family burden. An increase of PMH was found in women, without significant associations.

Conclusions Mental health of migrant workers in Spain has worsened during the economic crisis.

Keywords Working conditions · Economic crisis · Migrants · Mental health · Spain

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Introduction

During the last decade of the 20th century and the beginning of the 21st, Spain has become one of the preferred destinations for migrants, making it one of the countries with the highest proportion of migrants in the European Union (European Commission 2012). The economic growth of the country based mostly on the construction and tourism, and personal services attracted huge amount of foreign workers (Agudelo-Suarez et al. 2009b). Overall, 12.2 % of the population registered in Spain in 2010 was foreign-born compared to 1.6 % in 1998 (Instituto Nacional de Estadística [National Institute of Statistics] 2012b).

Since 2008, Spain has been affected by a deep economic crisis. This situation has represented a severe setback in employment, and the economy has suffered the highest rise in unemployment ever recorded (Directorate-General for Economic and Financial Affairs of the European Commission 2009; Garcia 2010; Instituto Nacional de Estadística [National Institute of Statistics] 2012a): the unemployment rate increased from 11.3 % in 2008 to 21.6 % in 2011, with the rate among immigrants exceeding

30 % in the latter period. An increasing number of studies have analyzed the impact of the economic crisis on health status (Catalano 2009; Davila Quintana and Gonzalez Lopez-Valcarcel 2009; Kentikelenis et al. 2011; Kentikelenis and Papanicolas 2012; Papademetriou et al. 2010; Riva et al. 2011; Shi et al. 2011), and the WHO has documented the particular challenge that the economic consequences of the recessions such as unemployment and losses of income poses for mental health (World Health Organization (WHO): Regional Office for Europe 2011). However, its impact on migrant workers has so far not been analyzed.

The analysis of the occupational health of foreign residents in Spain is steadily developing. Available research shows that migrant workers face precarious jobs, segmented labor market, and risk factors in the workplace. The ITSAL (Spanish acronym for *Inmigración, Trabajo y Salud*) Project, a network of research groups aiming to explore the occupational health conditions of foreign-born residents in Spain, began in 2008 with a cross-sectional survey in a sample of migrant workers (Agudelo-Suarez et al. 2010; Delclos et al. 2011; Sousa et al. 2010), which has continued in 2011 assessing the influence of the current economic crisis on the working conditions and health of these workers. The objective of this report is to assess mental health changes in a sample of migrant workers after the eruption of the economic crisis in Spain.

Methods

This is a two-wave follow-up study. In 2008, a survey was carried out in a quota sample of 2,434 migrants from Morocco, Ecuador, Romania, and Colombia working for at least 1 year in Spain. From this sample, 1,129 agreed to be re-contacted in future research, providing their phone number. In February 2011, 318 of them were localized and interviewed again using the same questionnaire. Details of the sampling and surveying processes are provided elsewhere (Agudelo-Suarez et al. 2009b; Delclos et al. 2011).

Mental health status was the outcome variable and the time period (2011 and 2008) was the main explanatory covariate. Mental health was measured by the 12-item version of the General Health Questionnaire GHQ-12 (Goldberg and Williams 1996). Individuals with a score of 3 or higher were considered to have poor mental health (yes/no). Explanatory variables obtained both in 2008 and 2011 were (a) Sociodemographic: Sex, country of birth, age, and residence status (documented/undocumented) and (b) economic crisis related variables: working situation (employed/unemployed), monthly income (in euros $\leq 1,200$, 1,201, or higher), and family burden (having someone financially dependent on them in Spain and/or their country of origin, yes/no).

A descriptive analysis was carried out for each variable. Prevalence of poor mental health was calculated (stratified by sex) for economic crisis related variables at 95 % confidence intervals (95 % CI). Finally, multivariate logistic regression models with random effects for each individual were fitted (Rabe-Hesketh and Skrondal 2008; Twisk 2003). Odds ratio (OR) of poor mental health in year 2011 (after the crisis) relative to year 2008 (before the crisis) were computed at 95 % CI. Adjusted odds ratio (aOR) by age, country of residence, and legal residence/status with 95 % CI were also calculated. The models were extended to include interaction terms between time period and each of the employment characteristics to estimate OR and aOR within each employment characteristics group. All the analyses were conducted separately for men and women. Calculations were obtained using SPSS 18.0 and Stata 11.0. The study protocol was approved by the local Ethical Committees. Confidentiality was guaranteed throughout the research process and all respondents gave informed consent to participate in accordance with Spanish regulations.

Results

In the sample of 318 migrant workers, 50.6 % were women and 84 % under 45 years of age in 2008. By country of origin, 41 % of the women were from Ecuador, 7 % from Morocco, 19 % from Romania, and 33 % from Colombia. In men, the proportions were 40 % from Ecuador, 33 % from Morocco, 13 % from Romania, and 14 % from Colombia.

As is detailed in Table 1, the already high proportion of migrants with residence permission in 2008 had increased even more in 2011 (from 85 to 97 % in women and from 85 to 95 % in men). At the same time, the labor conditions had deteriorated: the proportion of unemployed in this period increased from 18 to 31 % in women and from 29 to 39 % in men. The proportion of subjects earning $\leq 1,200$ euros per month increased from 68 to 77 % in men, and family burden increased too from 73 to 79 % in women and from 74 to 77 % in men.

Table 2 shows prevalence of poor mental health in both 2008 and 2011 surveys according to working situation, income, and family burden. An increase of the prevalence of poor mental health between 2008 and 2011 was observed in unemployed migrants (from 45 to 63 % in women and from 30 to 60 % in men), those migrants with low salaries $\leq 1,200$ euros (from 35 to 46 % in women and from 24 to 45 % in men) and those migrants with family burden (from 36 to 44 % in women and from 29 to 44 % in men).

Table 1 Characteristics of the sample of migrant workers in 2008 and 2011 ($n = 318$)

Variables	Women				Men			
	2008		2011		2008		2011	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Age (years)								
≤34	73	45.6	61	38.1	96	61.5	66	42.3
35–44	61	38.1	56	35.0	35	22.5	55	35.3
≥45	26	16.3	35	26.9	25	16.0	35	22.4
Country of origin								
Ecuador	66	41.0	66	41.0	63	40.1	63	40.1
Morocco	11	6.8	11	6.8	51	32.5	51	32.5
Romania	31	19.3	31	19.3	21	13.4	21	13.4
Colombia	53	32.9	53	32.9	22	14.0	22	14.0
Legal/residence status								
Documented	137	85.1	149	96.8	133	84.7	143	95.3
Undocumented	24	14.9	5	3.2	24	15.3	7	4.7
Working situation								
Employed	132	82.0	107	69.5	111	70.7	92	61.3
Unemployed	29	18.0	47	30.5	46	29.3	58	38.7
Income (monthly—euros)								
≤1,200	149	92.6	139	90.3	107	68.1	115	76.7
≥1,201	12	7.4	15	9.7	50	31.8	35	23.3
Family burden								
Yes	118	73.3	127	78.9	116	73.9	121	77.1
No	43	26.7	34	21.1	41	26.1	36	22.9
Total	161	100.0	161	100.0	157	100.0	157	100.0

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Missing value: legal status, working situation, and income (women $n = 7$, 4.3 % and men $n = 7$, 4.5 %)

Finally, considering the multivariate regression models for assessing changes in mental health with respect to 2008 (Table 3), after adjusting for age, country of origin, and residence status, a significant association was found in all men (aOR 4.63; 95 % CI 2.11–10.16); specifically those unemployed (aOR 8.34; 95 % CI 2.19–31.75), with low salaries ≤1,200 euros (aOR 5.15; 95 % CI 2.07–12.80), and those reporting family burden (aOR 4.01 95 % CI 1.73–9.26). Also, an increase of the OR in 2011 with respect to 2008 was found in unemployed women and those with familiar burden, although without significant associations.

Discussion

The results of this study, to our knowledge the first research on the impact of the current economic crisis on migrant workers' mental health, show that since the beginning of the economic crisis in Spain, mental health in migrants has

substantially worsened. Statistically significant changes were observed after adjusting for different variables in men, those unemployed with low salaries ≤1,200 euros, and those reporting family burden in their countries of origin. Increase in prevalence of poor mental health in 2011 with respect to 2008 was observed in women, although no significant changes were observed after adjusting for other variables.

Studies conducted in general population have reported a negative impact of economic crises on mental health (Kentikelenis et al. 2011; Kentikelenis and Papanicolas 2012; Riva et al. 2011; Shi et al. 2011; Uutela 2010; World Health Organization (WHO): Regional Office for Europe 2011). Two of the major consequences and factors influencing poor mental health are the reduction of income and an increase in unemployment; this has also been observed in our study. According to Spanish Labour Force Survey (2011), the unemployment rate in migrants was 31.5 % in women and 37.2 % in men. The higher impact among men could be explained by the negative effects of the financial crisis that were strong in the construction and services sectors and had less impact on domestic and care services in private households in the informal economy (Instituto Nacional de Estadística [National Institute of Statistics] 2012a).

Overall, we have observed an increase in the prevalence of reported poor mental health from 2008 to 2011 (from 36 to 43 % in women and from 24 to 41 % in men), and we found a significant increase in men (aOR 4.63; 95 % CI 2.11–10.16). It has been argued that the relationship between worsening of employment conditions, low socio-economic status, and poor mental health are more evident in migrant than in autochthonous workers, since they are exposed to other additional detrimental factors such as uprooting, family burden in their countries of origin, workplace, and social discrimination and these factors make them more susceptible to suffer mental health problems (Agudelo-Suarez et al. 2009a; Agudelo-Suarez et al. 2011).

However, our results may be affected by selection bias and should be taken with caution. Probably, migrant workers who accept to provide their cellular phone number in 2008 and those who were located 3 years later are those with the more favorable conditions as workers in Spain. In fact, this subsample improved their legal status (from around 85 % in 2008 to 95 % in 2011). If our sample represents a privileged subgroup of migrants in Spain, the impact of economic crisis on mental health of Spanish migrant workers may be even higher. Participants in 2011 survey are a highly selected group of participants of 2008 survey. Response rate in 2011 was 32.2 % in relation to 56 % in 2008. So it may be that many of migrants that could not possible to contact have returned to their country of origin because of the economic crisis itself. This seems

Table 2 Number of cases, prevalence and 95 % confidence interval of poor mental health of migrant workers in 2008 and 2011 by economic crisis related variables and sex ($n = 318$)

Variables	Women						Men					
	2008			2011			2008			2011		
	c	P	95 % CI	c	P	95 % CI	c	P	95 % CI	c	P	95 % CI
Working situation												
Employed	45	34.1	25.6–42.6	37	34.6	25.1–44.1	23	20.7	12.7–28.7	27	29.3	19.5–39.2
Unemployed	13	44.8	25.0–64.7	29	63.0	48.0–78.1	14	30.4	16.1–44.8	35	60.3	46.9–73.8
Income (monthly)												
≤1,200	52	34.9	26.9–42.9	63	45.7	37.0–54.3	26	24.3	17.7–32.9	52	45.2	35.7–54.5
≥1,201	6	50.0	21.1–78.9	3	20.0	4.3–48.1	11	22.0	9.5–34.5	10	28.6	12.2–45.0
Family burden												
No	15	34.9	19.5–50.3	14	41.3	23.2–59.2	25	21.6	13.6–29.5	49	40.5	31.3–49.7
Yes	43	36.4	27.3–45.5	55	43.7	34.6–52.7	12	29.3	14.1–44.1	16	44.4	26.8–62.1
<i>Total</i>	58	36	29.0–43.7	69	42.9	35.5–50.6	37	23.6	17.6–30.8	65	41.4	34.0–49.2

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c number of cases of individuals reporting poor mental health, *P* prevalence of poor mental health (per 100 individuals), *95 % CI* 95 % confidence interval

Table 3 Odds ratio and 95 % confidence interval of poor mental health prevalence in 2011 relative to 2008 by economic crisis related variables and sex ($n = 318$)

Variables	Women				Men			
	OR	95 % CI	aOR	95 % CI	OR	95 % CI	aOR	95 % CI
Working situation								
Employed	1.08	0.59–1.98	1.17	0.61–2.23	2.17	0.95–4.95**	2.58	1.04–6.39*
Unemployed	2.14	0.69–6.59	2.60	0.75–9.03	5.00	1.77–17.46*	8.34	2.19–31.75*
Income (monthly)								
≤1,200	1.71	1.00–2.93**	1.71	0.94–3.11**	4.23	1.88–9.51*	5.15	2.07–12.80*
≥1,201	0.24	0.03–1.74	0.19	0.02–1.52	1.85	0.49–6.93	1.81	0.46–7.18
Family burden								
No	1.64	0.55–4.86	1.32	0.39–4.52	2.91	0.81–10.47	4.26	1.00–18.23**
Yes	1.37	0.77–2.45	1.45	0.77–2.72	3.84	1.77–8.37*	4.01	1.73–9.26*
<i>Total</i>	1.44	0.87–2.37	1.65	0.95–2.86**	3.55	1.82–6.92*	4.63	2.11–10.16*

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OR Odds ratio of poor mental health in 2011 relative to 2008; *aOR* Odds ratio of poor mental health in 2011 relative to 2008 adjusted by age, country of origin, and legal/residence status; *95 % CI* 95 % confidence interval

* $p < 0.05$, ** $p < 0.10$

to be confirmed by statistics of residential variations indicating that in 2010 approximately 12 % of migrants aged 16–24 from Colombia, Ecuador, Morocco, and Romania had left Spain (Instituto Nacional de Estadística [National Institute of Statistics] 2012b).

The analysis of the effects of economic crises on social protection systems, employment, working conditions, physical mental and social health, and the barriers to the access to health in the population is a priority issue for public health. In this analysis, migrants should be considered as a more vulnerable group with particular needs, for

example, in relation to their possibilities of return to their countries and to the increase of marginalization and social exclusion. Active policies, strategies, and labor market programs, especially for vulnerable groups, could help to prevent some of the adverse health effects of economic crisis.

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Conflict of interest The authors declare no conflict of interest.

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