

Symptoms and online intimate partner violence during the Covid-19 Quarantine

Síntomas psicopatológicos y violencia *online* de pareja durante la cuarentena por el covid-19



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Abstract:

Introduction: The Covid-19 pandemic has affected the physical and mental health of the population in general, in addition, during the quarantine, online intimate partner violence behaviours may arise, which increases the probability of psychopathological symptoms, with alterations in emotional and affective states.

Objective: The purpose this study was examine the relationship between psychopathological symptoms and online intimate partner violence behaviours during the Covid-19 pandemic.

Method: The design was correlational cross-sectional comparative, the sample nonprobability with the participation of 588 people of between 18 and 46 years of age. Symptom Checklist- SCL-36, Cyber dating abuse questionnaire and Sociodemographic questionnaire

Results: Out of the total, 60 % reported having perpetrated a controlling behaviour and 54,3 % claimed to have been a victim of online abuse in your relationship, during the quarantine. It was found that there is a positive and significant relationship between cyber abuse, for both victimization and perpetration, and the psychopathological Symptoms by the Symptom Check List-36. A positive and significant relationship was also found between some symptoms assessed by the Symptom Check List-36 and sleep quality, cigarette consumption, and the intake of alcoholic and energising beverages during the quarantine. These results show that mental health may be affected by the confinement during the pandemic. Moreover, during the quarantine, intimate partner violence behaviours may arise, altering the emotional and affective state of individuals, with the appearance of symptoms of psychological disorders.

Conclusions: Therefore, future investigations should be geared towards intervention programmes to reduce the psychological impact on the people affected.

Keywords: psychopathological symptoms, online intimate partner violence, mental disorders, Covid-19.

Resumen:

Introducción: La pandemia por Covid-19 afecta la salud física y mental de la población en general, además, durante el tiempo de cuarentena se puede presentar violencia *online* de pareja, lo que aumenta la probabilidad que se presenten síntomas psicopatológicos, con alteraciones en los estados emocionales y afectivos.

Objetivo: Por lo tanto, este estudio examinó la relación entre los síntomas psicopatológicos y comportamientos de violencia *online* de pareja durante Pandemia de covid-19.

Método: El diseño fue correlacional comparativo transversal y la muestra no probabilística con la participación de 588 personas (18 y 46 años); los instrumentos que se emplearon en esta investigación fueron el cuestionario SCL-36, Escala de abuso *online* en relaciones y un cuestionario sociodemográfico.

Resultados: El 60 % informó haber utilizado conductas de control y el 54,3 % refirieron haber sido víctima de abuso *online* en su relación en el tiempo de cuarentena. Se encontró que existe una relación positiva y significativa entre las conductas de violencia *online* tanto para la victimización y perpetración, con los síntomas psicopatológicos que evalúa SCL-36. También se encontró una relación significativa y

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positiva con algunos síntomas que evalúa el SCL-36 y la calidad del sueño, consumo de cigarrillo, ingesta de bebidas embriagantes y energizantes en el tiempo de cuarentena.

Conclusiones: Estos resultados muestran que pueden aparecer síntomas psicopatológicos por el confinamiento durante la pandemia; además, que durante la cuarentena se pueden presentar conductas de violencia *online* en la pareja alterando el estado emocional y afectivo con la aparición de síntomas de trastornos psicológicos, por lo tanto, las futuras investigaciones deben dirigirse a programas de intervención para disminuir el impacto psicológico en las personas afectadas.

Palabras clave: síntomas psicopatológicos, violencia *online* de pareja, trastornos mentales, covid-19.

1. INTRODUCTION

People's mental health can be altered by intrinsic and extrinsic factors, changing the way in which they perceive their context and their role in life, which makes the appearance of mental and behavioural disorders more likely. Some factors that may put an individual's mental state at risk are the death of a relative or loved one, work or academic problems, suffering from a disease, an economic crisis, or a breakup with a partner, among others (Suárez, 2010).

At present, a factor that could put mental health at risk are sanitary emergency situations, such as the pandemic caused by SARS-CoV2 (Covid-19), which has led to the adoption of strict measures of social distancing and quarantine. This has given rise to new ways of carrying out work and educational activities and, in some cases, resulted in the loss of work positions, with the subsequent search for alternatives in order to generate economic resources (an income). For example, during the severe acute respiratory syndrome (SARS) epidemic, people have displayed irrational behaviours, such as the purchase and storage of large quantities of food and cleaning products. In addition, there were signs of alterations in mental health (Li Lj, Zhang y Wu, 2014).

In 2003, SARS affected more than 30 countries, not only in terms of physical health, but also the mental health of the populations, as reported by Ko, Yen, Yen, and Yang, (2006). Particularly, the people who were in quarantine or indirectly exposed to the virus during the epidemic had a tendency towards experiencing symptoms of depression, due to the impact and the speed of transmission of the respiratory syndrome, the economic recession, poor health conditions, and inadequate social support.

There was another epidemic in 2013, with the avian flu H7N9, which originated in Asia due to the exposure of people to poultry which was directly or indirectly contaminated. Zhang *et al* (2015) evaluated the cognition and the emotional response of 2709 inhabitants of the Zhejiang province (China), during the epidemic. It was found that the high level of risk perception and

the poor response capacity of the subjects were positively related with depression, neurasthenia, fear and hypochondria.

At the end of 2019, WHO announced the appearance of an infection produced by the SARS-CoV-2 virus, or Covid-19, a disease that spread rapidly and a global pandemic was declared on March 11th, 2020. This new pandemic has caused serious effects on a physical, psychological, social and economic level. At a psychological level, some research projects have shown an increase in the prevalence of anxiety, depression, stress, post-traumatic stress disorder, sleeping disorders, as well as an increase in the consumption of alcoholic beverages to harmful levels, possibly associated with the concern caused by the fear of infection, the economic crisis, the difficulty in access to financial aid, academic problems, among others. By age group, people under 35 have shown psychological effects, as well as widowed, divorced and single people, showing higher levels of anxiety and depression (Lei, Huang, Zhang, Yang, Yang, and Xu (2020); Ahmed, Ahmed, Aibao, Hanbin, Siyu, and Ahmad (2020); Huang, y Zhao, (2020)).

For example, Lei, L., Huang, X., Zhang, S., Yang, J., Yang, L., & Xu, M. (2020) evaluated the prevalence of and factors associated with anxiety and depression in 1593 Chinese citizens who either had been, or had not been affected by the quarantine during the Covid-19 pandemic. It was found that 8,3 % exhibited anxiety, of which 5,3 % suffered from mild anxiety, 2,1 % from moderate anxiety, and 0,4 from severe anxiety. Regarding depression, researchers reported that 14,6 % presented symptoms, of which 8,3 suffered from mild depression, 5,2 % had moderate depression, and 1,1 had severe depression. When comparing the group of affected and not affected individuals, the prevalence of anxiety and depression was significantly higher within the “affected group”. The variables associated with depression and anxiety were age, socioeconomic level, marital status, health self-perception, concern about the virus, economic problems and the financial recession.

In the same way, Cai, W., Lian, B., Song, X., Hou, T., Deng, G. and Li, H. (2020) researched into the state of mental health of 1521 health workers who fought against Covid-19 and examined the relationship between social support, resilience and mental health. Among the results of the investigation, it can be highlighted that 14,1 % presented some sort of psychological effects. In addition, the less experienced workers obtained statistically significant scores regarding interpersonal sensitivity and anxiety. Finally, this group obtained significantly lower scores in resilience, tenacity, fortitude, and optimism.

Moccia *et al.* (2020) investigated psychological disorders in 500 Italian participants, aged 18 to 75 during the first phase of the Covid-19 pandemic. Moreover, they analysed as potential mediators the elements of temperament and attachment styles. They found that 19,4 % presented mild psychological anguish while in 18,6 % of cases, it was moderate to severe. The risk factors associated with psychological anguish were cyclothymia, symptoms of depression, anxiety, and the need for approval.

Additionally, during the period of the quarantine intimate partner violence behaviours may arise, in men as well as women, as a result of the strict confinement conditions, a history of mental health disorders and intra familiar violence, more time spent together at home, work overload, among others, which could affect the mental health of family members (Mazza, Marano, Lai, Janiri, & Sani, G, 2020). Some behaviours of the aggressors to their victims, described by Zero & Geary (2020), range from controlling economic resources and food to total isolation, without the possibility to contact any family member or support network, under the threat of retaliation against the victim or other members of the household.

The investigations previously described indicate that a large number of people could be experiencing Psychopathological Symptoms and behavioural issues during the quarantine produced by Covid-19. In Colombia, up until the moment of writing, there are no available investigations which identify the Psychopathological Symptoms and associated factors during the quarantine. Therefore, this descriptive-comparative study had the objective of analysing the relationship between the Psychopathological Symptoms and *Online* intimate partner violence, during the pandemic.

2. METHOD

2.1. Participants

The sample was composed of 588 Colombian participants, of which 75 % (443) of participants identified as cisgender women and 24,7 % (145) as cisgender men, aged between 18 and 46 years of age ($M=25,3$; $TD= 8,2$ years). Out of the total, 52,4 % had completed their university studies, 22,3 % had not completed their university studies, 14,5 % had completed postgraduate studies, 7,7 % had completed technical studies, and 3,2 % had only completed their secondary school studies. Strata 3 or middle-income was the most common socio-economic level reported, with 47,8 % of cases, followed by strata 2 or low-income with 24,8 %. All the participants were in a relationship or had ended a relationship during the quarantine (453 were

in a relationship and 135 had ended their relationship with their partner during the quarantine). At the time of responding to this survey, 72,8 % of the participants were in a dating relationship, 14,1 % were in a common law relationship, and 11,6 % were married. Also, 40,1 % reported that they had a job during the quarantine.

It was a non-parametric sample; the participants were contacted through social media and email. Participation in the tests, programmed in Google Forms, was voluntary. In total, 626 people submitted a response. However, 38 (6 %) were discarded because they did not meet the inclusion criteria: being over 18 and having a relationship of at least 1 month in the previous 6 months or having ended a relationship during the time of the Covid-19 quarantine.

2.2. Instruments

2.2.1. Socio-demographic Survey

By means of a survey designed by a group of researchers, the following information about the participants was collected: age, sex, and level of education reached. In addition, there were some questions to evaluate the quality of their sleep: How many days a week have you had difficulties sleeping? How many days a week have you had difficulties remaining asleep? How many days a week have you had difficulties with excessive sleepiness? How many days a week have you had difficulties waking up at the usual time? In the last 15 days, on average: how many hours do you sleep per night? How long are you in bed before you fall asleep? How long do you stay in bed after waking up and before getting up? On the use of psychoactive substances and alcoholic and energising beverages during the quarantine: Have you smoked cigarettes during the quarantine? How often have you smoked cigarettes during the quarantine? Have you consumed alcoholic beverages during the quarantine? How many times have you consumed alcoholic beverages during the quarantine? Have you consumed psychoactive substances during the quarantine? How often have you consumed psychoactive substances during the quarantine? Have you consumed energising substances or beverages during the quarantine? How often have you consumed energising substances or beverages during the quarantine? Information about the dynamics of the relationship was also collected: During the quarantine due to Covid-19, are you or have you been afraid of your partner or ex-partner? During the Covid-19 quarantine, do you feel or have you felt that your life is or has been at risk due to your partner or ex-partner? During the Covid-19 quarantine, have you felt mistreated by your partner or ex-partner? In particular, if the participants

considered themselves to be jealous with their partner, the participants had felt at risk or maltreated by their partner during the quarantine as a result of Covid-19.

2.2.2. Cyber Dating Abuse Questionnaire-CDAQ (Borrajo, Gámez-Guadix, Pereda *et al.*, 2015)

This is a questionnaire which permits the identification of violent behaviours suffered and perpetrated by electronic means. It is composed of two factors: the first is denominated direct aggressions and the second is called controlling behaviour. In total, this instrument has 40 items which are parallel distributed to report victimization (20 items) and perpetration (20 items) of each one of the forms of mistreatment contemplated in the questionnaire. It uses a Likert scale with six response options. For this research, the scale was: Never (0); not in the past year (1) it has happened before but rarely: once or twice (2); sometimes: between 3 and 10 times (3); usually: between 10 and 20 times (4), and always: more than 20 times (5). The original version includes adequate indexes of content validity, construct validity and convergent validity, in accordance with the data obtained from 788 Spanish people from 18 to 39 years of age, evidencing alpha indexes between 0,73 and 0,87. The participants responded the questions of the instrument taking into account the events that had taken place during the Covid-19 quarantine.

2.2.3. Symptom Checklist - SCL-36- (Londoño, Agudelo, Martínez, Anguila, guirre, Aria, 2018)

This instrument is a reduced version of the SCL-90 revised and developed by Derogatis (1975, 1994). It allows the rapid detection of the symptoms of mental disorders. This questionnaire is self-administered and is used in both, clinical and general populations. The original SCL-90 version evaluates psychopathological symptoms: somatisation, obsession and compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. Moreover, it includes the following indexes: global severity, malaise, and positive symptoms. The reduced version of the SCL-90 evaluates psychopathological symptoms of: depression, obsession and compulsion, somatisation, anxiety, hostility, phobic anxiety and paranoid ideation. Londoño, *et al.*, (2018) evaluated the validity and reliability of the reduced version in 214 clinical patients who received psychological services in Colombia. The depression factor was composed of 8 items and explained 13,1 % of the variance. The obsession/compulsion factor included 6 items and explained 9,7 % of the variance. The somatisation factor was made up of 5 items and explained 8,9 % of the variance. The anxiety factor included

6 items and explained 8,5 % of the variance. The hostility factor had 4 items and explained 7,6 % of the variance. The phobic anxiety factor included 4 items and represented 7,0 % of the variance and the paranoid ideation factor included 3 items and explained 5,9 % of the total variance. The reliability of the instrument oscillated between 0,67 and 0,88.

2.3. Procedure

The battery of tests was programmed in Google Forms. Then, social media were used to invite people over 18 years of age and who had been in a relationship for at least 1 month out of the previous 6 months, or had ended their relationship during the period of the Covid-19 pandemic. Before the participants filled out the questionnaire, the objective, characteristics, risks and scope of the investigation were explained to them in order for them to give their informed consent of participation. The collection of data was carried out between April 29th and May 8th, 2020. In the format, the option was given for the participants to include their email address in case they required any psychological support or feedback from the results of the investigation.

2.4. Statistical analysis

The statistical analysis was carried out using the program SPSS version 21.0. Descriptions were calculated using frequencies, percentages, central tendencies (mean) and measures of dispersion (SD) in order to characterise the participants. Student's t-test was used for independent samples and Pearson's correlation coefficient.

2.5. Ethical considerations

Based on resolution 008430 of 1993, this study corresponds to a minimal risk investigation. In addition, informed consent was solicited for participation, where the objectives, procedures, possible consequences and social-scientific relevance of the work was explained. The ethical principles of the work are framed within Law 1090 Of September 6th, 2006, which regulates the profession of psychology, guaranteeing the right to not participate, as well as the confidentiality and anonymity of the participants and the right to be informed about the results.

3. RESULTS

Out of the total of the participants, 10 % reported that they had felt mistreated by their partner, while 5,4 % felt that their lives were at risk, and 10,9 % were afraid of their partner during the quarantine.

Also, 54,3 % of the participants reported to have been a victim of at least one *online* controlling behaviour by their partner during the Covid-19 quarantine (52,1 % of the women and 60,7 % of the men). With respect to aggressive behaviour *online*, 21,1 % stated that their partner carried out at least one of these actions on social media (17,4 % of the women and 32,4 % of the men). Similarly, 60 % indicated having realized a controlling behaviour *online* towards their partners during the quarantine (60,7 % of the women and 57,9 % of the men) and 17,3 % had exercised aggression on social media (12,5 % of the women and 20 % of the men).

Concerning the use of psychoactive, alcoholic or energising substances or beverages during the quarantine, the findings were the following: 13,8 % of the participants smoked cigarettes (7,7 % smoked 1 cigarette per week and 2,4 % smoked between 1 and 5 cigarettes); 48 % consumed alcoholic beverages (17,9 % consumed them once a week, 15,5 % twice a week, and 10,5 % five times a week); 4,6 % used some type of psychoactive substance (2 % done so in the previous month and 1 % once in the previous week), and 13,9 % ingested energising substances or beverages (6,5 % once during the quarantine, 4,4 % once a week, and 1,2 % from two to five times a week).

When enquiring into the participant's quality of sleep during the time of the Covid-19 quarantine, 74,8 % reported they had difficulties sleeping at least once a week (29,9 % had problems sleeping once or twice a week, 15,3 % three days a week, 16,5 % between four and five times a week, and 13 % between six and seven times a week). Besides, 55,8 % mentioned problems remaining asleep (27 % between one and two days, 15,5 % three days, and 13,3 % more than four days). In addition, 43,2 % described that they experienced excessive sleepiness (19 % between one and two days, 11,4 % three days, and 12,4 % more than four days). Finally, 61,6 % claimed that they had problems waking up at the regular time at least once a week, 21,3 % between one and two days, 16,8 % three days, and 23,4 % more than four days.

In Table 1, the results of the differences of the mean with the Student's t test statistic among different groups of the study sample can be observed. When comparing men and women with the abbreviated version with 36 symptoms, significantly greater differences can be observed in women for the following factors: Depression (Men: mean = 10, SD 7,7; Women: mean 12,9; SD 7,8; $p = \leq 0,05$), and Somatisation (Men: mean = 3,8, SD 4,3; Women: mean 4,8; SD 4,7 $p = \leq 0,05$). When analysing the 36 symptoms in relation to being in a relationship or having terminated a relationship during the Covid-19 quarantine greater and more significant differences were also

found in people who had terminated a relationship, for the seven factors evaluated by the SCL-36. Therefore, the people who ended a relationship during the quarantine obtained higher scores in symptoms of depression, obsession-compulsion, somatisation, anxiety, hostility, phobic anxiety, and paranoid ideation in comparison to those who were in an active relationship. At the same time, the participants in the study who described themselves as jealous obtained higher scores in symptoms of depression, obsession-compulsion, somatisation, anxiety, hostility, phobic anxiety, and paranoid ideation, in comparison to those who do not consider themselves to be jealous (see Table 1).

Table 1.

Analysis of the differences between men and women, and symptoms of seven mental disorders (SCL-36)

		MEN (N=145)		WOMEN (N=443)		T	EFFECT SIZE (COHEN'S D)
		M	SD	M	SD		
	Depression	10	7,7	12,6	7,8	3,467	0,33
	Obsession Compulsion	9,3	6,4	9,8	6,8	0,697	0,07
	Somatization	3,8	4,3	4,8	4,7	2,243	0,22
	Anxiety	5,6	6,5	5,6	6,3	0,060	0
	Hostility	1,7	3,2	1,8	3,3	0,222	0,03
	Phobic Anxiety	1,7	3,1	1,7	2,8	0,067	0
	Paranoid Ideation	2,2	3,4	1,9	2,8	-1,003	0,10
DID YOU END AN INTIMATE RELATIONSHIP WITH A PARTNER DURING THE QUATANTINE?							
		No (453)		Yes (135)		t	
		M	SD	M	SD		
Symptom Checklist-36	Depression	11,1	7,5	14,8	8,4	-4,906	0,48
	Obsession Compulsion	9,2	6,5	11,1	7,1	-2,752	0,29
	Somatization	4,2	4,4	5,7	5,2	-3,232	0,33
	Anxiety	5,2	6,3	6,9	6,4	-2,682	0,27
	Hostility	1,6	3,2	2,3	3,6	-2,317	0,21
	Phobic Anxiety	1,5	2,6	2,2	3,7	-2,365	0,20
	Paranoid Ideation	1,6	2,6	2,9	3,7	-4,311	0,37
	DO YOU CONSIDER YOURSELF TO BE JEALOUS?						
		Yes (329)		No (258)		t	
		M	SD	M	SD		
	Depression	13,8	7,7	9,6	7,2	6,814	0,56
	Obsession Compulsion	10,7	7	8,3	6	4,342	0,36
	Somatization	5,1	4,6	4	4,7	2,916	0,21
	Anxiety	6,7	6,7	4,2	5,45	4,856	0,4
	Hostility	2,5	3,8	0,89	2	6,511	0,51
	Phobic Anxiety	2	3,2	1,3	2,3	3,046	0,25
	Paranoid Ideation	2,3	3,0	1,5	2,7	3,071	0,28

When comparing *online* violent behaviour between men and women, no statistically significant differences were found by sex. When analysing said behaviours in relation to being in a relationship or having terminated a relationship during the quarantine, greater and more statistically significant differences were found in those who had ended a relationship during the quarantine, in the victim of control and aggression factors, in addition to significant differences in the *online* aggression perpetration factor. In the same vein, the people who describe themselves as jealous with their partner, present greater and more significant differences in the control factor, in perpetration as well as in victimization (see Table 2).

Table 2.

Analysis of the differences between men and women, and online abuse

		MEN (N=145)		WOMEN (N=443)		T	EFFECT SIZE (COHEN'S D)
		M	SD	M	SD		
Online Victimization	Control	5,3	7,2	4,1	7,6	-1,629	0,16
	Aggressions	1,3	3,5	0,71	2,8	-1,948	0,20
Online Perpetration	Control	3	4,1	3,8	6	1,592	0,14
	Aggressions	0,71	2,5	0,48	1,9	-1,159	0,10
DID YOU END AN INTIMATE RELATIONSHIP WITH A PARTNER DURING THE QUATANTINE?							
		No (453)		Yes (135)			
		M	SD	M	SD	t	
Online Victimization	Control	3,9	7	6,1	8,7	-2,991	0,30
	Aggressions	0,57	2,6	1,8	4	-4,323	0,41
Online Perpetration	Control	3,4	5,4	4,2	6,1	-1,293	0,14
	Aggressions	0,40	1,9	0,98	2,7	-2,783	0,27
DO YOU CONSIDER YOURSELF TO BE JEALOUS?							
		No (329)		Yes (258)			
		M	SD	M	SD	t	
Online Victimization	Control	5,6	8,5	2,9	5,7	4,383	0,36
	Aggressions	0,88	2,6	0,84	3,4	0,150	0,01
Online Perpetration	Control	5,1	6,3	1,6	3,8	7,819	0,67
	Aggressions	0,56	1,3	0,50	2,8	0,336	0,03

With the intention of identifying the relationship among the variables studied, a correlation analysis was carried out using the Pearson coefficient, the results of which can be seen in Table 3. It was found that there is a positive and significant relation between *online* violent behaviours, both for perpetration and victimization, with the symptoms of depression, obsession-compulsion, somatisation, anxiety, hostility, phobic anxiety, and paranoid ideation. A significant and positive relationship was also found with some of the variables of sleep quality during the quarantine and the symptom patterns evaluated by SCL-36, consequently, the greater the number of days with difficulties

sleeping, excessive sleepiness, and waking up at the regular time, the greater the symptom patterns of depression, obsession-compulsion, somatisation, anxiety, hostility, phobic anxiety, and paranoid ideation (see Table 3). Finally, a positive and significant relation is observed between smoking and ingesting alcoholic and energising beverages during the quarantine, and the patterns of symptoms evaluated by the SCL-36.

Table 3.

Analysis of the relationship between symptoms of seven mental disorders (SCL-36) and cyber abuse, quality of sleep and the use of psychoactive substances

			DEPRE	O_COMP	SOMAT	ANSI	HOST	ANS_FÓB	ID_PAR
Intimate partner violence	Online Victimization	Control	0,248	0,311	0,186	0,189	0,203	0,027	0,247
		Aggressions	0,233	0,242	0,198	0,208	0,217	0,165	0,297
	Online Perpetration	Control	0,321	0,299	0,265	0,234	0,248	0,074	0,262
		Aggressions	0,248	0,249	0,196	0,209	0,162	0,120	0,278
	In the last 15 days, on average, how many hours have you slept per night?		-0,215	-0,171	-0,209	-0,229	-0,154	-0,112	-0,192
Quality of sleep during the quarantine	How many days a week have you had difficulty falling asleep?		0,281	0,332	0,327	0,368	0,223	0,175	0,211
	How many days a week have you had excessive sleepiness?		0,339	0,456	0,343	0,380	0,304	0,246	0,335
	How many days a week have you had difficulty waking up at the usual time?		0,201	0,305	0,164	0,202	0,196	0,160	0,242
	How often have you smoked cigarettes during the quarantine?		0,068	0,089	0,097	0,129	0,143	0,129	0,138
Use of psychoactive, alcoholic, or energising substances	How often have you consumed energising substances or beverages during the quarantine?		0,139	0,180	0,211	0,256	0,188	0,063	0,121
	How often have you consumed psychoactive substances during the quarantine?		-0,012	0,049	0,018	0,020	0,040	0,029	-0,018
	How many times have you consumed alcoholic beverages during the quarantine?		0,060	0,117	0,096	0,089	0,012	0,048	0,108

Note: DEPRE= Depression; O_COMP = Obsession Compulsion; SOMAT = Somatisation; ANSI= Anxiety; HOST = Hostility; ANS_FÓB = Phobic Anxiety; ID_PAR= Paranoid Ideation

4. DISCUSSION

The objective of this work was to identify and examine the relationship between symptoms of mental disorders and intimate partner violence during the Covid-19 quarantine. The results indicate that a significant percentage of the participants suffered or carried out intimate partner violence throughout this period. One in ten participants reported having felt mistreated by their partner during this period, while 5,4 % felt that their lives were at risk and 10,9 % were afraid of their partner. Additionally, approximately half of the participants received or perpetrated a controlling behaviour towards their partner by electronic means and approximately 20 % suffered or pe-

trated an aggression by electronic means. The absence of statistically significant differences between sexes in the frequency of violent behaviours, both received and perpetrated by these means, suggests that the aggressions were independent of the sex of the participants.

These results suggest that, during the quarantine, behaviours of intimate partner violence may have increased among the participants, which is consistent with the reports regarding the increase in the number of cases of family violence and violence against women that have been registered in Colombia since the mandatory quarantine began, on April 24th, 2020, at midnight. Thus, the *Observatorio Colombiano de Mujeres (Colombian Women's Observatory, 2020)* reported a 142 % increase in the number of intimate partner violence complaints between March 25th and April 11th, with respect to the same period in the previous year. By April 20th, a total of 9000 calls and text messages to different telephone support lines had been registered in the capital of Colombia, asking for help. This situation was similar in other cities, which means an increase of 982 cases during the quarantine and this led to the reopening of the Family Services Division (*Noticias Caracol, 2020*). It is possible that, as a result of the quarantine, these complain will not reach the *Instituto Nacional de Medicina Legal y Ciencias Forenses (National Institute of Legal Medicine and Forensic Sciences - INM y CF, by its acronym in Spanish)*, an entity which reported a decrease in the cases of intimate partner violence and other types of family violence in Colombia for the period January-April, with respect to the same period during the previous year (*INM y CF, 2020*). World-wide, the World Health Organization (*WHO, 2020*), indicates that, since the surge of Covid-19, reports from China, the United Kingdom and the United States suggest an increase in the cases of domestic violence.

It is possible that the stress caused by the situation of confinement combined with other circumstances, such as uncertainty with respect to the economic and work situation, the loss of economic resources and of employment, in many cases, the fear of infection, the isolation from social and family support networks, the work overload of those individuals who continue to work and the difficult access to first necessity goods, among others, favour the perpetration of intimate partner violence behaviours, particularly in those people whose individual and contextual characteristics are conducive to that type of violence (*Gelder et al., 2020; Hoseinnezhad et al., 2021*). Moreover, many of the strategies of intimate partner violence perpetration overlap with the social restriction measures of the quarantine, such as the isolation from social

and family support networks, leading to an increase in the consumption of alcohol during these circumstances facilitating violence (Gelder *et al.*, 2020).

Furthermore, an important percentage of the participants reported having consumed some alcoholic beverage during the quarantine (48 %), an energising beverage (13,9 %), cigarettes (13,8 %) or some type of psychoactive substance (4,6 %), which is consistent with the results of a study conducted by Devaraj and Patel (2020), based on data collected from 5132 Americans, surveyed between March and April 2020, in which the effect of the confinement on the consumption of alcohol and marihuana was evidenced. It is possible that the increase in the consumption of substances is a consequence of the increase in negative emotions, such as fear, anxiety, stress, sadness, frustration, and boredom, caused by the aforementioned circumstances related to the quarantine (Devaraj & Patel, 2020; Razai, Oakeshott, Kankam, Galea & Strokes-Lampard, 2020). This would explain the statistically significant correlation found between the consumption of cigarettes with all the psychopathological symptoms examined through the SCL-36 (depression, obsession-compulsion, somatisation, anxiety, hostility, phobic anxiety, and paranoid ideation) and the correlation between the consumption of energising and alcoholic beverages with the majority of the symptoms.

At the same time, a high percentage of the participants reported having had difficulties sleeping (74,8 %) and waking up at their regular time (61,6 %) at least once a week, together with difficulties remaining asleep (55,8 %) and excessive sleepiness (43,2 %) during the quarantine. These difficulties were also reported in previous quarantines (Brooks *et al.*, 2020) and are probably caused by the negative circumstances produced by this situation (Razai *et al.*, 2020). Besides, the frequency in the sleeping problems examined correlated significantly with all the symptoms measured with the SCL-36, which indicates that said difficulties increase in line with the frequency of these symptoms. The American Association of Psychiatry (2014) highlights that sleeping disorders are generally coupled with depression, anxiety, and cognitive changes, and that the people who suffer from depressive disorders and anxiety tend to have difficulties sleeping.

The frequency of controlling behaviours and aggressions received by virtual means also correlated significantly with the frequency of all the psychopathological symptoms examined with the SCL-39, although controlling behaviours suffered did not correlate significantly with scores obtained in the phobic anxiety scale. The above indicates that victims of domestic violence could present a greater risk of mental health disorders during the quarantine

and that the confinement could exacerbate the incidents caused by this type of violence (Mazza, Marano, Lai, Janiri & Sani, 2020; Razai *et al.*, 2020). Additionally, these disorders could be intensified due to confinement, given that this situation limits the possibilities of receiving guidance and help, and victims might continue in the conflictive relationship because of economic reasons (Mazza *et al.*, 2020).

At the same time, the frequency of controlling behaviours and aggressions perpetrated by electronic means correlated significantly with all the symptoms mentioned, except for phobic anxiety, which did not correlate with the controlling behaviours perpetrated. It is possible that these symptoms are a reflection of the emotional load generated by the stressful circumstances that result from the confinement, increasing the probability of perpetrating a violent behaviour towards a partner among those who show individual and contextual characteristics that favor this type of violence. On the other hand, it is possible that some participants present mental disorders, a circumstance that increases the risk of perpetrating domestic violence (Mazza *et al.*, 2020; Yu *et al.*, 2019).

With regard to the difficulties examined, women reported more symptoms of depression and somatisation than men, results which are compatible with those of the study by Devaraj and Patel (2020), who found that the movement restrictions had a small effect on psychological distress, but that this effect was higher among women. In the community in general, the symptoms examined by the SCL-90 tend to be more common among women (Sánchez & Ledesma, 2009), so it is possible that they have been exacerbated by the quarantine.

Furthermore, the results show that the participants who reported having ended a relationship during the quarantine, presented a greater frequency in all the psychopathological symptoms examined, as well as a greater frequency of aggressive and controlling behaviour perpetrated by electronic means. However, they also received more aggressive behaviours *online* than the participants who did not report having ended a relationship during the quarantine. It is possible that these controlling and aggressive behaviours led to the break-up in the first place, and that said break-up, at the same time, increased the frequency of said symptoms, taking into account the results of the studies that indicate that psychopathological disorders increase the risk of the perpetration of intimate partner violence (Mazza *et al.*, 2020; Yu *et al.*, 2019).

The participants considered to be jealous also reported a greater frequency of controlling behaviours by electronic means, both perpetrated and received, in comparison to those who did not consider themselves to be jealous, although they did not differ in relation to the frequency of aggressions received and perpetrated. It is considered that jealousy could favour incidents of intimate partner violence by encouraging controlling behaviours, such as those examined in our study (Papp, Liss, Erchull, Godfrey & Waaland-Kreutzer, 2017).

Jealousy has also been related to physical and verbal violence (Martínez-León, Peña, Salazar, García & Sierra, 2017). The INML y CF (2019) reported, with respect to the above, that in 35,6 % of the 49669 cases determined to be intimate partner violence in 2018, the violence triggering factors were “jealousy, distrust, and infidelity”, followed by “alcoholism and drug addiction”, in 13,42 % of the cases. There is evidence on the relationship between jealousy caused by social media and behaviours of intimate partner violence. Thus, Daspe, Vaillancourt-Morel, Lussier and Sabourin (2018) found among 1508 adolescents and young adults that jealousy on Facebook was the link between the use of this social network and the perpetration of intimate partner violence. Therefore, a greater frequency of controlling behaviours by virtual means it was to be expected among those participants considered to be jealous.

Daspe *et al.* (2018) also found, among 46 young couples, that the more jealous one of the members of the couple was due to their partner’s activity on Facebook, the more probable it was that the other person became jealous as well, increasing the probability of intimate partner violence. This would explain why the participants in our study considered to be jealous reported a greater frequency of controlling behaviours by virtual means, both perpetrated and suffered.

Taking the above into account, it is possible that the jealous participants have increased their controlling behaviour over their partners by electronic means during the confinement, given that they have more contact with them, in the case of the those who live with their partner. It is also happen when they cannot monitor their partner more often due to the confinement, when they do not live together. At the same time, conflicts caused by controlling behaviours may have increased the symptoms of anxiety, depression, hostility, paranoid ideation, and others examined by SCL-36.

5. CONCLUSIONS

In conclusion, the results confirm the need to implement measures to prevent and mitigate the effects of the quarantine on *online* intimate partner violence and mental health, particularly among those people whose relationship ended during this period and those people who have characteristics which promote this type of violence, like, for example jealousy. In this sense, strategies have been recommended such as making the population in general aware of the increase in the risk of intimate partner violence during the quarantine, training healthcare personnel in the identification of possible victims and the use of screening tools which examine the different types of violence pertaining to couples, in order to activate the necessary assistance paths, among other strategies (Gelder *et al.*, 2020; Mazza *et al.*, 2020). It is also recommended that individuals maintain contact with their relatives, friends, co-workers, and acquaintances, as social distancing could favour intimate partner violence and may offer different report alternatives and ways to ask for help directly or surreptitiously, given that it is possible that the victims are co-habiting with their aggressors (Gelder *et al.*, 2020; Razai *et al.*, 2020).

The Ministry of Health and Social Protection of Colombia (2020) provides other recommendations for protecting mental health during the quarantine among the population in general, such as being in contact with friends and family, identifying and expressing emotions, doing physical activity, and having a restful sleep, among others. Razai *et al.* (2020), for their part, also offer guidelines for professionals, such as using validated screening tools and offering phone or virtual counselling.

Some of the strengths of this study are the use of validated instruments and a relatively large sample, comprised of young and middle-aged adults. However, a significant shortcoming is the method used to select the participants, as it was non-probabilistic through a technique called snowball sampling, which could be susceptible to self-selection, given that many of the people who took part in the study may have had a particular interest in the topic of intimate partner violence. At the same time, given the speed with which the quarantine was declared in Colombia, it was not possible to carry out a preliminary survey among the participants which would allow to determine if there was a real increase in the frequency of intimate partner violence perpetrated and received, and in the difficulties and psychopathological symptoms examined.

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REFERENCES

- Ahmed, MZ, Ahmed, O., Aibao, Z., Hanbin, S., Siyu, L. y Ahmad, A. (2020). Epidemia de COVID-19 en China y problemas psicológicos asociados. *Asian journal of psychiatry*, 51, 102092. <https://doi.org/10.1016/j.ajp.2020.102092>
- Asociación Psiquiátrica Americana (2014). *Manual diagnóstico y estadístico de los trastornos mentales* (5ª Ed.). Madrid: Panamericana.
- Borrajó, E., Gámez-Guadix, M., Pereda, N., & Calvete, E. (2015). The development and validation of the cyber dating abuse questionnaire among young couples. *Computers in Human Behavior*, 48, 358-365. <https://doi.org/10.1016/j.chb.2015.01.063>
- Brooks, S.K., Webster, R.K., Smith, L.E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G.J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395, 912-20. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Cai, W., Lian, B., Song, X., Hou, T., Deng, G., & Li, H. (2020). A cross-sectional study on mental health among health care workers during the outbreak of Corona Virus Disease 2019. *Asian journal of psychiatry*, 51, 102111. <https://doi.org/10.1016/j.ajp.2020.102111>
- Daspe, M., Vaillancourt-Morel, M., Lussier, Y., & Sabourin, S. (2018). Facebook use, facebook jealousy, and intimate partner violence perpetration. *Cyberpsychology, Behavior, and Social Networking*, 21(9), 549-555. <https://doi.org/10.1089/cyber.2018.0159>
- Devaraj, S., & Patel, P. (2020). Change in psychological distress in response to changes in residential mobility during Covid-19 pandemic: Evidence from the US. *SSRN*. <http://dx.doi.org/10.2139/ssrn.3603746>
- Gelder, N., Peterman, A., Potts, A., O'Donnell, M., Thompson, K., Shah, N., & Oertelt-Prigione, S. (2020). Covid-19: Reducing the risk of infection might increase the risk of intimate partner violence. *EclinicalMedicine*, 21, 100348. <https://doi.org/10.1016/j.eclinm.2020.100348>
- Hoseinnezhad, S. Z., Elyasi, F., & Shahhosseini, Z. (2021). A Rapid Review on Domestic Violence as a Silent Consequence in Corona Time: A Double Pandemic. *European Journal of Environment and Public Health*, 5(1), em0062. <https://doi.org/10.29333/ejeph/8577>
- Huang, Y., & Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. *Psychiatry research*, 288, 112954. <https://doi.org/10.1016/j.psychres.2020.112954>
- Instituto Nacional de Medicina Legal y Ciencias Forenses (2019). *Forensis 2018 datos para la vida*. Bogotá: Autor.
- Instituto Nacional de Medicina Legal y Ciencias Forenses (2020). *Boletín estadístico mensual: abril 2020*. <https://www.medicinalegal.gov.co/documents/20143/494197/Boletin-abril-2020.pdf/f0da11c1-355a-687b-2ded-911cf6817a87>

- Ko, C. H., Yen, C. F., Yen, J. Y., & Yang, M. J. (2006). Psychosocial impact among the public of the severe acute respiratory syndrome epidemic in Taiwan. *Psychiatry Clin Neurosci*, 60(4), 397-403. <https://doi.org/10.1111/j.1440-1819.2006.01522.x>
- Li, L. J., Zhang, D., & Wu, X. M. (2014). Progress on collective behavior in emergency public health events. *Chineses Journal of Health Education*, 30(7), 631-33. CNKI:-SUN:ZGJK.O.2014-07-017.
- Lei, L., Huang, X., Zhang, S., Yang, J., Yang, L., & Xu, M. (2020). Comparison of Prevalence and Associated Factors of Anxiety and Depression Among People Affected by versus People Unaffected by Quarantine During the Covid-19 Epidemic in Southwestern China. *Medical science monitor: international medical journal of experimental and clinical research*, 26, e924609. <https://doi.org/10.12659/MSM.924609>
- Londoño, N. H., Agudelo, D. M., Martínez, E., Anguila, D., Aguirre, D. C., & Arias, J. F. (2018). Validación del cuestionario de 90 síntomas SCL-90-R de Derogatis en una muestra clínica colombiana. *MedUNAB*, 21(2), 45-59. <https://doi.org/10.29375/01237047.2807>
- Martínez-León, N. C., Peña, J. J., Salazar, H., García, A., & Sierra, J. C. (2017). A systematic review of romantic jealousy in relationships. *Terapia Psicológica*, 35(2), 203-212. <https://doi.org/10.4067/s0718-48082017000200203>
- Mazza, M., Marano, G., Lai, C., Janiri, L., & Sani, G. (2020). Danger in danger: Interpersonal violence during Covid-19 quarantine. *Psychiatry research*, 289, 113046. <https://doi.org/10.1016/j.psychres.2020.113046>
- Ministerio de Salud y Protección Social (2020). *Todos a cuidar nuestra salud mental durante la Covid-19*. <https://www.minsalud.gov.co/Paginas/Todos-a-cuidar-nuestra-salud-mental-durante-la-COVID-19.aspx>
- Moccia, L., Janiri, D., Pepe, M., Dattoli, L., Molinaro, M., De Martin, V., ... & Di Nicola, M. (2020). Affective temperament, attachment style, and the psychological impact of the Covid-19 outbreak: an early report on the Italian general population. *Brain, behavior, and immunity*. <https://doi.org/10.1016/j.bbi.2020.04.048>
- Noticias Caracol (abril 20, 2020). *Violencia intrafamiliar, disparada en cuarentena: 9.000 llamadas pidiendo auxilio solo en Bogotá*. <https://noticias.caracoltv.com/colombia/bogota/violencia-intrafamiliar-disparada-en-cuarentena-9000-llamadas-pidiendo-auxilio-solo-en-bogota-nid226822>
- Papp, L. J., Liss, M., Erchull, M. J., Godfrey, H., & Waaland-Kreutzer, L. (2017). The dark side of heterosexual romance: Endorsement of romantic beliefs relates to intimate partner violence. *Sex Roles*, 76, 99-109. <https://doi.org/10.1007/s11199-016-0668-0>
- Razai, M. S., Oakeshott, P., Kankam, H., Galea, S., & Strokes-Lampard, H. (2020). Mitigating the psychological effects of social isolation during the Covid-19 pandemic. *BMJ*, 369, m1904. <https://doi.org/10.1136/bmj.m1904>
- Sánchez, R. O., & Ledesma, R. D. (2009). Análisis psicométrico del Inventario de Síntomas Revisado (SCL-90-R) en población clínica. *Revista Argentina de Clínica Psicológica*, 18(3), 265-274. Disponible en: <https://www.redalyc.org/pdf/2819/281921775007.pdf>
- Suárez Cuba, M. Á. (2010). La importancia del análisis de los acontecimientos vitales estresantes en la práctica clínica. *Revista Médica La Paz*, 16(2), 58-62. Disponible en: http://www.scielo.org.bo/scielo.php?script=sci_arttext&pid=S1726-89582010000200010&lng=es&tlng=es.
- Observatorio Colombiano de Mujeres. Vicepresidencia de la República de Colombia (marzo 4, 2020). *Aumentan en 142 % llamadas a Línea 155, por violencia intrafamiliar durante aislamiento*. <https://mlr.vicepresidencia.gov.co/Paginas/>

[prensa/2020/Aumentan-en-142-llamadas-a-Linea-155-por-violencia-intrafamiliar-durante-Aislamiento.aspx](#)

- World Health Organization (2020). COVID-19 and violence against women: What the health sector/system can do. <https://apps.who.int/iris/bitstream/handle/10665/331699/WHO-SRH-20.04-eng.pdf>
- Yu, R., Nevado-Holgado, A. J., Molero, Y., D'Onofrio, B. M., Larsson, H., Howard, L. M., & Fazel, S. (2019). Mental disorders and intimate partner violence perpetrated by men towards women: A Swedish population-based longitudinal study. *PLoS medicine*, *16*(12), e1002995. <https://doi.org/10.1371/journal.pmed.1002995>
- Zero, O., & Geary, M. (2020). Covid-19 and Intimate Partner Violence: A Call to Action. *Rhode Island medical journal* (2013), *103*(5), 57–59. <https://doi.org/10.1016/j.ijlp.2020.101606>
- Zhang, R., Jiang, T., Li, N., Wang, Z., Liu, B., Fang, L., & Zhang, X. (2015). The negative psychology for the public in Zhejiang province during the epidemic of human H7N9 avian influenza. *Zhonghua yu fang yi xue za zhi [Chinese journal of preventive medicine]*, *49*(12), <https://doi.org/10.3760/cma.j.issn.0253-9624.2015.12.011>

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