Mental Health Among LGBT+ Populations in Mexico During the COVID-19 Pandemic

Salud Mental entre las Poblaciones LGBT+ de México Durante la Pandemia de COVID-19

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People of sexual dissidents in Mexico face mental health challenges due to discrimination based on sexual orientation or gender identity. The confinement due to COVID-19 had an impact on their mental health, so this study analyzed the differences in psychosocial and mental health effects among the LGBT+ populations of Mexico in this context. Cross-sectional and non-probabilistic study with the participation of 1,525 LGBT+ people. Through a questionnaire, the psychosocial impact of COVID-19 was explored by comparing four groups: gay and bisexual men (GBM), lesbian and bisexual women (LBW), transgender people and individuals with other non-normative gender identities (TNN), and those with other non-normative sexual identities (NNI). The areas with the most significant psychosocial impact from COVID-19 were the impact on life, limitations on activities, isolation from LGBT+ and cis-heterosexual friends, fear of COVID-19, and discomfort at home. Performing analysis of variance and covariance, GBM presented differences with the other groups by reflecting fewer impairments. Through logistic regression models, it was found that the probability of suicidal ideation was greater in LBW, TNN, and NNI compared to GBM. TNN were more likely to have attempted suicide than GBM, even after adjusting for control variables. The COVID-19 pandemic impacted areas that transcend the biological, as social isolation showed effects on the mental health of the LGBT+ population.

Keywords: mental health, LGBT, COVID-19

Las personas de la disidencia sexual en México enfrentan retos en salud mental ante la discriminación por orientación sexual o identidad de género. El confinamiento por la COVID-19 repercutió en su salud mental, por lo que este estudio analizó las diferencias en afectaciones psicosociales y en salud mental entre las poblaciones LGBT+ en México en este contexto. Método: Estudio transversal y no probabilístico, con la participación de 1,525 personas LGBT+. Por medio de un cuestionario, se exploró el impacto psicosocial de la COVID-19 comparando cuatro grupos: hombres gay y bisexuales (HGB), mujeres lesbianas y bisexuales (MLB), personas transgénero y de otras identidades de género no normativas (TIN) y personas de otras identidades sexuales no normativas (ISN). Resultados: Las áreas con mayor afectación psicosocial por la COVID-19 fueron la afectación en la vida, la limitación para hacer actividades, el aislamiento de amigos/as LGBT+ y cis-heterosexuales, el miedo a la COVID-19 y la incomodidad en el hogar. Realizando análisis de varianza y covarianza, los HGB presentaron diferencias con los otros grupos al reflejar menores afectaciones. A través de modelos de regresión logística se mostró que la probabilidad de ideación suicida era mayor en MLB, TIN e ISN, comparado con los HGB. Las personas TIN tuvieron mayor probabilidad de presentar intento suicida que los HGB, incluso después de ajustar por variables de control. Conclusiones: La pandemia por la COVID-19 impactó en áreas que trascienden lo biológico, pues el aislamiento social evidenció afectaciones a la salud mental de la población LGBT+.

Palabras clave: salud mental, LGBT+, COVID-19

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The SARS-CoV-2 pandemic, the virus that causes COVID-19, generated a complex global context. The virus had implications at the biological level and social life due to the paralysis of productive dynamics and the disruptive change in everyday life, as social practices were questioned by the so-called "new normality."

Most countries applied confinement and social distance as measures of action to avoid COVID-19 dispersion (Alfano & Ercolano, 2020). However, such a strategy entailed severe problems, as previous social inequalities became evident (Salama, 2021), especially regarding welfare and social rights, particularly in peripheral countries.

One challenge was understanding the social determinants of health in the context of COVID-19. Although the body was directly affected, the policies implemented to deal with the contingency and the social climate at the time influenced people's health situation. In this sense, mental health is relevant, especially in those groups that were in a situation of social vulnerability before the contingency, such as lesbian, gay, bisexual, trans and other gender identities and non-normative sexual orientations (LGBT+) populations due to the transgression of gender stereotypes, androcentrism and heterosexism (Ortiz-Hernández & Granados-Cosme, 2006).

Pre-pandemic studies describe significant mental health impacts in LGBT+ populations, mainly elevated rates of depression, anxiety, and suicidal ideation, as well as increased risk of self-harm and suicide attempts (Gnan et al., 2019; McDonald, 2018; Pitoňák, 2017). These works were mainly developed in Anglo-Saxon countries (Meyer, 2003; Nadal et al., 2014; Scandurra et al., 2017; Valentine & Shipherd, 2018), although there are some studies in Latin American countries, such as Chile (Gómez & Barrientos Delgado, 2012), Colombia (Choi et al., 2019) and Mexico (Lozano-Verduzco et al., 2017; Mendoza-Perez & Ortiz-Hernandez, 2021).

However, such efforts recognize the importance of exploring mental health disparities among LGBT+ populations and not just as a general population, despite facing common problems (Krueger & Upchurch, 2019). For example, several studies report that sexual minority women (i.e., lesbian, bisexual, or transgender women) show greater mental health impairments related to sexism and minority stress, reflected in higher rates of anxiety, mood problems, as well as elevated risks of suicide attempts and self-harm (Gnan et al., 2019; Krueger & Upchurch, 2019; Schulman & Erickson-Schroth, 2019). Another paper describes how bisexual people have elevated levels of anxiety and depressive symptomatology, compared to gay men and lesbian women, stemming from monosexist beliefs and the invisibilization of bisexual identity (Chan et al., 2020).

However, during the pandemic, much of the work focused on exploring the impact of social containment measures on the mental health of LGBT+ populations in general, without disaggregating them by group, showing a consensus on the detrimental effects of isolation and the exacerbation of situations of vulnerability on mental health (depressive symptomatology associated with loneliness, anxiety, and post-traumatic stress symptoms; Herrmann et al, 2023; Kamal et al., 2021; Krause, 2021; Salerno et al., 2020), as well as low levels of family support as social support networks were constrained (Barrientos et al., 2021; Kamal et al., 2021), as some people had to return to spaces with high levels of hostility (Fuentes Carreño, 2021).

However, some studies found different psychosocial effects among LGBT+ populations. A study in Germany reported that asexual, transgender, and non-binary people showed greater feelings of loneliness during the pandemic, which was related to symptoms of depression (Herrmann et al., 2023). Consistent with this, Perl et al. (2021) describe that transgender and gender non-binary populations had lower levels of physical and emotional health after starting isolation measures. In another vein, a Chilean paper shows that bisexual and other sexual orientations (i.e., non-gay) people had a higher prevalence of symptomatology associated with mental health problems (depression, anxiety, and stress) during the contingency compared to gay men and lesbian women populations (Urzúa et al., 2022).

In Mexico, evidence about LGBT+ populations in the context of COVID-19 is scarce (Cerecero-Garcia et al., 2021; Lozano-Verduzco et al., 2023; Rao et al., 2021; Santos et al., 2021), so it is essential to know the mental health status of LGBT+ people to generate elements to create public policies to address their specific health needs.

Therefore, this study aimed to analyze the differences in psychosocial and mental health outcomes among LGBT+ populations in Mexico during the COVID-19 pandemic. Three hypotheses guided this study: (a) there are differences between LGBT+ groups in terms of their socio-demographic characteristics, (b) psychosocial effects of COVID-19 are different between groups, and (c) there are differences in mental health among LGBT+ populations during the context of COVID-19.

Method

Design

An observational study of correlational scope was carried out with a cross-sectional design. A research team initially implemented this research made up of the University of Porto and the University of Coimbra, Portugal; the Alberto Hurtado University and the Catholic University of the North, Chile; the University of London, United Kingdom; the University of Linköping, Sweden; the Federal University of Sergipe, Brazil and the University of Padua, Italy. The Mexican research team joined later, so the international collaboration consisted mainly of providing the facilities to replicate the protocol and the instruments and to allow the adaptation of the instruments for Mexico.

Participants

The sample was non-probabilistic by convenience. Recruitment was done mainly through an opt-in invitation on social networks (e.g., Facebook, Twitter) and digital LGBT+ media.

The criteria for participation in the study were to self-identify as part of an LGBT+ population, to be 16 years of age or older, and to be living in Mexico at the time of answering the questionnaire. A total of 1,525 people participated, with an average age of 30 years (standard deviation = 9.29) (Table 1). The largest survey response population was gay and bisexual men (GBM), followed by lesbian and bisexual women (LBW) and, to a lesser extent, transgender and other non-normative gender identities (TNN). The majority resided in Mexico City or central Mexico. Individuals had mainly some level of university and postgraduate education. The population was primarily made up of students and working people. One in two people were in a sexual relationship, and eight out of ten were single.

More than 80% were in complete or partial social isolation, and just over half reported living usually with their parents or another family member at the time of the survey. In terms of experiences of discrimination, one in eight people had a previous experience of discrimination based on sexual orientation or gender identity.

Table 1

Sociodemographic Characteristics of the Participant Population (n = 1525)

Feature	n	%
Collective identity by sexual orientation and gender identity		
Gay/bisexual man (GBM)	1001	65,6
Lesbian/bisexual woman (LBW)	282	18,5
Trans or other non-normative gender identity (TNN)	164	10,8
Person of non-normative sexual identity (NNI)	78	5,1
Last level of education		
Preschool	1	0,1
Primary	1	0,1
Secondary	25	1,6
Technical career	39	2,6
High School	289	19,0
University	884	58,0
Master	245	16,1
PhD	41	2,7
Type of area in which you live		
Urbana	1447	94,9
Rural	78	5,1
Current occupation		
Student	388	25,4
Full-time worker	568	37,2
Part-time worker and student	81	5,3
Full-time worker and student	97	6,4
Part-time worker	105	6,9
Working, although during the contingency I lost my job for a while	79	5,2
Unemployed or previously dismissed	111	7,3
Unemployed or laid off because of the economic crisis and confinement measures	96	6,3
I was in a sexual relationship at the time of the survey	721	47,3
Marital Status		
Single	1231	80,7
Married	68	4,5
Free union	203	13,3
Divorced	19	1,2
Widowed	4	0,3
Social isolation during the COVID-19 context		
Yes	698	45,8
No	204	13,4
Partially	623	40,9
Living with relatives (parents or siblings)		
Yes	875	57,4
No, but given the circumstances of COVID19 I have returned to my family home	111	7,3
No, I live with roomies (flatmates)	109	7,1
No, I live with my partner	241	15,8
No, I live alone	189	12,4
Region of the country where you live		
North	238	15,6
Central West	176	11,5
Centre	370	24,3
South-Southeast	122	8,0
Mexico City	619	40,6
COVID-19 pre-contingency experience of sexual orientation or gender identity discrimination	197	12,9

Study Variables

Sociodemographic

The schooling of the participant sample was ascertained according to the last level of education attained. We asked whether they lived in an urban or rural area, their occupation, marital status, region of the country where they lived at the time of the study and whether they had been discriminated against because of their sexual orientation or gender identity before the pandemic. For variables linked to the context of the COVID-9 pandemic, we asked whether they had experienced social isolation during the pandemic context, whether they lived with relatives such as parents or siblings, whether they had a sex-affective relationship, and whether they had experienced discrimination based on their sexual orientation or gender identity during that period (Tables 1 and 2).

Collective Identities within the LGBT+ Movement

Through self-identification, participants were grouped into four populations considering the collective identities within the Mexican LGBT+ movement: (a) GBM, (b) LBW, (c) TNN, and (d) people of non-normative sexual identities (e.g., queer people, NNI).

Psychosocial Affects of COVID-19

To assess how COVID-19 affected psychosocial well-being, we used a methodology like that implemented in another international study on LGBT+ populations in the context of the pandemic (Gato et al., 2021), in which eight 10-point ordinal variables (where 1 reflects less affected and 10 reflects more affected, limited, suffocated, uncomfortable, fearful or isolated) were asked. The battery of questions included (a) how much they felt the pandemic had affected their life, (b) limitation in doing activities, (c) discomfort in being at home, (d) isolation from cis/straight friends, (e) isolation from LGBT friends, (f) isolation from their partner, (g) not being able to express their LGBT identity, and (h) fear of COVID-19. Internal consistency analyses of the questions indicate adequate reliability ($\alpha = 0.71; \omega = 0.72$). In terms of construct validity, confirmatory factor analysis indicates an acceptable fit of a two-factor model: affect (1, 2, 3, 7, and 8) and social isolation (4, 5, and 6) with the fit (CFI = 0.94; TLI = 0.91; GFI = 0.98) and error (RMSEA = 0.07; SRMR = 0.06) indices considered acceptable. Finally, participants were also asked whether they ever seriously considered or attempted suicide during the pandemic. These questions were nominal dichotomous (yes/no) questions asked of participants whether "During the COVID-19 quarantine or health emergency, did you ever seriously consider suicide?" or "During the COVID-19 quarantine or health emergency, did you ever attempt suicide?".

Procedure

The study was implemented through an instrument applied electronically from August to October 2020 to LGBT+ people residing in the Mexican Republic at the time of the survey.

The Faculty of Medicine of the National Autonomous University of Mexico Ethics Committee approved the study.

Data Analysis

Descriptive analyses were conducted for each variable, and comparisons were made using the χ^2 test to determine significant differences between categories and groups, given that some expected frequencies were less than 5. Yates' continuity correction was used for all analyses. To assess differences in the psychosocial effects of COVID-19 according to participants' sexual orientation and gender identity, models were conducted through analysis of variance (ANOVA) and analysis of covariance (ANCOVA) to control for the effect of region of the country, schooling, age, area of residence, occupation, marital status, sex-affective relationship, living with parents or siblings, quarantine, and having experienced discrimination based on sexual orientation or gender identity during the health contingency.

Compliance with normality assumptions was assessed using the Kolmogorov-Smirnov test, and equality of variances was examined using Levene's test. The results were favorable, especially considering the considerable sample size. Where differences between groups were found, Tukey's test was used to determine the differences between different pairs of groups. In the case of suicide ideation and attempt, being dichotomous variables, logistic regression models were performed, both univariate and controlling for the same variables as in the ANCOVA, reporting the respective *odds ratios*. For all these analyses, a significance level of 0.05 was considered. The statistical program JAMOVI version 1.6 was used for all analyses.

Results

In the first stage, differences between the GBM, LBW, TNN, and NNI groups were compared concerning demographic variables of interest, such as area of residence (rural or urban), educational level, occupation, partner status, marital status, quarantine compliance, living with family during confinement, region of the country and experiences of discrimination.

Table 2 compares socio-demographic characteristics among LGBT+ populations, finding statistically significant differences in educational level, occupation, quarantine compliance, living with family during the contingency, region of the country of residence, and experience of discrimination. Notably, at the educational level, the GBM and LBW groups had a higher frequency of postgraduate levels, even though most of the groups had high school or bachelor's degree levels. These groups also reported a higher proportion of employed persons. In terms of quarantine compliance, GBM and TNN underwent quarantine to a lesser extent, while the other groups mainly spent home confinement with their families. Regarding the region of the country where they resided, a higher proportion of GBM and TNN were found in the central west. In general, the distribution was similar in all groups. Finally, TNN and NNI were the most likely to report discrimination during health contingencies.

Regarding the psychosocial effects according to collective identity, except for suicide ideation and suicide attempt, all were evaluated on a 10-point ordinal scale, with 1 and 10 being the least and most affected, respectively. As shown in Table 3, the areas of greatest psychosocial effect by COVID-19 (average score of 5 or more) were - in descending order – life effect, limitation of activities, isolation from LGBT+ and cis-heterosexual friends, fear of COVID-19 and discomfort at home. The least affected areas were not being able to express their LGBT+ identity and isolation from their partner. Suicidal ideation was more frequent than suicide attempts. In terms of psychosocial distress among LGBT+ groups, TNN were the most affected.

In the ANOVA, differences were found in the following variables related to psychosocial distress caused by COVID-19: distress in life, discomfort to be at home under the current situation, isolation from their partner, and feeling stifled by not being able to express their LGBT+ identity in the family. Overall, when analyzing data not controlled for covariates (Table 3), GBM were found to have differences in life affect with TNN (Δ = -0.83; p = 0.021, 95% CI = [-1.06;-0.28]), in discomfort at home with TNN (Δ = -1.25; p < 0.001, 95% CI = [-1.79;-0.71]) and NNI (Δ = -0.98; p = 0.047, 95% CI = [-1.74;-0.23]); in partner isolation and not being able to express their LGBT+ identity in the family with LBW (Δ = -0.92; p = 0.048, 95% CI = [-1.63;-0.21]; andΔ = -1.43; p < 0.001, 95% CI = [-1.95;-0.91]), TNN (Δ = -1.64; p = 0.003, 95% CI = [-2.58;-0.71]; andΔ = -1.43; p < 0.001, 95% CI = [-1.95;-0.91]) and NNI (Δ = -2.07; p = 0.010, 95% CI = [-3.40;-0.74]; andΔ = -1.43; p < 0.001, 95% CI = [-1.95;-0.91]). Similarly, TNN showed significant differences with LBW in home discomfort (Δ = -0.86, p = 0.033, 95% CI = [-1.50, -0.23]) with higher levels.

After controlling for variables of interest, such as region of the country, schooling, age, area of residence, occupation, marital status, sex-affective relationship, living with parents or siblings, meeting social isolation, and having experienced discrimination, only feeling stifled by not being able to express one's LGBT+ identity in the family continued to show a significant difference. Only GBM showed differences with LBW (Δ = -0.75, p = 0.014, 95% CI = [-1.25, -0.25]), the latter showing a higher level of suffocation.

Table 2

Comparison of Sociodemographic Variables among LGBT+ Populations

Variable	GBM (n = 1001)		LBW (n = 282)		TNN (n = 164)		NNI (n = 78)		χ^2	p
	n	%	n	%	n	%	n	%		
Zone									2,03	0,567
Urban	954	95,3	267	94,7	152	92,7	74	94,9		
Rural	47	4,7	15	5,3	12	7,3	4	5,1		
Schooling									93,81	< 0,001
Preschool	1	0,1	0	0,0	0	0,0	0	0,0		
Primary	1	0,1	0	0,0	0	0,0	0	0,0		
Secondary	13	1,3	1	0,4	6	3,7	5	6,4		
Technical career	24	2,4	4	1,4	11	6,7	0	0,0		
High School	147	14,7	70	24,8	52	31,7	20	25,6		
University	589	58,8	170	60,3	79	48,2	46	59,0		
Master	191	19,1	31	11,0	16	9,8	7	9,0		
PhD	35	3,5	6	2,1	0	0,0	0	0,0		
Occupation									72,21	< 0,001
Unoccupied	125	12,5	38	13,5	33	20,1	11	14,1		
Student	196	19,6	100	35,5	57	34,8	35	44,9		
Employee	680	67,9	144	51,1	74	45,1	32	41,0		
Sex-affective relationship									6,21	0,102
No	544	54,3	130	46,1	87	53,0	43	55,1		
Yes	457	45,7	152	53,9	77	47,0	35	44,9		
Marital status									10,80	0,546
Single	814	81,3	223	79,1	126	76,8	68	87,2		
Married	45	4,5	14	5,0	6	3,7	3	3,8		
Free union	128	12,8	39	13,8	29	17,7	7	9,0		
Divorced	10	1,0	6	2,1	3	1,8	0	0,0		
Widowed	4	0,4	0	0,0	0	0,0	0	0,0		
Quarantine compliance									33,57	< 0,001
No	149	14,9	28	9,9	22	13,4	5	6,4		
Yes	412	41,2	146	51,8	87	53,0	53	67,9		
Partially	440	44,0	108	38,3	55	33,5	20	25,6		
Lives with relatives									28,31	< 0,001
No	474	47,4	98	34,8	57	34,8	21	26,9		
Yes	527	52,6	184	65,2	107	65,2	57	73,1		
Region of the country where you live									32,46	< 0,001
North	125	12,5	67	23,8	30	18,3	16	20,5		
Central West	128	12,8	24	8,5	20	12,2	4	5,1		
Centre	246	24,6	63	22,3	38	23,2	23	29,5		
South-Southeast	90	9,0	15	5,3	12	7,3	5	6,4		
Mexico City	412	41,2	113	40,1	64	39,0	30	38,5		
Discrimination based on sexual orientation or gender identity during the health contingency									47,49	< 0,001
No	898	89,7	250	88,7	116	70,7	64	82,1		
Yes	103	10,3	32	11,3	48	29,3	14	17,9		

Note. Individuals were grouped into the collective identities that have historically maintained mobilization and social action within the Mexican LGBT+ movement. GBM: gay and bisexual men; LBW: lesbian and bisexual women; TNN: trans and other non-normative gender identities; NNI: non-normative sexual identities.

Table 3

COVID-19 Psychosocial Affect Averages According to Collective Identity

Variable	GBM		LBW		TNN		NNI		ANOVA		ANCOVA	
	Media	D.E.	Media	D.E.	Media	D.E.	Media	D.E.	F(3, 1520)	p	F(3, 1499)	p
Affect on life	6,54	2,39	6,70	2,19	7,21	2,02	6,76	2,14	4,05	0,007	1,44	0,229
Limitation for activities	6,93	2,35	7,16	2,24	7,10	2,21	6,94	2,3	0,86	0,459	0,35	0,785
Discomfort at home	4,35	3,22	4,73	3,22	5,60	3,33	5,33	3,09	8,76	0,001	1,74	0,157
Isolation of cis/hetero friends	6,13	3,06	6,12	3,1	6,35	3,01	5,99	2,91	0,32	0,811	0,52	0,666
Isolation of LGBT friends	6,41	3,14	6,32	3,24	6,74	3,05	6,58	2,76	0,73	0,532	0,52	0,665
Partner isolation[+]	3,81	3,75	4,74	3,88	5,45	3,88	5,89	3,70	7,59	0,001	2,28	0,079
Not expressing LGBT identity in the family	3,30	3,78	4,73	3,88	4,99	4,19	5,21	3,74	19,9	0,001	4,01	0,007
Fear of COVID-19	5,72	2,94	6,17	2,75	5,98	2,91	5,69	2,8	1,96	0,118	1,59	0,188

Note: ANCOVA controlled for the effect of area of the country, schooling, age, type of locality, occupation, marital status, relationship status, living with relatives, being in quarantine, and having experienced discrimination. [+]Analysis conducted only on those who reported having a partner. People were grouped into the collective identities that have historically maintained mobilization and social action within the Mexican LGBT+ movement. GBM: gay and bisexual men; LBW: lesbian and bisexual women; TNN: trans and other non-normative gender identities; NNI: non-normative sexual identities.

We also compared whether there were differences in the frequencies of suicide ideation and attempt - both univariate and adjusting for the control variables in the ANOVA (Table 4). Table 4 shows that the likelihood of suicidal ideation was higher in LBW, TNN, and NNI compared to GBM. Finally, TNN were more likely to have attempted suicide than GBM, even after adjusting for control variables.

Table 4

Frequencies of Psychosocial Affects of COVID-19: Suicide Ideation and Attempted Suicide

Variable	No		Yes		OR	p	95% CI	AOR[1]	p	95% CI
	n	%	n	%						
Suicidal ideation										
GBM	694	82,6	121	17,4	Ref.			Ref.		
LBW	131	69,0	59	31,1	2,13	< 0,001	(1,48, 3,07)	1,73	0,006	(1,17, 2,57)
TNN	67	57,8	49	42,2	3,46	< 0,001	(2,28, 5,26)	2,37	< 0,001	(1,50, 3,73)
NNI	31	63,3	18	36,7	2,75	< 0,001	(1,49, 5,08)	1,98	0,042	(1,03, 3,81)
Attempted suicide										
GBM	674	96,3	26	3,7	Ref.			Ref.		
LBW	187	94,9	10	5,1	1,38	0,392	(0,66, 2,93)	1,36	0,446	(0,61, 3,03)
TNN	100	87,7	14	12,3	3,63	< 0,001	(1,83, 7,18)	2,38	0,024	(1,12, 5,05)
NNI	47	95,9	2	4,1	1,10	0,896	(0,25, 4,79)	0,73	0,687	(0,16, 3,39)

Note: OR = *Odds Ratio*; AOR = Adjusted *Odds Ratio*; Ref: Value used as a reference for coding dummy variables. Individuals were grouped into the collective identities that have historically maintained mobilization and social action within the Mexican LGBT+ movement, GBM: gay and bisexual men; LBW: lesbian and bisexual women; TNN: trans and other non-normative gender identities; NNI: non-normative sexual identities.

[1]Values controlled for the effect of region of the country, schooling, age, area of residence, occupation, marital status, sex-relationship, living with parents or siblings, being in quarantine, and having experienced discrimination based on sexual orientation or gender identity.

Discussion

The context provided by COVID-19 had implications for the mental health of Mexican LGBT+ populations by presenting psychosocial affectations during social isolation. From the highest to the lowest degree of affectation, these were: affectation in daily life, limitation of activities, isolation from LGBT+ and cis-heterosexual friends, fear of COVID-19 and feeling uncomfortable at home. In the case of suicidal ideation and attempts, in contrast to the general population, where suicidal ideation has been reported at 5%, according to the National Health and Nutrition Survey 2018 (National Institute of Statistics and Geography, 2021), the prevalence was higher in LGBT+ populations.

In terms of socio-demographic characteristics, TNN were the population that presented the greatest social difficulties during COVID-19, reporting a lower level of education, not having an occupation during the pandemic, greater non-compliance with social isolation and experiencing situations of discrimination due to their sexual orientation or gender identity during confinement. The risk of loss of jobs, income, and finances has been documented to be higher in this population, presenting a challenge to meeting their basic needs and accessing essential resources (Torres et al., 2021). The intersection of transphobia and social marginalization can lead to experiencing these social inequalities, requiring social measures that promote inclusion, reduce transphobia, and ensure equal rights.

Psychosocial Affects and Mental Health Implications of the COVID-19 Context: Particularities in LGBT+ Populations

There were differences between LGBT+ populations, with GBM generally reporting lower levels of psychosocial distress from COVID-19. After adjusting the analysis for covariates, there were only differences between GBM and LBW in terms of feeling stifled by not being able to express their LGBT+ identity in the family during this period, with LBW reporting a higher level of stifling.

However, the TNN population had a greater impact on mental and psychoemotional well-being during the pandemic, as, in addition to reporting higher proportions of discrimination during this period, they had the highest values for psychosocial effects in COVID-19. Although LBW, TNN, and NNI had higher percentages of suicidal ideation (over 30%), again, the TNN population reported it more frequently (just over 40%). Mainly, when compared to GBM, TNN were more likely to attempt suicide during the pandemic.

A recent study describes that more than half of the trans and non-binary (NB) people, in this case, Argentinians who participated in this research, experienced negative emotions, as well as suicidal thoughts due to alienation and social isolation (especially NB people; Radusky et al., 2023). In addition, another paper argues that transgender and gender non-normative youth experienced greater mental impairment than cisgender people, as well as less family support, greater disruption in health services, and unmet need for mental health and substance use services during the pandemic (Hawke et al., 2021).

TNN and NNI reported a greater feeling of discomfort at home (mostly TINs) and of not being able to express their LGBT+ identity (mostly NNI). This is consistent with the findings of Barrientos et al. (2021), as people grouped under non-normative sexualities (queer, asexual, pansexual, demisexual, and gender non-conforming) showed more discomfort at home and greater suffocation about not being able to express their sexual identity (followed by bisexual and homosexual people), as well as being the populations most affected by the pandemic. Furthermore, almost 50% of LGBT+ university students surveyed in other work reported having no family support regarding their LGBT+ identity (or not being able to express it, as the family does not know about their gender-diverse reality; Gonzales et al., 2020).

This psychosocial impact of COVID-19 on well-being and mental health by being in (or returning to) the family during the contingency could be due to exposure to episodes of violence and discrimination in one of the few spaces of socialization allowed in the context of the pandemic (i.e., the family), given the most evident transgression of binary sexual and gender stereotypes. Thus, these experiences may have led to voluntary exits from the home, resulting in increased exposure to the SARS-CoV-2 virus (Gelpi & Silvera Barreiro, 2020).

However, daily social activities and support networks (i.e., isolation from LGBT+ peers and cis-heterosexual friends) were those situations in which the entire LGBT+ population showed significant impacts that were related to psychosocial impairments on the COVID-19, exceeding six points on average in all groups, although TNN individuals continued to show higher ranks compared to the other groups. This is consistent with what has been presented by different research since, in the Chilean case, the LGBT+ population was affected by almost total isolation from LGBT+ peers, as well as from heterosexual friendships, where distancing from the former had a greater impact on their psychosocial well-being (Barrientos et al., 2021). Meanwhile, another study notes how almost half of LGBT+ university students felt that their lives were disrupted mainly by the pandemic (Gonzales et al., 2020).

The cancellation of Pride days, the closure of LGBT+ spaces (bars, nightclubs, restaurants, cultural events) and university institutions had a dramatic impact on psycho-emotional wellbeing by damaging social networks, a fundamental basis of interaction and cohesion for this population, as it is their primary source of community support. These include gender and non-normative sexuality alliances, a celebration of social change, sharing common concerns within the community, student or community organizing, and peer and ally support for LGBT+ specific needs, among others (Banerjee & Nair, 2020; Salerno et al., 2020).

Moreover, a cross-cultural study notes how young people with less access to education, who are unemployed, more emotionally affected by the pandemic, who felt uncomfortable at home, and who felt more isolated from their friends reported higher levels of depressive symptoms (Gato et al., 2021), which may lead to higher proportions of suicidal ideation and attempts.

Finally, all four collective identity groups reported a psychosocial impact of COVID-19, reporting fear of acquiring the virus. Incidentally, some studies agree that just over half of the LGBT+ population under study expressed extreme concern about the disease (Gonzales et al., 2020), while others note that fear of infection was significantly higher in Latin American countries due to high rates of illness and death (Gato et al., 2021). This may be due to a heightened awareness of the high prevalence of HIV and other sexually transmitted infections in sexual minority populations, as well as the chronic illnesses presented by high substance use (particularly cigarette smoking), which increase the inherent risk of morbidity from COVID-19 (Banerjee & Nair, 2020; Krause, 2021). Further studies need to standardize a scale to measure fear of COVID-19, as this research is an emerging issue and was not compared to another normative figure.

Notes on Collective Identity Grouping

Currently, most studies on LGBT+ populations disaggregate sexual orientation, sex assigned at birth, and gender identity within their analyses (Wolff et al., 2017). However, to differentiate populations, this paper took up the concept of collective identity as that active social process in which individuals within a given society internalize and recognize elements of the culture of which they are a part (i.e., symbols and meanings) by differentiating themselves from others; but, not being natural identities, collective identities are contingent on the context of their origin and are distinguished by shared historical ties that are represented through social practices (Giménez, 2007). Therefore, rather than considering sexual orientation, gender identity, sex, or gender expression as autonomous categories, individuals were grouped into the collective identities that have historically maintained social mobilization and collective action within the Mexican LGBT+ movement (Diez, 2011), given that the health-disease process is determined by the social group to which one belongs (Breilh, 2010).

Sexual orientation and gender identity are social identities that have defined cultural characteristics shared and framed by the national and Latin American context, especially among those who identify with one or the other population, as collective identity is an active social process. GBM, LBW, TNN, and recently NNI have maintained historical demands around their sexual orientation, gender identity, or sexual identity, creating a culture of their own that translates into concrete social practices linked to their experience of health. This is relevant since the ways of becoming ill are influenced by the human-environment relationship through social relations and specific historical conformation processes (Berlinguer, 1975, chapter "Capital as a Pathogenic Factor"). Social medicine states that the health-disease process has economic, political, and cultural determinations. Hence, social inequalities impact particular ways of falling ill and dying and correspond to how human groups are inserted into society (Granados Cosme et al., 2006).

Limitations

This work is based on an online questionnaire applied to a non-probabilistic, nationwide sample. Therefore, the results are neither representative nor generalizable to the full spectrum of LGBT+ populations in Mexico. However, the data approximate the socially determined mental health effects of this sector of the population during the global pandemic due to COVID-19. In that sense, they can be taken as a panoramic example of the urgent problems they faced to urge future studies to delve into the specificities given by immersion in culturally diverse contexts.

In addition, it is suggested that new methodological strategies be planned to address all groups, as some groups are overrepresented (GBM) or underrepresented (TNN) in this study. On the other hand, the nature of the online instrument's application falls on a class factor, as in Mexico, there is unequal access to new information technologies and the Internet, which affects populations in situations of poverty and vulnerability (such as some LGBT+ people).

Finally, the categories derived from non-normative gender orientations and identities are constructions that seek to encompass the full spectrum of the LGBT+ population, so some people may be confused, unaware of, or not feel identified with one group or another. Consequently, it is acknowledged that the grouping of identities excludes certain LGBT+ groups, so the constant search for theoretical-methodological strategies for their correct adequacy is encouraged.

Conclusion

The COVID-19 pandemic had an impact in areas that transcended the biological disease, as the social confinement measures affected the mental health of the population. In this regard, it is argued that COVID-19 has social determinations on health in the sense that it accentuated previously existing social inequalities and resulted in subaltern groups, such as LGBT+ populations, facing a situation of greater vulnerability. Therefore, this paper analyzed the association of the effects of the COVID-19 context on mental health among Mexican LGBT+ populations.

Overall, among Mexican LGBT+ people, there were psychosocial affectations derived from the policies of social confinement by COVID-19, which had implications on mental health materialized in a high report of suicidal ideation and attempts, compared to the general population in Mexico. Although this paper made intra-group comparisons between LGBT+ groups, the intention was not to generate a kind of competition of vulnerabilities, so we invite you to read the study as a tool to understand some issues faced by each group during this health event. Nevertheless, TNN are the LGBT+ group in the Mexican context that presented the greatest psychosocial and, consequently, mental health problems. Therefore, there is an urgent need to develop public policies that address their needs (in this case, mental health), in addition to addressing the problems caused by social inequalities due to their gender identity, not by the cis-heterosexual binarism.

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