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Mental health, substance use, experiences of violence, and access to health care among transgender and non-binary people during the COVID-19 lockdown in Argentina

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ABSTRACT

Background: Lockdown measures are effective to control COVID-19 spread; however, concerns have increased regarding its impact on transgender and non-binary people.

Aims: This study describes self-reported changes in mental health, substance use, experiences of violence, and access to health care and basic services among transgender and non-binary population from Argentina after two months of implementation of the lockdown.

Methods: An online national survey was responded by 182 participants (72 transfeminine [TF], 66 transmasculine [TM], 44 non-binary [NB] people) between May and June 2020. The questionnaire was informed by the results of focus groups, reviewed by activists, and disseminated through social media. Descriptive statistics were used to summarize data.

Results: The COVID-19 pandemic and the lockdown have had a general negative impact on the participants. TF participants reported a greater proportion of negative changes in the socioeconomic aspect, such as reduction in income and barriers to access basic services (housing, food, hygiene products and financial assistance). TM and NB participants reported higher proportions of adverse psychological impact, with high frequencies of intense negative emotions and suicidal ideation. A general reduction in substance use was observed in the three groups. The most frequent source of violence in the three groups was from a family member, especially among NB participants. Half of the TF and TM individuals reported difficulties to access or continue their hormone therapy. TM and NB participants reported considerable barriers to access mental health care.

Conclusion: The COVID-19 pandemic and the prolonged lockdown have had a negative impact on the transgender and NB population, aggravating their preexisting situation of vulnerability and exclusion. Furthermore, this impact affected each subgroup differently in a particular and specific way.

KEYWORDS

Argentina; COVID-19; health care; lockdown; mental health; non-binary; transgender

Introduction

Since its outbreak in December, 2019; the COVID-19, caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), has rapidly spread worldwide (Lu et al., 2020). Until a vaccine or medical treatment for COVID-19 is available, lockdown and social distancing measures have been identified as the most effective strategies to control the pandemic's expansion (Adhikari et al., 2020; Koo et al., 2020; Nussbaumer-Streit et al., 2020). Such public health policies seek to minimize physical or face-to-face contact between individuals and groups by restricting movement, work, and travel; thus, slowing transmission rates, and preventing the overburdening of the local health care systems (Block et al., 2020; Sheikh et al., 2020). The first COVID-19 case in Argentina was diagnosed on March 3rd, 2020 (World Health Organization, 2020), and on March 20th, 2020, the Argentinian government established compulsory lockdown and social distancing measures at a national level (Presidencia de la Nación Argentina, 2020).

Despite the effectiveness of these measures in the control of the pandemic, concerns have been

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raised about their impact on marginalized and underserved populations, such as the transgender and non-binary communities (Kessler et al., 2020), particularly in Latin America (Radi & Losada, 2020). These populations may be disproportionately affected by the consequences of the COVID-19 pandemic and the lockdown and social distancing measures (Phillips et al., 2020; Radi & Losada, 2020; Torres et al., 2020). Argentina's lockdown was particularly strict and one of the world's longest ones, lasting approximately seven months (McCoy et al., 2020). Consequently, its negative impact on these populations may have been even greater.

From an intersectional perspective, the interlocking and interaction of several stigmas (e.g., related to gender identity, sexual orientation, HIV, sex work, among others) contribute to a context of high psychosocial and economic vulnerability for transgender and non-binary people (Bowleg, 2020). Among Argentinian transgender people, these conditions result in a reduction of educational opportunities and access to formal employment. This, in turn, leads to negative outcomes, such as unstable housing and economic income, high frequency of informal employment (including sex work) and lack of private or employer-provided health insurance (Fundación Huésped, 2014; Ministerio Público de la Defensa, 2017). In this context of increased economic precariousness, restrictions to work may have an even greater negative impact, especially as the income of many transgender people to afford their basic needs strongly depends on daily independent or informal activities. Zwickl et al. (2021) have shown high proportions of financial strain and unemployment among transgender people in the first three months of the COVID-19 pandemic.

Such context can negatively affect transgender people's mental health. According to the minority stress theory, stigma is also associated with increased prevalence rates of mental health problems and substance use in this population (Keuroghlian et al., 2015; McDowell et al., 2019; Reisner et al., 2016; Valentine & Shipherd, 2018), also among Argentinian transgender people (Radusky et al., 2020). Stressors associated with the pandemic and the lockdown (e.g., long duration, financial loss, fear of infection, frustration) can exacerbate these negative mental health outcomes, as already observed in other South American countries, like Brazil (Brooks et al., 2020; Torres et al., 2020). Social distancing may limit the availability of social support networks, that function as a protective factor, worsening social exclusion and isolation (Aristegui et al., 2018; Gibb et al., 2020).

Mental health can also be negatively affected by barriers in access to psychological and medical gender-affirming procedures, such as psychotherapy and hormone therapy. Gender affirmation has a protective effect, promoting well-being among transgender people (Glynn et al., 2016; Radusky et al., 2020). Argentina's Gender Identity Law (2012), one of the most progressive, establishes every person's right to the recognition of their self-defined gender identity without any precondition and guarantees free access to legal and medical gender-affirming procedures. However, in the context of the pandemic, scarce health resources may have been reoriented to prioritize the diagnosis and assistance of those affected by COVID-19. Thus, medical care that is perceived elective or non-essential may be canceled or deferred (van der Miesen et al., 2020; Y. Wang et al., 2020). Consequently, the provision of gender-affirming medical procedures and mental health services may have been reduced, postponed, or set on hold (van der Miesen et al., 2020; Y. Wang et al., 2020), with a negative impact on transgender people's mental health, as shown by recent studies (Jones et al., 2021; Zwickl et al., 2021). This would also imply a deficient enforcement of the National Law of Mental Health and Addictions (2010), which recognizes the mental health patients' human rights and compels the government to provide free mental health care and prevention, according to current international standards, guaranteeing universal access.

In fact, increased challenges to access health care have been observed among Brazilian transgender and non-binary people (Torres et al., 2020). Possibly, the context of pandemic and the lockdown are also exacerbating barriers that already existed before the COVID-19 crisis, involving structural (e.g., unavailability of appointments, rigid schedules) and social factors (e.g., stigma and discrimination, institutional violence)

(Mendieta & Vidal-Ortiz, 2021; Zalazar et al., 2018). This is particularly concerning for those transgender or non-binary people who are under chronic treatments, such as HIV care, considering that prevalence of HIV among trans women in Argentina is 34% (Ministerio de Salud de la Nación, 2019).

Furthermore, researchers have noted that lockdown measures can also aggravate preexisting discrimination and violence against transgender and non-binary people. Greater presence of security forces in the streets, in order to enforce compliance with the lockdown, can magnify violence from the police against transgender people, which was already highly frequent in Argentina and other South American countries (Perez-Brumer & Silva-Santisteban, 2020; Radusky et al., 2020). Particularly, the local transgender community has a long history of institutional violence and criminalization from the police (Ministerio Público de la Defensa, 2017), and in this new context, police were in charge of controlling individuals' circulation permits, increasing their attributions and, possibly, the odds of abuse and violence in the encounters with members of this community. Additionally, lockdown measures may have forced transgender and non-binary people to stay confined with unaccepting or unsupportive families (Gonzales et al., 2020) or with violent partners for a longer time, which may also increase exposure to violence and its deleterious consequences.

All the latter may compromise the ability of transgender and non-binary people to comply with lockdown and social isolation measures, therefore increasing exposure to COVID-19 and risk of contagion (Torres et al., 2020). Loss of economic income contributes to exacerbate vulnerability to COVID-19 when transgender people cannot afford stable housing, and basic needs. Barriers in health care access may worsen this situation, placing those with preexisting conditions at higher risk. Although information on the impact of the pandemic on transgender and non-binary populations is increasingly available in South America, more data is still required to thoroughly understand this population's needs and to provide empirical evidence aiming to adjust public policies to alleviate the negative consequences of the lockdown measures. Though lockdown and social distancing measures are usually temporary, their effect on this population may be long-lasting and such specific assistance may be required even after their implementation concludes. The present study describes self-reported changes in mental health, substance use, experiences of violence and access to health care and basic services among transgender and non-binary population from Argentina after two months of implementation of the lockdown and social distancing measures to control COVID-19.

Methods

Participants

The total sample consisted of 182 transgender and non-binary participants that completed an online survey: 72 transfeminine (TF), 66 transmasculine (TM) and 44 non-binary (NB) participants. Inclusion criteria were to be 16 years old or older and to report a gender identity different than cisgender.

Survey instrument

A structured survey was created specifically for the present study, to be distributed and completed online. Firstly, a preliminary version was designed based on the aims of the study and the input of the transgender researchers who are part of this team. Secondly, a focus group with 13 transgender and NB participants was conducted, coordinated by transgender researchers, to gather information about the perceptions and experiences of these communities since de beginning of the pandemic and the lockdown. The focus groups explored (a) perceived changes in their lives due to the lockdown and social isolation measures; (b) needs (regarding housing, employment, health care, etc.); (c) strategies implemented to prevent COVID-19; and (d) mental and emotional health, and substance use. Information from the focus group contributed to produce a final version of the survey adjusted to the transgender and non-binary population in terms of wording and topics to be explored.

The survey comprised five sections.

Sociodemographic information

This section included the following variables: age, country of birth (Argentinian or foreign born), place of residency (categorized as Autonomous City of Buenos Aires, Greater Buenos Aires / suburban area, or rest of the country), educational level (categorized as incomplete secondary school or lower / complete secondary school or higher), type of housing during the lockdown (categorized as house, apartment, and hotel room or other kind of unstable housing) and employment (categorized as formal, informal/independent, unemployed/lack of income and sex work). Although sex work falls under the category of informal work, it was added as a differentiated option considering its disproportionately high rates among these populations. Being frequently street-based, it implicates a greater level of social vulnerability, economic precariousness, and exposure to violence and abuse. All of these are adverse conditions that might have been exacerbated due to the restrictions to circulate and the controls exerted by the police.

Regarding gender identity, participants were provided with a list of terms that the transgender and NB people commonly use to identify themselves in our cultural context and were requested to indicate if they self-identified with any of them. An open option was also included, where participants could mention other identities, if they did not identify themselves with any of the options provided. To summarize data and to enable the exploration of particularities by gender identity, in such a diverse community, participants were grouped in three categories. Those who had reported identities that could be located within the transmasculine spectrum were categorized as transmasculinities (TM). All self-reported identities that could be located within the transfeminine spectrum were categorized as transfemininities (TF) and those participants who informed not to self-identify with any of those genders or identified themselves as non-binary, were considered non-binary people (NB).

Information related to COVID-19 and lockdown or social distancing measures

Perception of risk for COVID-19 was assessed with the question "How much exposed or at risk do you feel you are to acquiring COVID-19?," using a 5-point scale ranging from Not at risk to Highly at risk. For greater simplicity, responses were then grouped in three categories (not at risk, moderately at risk, highly at risk). Presence of a preexisting chronic condition associated with higher severity of COVID-19 was categorized as yes, when one of the following was reported: heart or respiratory disease, diabetes, cancer, or hypertension. Participants self-reported their HIV status as yes (living with HIV), no or unknown (when participants referred unknown status or preferred not to answer). Additionally, participants were requested to indicate who they were living with during the lockdown. Responses were grouped in the following categories: alone, with partner only, with family and with friends or other people. Changes in economic income and work status were assessed with the two following questions: "As a consequence of the lockdown have you: (a) experienced a reduction in income and work, and (b) lost your job or been unable to go out to work" (yes/no).

Mental health and substance use

Participants were provided with a list of emotions (including support from others and suicidal ideation) and requested to indicate the intensity of each emotion as a result of the lockdown and social distancing measures, using a 5-point response scale (from 1-Nothing to 5-A lot). However, for the analyses, responses about the emotional impact were grouped in three categories: low (1-Nothing), moderate (2-Somewhat/3-A little), and high (4-Quite/5-A lot) level. In the case of suicidal ideation, responses between 2-Somewhat and 5-A lot were categorized as yes, whereas 1-Nothing was categorized as no. To evaluate changes in substance use during the lockdown, participants received a list of substances and were requested to indicate the frequency of use since lockdown implementation (less than before/same as before/more than before). Participants could also report if they had never consumed any of these substances but were later excluded from these analyses.

Experiences of violence

Participants were requested to indicate if they had experienced episodes of psychological, physical and/or sexual violence, during the lockdown,

from one or more of the following sources: family member, intimate stable partner, neighbor, landlord and/or the police or security forces.

Barriers to access to health care and basic services

Participants were asked about barriers and difficulties in access to the following health care services after the implementation of the lockdown: antiretroviral treatment, hormone therapy, general health care (emergencies, proctology, gynecology, etc.), mental health care and toxicology (substance dependence treatment). Responses were dichotomized (yes/no). A response was categorized as yes, when indicating the presence of a barrier, that is, when the participants reported they had had to interrupt using a service/treatment or they needed/wanted to start using it but were not able to do it during the lockdown. Participants who responded that they had normally accessed the service, were categorized as experiencing no barriers (no). Furthermore, barriers to access to basic services and goods (housing/shelter, food, cleaning or hygiene products, and financial assistance from the government/NGOs) were also explored. Participants who indicated having problems to access any of these services or goods were categorized as experiencing a barrier (yes), whereas participants who indicated that they were accessing normally, were categorized as experiencing no barriers (no).

Ethical statement

This study was reviewed and approved by the Ethics Committee of Fundación Huésped. The informed consent provided details on the rationale of the study, and included a statement explaining that participation was voluntary, and that participants had the right to withdraw from the study at any moment. Informed consent also explained that responding the survey did not entail a direct benefit to participants, but that data gathered in this study could contribute to inform public policies for the transgender and non-binary communities. This is in line with local research highlighting the importance of including and amplifying the voice of the transgender and NB community in the advocacy for laws and public policies that are favorable for this population (Fernández Romero, 2021; Mendieta & Vidal-Ortiz, Mendieta & Vidal-Ortiz, 2021).

Procedures

The link to the online survey was distributed through Fundación Huésped's social media, contact networks and WhatsApp® groups, between May 28 and June 17, 2020, approximately two months after the implementation of the compulsory lockdown and social distancing measures. Transgender and non-binary community organizations contributed to distribute the survey among the population.

Participants who met inclusion criteria and acknowledged reading the informed consent were directed to the survey on SurveyMonkey®. An online modality was selected since the anonymity it provides, facilitates responses to sensitive issues and enables access to traditionally invisibilized populations such as transmasculine and non-binary people. In addition, it favors greater geographic coverage and the possibility of reaching a more nationally representative sample, by getting to participants residing in the provinces or far from the main urban centers.

Data analyses

Statistical analyses were assisted by the Statistical Package for the Social Sciences v24 (SPSS, IBM, 2016). Only those participants who completed the survey were included in the final sample. Incomplete surveys were discarded. Given the descriptive nature of this study, medians and interquartile ranges (IQR) were calculated for continuous variables, and frequencies and proportions were obtained for categorical variables. To simplify analyses and facilitate interpretation of results, responses to specific variables were grouped and re-categorized, as specified in the section about the survey instrument.

Results

Sociodemographic characteristics

Sociodemographic characteristics are shown in Table 1. Participants were young on average (Median = 28 years, IQR = 23–35), being the TM

Table 1. Sociodemographic characteristics.

	TF = 72 % (n)	TM = 66 % (n)	NB = 44 % (n)
Age (median, IQR)	33 (26–40.75)	25.5 (22–31.25)	28 (22–32)
Born in Argentina			
Yes	88.9 (64)	93.9 (62)	86.4 (38)
No	11.1 (8)	6.0 (4)	13.6 (6)
Residence			
City of Buenos Aires	40.3 (29)	30.8 (20)	34.9 (15)
Greater Buenos Aires (suburban area)	26.4 (19)	35.4 (23)	23.3 (10)
Rest of the country	33.4 (24)	33.7 (22)	41.9 (18)
Educational level			
Incomplete secondary education or lower	32.4 (23)	25.8 (17)	11.4 (5)
Complete secondary education or higher	67.7 (48)	74.3 (49)	88.7 (39)
Employment			
Formal	26.4 (19)	25.8 (17)	29.6 (13)
Informal, free-lance or independent	18.1 (13)	21.2 (14)	27.3 (12)
Unemployed/ lack of income	25.1 (18)	51.5 (34)	38.6 (17)
Sex work	30.6 (22)	1.5 (1)	4.5 (2)
Type of housing			
House	54.2 (39)	66.2 (43)	54.5 (24)
Apartment	25.0 (18)	29.2 (19)	43.2 (19)
Hotel room or other kind of unstable housing	20.9 (15)	4.5 (3)	2.3 (1)

ones the youngest (Median = 25.5, IQR = 22–31.25). Around 90% of participants in each group were born in Argentina. The proportion of migrants was higher among NB participants (13.6%, n = 6). More than half of the participants in each group resided in the Metropolitan Area of Buenos Aires (City of Buenos Aires and its suburban area). Participants living in other provinces or cities comprised around a third of TF and TM, with a higher proportion among NB (41.9%, n = 18).

Disparities in educational level were found between groups. NB participants exhibited a higher educational level as most of them (88.7%, n = 39) had completed secondary school or more. This proportion decreased to 67.7% (n = 48) among TF participants, with more than a third of them not having completed secondary school (32.4%, n = 23), showing a lower educational level than the other two groups. Only between a quarter and a third of each sample reported having a formal job. This was more frequent among NB participants, with 29.6% of them (n = 13) informing being formally employed. Unemployment and lack of income was notably high among TM participants. Within this group, more than half of the participants were not working or reported not having any kind of economic income. On the other hand, a third of TF participants reported engagement in sex work (30.6%, n = 22). This proportion was remarkably higher than the one reported by TM and NB participants.

More than 90% of TM and NB participants were living in a house or apartment during the lockdown. This proportion was lower among TF participants (79.2%, n = 57). Within this group, unlike TM and NB individuals, a greater proportion (20.9%, n = 15) reported spending the lockdown in a hotel room or other type of unstable housing.

Information related to COVID-19, health and lockdown/social distancing measures

As shown in Table 2, more than half of the participants in each group perceived themselves moderately at risk or exposed to COVID-19. Perception of high risk was more frequent among TF participants, being reported by more than a quarter of that group (26.8%, n = 19). The majority of the participants reported not living with a preexisting condition that could contribute to exposure to COVID-19 or its severity. However, presence of such diagnoses among TF individuals (18.2%, n = 12) duplicated the proportion of the other two groups. Self-reported HIV prevalence was higher for TF participants, representing more than a third of them (33.3%, n = 24); followed by NB participants (22.7%, n = 10).

Table 2 shows that more than half of the TM and NB participants were sharing the lockdown and confinement with family. TF participants were also primarily sharing isolation with family, though in a lower proportion. Among the three groups, TM individuals were the ones who more frequently reported living with an intimate partner during this period: more than a third of them (34.8%, n = 23). In turn, TF participants were the group that reported spending the lockdown alone in the highest proportion, being mentioned by a quarter of that sample (25.0%, n = 18).

Regarding changes in income and employment after the implementation of the lockdown and social distancing measures, most of the TF and TM participants reported reductions in economic income and work. This reduction was even more severe for TF participants, affecting the great majority of them (81.4%, n = 57). In this same line, loss of a job or impossibility to work resulting from these measures was more frequent among TF participants, affecting more than half of them (52.9%, n = 37). This negative consequence of lockdown was reduced to a third of TM participants (31.8%, n = 21). In comparison with the other groups, NB participants' income or employment were the least affected by the implementation of the lockdown and social distancing measures (Table 2).

Mental health and substance use

Table 3 shows that, in the three groups, boredom, anxiety and worry or concern were the emotions that participants reported to have experienced in a higher level in association with the implementation of lockdown and social distancing measures. All these emotions were experienced in high intensity by more than half of the participants in each group (except for worry among TM participants, though the proportion is still around 50% of them).

For TF and TM participants, each of the other negative emotions that were assessed (sadness, hopelessness, and fear) were experienced in a high level by around a third of them. The only exception was loneliness, that was highly experienced by half of the TM participants (49.2%, n = 32). In contrast, more than half of the NB participants reported to have experienced high levels of all the negative emotions associated with the lockdown and social distancing measures. In fact, proportions of high levels of negative emotions for this group were more elevated than those of the other two groups for all the assessed emotions. High levels of support from others during the lockdown were reported by less than half of the TF and NB participants, and by only a third of the TM participants (Table 3).

NB participants showed the highest proportion of presence of suicidal thoughts since the implementation of the lockdown (45.5%, n = 20), followed by TM (27.7%, n = 18) and TF (14.1%, n = 10) individuals.

A general reduction in substance use was observed in the three groups since the implementation of the lockdown, especially for alcohol and cocaine use. Increments in use in this period were observed primarily for tobacco and cannabis, especially among TM and NB participants (Table 4).

Experiences of violence

The number of participants reporting experiences of violence since the implementation of lockdown

Table 2. Information related to COVID-19, health, and lockdown/social distancing measures.

	TF = 72 % (n)	TM = 66 % (n)	NB = 44 % (n)
Perception of risk for COVID-19			
Not at risk	14.1 (10)	16.9 (11)	13.6 (6)
Moderately at risk	59.2 (42)	63.1 (41)	68.2 (30)
Highly at risk	26.8 (19)	20.0 (13)	18.2 (8)
Preexisting chronic condition			
Yes	18.2 (12)	7.9 (5)	9.8 (4)
No	81.8 (54)	92.1 (58)	90.2 (37)
HIV status			
Yes	33.3 (24)	3.0 (2)	22.7 (10)
No	54.2 (39)	89.4 (59)	54.5 (24)
Unknown	12.5 (9)	7.6 (5)	22.8 (10)
Who they are sharing lockdown with			
Alone	25.0 (18)	10.6 (7)	20.5 (9)
Partner only	27.8 (20)	34.8 (23)	20.5 (9)
Family	37.5 (27)	51.5 (34)	54.5 (24)
Friends or other people	13.9 (10)	16.7 (11)	15.9 (7)
Reduction in income or work			
Yes	81.4 (57)	60.0 (39)	46.5 (20)
No	18.6 (13)	40.0 (26)	53.5 (23)
Loss of job or impossibility to work			
Yes	52.9 (37)	31.8 (21)	16.3 (7)
No	47.1 (33)	68.2 (45)	83.7 (36)

Table 3. Frequencies and percentages of participants who reported high levels of emotions associated with the lockdown and social distancing measures.

High levels of…	TF = 72 % (n)	TM = 66 % (n)	NB = 44 % (n)
Boredom	64.8 (46)	65.2 (43)	65.9 (29)
Anxiety	61.1 (44)	65.2 (43)	65.9 (29)
Worry/Concerns	51.4 (36)	45.5 (30)	65.9 (29)
Support from others	43.7 (31)	30.3 (20)	44.2 (19)
Loneliness	36.1 (26)	49.2 (32)	65.1 (28)
Sadness	35.2 (25)	36.4 (24)	60.5 (26)
Hopelessness	28.2 (20)	26.2 (17)	50.0 (21)
Fear	27.8 (20)	30.3 (20)	50.0 (22)

Table 4. Self-reported changes in substance use after the implementation of lockdown and social distancing measures.

Substance	Less than before % (n)	Same as before % (n)	More than before % (n)
TF			
Tobacco	40.7 (11)	37.0 (10)	22.2 (6)
Alcohol	63.0 (29)	32.6 (15)	4.3 (2)
Cannabis	37.9 (11)	44.8 (13)	17.2 (5)
Cocaine	69.2 (9)	30.8 (4)	–
TM			
Tobacco	43.8 (14)	15.6 (5)	40.6 (13)
Alcohol	57.8 (26)	28.9 (13)	13.3 (6)
Cannabis	48.5 (16)	18.2 (6)	33.3 (11)
Cocaine	66.7 (2)	33.3 (1)	–
NB			
Tobacco	50.0 (11)	18.2 (4)	31.8 (7)
Alcohol	62.5 (25)	15.0 (6)	22.5 (9)
Cannabis	44.4 (12)	29.6 (8)	25.9 (7)
Cocaine	75.0 (3)	–	25.0 (1)

Table 5. Experiences of violence, and barriers to access health care and basic services during the implementation of lockdown/social distancing measures.

	TF = 72 % (n)	TM = 66 % (n)	NB = 44 % (n)
Experiences of violence by any source			
Yes	20.9 (14)	27.6 (16)	42.5 (17)
No	79.1 (53)	72.4 (42)	57.5 (23)
Experiences of violence by source (yes)			
Family member	9.7 (6)	17.0 (9)	29.7 (11)
Intimate partner	5.8 (3)	3.8 (2)	10.3 (3)
Neighbor	7.3 (4)	9.8 (5)	5.7 (2)
Landlord	5.8 (3)	6.5 (3)	3.0 (1)
Police/Security forces	5.3 (3)	10.9 (6)	7.9 (3)
Barriers in access to health care (yes)			
Antiretroviral treatment	11.3 (8)	4.7 (3)	11.6 (5)
Hormone therapy	50.0 (34)	52.3 (34)	11.6 (5)
General health care	24.6 (17)	28.8 (19)	38.6 (17)
Mental health care	18.8 (13)	33.8 (22)	29.5 (13)
Toxicology	10.1 (7)	4.5 (3)	2.3 (1)
Barriers to access basic services (yes)			
Housing/ shelter	11.8 (8)	7.6 (5)	4.8 (2)
Food and cleaning or hygiene products	26.1 (18)	21.2 (14)	21.4 (9)
Financial assistance	36.2 (25)	19.7 (13)	29.5 (13)

was similar across the three groups, though a larger proportion of the NB sample was affected (42.5%, n = 17) (Table 5). The most frequent source of violence in the three groups was from a family member, especially among NB (29.7%, n = 11) and TM (17.0%, n = 9) participants. In these two groups, violence from family members was psychological (e.g., humiliation, threats, or insults) in all cases, whereas TF participants reported also physical (n = 2) and sexual (n = 1) violence from this source. Violence from the police or security forces was remarkably high among TM participants (10.9%, n = 6), half of these cases involving psychological violence and half, physical violence (Table 5). Violence from intimate partners for all cases across the three groups was reported as psychological.

Barriers in access to basic services and health care

Barriers in access to basic services (housing, food, cleaning/hygiene products and financial assistance) were reported in a greater proportion by TF participants (Table 5). Among TF and NB participants, barriers were more frequent in access to financial assistance provided by the Government or civil/community organizations, being reported by around a third of these participants.

Barriers in access to health care since the implementation of lockdown were detected primarily for hormone therapy. Half of the TF and TM participants reported difficulties to access or continue their hormone therapy during this period. However, among NB participants, the most frequently reported barriers were related to access to general health care (e.g., gynecology, proctology) (38.6%, n = 17). Difficulties in access to general health care services were also considerable for TF (24.6%, n = 17) and TM (28.8%, n = 19) participants. Around a third of TM and NB participants showed difficulties to access mental health care or continue psychological/psychiatric treatments. Barriers to access toxicology services or substance dependence treatment were more frequently reported by TF individuals (10.1%, n = 7) (Table 5).

Discussion

The present study sought to describe mental health, substance use, experiences of violence, and access to health care and basic services; and

explore self-reported changes in these variables among transgender and non-binary population from Argentina after two months of implementation of lockdown and social distancing measures to control COVID-19. The pandemic of COVID-19 and the lockdown and social distancing measures have had a general negative impact on the participants of this study. This adverse impact seems to have differentially affected each of the three samples (transfeminine, transmasculine and non-binary participants), probably due to the diversity within this population and the particularities of each group. Among TF participants, the pandemic, and the policies to control it seem to have had a greater negative impact on the socioeconomic aspect. In contrast, among NB participants, this impact seems to be stronger on their mental health and psychological well-being.

TF participants were the most negatively affected group in the socioeconomic aspect, with the highest reduction in economic income and the highest impossibility to work. Trans women in Argentina frequently live in a context of high psychosocial vulnerability, that preexists the pandemic and the implementation of lockdown measures (Fundación Huésped, 2014; Ministerio Público de la Defensa, 2017). As in previous research, TF participants in this study showed low levels of educational attainment and high frequency of sex work and unstable housing. Therefore, they may have been in a more precarious situation to cope with the restrictions that a lockdown implies. For example, restrictions to circulation, for both sex workers and clients, may have impeded street-based sex work, reducing income for livelihood. Evidence of this is that barriers to access to basic services and goods (i.e., housing, food/hygiene products and financial assistance) were more frequently reported by TF participants.

Since the implementation of lockdown, the national government has established temporary financial assistance to compensate people whose economic situation was more negatively affected by this measure. It consisted of a monthly aid between US$ 150 and 160. However, this assistance was insufficient, as it was provided only for a limited period (3 months), hardly covered the basic market basket (approximately US$ 216) and was slightly above the line of poverty (Instituto Nacional de Estadística y Censos [INDEC], 2020). Thus, even those who had access to these aids, may not have received enough assistance to compensate for income loss and to entirely afford shelter and livelihood. Additionally, a considerable proportion of participants in each group, especially TF participants, have informed barriers to access these financial benefits, as they frequently include filling out forms, attaching several documents, and access to Internet to submit them. Fulfilling this task on their own is not always possible for those who have a lower literacy level or lack an adequate electronic device.

Regarding mental health, the most frequent and more intensely experienced emotions during the lockdown were boredom, anxiety, and worry. Boredom is probably an expected result of a long-lasting confinement. Anxiety and concerns have also been frequently reported in other studies about the emotional impact of the COVID-19 pandemic and social distancing measures (García-Álvarez et al., 2020; C. Wang et al., 2020). They may be the consequence of several factors: uncertainty about how or when the pandemic or the lockdown will end or how successful the measures to control it will be, fear of contagion, concerns about the impact of lockdown on income and livelihood, among others (Brooks et al., 2020). The negative emotional impact of the lockdown measures seems to have affected a greater proportion of NB participants, who also reported the highest proportion of suicidal thoughts. It is possible that NB people have less opportunities to benefit from the protective effect of gender affirmation. Gender affirmation, whether social, legal, medical, or psychological, often reproduces traditional binarism and thus, may be more easily available for transgender people who identify either as male or female. Recognition, acceptance, and validation of NB identities may be less frequent, leaving this population in a more vulnerable psychological situation (Reisner & Hughto, 2019).

TM and NB participants showed the highest frequencies of violence from family members, mainly psychological (humiliation, threats and/or insults), in line with other reports from the Latin American region (Radi & Losada, 2020). In

relation to this, it is noteworthy the high levels of loneliness in these two groups (and the low levels of social support from others in the first one), as most of these participants reported to be sharing confinement with other people, primarily family members. Previous studies suggested that compulsory lockdown measures may exacerbate violence and discrimination against transgender and NB population, by forcing them to be confined in unaccepting environments, such as their families (Gonzales et al., 2020). Confinement in such unsupportive and non-affirming environments, due to the COVID-19 lockdown, was also found to be associated with negative mental health outcomes among transgender people (Jones et al., 2021; Zwickl et al., 2021). This can contribute to explain the particularly negative emotional impact of lockdown on TM and NB participants, which can be worsened by the reduced access to or availability of mental health care services that participants reported.

The proportion of violence from security forces, traditionally frequent among TF individuals, was higher among TM participants. A possible explanation is that violence from police among TM individuals may have been underestimated or scarcely explored in previous local studies. Consistently with this result, researchers and community representatives in Latin America have reported an increment of institutional violence toward TM people, perpetrated by the police (Radi & Losada, 2020). In this sense, warnings have been made about the increment of violence from security forces during the lockdown, as governments in South America have increased the presence and attributions of the police to enforce compliance with this measure among citizens (Perez-Brumer & Silva-Santisteban, 2020).

Substance use was overall reduced since the implementation of lockdown in the three groups, especially for alcohol and cocaine. This may be a consequence of restrictions of movement, that made it more difficult for them and their providers to meet. It may also be the result of reductions in economic income and in the possibility to afford these substances. Among those who reported increments in substance use, it was observed primarily for tobacco and cannabis. The first one is legal and available in any local store that is walk distance from any home (such distances were not included in the restrictions). On the other hand, cannabis can be grown at home and thus, it is not so strongly conditioned by restrictions of movement or affordability. Additionally, both substances may usually have a tranquilizing effect, reducing anxiety, which was precisely one of the emotions that participants most frequently reported to have experienced. It is not surprising that they have prioritized those substances that could reduce their anxiety levels to cope better with the pandemic.

Finally, barriers to access health care were observed in the three groups, consistently with results from other studies with Latin American transgender and NB populations (Radi & Losada, 2020; Torres et al., 2020). Main barriers were reported to access or continue hormone therapy among TF and TM participants. This is particularly worrying as gender affirming procedures, such as hormone therapy, are positively associated with psychological well-being (Glynn et al., 2016) and can be a protective factor against pandemic-related stressors. Cancelation, postponement, or lack of gender-affirming procedures, resulting from the COVID-19 pandemic, were associated with emotional distress and negative mental health outcomes in this population (Jones et al., 2021; Zwickl et al., 2021). This can be worsened by the fact that a considerable proportion of participants reported barriers to access mental health care, in particular, TM and NB individuals, who also mentioned a greater negative emotional impact of the lockdown, with an alarming proportion of suicidal thoughts. Therefore, these populations may be lacking access to two fundamental health care services, precisely when they are in most need of them, also indicating a deficient enforcement of the Gender Identity and the National Mental Health and Addictions laws, that compel the government to provide and guarantee free access to gender-affirming and mental health care for all citizens. The pandemic and the lockdown may have enlarged the gap that already existed between what these Laws establish and what the health care system effectively offers to transgender and

NB people (Millet, 2021). Other reported barriers, such as those to access or continue antiretroviral treatment, are also concerning given the high prevalence rates of HIV among TF and NB people in this study and in general (34% at a national level among the first ones) (Ministerio de Salud de la Nación, 2019). Researchers have noted that, as health care systems prioritize diagnosis and attention to COVID-19 patients, services that are perceived as elective or less essential can be reduced or canceled (van der Miesen et al., 2020; Y. Wang et al., 2020). The Argentinian health care system may have re-oriented resources to assist those affected by COVID-19, reducing availability of hormone therapy or mental health services, as suggested in previous international studies (Y. Wang et al., 2020).

Barriers to health care, in general, may be also due to restrictions to circulation and public transport use imposed by the lockdown, and the requirements of special permits. These were not always easy to obtain and may have discouraged participants to seek health care. Intensification of economic hardship and social vulnerability (e.g., reduction in income and work, insufficient financial assistance), may have also contributed to barriers to access health care. Participants may have had less material resources to afford transportation, medication, and other costs related to health care. These reasons only add to preexisting barriers to access health care among the transgender population in Argentina, such as stigma and discrimination from health care workers, and lack of supplies (e.g., hormones) and health programs specifically designed or adapted to adequately serve this population (Centro de Estudios Legales y Sociales, 2020; Radi, 2020; Socías et al., 2014; Zalazar et al., 2018).

Several limitations of this study should be acknowledged. Firstly, samples are non-probabilistic and thus, may not be representative of the transgender and NB population. In fact, using an online survey may have introduced bias regarding age and educational level. Responding to this kind of survey is facilitated when respondents are familiarized with technology and use of electronic devices, which is more common among younger and/or more educated people. It also requires access to Internet and a smartphone/computer and this is more frequent among people with higher economic and literacy levels. Secondly, given the samples' size, analyses were limited to descriptive statistics and the study was primarily exploratory. In this sense, this study did not search for statistically significant differences between groups. Future research with larger samples could compare these groups and examine if these differences are actually significant. Thirdly, relevant variables that may also affect or mediate mental health outcomes (e.g., whether respondents were in charge of children or not) were not included and should be considered for future studies in this subject. Finally, measures and data collection relied exclusively on self-report from participants. As such, this study only gathered information on the pandemic and the lockdown from the perspective of the transgender and NB community. Future studies could objectively assess and analyze public policies and services provided by the government or other institutions, to examine their effectiveness in assisting this population.

However, it is relevant to highlight that this is the first study conducted in Argentina, entirely focused on the transgender and NB population, to explore the effect of lockdown and social distancing on these populations and to analyze its differential impact on the subgroups within them, from the perspective of the community. From these results, it is possible to conclude that, as anticipated, the COVID-19 pandemic and the prolonged lockdown implemented in Argentina to control it, have had a negative impact on the transgender and NB population, aggravating their preexisting situation of vulnerability and exclusion. This conclusion is in line with other studies conducted in Latin America (Radi & Losada, 2020) and other regions (Jones et al., 2021; Zwickl et al., 2021). Additionally, this impact affected different subgroups within this population in a particular and specific way.

As final words, it is relevant to mention that even though lockdown measures concluded in Argentina in November, 2020; public policies will still have to deal with their long-lasting negative effects on vulnerable populations. Second waves of the COVID-19 pandemic are currently occurring before an effective vaccine or medical treatment are available or able to cover the majority

of the population, forcing several governments to reestablish lockdown. Acknowledging its effects may help to anticipate and be better prepared to protect those who can be more negatively affected. Public policies are required to mitigate the negative impact of lockdown measures on the transgender and NB population, during this pandemic and afterwards. Firstly, mechanisms to compensate loss of income and employment should be implemented to guarantee transgender and NB populations' livelihood and shelter. This implies that financial assistance should be projected to widely and sufficiently allow these populations to afford their basic needs. Furthermore, strategies to facilitate access to such assistance should be developed (e.g., forms that are simpler to fill out, less formal requirements, assistance from employees, social workers, or peer community workers). Secondly, health care services that are essential to transgender and NB people (e.g., hormone therapy, mental health) should be assured, developing strategies to address barriers to access. One possibility is to establish networks with community organizations and promote their active participation. For example, peer health promoters or navigators can function as "bridges" between the health care system and the community, contributing to overcome obstacles (e.g., assisting transgender and NB patients in obtaining permits to circulate or appointments online or by telephone). Such roles can also promote access to available financial assistance, as abovementioned. Additionally, expansion of telehealth services can also contribute to overcome restrictions to circulation among this population. Finally, urgent efforts should be made to protect the transgender and NB population from violence and abuse during this period. Programs and resources (e.g., a specific phoneline) to assist victims of gender-based violence are already available both at a national and local levels, though they are not easily available to all communities. An alliance with community organizations could contribute to the enforcement of these policies by disseminating information about them and facilitating immediate access to these resources. In this sense, as local research has shown (Fernández Romero, Fernández Romero, 2021; Mendieta & Vidal-Ortiz, 2021), it is fundamental to include the voices and perspective of transgender and NB community organizations in the development and enforcement of public policies and laws in benefit of this population.

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Conflict of interest

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