Domestic Violence During the COVID-19 Confinement: Do Victims Feel more Socially Isolated?

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Abstract

Background

Since March 13th 2020, confinement measures have been introduced in Belgium to curb the spread of the coronavirus (COVID-19). These measures also have an impact on people's daily life (closure of school/businesses, teleworking, recommendation to stay at home...). This can cause stress on social, economic and psychological levels and thereby can trigger domestic violence. Besides, confinement also fosters social isolation, which can complicate help seeking behaviour. The aim of this study is to determine the prevalence of domestic violence during the coronavirus crisis and to assess whether victims of domestic violence experienced more social isolation than nonvictims.

Methods

Several online COVID-19 health surveys were organised among Belgian residents aged 18 + via snowball sampling. This study is based on the second (April 2020) and the sixth survey (March 2021). After excluding 1-person households and missing data, the sample size was respectively 25,251 and 12,589. Weighted prevalence of domestic violence was evaluated for the two surveys. The association (OR (95% CI)) between domestic violence and subjective social isolation was assessed with logistic regression stratified by survey, adjusted for covariates and taking post-stratification weights into account.

Results

In April 2020, 4.0% of the adult population reported being a victim of domestic violence (1.2% in the health interview survey 2018); in March 2021, this was 6.2%. In April 2020, victims of domestic violence had a higher odds of perceived weak social support (2.23 (1.76–2.82)) and of having less confidence in health care services (1.78 (1.21–2.63)). In March 2021, victims had a higher odds of perceived weak social support (1.98 (1.27–3.09)), but also of being unsatisfied with their social contacts (1.81 (1.16–2.84)) and of perceived social (2.70 (1.77–4.13)) and emotional loneliness (2.40 (1.45–3.97)).

Conclusions

Compared to 2018, more people reported domestic violence since the coronavirus crisis. Victims of domestic violence feel more often socially isolated. Although confinement is needed to counteract the virus, it can put people in a dangerous situation since they do not get the help they need. Therefore, adequate support is essential.

Background

Domestic violence is generally defined as violence between intimate partners, but also as violence against household members (children, parents and elderly) (1–3). Although women are sometimes the perpetrator, they are most often the victim (4). Domestic violence is not only a breach of human rights, it is also a major public health problem (4–7). Since it occurs in different forms (physical, psychological and sexual violence), its health impact varies from mental problems (including depression, anxiety and suicide attempts) to physical injuries (7, 8), which in turn may lead to a more frequent use of health care services (9). Domestic violence can also be fatal (8). Though psychological violence is more prevalent, it more often remains under the radar (2).

Prevalence rates of domestic violence on a national level are rather scarce and complicated to gather. Moreover, discrepancies in the definition (form of violence and target group) and in the methodology applied in studies make comparisons difficult (2). Commonly used sources to obtain figures on domestic violence are clinical studies, police and hospital records, but those figures cannot be generalized to the general population. A scientific review of mostly U.S. surveys on violence has shown that the past year prevalence of intimate partner violence against women varies between 2% and 12% (10). According to the 2018 national Health Interview Survey (HIS) of Belgium, 1% of the population, aged 18 years and older reported being a victim of domestic violence in the 12 months preceding the survey (11). It has been shown that a HIS is an appropriate tool to deliver population-based prevalence of victimization and to study the association between domestic violence and (physical, mental and social) health (2).

Since the start of the COVID-19 pandemic in 2020, confinement measures have been taken globally to curb the spread of the coronavirus and to relieve the health care system (1, 12–14). These measures had a tremendous impact on people's daily life, such as closure of schools and businesses, teleworking and the recommendation to stay at home (1, 13–15). This can cause stress on social, economic and psychological levels and thereby can trigger violence (16). Accordingly, domestic violence has extensively been reported since the beginning of the coronavirus crisis: i.e. an increase of 30% in France, 25% in Argentina, 30% in Cyprus, 33% in Singapore (1, 12, 13, 17). This may also be the case in Belgium as the number of calls regarding domestic violence to the helplines has raised by 70% since the beginning of this crisis (18).

Confinement measures foster social isolation (15, 16) as people have to restrict social contacts with external family members, friends, neighbors and colleagues and have limited access to social and health care services (7, 12, 13, 15–17, 19). Social isolation can be detrimental especially for victims of domestic violence since seeking help becomes more difficult (7, 12, 14, 17, 19, 20). Moreover, it is harder for the victims to report domestic violence because they are trapped with their perpetrator (12, 15, 18). Besides, perpetrators commonly use social isolation as a tactic to deprive their victims of their support network. In this sense, the confinement measures only play to the advantage of the offenders (13, 14, 17, 21).

In this study, we aim to examine the evolution of domestic violence throughout the coronavirus crisis and to assess the association between confinement and domestic violence by using data from an online survey organized among the adult population living in Belgium conducted 6 weeks and 1 year after the

introduction of the confinement measures. We hypothesize that the prevalence of domestic violence is higher during the confinement period compared to the prevalence measured in the HIS 2018. Additionally, as social isolation may worsen the situation of the victims, we hypothesize that during the confinement, victims of domestic violence experienced more social isolation than nonvictims.

Methods

Survey methodology

Since the introduction of the confinement measures in Belgium by the National Security Council on the 13th of March 2020 (22), the Belgian Institute of Public health Sciensano organized a series of online COVID-19 health surveys to evaluate the impact of the coronavirus crisis on people's daily life. Even though the restriction measures were gradually loosened starting from 4 May 2020, the rise of SARS-Cov-2 infections in the second and third COVID-19 waves meant that the measures had to be tightened up again on respectively 18 October 2020 (23) and 26 March 2021 (24). However, the measures that were in place during the first COVID-19 wave were the most restrictive. The questions on domestic violence were asked in the second survey (launched from 16 to 22 April 2020 – during the first COVID-19 wave) and in the sixth survey (launched from 17 to 25 March 2021 – just before the third COVID-19 wave). All the surveys were developed using LimeSurvey version 3. The average completion time was 15 minutes.

The link to the survey was, among others, announced on Sciensano's and other organization's websites, as well as through the press and social media. Moreover, an invitation e-mail was sent to contacts of Sciensano employees and to the participants who indicated in a given survey that they agreed to be invited for the next one. Furthermore, they were asked to spread the link of the survey to family, friends and acquaintances, the so called snowball sampling (25). Each cross-sectional survey received the approval of the Ethics Committee of the University of Ghent (BC-07544), in accordance with the General Data Protection Regulation (GDPR) and the Declaration of Helsinki (26, 27). Only Belgian residents aged 18 years or older who gave their consent were allowed to take part in the survey (25).

Study population

The total number of participants in the second COVID-19 Health Survey (April 2020) was 42,895. As the topic regarding domestic violence was not asked to people living alone, these were excluded (N sample = 35,800). After excluding participants with missing data on the sociodemographic and health covariates and the social isolation indicators (N sample = 25,532), followed by excluding participants with missing data on domestic violence, the final study sample consisted of 25,251 individuals aged 18 years and older. In the sixth survey (March 2021) these numbers were respectively 20,410 (total participants) – 16,520 (after exclusion people living alone) – 12,909 (after exclusion missing sociodemographic and health covariates and social isolation indicators) – 12,589 (after exclusion missing domestic violence variable) (Fig. 1). People may have participated in both surveys, but since it is no follow-up survey, the number is not known. Post-stratification weights, based on the composition of the population from the

“Labour Force Survey 2018”, were applied to the COVID-19 Health Survey samples to correct for the distribution in terms of region, gender, age group and educational attainment (25).

Variables

Tables 1a, 1b and 1c give an overview of the questions used in both surveys and the corresponding variables (covariates and indicators).

Table 1

a: Overview of the questions and the corresponding covariates of the second and the sixth COVID-19 Health Survey, Belgium 2020–2021

Questions second survey	Questions sixth survey	Sociodemographic and health covariates
What is your year of birth?	Idem	Age group 1. 18–34 years 2. 35–54 years 3. 55+ years
What is your gender? 1. Man 2. Women 3. Other	Idem	Gender 1. Men 2. Women - (excluded)
What type of household do you live in? 1. Living alone 2. As couple without child(ren) 3. As a couple, with child(ren) 4. Living alone with child(ren) 5. With my parent(s), family, friends or acquaintances 6. Other	Idem	Household composition - (excluded) 2. Couple, without child(ren) 3. Couple, with child(ren) 4. Living alone with child(ren) 5. Living with parents, family,... 6. Other
Including yourself, how many people live in your household?	How many people live in your household, including yourself?	Household size 1. 2–4 persons 2. 5 persons or more

Questions second survey	Questions sixth survey	Sociodemographic and health covariates
<p>What is the highest level of education degree you have completed?</p> <p>1. No degree</p> <p>2. Primary education</p> <p>3. Secondary education</p> <p>4. Bachelor</p> <p>5. Master</p> <p>6. Doctorate: PhD</p> <p>7. Other</p>	<p>Idem</p>	<p>Educational attainment</p> <p>1. Low (answer categories 1–3)</p> <p>2. High (answer categories 4–6)</p> <p>- (answer category 7 excluded)</p>
<p>To what extent does the coronavirus (COVID-19) epidemic have an impact on your household's monthly net income</p> <p>1. No impact</p> <p>2. Limited impact (limited loss of income)</p> <p>3. Significant impact (significant loss of income)</p> <p>4. Serious impact (serious loss of income)</p>	<p>On the following scale, to what extent does the corona crisis still impact the following domains of your life today, considering that -5 = most negative impact, 0 = no impact and + 5 = the most positive impact?</p> <p>11 domains including income</p>	<p>Impact of COVID-19 on income</p> <p>1. No (or positive) impact</p> <p>- Survey 2: answer category 1</p> <p>- Survey 6: from + 5 to 0</p> <p>2. Negative impact (loss)</p> <p>- Survey 2: answer categories 2–4</p> <p>- Survey 6: -1 to -5</p>
<p>Health related quality of life: standardized instrument developed by the European EuroQol (34) concerning 5 dimensions: problems of mobility, self-care, performance of the usual activities, pain/discomfort and anxiety/depression</p>	<p>Idem</p>	<p>Reporting no health problems (EQ-5D)</p> <p>1. Yes (report a problem in at least one of the dimensions)</p> <p>2. No (no problem on all dimensions)</p>

Table 1

b: Overview of the questions and the corresponding indicators of the second and the sixth COVID-19 Health Survey, Belgium 2020–2021

Questions second survey	Questions sixth survey	Outcome indicators
<p>Since 13 March 2020, have you experienced verbal/psychological violence (e.g. insults, ridicule, humiliation), physical violence (e.g. being beaten, shaken up) or sexual violence (e.g. forced sexual acts, rape) within in your family?</p> <p>1. No, and never before 2. No, but before that 3. Yes, but less than usual 4. Yes, same as usual 5. Yes, and more than usual</p>	<p>In the past 12 months, have you experienced verbal/psychological violence (e.g. insults, ridicule, humiliation), physical violence (e.g. being beaten, shaken up) or sexual violence (e.g. forced sexual acts, rape) within in your family?</p> <p>1. No, and never before 2. No, but before that 3. Yes, but less than usual 4. Yes, same as usual 5. Yes, and more than usual</p>	<p>Victim of domestic violence</p> <p>1. Yes (answer categories 3–5) 2. No (answer categories 1–2)</p>
If yes	If yes	
<p>Since 13 March 2020, what type of violence have you experienced within your family?</p> <p>- Verbal/psychological violence: 1. Yes – 2. No - Physical violence: 1. Yes – 2. No - Sexual violence: 1. Yes – 2. No</p>	<p>In the past 12 months, what type of violence have you experienced within your family?</p> <p>- Verbal/psychological violence: 1. Yes – 2. No - Physical violence: 1. Yes – 2. No - Sexual violence: 1. Yes – 2. No</p>	<p>Victim of psychological violence within the family</p> <p>1. Yes 2. No</p> <p>Victim of physical violence (including sexual violence) within the family</p> <p>1. Yes 2. No</p>

Table 1c: Overview of the questions and the corresponding indicators of the second and the sixth COVID-19 Health Survey, Belgium 2020-2021

Questions second survey	Questions sixth survey	Subjective social isolation indicators
<p>Based on what you have seen, read or heard, how confident are you that the following institutions are dealing well with the coronavirus (COVID-19) epidemic?</p> <p>“The health care services (doctors, hospitals,...)”</p> <ol style="list-style-type: none"> 1. Very confident 2. Less confident 3. No opinion 	Not included	<p>Confidence in health care services</p> <ol style="list-style-type: none"> 1. Very confident 2. Less confident <p>- (answer category 3 excluded)</p>
<p>How do you judge your social contacts of the last 2 weeks?</p> <ol style="list-style-type: none"> 1. Really satisfied 2. Rather satisfied 3. Rather unsatisfied 4. Really unsatisfied 	Idem	<p>Satisfaction with social contacts</p> <ol style="list-style-type: none"> 1. (Rather) unsatisfied (answer cat. 3-4) 2. (Rather) satisfied (answer categories 1-2)
<p>Over the last 2 weeks, how many people were so close to you that you could count on them if you would have had serious personal problems?</p> <ol style="list-style-type: none"> 1. None 2. 1 or 2 3. 3 – 5 4. 6 or more 	Idem	
<p>Over the last 2 weeks, how much concern have people shown in what you were doing?</p> <ol style="list-style-type: none"> 1. A lot of concern and interest 2. Some concern and interest 3. Uncertain 4. Little concern and interest 5. No concern and interest 	Idem	<p>Quality of social support derived from OSLO social support scale (OSSS-3) (35)</p> <ol style="list-style-type: none"> 1. Weak support 2. Moderate/strong support
<p>Over the last 2 weeks, how easy was it to get practical help from neighbours if you should have needed it?</p>	Idem	

1. Very easy		
2. Easy		
3. Possible		
4. Difficult		
5. Very difficult		
Not included	<p>Below you find some statements about you and the people around you. Please score how valid the statement is for you.</p> <p>01. I experience a general sense of emptiness</p> <p>02. There are plenty of people I can rely on when I have problems</p> <p>03. There are many people I can trust completely</p> <p>04. There are enough people I feel close to</p> <p>05. I miss having people around me</p> <p>06. I often feel rejected</p> <p>With the answer categories: 1. Yes! – 2. Yes – 3. More or less – 4. No – 5. No!</p>	<p>Social loneliness derived from the De Jong-Gierveld scale (36) (based on the items 02, 03 and 04)</p> <p>0. Not lonely</p> <p>1. Lonely</p> <p>Emotional loneliness derived from the De Jong-Gierveld scale (36) (based on the items 01, 05 and 06)</p> <p>0. Not lonely</p> <p>1. Lonely</p>

The independent indicator was reporting being a victim of domestic violence on either April 2020 or March 2021 (that is 6 weeks or 1 year after the introduction of the confinement measures). A number of sociodemographic and health variables have been found to be related to domestic violence (2, 8, 12, 13, 15–17, 19, 32, 33), these covariates are: gender, age group, educational attainment, household composition and size, income loss and quality of life.

To assess if victims of domestic violence feel more socially isolated during confinement than nonvictims, the indicators of social isolation were defined as the outcome indicators. The definition of social isolation can vary from a simple description, like ‘the absence of contacts’, to a more complex one which comprises multiple dimensions concerning ‘feelings related to (the absence of) contacts, such as social support, belongingness, fulfillment and engagement’ (28). An intermediate definition of social isolation which is bi-dimensional, makes a distinction between an objective and a subjective component (28–31).

Objective social isolation (or social disconnectedness) is defined as having a small social network (e.g. few close friends and relatives) (28–31) and having limited involvement in social activities (29, 30). Conversely, subjective social isolation (or perceived isolation) is defined by a perceived lack of social support and a feeling of loneliness (28–30). Gierveld and Tilburg (31) describe loneliness as “the expression of a negative feeling of missing relationships with others”. All the five social isolation indicators used in this study concern subjective social isolation and refer to the survey questions evaluating the respondent’s satisfaction with social contacts, perceived quality of social support, confidence in health care services, and social and emotional loneliness. The subjective social indicator ‘confidence in health care services’ may look like an outsider, but those services are important for victims of domestic violence in the search for support and so having confidence in them plays a crucial role here.

Data analysis

First, the weighted prevalence of domestic violence and type of violence was assessed for the two time periods (i.e. 6 weeks and 1 year after the introduction of the confinement measures). We assessed the difference with the situation prior to the COVID-19 by comparing the odds of reporting being a victim in the HIS 2018 with the odds of being a victim in the COVID-19 surveys while controlling for gender, age group and educational attainment.

Since the prevalence of domestic violence and its association with social isolation may differ by survey, the following analyses were stratified by survey and conducted on the final study samples of each of the two COVID-19 Health Surveys. The weighted frequency of the covariates and the subjective social isolation indicators were determined for the victims and the nonvictims of domestic violence. The association between domestic violence and subjective social isolation was assessed based on the adjusted ORs (95% CIs and P-values). The adjusted OR of each subjective social isolation indicator was controlled for all the covariates. So five different logistic regressions were modelled. The frequency analyses and the logistic regressions, both taking the post-stratification weights into account, were performed with SAS® 9.4 using the PROC SURVEY-procedures.

Results

After 6 weeks of confinement, 4.0% of the population aged 18 years and older and not living alone had indicated having been a victim of domestic violence (compared to 1.2% in the HIS 2018). The prevalence increased to 6.2% 1 year after the coronavirus crisis, however keep in mind that it concerns two different time periods (6 weeks versus 1 year). These figures are significantly higher than the prevalence shown in the HIS 2018 (HIS 2018: OR_{adj} =reference; second COVID-19 survey: OR_{adj} =3.06 (95% CI = 2.10–4.48), $P < .0001$; sixth COVID-19 survey: OR_{adj} =5.00 (95% CI = 3.33–7.36), $P < .0001$). In most cases, victims reported psychological violence (second survey: 93.6%; sixth survey: 95.6%), but in almost 1 in 5 cases (second survey: 16.6%; sixth survey: 19.1%) physical violence (including sexual violence) was (also) involved.

Table 2 gives an overview of the characteristics of the victims and the nonvictims of domestic violence by survey. Participants reporting being a victim were more prevalent among young adults aged 18–34 years, individuals living with their parents and family, larger households (5 members or more), individuals experiencing a negative impact of COVID-19 on their incomes and individuals having at least one health problem. Victims more often reported weak social support, having less confidence in health care services and feeling socially lonely.

Table 2

Distribution (weighted prevalence) of the sociodemographic and health covariates and the subjective social isolation indicators by victims and nonvictims of domestic violence, stratified by the second and sixth COVID-19 Health Survey, Belgium 2020–2021

	Second survey (April 2020)		Sixth survey (March 2021)	
	Victims (%) (N = 933)	Nonvictims (%) (N = 24,318)	Victims (%) (N = 636)	Nonvictims (%) (N = 11953)
Age group	41.5	28.3	49.2	28.6
18–34 years	37.4	35.3	31.8	34.9
35–54 years	21.1	36.4	19.0	36.5
55 + years				
Gender	47.2	50.4	41.0	49.3
Men	52.8	49.6	59.0	50.7
Women				
Household composition	19.9	41.2	23.0	42.3
Couple, without child(ren)	39.5	35.4	31.1	34.0
Couple, with child(ren)	5.2	5.5	5.8	5.0
Living alone with child(ren)	33.2	16.8	39.2	17.7
Living with parents, family,...	2.2	1.1	0.9	1.0
Other				
Household size	80.0	89.8	84.9	89.9
2–4 persons	20.0	10.2	15.1	10.1
5 persons or more				
Educational attainment	65.7	62.3	69.5	63.9
Low	34.3	37.7	30.5	36.1
High				
Impact of COVID-19 on income	42.3	59.1	74.2	82.7
No (or positive) impact	57.7	40.9	25.8	17.3
Negative impact (loss)				

	Second survey (April 2020)		Sixth survey (March 2021)	
Health problem	10.8	28.3	12.5	29.2
No health problem	89.2	71.7	87.5	70.8
At least one health problem				
Satisfied with social contact	69.9	62.9	76.4	63.2
(Rather) unsatisfied	30.1	37.1	23.6	36.8
(Rather) satisfied				
Quality of social support	50.6	28.5	53.0	32.9
Weak support	49.4	71.5	47.0	67.1
Moderate/strong support				
Confidence in health care services	86.0	92.6	-	-
Very confident	14.0	7.4	-	-
Less confident				
Social loneliness	-	-	34.0	60.6
Not lonely	-	-	66.0	39.4
Lonely				
Emotional loneliness	-	-	14.0	34.6
Not lonely	-	-	86.0	65.4
Lonely				

Table 3 shows that 6 weeks after the introduction of the confinement measures, victims of domestic violence had significant higher odds of a perceived weak social support ($OR_{adj.}=2.23$ (95% CI = 1.76–2.82)). One year after the introduction of the confinement measures, these odds were still significantly higher ($OR_{adj.}=1.98$ (95% CI = 1.27–3.09)); the odds that victims of domestic violence were (rather) unsatisfied with their social contacts were also significantly higher than for nonvictims ($OR_{adj.}=1.81$ (95% CI = 1.16–2.84)). In the first 6 weeks of confinement, victims of domestic violence also had significant higher odds for what concerned having less confidence in health care services ($OR_{adj.}=1.78$ (95% CI = 1.21–2.63)). The indicator on having less confidence in health care services was only available in April 2020; while the indicators on feelings of loneliness were only available in March 2021. One year after the introduction of the confinement measures, victims of domestic violence had significant higher odds of perceived social ($OR_{adj.}=2.70$ (95% CI = 1.77–4.13)) and emotional loneliness ($OR_{adj.}=2.40$ (95% CI = 1.45–3.97)) than nonvictims.

Table 3

Association between domestic violence and subjective social isolation by means of crude and adjusted[&] OR (95% CI), stratified by the second and sixth COVID-19 Health Survey, Belgium 2020–2021

Domestic violence	Second survey (April 2020)		Sixth survey (March 2021)	
	Crude OR (95% CI)	Adjusted OR (95% CI)	Crude OR (95% CI)	Adjusted OR (95% CI)
Satisfied with social contacts	1.37 (1.07–1.76) [*]	1.15 (0.90–1.47)	1.89 (1.21–2.95) [*]	1.81 (1.16–2.84) [*]
(Rather) unsatisfied	1	1	1	1
(Rather) satisfied				
Perceived quality of social support	2.57 (2.04–3.24) ^{***}	2.23 (1.76–2.82) ^{***}	2.30 (1.50–3.52) ^{***}	1.98 (1.27–3.09) [*]
Weak support	1	1	1	1
Moderate/strong support				
Confidence in health care services	1	1	-	-
Very confident	2.05 (1.38–3.03) ^{**}	1.78 (1.21–2.63) [*]	-	-
Less confident				
Social loneliness	-	-	1	1
Not lonely	-	-	2.98 (1.95–4.56) ^{***}	2.70 (1.77–4.13) ^{***}
Lonely				
Emotional loneliness	-	-	1	1
Not lonely	-	-	3.26 (1.99–5.34) ^{***}	2.40 (1.45–3.97) [*]
Lonely				
&: controlled for the covariates				
*: p < 0.05				
**: p < 0.001				
***: p < 0.0001				

Discussion

Compared to the HIS 2018 findings, domestic violence occurred more often in Belgium since the beginning of the coronavirus crisis and the persistent confinement measures even worsened this situation. In April 2020, 6 weeks after the introduction of the confinement measures, adults were 3 times

more likely to report being victim of domestic violence than in 2018, and in March 2021, it was even 5 times more likely than in 2018. However, the longer reference period for reporting domestic violence between the two COVID-19 health surveys (retrospectively in the past 6 weeks versus in the past year) may explain the increased risk of being a victim of domestic violence from 6 weeks to 1 year after the coronavirus crisis. As is the case in other studies (7, 37, 38), psychological violence was the most frequent form of domestic violence reported in our study. This type of violence can also be experienced as traumatic, but often stays unnoticed by society (2). However, psychological violence can also go hand in hand with physical violence (9, 14). In this study, most of the victims reporting physical violence (including sexual violence) also experienced psychological violence. So even though confinement is in the interest of curbing the virus transmission, it can put people in a potentially dangerous situation or even put victims more at risk (8, 14, 15, 18, 19, 32).

Social isolation among victims of domestic violence was assessed based on five subjective social isolation indicators. The main conclusion is that there is an association between being a victim of domestic violence and perceived social isolation. Victims of domestic violence indicated twice as often to have weak social support in the first 6 weeks of confinement, and still 1 year after the introduction of the confinement measures. This is in line with a study that showed that battered women perceived their social support as being weak (21). Besides, one year after the confinement victims of domestic violence also indicated almost twice as frequently being rather unsatisfied of their social contacts. Furthermore, in the beginning of the confinement, victims of domestic violence were more likely to have less confidence in health care services. In general, in the beginning of the confinement period there was a reduced accessibility to health care and social services and later there was a switchover to virtual consultations (1, 8). In normal circumstances, victims are already reluctant to seek help, so confinement could make it even more difficult for them (20). These virtual technologies can of course be useful; however, the victim cannot always use them discreetly or cannot access them because of control tactics by the perpetrator. On the other hand it may also be possible that acquiring such technologies is too expensive (14). Other explanations of this social isolation among victims is that perpetrators often disrupt the friendship ties of the victim (21) or that they use COVID-19 as a coercive control mechanism to make their victim anxious which will make them stay at home (17). Nevertheless, even though the confinement measures have been loosened over time, 1 year after their introduction victims of domestic violence feel more than twice as often lonely, both socially and emotionally, than nonvictims.

Not only does the taboo on domestic violence make it difficult for victims to report it or to seek help (9, 16), the confinement clearly creates other barriers (i.e. movement restrictions, trapped with perpetrator, reduced access to social services) as well (15). Consequently there are vulnerable people who do not get the help they need which will affect their safety, health and wellbeing (14, 37). When confinement is necessary, policy makers should take measures that are as bearable as possible for everyone (39). Therefore it is essential to provide adequate support during confinement (8, 20). In this context the United Nations evoked to prioritize support and warning systems for victims of domestic violence (17). Support can come from different areas. For example, health care and social professionals, often the first point of contact for victims, must be made aware of the increased risk of domestic violence during confinement.

Training can help them recognize this problem (signs and people at risk) and anticipate in an appropriate way so that the safety of the victim is guaranteed (1, 16, 19). One should also invest in mental health care (expand and free of charge), as victims of domestic violence often have to deal with psychological problems (7, 19, 32). It is also crucial that social support systems and shelters remain accessible during confinement (12, 16). In Belgium, hotels and empty government buildings were offered to victims as an alternative for shelters (18). Of course the general population needs to be informed about the available services like hotlines, online platforms and shelters through (social) media and health and social services (16, 17). Regarding online platforms, it is important that they contain a mechanism to quickly and safely exit them so that these platforms cannot be tracked by the perpetrator (16). Still, it is important that people keep connected with family, friends and neighbors during confinement which can help to reduce social isolation among victims of domestic violence and facilitate a faster report of a concern of domestic violence (16–18). In Belgium, but also in some other European countries, the government has set up a warning system in pharmacies. The purpose of this system is that victims can alert the staff that they are in danger and need support by using a code word (12, 17–19). In addition, it is also important to focus on prevention of domestic violence by, among others, promoting gender equality (8, 9, 12, 18).

The first strength of this study is that it was conducted in the heat of the battle against the coronavirus, this goes especially for the second COVID-19 health survey (organized 6 weeks after the introduction of the confinement measures). This rapid approach could only be done by using a web survey, which was accessible by mobile phone, a tablet and computer (25). An advantage of a web survey is that it is very user-friendly and the high quality data are readily available (40, 41). Another strength of these online health surveys is the repeated cross-sectional way of data collection and the fact that sensitive topics such as domestic violence can be surveyed (2). The last strength is that domestic violence was investigated in a large convenience sample at national level among the population of 18 years and older.

However, online surveys also introduce weaknesses in the study design. For instance children, who also can be a victim of domestic violence, were not included in this study. The Ethics Committee imposed this age restriction. Other weaknesses of this study are the selection bias (e.g. the digital divide: overrepresentation of higher educated people and internet literate people), the potential healthy volunteer bias, (e.g. need for good concentration level to complete questionnaire) and misreporting since self-reported data are subject to social desirability (2, 25). Besides, the reliability of the questions on domestic violence can be affected because they were developed without pretesting due to the urgency (25). Finally, it also needs to be noted that domestic violence in the HIS 2018 was questioned differently than in the COVID-19 health surveys (with different time periods): in the former, victims of violence were asked who the perpetrator was (stranger(s), colleague(s), acquaintance(s), friend(s), (ex-) partner, parent(s), (plus) child(ren) or family member). In addition, the methodology was also different: a survey on household level where maximum 4 members were questioned by an interviewer, next to a paper questionnaire (including the more sensitive items like violence) which needed to be filled in by the members themselves (26).

Conclusion

In Belgium, the prevalence of domestic violence increased during the period of confinement imposed to slow the coronavirus circulation. Moreover, victims of domestic violence felt more often socially isolated. Although confinement is needed to counteract the virus transmission, it increases the barriers to report domestic violence and to seek help. Consequently, it can put people in a dangerous situation since they do not get the help they need. Policy makers should provide adequate support and warning systems during confinement. Finally, the population must be made aware that domestic violence is not tolerated in society.

Abbreviations

HIS: Health Interview Survey

U.S.: United States

GDPR: General Data Protection Regulation

OR: Odds Ratio

CI: Confidence interval

Declarations

Ethics approval and consent to participate

The survey was approved by the ethical committee of Ghent University (BC-07544). The participants had to agree with the consent before they could start with the survey.

Consent for publication

There are no details on individual participants within the manuscript.

Availability of data and material

Access to the data of the second and the sixth Belgian COVID-19 health survey reported in this manuscript can be requested by sending an e-mail to HIS@sciensano.be.

Competing interests

The author(s) declared no competing interests with respect to the research, authorship, and/or publication of this article.

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Authors' contribution

SDr conceived the framework of the study, performed the statistical analyses and drafted the manuscript. EB elaborated the definition of social isolation based on the literature. KD, SD, LG and RC revised and commented the statistical analyses. All co-authors (EB, KD, LG, RC, LH and SD) contributed to the interpretation of the results and the critical revision of the manuscript. All authors read and approved the final manuscript.

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Figures

Figure 1

From total sample to study sample, second and sixth COVID-19 Health Survey, Belgium 2020- 2021