

# Intimate partner violence during the COVID-19 pandemic: An online survey

## COVID-19 pandemisi sırasında yakın partner şiddeti: Çevrim içi bir araştırma

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### SUMMARY

**Objective:** Intimate partner violence (IPV) against women is a human rights violation and a public health concern. The incidence of IPV increases in mass events such as epidemics. The aim of this study was to assess the nature and the extent of IPV among women in Turkey; to identify the associated factors, and mental health outcomes during the COVID-19 pandemic. **Method:** The study has a cross-sectional, descriptive design. An online self-report survey, based on World Health Organization guidance on epidemiological studies to assess IPV, was conducted among women between 09.01.2021 and 09.02.2021. The survey had 69 questions which covered sociodemographic characteristics, relationship history, types of violence and mental well-being. Inclusion criteria were being over the age of 18, and having a spouse/partner during the pandemic. Participation was on voluntary basis. 1372 women were included in the analysis. **Results:** Around a third (30.7%) of participants were exposed to any type of violence before the pandemic, with most common form being emotional violence, and this rate remained unchanged during the pandemic, despite the time spent with partners were expected to increase due to isolation measures. 61 women (4.4%), mostly university graduates living in cities, reported being subject to violence for the first time during the pandemic. 31.2% of them were cases of digital violence. Lower level of education, younger age and partner's alcohol and substance use was associated with IPV, and IPV was associated with poorer mental well-being. **Discussion:** Despite the public health measures taken during the pandemic (e.g. lockdowns), where women would have spent more time isolated with their partners, rates of IPV did not change from pre-pandemic to pandemic. This outcome needs to be compared with findings from other contexts. Strategies to prevent IPV is of utmost importance for the protection of mental well-being of women and the society during and after the pandemic.

**Key Words:** Women's Health, Sexual Abuse, COVID-19, Domestic Violence, Intimate Partner Violence

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### ÖZET

**Amaç:** Kadınlara yönelik yakın partner şiddeti (YPS), bir insan hakları ihlali ve bir halk sağlığı sorunudur. YPS insidansı, salgın hastalıklar gibi toplumsal olaylarda artmaktadır. Bu çalışmanın amaçları, Türkiye'de COVID-19 pandemisi sırasında kadınlara yönelik YPS'nin niteliğini ve boyutlarını değerlendirmek; YPS ile ilişkili etkenler ve ruh sağlığı açısından sonuçlarını belirlemektir. **Yöntem:** Kesitsel, tanımlayıcı desende bir araştırma planlanmıştır. Kadınlara yönelik YPS'yi değerlendirmek için Dünya Sağlık Örgütü'nün epidemiyolojik çalışmalara ilişkin rehberlerine dayanarak hazırlanan, çevrimiçi öz bildirim dayanan bir anket 09.01.2021 ve 09.02.2021 tarihleri arasında uygulanmıştır. Ankette sosyodemografik özellikler, ilişki geçmişi, şiddet türleri ve ruhsal iyilik halini kapsayan 69 soru bulunmaktadır. Çalışmaya dahil edilme kriterleri, 18 yaşından büyük olmak ve pandemi sırasında bir eş/partner sahibi olmak olarak belirlenmiştir. Katılım gönüllülük esasına dayandırılmıştır. Analize dahil edilen katılımcı sayısı 1372'dir. **Bulgular:** Katılımcıların yaklaşık üçte biri (%30,7) pandemi öncesinde herhangi bir tür YPS'ye maruz kaldığını belirtti. Bu oranda önlemler nedeniyle kadınların partnerleri ile daha fazla zaman geçirmeleri beklenen pandemi sırasında anlamlı bir değişiklik olmamıştır; ancak üniversite mezunu, şehirde yaşayan 61 (%4.4) kadının ilk kez pandemi döneminde YPS'ye maruz kaldığı görülmüştür. Bunların %31,2'si dijital şiddet olgularıdır. En sık YPS türü duygusal şiddet olarak bildirilmiştir. Düşük eğitim düzeyi, genç yaş ve partnerin alkol/madde kullanımı YPS ile ilişkili bulunmuştur. YPS'nin, düşük ruhsal iyilik hali skoru ile ilişkili olduğu belirlenmiştir. **Sonuç:** Bu çalışmada, karantina ve benzeri önlemler nedeniyle kadınların partnerleri daha fazla izole zaman geçirmeleri beklenen pandemi sırasında, YPS oranının pandemi öncesine göre değişkenlik göstermediği saptanmıştır. Bu sonucun diğer çalışmalardan elde edilen bulgularla karşılaştırılması gerekmektedir. YPS'yi önleme stratejileri, pandemi sırasında ve sonrasında kadınların ve toplumun ruh sağlığının korunması için büyük önem taşımaktadır.

**Anahtar Sözcükler:** Kadın Sağlığı, Cinsel İstismar, COVID-19, Ev İçi Şiddet, Yakın Partner Şiddeti

## INTRODUCTION

Intimate partner violence (IPV) against women is a human rights violation and a public health concern, although its prevalence and presentations vary across countries (1). IPV is responsible for a quarter of all serious attacks on women and accounts for a third of all murders of women (2). IPV occurs when a partner tries to control the other partner physically or psychologically (3).

Interpersonal violence targets women and men alike. However, IPV predominantly targets women of all ages. IPV differs from other interpersonal violence acts because it emerges in private rather than public spaces. IPV perpetrators and survivors have a close relationship. That comes along with the chronicity of violence. Additionally, societal factors like gender-unequal norms becloud the awareness of violence, complicate the legal process, and finally result in violations of women's human rights (2, 4).

Violence against women can occur in all parts of the world. Moreover, it has been shown that rates of IPV increase in mass events such as epidemics and natural disasters (5). For example, a four-fold increase in violence against women has been reported among displaced women in Mississippi after Hurricane Katrina (6). After the 2004 Indian Ocean earthquake and tsunami (7) and the Black Saturday bushfires in Australia (8), violence against women has also increased rapidly.

Risk factors associated with a disaster, such as the deterioration of the social structure, economic difficulties, forced migration, increased tension of the perpetrator and impairment of psychological well-being were also present in the COVID-19 pandemic. Measures like border closures, staying at home, remote working, and school closures were taken to reduce the speed of transmission. Stay-at-home was the most common and effective worldwide measure, which was also implemented in Turkey. However, this preventive measure meant that women had to stay at home with aggressors or potential aggressors (9). Indeed, during the lockdown period, reports and news from all over the world, including countries such as Brazil, Spain,

Cyprus, the UK and Italy stated that domestic violence was on the rise (10, 11). It was predicted that 31 million cases of violence against women will be increased if the lockdown period is extended by 6 months (12). In addition, it was reported a 75% increase in searches for IPV on the Google search engine during this process (13). The situation is not different in Turkey. Professional organizations and non-governmental organizations in Turkey have pointed out that violence against women has increased with home isolation and social distancing measures since the first coronavirus case was announced on 11 March (14, 15). According to the statement of the, We Will Stop Femicide Platform, following the isolation measures, the number of people calling hotlines increased by 55% in April 2020 and 78% in May 2020 compared to the previous months (16). According to the report of the Federation of Turkish Women's Associations, psychological violence increased by 93%, physical violence by 80%, and the demand for shelter by 78% in March 2020 compared to the previous year (17). Descriptive studies from different parts of Turkey also showed that during the pandemic, IPV was related to negative outcomes for women (18-20). Moreover, several NGOs from Turkey and the world reported that the number and accessibility of shelter houses were also diminished during the pandemic (21).

IPV is associated with poor mental well-being and psychiatric disorders including depression, anxiety, post-traumatic stress disorder, and sleep disorders (22-24). It is also linked with physical and reproductive health problems in women, which might gain chronicity (21, 25, 26). Descriptive studies from different parts of Turkey also showed that during the pandemic, IPV was related to negative outcomes for women (18-20, 27-29). It is necessary for all healthcare professionals, including doctors, nurses and community health staff who are at the forefront to assess the presence of IPV, to have accurate knowledge about the extent and impact of this growing and multifaceted problem (30).

In this study, we aimed to measure and compare the prevalence of IPV among a sample of women in Turkey pre- and during the pandemic. We also aimed to investigate the situation during the lockdown regarding the extent and forms of IPV

women are exposed to. Another aim of our research is to find out the factors associated with IPV during the COVID-19 pandemic and its relationship with women's mental well-being. We hypothesized that during the COVID-19 lockdown, IPV rates would increase. We also hypothesized that IPV would harm the mental well-being of women.

## METHOD

An online cross-sectional survey was created and digitalized using the Qualtrics program. Given the pandemic-related contact restrictions during the time of the survey, the sample was created using the snowball sampling method. The web link and QR-code generated for the survey were distributed via social media servers (Twitter, Facebook and Instagram pages of relevant NGOs including that of the Psychiatric Association of Turkey and personal pages voluntarily) and communication applications (WhatsApp), so that each participant would share the link to other people if they preferred to. Before starting to fill out the questionnaire, the participants were asked to click a button indicating that they had read the consent information and agreed to participate anonymously, without any incentives. Once the button was clicked, the participants were directed to the first page of the survey questionnaire. Repetitive participation was avoided based on the system arrangements avoiding repetitive entries from the same IP numbers. The survey was implemented between 09.01.2021 and 09.02.2021.

Women who agreed to participate in the study, and who had a spouse/partner were included in the study. Exclusion criteria were being illiterate and/or not being able to follow the instructions on the webpage, not having a partner at the time of the study, and being under the age of 18.

The survey questionnaire was prepared by the authors based on previous studies in the field (24, 31, 32). It had a total of 69 multiple-choice questions and took approximately 15-20 minutes to complete. The first 25 questions are related to socio-demographic characteristics, age, education, working status, and alcohol and substance use of

women and their partners. The remaining questions focused on the presence of awareness of intimate partner violence as well as the household conditions. The types and severity of violence were assessed based on the World Health Organization (WHO) guidance (33), which aims to estimate the prevalence of lifetime IPV against women and determine associations between IPV and health outcomes. The types of IPV that were evaluated were emotional, economic, physical (moderate and severe), sexual and digital violence. A study based on this guidance was carried out in 12 countries in 2005 (34), and the questionnaire of that study was adapted to Turkish society by the Ministry of Family and Social Policies (35). In our study, we included the fifth section of this instrument which questions the basic characteristics and behaviours of the partner, and the seventh section on the violence of the partner (see questions provided in Chart-1). The survey questionnaire ended with an information note for participants on details about relevant organizations', legal procedures, IPV hot-lines, and shelter houses, to enhance awareness and support.

The survey was enriched with the WHO-5 index (36). The WHO-5 consists of 5 positive items about

Chart - 1

Types of violence and how they were questioned in the interview

|                                     |   |
|-------------------------------------|---|
| <b>Economic violence</b>            | Has or does your partner<br>- prevent you from having or keeping a job although you wanted to?<br>- control access to household money, although he had for other expenses?<br>- take your paycheck, money or other valuable belongings against your will? |
| <b>Emotional violence</b>           | Has or does your partner<br>- ridicule or insult you?<br>- humiliate you in public or private?<br>- threaten to assault you or your relatives/friends?<br>- threaten you with his words, looks, or by hitting household items?                            |
| <b>Physical violence (moderate)</b> | Has or does your partner<br>- slap you in the face?<br>- throw objects onto you that may hurt you?<br>- pull your hair?   |
| <b>Physical violence (severe)</b>   | Has or does your partner<br>- hit or punch you<br>- push, shove or kick you?<br>- bit, stab, burn or choke you?<br>- threaten or hurt you with a weapon or knife?   |
| <b>Sexual violence</b>              | Has or does your partner<br>- force sex with him?<br>- force sex after beating or threatening beating, or made you have sex because you felt threatened?<br>- make humiliating or crude remarks about you?  |
| <b>Digital violence</b>             | Has or does your partner<br>- prevent you from access to telephone or internet?<br>- listen to your conversations on the phone or read your messages against your will?<br>- check your internet history against your will?                               |

the feelings of the participants in the last two weeks. These are "I have felt cheerful and in good spirits.", "I have felt calm and relaxed.", "I have felt active and vigorous.", "I wake up feeling fresh and rested.", "My daily life has been filled with things that interest me". Each item is scored on a 6-point Likert-type scale between 0-5 with higher scores indicating better well-being and scores of less than 13 indicating probable depression. The reliability and validity study of the Turkish version of the WHO-5 for adults was done by Eser et. al (37).

The research project was approved by the XXX(blinded) University Non-Interventional Practices Ethics Committee (Approval number: 27.10.2020/ 248) following the Helsinki Declaration.

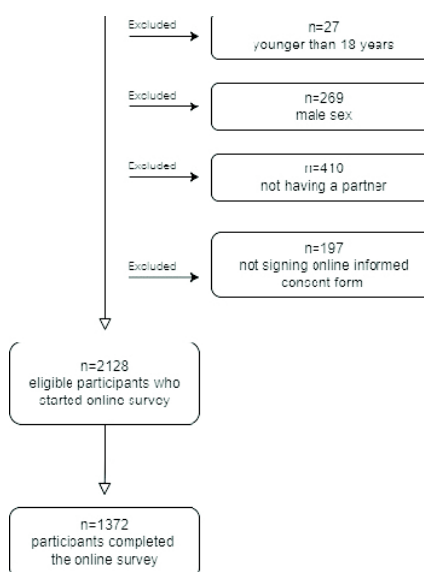
Responses, which were compiled anonymously via the Qualtrics program, were converted into numerical data, and statistical analyses were made by IBM SPSS v.21.0 (SPSS Inc., Chicago, IL, USA). Categorical variables were analysed with the chi-square and McNemar's tests. We used the Kolmogorov-Smirnoff test to determine if the continuous data were normally distributed or not. Statistical comparisons were analysed with the Student's T test when continuous variables were normally distributed, and the Mann-Whitney U test when they were non-normally distributed. We performed a logistic regression analysis to investigate the factors which determine exposure to any type of IPV. While exposure to any type of IPV was taken as the dependent variable, socioeconomic situation, time spent at home, changes during the pandemic, and individual's and partner's alcohol and substance use were taken as independent variables. The relationship between exposure to IPV and mental well-being scores was analysed using Student's T-test. The significance level was set at  $p < 0.05$ .

## RESULTS

### General characteristics of the sample

The study reached 3031 potential participants from 79 out of 81 cities in Turkey. The survey was programmed to control including criteria in the begin-

Figure 1. Flowchart demonstrating the recruitment and exclusion of participants



ning. As a result, 2325 applicants were eligible participants for the present study: 18 years old or older, female, and had a partner. However, 197 of them did not sign the online informed consent form. 2128 women initialized the survey, and 1372 of them finished off. Thus, these 1372 women from 72 cities in Turkey were included in the statistical analysis (Figure 1).

The participants' mean age was  $42.0 \pm 11.2$  (19-75) years. 168 of them (12.2%) were single, and 1204 of them (87.8%) were either married or cohabitating. Most women (86.2%) lived in city centres. The duration of the relationship with the current partner was 10 years or more for 61.6% of the participants ( $n=844$ ). 66% of women had one child or two children. 83.9% of them graduated from college (Table 1). 79.6% of the partners had graduated from college (Table 2).

While the number of women who were not working in a paid job before the pandemic was 195 (10.8%), this number increased to 241 (17.6%) during the pandemic period. Nine (0.65%) women lost their health insurance during the pandemic. The number of partners who did not have a paid job before the pandemic was 69 (5.0%), which increased to 112 (8.2%) during the pandemic.

During the pandemic, 86.4% of women ( $n=1185$ )

Table 1. Sociodemographic characteristics and mental well-being scores of the participants (n=1372)

| Variable  | Mean – standard deviation | min-max  |
|---|---------------------------|--|
| Age   | 42.0 – 11.2               | 19-75  |
| WHO-5 total score                                     | 17.9 – 0.7                | 6-18   |
|   |                           | <b>n (%)</b>                                   |
| Marital status  | Not married               | 168 (12.2)                                     |
|   | Married or cohabiting     | 1204 (87.8)                                    |
| Place of residence                                    | City centre               | 1183 (86.2)                                    |
|   | County - town             | 171 (12.5)                                     |
|   | Village                   | 18 (1.3)                                       |
| Education   | Primary                   | 11 (0.8)                                       |
|   | Secondary                 | 6 (0.4)  |
|   | High school               | 110 (8.0)                                      |
|   | Junior college            | 94 (6.9)                                       |
| Duration of the relationship with the current partner | 10 years or more          | 844 (61.6)                                     |
|   | <10 years                 | 528 (38.4)                                     |
|   | 0                         | 404 (29.4)                                     |
|   | 1                         | 432 (31.5)                                     |
| Number of children                                    | 2                         | 473 (34.5)                                     |
|   | 3 or more                 | 63 (4.6)                                       |
|   | Smoking                   | Yes  |
|   | No                        | 962 (70.1)                                     |
| If yes, increased smoking during the pandemic (n=410) | Yes                       | 231 (56.3)                                     |
|   | No                        | 179 (43.7)                                     |
| Alcohol use   | Yes                       | Six standard drinks or less/week<br>735 (53.6) |
|   | Yes                       | Seven standard drinks or more/week<br>32 (2.3) |
|   | No                        | 605 (44.1)                                     |
|   | Yes                       | 204 (26.6)                                     |
|   | No                        | 563 (73.4)                                     |
|   | Yes                       | 21 (1.5)                                       |
|   | No                        | 1351 (98.5)                                    |
|   | Yes                       | 12 (57.1)                                      |
|   | No                        | 9 (42.9)                                       |
|   | Yes                       | 1185 (86.4)                                    |
|   | No                        | 187 (13.6)                                     |
|   | Yes                       | 1078 (78.6)                                    |
|   | No                        | 294 (21.4)                                     |
|   | Yes                       | 511 (37.2)                                     |
|   | No                        | 861 (62.8)                                     |
|   | Yes                       | 434 (84.9)                                     |
|   | No                        | 77 (15.1)                                      |
|   | Increased                 | 412 (30.0)                                     |
|   | Decreased                 | 705 (51.4)                                     |
|   | No change                 | 255 (18.6)                                     |

reported spending more time at home with their partners. 84.9% said that the time they spent with the persons they cared for at home (children, elderly, sick) increased. 51.4% of women stated that they had been less able to spend time for themselves

Table 2. Sociodemographic characteristics of the partners, as reported by women (n=1372)

| Variable   | n (%)          |   |
|--|----------------|---|
| Education  | Primary        | 20 (1.4)  |
|  | Secondary      | 29 (2.1)  |
|  | High school    | 149 (10.9)                                      |
|  | Junior college | 82 (6.0)  |
|  | College        | 1092 (79.6)                                     |
| Smoking  | Yes            | 410 (29.9)                                      |
|  | No             | 962 (70.1)                                      |
| If yes, increased smoking during the pandemic (n=528)              | Yes            | 282 (53.4)                                      |
|  | No             | 246 (46.6)                                      |
| Alcohol use  | Yes            | Less than 14 standard drinks/week<br>780 (56.9) |
|  | Yes            | 14 standard drinks or more/week<br>86 (6.3)     |
|  | No             | 506 (36.8)                                      |
| If yes, increased alcohol use during the pandemic (n=866)          | Yes            | 251 (29.0)                                      |
|  | No             | 615 (71.0)                                      |
| Illegal substance use  | Yes            | 28 (2.0)  |
|  | No             | 1344 (98.0)                                     |
| If yes, increased illegal substance use during the pandemic (n=28) | Yes            | 16 (57.1)                                       |
|  | No             | 12 (42.9)                                       |

during the pandemic.

Although it is observed that women mostly undertook unpaid domestic labour before and during the pandemic, during the pandemic, there was an increase in the rate of women who said, "we divide work equally" (29.8% vs 34.0%,  $p=0.020$ ) or "my husband does more housework than me" (4.0% vs 6.5%,  $p=0.004$ ).

Among those women who smoked or used illegal substances, the majority had increased use during the pandemic. For those who used alcohol, 26.6% reported an increase in their use during the pandemic (Table 1).

Regarding mental well-being, the WHO-5 mean score was  $17.9 \pm 0.7$ , and only 2 participants scored under the cut-off of 13 points (indicating probable depression).

Among the partners of participants, the majority of those who smoked or used illegal substances reported an increase during the pandemic, as reported by the participants. 29.0% of the partners who were reported to use alcohol increased their use (Table 2).

**Table 3:** IPV prevalence before and during the pandemic, the rates of medical, psychological and legal support

| Variable                       |     | All participants (n=1372) |                     | The subgroup who were exposed to IPV first time in the pandemic (n=61) |
|--------------------------------|-----|---------------------------|---------------------|--|
|                                |     | Before the pandemic       | During the pandemic | During the pandemic  |
|                                |     | n (%)                     | n (%)               | n (%)  |
| Digital violence               | Yes | 148 (10.8)                | 147 (10.7)          | 19 (31.1)  |
|                                | No  | 1224 (89.2)               | 1225 (89.3)         | 42 (68.9)  |
| Economical violence            | Yes | 97 (7.1)                  | 91 (6.6)            | 9 (14.7)   |
|                                | No  | 1275 (92.9)               | 1281 (93.4)         | 52 (85.2)  |
| Emotional violence             | Yes | 325 (23.7)                | 321 (23.4)          | 41 (67.2)  |
|                                | No  | 1047 (76.3)               | 1051 (76.6)         | 20 (32.8)  |
| Physical violence -moderate    | Yes | 138 (10.0)                | 99 (7.2)            | 5 (8.2)  |
|                                | No  | 1234 (90.0)               | 1273 (92.8)         | 56 (91.8)  |
| Physical violence - severe     | Yes | 44 (3.2)                  | 30 (2.2)            | 1 (1.6)  |
|                                | No  | 1328 (96.8)               | 1342 (97.8)         | 60 (98.4)  |
| Sexual violence                | Yes | 47 (4.1)                  | 36 (2.6)            | 0 (0.0)  |
|                                | No  | 1325 (95.9)               | 1336 (97.4)         | 61 (100.0)   |
| *Medical support (n=193)       | Yes | 16 (8.4)                  | 8 (4.2)             | 0 (0.0)  |
|                                | No  | 183 (91.6)                | 183 (95.8)          | 6 (100.0)  |
| *Psychological support (n=490) | Yes | 61 (12.37)                | 49 (10.2)           | 8 (13.1)   |
|                                | No  | 429 (87.63)               | 431 (89.8)          | 53 (86.9)  |

\*The questions with an asterisk were only asked to the participants who stated that they were exposed to any form of IPV.

### Findings related to IPV

Before the pandemic, 30.7% of participants were exposed to any type of violence. Among them, emotional violence was 23.7%, digital violence 10.8%, moderate and severe physical violence was 10.0% and 3.2%, economic violence was 7.1% and sexual violence was 4.1% prevalent. During the pandemic, 29.6% of women reported being exposed to violence. Among these, emotional violence was 23.4%, digital violence 10.7%, moderate and severe physical violence was 7.2% and 2.2%, economical violence was 6.6% and sexual violence was 2.6% prevalent. To compare the rates of violence of the same sample before and during the pandemic, and given the non-normality of the distribution, McNemar’s test for paired samples was used. It was found that the rate of physical violence decreased during the COVID-19 pandemic (McNemar’s  $\chi^2 = 22.51, p < 0.001$ ). The rate of sexual violence was also found to be decreased (McNemar’s  $\chi^2 = 15.38, p = 0.0001$ ). There was no difference between the rates of other subtypes of violence before and during the pandemic.

Participants who are exposed to IPV stated decreasing rates of seeking medical and psycholo-

gical support from a healthcare professional (including doctors, nurses and community healthcare staff) during the pandemic (Table 3 – see the bottom section). WHO-5 well-being score was significantly lower among women who were exposed to violence, regardless of subtype ( $p < 0.001$ ), although the most distinct association was with severe physical violence ( $p < 0.001$ ).

Regarding the knowledge and awareness about IPV and available support systems, 58.7% (n=805)

**Table 4.** Logistic regression analysis of the IPV predictors

| Variables                          | OR                              | %95 CI | z         | p     |       |
|------------------------------------|---------------------------------|--------|-----------|-------|-------|
| Age of the participant             | <45                             | ref    |           |       |       |
|                                    | >45                             | 0.76   | 0.59-0.98 | -2.14 | 0.033 |
| Education level of the participant | Less than undergraduate degree  | ref    |           |       |       |
|                                    | Undergraduate degree or more    | 0.71   | 0.51-0.97 | -2.12 | 0.034 |
| Employment                         | No                              | ref    |           |       |       |
|                                    | Yes                             | 0.74   | 0.51-0.97 | -1.88 | 0.060 |
| Having children                    | No                              | ref    |           |       |       |
|                                    | Yes                             | 0.78   | 0.44-1.37 | -0.88 | 0.379 |
| Alcohol use of the partner         | No                              | ref    |           |       |       |
|                                    | 13 standard drinks or less/week | 0.94   | 0.73-1.21 | -0.48 | 0.634 |
|                                    | 14 standard drinks or more/week | 2.08   | 1.30-3.33 | 3.06  | 0.002 |

of the participants were aware of Law Nr. 6284 to Protect Family and Prevent Violence Against Women. 77.8% (n=1067) of them were informed of the governmental violence helpline “Alo 183”, 68.2% (n=935) knew about the governmental phone application “KADES” which gives women the opportunity to click to call the police in case of violence and, 90.9% (n=1247) were aware of non-governmental organizations in the field of violence against women. Moreover, both before and during the pandemic, women stated that they had a friend or relative to ask for help in case of exposure to IPV (94.7% and 93.9%, respectively).

The ages of women did not have a normal distribution; therefore, the Mann-Whitney U test was used. No significant differences were found in terms of age between the survivors of IPV and the other participants. Women who were not married nor cohabiting with their partners were found to be exposed to sexual violence more frequently (5.4% vs 2.2%,  $\chi^2 = 5.60$ ,  $p = 0.018$ ). IPV was more often in rural areas compared to city centres (35.5% vs 28.3%,  $\chi^2 = 4.0014$ ,  $p = 0.045$ ). Graduate women were exposed to IPV less when compared to women with lower educational levels (28.0% vs 36.2%,  $\chi^2 = 6.0524$ ,  $p = 0.014$ ). Job loss during the pandemic was not associated with a statistically significant difference in terms of exposure to IPV. Logistic regression analysis revealed a significant relationship between exposure to IPV during the pandemic and women’s age, with being 45 or older and higher education level being protective (OR=0.76 and 0.71, respectively), and partners’ risky alcohol use being a risk factor (OR=2.08) (Table 4).

The level of education of partners who committed and did not commit IPV was significantly different. The rate of university graduates among IPV aggressors was lower (72.7% vs. 82.6%, Pearson  $\chi^2 = 17.4396$ ,  $p < 0.001$ ). The rate of aggressors among smokers and risky alcohol users was significantly higher than non-users (37.1% vs. 24.4%,  $\chi^2 = 25.3438$ ,  $p < 0.001$ ; 45.4% vs 27.3%,  $\chi^2 = 12.2164$ ,  $p = 0.002$ , respectively). Besides, during the pandemic, women whose partners had risky alcohol use were more likely to be exposed to IPV (OR=2.08) (Table 4). The frequency of sexual violence by partners using illegal substances was significantly high-

er compared to partners who did not use illegal substances (10.7% vs. 2.5%,  $\chi^2 = 7.3223$ ,  $p = 0.007$ ).

During the pandemic, 58 partners were reported to have lost their jobs. Among them, 48.28% were IPV aggressors, while the rate of committing IPV was 28.46% among those who maintained their employment status ( $\chi^2 = 10.526$   $p < 0.01$ ).

Sixty-one women stated that during the pandemic they were exposed to IPV for the first time in their lives. The findings of this subgroup were analysed in detail. Their ages ranged from 19 to 66 years, with a mean of  $20.38 \pm 10.84$  years. They were statistically significantly younger (20.38 vs 25.17,  $p < 0.001$ ) and had a lower rate of being married/cohabiting (68.9% vs 88.6%,  $p < 0.001$ ) compared to the rest of the group. 89% of them lived in the city centres, 83.6% were university graduates, 36.1% had been in a relationship with their partner for ten years or longer, and 42.6% had no children. Among them, 67.2% have been exposed to emotional violence, 31.2% to digital violence, 14.8% to economic violence, and 9.8% to physical violence.

## DISCUSSION

In this study, we hypothesized that there would be an increase in the incidence of IPV during the pandemic in Turkey, and we aimed to look for the relationship between the increase and factors such as job loss, economic difficulties, the increased workload at home, an increase in alcohol and substance use, and difficulties in reporting violence.

While the COVID-19 pandemic has become the focus of daily life and health systems, requiring a total reorganization since early 2020, the UN warned about the “shadow pandemic” of intensifying violence against women (38). Lockdown and other restrictive measures meant an increase in the time spent under the same roof with potential aggressors of IPV. Even before the pandemic, IPV was identified as a significant public health concern (39). The well-established links between intimate partner violence and mental health consequences (1, 21, 24) instruct that the extent and impact of violence during the COVID-19 pandemic should

be assessed and intervened upon by scholars and clinicians. To our knowledge, this is the widest nationwide study examining the extent of intimate partner violence during the COVID-19 pandemic in Turkey, following some initial studies (20, 40).

Our study demonstrates that the COVID-19 pandemic has resulted in negative changes in the socioeconomic status of women, whose household labour is already invisible, such as losing their formal job and/or insurance and spending more time at home, which may also hinder their access to health institutions or formal support in case of need. It is also of note that a higher percentage of women lost their jobs during the pandemic than that of partners (6.8% vs. 3.2%). Despite heterogeneity among countries, women have been shown to experience higher rates of job or income loss during the pandemic (41, 42). Moreover, during the pandemic, the time spent by children at home increased significantly with the closure of schools and daycare centres. The absence of helping maids during this period resulted in an increase in household-related responsibilities for people living together at home (43). Such differential socioeconomic transitions between men and women during the pandemic may lead to changes in relationship dynamics and create a risky environment for violence (21).

Despite our sample is not a representative one, the rate of exposure to violence in our sample is comparable to other local and national surveys conducted in Turkey within the past decade (31, 32, 44, 45), suggesting that in the general population, around 1 out of 3, women are subjected to violence. Among the member countries of the Organization for Economic Cooperation and Development (OECD), Turkey ranks first among the countries where violence against women is most common, with 38% of women being subjected to physical or sexual violence by their partners (46). According to the widest research conducted in Turkey between 2013-2014, the rate of women who stated that they were exposed to physical violence at any point in their lives was 36%, the rate of psychological violence was 44%, and the rate of economic violence was 30%. 12% of ever-married women stated that they were exposed to sexual violence at any point in their lives (32).

In our sample, emotional violence was the most frequently encountered form among different types of violence, which is estimated to be the most commonly perpetuated form in other studies (47). However, we noticed a change in the ranking of other forms of violence. Digital violence has become more common during the pandemic, surpassing the level of physical violence, especially among women who were exposed to IPV for the first time. We interpret this finding to be specific to the pandemic period, in which time spent at home and online has dramatically increased. Further discussion on this is provided below.

While time spent at home has increased, rates of physical and sexual violence have decreased, in contrast with expectations. Yet, this finding might be due to the largely underreported socioeconomic strata in our survey. Yılmaz Karaman and colleagues stated that during the COVID-19 pandemic; IPV survivors who applied to emergency departments were more likely to be without social insurance, to be severely injured and to be attacked at home, compared to the pre-pandemic period (27), which may indicate a selection bias in our study due to its methodology. Moreover, we asked for a comparison between their lifetime exposure to IPV and relatively recent exposure during the pandemic, which might explain the maintenance of the already high rate of violence (30.7%). Another survey conducted in Turkey during the pandemic found that emotional violence increased among literate women (20). Some other descriptive studies conducted in different settings pointed to increased rates of IPV (27, 29), while another study yielded a comparable result with a rate of IPV of 35.5% (19). On the other hand, a systematic review that has compiled studies from various countries also stated that evidence for changes in the prevalence of IPV is yet inconclusive (48). Hoehn-Velasco and colleagues found that domestic violence in Mexico declined during the lockdown and increased back to pre-pandemic levels after returning to daily life (49). Our study period did not include a complete lockdown, however, there were partial curfews(50). Besides, COVID-19 public vaccination did not start then (51). Several researchers argued that IPV might more frequently occur in psychological rather than physical form during the COVID-19 pandemic, a form of violence that is hard to detect



(52).

Regarding the related factors, we found that partner alcohol and substance use were associated with greater rates of violence, in line with the literature (53, 54). Moreover, it is reported that alcohol and substance use increased during the pandemic, due to increased levels of stress, anxiety, depression, and caregiving load, which might have exacerbated this situation (55, 56). Higher WHO-5 scores were associated with all types of violence and especially physical violence in our study, confirming the negative consequences of IPV on mental health as reported in the literature (1, 24, 57). Poorer mental well-being might also be related to the influence of some confounding factors, such as poorer socioeconomic status, lower level of education, and so forth, yet we believe IPV is a reflection of these negative psychosocial determinants, the visible tip of the iceberg.

### **The impact of age and education**

We demonstrated that a lower level of education and younger age are two main predictors of IPV, a finding repeatedly shown in other studies, especially regarding recently encountered IPV (24, 32, 45, 58-61). A WHO study demonstrated that younger age is associated with greater recent experience of spousal violence (62). However, there are other studies indicating that older age is significantly associated with higher exposure to IPV (63). Our findings and findings from other studies signify that women are exposed to violence regardless of their education level, but the higher their education level is, the lower becomes their exposure to violence. It is argued that the level of education does not make a difference in women's exposure to violence, but that educated women are more successful in ending violence (64). We interpret that education is an important factor that helps women to develop their self-esteem and self-confidence, raising their awareness of new options and allowing them to make rational decisions. However, based on the distribution of our results, we believe it is important to note that vulnerable populations might not be reached via an online survey and that field still requires the attention of researchers.

Studies from a wide range of countries have shown that in the past year, factors related to IPV were exacerbated (65-67), lockdowns and quarantines were related to abusive situations, and there is an alarming trend of the increased rate of IPV (68-70). Up to a three-fold increase in cases of IPV is shared (71, 72). This trend is also highlighted in the 2020 report of UN Women (73). Besides, the routes of reaching out for help have become limited and studies have shown that the pandemic situation is associated with a delay in reporting IPV (74), a condition in which less than 40% of women who experience seek help from any sort (73). While in our study it was found that the rates of IPV did not increase, based on responses to dichotomous-type questions, the quality/severity of each type of IPV might have changed, which was not examined in our study.

A striking finding is that 61 women, mostly university graduates living in cities, reported being subject to violence for the first time during the pandemic. 31.2% of them were cases of digital violence. This is a new category of violence, which we believe requires special attention. The UN Women has released a special brief on the impact of information and communication technology facilitated violence (75), which can have many forms, including threats, trolling, stalking, harassment, and so forth. Increased digitalization was already a growing global trend and it has become inevitable during the COVID-19 pandemic, with up to 50-70% increase in the use of the internet (75). This phenomenon needs to be seen as a double-sided medallion. On the one hand, it poses risks of abuse, violence, privacy and security breaches. On the other hand, digital tools also have the potential of providing new ways of seeking help, delivering interventions or creating psychosocial support networks (71), such as the high level of awareness (90.9% of women) of the governmental digital application KADES we found, which may also be related to the high education level of participants.

The efforts to reduce the mental health consequences of intimate partner violence should have several dimensions, including prevention, intervention against risk factors, accurate reporting and reduction of violence (1). We note that Turkey has been among the countries with the lowest level of

income support throughout the pandemic (76), which might be related to an increased risk of future IPV cases. Another important factor in the development of violence is inequalities in various aspects of life, including economic, educational, political and so forth (21). The WEF Gender Gap Report states that Turkey has plummeted three steps down, from being ranked 130th to 133rd among all countries within the past year, indicating a widening in the gender gap (77). Unfortunately, recently after the completion of our online survey, the government in Turkey has withdrawn from the Council of Europe Convention on preventing and combating violence against women and domestic violence using a presidential decree, as addressed in the Official Gazette issue nr. 31429. Turkey was the first country to sign the convention in Istanbul; later, the convention was called as “Istanbul Convention.” Many feminist activists from Turkey took part in the convention’s development process. The convention and the related domestic law (Nr. 6284) have been in effect since 2014. The Istanbul Convention is not only about reducing harm after violence occurs; it also underlines gender equality, precautions for gender-based discrimination, and gender-based violence. After the withdrawal from the convention, women who applied to police stations due to domestic violence faced difficulties. Women reported that authorized persons did not act under the law numbered 6284(78). In 2021, 280 femicides and 217 suspected deaths of women occurred in Turkey (79). Gender inequality and domestic violence have many consequences; at the tip of the iceberg, they result in femicide. Before the withdrawal decree, 58% of the women in our survey responded that they knew about Law Nr.6284 to protect families and prevent violence against women, which can be considered moderate. We can expect a drop in this level and general awareness about legal protection measures in the future, which shall become an area of increased effort for all professionals in this field.

### **Limitations**

Online surveys have been very helpful during the pandemic, enabling a real-time and rapid assessment of many issues related to the psychosocial health of individuals, despite being under restrictions. Since early 2020, there has been a plethora of

online surveys. However, there are some limitations regarding the generalizability of the results from online surveys, inherent to the nature of the method, such as convenience sampling and responder selection bias (80). People without internet access for a variety of reasons, including those who are not familiar with digital technologies will have limited representation in the data set (81).

There are some recommendations to overcome these limitations, one of which is counting the complete responses in the analysis. In this regard, we have limited the analysis of our data to 1372 out of a total of 2128 responses, excluding the incomplete ones, aiming to increase the degree of robustness in the analysis. Still, the grossly skewed distribution of the educational level of survey participants, with around 4 out of every 5 being university graduates and 9 out of 10 having a paid job, is the main limitation of our data set. Based on the nationwide statistics conducted by the Turkish Statistical Institute (TurkSTAT), 17.5% of women over the age of 25 in Turkey are university graduates and 28.7% have a paid job (82). Among those who had a partner, the rate of those whose partners were university graduates was 79.5%, which is around 3 times more than the general rate of university graduation among males in Turkey (82). The rate of urban living in our sample was 86.3%, which is parallel to the rate of urban living in Turkey (93.0%) (83). We can interpret that our sample consists of relatively well-educated individuals living in urban conditions. Although this is a limitation to the generalizability of our results, the fact that violence is reported in a sample belonging to the upper strata of society is also important and worrisome. Moreover, our evaluation is based on a self-report measure, and detailed clinical assessments would be necessary to understand the real impact caused by IPV on women. There might also have been some reporting bias, including recall bias, particularly for the pre-pandemic period. The cross-sectional nature of the study also hinders the possibility of making causal interpretations. Given the limits of an online survey, the number of questions was limited to essential sociodemographic factors, and a thorough assessment of the relationship quality of our couple’s adjustment characteristics before and during the pandemic was not made, which could have also impacted our results. A last limitation

might be that in our survey we included only women who had a partner at the time of the survey, so those who did not have an ongoing relationship but were exposed to violence are not reflected in our results.

## CONCLUSION

To conclude, in this self-report online survey, we found that the prevalence and the most common form of violence (emotional) remained during the pandemic. However, there was a change in the ranking of other forms of violence. While life has become more digital during the pandemic, digital violence has become more common, surpassing the level of physical violence. Remarkably, a group of women were subjected to violence for the first time in their lives during the pandemic, with the most

common form being digital violence. Our findings indicate the need to pay greater attention to this relatively new form of violence. Awareness, accurate reporting, and strategies to prevent and reduce intimate partner violence are of utmost importance for the protection of the mental well-being of women and society during and after the COVID-19 pandemic, and other natural and/or human-made disasters.

**Conflicts of interest:** The authors declare that they have no conflict of interest.

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