Prevalence of Sexual Dysfunction and Domestic Violence During Quarantine of COVID 19

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Abstract

Background: The Sexual dysfunction and interpersonal violence have been reported as common social and health problems brought on by the COVID-19 pandemic. It is critical for public health and policymaking that we comprehend how the pandemic will affect these concerns. The goal of this descriptive study is to examine the incidence of sexual dysfunction and domestic violence during COVID-19 quarantine measures and to compare these figures to those from before the pandemic. It also examines the causes, symptoms, and diagnostic and therapeutic approaches to sexual dysfunction. It also looks at social isolation and other variables that may have contributed to an increase in domestic violence during the epidemic. Conclusions: An increase in sexual dysfunction, especially erectile dysfunction, has been seen in the wake of the COVID-19 pandemic. This is likely attributable to the virus's effect on endothelial function. Stress, economic instability, and restrictions on migration have all been linked to increases in domestic violence during quarantine times. Both sexes reported reduced levels of sexual pleasure during the COVID-19 epidemic. Anxiety and despair were more common among men.

Key words: COVID-19, erectile dysfunction, domestic violence, risk factors, public health, policy implications are some of the terms used in this paper.

1. Introduction

The One of the most pressing global health issues of the 21st century is the COVID-19 pandemic, which is being produced by the new coronavirus SARS-CoV-2. This extremely infectious virus emerged in late 2019 and has since spread fast across continents, causing extraordinary disease and death and societal upheavals throughout the globe [1].

Lockdowns, social isolation, travel bans, and forced quarantine of affected or possibly exposed persons are just a few of the steps governments and health authorities throughout the world have adopted to stem the spread of the virus. Although these precautions were necessary to stop the spread of the virus, they had serious and far-reaching effects on people's physical, emotional, and social health [2].

Because of the COVID-19 epidemic and the quarantine that followed, society has undergone profound changes. While stopping the spread of the virus and protecting the public health have been top priorities, it's also important to acknowledge the ripple effects the epidemic is having on other spheres of society. Quarantine-related sexual dysfunction and marital violence are two major causes for alarm [3].

The quarantine procedures, which have kept people homebound for long periods of time, have introduced new stresses and difficulties that may have an effect on sexual health and romantic partnerships. Sexual dysfunction may be brought on by a number of factors, including unexpected changes in habit, financial strain, health worries, and feelings of loneliness. It is crucial for healthcare providers, policymakers, and mental health practitioners to be aware of the incidence and variables related with sexual dysfunction during quarantine [4] to better serve their patients.

Similarly, people in abusive relationships may worry about their own safety and well-being if they are quarantined for their own protection. Conditions generated by quarantine may increase all types of domestic violence, including physical, emotional, and sexual abuse. Abuse survivors may feel alone and helpless if they are unable to escape their abusers [4]. In order to understand the scope of the issue and develop ways to safeguard vulnerable persons and families, it is crucial to conduct an assessment of the incidence of domestic violence during quarantine.

The main objective of this study was to determine how common sexual and domestic violence were during the COVID-19 quarantine, and the second objective was to compare the rates of violence before and after the quarantine was enacted in response to the pandemic.

2. SARS-CoV-2 Disease

Coronaviruses, part of the Coronaviridae family, are characterized by crown-like spikes on their surface and are
categorized into subgroups alpha, beta, gamma, and delta (Figure 1). Notably, SARS-CoV, H5N1 influenza A, H1N1 2009, and MERS-CoV can lead to acute lung injury (ALI) and acute respiratory distress syndrome (ARDS), resulting in pulmonary failure and fatalities [5]. While initially believed to infect only animals, SARS-CoV emerged in Guangdong, China, in 2002, followed by MERS-CoV causing an endemic in the Middle East. In late 2019, Wuhan, China, witnessed a deadly outbreak of a novel coronavirus, named 2019 novel coronavirus (2019-nCov), belonging to the beta subgroup, causing significant mortality and infections within a short period [6].

Fig. (1) Structure of respiratory syndrome causing human coronavirus[7].

Epidemiology
The beginning in early December in Wuhan, the 7th most populated city in China, the COVID-19 outbreak quickly spread across China and beyond. On January 13, 2020, in Bangkok (Thailand), the first verified case of COVID-19 outside of China was detected. Significant community transmission was happening in various countries globally, including Iran and Italy, and on the 11th of March 2020[9], the WHO proclaimed COVID-19 a global pandemic, with 8565 confirmed cases and 132 fatalities recorded from 67 areas outside mainland China. Over 4.1 million new cases and 84,000 new fatalities were recorded according to the WHO Epidemiological Update issued on May 25, 2021, a drop of 14% and 2%, respectively[10]. From 3 January 2020 to 27 May 2021, 257,275 confirmed cases of COVID-19 were recorded in Egypt, resulting in 14,850 fatalities. As of the 25th of May, 2021, a total of 2,128,164 doses of vaccination have been given out.

Pathophysiology
SARS-CoV-2 produces viral proteins via intricate processes, including as polyprotein synthesis, protease processing, and the translation of structural proteins, all of which contribute to the pathogenesis of the virus. Important roles in virulence and immune evasion [12] are played by both non-structural proteins (nsps) and structural proteins. Extensive tissue damage may be brought on by the immune system's overreaction to the infection, known as a “cytokine storm” driven by interleukin 6 (IL-6). Second wave of aggravation occurs 7–14 days post-onset and is accompanied by decreased B lymphocytes and increased inflammatory factors, particularly IL-6, which further exacerbate the disease [13, 14]. The virus initially targets organs expressing angiotensin converting enzyme 2 (ACE2), such as the lungs and heart.

Although SARS-CoV-2 may infect persons of any age, those 65 and over, as well as those with underlying health issues, have shown an increased susceptibility to infection with COVID-19. Over-expression of ACE2 in the elderly, or the high frequency of co-morbidities in this population (Figure 2) [15], may account for the sensitivity of the elderly.
COVID-19 Diagnosis
COVID-19 There are several components to a diagnosis: Elevated liver enzymes and inflammatory markers, as well as lymphopenia, leukopenia, leukocytosis, and thrombocytopenia, are typical laboratory results. Peripheral patchy opacities and ground-glass opacities may be seen on radiographic findings including chest X-rays (CXR) and high-resolution CT (HRCT) [17]. ICU patients’ lung and heart function may be evaluated more accurately using point-of-care ultrasonography [18]. Microbiological testing, more especially reverse transcription polymerase chain reaction (RT-PCR) for SARS-CoV-2 RNA detection, is necessary for a conclusive diagnosis, however test sensitivity must be taken into account. Factors such as age distribution, population density, political ideology, and socioeconomic conditions all affect how successful social distancing strategies are in reducing the spread of COVID-19 over the world. [19].

Social Distancing: Determinants, Effectiveness and Compliance
A wide worldwide, a wide array of social isolation strategies, from complete lockdowns to purely voluntary programmes, have been put into place [20]. Sweden, for instance, opted for looser controls, such as bans on mass gatherings, table-service-only laws for restaurants and pubs, and recommendations that people remain at home when they’re sick. Fear of infection or a feeling of social obligation are two of the primary motivators for adhering to the social distance recommendation [21]. Countries with more precarious industries, more democratic freedom, higher international travel rates, and greater latitudes north or south of the equator are more likely to benefit from stricter regulations. Compliance with social distancing policies has been shown to be correlated with features, views, and partisan differences between political parties [22]. The ideal treatment for high-risk groups involves isolating and quarantining cases in the house.

Studies show that social isolation has an effect on the number of COVID-19 cases and hospitalizations; for example, in Wuhan, infection rates dropped after lockdowns were implemented, while in Germany, the number
of new cases decreased when lock downs were put into place. U.S. ICU overcrowding is a major problem, and projections suggest that strict adherence to distancing regulations might help alleviate this problem. The number of illnesses and fatalities caused by COVID-19 have decreased in California because to preventative steps taken early on. Income level, trust, social capital, public discourse, and news channel watching are all socioeconomic characteristics that impact compliance; ethnic diversity, gender, access to high-speed internet, and income differences are all influential factors in following social distancing guidelines [24]. Residents of low-income areas tend to have fewer access to social distancing methods [25] due to factors such as less job flexibility and smaller living quarters.

3. Sexual Dysfunction During Major Pandemic

Erectile dysfunction (ED) refers to the inability to get or keep an erection strong enough for sexual activity and is a frequent male sexual problem. It is a possible early sign of cardiovascular disease and is connected to endothelial dysfunction, which in turn affects the nitric oxide/cyclic guanosine monophosphate (NO-cGMP) system. Among American males aged 40–70, 52% have had ED, however this number may be low because of underreporting and cultural factors. Notably, ED gets increasingly common as people age; 40% of males have it at age 40, and 70% do so at age 70 [26].

Pathophysiology

Penile erection is regulated by a complex network of blood vessels and nerves, and malfunction in either may lead to erectile dysfunction (ED). An erection is achieved when the corpora cavernosa’s smooth muscles relax in response to the release of nitric oxide, which in turn increases blood flow and decreases venous outflow. Age, smoking, obesity, inactivity, excessive drinking, high blood pressure, high cholesterol, diabetes, and pharmaceutical side effects are all contributors to erectile dysfunction (ED). Common causes for drug-induced ED include antihypertensives, antidepressants, and antipsychotics. The beginning of cardiovascular and metabolic illnesses may be predicted by ED, sometimes by as much as 5 years [27].

Erectile dysfunction (ED) affects a large percentage of males and their intimate relationships. Endothelial dysfunction and cardiovascular disease are strongly associated to erectile dysfunction (ED), which is defined as the inability to produce or sustain an erection suitable for sexual intercourse. The prevalence of ED among US males aged 40–70 is estimated at 52%, albeit this figure may be low due to cultural factors and underreporting. The percentage of males with ED rises steadily with age, from around 40% at age 40 to 70% at age 70 [28]. Nitric oxide and cyclic guanosine monophosphate play important roles in the pathophysiology of penile erection, which includes complicated vascular and neuronal mechanisms. ED may develop if these processes are disrupted. Factors that increase vulnerability include becoming older, smoking, being overweight, leading a sedentary lifestyle, drinking alcohol, having high blood pressure, high cholesterol, or being diabetic. And, critically, ED may potentially precede cardiovascular problems in certain cases. Premature ejaculation and symptoms of the urinary tract often occur together [29].

Diagnostic Distinction

Hypogonadism, libido loss, depressive low mood, and other psychiatric problems would be the primary differential diagnosis for erectile dysfunction. Diabetes, heart disease, and depression may all have this as their initial symptom. True erectile dysfunction should be distinguished from other sexual problems like premature ejaculation. Getting a complete sexual history is typically sufficient for this [30].

In general, psychosexual reasons respond well to therapy, although this varies from case to case. It seems that oral PDE-5 inhibitors are effective against erectile dysfunction due to most causes. However, if these methods are unsuccessful, further treatments are available, such as external vacuum devices, intraurethral prostaglandin pellets, intracavernosal injections, and combination therapy. Even if a patient were to fail every non-surgical alternative, we still have a very successful penile prosthesis implantation operation. Current treatments for erectile dysfunction (ED) are almost universally effective [31].

Complications

Erectile dysfunction is mostly an emotional disorder that may put a burden on relationships and lower the quality of life for the sufferer. Comorbidities including cardiovascular disease and diabetes make ED even more dangerous [32]. Although PDE-5 inhibitor drugs are widely used, they only account for a small percentage (3%) of all occurrences of priapism. In roughly 8.8 percent of instances, priapism is caused by penile injection treatment, and in about 6 percent of cases, trazodone is to blame. There
is a correlation between the use of second-generation antipsychotics and 33.8% of priapism instances. Intermittent intracavernosal injections of diluted phenylephrine solution, up to a maximum of 1 mg, are often used to treat drug-induced priapism. If this doesn’t work, surgical shunting may be necessary, and quick treatment is essential for avoiding irreversible corporal fibrosis [33].

Endothelial function and ED

There is strong evidence connecting erectile dysfunction (ED) to endothelial function/dysfunction-related illnesses, such as coronary heart disease and cardiovascular disease (CVD). Not only does the activity of endothelial cells in the body have an impact on ED, but also on cardiovascular disease and peripheral vascular disease. Sildenafil and other phosphodiesterase type 5 (PDE5) inhibitors improve erections by stimulating nitric oxide (NO) release from vascular endothelial cells, highlighting the endothelium’s role in erection maintenance. Similar to how decreased NO production in the coronary artery system leads to cardiovascular disease, decreased NO production in endothelial cells has a negative effect on the relaxation of smooth muscle cells in the corporal bodies, resulting in decreased blood flow and ED. Endothelial dysfunction has been linked to ED, highlighting the need of a functional endothelium in maintaining normal erections [34].

Treatment

Erectile dysfunction (ED) may be treated with a wide range of approaches, from oral drugs and behavioural modifications to surgical procedures. After weighing the risks and advantages, treatment decisions should be made based on the patient’s wishes (Table 1). Treatment efficacy may be enhanced, and the risk of developing coexisting chronic illnesses can be decreased, by the adoption of healthier lifestyle habits [35]. Improving ED symptoms and the efficacy of oral drugs may be achieved by treating underlying chronic illnesses such as diabetes, hypertension, and hyperlipidemia. Phosphodiesterase type 5 (PDE5) inhibitors are routinely utilised; however, the success of these drugs varies from patient to patient [36]. It is important to think about the possibility of drug interactions, particularly with nitrate medicines [37]. Vacuum devices, penile prosthesis, and alprostadil administration by the urethra or intracavernosum are other choices. Experimental therapies such stem cell therapy, platelet-rich plasma therapy, and shock wave therapy are being researched [38]. Psychotherapy may be used in conjunction with conventional medical treatment for ED [39, 40]. Referral to urologist or cardiology may be required in rare instances.

Table 1 medication for use in ED[41]

<table>
<thead>
<tr>
<th>Onset of Action</th>
<th>Effectiveness Time</th>
<th>Dosage</th>
</tr>
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<tbody>
<tr>
<td>Avanafil</td>
<td>35–30 min</td>
<td>6 h</td>
</tr>
<tr>
<td>Sildenafil</td>
<td>30–60 min</td>
<td>12 h</td>
</tr>
<tr>
<td>Tadalafil</td>
<td>60–120 min</td>
<td>36 h</td>
</tr>
<tr>
<td>Vardenafil</td>
<td>30–60 min</td>
<td>10 h</td>
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4. COVID-19 Endothelial Dysfunction Role in Erectile Dysfunction

Studies have shown that angiotensin converting enzyme-2 is essential for COVID-19 entry into cells (ACE-2). Transmembrane serine protease is required to prepare viral spike proteins for binding to ACE-2 receptors (TMPRSS-2). Since ACE-2 and TMPRSS-2 are both expressed by the same cells and organs, COVID-19 seems to target both. Perhaps explaining why COVID-19 infection causes systemic endothelial dysfunction is the fact that endothelial cells express both the ACE-2 receptor and the TMPRSS-2 gene. Electron microscopy has shown that COVID-19 viral elements are present in the endothelial cells of the lung, heart, and kidney. These results raise the question of whether widespread endothelial dysfunction induced by COVID-19 may also affect erectile tissue in the penis, which is abundant in endothelium lined blood vessels. We report here the histological characteristics of penile tissue in men who had previously recovered from symptomatic COVID-19 infection but now suffered from severe erectile dysfunction (ED) [42].
Prevalence of Sexual Dysfunction and Domestic Violence During Quarantine of COVID 19

Fig. (4) Ultrastructure features of penile tissue from live seroconverted COVID-19 patients. (A) Coronavirus-like spiked viral particles (arrows) visualized via TEM in the peri-vascular erectile tissue of a live patient who had previously contracted the COVID-19 virus and subsequently seroconverted. Particle diameter measurement indicated on image. (B) Coronavirus-like spiked viral particles (arrows) visualized via TEM in the peri-vascular erectile tissue of a live patient who had previously contracted the Covid-19 virus and subsequently seroconverted. Particle diameter measurement indicated on image[42].

Fig. (5) Immunohistochemical comparison of endothelial nitric oxide synthase (eNOS) at both 40× and 10× magnification with the Leica Bond™ system using the standard protocol. Immunohistochemistry in the COVID-19 (-) patient (Control) had stained more intensely indicating relatively high expression of eNOS and normal endothelial function. The COVID-19 (+) patient (Patient) exhibited less intense staining indicating relatively low expression of eNOS which can indicate endothelial dysfunction and damaged vascular integrity[42].

5. Domestic Violence During COVID-19 Pandemic

When a spouse, partner, or other family member is a victim of physical, sexual, or emotional abuse in the house, we call this kind of violence "domestic violence." It's a "health concern" for people everywhere. The "physical and psychological" effects are significant. The necessary tactics to minimise the transmission of this virus are being implemented, but they are dramatically increasing the danger of "family violence" around the globe. However, there is clear evidence of a substantial increase in DV cases in a few of nations. Violence against women has increased as a result of this epidemic. With fewer people to interact with, the potential for DV increases during this epidemic. This is due to the fact that "staying at home" entails "sharing the same space with one's abuser if one is facing a DV" and is therefore discouraged in every nation. [43].

There has been a "hidden pandemic" of DV reproduction ever since the COVID-19 epidemic broke out, and it has persisted all around the globe. During these critical times, VAW symptoms worsen. According to the World Health Organization, "the epidemic exposes inherent inequities in socioeconomic and health systems," leading to a rise in GBV. Disruption to society and domestic violence have resulted from the spread of COVID-19. The increase in DV is indicative of the multiplicity of physical and mental health problems it has produced beyond the virus itself. The emotional and physical toll of sexual violence (SV) is high [44].

Anxiety, feelings of isolation and stigma, low self-esteem, despair, self-destructive conduct, a propensity to re-victimize, drug misuse, and sexual maladjustment were shown to be long-term repercussions of child sexual abuse.

Because of the particular effects of systemic inequalities based on factors such as gender, colour, disability, sexual orientation, and socioeconomic status, this pandemic disproportionately affects already vulnerable
populations. The "sexual and reproductive health and justice disparities" would worsen if the world adopts restrictive measures to stop the spread of the COVID-19 pandemic. [45].

Despite the fact that many have experienced IPV long before the release of COVID-19, IPV is a global epidemic. When society is relatively stable, the issue of partner violence is typically overlooked since it is seen as a private matter. Children that are victimised or neglected as a result of COVID-19 have suffered as a result. The number of calls to child hotlines about child abuse has skyrocketed since the start of the COVID-19 outbreak [44].

Violence, whether experienced in childhood or adulthood, has been linked to cardiovascular disease in studies. The risk of DV, which may have serious consequences for women's mental and cardiovascular health, has risen due to COVID-19. Another research found that cardiovascular disease, type 2 diabetes mellitus, and all-cause death were more common among female DV survivors. In addition, intimate partner violence has been linked to increased rates of suicidality, injuries, psychological distress, unhealthy behaviours, sexual risk behaviours, and negative mental health outcomes. Due to the physical harm to a pregnant woman's body and the stress impact on foetal growth and development, DV during pregnancy may lead to fatal and nonfatal poor health effects. However, postpartum and antenatal depression have also been linked to an increased likelihood of experiencing emotional abuse. If IPV happened during the perinatal period, it would have negative effects on the mother, her growing pregnancy, and any children in her care. Furthermore, IPV-exposed pregnant women often experience melancholy and anxiety [46].

The rate of domestic violence against women and children in the course of the 2019 COVID

About 4.6% of Australian women who participated in a poll said they had experienced PV or SV "by a current or past sexual partner in the three months before to the research." A study conducted in Ethiopia found that the prevalence of IPV against women was 24.6%, followed by "psychological violence" at 13.3%, physical violence at 8.3%, and sexual violence at 5.3%. 66 About 15.5% of the people surveyed in the California study reported experiencing IPV, and 10% reported experiencing SV. The rate of intimate partner violence (IPV) in a cross-sectional study conducted in New Orleans was 59%. According to research done in Bangladesh, 19.9% of people are affected by emotional violence, with 68.4% claiming that it has worsened since the lockdown. Six percent of PV was recorded, whereas fifty-six percent claimed a rise after the lockdown. Only 3.0 percent of people reported having SV, but of those who did, 50.8% said their symptoms had worsened since the lockdown [44].

Eighteen percent of victims of intimate partner violence (IPV) in the United States said that their victimisation had deteriorated because of the COVID-19 epidemic, while seventeen percent said that sexual and physical violence (SPV) had become more common. According to research done in Jordan during the pandemic, the percentage of VAW was 40%. Another survey found that 22.4% of Ethiopians have experienced IPV at some point in their lives. In addition, 11% of women have encountered PV, 20% have experienced "psychological violence," and 13% have had SV [44].

According to a study conducted in Iran, the rate of IPV prevalence after the COVID-19 pandemic was greater than it had been before the outbreak (54.2 percent ). Twenty percent of respondents in a research conducted in Jordan experienced expanded domestic abuse throughout this epidemic. High levels of restriction are associated with a 35-46% increase in aggressive punishment used on children aged 1-14 in a research done in Nigeria. There were 3.09 percent of physical conflicts, 7.67 percent of emotional abuse, 3.57 percent of non-consensual intercourse, and 6.58 percent of child corporal punishment, according to a survey of 1,474 German women who were in committed relationships [44].

Twenty-two percent of women in the Arab nations surveyed reported experiencing intimate partner violence (IPV) of some kind during the research period. According to a survey taken at the height of the DV epidemic in Portugal, 13.7% of respondents were personally impacted. One-thirteenth experienced emotional abuse, one-hundredth experienced sexual abuse, and one-ninth experienced physical abuse. More than seven percent of women in France had PV or SV after the lockdown, according to a recent research. IPV was found to be 45.29 percent in a research done in Bangladesh. While 44.12% have experienced mental abuse, 15.29% have experienced physical abuse, 10.59% have experienced sexual abuse, and 19.22% have experienced both types of abuse. Children in Kenya were most likely to get SV from their neighbours (29%) and extended family (20%), according to a recent research. Compared to children, adults were more likely to be exposed
to SV through a friend or family member (59% vs. 41%)[47].

The Indian research confirmed that COVID-19 has led to an increase in DV in secure facilities. Violence against women is a serious problem that affects millions of people and may last a lifetime. Worldwide DV has increased significantly during the COVID-19 quarantine. Intimate partner violence (IPV) is a pervasive problem, with estimates showing that 35% of women and 17% of children globally have been victims of IPV themselves. Violence against women and girls has increased due to COVID-19, with up to a threefold increase in DV cases compared to the same period last year. Still unfolding are the negative consequences of the epidemic on DV [44].

Women and children are far more likely to be victims of violence in the post-Covid-19 period. The worldwide incidence of DV was significantly impacted by this epidemic. Since the lockdown, VAW has increased worldwide. The prevalence of both VAW and child violence have increased as a result of this epidemic. Domestic violence, drug addiction, significant depression, anxiety, and suicide may all increase if regulations are put in place to contain the COVID-19 epidemic. The worldwide rise in domestic violence caused by the COVID-19 pandemic outbreak. This is due to the fact that "stay-at-home" moms in many parts of the globe have reported an upsurge in domestic violence and abuse cases during the epidemic. Isolating homes to prevent the spread of the pandemic virus actually made domestic violence and abuse more likely [44].

Several effects of COVID-19 on VAW and girls were found in the available evidence. These included an increase in the likelihood of DV, violence in the health care industry, and the abuse and exploitation of vulnerable women workers. Government actions taken to reduce the spread of COVID-19 have been linked to an increase in the occurrence of DV. According to "Sharma and Borah's" global research, nations' preparations for COVID-19 are increasing both the frequency and severity of DV. One study found that one in three women throughout the world had PV or SV, and that it was most often perpetrated by a partner. Since the spread of COVID-19, new statistics and studies have shown that all forms of VAW and girls, especially DV, have increased. In addition, there has been an increase in calls to domestic violence helplines across several nations since the current epidemic began. There has been a 300 percent increase in calls to the service in Vancouver, British Columbia, which helps women who have been victims of domestic violence, according to their data[44].

COVID-19 Risk Factors for Violence Against Women and Children

A research conducted in Ethiopia found that being a housewife, being under the age of 30, being married, and having a spouse between the ages of 31 and 49 were all strongly related with IPV against women during this epidemic. According to research conducted in the United States, victims of sexual violence are more likely to experience IPV than victims of other forms of violence, and victims of physical violence are more likely to experience IPV than victims of other forms of violence. 70 Employment and marital status were shown to be significant predictors of VAW in the Jordanian research. A lack of education, being married to an illiterate man, having a spouse who uses drugs, and having a negative outlook on violence were all identified as risk factors for intimate partner violence in Ethiopia [48].

Employment status was shown to be linked with intimate partner violence in an Iranian research. Higher levels of physical IPV were associated with lower socioeconomic status and part-time employment. German researchers found that young children (under 10 years old), financial stress, poor mental health, and home quarantine all increased the likelihood of violent confrontation. According to research conducted in Arab nations, IPV is linked to factors such as where one lives (Africa), one's family's financial situation, and whether or not the spouse has just lost his job. According to research done in Bangladesh, the country's recent economic decline may be attributed to factors such as residence, marital type, women's work status, spouse age, educational level, family income status, and epidemic.

Incidents of both depressed symptoms and suicide attempts were linked to IPV, whereas IPV was linked to depressive symptoms in females. Family members spend more time together and tension in the home increases during COVID-19, which leads to an increase in VAW and violence towards children[44].

Furthermore, this COVID-19 pandemic may increase the likelihood of violence in high-risk relationships due to job losses and financial stress. The greatest rates of VAW were found in the Eastern Mediterranean Region, which was linked to political and social unrest as well as institutionalised discrimination against women. Lockdowns in Nigeria due to COVID-19 have
unintentionally exposed women to a higher risk of suffering severe partner abuse, according to a recent study[44]. Anxiety, gender, age, perceived COVID-19 risk, and sexual orientation were all shown to be variables in a Taiwanese research that were linked to greater variation in sexual behaviour. Researchers concluded that COVID-19 and VAW are connected pandemics. Health policy must take a structural approach to addressing VAW since it is a priority for public health systems. Substance abuse (alcohol or drugs), unemployment, control of family finances, and physical aggressiveness against other males were shown to be major drivers of spousal PV [50].

According to the research, both domestic violence (DV) and sexual violence (SV) committed online increased as COVID-19 spread over the world. In addition, social media becomes a transitional path from offline to online SV. The data showed that health crises like COVID-19 might cause disproportionate damage to the population because of their gender or sexuality [51].

Risk of IPV is increased by conditions associated with quarantine and isolation, such as psychological, interpersonal, and material difficulties. As a result of the financial strain of the pandemic, IPV rates increased and continue to be a major health care concern. COVID-19. Multiple risk variables are likely to be amplified by the reaction to the COVID-19 [52], as shown by research on violence against minors, VAW, and the elderly.

The risk factors for DV and GBV may be amplified during quarantine, as has been warned by an increasing number of studies and organisations. Conflicts at home may be exacerbated by factors such as increased stress and irritation, and less personal time and space. Similarly, the inability to leave the house severely limits victims' access to help. Victims of domestic abuse who were given "stay-at-home orders" to prevent the spread of COVID-19 discovered that their own homes frequently posed a greater danger of further assault.

6. Conclusions:

In conclusion, Due to the virus's effect on endothelial function, the COVID-19 pandemic has had a significant effect on sexual health, with a rise in sexual dysfunction, notably erectile dysfunction. Stress, economic instability, and restrictions on migration have all been linked to increases in domestic violence during quarantine times. Both sexes reported reduced levels of sexual pleasure during the COVID-19 epidemic. The incidence of anxiety and depression was higher in males. Due to the virus's effect on endothelial function, the COVID-19 pandemic has had a significant effect on sexual health, with a rise in sexual dysfunction, notably erectile dysfunction. Stress, economic instability, and restrictions on migration have all been linked to increases in domestic violence during quarantine times. Both sexes reported reduced levels of sexual pleasure during the COVID-19 epidemic. The incidence of anxiety and depression was higher in males.

References
Prevalence of Sexual Dysfunction and Domestic Violence During Quarantine of COVID 19

[31] Z. Cai, X. Song, J. Zhang, B. Yang, H. Li. Practical Approaches to Treat ED in PDE5i Nonresponders. Aging Dis;11:1202-18. 2020


