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Original article

The Effect of Domestic Violence Against Women on Their Children's Discipline Methods During the COVID-19 Lockdown in Egypt: A Cross-Sectional Study

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ABSTRACT

Background: The COVID-19 pandemic resulted in the displacement of nearly half of the global student population from educational institutions and daycare facilities. This resulted in hindering access to education and increasing their exposure to domestic violence (DV) at home. Injuries incurred during this period frequently arose from parental corporal punishment, leading to both physical harm and psychosocial disorders among children. Mothers may incur legal responsibility and criminal charges, including assault, battery, or child abuse, if they cause harm to their child. This study aims to identify the patterns of child disciplining methods and their association with domestic violence against mothers during the COVID-19 pandemic in Egypt. **Participants and Methods:** A cross-sectional analytical study was conducted. The sample was collected using a multistage cluster sampling approach. The Egyptian demographic and health Arabic questionnaire was used. From May to June 2020, a Google form link was disseminated across all social media groups, including women in the targeted governorates, resulting in the collection of 318 samples. The research focused on women aged 20 to 49 residing in Egypt during the pandemic lockdown. **Results:** The results revealed that psychological discipline (86.2%) was the predominant form of violence utilized. A correlation exists between mothers who experienced domestic violence and the employment of violent disciplinary methods. **Conclusion and recommendation:** This study is the first in Egypt demonstrating a correlation between the COVID-19 epidemic, maternal violence, and child-discipline practices. During the pandemic, effective multi-level interventions are essential for protecting children against violence and its severe repercussions. Forensic and legal professionals are essential in reporting, examination, injury documentation, and offering child welfare services in cases of violent discipline.

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I. Background

Child discipline encompasses the training and care provided to children that promote skills such as self-control, self-direction, and empathy while also shaping their future personalities (Gadsden et al., 2016). Caregivers employ two categories of disciplinary strategies to address the behavior of children. Nonviolent practices include guiding children towards acceptable or desirable behaviors, encouraging the continuation of such behaviors, and offering moral and monetary rewards (Anwar Abdel-Fatah, 2021). The second form of disciplinary action involves aggressive behavior directed at individuals under 18 years of age, including neglect by parents or other authorized guardians, as well as corporal, emotional, and sexual assault (AboKresha et al., 2021).

A comprehensive assessment in 2016 estimated that approximately 1 billion children aged 2-17 experience different forms of violence annually worldwide (Wong et al., 2020). Exposure to violence in children can lead to enduring adverse effects on families, societies, and countries (Norman et al., 2012). All children possess the right to protection from violence, as stated in the United Nations Declaration on the Rights of the Child. The 2014 Egyptian Legislation and Article 1 of the 2008 Egyptian Child Law protected children's rights (Tran et al., 2015). A 2014 study by the UN Children's Fund on violence against children in Cairo, Alexandria, and Assiut found that approximately two-thirds of children experienced corporal harm, while 78% reported experiencing emotional violence (UNICEF, UN Women, 2020).

World Health Organization data indicates that approximately one in three women (30%) have encountered physical or sexual violence from their intimate partners, referred to as intimate partner violence. Research indicates that male intimate partners account for 38% of homicides involving women. Reports from China, the United Kingdom, the United States, and other countries indicate an increase in domestic violence incidents following the COVID-19 pandemic (World Health Organization, 2020).

Governments have implemented various control measures to halt the spread of COVID-19 (Casale & Posel, 2021). People were restricted from leaving their residences except for obtaining or delivering food and essential services. Educational institutions were closed, and residents were mandated to remain indoors. Travel between provinces and internationally was prohibited (Republic of South Africa, 2020). This suggests that many parents stayed home with their children, while some children participated in online classes and others engaged in remote work. Families encountered atypical circumstances. Studies show that in specific households, traditional gender roles were pronounced, with men responsible for financial and grocery purchasing decisions, while women managed household tasks and family care (Parry & Gordon, 2021).

Some studies indicate that the restrictions imposed by the COVID-19 lockdown resulted in a decreased likelihood of men participating in "traditionally" masculine behaviors, such as working outside the home, thereby challenging established gender norms and perceptions of masculinity within the context of home (Tahir et al., 2022). Males who lost their ability to earn money and support their families, thereby failing to fulfill the role of "wage earner," were significantly affected, as were those who encountered alterations in the allocation of household chores (Casale, 2020). This increases the risk of domestic violence, including child abuse (Lawson et al., 2020).

Estimates from UNESCO indicate that over 5 million children have been unable to attend schools and childcare facilities as a result of the COVID-19 lockdown. Consequently, families and children have been restricted to their residences (Nyashanu et al., 2020). These scenarios have adversely affected children's psychological well-being, increasing their vulnerability to violence, with potential intergenerational consequences (UNESCO, 2022).

The adverse effects of societal restrictions due to Covid-19 on children and families are evident, with potential long-term consequences for certain individuals. Numerous families experienced stress, anxiety, and depression due to the restrictive measures. Recent research indicates that children may experience loneliness, anxiety, and challenges in coping in the absence of peers and school. Children have articulated concerns regarding the potential loss of friendships during the lockdown. Providing pastoral care for returning students continues to be a primary concern. Schools have recognized the need for long-term planning regarding social and wellness interventions, highlighting the pandemic's impact on

children's social and emotional well-being (Beresin & Bishop, 2023).

The number of confirmed cases, recoveries, and fatalities has consistently increased since the first COVID-19 case was reported in Egypt on February 13, 2020, particularly from April 2020 onward, affecting individuals across different age groups. The majority of fatalities occurred among the elderly with preexisting health conditions. Egypt closed its schools on March 15, 2020, and implemented a nationwide lockdown on March 25, 2020. It imposed a nationwide lockdown as part of its COVID-19 prevention measures (AboKresha et al., 2021).

Forensic professionals play a critical role in ensuring justice, aiding victims, and preventing further harm. Forensic professionals document injuries in cases of physical abuse, including bruising, burns, fractures, head trauma, and wounds. In fatal instances where domestic violence leads to death, forensic pathologists are crucial in establishing the cause and manner of death (Kletečka-Pulker et al., 2024).

To date, only one study has examined the relationship between child violence and the psychological stress experienced by parents during the isolation measures of the COVID-19 pandemic in Egypt (AboKresha et al., 2021). Disseminating current knowledge about the impact of the COVID-19 pandemic and associated isolation measures on mothers and their disciplinary strategies is crucial for the public, the medical community, and national authorities. Therefore, it is essential to provide assistance and healthcare resources to adequately address the family's situation. This study analyzes patterns of violent and nonviolent child discipline, identifies associated risk factors, and examines the correlation with mothers' exposure to domestic violence during the COVID-19 pandemic lockdown in Egypt.

I. Participants and methods

II.1 The study has the following objectives:

This study aims to analyze the patterns of violent and nonviolent child discipline methods employed by mothers who experienced domestic violence during the COVID-19 pandemic and determine the prevalence of aggressive child discipline tactics. This study aims to identify the risk factors associated with violent discipline methods against children and their correlation with mothers' experiences of domestic violence during the COVID-19 pandemic lockdown.

II.2 Study design:

This cross-sectional study was carried out between May and June 2020 to evaluate the prevalence of violent discipline methods and their correlation with mothers' exposure to domestic violence during the COVID-19 lockdowns in the Arab Republic of Egypt.

II.3 Study Sample:

The sample size was calculated using the Epi Info tool (version 7, Centers for Disease Control and Prevention [CDC], Atlanta, Georgia). Assumptions were based on the 2014 Egyptian Demographic Health Survey (EDHS), which reported a 78% prevalence of physically harsh discipline methods against children, with a confidence level of 95% and a precision of 5%, employing a single design effect (El-Zanaty Associates, 2015).

The sample size was calculated as 262 and adjusted to 289 to accommodate a 10% non-response rate. Mothers were selected as participants through a multistage cluster sampling method. Egypt is divided into 27 governorates for administrative purposes. Egypt is divided into four distinct categories of governorates: Upper Egypt, Lower Egypt, Urban Governorate, and Border Governorate. Eight governorates were randomly selected to represent Egypt through the lottery method, with two selected from each category. Suhag and Minya are situated in Upper Egypt, whereas Gharbia and Ismailia are located in Lower Egypt. The Red Sea and New Valley are located within the Border Governorate, while Port Said and Cairo are included in the Urban Governorate. A fixed random sample was collected from each governorate. Confidentiality measures were considered during the data collection process.

II.4 Study participants:

The inclusion criteria comprised mothers aged 20 to 49 residing in Egypt during the pandemic, who had a normally developing child aged 1-14 living at home, as discipline during this age is crucial for formative child behavior and self-control (Durrant & Stewart-Tufescu, 2017).

II.5 Data collection tools:

We used an online questionnaire derived from the Multiple Indicator Cluster Survey (MICS) and adapted from the 2014 Child Discipline Questionnaire (EDHS). The questionnaire was available in an Arabic version that was socially and culturally appropriate, as well as easy to understand (El-Zanaty Associates, 2015).

II.6 Validation of the study instrument:

This instrument was validated as a reliable measure of discipline and has been utilized across diverse contexts. The questionnaire was pretested with a sample of 250 families across two governorates, Beni Suef (Upper Egypt) and Menoufia (Lower Egypt), in January 2014. The internal consistency and reliability of the child discipline module were acceptable, with a Cronbach's alpha coefficient of 0.681.

An informed consent form accompanied the questionnaire, which was distributed online to women aged 20–49 between May and June 2020. A link to the questionnaire was disseminated via email, WhatsApp groups, Facebook groups, and other social media platforms to collect relevant data. The questionnaire consists of three sections: the first part addresses sociodemographic features, the second examines domestic abuse against mothers, and the third focuses on child discipline. We employed the Arabic version of the Domestic Violence module from the EDHS to assess mothers' exposure to violence. Women were asked about their recent experiences of emotional, physical, or sexual abuse in their homes during lockdowns. Seven questions were utilized to evaluate exposure to physical violence. Three questions were used to assess an individual's exposure to sexual or emotional violence. Women providing at least one affirmative response to any form of violence were classified as having experienced DV (El-Zanaty Associates, 2015).

The Child disciplinary part of the questionnaire included both violent and nonviolent methods. Nonviolent methods included explaining the child's behavior, removing privileges, restricting participation in preferred activities, or denying permission to leave the house. Violent disciplinary practices were categorized as psychological, physical, or severe physical: 1) shouting, screaming, or yelling; 2) using derogatory terms (e.g., "stupid," "lazy"); 3) shaking the child; 4) hitting the arm, leg, or hand; 5) spanking the bottom with a bare hand; 6) striking with rigid objects (e.g., stick, hairbrush); 7) slapping the head, ears, or face; and 8) administering repeated, intense beatings. Respondents answered "yes" or "no" for each method. At the end of the questionnaire, there is a question to ask mothers and caregivers probing their beliefs about the necessity of extreme corporal punishment.

II.7 Statistical analysis:

Data were analyzed using IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp. Categorical variables were summarized as frequencies and percentages. Associations between child discipline practices and qualitative independent variables were evaluated using the Chi-square test, with Fisher's exact test applied when >20% of cells had expected counts less than 5. Predictors showing significant bivariate associations with violent discipline were further analyzed via binary logistic regression to assess their impact on the likelihood of violent discipline toward Egyptian children. A p-value of less than 0.05 was considered statistically significant (95% CI).

II.8 Ethical considerations:

The Research Ethics Committee of Suez Canal University's Faculty of Medicine approved the study under approval number 4177. In addition, the study's procedures adhered to the Declaration of Helsinki's ethical guidelines. Informed consent was obtained from participants at the outset of the questionnaire. Data confidentiality was strictly maintained, with access restricted to research purposes only.

III. Results

This study included 318 women with at least one child aged 1 to 14 residing at home during the COVID-19 pandemic. Additionally, 63.5% of participants in the study were between 30 and 39 years old. Approximately 48.4% of mothers had attained secondary education or higher, while 42% were employed in professional roles, including positions as doctors or technical specialists. In urban areas, 87% of the population resided, while 81% of households reported an adequate average monthly income. 91.5% of women reported utilizing nonviolent methods for disciplining their children. 51.6% indicated that they employed severe physical punishment on their children. In parallel, 86.2% of women reported employing psychological punishment on their children. Consequently, both psychological aggressiveness and physical punishment were utilized extensively (Figure 1).

Discipline tactics were categorized as either nonviolent or violent. The most frequently reported nonviolent approach involved elucidating to the children the inappropriateness of their behavior, with a prevalence of 90.3%. During the COVID-19 pandemic, over 80% (84.6%) of children experienced psychological discipline through screaming or shouting. The predominant method of physical punishment involves slapping a child on the face or head (49.1%), followed

by shaking (46.2%), spanking on the child's bottom (30.5%), and striking the child on the hand, arm, or leg (27%). The least violent physical method identified was repeated child beating (10.1%). (Figure 2).

Table (1) indicates that 67.6% of mothers employing violent tactics were within the age range of 30 to 39 years. Mothers employing violent tactics were more prevalent in urban areas (86.3%) compared to rural regions (13.7%). Among mothers employing violent tactics, 48.9% held postgraduate degrees, while 69.4% of their partners possessed only a secondary education. 64.4% of mothers who work for cash employ violent methods, in contrast to those who do not work for cash. The age, occupation, position, and attitude of mothers regarding the use of violent discipline to enhance their children's behavior exhibited statistically significant correlations with the employment of aggressive tactics by mothers. Finally, 17.6% (n=56) of mothers believed proper child-rearing and instruction required corporal discipline.

Table (2) displays the distribution of discipline methods (violent and nonviolent) based on parents' sociodemographic variables. The majority of mothers employing physical, psychological, and severe physical discipline techniques were aged 30-39, with prevalence rates of 69.2%, 67.5%, and 68.9%, respectively. Over 90% of women employing harsh punishment methods were married, with specific rates of 93.9% for physical, 94.5% for psychological, and 94.5% for severe physical punishment. Working mothers exhibited a greater tendency than housewives to employ physical (38.9%), psychological (42.7%), or severe physical (38.4%) forms of harsh punishment. Women with secondary education exhibited the highest likelihood of employing physical (49%), psychological (48.5%), and severe physical (46.3%) forms of harsh discipline. Additionally, fathers who employed physical (73.7%), psychological (n=189, 69%), or severe physical (n=116, 70%) forms of violent discipline were more likely to have attained secondary education. The use of violent discipline by mothers exhibited a statistically significant correlation with their age, occupation, husband's educational background, and job position.

The results of the regression model utilized to identify predictors, specifically sociodemographic traits associated with various forms of violent discipline, are displayed in Table 3. The probability of employing violent discipline to modify children's behavior was significantly greater among mothers aged 30 to 39 (OR=4.0; 95% CI = 1.6-7.8), indicating that this demographic was four times more likely to utilize violent methods compared to nonviolent alternatives. Mothers possessing only primary education were identified as a significant predictor of physical violence (OR = 5; 95% CI =1.2-10.1). The findings indicated that parents' beliefs regarding the effectiveness of physical punishment significantly predicted the use of any form of violent discipline. Children were at a higher risk of experiencing violence when their parents deemed physical punishment essential for discipline (OR = 5.4; 95% CI = 1.1-10.1). Children whose mothers had lower monthly earnings were more likely to experience severe physical abuse compared to those whose mothers earned sufficient income(OR =2.4; 95% CI = 1.2–4.7). The model of violent tactics was statistically significant at the 0.05 level, with $\chi 2 = 33.98$ (df = 17).

According to Table (4)**,** there is an increased likelihood of violent physical discipline in children whose mothers experienced psychological violence (OR = 3.8; 95% CI = 1.0–13). There was a statistically significant correlation between mothers' experiences of domestic violence and their use of harsh punishment methods with their children. The violent techniques model was statistically significant at 0.05, with $\chi 2 = 19.14$ (df= 3).

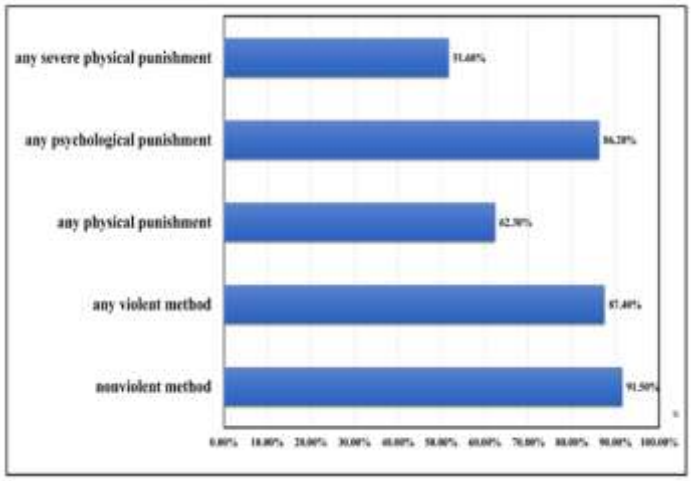

Figure (2): The pattern of violent and nonviolent disciplinary methods used by mothers against their children during the COVID-19 pandemic.

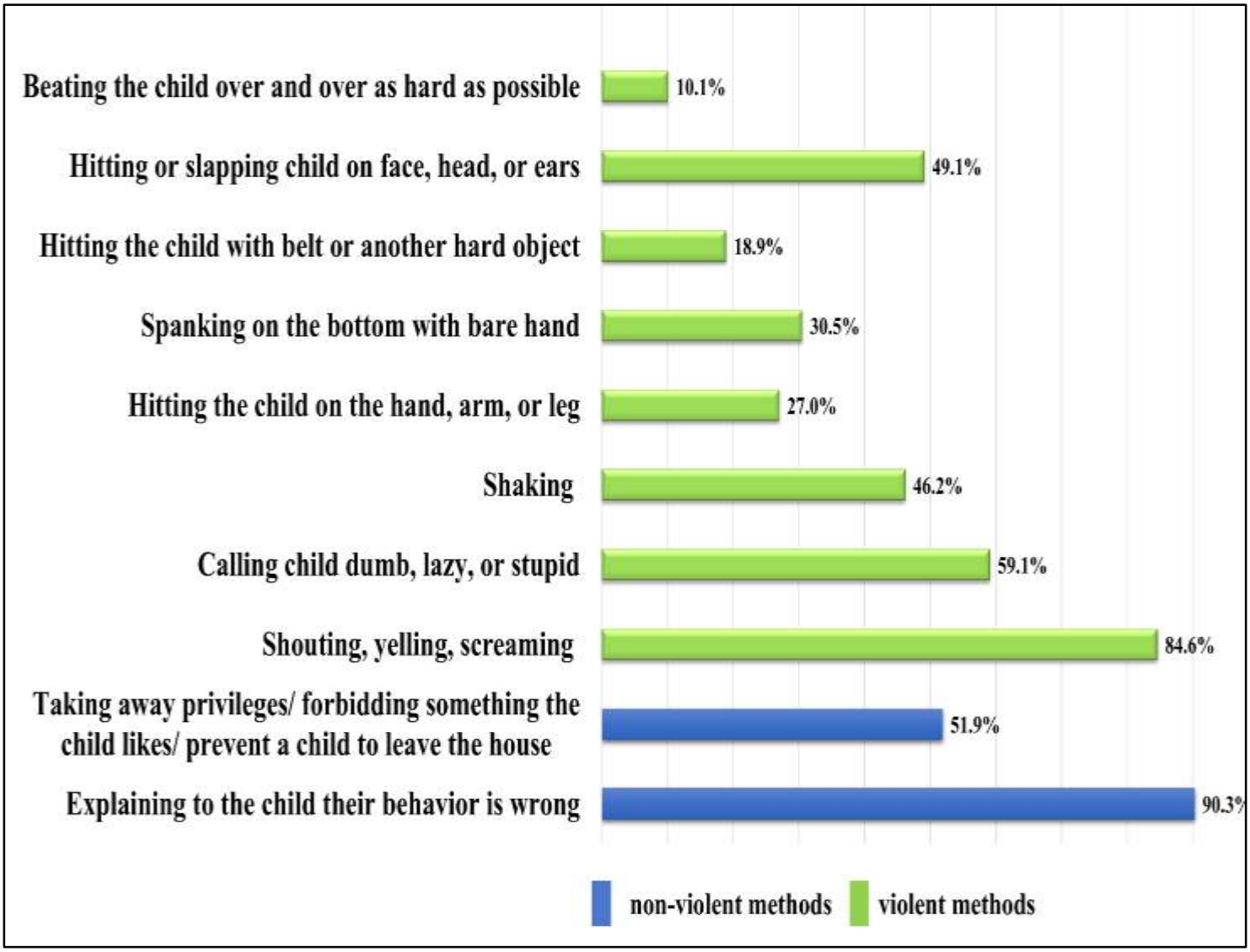

Figure (2): The pattern of violent and nonviolent disciplinary methods used by mothers against their children during the COVID-19 pandemic

Table (1): Frequency distribution of violent and nonviolent disciplining methods according to the parents' sociodemographic characteristics.

Variable	N	Violent discipline methods N= 278			Nonviolent methods N=291		
		N (%)	$\chi 2$	*p*-value	N (%)	$\chi 2$	*p*-value
Age							
20-29	55	44(15.8)			49(16.8)		
30-39	202	188(67.6)	16.68	0.001*	184(63.2)	1.46	0.48
40-49	61	46(19.2)			58(19.9)		
Marital status							
Married	301	263(94.6)			276(94.8)		
Divorced	14	12(4.3)	0.31ᶠ	0.79	12(4.1)	1.19ᶠ	0.49
widow	3	3(1.1)			3(1)		
Number of children							
1-2	195	171(61.5)			179(64.8)		
3-4	121	105(37.8)	0.31ᶠ	0.89	110(37.8)	0.50ᶠ	0.864
≥5	2	2(0.7)			2(0.7)		
Mother□s education							
Some primary	1	1(0.4)			1(0.3)		
Primary complete/some Secondary	24	23(8.3)	1.83	0.60	22(7.6)	0.99ᶠ	0.9
Secondary complete/higher	154	118(42.4)			141(48.5)		
Postgraduate	139	136(48.9)			127(43.6)		
Father's education							
Primary complete/some Secondary	5	4(1.4)			1(0.3)		
Secondary complete/higher	217	193(69.4)	2.08ᶠ	0.29	206(70.8)	21.21ᶠ	0.001*
Postgraduate	96	81(29.1)			84(28.9)		
Mother□s job							
Not working	89	84(30.2)			79(27.1)		
Employee/manual	87	69(24.8)	10.4	0.01*	81(27.8)	4.49	0.21
Clerical/sales	8	6(2.2)			6(2.1)		
Professional/doctors/technical	134	119(42.8)			125(43)		
Father□s job (n=301)							
Not working	3	3(1.1)			3(1.09)		
Employee/manual	120	106(40.3)	0.45ᶠ	0.97	109(39.7)	1.27ᶠ	0.84
Clerical/sales	41	36(13.7)			37(13.5)		
Professional/doctors/technical	137	118(44.9)			127(43.6)		
Residence							
Urban	277	240(86.3)	1.18	0.27	250(85.9)	7.81ᶠ	0.02*
Rural	41	38(13.7)			41(14.1)		
Work status							
Working for cash	212	179(64.4)	5.16	0.02*	195(67)	0.18	0.83
Not working for cash	106	99(35.6)			96(33)		
Monthly income							
Sufficient	258	225(80.9)	0.05	0.81	237(81.4)	0.21	0.79
Not sufficient	60	53(19.1))			54(18.6)		
Mother's opinion of violence							
Yes	56	54(19.4)	5.01	0.02*	54(18.6)	2.11	0.19
No	262	224(80.6)			237(81.4)		

*N: Number, %: Percent, *= p-value <0.05,* ᶠ=fisher exact test

Table (2): The proportion of violent disciplinary methods according to parents' sociodemographic characteristics.

Variable	N	Physical violence N=198			psychological violence N=274			Severe physical violence N= 164		
		N (%)	$\chi 2$	*p*-value	N (%)	$\chi 2$	*p*-value	N (%)	$\chi 2$	*p*-value
Age										
20-29	55	33(16.7)			43(15.7)			26(15.9)		
30-39	202	137(69.2)	9.72	0.008*	185(67.5)	13.8	0.001*	113(68.9)	4.68	0.00*
40-49	61	28(14.1)			46(16.8)			25(15.2)		
Marital status										
Married	301	186(93.9)			259(94.5)			155(94.5)		
Divorced	14	9(4.5)	1.87	0.47	12(4.4)	0.48	0.78	8(4.9)	0.57	0.75
widow	3	3(1.5)			3(1.1)			1(0.6)		
Number of children										
1-2	195	121(61.1)			167(60.9)			102(62.2)		
3-4	121	75(37.9)	0.83ᶫ	0.75	105(38.3)	0.28ᶫ	0.90	61(37.2)	0.35ᶫ	0.90
≥5	2	2(1)			2(0.7)			1(0.6)		
Mother□s education										
Some primary	1	1(0.5)			1(0.4)			0		
Primary /some Secondary	24	21(10.6)	8.88	0.03*	22(8)	0.96	0.81	17(10.4)	4.94	0.17
Secondary complete/higher	154	97(49)			133(48.5)			76(46.3)		
Postgraduate	139	79(39.9)			118(43.1)			71(43.3)		
Father's education										
Primary /some Secondary	5	2(1)			4(1.5)			3(1.8)		
Secondary complete/higher	217	146(73.7)	7.61	0.02*	189(69)	0.57	0.75	116(70.7)	1.29	0.57
Postgraduate	96	50(25.3)			81(29.6)			45(27.4)		
Mother□s job										
Not working	89	67(33.8)			83(30.3)			45(27.4)		
Employee/manual	87	51(25.8)	10.31	0.01*	68(24.8)	9.41	0.02*	51(31.1)	3.26	0.35
Clerical/sales	8	3(1.5)			6(2.2)			5(3)		
Professional/doctors/technical	134	77(38.9)			117(42.7)			63(38.4)		
Father□s job (n=301)										
Not working	3	3(1.6)			3(1.1)			3(1.9)		
Employee/manual	120	83(44.6)			103(39.7)	0.71	0.9	68(43.8)	5.46	0.24
Clerical/sales	41	27(14.5)	9.67	0.04*	36(13.9)			19(12.2)		
Professional/doctor/technical	137	73(39.2)			117(45.1)			65(42)		
Residence										
Urban	277	168(84.8)	2.38	0.12	237(86.5)	0.65	0.41	140(85.4)	0.91	0.33
Rural	41	30(15.2)			37(13.5)			24(14.6)		
Work status										
Working for cash	212	121(61.1)	7.28	0.007*	177(64.6)	3.81	0.05	108(65.9)	0.10	0.81
Not working for cash	106	77(38.9)			97(35.4)			56(34.1)	1	
Monthly income										
Sufficient	258	154(77.8)	3.85	0.050	221(80.7)	0.29	0.58	123(75)	8.31	0.004*
Not sufficient	60	44(22.2)			53(19.3)			41(25)		
Mother's opinion of violence										
Yes	56	49(24.7)	18.4	0.00*	54(19.7)	6.00	0.01*	40 (24.4)	10.73	0.001*
No	262	149(75.3)			220(80.3)			124 (75.6)		

*N: Number, %: Percent, *= p-value <0.05,* ᶫ=fisher exact test

Table (3): A binary logistic regression showing sociodemographic predictors of different types of violent discipline methods used by mothers against their children.

Variable	Physical violent discipline		Psychological violent discipline		Severe physical violent discipline		Any violent discipline	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Age (40-49) [R]								
20-29	2.2	0.9-5.0	1.1	0.4-2.7	1.4	0.6-3.2	1.2	0.4-3.1
30-39	2.8	1.4-5.6	3.2	1.4-7.4	2.1	1.1-4.0	4.0	1.6-7.8
Education (Postgraduate) [R]								
Primary completed/some secondary	5.0	1.2-10.1	1.8	0.4-8.6	2.1	0.8-5.6	1.0	0.1-5.1
Secondary complete/ higher	1.2	0.7-2.0	1.1	0.5-2.1	0.9	0.5-1.4	1.3	0.5-2.7
Husband's education (Secondary complete/ higher) [R]								
Primary complete/some Secondary	0.2	0.01-1.4	0.4	0.02-8.3	1.0	0.1-8.0	0.3	0.2-8.1
Postgraduate	0.6	0.3-1.2	0.7	0.3-1.5	0.9	0.5-1.6	0.5	0.2-1.2
Mother□s job (Professional/doctors/technical) [R]								
Not working	1.3	0.4-4.0	1.5	0.3-7.7	0.5	0.1-1.4	1.2	0.2-7.8
Employee/manual	0.7	0.3-1.4	0.5	0.2-1.2	1.4	0.7-2.8	0.4	0.1-1.1
Clerical/sales	0.3	0.04-1.2	0.6	0.05-5.1	1.1	0.2-5.9	0.5	0.04-4.7
Father□s job (Professional/doctors/technical) [R]								
Employee/manual	1.9	1.1-3.2	1.0	0.5-2.0	1.4	0.8-2.3	1.1	0.4-2.8
Clerical/sales	1.6	0.7-3.4	1.2	0.4-3.4	0.9	0.4-2.0	0.7	0.2-2.7
Monthly income(sufficient) [R]								
Not sufficient	2.2	1.0-4.7	1.5	0.5-4.0	2.4	1.2-4.7	1.2	0.4-3.5
Work status (Working for cash) [R]								
Not working for cash	0.9	0.3-2.6	0.9	0.3-3.4	1.5	0.5-3.8	1.2	0.3-5.2
Mother opinion of violence (No) [R]								
Yes	5.4	2.4-10.6	6.3	1.3-10.9	3.4	1.6-7.1	5.4	1.1-10.1

OR= Odds ratio, CI= confidence interval, R = Reference group

Goodness of fit (chi-square) of physical violent methods =60.03.df 17, p value< 0.001.

Goodness of fit (chi-square) of psychological violent methods =30.58.df 17 p value< 0.02.

Goodness of fit (chi-square) of severe physical violent methods =38.03.df 17 p value< 0.002.

Goodness of fit (chi-square) of any violent methods =33.98.df 17 p value< 0.008.

Table (4): A binary logistic regression shows mothers' exposure to different forms of domestic violence as a predictor of their use of other violent and nonviolent discipline methods

Variable (N)	Physical violent method N=198				Psychological violent methods N=274				Severe physical methods N=164				Any violent methods N= 278			
	N (%)	$\chi 2$ *p*-value	B	OR 95% CI	N (%)	$\chi 2$ *p*-value	B	OR 95% CI	N (%)	$\chi 2$ *p*-value	B	OR 95% CI	N (%)	$\chi 2$ *p*-value	B	OR 95% CI
Have physical violence																
Yes (84)	75(47.9)	35.47	0.6	1.7	82(29.9)	12.56	1.1	2.8	60(36.6)	18.02	0.7	2.1	82(29.5)	10.795	1.1	2.7
No (234) R	123(62.1)	0.00*		0.4-6.9	192(70.1)	0.000*		0.2-6.2	104(63.4)	0.000*		0.7-5.8	196(70.5)	0.000*		0.3-6.7
Have psychological violence																
Yes (97)	86(43.4)	41.38	1.3	3.8	94(34.3)	13.51	0.5	1.6	67(40.9)	17.11	0.4	1.5	94(33.8)	11.42	0.4	1.5
No (221) R	112(56.6)	0.00*		1.0-13	180(65.7)	0.000*		0.2-5.1	97(59.1)	0.000*		0.5-4.2	184(66.2)	0.001*		0.2-10
Have sexual violence																
Yes (47)	43(21.7)	20.04	0.6	1.8	47(17.2)	8.856	-	-	33(20.1)	7.67	0.1	1.1	47(16.9)	7.93	-	-
No (271) R	155(78.3)	0.00*		0.5-6.4	227(82.8)	0.003*			131(79.9)	0.006*		0.5-2.5	231(83.1)	0.005*		

*OR= Odds ratio, CI= confidence interval, R = Reference group, B= coefficient, *= P value <0.05*
Goodness of fit (chi-square) of physical violent methods =58.84.df 3 p value< 0.001.
Goodness of fit (chi-square) of psychological violent methods =21.95.df 3 p value< 0.001.
Goodness of fit (chi-square) of severe physical violent methods =19.34.df 3 p value< 0.001.
Goodness of fit (chi-square) of any violent methods =19.14.df 3p value< 0.001

VI Discussion

This study examined the prevalence of child disciplinary measures during COVID-19 lockdowns and their correlation with women who experienced domestic abuse. Limited research has investigated the impact of COVID-19 on children's behavior in the Arab world. While there is limited data linking pandemics to child abuse, previous research indicates that child abuse tends to increase during or after natural disasters (Yamaoka et al., 2021). The stressful stay-at-home setting may account for the increased vulnerability of children to abuse during periods of social isolation, characterized by restricted mobility that hinders communication with the outside world and intensifies family interactions (Pereda & Díaz-Faes, 2020). Consequently, abusers gained greater access to victims, thereby elevating the likelihood of violence (Keeley et al., 2019).

The current study indicates that 87.4% of mothers employed violent methods of discipline on their children. In comparison to a 2014 United Nations children's survey conducted in Egypt, which indicated that 68.5% of children experienced violent discipline, this percentage is significantly higher (UNICEF, UN Women, 2020). However, the United Nations study employed a three-month reporting period, whereas the current investigation adopted a one-month timeframe. According to a meta-analysis of 38 reports from 96 countries, at least 50 percent of children in Asia, Africa, and North America experienced violence in the past year, exceeding the rates identified in the current study (Hillis et al., 2016).

Research indicates that children are at an increased risk of experiencing violence during public health emergencies (Cluver et al., 2020). Numerous reports have linked the COVID-19 pandemic to an increase in child abuse, attributing this rise to parental stress and economic instability. In Jianli County, China, the reported cases of abuse to authorities increased from 47 in 2019 to 162 in 2020 during the February lockdown (Lee, 2020). Fabbri et al. employed multivariable predictive regression models to estimate COVID-19's impact on violent discipline toward children aged 1–14. Their projections suggested that stringent restrictions could elevate violent discipline rates by 35–46% in Nigeria, Mongolia, and Suriname, compared to 4–6% increases under moderate restrictions (Fabbri et al., 2021). These findings highlight the need for comprehensive strategies to protect children and support families during pandemic conditions.

This study indicates that 86.2% of child discipline methods included psychological violence, with shouting, yelling, or screaming at the child identified as the most prevalent form. This outcome surpassed the 70% reported in Egypt's 2014 UNICEF survey (UNICEF, UN Women, 2020). This result aligns with another study indicating that 88% of mothers employed psychological discipline during the two-week closure period in Egypt (AboKresha et al., 2021). Discrepancies may stem from methodological variations, particularly differences in study duration and data collection procedures.

The elevated prevalence of violent discipline can be attributed to lockdown measures, societal pressures, and parental beliefs regarding the necessity of raising disciplined and obedient children. Intergenerational transmission patterns emerge as critical contributors, with mothers experiencing childhood violence often perpetuating similar disciplinary practices – a phenomenon normalized across Egyptian generations. Egyptian families encounter financial difficulties stemming from poverty and adverse living conditions, which may elevate stress levels and lead to negative behavior among mothers (Madi et al., 2024).

The most prevalent form of physical violence identified in the present study is shaking children (46.2%), in contrast to the EDHS 2014, which reported striking the child on the hand, arm, or leg (54.8%) (El-Zanaty & Way, 2006). Additionally, the current study found that 49.1% of severe physical violence involves beating or hitting a child on the face, head, or ears. This rate is higher than that of EDHS 2014 (41.2%), which shows that lockdown measures are stressful for mothers (Madi et al., 2024). This study identified sociodemographic risk factors for child abuse among mothers and children. Risk factors associated with child abuse encompass a limited number of children, low family income, and inadequate parental education. Our results are consistent with prior studies (AboKresha et al., 2021; Alyahri & Goodman, 2008; Hillis et al.,2016).

Corporal punishment can result in various injuries, which may be severe and potentially fatal. Mothers may incur legal liability and criminal charges, including assault, battery, or child abuse, if they cause harm to their child. Forensic examinations are essential for identifying and recording evidence of child abuse, ensuring justice for the child, and facilitating the delivery of suitable care and support (Kletečka-Pulker et al., 2024).

Consistent with the findings of Antai D et al. (2016) in Egypt, the current study discovered a statistically significant association between maternal exposure to DV and harsh disciplinary practices during the pandemic (Antai et al., 2016). This finding supports existing evidence that mothers experiencing DV face psychological challenges in managing child behavior appropriately. Potential mechanisms include trauma-induced parenting difficulties or attempts to prevent children from provoking abusive partners, thereby compounding risks for both mother and child (Herrenkohl et al., 2008).

A plausible explanation is found in cyclical abuse patterns: women experiencing domestic violence often report exposure to childhood abuse. Research indicates widespread normalization of physical abuse in Africa, particularly in Egypt (Lawoko, 2006). Evidence suggests limited tolerance for emotional or sexual abuse of wives within African societies. Studies indicate that mothers who have experienced physical abuse are more prone to mistreat their children compared to those who have faced emotional or sexual abuse. Future research should examine the correlation between spousal abuse and child abuse, taking into account societal norms regarding acceptable forms of spousal violence (El-Zanaty Associates, 2015).

Therefore, Childhood abuse was linked to a higher probability of partner violence, women's justification of spousal abuse, and familial IPV. The study recommends that practitioners engaging with children and adolescents employ culturally appropriate methods when examining and addressing child abuse cases, given the potential for considerable unmet child protection requirements during public health emergencies.

V. Limitations of the study

This study utilized a validated questionnaire for identifying child disciplinary practices, marking one of the initial examinations of these issues in Egypt and worldwide during the COVID-19 pandemic. This study has a number of limitations. First, digital data collection restricted participation to individuals with technological literacy, potentially excluding socioeconomically disadvantaged groups and limiting generalizability. Second, reliance on maternal self-reports without child perspectives or longitudinal follow-up introduces potential recall bias and precludes causal inference. Third, the cross-sectional design hinders the evaluation of intervention efficacy or long-term psychosocial impacts on children.

VI. Conclusion

The current study indicates that the prevalence of aggressive discipline techniques, particularly psychological methods, on children increased in Egypt during the COVID-19 pandemic. Mothers who have experienced domestic abuse are more inclined to employ violent disciplinary methods with their children. Identifying the risk factors for violent discipline techniques during COVID-19 would facilitate the planning and implementation of mandatory DV scanning and preventive programs aimed at early child abuse identification, law enforcement, and the establishment of child protection policies in future pandemic crises. Forensic protocols are essential for the reporting, identification, and documentation of child abuse cases.

VI. Recommendations

Large-scale longitudinal studies are warranted to identify predictors of violent disciplinary practices and assess their potential long-term health and academic consequences for affected children. Prioritizing early detection and protection measures for women experiencing domestic violence is critical to enhancing maternal well-being, fostering safer home environments, and mitigating intergenerational cycles of abuse. Concurrently, institutional reforms must ensure equitable access to legal assistance and healthcare services for vulnerable populations. Furthermore, comprehensive public health initiatives should be implemented to raise awareness about the negative consequences of using physical and verbal punishment as child discipline.

List of abbreviations:

DV: Domestic violence
EDHS: Egypt Demographic and Health Survey
MICS: Multiple Indicator Cluster Survey
SPSS: Statistical Package for Social Sciences
USAID: United States Agency for International Development
UNESCO: United Nations Educational, Scientific and Cultural Organization
WHO: World Health Organization

Declarations

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Ethical approval

The study was approved by the Research Ethics committee (REC) of Faculty of Medicine, Suez Canal University, Egypt (Reference number: #4177)

Data availability statement
The datasets analyzed during the current study are available from the corresponding author upon reasonable request.

Conflict of interest
The authors declared that there was no conflict of interest.

References

AboKresha, S. A., Abdelkreem, E., & Ali, R. A. E. (2021). Impact of COVID-19 pandemic and related isolation measures on violence against children in Egypt. *Journal of the Egyptian Public Health Association*, *96*(1). https://doi.org/10.1186/s42506-021-00071-4

Alyahri, A., & Goodman, R. (2008). Harsh corporal punishment of Yemeni children: Occurrence, type and associations. *Child Abuse & Neglect*, *32*(8): 766–773. https://doi.org/10.1016/j.chiabu.2008.01.001

Antai, D., Braithwaite, P., & Clerk, G. (2016). Social determinants of child abuse: Evidence of factors associated with maternal abuse from the Egypt demographic and health survey. *Journal of Injury & Violence Research*, *8*(1): 25–34. https://doi.org/10.5249/jivr.v8i1.630

Anwar Abdel-Fatah, N. (2021). Determinants of severe physical disciplinary practices against children in Egypt. *Child Abuse & Neglect*, *111*, 104821. https://doi.org/10.1016/j.chiabu.2020.104821

Beresin, A., & Bishop, J. (2023). Play in a Covid Frame: Everyday Pandemic Creativity in a Time of Isolation. *Play in a Covid Frame: Everyday Pandemic Creativity in a Time of Isolation*, 1–491. https://doi.org/10.11647/obp.0326

Casale, D. (2020). *The gendered effects of the ongoing lockdown and school closures in South Africa: Evidence from NIDS-CRAM waves 1 and 2. Department of Economics, University of Stellenbosch. Retrieved April 13, 2024 from https://resep.sun.ac.za/wp-content/uploads/2020/12/RESEP_wp212020.pdf*

Casale, D., & Posel, D. (2021). Gender inequality and the COVID-19 crisis: Evidence from a large national survey during South Africa's lockdown. *Research in Social Stratification and Mobility*, *71*, 100569. https://doi.org/10.1016/j.rssm.2020.100569

Cluver, L., Lachman, J. M., Sherr, L., Wessels, I., Krug, E., Rakotomalala, S., Blight, S., Hillis, S., Bachman, G., Green, O., Butchart, A., Tomlinson, M., Ward, C. L., Doubt, J., & McDonald, K. (2020). Parenting in a time of COVID-19. In *Lancet (London, England)*, 395(10231): 64 https://doi.org/10.1016/S0140-6736(20)30736-4

Durrant, J. E., & Stewart-Tufescu, A. (2017). What is "discipline" in the Age of Children's Rights? *International Journal of Children's Rights*, *25*(2): 359–379. https://doi.org/10.1163/15718182-02502007

El-Zanaty Associates, F. (2015). *Egypt Demographic & Health Survey (EDHS). Ministry of Health and Population; Egypt; USAID; NNICEF; UNEPA. ICF International Rockville, Maryland,USA P:(234)*: 234.

El-Zanaty, F., & Way, A. (2006). *Egypt Demographic and Health Survey 2005* . Ministry of Health and Population/Egypt, National Population Council/Egypt, El-Zanaty and Associates/Egypt, and ORC Macro. Retrieved June 6, 2023 from https://dhsprogram.com/publications/publication-fr176-dhs-final-reports.cfm

Fabbri, C., Bhatia, A., Petzold, M., Jugder, M., Guedes, A., Cappa, C., & Devries, K. (2021). Modelling the effect of the COVID-19 pandemic on violent discipline against children. *Child Abuse & Neglect*, *116*(2): 104897. https://doi.org/10.1016/j.chiabu.2020.104897

Gadsden, V. L., Ford, M., & Breiner, H. (2016). Parenting matters: Supporting parents of children ages 0-8. In *Parenting Matters: Supporting Parents of Children Ages 0-8*. Washington DC: National Academies Press. https://doi.org/10.17226/21868

Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Moylan, C. A. (2008). Intersection of child abuse and children's exposure to domestic violence. *Trauma, Violence & Abuse*, *9*(2): 84–99. https://doi.org/10.1177/1524838008314797

Hillis, S., Mercy, J., Amobi, A., & Kress, H. (2016). Global Prevalence of Past-year Violence Against Children: A Systematic Review and Minimum Estimates. *Pediatrics*, *137*(3): e20154079. https://doi.org/10.1542/peds.2015-4079

Keeley, B., Little, C., & Zuehlke, E. (2019). The State of the World's Children 2019: Children, Food and Nutrition—Growing Well in a Changing World. In *Unicef*. Retrieved June 6, 2023 from https://eric.ed.gov/?id=ED599360

Kletečka-Pulker, M., Doppler, K., Völkl-Kernstock, S., Fischer, L., Eitenberger, M., Mussner, M., Klomfar, S., Mora-Theuer, E. A., Grylli, C., Atanasov, A. G., & Greber-Platzer, S. (2024). Influence of various factors on the legal outcome of cases of child abuse—Experiences gathered at an interdisciplinary forensic examination center in Vienna, Austria. *International Journal of Legal Medicine*, *138*(1): 3–14. https://doi.org/10.1007/s00414-023-03094-y

Lawoko, S. (2006). Factors associated with attitudes toward intimate partner violence: A study of women in Zambia. *Violence and Victims*, *21*(5): 645–656.

Lee, J. (2020). Mental health effects of school closures during COVID-19. *The Lancet. Child & Adolescent Health*, *4*(6): 421. https://doi.org/10.1016/S2352-4642(20)30109-7

Madi, A. A., Seifeldin, A., Ibrahim, A. G., & Sultan, E. A. (2024). Prevalence of child discipline practices and their associated maternal psychosocial profile in Alexandria. *Alexandria Journal of Medicine*, *60*(1): 45–53. https://doi.org/10.1080/20905068.2024.2321828

Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: A systematic review and meta-analysis. *PLoS Medicine*, *9*(11): e1001349. https://doi.org/10.1371/journal.pmed.1001349

Nyashanu, M., Simbanegavi, P., & Gibson, L. (2020). Exploring the impact of COVID-19 pandemic lockdown on informal settlements in Tshwane Gauteng Province, South Africa. *Global Public Health*, *15*(10): 1443–1453. https://doi.org/10.1080/17441692.2020.1805787

Parry, B. R., & Gordon, E. (2021). The shadow pandemic: Inequitable gendered impacts of COVID-19 in South Africa. *Gender, Work, and Organization*, *28*(2), 795–806. https://doi.org/10.1111/gwao.12565

Pereda, N., & Díaz-Faes, D. A. (2020). Family violence against children in the wake of COVID-19 pandemic: A review of current perspectives and risk factors. *Child and Adolescent Psychiatry and Mental Health*, *14*: 40. https://doi.org/10.1186/s13034-020-00347-1

Republic of South Africa. (2020). Regulation 3(3) of the Disaster Management Act (57/2002): Regulations made in terms of Section 27(2) by the Minister Health. *Government Gazette*, *867*(13): 3–5. https://www.gov.za/sites/default/files/gcis_document/202004/43258rg11098gon480s.pdf

Tahir, M. W., Störmer, M., & Zafar, M. (2022). Changing gender role behaviors of south Asian men in different gender regimes: A comparative study of COVID-19 lockdown in Pakistan and Germany. *Journal of Public Affairs*, *22*(S1): 1–14. https://doi.org/10.1002/pa.2797

Tran, Q. A., Dunne, M. P., Vo, T. Van, & Luu, N. H. (2015). Adverse Childhood Experiences and the Health of University Students in Eight Provinces of Vietnam. *Asia-Pacific Journal of Public Health*, *27*(8):26S-32S. https://doi.org/10.1177/1010539515589812

UNESCO. (2022). *Evidence on the gendered impacts of extended school closures A systematic review*. Retrieved April 9, 2024, from https://unesdoc.unesco.org/ark:/48223/pf0000380935

UNICEF, UN Women, P. I. (2020). *A New Era for Girls: Taking Stock of 25 Years of Progress*. New York. Retrieved June 6, 2023 from https://data.unicef.org/resources/a-new-era-for-girls-taking-stock-of-25-years-of-progress/ : UNICEF.

Wong, C. A., Ming, D., Maslow, G., & Gifford, E. J. (2020). Mitigating the Impacts of the COVID-19 Pandemic Response on At-Risk Children. *Pediatrics*, *146*(1). https://doi.org/10.1542/peds.2020-0973

World Health Organization. (2020). COVID-19 and Violence Against Women What the Health Sector / System Can Do. *Human Reprouctive Programme*. Retrieved June 6, 2024 from https://www.who.int/publications/i/item/covid-19-and-violence-against-women

Yamaoka, Y., Hosozawa, M., Sampei, M., Sawada, N., Okubo, Y., Tanaka, K., Yamaguchi, A., Hangai, M., & Morisaki, N. (2021). Abusive and positive parenting behavior in Japan during the COVID-19 pandemic under the state of emergency. *Child Abuse & Neglect*, *120*, 105212. https://doi.org/10.1016/j.chiabu.2021.105212

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