





ORIGINAL ARTICLE

An examination of effects of intimate partner violence on children: A cross-sectional study conducted in a paediatric emergency unit in Turkey

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Abstract

Background: Intimate partner violence (IPV) against women causes inadequate and unbalanced nutrition in children aged 0–5 years and adversely affects their growth.

Aim: To examine the impact of intimate partner violence on a child's growth regarding the medical diagnosis in paediatric patients under 5 years of age, growth of the child, and the mother's exposure to intimate partner violence.

Methods: This descriptive cross-sectional study included 166 children admitted to a paediatric emergency department, and their mothers.

Results: Women exposed to emotional violence and controlling behaviour during pregnancy had children prone to being overweight and obese. A mother's lifetime exposure to physical violence had an adverse effect on their children's wasting and moderate wasting. In contrast, mothers' exposure to emotional violence had a direct impact on a child's wasting and moderate wasting.

Conclusion: The lifetime effect of domestic violence may begin at birth. This vulnerability leads to negative outcomes in both children and women regarding biopsychosocial development.

Implications for nursing management: Nurses and midwives in primary health care services and one-on-one care should be trained to evaluate prospective mothers and children aged 0–5 regarding violence and its effects on the child's growth.

KEYWORDS

child development, child growth, intimate partner violence, pregnancy

1 | BACKGROUND

Intimate partner violence (IPV) is a common form of violence against women (Chai et al., 2016; Khalifeh et al., 2013; World Health Organization [WHO], 2012). Physical and sexual violence and psychological and emotional abuse, the most common forms of IPV, are considered global public health problems (Abramsky et al., 2011; Kleven

et al., 2012; Pallitto et al., 2013; Ziaei et al., 2014). According to a 2012 WHO report, in a study conducted with 24,000 women across 10 developing countries, 13–61%, 6–59%, and 20–75% were exposed to physical, sexual, and emotional violence by their spouses in their lifetime, respectively. Regardless of the level of growth, IPV has been highlighted as a public health and human rights issue (Khalifeh et al., 2013; Reichenheim et al., 2017; WHO, 2012).

Based on studies conducted in different countries, the factors that affect the risk of IPV have been determined (Black et al., 2019; Carlson et al., 2019). However, while these factors have a huge protective effect in one environment, they may be ineffective, or may increase its risk in another. These differences are due to different beliefs regarding IPV in social and cultural structures. In this context, evaluating IPV measures globally may cause difficulties on a national basis when comparing its effects on women and children (Neamah et al., 2018; Pallitto et al., 2013).

Exposure to IPV has adverse psychological and physical effects on a woman's health. It was emphasized that women exposed to IPV had more problems, such as depression, anxiety, suicidal thoughts, sleep problems, gastrointestinal and gynaecological disorders, post-traumatic stress disorders, suicide attempts, unwanted pregnancies, and chronic pain (Pallitto et al., 2013; Ziaei et al., 2014). These problems persisted even after the violence ended (Klevens et al., 2012; Pallitto et al., 2013; Ziaei et al., 2014). Such violence against women also negatively affects child care, and the child is neglected unintentionally.

The negative consequences of IPV against women can be directly or indirectly transferred to a child's health (Ziaei et al., 2014). Various adverse health problems, such as diarrhoea, respiratory tract infection, nutritional deficiency, growth, and developmental delay, may occur in mothers who are victims of IPV (Chai et al., 2016; Pallitto et al., 2013; Ziaei et al., 2014). In addition, witnessing violence may cause stress in children. It was suggested to cause a decline in children's metabolic rates, physical growth, and cognitive functions (Pallitto et al., 2013; Ziaei et al., 2014). The American Academy of Pediatrics recommends routine IPV assessment and states that there is limited knowledge regarding its effects on child health and development, and its role in the persistence of domestic violence (Thackeray et al., 2010). Paediatric emergency nurses are in a unique position to identify mothers suffering from IPV and to evaluate and treat children in homes where IPV could occur. Therefore, nurse managers should undergo routine training on IPV diagnosis methods and diagnosis in paediatric emergencies.

Unmet physical, psychological, and economic needs are observed in children's health care among women exposed to IPV (Ziaei et al., 2014). Various situations, such as restrictions in maintaining the health care of children, stress, disregard for their nutrition and health even though they have enough food during an economic depression, restricted nutrition by the spouse, and not enough health care for the children, negatively affect their growth (Chai et al., 2016). Since emergency services are often the first point of contact for these cases, their data are required to analyse this subject.

According to data from The World Bank (2022), 250 million children under 5 years in low- and middle-income countries worldwide are at risk of being stunted. In contrast, in Africa alone, one-third of the children are stunted. Consequently, the WHO (2014) targeted for 2025 to include a 40% reduction in the number of stunted children under 5, maintenance of an average weight values in childhood, and reduction of wasting below 5%. To prevent stunting, a parameter that shows growth, the impact of IPV should be evaluated along with

investment in nutrition, improvement of the economic situation, and education.

This study aimed to examine the impact of intimate partner violence on child growth regarding medical diagnosis in paediatric patients under 5 years of age, their growth, and the mother's exposure to IPV. Our finding will provide substantial evidence in determining the priority areas in the healthy growth and maintenance of children's well-being, either direct or indirect witnesses of domestic violence, and expose the terrifying damage of interpersonal violence consistent with the child-mother togetherness.

2 | METHODS

This study used a descriptive cross-sectional design to examine the relationship between paediatric emergency admissions regarding medical diagnosis in paediatric patients under 5 years of age, their growth, and the mother's exposure to IPV. Data were collected between August and November 2018.

The research was conducted in a university hospital located in Istanbul. This was a highly preferred hospital since it was located in the city centre and had all the medical units. The hospital was in a cosmopolitan environment with individuals from different socio-cultural backgrounds. Patients differed regarding sociocultural and economic conditions.

In Turkey's health care system, a family physician's referral is not compulsory to reach a specialist. Families can take their children to the hospital of their choice via appointments. However, due to the high number routine appointments in primary health care institutions and polyclinics, there is a necessary waiting time. Hence, fast and appointment-less examinations and interventions are preferred in the emergency department. Simultaneously, detailed examinations are conducted in university hospital emergencies to diagnose and not overlook diseases. In acute illness or general examination, families usually visit the paediatric emergency unit. A variety of paediatric health care settings are necessary to devise the most effective approach.

Primary health care services are units close to the family's residential area, where regular follow-up and visits are conducted, and doctors and nurses can get to know the families. When women are exposed to domestic violence, they do not want health teams around them to know, and often reject the violence (Bradbury-Jones et al., 2014). Hence, it is believed that women choose to visit paediatric emergency departments where there is no regular follow-up system. Therefore, we chose this department for our study.

2.1 | Participants

Our sample consisted of 166 children aged under 5 years admitted to the paediatric emergency department of a university hospital in Istanbul and their mothers. The children in the emergency unit with their mothers during working hours 2 days a week received the medical

service they required by the researcher, a specialist nurse (S.D.) in the emergency department. Anthropometric measurements of the children were taken by the second (S.D) researcher in cooperation with an expert physician if their mothers agreed to participate in the study. Five mothers participation was prevented by their spouses. Hence, they gave up.

After the children's anthropometric measurements were taken, mothers were taken to a comfortable private interview room outside the emergency room. An interview, which lasted for an average of 20 min, was then conducted.

2.1.1 | Inclusion criteria

The inclusion criteria were mothers who could read and write in the Turkish language and had children under the age of 5 years.

2.1.2 | Exclusion criteria

The exclusion criteria were children who had metabolic disorders, children who had eating disorders, and children brought to the emergency room due to accidents.

2.2 | Data collection tool

A Personal Information Form, prepared by the researcher based on the literature and reviewed by three experts, consisted of six parts (Blythe & White, 2012; Happell et al., 2012; WHO, 2012). The first part consisted of eight questions that determined an individual's characteristics (age, gender, education level, educational status of spouse, profession, economic status, and habits). The second part consisted of two questions that enquired family related characteristics (whether the marriage was voluntary or involuntary and who/with whom). The third part consisted of nine questions regarding the characteristics of the children (the number of children, whether they were voluntary/involuntary and planned/unplanned, age of the child brought to the emergency unit, number of children brought to the emergency service, how many times they were brought to the emergency room, how long they were breastfed, the presence of complications during and after birth, and whether the child had a permanent disease) and the anthropometric measurements (height and weight) of the child brought to the emergency room. Anthropometric measurements, body size, weight, and proportion were used to assess the past and current nutritional and health status of the children. Children's weights and heights were measured and recorded by a paediatric health and disease specialist nurse (S.D.). The children were measured while standing (over 2 years) or lying down (under 2 years). The collected weight and height data were used to create three anthropometric measurements (height-for-age, weight-for-age, and weight-for-height). Each of the three indicators was represented by deviations (z-scores) from the median value of the reference population for the

same sex and age (Table 1). In all countries, the use of the WHO Multicentre Growth Reference Study (MGRS) for 0–5 years growth (Z-score) curves was recommended by “The European Childhood Obesity Group,” “International Pediatric Association,” “United Nations Standing Committee on Nutrition,” and “International Union of Nutrition Sciences”.

The fourth part consisted of four questions regarding pregnancy-related experiences (stillbirth, abortion, and IPV during pregnancy). Conversely, the fifth part consisted of five questions regarding the characteristics related to life-long and childhood violence experiences (physical, sexual, emotional violence, and controlling behaviours).

Since sexual violence during childhood is a traumatic experience, people have difficulty expressing it. Additionally, considering the Turkish cultural structure, women are reluctant to talk of or openly express their experiences of violence. To determine whether mothers were exposed to sexual violence during childhood, cards with smiling (happy) and sad facial expressions were displayed. They were asked to mark a sad face if exposed to violence and a smiling face if there was no more exposure.

Based on the 2012 WHO report, questions regarding violence were evaluated in four categories: i. physical violence: bent your arm, slapped, threw something that could harm you, kicked, pulled your hair, were beaten, drowned, shook, deliberately burnt, or threatened with a gun or other means, ii. sexual violence: a physical force for involuntary sexual intercourse, had sexual intercourse as you feared your partner, or had to do things you found sexually humiliating, iii. emotional violence: insulted, sworn at, contempt, constant humiliated, or spouse threatened to take the children away; iv. controlling behaviour: separated from family and friends, prevented you from meeting them, monitored your movements, or restricted access to financial resources, employment, education, or medical care.

TABLE 1 Z-score (SD) classification according to intersections

Measurements	Evaluation	Z-score (SD)
Weight for age	Underweight	<−2SD
	Moderate underweight	≥−2SD−<−1SD
	Normal	≥−1SD−<+1SD
	Moderate overweight	≥+1SD−<+2SD
	Overweight	≥+2SD
Length for age	Stunting	<−2SD
	Moderate stunting	≥−2SD−<−1SD
	Normal	≥−1SD−<+1SD
	Moderate tall	≥+1SD−<+2SD
	Tall	≥+2SD
Weight for length	Wasting	<−2SD
	Moderate wasting	≥−2SD−<−1SD
	Normal	≥−1SD−<+1SD
	Moderate obese	≥+1SD−<+2SD
	Obese	≥+2SD

2.3 | Analysis

Descriptive statistics (means, standard deviations, frequencies, and percentages) were used to describe the participants' characteristics. Normal distribution and variable types were considered when selecting the appropriate analysis method. All data were analysed using IBM SPSS Statistics for Windows version 23 (IBM Corp., Armonk, NY, USA). A multinomial logistic regression analysis was performed to examine the effect of IPV type on anthropometric measurements (length-for-age, weight-for-age, and weight-for-length), which indicated a child's growth. This analysis included more than two categories (wasting and moderate, normal, moderately obese, and obese) and more than one independent variable (yes or no for violence). In a bivariate analyses, significance was evaluated at $p < 0.05$ and $p < 0.01$.

In the evaluation of anthropometric measurements, "WHO-MGRS 2006 and 2007 Growth Curves" developed for children aged 0–5 years, from birth till the age of 5 years, were used.

To determine the nutritional status, indicators of "weight-for-age (W/A), length-for-age (L/A)," and weight-for-length (W/L)" were used. The data obtained were evaluated via the WHO Anthro Survey Analyzer 0- to 5-year-old program. The measurements were interpreted according to the Z-score (SD) intersections (Table 1).

3 | RESULTS

Table 2 shows the individual characteristics of the mothers and children. The mothers' ages from 20 to 45 years (mean = 31.45 years). Almost all were married (90.4%, $n = 150$). Of these, 36% of the mothers and fathers were high school graduates. More than half of the mothers were unemployed (57.2%, $n = 95$), stated their economic level as moderate (51.2%, $n = 85$), and did not smoke (50.6%, $n = 84$). Of these, three-quarters lived with their husbands (77.1%, $n = 144$).

When the children's characteristics were examined, more than half (52.4%, $n = 87$) were female, and almost all of them were admitted to

TABLE 2 Individual characteristics of mother and child

Maternal characteristics		N	%	Child characteristics		n	%
Marital status	Married	150	90.4	Gender	female	87	52.4
	Divorced	15	9.0		male	79	47.6
	Widow	1	0.6	Reason for applying to the emergency room	Acute diseases	159	95.8
Education status	Illiterate	1	0.6		Chronic diseases	7	4.2
	Literate	9	5.4	Breastfeeding time	Never breastfeeding	8	4.8
	Primary education	35	21.1		Still breastfeeding	28	16.9
	High school	64	38.6		0–6 month	38	22.9
	Bachelor	52	31.3		7–12 month	64	38.6
Postgraduate	5	3.0	13 month and above	28	16.9		
Education status of the father	Illiterate	3	1.8	Parameters showing growth		n	%
	Literate	5	3.0		Weight for length	Wasting and moderate wasting	48
	Primary education	36	21.7	Normal		69	41.6
	High school	64	38.6	Moderate obese and obese		49	29.5
	Bachelor	56	3.7	Weight for age	Underweight and moderate underweight	39	23.5
Postgraduate	2	1.2	Normal		86	51.8	
Working status	Yes	71	42.8	Moderate overweight and overweight	41	24.7	
	No	95	57.2	Length for age	Stunting and moderate stunting	40	24.1
Economical situation	Less than income	76	45.8		Normal	77	46.4
	Medium	85	51.2		Moderate tall and tall	49	29.5
	More than income	5	3.0		Min–max	Mean ± ss	
Living with who?	Husband	128	7.1	Which child is your family brought to the emergency room?	1–4	1.69 ± 0.815	
	Others (family, friends, child, alone)	38	22.9	How many times was the child brought to the emergency room?	0–30	6.19 ± 5.187	

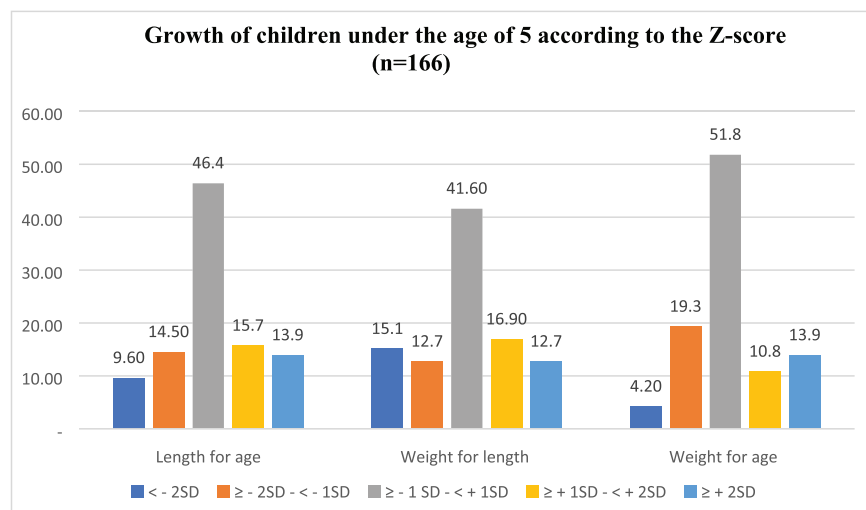


FIGURE 1 Growth of children under the age of 5 according to the Z-score ($n = 166$)

TABLE 3 Diagnoses in paediatric emergency admissions

Medical diagnoses	<i>n</i>	%
Neurology	6	3.6
Chest diseases	51	30.7
Infectious diseases	38	22.9
Nephrology	2	1.2
Rheumatology	2	1.2
Gastroenterological diseases	58	34.9
Immunology allergy	9	5.4

the emergency service due to acute health problems (95.8%, $n = 159$). Less than half (38.6%, $n = 64$) had received breast milk for 7–12 months. There were no postpartum complications in three-quarters of the children (80.1%, $n = 133$). The child brought to the emergency room was usually the first child, with an average frequency of six times (Table 2).

3.1 | Growth of the children under 5 years

Among the parameters that showed the growth of the children, less than half (41.6%, $n = 69$) were in the normal range when the weight-for-length and length-for-age were examined. Furthermore, over half (51.8%, $n = 86$) were normal when the weight-for-age was examined (Figure 1).

3.2 | The medical diagnosis of the children during an emergency admission

The most common medical diagnoses received by the children brought to the emergency room were gastroenterological diseases (34.9%, $n = 58$), chest diseases (30.7%, $n = 51$), and infectious diseases (22.9%, $n = 38$) (Table 3). There was no association between medical diagnoses and child growth.

3.3 | Characteristics of violence experienced by the mothers

Women stated that they were most exposed to “controlling behaviours” during “lifelong,” “pregnancy,” “childhood,” and “lifelong and pregnancy” periods (Table 4).

3.4 | Effect of IPV on a child’s growth

Emotional violence experienced by the mother during pregnancy had five times higher probability of wasting and moderate wasting children. Furthermore, it was possible for these children to be moderately overweight and overweight. Physical violence experienced by the mother during pregnancy increased the probability of the children being tall and very tall. Pregnant mothers’ exposure to controlling behaviours had five times probability of the children being moderate overweight and overweight and shorter in height. (Table 5).

In addition, mothers exposed to physical violence by their spouse were five times less likely to be wasting and moderate wasting, while those exposed to emotional violence had wasting and moderately wasting children. It was possible that mothers subjected to controlling behaviour by their spouses had children who were moderately tall and tall. (Table 5).

No relationship was found between the violence experienced by mothers during childhood and the growth of their children.

4 | DISCUSSION

This study examined the relationship between paediatric emergency admissions regarding medical diagnoses in paediatric patients under 5 years, the growth of the children, and the mother’s exposure to IPV. Being victims of domestic violence, either direct or indirect exposure, had significant adverse effects on the healthy growth of the children.

TABLE 4 Characteristics of violence experienced by the mothers

Exposure to IPV lifetime		Exposure to IPV during pregnancy		Exposure to IPV lifetime and during pregnancy		Exposure to violence during childhood		
Types of violence	n	%	Types of violence	n	%	Types of violence	n	
Physical violence	Yes	42	25.3	Yes	33	19.9	Yes	48
	No	124	74.7	No	133	80.1	No	118
Emotional violence	Yes	78	47	Yes	66	39.8	Yes	41
	No	88	53	No	100	60.2	No	125
Sexual violence	Yes	18	10.8	Yes	11	6.6	Yes	29
	No	148	89.2	No	155	93.4	No	137
Controlling behaviour	Yes	105	63.3	Yes	96	57.8	Yes	77
	No	61	36.7	No	70	42.2	No	89

Abbreviation: IPV, intimate partner violence.

TABLE 5 Intensity and factors associated with growth: Multinomial logistic regression (MLR) analysis results

	Wasting and moderate wasting ^a				Moderate overweight and overweight ^a				Moderate tall and tall ^a				
	B	p	Wald	ExpB	B	p	Wald	ExpB	B	p	Wald	ExpB	
Emotional IPV during pregnancy	-1.624	0.042	4.187	5.07	1	0.197	Emotional IPV during pregnancy	1.647	0.035	4.433	0.19	1	5.19
Physical IPV	-2.035	0.017	5.698	7.63	1	0.131	Controlling behaviour during pregnancy	-1.600	0.032	4.582	4.95	1	0.20
Emotional IPV	1.942	0.029	4.769	0.14	1	6.976	Controlling behaviour during pregnancy	1.447	0.044	4.063	0.23	1	4.248

^aOnly significant values were taken.

Brain development is the fastest in the first years of life. In addition, the capacity to change is also high and the foundation for health and well-being throughout life is laid (Grantham-McGrego et al., 2007). Many children under 5 years in undeveloped and developing countries are exposed to many risks, such as poverty, malnutrition, iron deficiency, stress and inadequate stimulation, and insufficient social interaction, which can negatively affect their cognitive, motor, and social-emotional development (Grantham-McGrego et al., 2007; Rashad & Sharaf, 2018). Hence, this study aimed to study children under 5 years of age.

Previous studies showed that many factors affected the growth of children. However, limited studies have evaluated the effect of IPV.

4.1 | Discussion of the growth of children under 5 years

According to The Population and Health Research report of Turkey (2018), 6% of all children under 5 years were stunted, 2% were wasting, 2% were underweight, and 8% were overweight. Chai et al. (2016) conducted a study across 29 low- and middle-income countries and found that 29.6% of all children aged 0–5 years were stunted, and 6.9% were wasting. In the present study, the stunted rate was 9.6%. This rate was congruent with the national mean. Regarding the socioeconomic and educational levels of the families and since our sample was from a metropolitan city, this rate might reflect the sample profile.

Being overweight is caused by malnutrition and consumption of higher calorie food and increases the risk of non-communicable diseases later in life (Food and Agriculture Organization of the United Nations, 2019). Therefore, being overweight was an indicator of unbalanced diet and malnutrition. In a study conducted by Suglia et al. (2013) in America, 17% of the children were obese. This was remarkable as the number of moderately overweight and overweight children was high. Children under 5 years are more likely to be overweight in upper-middle countries. This was consistent with the results of our study.

4.2 | Discussion of the medical diagnoses during children's emergency admission

Paul and Mondal (2020) found that exposure to physical and sexual violence by mothers of children under 5 years significantly increased the risk of childhood diarrhoea and fever. Further, emotional violence was associated with an increased likelihood of diarrhoea, fever, and acute respiratory tract infection. Nakphong and von Ehrenstein (2020) discovered, in their study in Cambodia, that the mothers' experiences of emotional IPV was associated with diarrhoea, acute respiratory tract infection, and fever in the children. In our study, no relationship was found between mothers' IPV experiences and children's emergency diagnoses. It may be that children were protected from such diseases since their parents' education level was of high school level.

The economic levels are generally equal to the income and expenses and the parents could provide better care for their children.

4.3 | Discussion of the characteristics of violence experienced by mothers

The prevalence of IPV varies among countries. This difference should be considered as a serious approach when reporting IPV in developed countries where gender equality is mentioned, or while reporting IPV in cultures where violence is culturally accepted or more normalised, especially in cultures with patriarchal family structures. The European Union (EU) has an average IPV prevalence of 22%, with Denmark at 32% (the highest prevalence in the EU), Finland at 30%, and Sweden at 28% (European Union Agency for Fundamental Rights, 2014). According to a WHO (2014) report, more than one in three women (35%) has been exposed to physical and/or sexual IPV in their lifetime. A study conducted in Africa found that women were exposed to at least one controlling behaviour (63%) by their husbands/male partners (Antai, 2011). Adhikari et al. (2020), in a study conducted in South Asia, found that 44% of all women had been exposed to at least one type of partner violence (physical, emotional, sexual violence, or controlling behaviour) during their lifetime. Existing research revealed that gender inequality was associated with a higher risk of IPV victimization in women, mainly in low- and middle-income countries (Archer, 2006). In a study by Kivrak et al. (2015), 366 (89.3%) women had experienced IPV at least once, 321 (78.3%) experienced economic violence, while 309 (75.4%), 306 (74.6%), 285 (69.5%), and 222 (54.1%) women were subjected to emotional, sexual, verbal, and physical violence, respectively. According to a research on domestic violence against women in Turkey conducted by Hacettepe University Institute of Population Studies in 2014, it was found that women across Turkey had been exposed to physical violence (36%), sexual violence (12%), emotional violence/abuse (44%), and economic violence (30%) in their lifetime.

A study conducted in the United States of America found that 84.6% of women were exposed to psychological, 28.8% to physical, and 24% to sexual violence. Furthermore, during pregnancy, 79.8% were exposed to psychological, 27.9% to physical, and 20.2% to sexual violence (Bailey & Daugherty, 2007). Another study found that 21.2% of all women experienced physical IPV during pregnancy (Reichenheim et al., 2017). In a study by Ayrancı et al. (2002) in Turkey, 110 (71.4%) of 154 women had experienced at least one type of physical, sexual, and spiritual/verbal IPV at any period during their current or previous pregnancy.

Globally, an average of 20% of all women are sexually abused during childhood. However, these levels differ significantly among different regions (WHO, 2014). A study found that one out of ten women reported at least one sexual violence incident until the age of 14 years, and 71.9% experienced psychological IPV (Reichenheim et al., 2017). In a study by Kivrak et al. (2015) conducted in Turkey, 400 (97.6%) of the women experienced physical neglect during their childhood and 374 (92.2%) emotional neglect. Furthermore,

265 (64.6%) were emotional abuse, 150 (36.6%) were physically abused, and 133 (32.4%) were sexually abused.

We discovered that women were exposed to controlling behaviours most during pregnancy, lifetime, and childhood. This result was consistent with previous studies.

4.4 | Discussion of the effect of IPV on a child's growth

The relationship between the types of IPV and child growth has been studied mostly via “demographic and health survey” programs. It was determined that stunting in children under 5 years was positively correlated with the mother's lifelong exposure to IPV. In a study by Chai et al. (2016), according to the data obtained from 42 “demographic and health surveys” from 29 countries, stunting in children was positively associated with the mother's exposure to physical or sexual violence. According to data from Bangladesh, Ziaei et al. (2014) found that women were more likely to have a stunted child if they had experienced physical or sexual IPV throughout their lifetime. Furthermore, in their study, 44.3% of the children were stunted, 18.4% were wasting, and 42.0% were underweight. Neamah et al. (2018) also found that exposure to physical and sexual IPV in mothers was associated with a higher risk of stunting in their children. According to the population data obtained from Rico et al. (2011), maternal exposure to IPV was associated with severe stunting. However, in our study, no relationship was observed between IPV exposure and stunting (age). Many of these studies were conducted in economically low-income or middle-income countries. Turkey is in the middle-upper income category, which may have affected the results. The education level of the mothers and fathers was high. Hence, the parents were likely to give importance to their children's healthy growth. Although there was no direct and concrete relationship between stunting in children and IPV exposure of mothers in our study, further research should focus on these probabilities using different data collection and observation methods.

Childhood overweight and obesity are significant public health problems for policymakers in many countries. Furthermore, parents play an essential role in preventing childhood obesity (Cullinan & Cawley, 2017; Suglia et al., 2013). In general, exposure to all kinds of violence (physical, sexual, and emotional) during pregnancy causes preterm and low-weight during the child's birth (Bailey & Daugherty, 2007; Reichenheim et al., 2017). Recent studies found that the mothers' exposure to emotional IPV during pregnancy caused unhealthy behaviours (unhealthy nutrition and lack of physical activity). In addition, it was stated that pregnant women and fetuses were at risk of obesity (Bailey & Daugherty, 2007). Our study showed that the mothers' exposure to emotional violence during pregnancy had a direct effect on moderately overweight and overweight children. There was also some evidence that emotional and physical IPV during pregnancy was associated with post-traumatic stress disorder (PTSD) symptoms (Reichenheim et al., 2017). Exposure to stressful situations, such as IPV, might cause mis-lactation. Thus, the mother may be

prone to overfeeding her baby. Mothers who are emotionally affected and under the chronicity of IPV may limit maternal emotional availability for children, which may impact their parental feeding style and patterns (Boynton-Jarrett et al., 2010).

Therefore, it is thought that breast milk had protective features against obesity (Mezzavill et al., 2018) and the mother's early weaning of her baby affected the child's overweight and obesity status. Cahng et al. (2019) found that women with high stress tended to consume significantly fewer fruits and vegetables than women with low stress, which was associated with obesity in children. In a study by Boynton-Jarrett et al. (2010), children of mothers with chronic domestic violence had higher obesity risks in the first 5 years. Parents with moderately overweight and overweight children need to improve their child's diet, encourage them to be more physically active, or take them to a doctor regarding their weight (Cullinan & Cawley, 2017). Our study also supported the relationship between moderate overweight and overweight in children who were direct witnesses of physical violence at home. Violent home environments reduced the mother's quality of care and the parents' ability to cope with the child's needs (Cullinan & Cawley, 2017). Inadequate access to nutritious foods due to their higher cost, the stress of living in food insecurity, and the physiological adaptation to food poverty are factors that could explain the higher risk of weakness in children in families with food insecurity (Food and Agriculture Organization of the United Nations, 2019). Due to these factors, the mother's exposure to controlling behaviours by her spouse during pregnancy showed an effect on the children being wasting or moderate wasting in our study.

5 | CONCLUSION

IPV is a global problem with varying dimensions across countries. Its impact on women affects the growth of their children. Although every child has rights, including health, nutrition, safety, sensitive care, and early learning, the healthy growth of children is adversely affected by the impact of IPV on their mothers.

5.1 | Strengths of the research

Studies that examined the relationship between child growth and IPV have generally been conducted in underdeveloped or developed countries. Hence, the findings of our study constitute an essential resource for upper-middle level countries. We also examined the relationship between the type of IPV (physical, emotional, sexual violence, and controlling behaviour) and the growth of children aged 0–5 years.

5.2 | Limitations of the research

First, the sample of the study consisted of the paediatric emergency unit, such as the mother who brought her child due to an emergency illness, worried about their child, and wanted to leave the emergency

room as soon as possible. This may have affected the answers provided in the questionnaire.

5.3 | Suggestions

The literature states that violence is observed more frequently in rural areas and in people with lower educational levels. It is suggested that this study should be recreated with multi-centre setting in rural areas. The sample should be increased, the children exposed to or those who witnessed violence, and the mother's complimentary parenting styles should be enquired to ensure healthy growth.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

The mother's experience of IPV and its chronicity affects the child's growth. In fact, this is a preventable risk for healthy children and adults for the future.

Therefore, when evaluating child growth, especially in paediatric emergency units, their growth should be comprehensively assessed by the nurses. In addition, nurses should also consider any history of violence experienced by the mothers as well as nutrition while taking anamnesis. Nurses in paediatric emergency services work with the family during an emergency application process of the child's examination. While the doctor deals with the emergency services, anthropometric measurements and the preparation of the child are performed by the nurse. During this process, the nurse, whose dialogue with the family and child increases, can closely observe the situation, such as signs of domestic violence, restrictive behaviour, or types of abuse and neglect, and have a conversation with the family. Therefore, nurse managers should create a standard form and ensure that it is utilized regularly.

During this study, it was observed that women used the emergency department as an escape from their home or as a socialization method. It was observed that women who were restricted from going out alone could only go out for their child and the child's urgent needs. This may explain why women bring their children to the emergency room and the frequency of their visits.

ETHICS STATEMENT

This study was carried according to the ethical guidelines described in the Declaration of Helsinki. Ethical approval was obtained from Istanbul University-Cerrahpaşa Faculty of Medicine Clinical Research (7 August 2018, board decision: A-37).

CONFLICT OF INTEREST

All the authors have no financial or other relationships to report.

AUTHOR CONTRIBUTIONS

SUY, ZZ, SD, and HB designed the study; SD, SUY, and HB collected the data; ZZ, SUY, and HB analysed the data; SUY, HB, ZZ, and SD

wrote the manuscript; and all authors revised and confirmed the final version of the manuscript.

DATA AVAILABILITY STATEMENT

Research data are not shared.

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