Prevalence, Risk Factors, and Outcomes of Emotional Abuse and Neglect during Childhood in Arab Countries: A Systematic Review and Meta-analysis

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Abstract

Introduction: Emotional abuse and neglect are among the most underestimated forms of child maltreatment, carrying serious long-term mental health consequences. This meta-analysis synthesizes evidence on the prevalence, risk factors, and outcomes of emotional abuse and neglect among children in Arab countries. **Methods:** We systematically searched PubMed, Scopus, Web of Science, and the Cochrane Library, from inception to May 2025, for studies reporting emotional abuse or neglect in Arabian children. Eligibility criteria included studies reporting prevalence, risk factors, or consequences in participants <20 years; studies not assessing emotional abuse or neglect or conducted in conflict settings were excluded. Risk of bias was assessed using the Newcastle–Ottawa Scale. Synthesis of results was performed using random-effects meta-analysis. **Results:** A total of 41 studies, predominantly cross-sectional and mainly from Saudi Arabia and Egypt, were included, representing 50,862 individuals. Lebanon (64%) and Yemen (63%) reported the highest rates of emotional abuse, with a pooled prevalence of 46% (95% confidence interval [CI]: 35%–56%; I^2 = 99.9%). Emotional neglect was most common in Tunisia (61%), with a pooled prevalence of 42% (95% CI: 33%–51%). Significantly identified risk factors included parental divorce, low parental education levels, and exposure to violence. Behavioral disorders, suicidal ideation, and physical harm were frequently reported outcomes. **Conclusion:** The prevalence of emotional abuse and neglect among children in Arab countries is high, comparable to or exceeding that of other global regions. Culturally grounded preventive strategies, including parent education and strengthening protective systems, are needed to safeguard children's well-being.

Keywords: *Adolescents, Arab countries, child maltreatment, emotional abuse, emotional neglect, mental health*

Introduction

Childhood is a critical developmental stage that lays the foundation for a healthy social, emotional, and psychological development.[1,2] During this period, many children worldwide experience maltreatment in the form of neglect and psychological mistreatment, often resulting in lasting psychological scars.[3] Emotional abuse is underreported worldwide and is culturally stigmatized.[4] Emotional abuse includes non-physical violence such as verbal abuse, humiliation, and rejection. Emotional neglect is the failure to offer emotional support and meet a child's emotional requirements.[5] This type of maltreatment is also often subtle and can manifest itself in different ways, such as ridiculing someone, rejecting, ignoring, threatening, and depriving a child of any form of emotional and psychological nourishment.[6] Due to its long-term implications for mental functioning, academic achievement, and interpersonal interactions, this issue has gained global attention.[7]

Several risk factors predispose to the occurrence of emotional abuse and neglect. These factors include family-related circumstances such as parental conflict, divorce, low educational attainments, and domestic violence.[8,9] Besides these, broader socioeconomic indicators like poverty and unemployment also incite these vulnerabilities. Child-specific attributes could include disability, problematic behavior, and special health needs.[10] There exist further cultural and environmental factors in many Arab societies, including gender norms, authoritarian style of parenting, and social tolerance toward harsh discipline, which further shape the risk pathways.[11] It is essential to understand

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these determinants to lay effective prevention and intervention strategies.

Childhood emotional maltreatment is associated with a wide range of adverse outcomes, including depression, anxiety, low self-esteem, conduct disorder, drug dependence, and suicidal ideation.[12] The consequences extend to physical health as well, with evidence linking emotional maltreatment to chronic illnesses, cardiovascular problems, and impaired immune functioning.[13] These consequences may impair individual functioning and impose a significant burden on the healthcare system and society.[14] In the Arab world, perceptions and responses to child abuse are shaped by economic, cultural, and historical factors.[15]

Despite growing awareness, there remains a significant gap in knowledge regarding the prevalence, risk factors, and long-term consequences of emotional abuse in Arab countries. Accountability considerations include culturally acceptable terminology and measures, study limitations, and barriers to disclosure.[15-18] In light of these gaps, regional synthesis is not only necessary but also vital. This systematic review and meta-analysis aim to estimate the prevalence of childhood emotional abuse and neglect in Arab countries, identify the key risk factors contributing to their prevalence, and examine the psychological and behavioral impacts.

Methods

This systematic review and meta-analysis adhered to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines,[19] and the protocol was registered in PROSPERO (CRD420251087797).

Eligibility criteria

We have included observational studies (case–control, cross-sectional, and cohort designs) conducted in Arab countries with participants aged <20 years. Eligible studies reported on the frequency (number or percentage) of emotional abuse or neglect. Studies were excluded if they did not assess emotional abuse and/or neglect as defined by the US Centers for Disease Control and Prevention (CDC).[20] Emotional abuse was operationalized as behaviors by a parent or caregiver that harm a child's self-worth or emotional well-being, including verbal assaults, humiliation, threats, intimidation, rejection, or other non-physical harmful interactions. Emotional neglect was defined as the failure of a parent or caregiver to meet a child's emotional or psychological needs, including insufficient affection, support, attention, or failure to provide a safe and nurturing environment. These CDC-based definitions were used as the coding framework for determining whether studies met inclusion criteria and for extracting prevalence, risk factors, and outcomes related specifically to emotional abuse or emotional neglect.

Additional exclusion criteria encompassed studies focusing solely on physical or sexual abuse, case series, case reports, animal studies, non-English publications, and studies conducted in conflict settings to avoid bias in prevalence and risk factor estimates. The upper age limit was selected to include older adolescents who remain vulnerable to abuse, acknowledging regional variation in definitions of maturity.

Information sources

We searched PubMed, Scopus, Web of Science, and the Cochrane Library from each database's inception to May 25, 2025. We also manually screened Google Scholar and grey literature sources (OpenGrey, conference abstracts, policy briefs, white papers, and dissertations) to reduce publication bias and enhance comprehensiveness.

Search strategy

The search strategy followed PRISMA guidelines and included terms related to childhood populations, Arab regions, and emotional maltreatment. We used this search strategy: (child* OR adolescent* OR teen* OR youth OR young OR kid OR juvenile OR minor*) AND (Arab* OR MENA OR "Middle east" OR "Gulf countries" OR "North Africa" OR "Middle-east" OR "Gulf-countries" OR "North-Africa" OR Egypt OR Qatar OR Emirates OR Libya OR Morocco OR Algeria OR Tunisia OR Sudan OR Palestine OR Bahrain OR Iran OR Iraq OR Jordan OR Kuwait OR Lebanon OR Oman OR Saudi OR Syria OR Yemen OR Djibouti OR Gaza OR Comoros OR Mauritania OR Somalia) AND ("emotional abuse" OR neglect OR maltreat* OR "psychological abuse" OR "mental abuse"). Search strategies were tailored for each database, and no filters were applied.

Selection process

Two reviewers independently screened all titles and abstracts against the predefined exclusion and inclusion criteria. Full texts were obtained for records deemed potentially eligible or where eligibility could not be determined from the abstract alone. The same two reviewers independently assessed full texts for final inclusion, and the reasons for exclusion were documented. Any disagreements during the screening or full-text review stages were resolved through conversation. A third reviewer was consulted if consensus was not reached.

Data collection process and data items

Two independent reviewers extracted study data using a pre-designed Excel form. Extracted variables included publication year, country, study design, sample size, age range, gender distribution, duration of data collection, measurement tools, primary findings, and identified risk factors. The process involved double extraction to ensure accuracy. Data items included: Prevalence of emotional abuse, prevalence of emotional neglect, study

characteristics (country, design, sample size, age, and gender), measurement tools for emotional abuse/neglect, reported risk factors, and reported consequences.

Study risk of bias assessment

Two reviewers independently assessed the methodological quality of the included studies, whether cross-sectional, cohort, or case–control studies, using the Newcastle–Ottawa Scale (NOS).[21]

Effect measures

The primary effect measure was the pooled prevalence of emotional abuse and emotional neglect. Prevalence estimates were reported with 95% confidence intervals (CIs).

Synthesis methods and reporting bias assessment

Statistical analyses were conducted using STATA 18 (StataCorp, College Station, Texas, USA). A random-effects model was applied to account for heterogeneity. Heterogeneity was assessed using I^2 statistics, with I^2 >50% or $P < 0.10$ indicating substantial heterogeneity.[22] National-level subgroup analyses, leave-one-out sensitivity analyses, and meta-regression (country and study design) were performed to explore sources of heterogeneity. Publication bias was evaluated using funnel plots. The trim-and-fill method was applied to estimate the number of potentially missing studies and to determine whether adjusting for these studies would meaningfully alter the pooled prevalence estimate [Supplementary File].

Results

Search results

Our systematic search identified 1397 records. After removing duplicates, 1,002 studies remained for the title and abstract screening. Of these, 76 studies were deemed as potentially relevant and underwent full-text review. Ultimately, 41 studies met the inclusion criteria and were included in the analysis. The PRISMA flow diagram is shown in Figure 1.

General characteristics

We included 41 studies in this review, comprising 35 cross-sectional studies, 5 cohort studies, and 1 case–control study, with a total pooled sample size exceeding 50,000 participants. Geographically, most studies were conducted in Saudi Arabia (n = 14),[8,11,16,23-33] followed by Egypt (n = 12),[9,10,34-43] Lebanon (n = 4),[44-47] Tunisia (n = 3),[48-50] Yemen (n = 2),[18,51] UAE (n = 2).[17,52] Individual studies were also conducted in countries such as Qatar,[53] Jordan,[54] Morocco,[55] and Palestine.[56]

The majority of participants were adolescents, with most studies focusing on age ranges between 12 and 18 years, although the overall age spectrum spanned from infancy to 20 years. Details and characteristics of the included studies are demonstrated in Table 1. Several of these studies assessed both physical and emotional abuse in the same cohorts; therefore, some physical consequences were reported alongside emotional outcomes. Our analysis, however, was limited to emotional abuse and neglect, and any mention of physical consequences reflects the way findings were originally presented in the source studies.

Quality assessment

A quality assessment according to the NOS revealed that many included studies were of fair to good quality. Of the cohort studies, two were graded as good and three as fair [Supplementary Table 1]. The one case–control study was graded fair [Supplementary Table 2]. Of the 35 cross-sectional studies, 25 were graded as good, 9 as fair, and one as poor [Supplementary Table 3]. Common limitations in methodology in lower-rated studies were inadequate sample representativeness, which may restrict generalizability; imprecise exposure ascertainment, which may raise measurement bias concerns; and failure to publish non-response rates, which may contribute to selection bias.

Meta-analysis (prevalence of emotional abuse and neglect)

As shown in Figure 2, country-specific prevalence of emotional abuse and neglect varied widely, ranging from 15% to 64% across Arab countries. The highest prevalence was reported in Lebanon (64%, 95% CI: 44%–84%, I^2 = 99.48%) and Yemen (63%, 95% CI: 47%–79%, I^2 = 97.78%), followed by Saudi Arabia (49%, 95% CI: 29%–69%, I^2 = 99.96%), Egypt (45%, 95% CI: 21%–69%, I^2 = 99.13%), and Tunisia (32%, 95% CI: 28%–37%, I^2 = 62.62%) [Supplementary Figures 1-5]. Based on single studies, the prevalence was reported as 34% (95% CI: 30%–38%) in the UAE, 25% (95% CI: 24%–26%) in Morocco, 16% (95% CI: 14%–19%) in Palestine, and 15% (95% CI: 13%–17%) in Qatar. The funnel plot [Figure 3] was asymmetrical, indicating the possibility of publication bias or small-study effects in the included studies. Several points deviate from the expected symmetrical distribution around the pooled estimate, suggesting that smaller studies with certain effect sizes may be over-represented. The Trim and Fill method indicates that the published literature likely underestimated the true effect.

The relatively low prevalence estimates observed in some countries may be explained by reliance on single, often older studies that may not reflect current circumstances. In addition, variability across countries is likely influenced by differences in study design, sample characteristics, and the measurement tools applied, as some instruments may capture narrower dimensions of emotional abuse or underestimate its occurrence compared to others.

The prevalence of childhood emotional neglect in individual Arab studies ranged from 11% in Lebanon to 61% in Tunisia. As demonstrated in Figure 4, the pooled prevalence of Arab

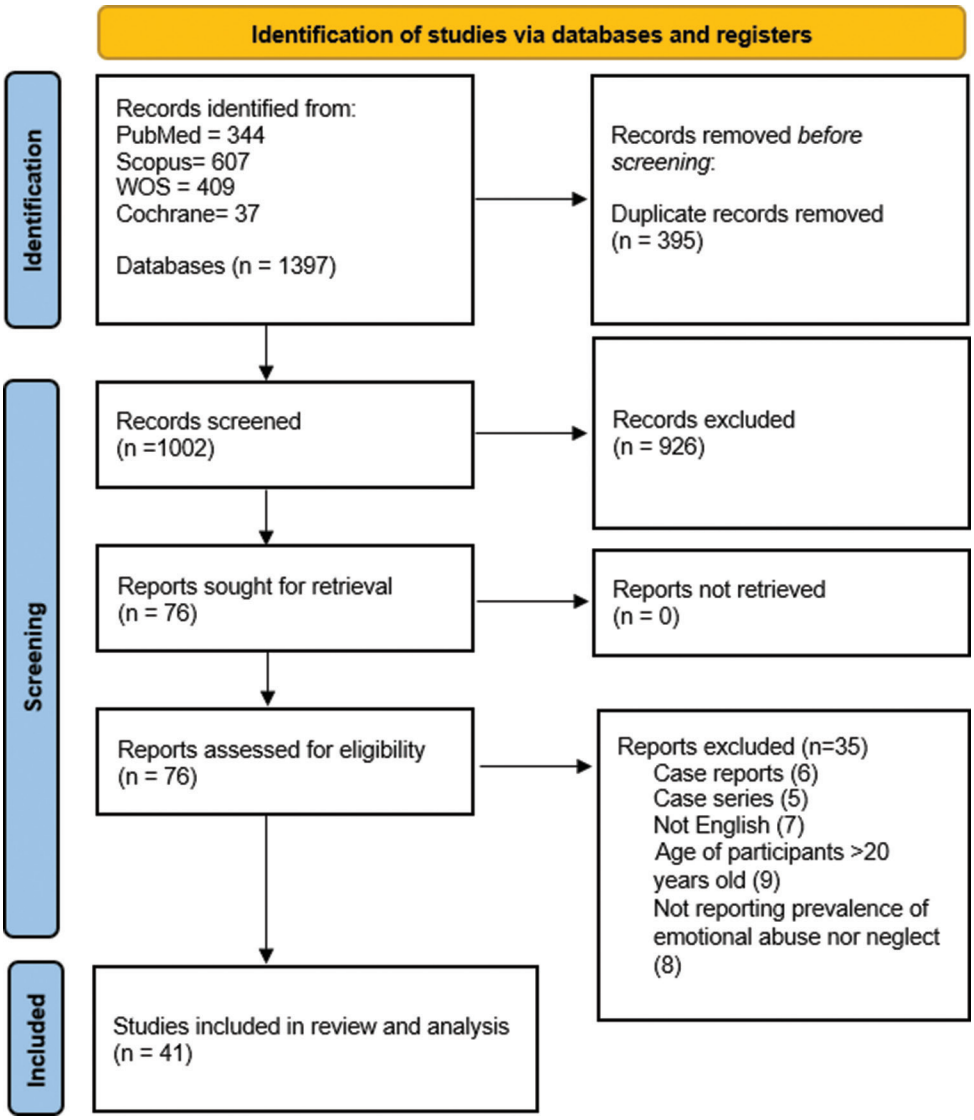

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow chart

childhood emotional neglect was estimated at 42% (95% CI: 33%–51%), with significant heterogeneity between studies (I^2 = 99.89%). Country-based analyses showed the highest prevalence in Tunisia (61%; 95% CI: 40%–82%, I^2 = 98.96%), followed by Saudi Arabia (47%; 95% CI: 33%–61%, I^2 = 99.92%), Egypt (44%; 95% CI: 29%–60%, I^2 = 98.47%), and the United Arab Emirates (10%; 95% CI: 0.5%–14%, I^2 = 88.67%) [Supplementary Figures 6-9]. On the individual study level, the estimated prevalence was 25% (95% CI: 24%–26%) in Morocco, 23% (95% CI: 14%–34%) in Jordan, and 11% (95% CI: 10%–12%) in Lebanon. The funnel plot [Figure 5] appears asymmetry, indicating potential publication bias. The trim-and-fill method suggested that three studies may be missing, supporting the presence of small-study effects.

None of the sensitivity analyses using leave-one-out or country and study design meta-regression for emotional abuse or neglect accounted for the heterogeneity observed. This suggests that the variability between studies is likely driven by unaccounted-for factors, such as differences in measurement tools, study populations, cultural perceptions of emotional abuse/neglect, or methodological variations (e.g., sampling strategies, reporting bias).

Risk factors and outcomes

Various risk factors, classified broadly as familial, socioeconomic/environmental, psychological, violence exposure, and child-specific, were connected to emotional abuse and neglect of children in Arab countries [Table 2]. All of the investigations consistently identified familial factors. Parental divorce or breakdown rates were significantly higher in Egypt (92%),[10] Qatar (30.9%),[53] and Saudi Arabia (13.2%).[26] Other correlations were reported in Palestine,[56] Lebanon,[44] and the United Arab Emirates.[52] Parental illicit drug use, which was reported at 67.9% in one study in Egypt,[43] and long-term or mental illness of caregivers[8,23] were other household risk factors

Table 1: Summary of the included studies, stratified by country

ID	Study design	Sample size	Age (range)	Female (%)	Period of data collection	Main results
Egypt						
Moawd, 2024	Cross-sectional	156	0–18	45.5	March–August 2022	Neglect, especially in the form of inadequate supervision and medical neglect, is extremely prevalent among Egyptian children presenting with skeletal injuries. In addition to neglect, physical abuse was also documented in more than one-fifth of cases, mainly in the form of hitting, underscoring that both forms of maltreatment were systematically assessed. The physical and emotional outcomes of abuse are strongly interconnected, as delayed care or recurrent neglect often contributed directly to more severe physical presentations
Saeed, 2024	Cross-sectional	147	2 months–17 years	53.7	October–December 2022	Neglect, especially with uneducated caregivers and in rural areas–leads directly to life-threatening incidents of childhood pesticide poisoning, which is recognized as both physical and emotional child abuse
Barazi, 2023	Cross-sectional	319	18–20	76.4	Time 1: March 2021, Time 2: March 2022	Childhood maltreatment is significantly associated with higher depression, anxiety, OCD, and emotion regulation difficulties over 1 year
Hamza, 2023	Cross-sectional	340	6–13	NR	Over 1 year	Executive dysfunctions, especially emotion regulation, are significantly associated with abuse and neglect in children with neurodevelopmental disorders
Ahmed, 2022	Cross-sectional	187	16–19	50.3	NR	Exposure to maltreatment is a significant negative predictor of self-esteem among adolescents, influenced by family and demographic factors
Sief, 2021	Case–control	90	12-18	Cases: 31.1 Controls: 46.7	NR	Emotional abuse and neglect significantly associated with psychiatric disorders, lower DNA methylation, and no significant interaction with OXTR gene polymorphism
Seif, 2019	Cross-sectional	90	12–18	38.9	NR	Child maltreatment causes DNA hypomethylation that disrupts stress, immune, and neural pathways, leading to lasting emotional, psychiatric, and physical health problems.
Ghanem, 2018	Cross-sectional	109	0–18	33	6 months (July 1, 2014–December 31, 2014)	11% of 109 children's skeletal injuries involved maltreatment (mostly neglect, 7.3%). RTA and falls were common causes; neglect often led to lower limb fractures
Youssef, 2015	Prospective cohort	67	6.3 (IQR: 3.4–9.4)	43.3	November 2014–April 2015 (6 months)	Falls, traffic accidents, direct trauma caused TBI. Neglect/abuse predisposing factors. GCS, D-dimer predicted mortality; high D-dimer linked nonsurvival
El-Elemi, 2013	Retrospective cohort	89	0–18	37.1	January 2000–December 2007	Reviewed 89 child autopsies (Egypt, 2000-2007). Deaths highest in newborns/youth. Neglect (41.6%) and blunt trauma (19.1%) were primary causes
Elkoussi, 2011	Cross-sectional	120	10–18	2.5	During 2009	High VSM prevalence (90.8%) among street children driven by accessibility and familial neglect; Kolla glue is commonly used. Self-reported adverse behavioral outcomes common
Afifi, 2003	Cross-sectional	555	12–18	37	1998	High abuse prevalence (36.6%) among Egyptian adolescents; emotional abuse (12.3%) linked to crowding, sickness, teacher maltreatment, and violent behavior
Jordan						
Gearing, 2013	Cross-sectional	70	11–18	44	December 2010–June 2011	Over half of institutionalized Jordanian adolescents had mental health problems. Maltreatment history, male gender, and transfers predicted worse outcomes

Contd...

Table 1: Contd...

ID	Study design	Sample size	Age (range)	Female (%)	Period of data collection	Main results
			Lebanon			
Malaeb, 2020	Cross-sectional	1810	14–17	53.3	January–May 2019	46.5% bullying victimization; linked to child abuse, internet addiction, social phobia; validated IBS scale
Pengbid, 2020	Cross-sectional	5708	15 (IQR: 3)	43.1	2017 Lebanon GSHS	14.7% of Lebanese adolescents reported worry-induced sleep disturbance, linked to loneliness, female sex, older age, social factors, and risk behaviors
El-Bcheraoui, 2012	Cross-sectional	1177	10–18	49.6	Spring 2009	76.4% physical abuse, 81.2% verbal abuse; males/ public schools/high-risk regions showed elevated exposure
Usta, 2012	Cross-sectional	1028	8–17	45.9	Mid-August 2006 to Mid-September 2006	Children who experienced emotional abuse had significantly higher trauma symptoms–including greater depression, anxiety, PTSD, and sleep and somatic disturbances
			Morocco			
Pengbid, 2020	Cross-sectional	6745	15 (IQR: 3)	46.2	2016	Almost one in four students reported psychological distress, with higher prevalence among females, and several modifiable risk factors were identified
			Palestine			
Khamis, 2000	Cross-sectional	1000	12–16	47.7	1998	Family characteristics (gender inequity, harsh discipline, ambiance, support) were strongest predictors of Palestinian child psychological maltreatment; economic hardship also contributed
			Qatar			
Akram, 2025	Cross-sectional	836	13–20	50.7	During 2017	Boys reported more ACEs and physical abuse; girls reported more emotional abuse. Multiple ACEs increased psychological distress and feeling unsafe
			Saudi Arabia			
Sadler, 2024	Retrospective cohort	355	0–14	47.2	January 1, 2012–December 31, 2022 (10 years)	Over 10 years, 159 pediatric Discharge Against Medical Advice cases showed red flags for medical neglect, often involving unstable or chronically ill children
Farhan, 2022	Cross-sectional	510	0–14	46.3	January 2015–December 2019 (5 years)	Supervisory neglect most common (63.1%), followed by medical neglect (39.2%), with 8 deaths documented
Alyousefi, 2021	Cross-sectional	960	12–19	48.6	January–April 2019	32.4% had moderate to severe depression; emotional abuse, female gender, poor family/friend relationships, low father education increased risk
Almuneef, 2020	Cross-sectional	1138	0–18	46	January 1, 2010–December 31, 2016	Reviewed 1138 child deaths (2010-2016) at a Saudi hospital; 15% preventable, mainly injuries (MVA, drowning, maltreatment), increasing with age
Jawadi, 2019	Cross-sectional	56	0–14	41	2009–2015	Neglect caused most nonaccidental fractures; young children, especially infants and preschoolers, were most affected; abusive head trauma common
Al-Eissa, 2018	Cross-sectional	16,010	15–18	49.2	2012	72% lifetime and 66% past-year poly-victimization; girls and urban residents at higher risk; family structure strongly predictive
Al-Eissa, 2017	Cross-sectional	16,010	15–18	49	2012	Witnessing intimate partner violence significantly increases likelihood of adolescents experiencing psychological abuse, physical abuse, neglect, and sexual abuse in Saudi Arabia
Al-Eissa, 2016	Cross-sectional	16,939	15–19	49.1	2012	High prevalence of psychological abuse and neglect among Saudi adolescents, with girls at higher risk except for sexual abuse

Contd...

Table 1: Contd...

ID	Study design	Sample size	Age (range)	Female (%)	Period of data collection	Main results
Saudi Arabia						
Altamimi, 2017	Cross-sectional	674	12–19	47.3	During 2014	Household dysfunction (substance use, imprisonment) and abuse types (psychological, physical) significantly associated with poor academic performance
Almuneef, 2016	Cross-sectional	220	6.72±4.61	43.6	July 2009–December 2013	Physical abuse, neglect common in Saudi CAN cases; parental unemployment, single-parent status key risk factors
Ghazwani, 2016	Cross-sectional	454	15-20	All males	Academic year 2013	High SAD prevalence (11.7%) in Saudi adolescent boys. Parental provocation and maltreatment significantly increase SAD risk
Raheel, 2015	Cross-sectional	1028	15–19	All female	November 2012–February 2013	30% depression prevalence among adolescent girls in Riyadh; significantly associated with lower income, poor relationships, abuse, and poor body image.
Al-Eissa, 2015	Cross-sectional	2043	15–18	58.0	December 2011–February 2012	High Child Abuse and Neglect incidence among Saudi adolescents (15–18 years). Psychological abuse is most common (74.9%), neglect 50.2%. Females higher risk
ElArousy, 2013	Cross-sectional	60	12–18	61.7	December 2011 - January 2012	90% reported rejecting abuse; 61.7% ignoring/terrorizing abuse; chronic illness and mother-child relationship significant correlates
Tunisia						
Melouki, 2024	Cross-sectional	1940	17±1.5	66.3	January - February 2020	High ACE prevalence (emotional neglect 83.2%) is mainly in girls
BenKhelil, 2019	Retrospective cohort	513	Newborns of 5–7 days	49.5	January 1, 1977–December 31, 2016 (40 years)	The prevalence of infanticide in Northern Tunisia is lower than that reported in most previous studies from Europe and the United States
Braham, 2018	Retrospective cohort	317 (3736 total referrals)	6 months–18 years	44	January 2006–December 2015 (10 years)	Neglect was the most common form of child maltreatment, affecting 51.4% of cases and emotional abuse (also called "psychological violence") was the second most common, observed in 35.3% of cases
UAE						
Pengbid, 2022	Cross-sectional	5849	15 (IQR: 2)	50.3	During 2016	16.2% of UAE adolescents had anxiety-induced sleep disturbance, associated with loneliness, bullying, physical attacks, and parental emotional neglect
Shah, 2021	Cross-sectional	518	12–18	61.2	During year of 2015	Emotional abuse (33.9%) is most common, followed by neglect (12.1%). Linked to depression, low self-esteem, screen time, smoking
Yemen						
Alizzy, 2017	Cross-sectional	598	11–16	50.7	2013–2014	High abuse prevalence: psychological abuse linked to emotional symptoms, physical abuse to conduct issues
Ba-Saddik, 2012	Cross-sectional	1066	12–17	37.4	2009–2010 school year	55.2% prevalence of emotional abuse; teachers' primary perpetrators

OCD: Obsessive–compulsive disorder, IQR: Interquartile range. GSHS: Global School-Based Student Health Survey, NR: Not Reported, PTSD: Posttraumatic stress disorder, UAE: United Arab Emirates. ACE: adverse childhood experience, CAN: Child Abuse and Neglect, SAD: Social Anxiety Disorders, OXTR: Oxytocin receptor genes, MVA: Motor vehicle accidents, VSM: Volatile substance misuse, RTA: Road traffic accident, GCS: Glasgow Coma Scale

reported. A more detailed mapping of risk factors, main outcomes, and assessment tools used across the included studies is provided in Table 3.

One of the most common associations was parents' poor educational position (72% in Jordan and 80% in Egypt). Unemployment among parents was also frequent, reaching 95.1% in some studies.[35] One study found a clear link between emotional abuse, poverty, and low socioeconomic position in the socioeconomic and environmental components, with an odds ratio (OR) of 1.7.[9] Risk factors also included a large family size and caregiver mistreatment.

Problems with relationships and social isolation were identified as psychological risk factors. Peer or familial connection troubles (OR = 2.15), a lack of close friends (37.6% of the maltreated group), and

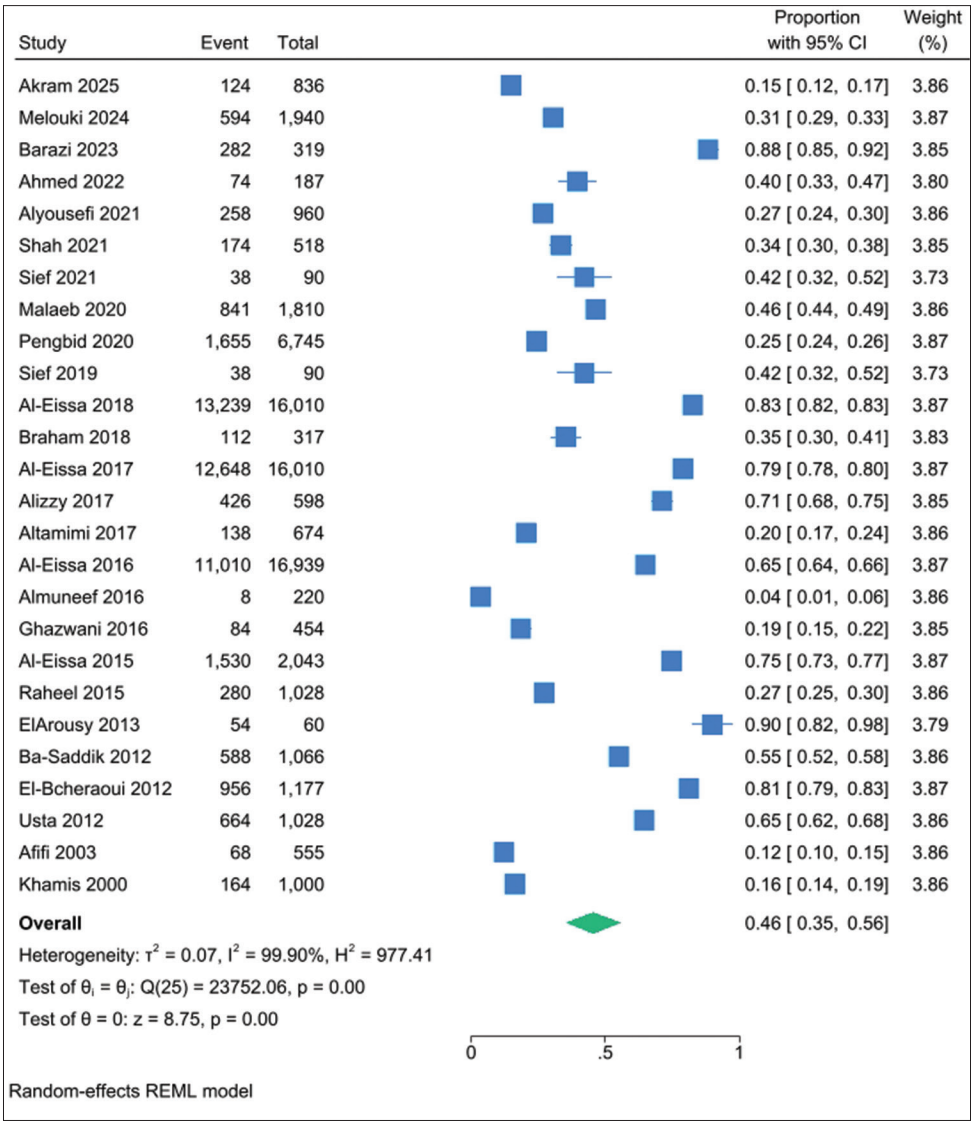

Figure 2: Forest plot of the overall prevalence of childhood emotional abuse in Arab countries

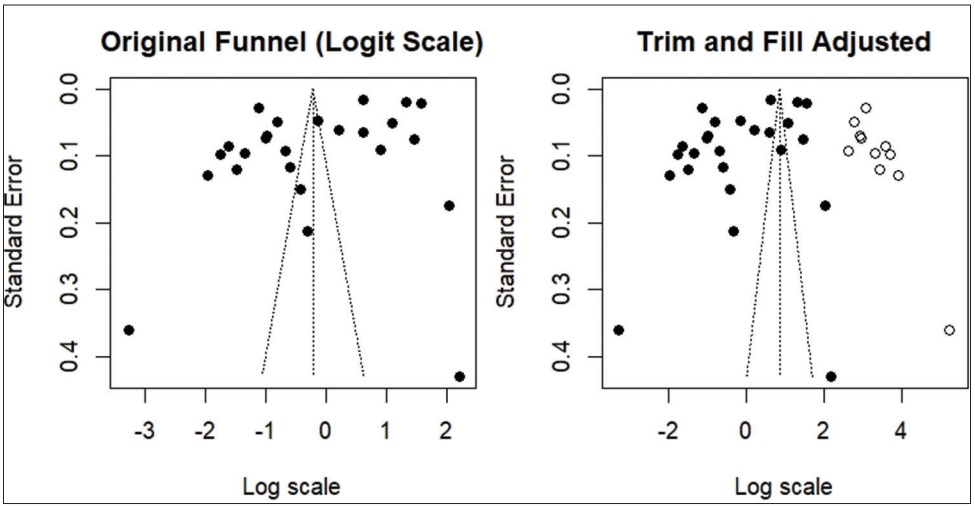

Figure 3: Funnel plot assessing potential publication bias in studies reporting the prevalence of childhood emotional abuse in Arab countries. The funnel plot displays asymmetry, with a notable lack of studies in the lower-left quadrant (high precision/low prevalence), suggesting a potential risk of publication bias

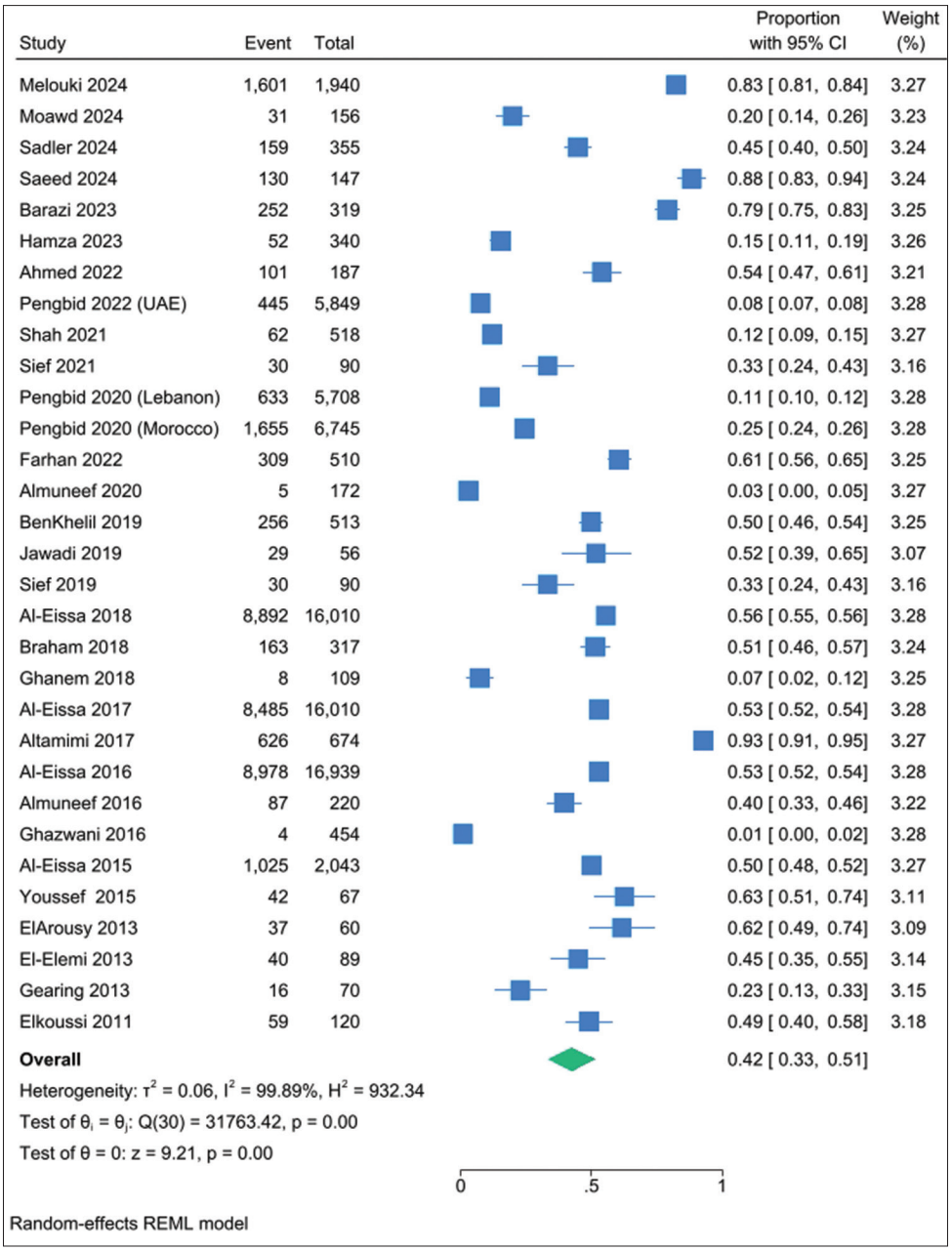

Figure 4: Forest plot of the overall prevalence of childhood emotional neglect in Arab countries

loneliness were all statistically significant predictors of abuse (OR = 4.78). Physical attacks and bullying, both etiologies, affected up to 38.8% of youngsters in some studies.[10] Emotional abuse was frequently associated with other forms of violence. For instance, 41.0% of Qatari school-aged children[53] and 56.3% of Tunisian school-aged children[49] were physically abused, showing that both physical and emotional maltreatment are common in this age range. In addition, among child-specific characteristics, 23% of Egypt's maltreated youngsters exhibited neurodevelopmental disorders, including ADHD.[10] The majority of studies found male sex to be a risk factor, while female sex was protective in a few (OR = 0.37).[10]

Psychological distress was the primary outcome reported, with depression, low self-esteem, and sleep disturbances found to be associated with emotional abuse and neglect. Some of the studies in this analysis have reported these sequelae, while observing emotional abuse or neglect, particularly when there was a suspicion of co-occurring abuses. However, physical consequences such as damage to the skeleton, head injuries, and poisoning are more typically the aftermath of physical abuse. Frequent overlap between various forms of maltreatment was detected; extremely high rates of skeletal injury (90.8%),[40] traumatic head injury and fatality (41.8%),[41] acute poisoning (25%),[35] and volatile substance misuse (90.8%)[56] occurred in children experiencing emotional maltreatment.

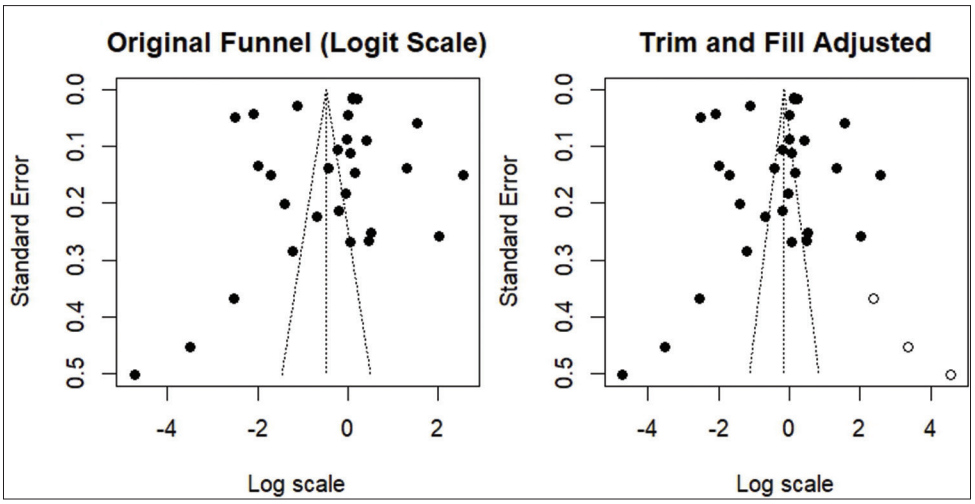

Figure 5: Funnel plot assessing potential publication bias in studies reporting the prevalence of childhood emotional neglect in Arab countries. The plot exhibits asymmetry, with studies appearing scattered and potentially missing from the lower-left and lower-right quadrants (high precision), suggesting a potential risk of publication bias

Table 2: Summary of reported risk factors and outcomes of childhood emotional abuse and neglect in Arab countries

Category	Reported risk factors/outcomes
Familial	Parental divorce or separation; parental substance abuse; caregiver long-term illness or mental illness; absence of one or both parents
Socioeconomic/ environmental	Poverty; low parental education; unemployment; large family size; poor housing or overcrowding; unsafe living environments
Psychological/social	Relationship problems; social isolation; lack of peer support; loneliness
Violence exposure	Bullying; physical attacks; domestic violence; community violence; co-occurrence with physical abuse
Child-specific	Young age; male sex (in most studies); neurodevelopmental disorders (e.g., ADHD); behavioral difficulties
Psychological outcomes	Depression; low self-esteem; sleep disturbances; psychological distress
Behavioral/ educational outcomes	Poor school performance; conduct problems; substance misuse; internet addiction
Physical consequences (overlap)	Skeletal injuries; head trauma; poisoning; volatile substance misuse

ADHD: Attention-deficit/hyperactivity disorder

Reports of conduct and learning difficulties were both observed. Poor school performance, executive function impairment, externalizing behavior (conduct problems or substance misuse), and Internet addiction (in more than 50%) were all reported in abused children or children with family conflict.[25,49] The assessment tools included rating scales, clinical documentation, observation scales, and autopsy findings, along with standardized instruments such as the Beck Depression Inventory-II (BDI-II), Patient Health Questionnaire-9 (PHQ-9), Child Behaviour Checklist (CBCL), and International Child Abuse Screening Tool–Child Home Version (ICAST-CH). The evaluation of child injury encompassed both psychological and physical variables [Table 3].

Discussion

According to this meta-analysis, emotional abuse and neglect are common in Arab nations yet go unreported. About two out of every five children (about 41%) suffer from emotional neglect, while about one out of every two children (about 45%) suffer from emotional abuse. The nations included in this meta-analysis, which included Egypt, Jordan, Lebanon, Morocco, Palestine, Qatar, Saudi Arabia, Tunisia, the United Arab Emirates, and Yemen, had a wide range of prevalence rates.

Different cultural attitudes, study methods, and reporting approaches can all account for these disparities. Notwithstanding variation, the data point to a significant frequency of psychological injury among youngsters in the area. The available evidence suggests that the prevalence of emotional abuse and neglect in the region is comparable to global estimates, despite the lack of comprehensive data from other Arab countries.[57,58] According to Stoltenborgh *et al*.'s meta-analysis of a large global sample, the prevalence of emotional abuse was lower in Europe (29.2%) but higher in Africa (46.7%), Asia (41.6%), and North America (36.5%).[58] Similarly, the prevalence of emotional neglect was 30.1% in Asia, 40.0% in Australia, and 14.5% in North America. These findings suggest that the prevalence of emotional abuse in Arab countries exceeds global estimates. However, the absence of comprehensive data from much of the region limits a full understanding of the true prevalence, underscoring the need for further research. The interpretation of these findings should take into account

Table 3: Risk factors, main outcomes, and assessment tools of the included studies

ID	Risk factors	Main outcomes	Assessment tools
		Egypt	
Moawd, 2024	Low income: 68.6%, Parental unemployment: 80%, Male gender: 54.5%, Child age ≥6 years: 82.9%, Low parental education: 40%	Skeletal fractures: 96.8%	Structured questionnaire (adapted from validated tools), radiographs, clinical exams
Saeed, 2024	Caregiver's low education: 70.7%, rural residence: 61%, parental unemployment: 95.1%, substance abuse: 28.6%	Acute poisoning: 25%	Observational checklist+novel 5-domain severity scoring system
Barazi, 2023	Parental divorce: 1.6%, poor parent–child relationship, low parental education, history of parental substance use	Depression: 70%, Anxiety: 41.2%, OCD: 2.7%, Difficulties in Emotion Regulation	BDI-II, BAI, YBOCS-II, DERS
Hamza, 2023	Lower social class: 32%, Presence of neurodevelopmental disorders (ADHD, SLD): 23% and divorced parents: 92%	Executive function deficits: 70%	Stanford Binet IQ test, Barkley Deficits In Executive Functioning Scale-Children and Adolescents
Ahmed, 2022	Parental separation: 27.3%, Violent relations between parents: 9.6%, Higher crowding index: 24.6%, Larger family size: 25.7%, Lower family income: 16.2%, Male gender: 49.7%, older age: 20%	Lower self-esteem: 28.3%	Childhood Trauma Questionnaire (adopted from Bernstein) and Rosenberg Self-esteem Scale
Sief, 2021	Parental separation/divorce, Lower parental education level, Witnessing domestic violence, parents' occupation and education	ADHD, depression, poor school performance	Childhood Trauma Questionnaire, Kovac's Children's Depression Inventory
Seif, 2019	Early age of onset (≤9 years) Longer duration and higher frequency of other forms of maltreatment	DNA hypomethylation	Arabic version of Childhood Trauma Questionnaire Short Form; MethylFlash methylated DNA quantification colorimetric kit
Ghanem, 2018	Lack of supervision in unsafe environments (unenclosed gardens, unlocked doors/windows, dangerous objects accessible), and potentially poverty/lack of resources	Skeletal injuries: 90.8%	Radiological Evaluation (X-ray, CT, MRI, US), MISS, Gustilo-Anderson open fracture classification
Youssef, 2015	Lower maternal education: 72%	Traumatic brain injury and mortality: 41.8%	Data form (probing questions for abuse/neglect), GCS, CT scan, Labs (routine, ABG, coagulation including D-dimer), Ultrasound, Radiology
El-Elemi, 2013	Younger parents' age: 43.8%, Unemployment, illness, housing problems, low socio-economic status, unstable familial patterns, urban residence: 73%	Death: 2.73%	Autopsy
Elkoussi, 2011	Away from home/family for long periods: 89.0%, Absence of a family member (primarily father): 73.4%, Parental or sibling substance misuse: 67.9%, Coworker influence (learning on the job): 53.2%	VSM: 90.8%	Self-developed 36-item questionnaire
Afifi, 2003	Overcrowding: OR 1.7 (95% CI 1.1–2.7), Family problems (11%): OR 2.6, Child's ill health (16.5% of all students): OR 4.7 (95% CI 1.2–17.9)	Aggressive/abusive behaviors: 23.5%, Attention-seeking: 33.8%, - Smoking or alcohol use: 10.4%	Pre-coded questionnaire (self-report)
		Jordan	
Gearing, 2013	Male gender: 56%, entering care due to child maltreatment: 23%, ≥2 transfers between facilities: 69%	Mental health and behavioral problems: 53%, Internalizing problems (e.g., depression, anxiety): 43%, Externalizing problems (e.g., aggression, rule-breaking): 46%	CBCL
		Lebanon	
Malaeb, 2020	Parental separation: 11.9%, internet addiction, social phobia	Bullying victimization	Illinois Bully Scale , Child Abuse Self-Report Scale Liebowitz Social Anxiety Scale, Internet Addiction Test, and Adolescent Depression Rating Scale

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ID	Risk factors	Main outcomes	Assessment tools
		Lebanon	
Pengbid, 2020	Loneliness: 13.1%, older age: 17.1%, female sex: 17.2%, having no close friends, infrequent bullying victimization, parents disrespecting privacy: 7.6%, current tobacco use: 35.9%	Worry-Induced Sleep Disturbance: 14.7%	Self-report question from GSHS questionnaire
El-Bcheraoui, 2012	Male gender, public schools, South Lebanon/Bekaa regions	NR	ISPCAN Child Abuse Screening Tool
Usta, 2012	Male gender, lower family communication, lower family affect, lower parent education level	Higher trauma symptoms (anxiety, depression, PTSD, dissociation, anger, sleep, somatic)	TSC-C
		Morocco	
Pengbid, 2020	Female sex: 29.2%, Older age (≥16 years): 30.3%, No close friends 37.6%, Bullied (3–30 days/month): 45.5%, Physically attacked (2+times/year): 38.8%	Psychological distress: 23.3%	Two-item measure of psychological distress from "2016 Morocco GSHS"
		Palestine	
Khamis, 2000	Presence of disability: 6%, Residence in refugee camps: 11.2%, Child labor: 11.8%	Poor school performance and psychological distress: 16.4%	CPM scale
		Qatar	
Akram, 2025	Parental divorce/separation (30.9%), Being sent away from home as punishment (28.6%), Physical abuse (41.0%), Long-term hospitalization (39.0%), Terrifying event (47.8%), Death of close family/ friend (64.5%)	High psychological distress: 36.2%, Feeling unsafe (all/ most time): 34.4%	Kessler 6-item Psychological Distress Scale
		Saudi Arabia	
Sadler, 2024	Infant age (<1 year):32%, chronic illness: 73.6%, parental factors (mental health, substance abuse, medical illiteracy), distrust, communication issues	Discharge Against Medical Advice and re-hospitalization: 10.7%	NR
Farhan, 2022	Large family size (≥4 siblings): 46.6%, father unemployment: 35.6%, living with single parent: 8.7%, underlying disability: 14.2%	Worsening underlying disease (30%), internal injuries (23.5%), burns (13.9%), mortality (2.6%)	Electronic medical records (BESTCare) and SCAN team records
Alyousefi, 2021	Poor family relationships: 85.3%, low father education level: 46.5%, excessive internet use (≥5 h): 38%, physical inactivity: 36.8%	Depression: 32.4%, Poor relationships with peers: 62.5%, Difficulty Performing Daily Tasks: 41.4%	PHQ-9 for depression
Almuneef, 2020	Younger age: 77.5%, male gender: 54.0%	Preventable Death: 15%	Modified UNICEF MICS-6 tool
Jawadi, 2019	Younger Infants (<1 year): 34% prior history of chronic disease or disability: 16.1%	Nonaccidental fractures	NFSP-R Radiographic review by radiologist and pediatric orthopedic surgeon
Al-Eissa, 2018	Living with extended family: 75%, urban residence: 73%, female gender: 78%	Psychological distress and trauma-related symptoms	ISPCAN Child Abuse Screening Tool (ICAST-CH)
Al-Eissa, 2017	Witnessing Intimate Partner Violence: 52%	Psychological distress	ISPCAN Child Abuse and Neglect Screening Tool
Al-Eissa, 2016	Living with a single parent or stepparent, female gender, older age	Trauma symptoms, poly-victimization, psychological distress	ICAST-CH
Altamimi, 2017	Household dysfunction: Substance use by parents/ guardians (4%), imprisoned family members (7.3%) Family structure: Living with stepparents (1.7%)	Poor school performance: 12.3%	Self-administered Arabic questionnaire
Almuneef, 2016	Large household size (≥6): 25.5%, Low parental education: 80%, Parental unemployment: 7.7%, Divorced: 13.2%	NR	Structured variables per US Office on Child Abuse and Neglect

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Table 3: Contd...

ID	Risk factors	Main outcomes	Assessment tools
		Saudi Arabia	
Ghazwani, 2016	Parenting styles (parental anger, criticism, exaggerated protection, family provocation, maltreatment)	SAD/Social Phobia: 11.7%	LSAS
Raheel, 2015	Poor relationships with peers and family: OR 2.15, CI 1.71–2.87. - Lower household income (<12,000 SR/month): OR 2.17, CI 0.97–6.84. - Living with a single parent or alone: OR 1.77, CI 0.97–3.32	Depression: 30% - Poor academic progress: OR 3.59, CI 0.90–13.73	BDI-II
Al-Eissa, 2015	Female gender: 83.7%, living with father only: 79.6%	NR	ICAST-CH
ElArousy, 2013	Parental chronic illness, Poor mother–child relationship	NR	Researcher-designed self-administered questionnaire
		Tunisia	
Melouki, 2024	Household Dysfunction (related, not exclusive): 80.5%, Physical Abuse: 56.3%, Sexual Abuse: 13.4%	Internet Addiction: 50%	IAT
BenKhelil, 2019	Shame, fear of rejection (parents/partner), social stigma of illegitimate pregnancies, denial of pregnancy	Infanticide	Autopsy
Braham, 2018	Family instability: Marital conflicts: 107 cases, Single-mother households: 35 cases, Parental alcohol addiction: 21 cases, Parental incarceration: 39 cases	Psychological stress and school dropout: 49.8%	NR
		UAE	
Pengbid, 2022	Female sex: OR=0.37, Older age (16 years or older): OR=1.70, Loneliness: OR=4.78, Lower economic status (feeling hungry): AOR=1.62, Frequent bullying victimization (10–30 days): AOR=3.09	Anxiety-Induced Sleep Disturbance: 16.2%	Measured by a 2-item index derived from GSHS questions
Shah, 2021	Longer daily screen time (>2 h) (OR=2.77), Tobacco smoking (OR=1.86), Lower maternal education	Low self-esteem: 15%, depressive symptoms: 17%	BDI-II, Rosenberg Self-Esteem Scale
		Yemen	
Alizzy, 2017	Experiencing/witnessing physical/psychological abuse in a family environment	Internalizing (emotional symptoms) and externalizing (conduct) problems	Child Abuse at Family Scale, Children Witnessing Family Violence Scale, SDQ
Ba-Saddik, 2012	Male gender: 72.6%, extended family type: 62.7%, lower father education: 62.2%	Anxiety, academic difficulties, delinquent behavior	Self-administered questionnaire (adapted from ICAST-CT)

ISPCAN: International Society for the Prevention of Child Abuse and Neglect, UNICEF MICS: United Nations Children's Fund - Multiple Indicator Cluster Surveys, SCAN: Suspected Child Abuse and Neglect, BESTCare: Refers to a specific electronic medical record system used in Saudi Arabia, ABG: Arterial blood gas, CT scan: Computed Tomography Scan, GCS: Glasgow Coma Scale, MISS: Modified Injury Severity Score, BDI-II: Beck Depression Inventory–Second Edition, BAI: Beck anxiety inventory, YBOCS-II: Yale-Brown Obsessive Compulsive Scale–Second Edition, DERS: Difficulties in Emotion Regulation Scale, CBCL: Child Behavior Checklist, ADHD: Attention-deficit/hyperactivity disorder, SLD: Specific learning disorder, CPM: Child Psychological Maltreatment, GSHS: Global School-Based Student Health Survey, NFSP-R: National Family Safety Program Registry, IAT: Internet Addiction Test, SDQ: Strengths and Difficulties Questionnaire, SAD: Social Anxiety Disorder, OR: Odds ratio, CI: Confidence interval, ICAST-CH: ISPCAN Child Abuse Screening Tool-Child: Home version, LSAS: Liebowitz Social Anxiety Scale, PHQ-9: Patient Health Questionnaire-9, TSC-C: Trauma Symptom Checklist for Children, AOR: Adjusted OR, OCD: Obsessive compulsive disorder, MRI: Magnetic resonance imaging, NR: Not reported, VSM: Volatile substance misuse, US: Ultrasound

the unique sociopolitical and economic circumstances of the region, which has experienced recurrent conflict, instability, and displacement over the past several decades. Such factors may amplify both the occurrence and reporting of emotional abuse and neglect, making direct comparison with other global regions challenging. Moreover, methodological heterogeneity across studies, including differences in sampling strategies, assessment tools, and cultural norms surrounding disclosure, introduces potential sources of bias that may have influenced the reported prevalence.

Risk factors identified in Arab countries tend to be largely consistent with reported global literature but are marked by strong contextual differences. Global research has consistently linked child abuse to parental unemployment, low education, economic disadvantage, and drug/alcohol abuse or mental illness among caregivers.[59,60] This

meta-analysis findings confirm the presence of these risk factors across Arab studies. Children with special needs, particularly those with ADHD, were identified as especially vulnerable, in line with global data and highlighting the demand for more inclusive support services in the region.[10,61] The results also reflect contextual variability in gender patterns. While international literature frequently reports girls as being at higher risk of emotional maltreatment, several Arab studies indicated greater vulnerability among boys, likely related to gendered expectations regarding behavior and discipline.[47,51,54]

According to the neurodevelopmental model, neglect and emotional abuse cause disruptions in brain architecture in regions involved in memory, emotional regulation, and executive function. Studies report structural changes in the amygdala, prefrontal cortex, and hippocampus, as well as disturbance of hypothalamic–pituitary–adrenal axis control, which impact stress response, learning, and self-regulation.[62-64] Impaired attention and executive control were seen in Arab adolescents who had faced early adversity, which is consistent with cross-cultural research.[25,49]

A meta-analysis of almost 44,000 people found that early maltreatment was strongly related to the beginning of serious depressive disease at the age of 18.[65] Furthermore, maltreated children are hypersensitive to negative emotional signals, such as anger, which can result in externalizing behavior or misreading of social signals.[59,60] Competence in school and social situations is also severely hampered. Emotional neglect has been associated with poor peer relationships, impaired cognitive ability, and academic underperformance. Chronic abuse has been shown to correlate with lower IQ scores and difficulties with school engagement.[66-68] These limitations can impede social integration and economic success and last into maturity and adolescence.

As evidenced by some of the reports included in the Arab region, psychological mistreatment is frequently combined with physical maltreatment, but not always blatant physical assault.[49,53] Therefore, the risk of accidents such as fractures, bruises, and delayed development increase.[27,34,40] Finally, chronic stress caused by maltreatment can decrease immunity, sleep, and metabolic function, all of which contribute to increased physical illness risk over time.[69] Though mandatory reporting of suspected maltreatment has been demonstrated in Gulf states, interdisciplinary collaboration among staff, such as medical, education, law enforcement, and human services professionals remains limited, preventing relevant case sharing and collaborative action against suspected abuse and neglect.[70]

Intervening against emotional abuse in Arab countries necessitates a multicultural and context-specific approach. Interventions that address local norms, family dynamics, and resource availability are necessary to foster community engagement and sustainability.[70] Public education campaigns with religious and culturally appropriate information can avoid abusive discipline techniques while maintaining treasured behaviors. If parenting seminars are offered in primary care settings, schools, or mosques and provide accessible outlets for maintaining appropriate discipline and emotional care.[71] In support of the above findings, previous reviews of child maltreatment protective and risk factors found that increased availability of services (e.g., social services), community participation, and particularly social support from family and friends all act as protective factors in preventing maltreatment.[72,73]

Strengths and limitations

This systematic review has several strengths. Considered the most comprehensive review, this study synthesizes the prevalence, risk factors, and outcomes of emotional child abuse and neglect across Arab countries with data collated from over 50,000 participants within 41 studies. The study integrated diverse findings, thus establishing consistent risk patterns and trends that were not fully appreciated in the region before. This level of detailed analysis provides new insights that can inform both policy and practice. However, it is crucial to note that there are some limitations. First, most Arab countries lack data, limiting the regional representativeness of the findings. Second, the definition, measurement, and cut-off points for emotional abuse and neglect varied significantly across studies, which may partly explain the persistent heterogeneity observed in our analyses and limit the comparability of prevalence estimates across settings. Third, the potential for publication bias was detected, suggesting that the true prevalence may be underestimated or overestimated depending on the direction of selective reporting. Fourth, because most included studies used cross-sectional designs, causal relationships between risk factors and outcomes cannot be established. Finally, our findings shed light on the urgent need to establish culturally, religiously, and environmentally relevant cut-off points and measurement standards for the Arab context.

Conclusion

This systematic review demonstrates that Arab countries have a high prevalence of child emotional abuse and neglect, with serious ramifications. The overall prevalence is comparable to other regions. Children are at risk due to exposure to violence, parental divorce, socioeconomic situation, and educational level. They face cross-cutting and geographically driven challenges. Emotional abuse was found to significantly impact neurological development, psychology, education, and physical health. The findings call for the establishment of alert systems, improved intersectoral collaboration, and culturally appropriate preventive treatments. Furthermore, there is a dire need to develop robust, contextually appropriate evaluation measures to promote children's resilience and well-being in the region.

Authors' contributions

Amani N. Alansari: Conceptualization, methodology, data collection, quality assessment, writing original draft. Amani Salim: Conceptualization, methodology, analysis, writing original draft. Kawther Elissa: Methodology, data extraction, analysis. Mohammed A. Mahmoud: Data collection, data extraction, quality assessment. Manal Abu Zayed: Data collection, data extraction, quality assessment. Ayman Albaghdady: Writing original draft and revision. Samer Hammoudeh: Validity and manuscript revision.

All authors reviewed the manuscript and approved it for publication.

Data availability

All Supplementary Materials [Supplementary Tables 1–3] for this review are available openly on the Open Science Framework (OSF) at: https://osf.io/d9yb4/overview?view_only=fadddaa889934068887c7f23eda15e3f.

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Conflicts of interest

There are no conflicts of interest.

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