Research article

Prevalence of child abuse in school environment in Kerala, India: An ICAST-CI based survey

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ABSTRACT

Very few studies focus on childhood abuse in developing countries and only a small fraction of such studies explicitly deal with abuse in a school environment. The purpose of this study was to estimate the prevalence of sexual, physical, and emotional abuse in a school environment in a developing country. Abuse history was collected using the International Society for the Prevention of Child Abuse and Neglect (ISPCAN) Child Abuse Screening Tool – Children's Institutional Version (ICAST-CI). Demographic variables were also collected. Student supportive measures were provided both during and after the survey. 6682 school attending adolescents in Thrissur, Kerala participated in this cross sectional self report study. One year and lifetime prevalence of physical (75.5%, 78.5%), emotional (84.5%, 85.7%) and sexual (21.0%, 23.8%) abuse was high. Abuse was considered to be present even if an individual item from these three categories was reported. Most abuse was reported as occurring 'sometimes' rather than 'many times'. More males than females reported being victims of abuse; figures for one-year prevalence were: physical abuse (83.4% vs. 61.7%), emotional abuse (89.5% vs. 75.7%), and sexual abuse (29.5% vs. 6.2%). Various factors significantly increase the likelihood of abuse—male gender, low socioeconomic status, regular use of alcohol and drugs by family member at home, and having other difficulties at school. Children tended to report abuse less frequently if they liked attending school and if they always felt safe at school. The results highlight the urgent need to address the issue of abuse in the school environment and minimize its impact.

1. Introduction

Childhood maltreatment is a serious global public health problem. Global studies suggest that 25–50% of children experience physical abuse; around 20% of girls and 10% of boys experience sexual abuse (WHO, 2006). Childhood abuse is known to have long-lasting negative consequences on the mental, physical and social wellbeing of children (Kelly-Irving et al., 2013; Flaherty et al., 2006). High rates of childhood abuse are reported in most adult patients with mental disorders and childhood sexual abuse is a nonspecific risk factor for psychopathology (Carr, Martins, Stingel, Lemgruber, & Juruena, 2013).

The prevalence of abuse, as estimated in epidemiological studies, varies widely. Differences in definitions, measurement methods,

sample characteristics, and socio cultural context account for much of these differences. The need for comparative research among nationally representative samples, highlighted almost two decades ago, remains pertinent even today (Barth, Bermetz, Heim, Trelle, & Tonia, 2013; Finkelhor, 1994).

Nearly 20% of the world's children, i.e. 440 million children, live in India. Few studies from India have examined the prevalence of childhood abuse; most such studies are limited by small sample sizes, non-representative participants and non-validated survey questionnaires. A recent meta-analysis (Barth et al., 2013) of global prevalence of childhood abuse included only two studies from India (Banerjee, 2001; Hasnain & Kumar, 2006). However, even these two studies are constrained by the limiting factors mentioned above. Available studies generally show high rates of abuse. A study on street children in Jaipur reported that a considerable proportion of children (61.8%) had faced "moderate" abuse while 36.6% children indicated abuse in the "severe" and "very severe" categories (Mathur, Rathore, & Mathur, 2009). Among illiterate runaway adolescents in New Delhi, 62% boys experienced domestic violence, 72% reported physical abuse, and 35% reported being subjected to sexual abuse (Bhat, Singh, & Meena, 2012). Forty-eight percent of college students in Puducherry reported being mocked because of their physical appearance; 56% reported being beaten during their childhood, with 13.4% of such cases requiring medical treatment; 10% reported being exposed to the private parts of another individual (10%); and 6.4% reported being forced to expose their private parts to another individual (Bhilwar et al., 2015). A study conducted on a representative sample of 1060 adolescent school going girls in Delhi to elicit abusive experiences not limited to school, found that 43% experienced physical maltreatment, 40% faced neglect, and 27% were subjected to sexual abuse (Daral, Khokhar, & Pradhan, 2016); this study used a semi-structured locally developed questionnaire. There are no Indian studies that focus exclusively on the experience of abuse in a school environment. Studies in other countries have found socio-economic marginalization, poor family interactions, parental dysfunction, and neighborhood violence to be the most predictive risk factors for childhood maltreatment (Patwardhan, Hurley, Thompson, Mason, & Ringle, 2017). In India, comprehensive information on the prevalence of childhood abuse or the associated risk factors is not available to inform policy or practice.

2. Objectives

To study the prevalence of childhood abuse in India by using internationally accepted and validated questionnaires and by surveying a large, representative sample. Specific objectives of the study were: (a) to discover one year and life time prevalence of sexual, physical and emotional abuse in a school environment; (b) to identify gender differences in the prevalence of all three categories of such abuse; and (c) to ascertain the demographic factors associated with such abuse.

3. Methods

3.1. Participants

A survey was conducted among high school students in Thrissur, a central city in the southern Indian state of Kerala. The city (corporation) has a population of 315,957, covers 100 sq. km area, and has an average literacy of 97%. There are 39 high schools in Thrissur Corporation with 15,150 students studying in classes 8–10.

Fifty percent of the schools in the city area were randomly selected to participate in the survey. All students who attended the selected schools, on the day of the survey, were approached to participate in the survey. Prior to the survey, all high school teachers in the selected schools were trained on child protection issues. Furthermore, support systems were established in each school to assist children who sought help after the survey.

3.2. Survey procedures

Detailed information about the survey was given to students and parents, beforehand. The survey was administered during school hours and within a class room setting. On the day of survey, teachers read out standardized survey-related information in each class room. Students could opt out of the survey by refusing to participate or by returning blank forms. All the students participated in the survey and none of the forms returned were blank.

Due to the sensitive nature of the study, the survey was conducted anonymously and it was designed to avoid collecting information that would reveal personal identities. Students were also advised on the procedures to contact the support service at school. Each school had a trained teacher to provide support and counselling. The teachers could contact a resource team for further assistance, if needed; the resource team consisted of psychologists and psychiatrists. The teachers also had direct access to the local child help line. The survey took 15–20 min to complete.

3.3. Measures

We used International Society for the Prevention of Child Abuse and Neglect (ISPCAN) Child Abuse Screening Tool—Children's Institutional Version (ICAST-CI), developed by ISPCAN in association with WHO and UNICEF. ICAST-CI assesses all forms of abusive experiences in the school environment. The ICAST–CI tool is designed for use with children aged 12–17 years. The questions cover various types of verbal, physical and sexual violence as well as experiences of neglect; respondents are also asked about their own experiences of victimization (over their lifetime and during the past year). The tool has 19 items for physical abuse, 12 items for emotional abuse, and 10 items for sexual abuse. ICAST-CI is an internationally validated tool developed to assess child victimization

in a multinational, multicultural, and multilingual context. It is drawn from a cross national sample and has been shown to work well in identifying child victimization, in all domains, with moderate to high internal consistency (Zolotor et al., 2009).

The ICAST-CI was translated to Malayalam, the local language of Kerala. We followed standard translation procedures like back translation by bilingual experts. School teachers, students, and psychologists were also involved in the translation process.

We collected basic socio-demographic data like gender, age, religion, family type (nuclear or joint), accommodation (own, rented, living with relatives, or other arrangements), parental occupation, socioeconomic status, and substance use in family. In addition, we asked students about their experiences at school—for example, whether they felt safe at school, liked school. Their opinion about school discipline was also ascertained. At the end of the survey, we asked the students about their experience of participating in the survey.

3.4. Ethical approval

Education Department of the Government of Kerala granted approval to conduct the study. An independent ethics committee provided the ethics clearance.

3.5. Data preparation

Data were entered into excel and checked for accuracy. Data entry was re-checked for randomly selected cases. Imputation for missing data (0.93%) was done using predicted mean matching method (pmm) available in R (The R Foundation for Statistical Computing 2016; version 3.3.0) from the mice package (Multivariate Imputation by Chained Equations, version 2.25, van Buuren and Groothuis-Oudshoorn, 2015).

3.6. Analysis

All abuse related questions had four categorised responses − "Many times", "Sometimes", "Never", and "Not in the last year but this has happened"; the respondent was supposed to select only one of the four options. One-year prevalence had two response categories—"Many times" and "Sometimes" and Life time prevalence had three response categories—"Many times", "Sometimes", and "Not in the last year but this has happened". Statistical analyses were conducted using PASW statistics package (version 18, SPSS Inc., Chicago). Prevalence was presented in percentages with 95% confidence interval (CI). Chi-square test was used for analysing associations of categorical variables. The significance level was kept at 0.05 level.

Table 1
Sample characteristics.

Variables	Categories	Male	Female	Total
Age categories	13	38.3	40.9	39.2
	14–15	55.1	55.5	55.3
	16 +	6.6	3.7	5.5
School Year/Class	8	35.2	32.9	34.3
	9	35.7	33.2	34.8
	10	29.2	33.9	30.9
Religion	Hindu	54.8	52.5	53.9
	Muslim	3.6	2.5	3.2
	Christian	41.2	44.6	42.5
	Others	0.4	0.4	0.4
Family status	Nuclear	48.8	54.0	50.7
	Joint	51.2	46.0	49.3
Accommodation	Own	82.1	84.7	83.0
	Rented	12.4	10.2	11.6
	Relatives	3.4	3.0	3.3
	Others	2.0	2.2	2.1
Employment status of father	Unemployed	4.9	6.1	5.3
	Employed	95.1	93.9	94.7
Employment status of mother	Unemployed	68.3	67.8	68.1
	Employed	31.7	32.2	31.9
Socioeconomic status	Low	61.7	67.5	63.9
	Medium	32.8	28.0	31.0
	High	5.5	4.4	5.1

Figures are in percentages.

Table 2

One year and lifetime prevalence of different categories of abuse in different genders.

Categories of abuse	One year prevalence				Lifetime prevalence			
	Male	Female	Total	95% CI	Male	Female	Total	95% CI
Physical	83.4	61.7	75.5	74.4–76.5	85.9	65.7	78.5	77.5–79.5
Emotional	89.5	75.7	84.5	83.6–85.3	90.1	78.1	85.7	84.9–86.6
Sexual	29.5	6.2	21.0	20.1–22.0	32.5	8.8	23.8	22.8–24.9
Any	92.4	80.7	88.1	87.3–88.9	93.1	83.2	89.5	88.7–90.2

Figures are in percentages; CI: Confidence Interval.

4. Results

4.1. Sample characteristics

We surveyed a total of 6682 students—4242 boys (63.5%) and 2440 girls (36.5%)—from 18 schools. Sample characteristics are given in Table 1. Almost half of the students surveyed lived in joint families and around 46.5% had their grandparents living with them. A considerable proportion (15.6%) of students reported regular alcohol or drug use by a family member at home.

Table 2 lists the one year and lifetime prevalence of abusive experiences for both genders; abuse has been categorised as physical, emotional and sexual. If abuse was indicated in at least one question from the set of questions pertaining to a particular abuse category, the response was considered positive for that category of abuse. Additionally, we evaluated the frequencies of "many times" and "sometimes" responses for individual items listed under the different categories of abuse (Table 3). Our results indicated that most of the one-year abusive experiences occurred "sometimes".

4.2. Categories of abuse

Around 88.1% of students experienced abuse in the last year. While 20.0% of students reported all three types of abuse, 15.3% reported only one type of abuse and 52.8% reported two types.

Physical abuse: Almost 75.5% of students had endured some form of physical abuse in the last year. "Being hit with closed fist" was the most frequently reported physical abuse by male children and females mostly reported "being slapped on hand or arm".

Emotional abuse: Emotional abuse was the most frequent (84.5%) type of abuse. The most frequent form of emotional abuse was "others swearing at them" for male students and "others calling hurtful names" for female students.

Sexual abuse: Sexual abuse in the year was reported by 21% of students (Table 2). "Showing sexual picture" was the most reported form of sexual abuse in both genders. However, females reported "touching in a sexual way" most frequently in the "sometimes" category.

Table 4 lists the prevalence of "abuse in the last year" for different socio-demographic groups. Children who reported regular use of alcohol or drugs by a family member at home also reported abuse much more frequently (93.1% v 87.2%, p < 0.001) than those who did not.

4.3. Predictive factors of abuse

Binary logistic regression analysis was used to study the predictive factors for abuse experiences (Table 5). Male gender, low or middle socioeconomic status, Christian religion, having no grandparents at home, having adults who use alcohol regularly at home, and diminished feelings of safety at school were predictors of life time abuse experience. Students who reported liking school "sometimes" and "usually" as well as those who had "other difficult experiences" at school were also more likely to experience abuse. The odds were less for Muslims compared to Hindus; the incidence of abuse was also lower when mothers were unemployed. Students who reported their school as having "very bad" discipline were at higher risk of abusive experience.

4.4. School environment

Most students (62.0%) felt safe at school "always" while 2.9% "never" felt so. While majority (73.2%) of students liked the school "always", 19.0% liked school "often", 6.6% "liked school occasionally" and 1.2% "never" liked school. Only 37.3% students felt the discipline at school as "very good"; 45.6% felt it as "good", while 17% felt it was "poor" or "very poor". A considerable proportion (21.6%) reported having experienced difficulties that were not listed in the questionnaire; the discussion of these issues is beyond the scope of this article.

Adolescents who "always" felt safe at school reported abuse less frequently (p < 0.001) than others. Similarly, those who liked the school "always" and those who considered discipline at school as "very good" reported abuse less frequently (p < 0.001). However, the overall prevalence of abuse in these categories was high. A significantly higher number of students who reported "any other difficult experiences" at school also reported higher rates of abusive experiences (p < 0.001).

Table 3
Frequency of abusive experience in one year.

Categories and items of abuse	Male		Female		Total	
	Many times	Sometimes	Many times	Sometimes	Many times	Sometimes
Physical abuse						
Cause physical pain	8.1	37.2	3.0	18	6.2	30.2
Slap on face or head	6.5	24.9	3.0	12.0	5.2	20.2
Slap on hand or arm	12.5	34.6	5.2	26.3	9.8	31.5
Twist ears	13.1	35.5	2.8	16.7	9.3	28.6
Pull hair	5.4	18.2	3.6	14.7	4.8	16.9
Hit by throwing object	9.0	29.1	3.3	15.4	6.9	24.1
Hit with closed fist	15.0	30.2	3.2	8.4	10.7	22.2
Kicking	5.4	21.2	1.8	9.4	4.1	16.9
Crush fingers, hands	9.1	33.6	3.3	17.0	7.0	27.5
Force to eat something	5.1	13.0	4.6	13.4	4.9	13.1
Stand/kneel for long	9.3	19.9	3.7	14.2	7.3	17.8
Standing out in cold/heat	1.7	4.8	0.3	3.2	1.2	4.2
Burning	0.5	1.4	0.2	0.4	0.4	1.0
Put in hot/cold water	0.2	0.7	0.1	0.4	0.2	0.6
Take food away	1.4	3.3	0.7	2.0	1.1	2.8
Dangerous activity	2.6	9.5	1.1	2.8	2.1	7.0
Choking	1.6	7.1	0.5	1.6	1.2	5.1
Tie with rope/belt	0.9	2.9	0.2	0.5	0.6	2.1
Cut with sharp item	1.7	7.1	0.4	2.2	1.2	5.3
Range of frequency	0.2–15.0	0.7–37.2	0.1–5.2	0.4–26.3	0.2–10.7	0.6–31.5
Mean frequency	5.74	17.59	2.16	9.40	4.4	14.6
Emotional abuse						
Swear	34.5	41.7	15.8	43.9	27.7	42.5
Insult	17.6	30.5	6.3	20.1	13.5	26.7
Shout	18.1	36.0	9.4	30.2	14.9	33.9
Call hurtful names	29.8	3.2	54.2	1.9	32.2	30.4
Make you feel stupid/fool	11.2	26.5	5.5	21.4	9.1	24.6
Hurt on colour/gender/religion	7.0	15.4	3.4	11.0	5.7	13.8
Hurt on health issues	6.3	11.0	3.0	8.4	5.1	10.0
Isolate	8.2	21.1	6.2	17.1	7.5	19.6
Embarrass as orphan	1	1.7	0.4	0.9	0.8	1.4
Embarrass as poor	2.1	6.2	1.6	2.7	1.9	5.0
Steal/damage property	12.1	30.5	6.2	20.3	9.9	26.8
Spread bad remarks	8.2	18.4	3.3	8.1	6.4	14.6
Range of frequency	1.0–34.5	1.7–41.7	0.4–54.2	0.9–43.9	0.8–32.2	1.4–42.5
Mean frequency	13	20.18	9.61	15.50	11.2	20.8
Sexual abuse						
Touch sexually	2.3	5.9	0.7	1.9	1.7	4.4
Show sexual pictures	5.5	13.1	0.8	1.4	3.8	8.8
Make you undress	1.3	3.1	0.2	0.3	0.9	2.1
Take their clothes off	2.0	5.4	0.5	1.0	1.5	3.8
Force to have sex	0.8	2.1	0.2	0.6	0.6	1.6
Make you touch their private parts	0.9	3.0	0.2	0.4	0.6	2.1
Touch your private parts/breasts	1.7	6.7	0.5	0.8	1.3	4.5
Give money to do sexual things	1.1	2.1	0.3	0.2	0.8	1.4
Involve you in making sexual pictures/videos	1.5	3.0	0.2	0.2	1.0	2.0
Kiss you against your wish	1.7	3.4	0.3	0.7	1.2	2.4
Range of frequency	0.8–5.5	2.1–13.1	0.2–0.8	0.2–1.9	0.6–3.8	1.4–8.8
Mean frequency	1.88	4.78	0.39	0.75	1.3	3.3

Figures are in percentages.

4.5. Survey experience

A minority (5.4%) of students found the survey emotionally distressing and 7.6% found it difficult to write about their personal experience. Both these groups also reported abusive experiences more frequently (93.0% vs. 87.8%) and (95.5% vs. 87.5%), respectively. Nearly 9.0% reported difficulties in reading and understanding the questionnaire and amongst them comparatively more students (94.7% v 87.5%, $p < 0.001$) reported abuse.

5. Discussion

To the best of our knowledge, this is the first Indian study to focus on abusive experiences in the school environment. The sample

Table 4
Prevalence of abuse in different sociodemographic groups.

Variables	Categories	Not abused	Abused
Gender[#]	Male	7.6	92.4
	Female	19.3	80.7
Age	13	12.1	87.9
	14–15	11.8	88.2
	16 +	11.4	88.6
School Year/Class[*]	8	11.3	88.7
	9	13.3	86.7
	10	11.0	89.0
Religion[#]	Hindu	12.5	87.5
	Muslim	19.5	80.5
	Christian	10.6	89.4
	Others	7.7	92.3
Family structure	Nuclear	11.2	88.8
	Joint	12.6	87.4
Accommodation	Own	11.6	88.4
	Rented	14.7	85.3
	Relatives'	11.0	89.0
	Others	11.5	88.5
Employment status of father	Unemployed	11.8	88.2
	Employed	11.9	88.1
Employment status of mother	Unemployed	12.4	87.6
	Employed	10.8	89.2
Socioeconomic status	Low	11.5	88.5
	Medium	12.3	87.7
	High	14.4	85.6

Figures are in percentages.
* P < 0.05.
# P < 0.001.

Table 5
Binary logistic regression of predicting factors for life time abuse experience.

Variables	Reference category	Compared category	B	S.E	Wald	df	Sig	Exp(B)
Gender	Female	Male	0.80	0.09	81.63	1	0.00	2.24
Age category	13	14–15	−0.12	0.12	0.977	1	0.32	0.88
		16	−0.44	0.23	3.61	1	0.06	0.65
Class	10	8	0.04	0.15	0.06	1	0.80	1.04
		9	−0.19	0.11	2.77	1	0.01	0.83
Accommodation	Other	Own	0.15	0.29	0.27	1	0.60	1.16
		Rented	−0.27	0.31	0.73	1	0.39	0.77
		Relatives	−0.01	0.37	0.07	1	0.79	0.91
Religion	Hindu	Muslim	−0.75	0.2	14.43	1	0.00	0.47
		Christian	0.19	0.09	4.42	1	0.04	1.2
		Others	0.16	0.76	0.04	1	0.83	1.17
Family	Nuclear	Joint	0.44	0.31	2.09	1	0.15	1.56
Socioeconomic status	High	Low	0.54	0.18	9.26	1	0.00	1.72
		Middle	0.36	0.18	3.90	1	0.05	1.44
Father Employment	Employed	Unemployed	0.08	0.20	0.16	1	0.69	1.08
Mother employment	Employed	Unemployed	−0.19	0.01	4.18	1	0.04	0.82
Grandparent at home	Present	Absent	0.67	0.30	4.88	1	0.03	1.96
Alcohol at home	No	Yes	0.59	0.14	16.63	1	0.00	1.81
Safe at school	Always	Usually	0.92	0.13	45.82	1	0.00	2.50
		Sometimes	1.37	0.235	34.11	1	0.00	3.94
		Never	1.21	0.48	6.45	1	0.011	3.36
Like school	Always	Usually	0.295	0.14	4.72	1	0.03	1.34
		Sometimes	1.01	0.32	10.07	1	0.00	2.74
		Never	0.26	0.63	0.17	1	0.68	1.29
Discipline at school	Very good	Good	0.61	0.09	43.76	1	0.00	1.83
		Bad	−0.37	0.15	6.30	1	0.01	0.69
		Very bad	1.67	0.51	10.51	1	0.00	5.31
Any other difficult experience at school	No	Yes	1.07	0.16	44.19	1	0.00	2.91
Constant			0.02	0.48	0.002	1	0.97	1.02

was representative of the population and the sample size was adequate. Furthermore, the study used a well-recognized and validated tool. We found high rates of physical, emotional and sexual abuse in the school setting. Additionally, our findings suggest that boys are more likely than girls to experience all three categories of abuse.

In contrast to other studies, our study discovered a higher prevalence of abusive experiences. A meta-analysis of 68 studies from China (Fang et al., 2015) found life time prevalence of physical abuse at 26.6%, emotional abuse at 19.6%, neglect at 26%, and sexual abuse at 8.7%. Although our study was limited to abusive experiences in school settings, considerably more abusive experiences were reported in all categories of abuse. It is possible that the differences are at least partially due to the comprehensiveness of the ICAST tool used in our study. A study from Saudi Arabia in a comparable age group in non-school settings using ICAST tools (Al-Eissa et al., 2015) also showed a similar pattern. However, considerably lower proportions reported having abusive experiences, with 65% reporting emotional abuse, 50% reporting physical abuse, and 10% reporting sexual abuse.

A study that used ICAST tools (Lynch, Saralidze, Goguadze, & Zolotor, 2007) reported one year prevalence of 47%, 47.5%, and 5.6% for physical, psychological and sexual abuse respectively; the study focused on children aged 10–17 in a school environment. In contrast, the high rates reported in our sample are indicative of the existence of possible true difference. Among Indian states, Kerala has the highest social development indicators; this could result in higher awareness of and greater sensitivity towards unacceptable experiences. Although most children faced abusive experiences of some sort, only a small minority were subjected to frequent abuse. Of the 42 abusive experiences that were listed in the survey, only 5 items (hit with closed fist, swearing, insulting, shouting, using hurtful names) were reported in the "many times" category by more than 10% of the students. Within the sexual abuse category, between 0.6% and 3.8% of children reported items under "many times" category.

Compared to another study from Kerala (Krishnakumar, Satheesan, Geeta, & Sureshkumar, 2014), our study reports lower rates of sexual abuse. The study conducted in 2014 found 36% males and 35% females to have had sexually abusive experiences. However, that study was done among older children, i.e. students enrolled in classes 11 and 12 as opposed to students enrolled in classes 8–10 in our study. Our survey focused only on abusive experiences within the school environment while the 2014 study covered such experiences in all contexts; the most commonly reported abusive experience in the 2014 study was "sexual advances during travel". A recent study among adolescent females from Delhi showed that 70% were subjected to at least one form of maltreatment and 27% of females reported sexual abuse of some form (Daral et al., 2016). This is nearly five times the prevalence of sexual abuse reported by the females in our study; however, the study in Delhi was not confined to experiences in school settings.

Internationally, childhood sexual abuse is generally reported to be more prevalent among females (Stoltenborgh, van Ijzendoorn, Euser, & Bakermans-Kranenburg, 2011). However, our study discovered a very high prevalence of abuse, especially sexual abuse, among males. A previous study from Kerala State also reported higher prevalence of sexual abuse among males compared to females (Krishnakumar et al., 2014). A study carried out among high school students in Chennai, a city in the neighboring state of Tamil Nadu, also found more males to be victims of abuse (Tulir, 2013). Similar trends have been reported in Malaysian primary school children (Ahmed et al., 2015) and adolescents in Saudi Arabia (Al-Eissa et al., 2016), South Africa (Madu & Petlzer, 2001) and Sri Lanka (de Silva, 2007). It is likely that social and cultural practices in these countries might be limiting unsupervised male female interactions which in turn reduce the risk of abuse among females.

Poor socioeconomic status and having family members who regularly use alcohol and drugs are established risk factors for child abuse (Brown, Cohen, Johnson, & Salzinger, 1998) (Stith et al., 2009). Our study confirms this finding in the Indian context (Table 5). Parental unemployment has been associated with maltreatment (Tobey, McAuliff, & Rocha, 2013). Our study found that, although paternal unemployment was associated with higher chances of abuse, maternal unemployment was protective. Many educated mothers in Kerala follow traditional domestic roles and remain out of employment. Closer examination of interrelationships between maternal education, household earning, and maternal employment might explain the true nature of this finding (Ye & Reyes-Salvail, 2014). This may need further exploration.

Children who feel unsafe at school and dislike attending school are at higher risk of having abusive experiences; it is likely that feeling unsafe at school and disliking school are secondary to abuse and could be considered to be proxy measures of maltreatment.

5.1. Strengths

Our study has the largest sample reported from India. The survey was administered with adequate safeguards and support systems and none of the eligible students refused to participate. Teacher training and establishment of support services prior to the survey created a safe atmosphere that facilitated the exploration of topics usually considered difficult to discuss. Missing data was minimal (less than 1%). The use of an internationally validated tool may enable a comparison of our results with findings elsewhere. Most children found it easy to understand and respond to the questionnaire which was administered in the local language.

5.2. Limitations

Our study explored abusive experiences only in a school environment. Most of the previous studies reported abusive experiences in a much broader context. Therefore, our study is likely to underestimate the true prevalence of abusive experiences in society. Since our sample consisted solely of high school students, the results may not be generalizable to all school students. Future studies can investigate abusive experiences among primary school children; early detection of abuse is likely to facilitate timely intervention. Early intervention may lessen the long-term adverse impact of abusive experiences. Our sample is drawn from an urban area in a State with the highest human development index in India. We are, therefore, unable to generalize the findings to school children all over India. Socioeconomic classification was based on limited information. Although participants were assured of confidentiality, the

sensitive nature of the topics covered could have limited the reporting of such experiences.

6. Conclusion

A comprehensive assessment of abuse in a school environment in an Indian city indicated a high incidence of physical, emotional and sexual abuse. Considering the multifarious negative effects of such abuse, urgent attention is needed to prevent these traumas and to help children overcome its consequences.

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