
**“DETERMINANTS AND CONSEQUENCES OF
PHYSICAL ABUSE AMONG ADOLESCENT
STUDENTS (10-16 YEARS AGE) IN
BELAGAVI - A SCHOOL BASED STUDY”.**

Thesis submitted to

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Govt. of India Notification No.F.9-19/2000-U.3 (A)]
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**Doctor of Philosophy
In the Faculty of Nursing**

By

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
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ABBREVIATIONS

Sl.No	Abbreviation	Expanded Forms
1.	ACF	Administration for Children and Families
2.	ACYF	Administration on Children, Youth and Families
3.	ACEs	Adverse Childhood Experiences
4.	AOR	Adjusted odds ratio
5.	BD	Bipolar disorder
6.	CAN	Child Abuse & Neglect
7.	CAPs	Child Abuse Pediatricians
8.	CAPTA	Child Abuse Prevention and Treatment Act
9.	ICAST-P	Child Abuse Screening Tool – Parents
10.	ICAST-C	Child Abuse Screening Tool Child
11.	CBC	Child Behavior Checklist
12.	CPA	Child Physical Abuse
13.	CTQ	Childhood Trauma Questionnaire
14.	OR	Odds Ratio
15.	CI	Confidence Interval
16.	GSHS	Qatar's Global School-based Student Health Survey
17.	ISPCN	International Society for Prevention of Child Abuse and Neglect
18.	ICAST-CI	International Child Abuse Screening Tool - Children's Institutional Version. DALYs: Disability-Adjusted Life Year

19.	ISPCAN	International society for the prevention of child abuse & neglect
20.	ICAST-R	International Child Abuse Screening Tool-Retrospective Version.
21.	MWCD	Ministry of Women and Child Development
22.	MANOVA	Multivariate analysis of variance
23.	PA	Physical Abuse
24.	PCCTC	Parent–Child Conflict Tactic Scale
25.	PTSD	Post-traumatic stress disorder
26.	SES	Socio-Economic Status
27.	USDHHS	U.S. Department of Health & Human Services
28.	WHO	World Health Organization

ABSTRACT

Every child deserves a peaceful childhood and a life free of violence. Physical abuse, according to the WHO, is defined as the intentional use of physical force against a child that causes harm to the child's health, life, development, or dignity, or has a high risk of doing so Hitting, kicking, shaking, biting, strangling, scorching, burning, poisoning, and suffocation are all examples of this.

Objective of the Study:

To assess the determinants and consequences of physical abuse among school going adolescent students (10 to 16 years age) in Belagavi.

Methodology:

The study was conducted in eight schools in Belagavi using descriptive cross sectional research design with multistage cluster random sampling. The data were collected from 785 school going adolescents of Belagavi. The interview schedule was used to collect data from school going adolescents in a one-on-one interaction.

Results:

Among the study population, the prevalence of physical abuse (≥ 1 form) was 23.9%, in urban it was 26.23% and in rural it was 20.57%. Among the study population, the prevalence of physical abuse (≥ 2 form) was 8.7%, in urban it was 10.82% and in rural it was 5.64%. The univariate logistic regression analysis had shown statistically significant association with determinants and consequences of physical abuse with more than one and two forms of physical abuse among adolescents.

Conclusions:

The study concluded that children were subjected to various forms of physical abuse, the univariate logistic regression analysis had shown statistically significant association with determinants and consequences of physical abuse with more than one and two forms of physical abuse among adolescents. The study's findings cannot be generalised because it was limited to a few schools in the Belagavi district. The study provided an insight into the different forms of physical abuse faced by these adolescents.

Keywords: Determinants, Consequences, Physical abuse, Adolescents.

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CHAPTER 1: INTRODUCTION

“Children are like wet cement: whatever falls on them makes an impression.” – Haim

Ginott

Transitions in current globalization and socioeconomic transitions and the rising diversity of life have a profound impact on the susceptibility of children to types of abuse.

It is the right of every kid to grow up in a safe and nonthreatening environment. The rights of children are violated when they are abused or neglected.¹ Every year, tens of thousands of Physical, sexual, and emotional violence affect children globally. Child abuse has long-term effects mostly on victim's overall health, well-being, and development, as well as on community as a whole.²

Child maltreatment has long-term effects globally.³ World Health Organization defines child abuse and maltreatment as "physical or emotional ill-treatment, sexual abuse, neglect or negligent care, or monetary or other manipulation that harms the child's health, survival, development, or honor" (WHO).⁴

Every year, Approximately 40 million youngsters around the world are abused.⁵ Physical abuse is predicted to affect one out of every fourteen children in the United Kingdom.⁶ Physical abuse is frequently behavior that incorporates authoritarian control as a major element, anxiety-inducing conduct, and affection from parents is lacking. Physical abuse, according to the WHO, inflicts harm on the health, life, development, or dignity of a child through the deliberate application of physical

force, Suffocation, poisoning, scorching, kicking, shaking, biting, strangling, and all of the above are all types of physical violence.⁶

“MWCDG” (2007).India performed research spanning 13 Indian states, finding that an unacceptably high percentage of students in state-run schools, 53.8 percent, were subjected to corporal punishment. After it, there was In addition, there was a lot of physical abuse of girls in institutions. In institutions, a higher percentage of children aged 5 to 12 were subjected to physical abuse.⁷ Abused children may have physical signs. Examples include inexplicable bruises, welts, cuts, abrasions, burns, fractures, and disclosures. A child's behaviour may indicate physical abuse.⁸

According to a 2015 assessment in the United Kingdom, over 6,000 children were recognized as needing protection from physical abuse.⁹ Every year, more than 7,00,000 children in the United States are abused. In 2014, an estimated that 7, 02,000 children (unique instances) were abused or neglected. The risk of abuse was highest for the younger members of the population. Adolescents in their very first year had the greatest victimization rate, with 24.4 per 1,000 in the country's population.⁹ Children of all ages (all gender) are affected by physical abuse, violence and injuries in all provinces; which is usually seen in children aged between 4 to 7 years and 12 to 15 years.¹⁰

Child abuse may be caused by a number of variables, but some conditions increase the chances of abuse and make youngsters more susceptible.They are present in the backgrounds of the parents, the child's upbringing, and the child's personality features. Parenting aspects include: A parent had previously assaulted as youngster, and the pregnancy was unwanted. The parents might be mistreated as children.¹¹ Many young, unsupported moms with low educational backgrounds. Parents are

unskilled and have excessive expectations for their children. The parent has a chronic illness or is an excessive user of drugs or alcohol. Family violence is among the natural conditions that include congestion, deprivation, or a lack of potential to expand the family's resources.¹²

Child abuse causes harm to children and their families, as well as having long-term consequences. Child maltreatment has long-term repercussions on a child's mental and physical well-being, as well as social and job elements, and may hinder a country's economic and social advancement. Those who had six or more unpleasant childhood experiences lived two decades shorter than those who did not have such experiences. Children's brains suffer from stress as a result of maltreatment.¹² The nervous and immune systems are both harmed by stress. As adults, maltreated children are more likely to acquire behavioral, physical, and mental health issues, such as violence, depression, anxiety, low self-esteem, increased sexual behaviors, smoking, being overweight, having an unexpected pregnancy, and using alcohol and drugs. Heart issues, cancer, suicidal behavior, and STDs may all result from mistreatment.¹²

For abused children, the first line of defense is to remove them from the abusive setting, followed by counseling and the provision of a healthy living environment. Despite modern society's incredible advancements, few parents and children disclose child abuse because of the child's future, unless the exposure is extremely severe.¹³ The majorities of rural Indians still think and prefer to keep family matters private, especially when the child's drunken father is involved.¹³

In addition to the medical and social effects of child abuse, there is also a financial cost, which includes hospitalization, mental health therapy, child welfare, and long-term health expenditures.¹⁴

Young adults have a key role in informing society about child abuse, which may lead to societal reform. According to the writers, attitude is a fixed way of thinking or feeling about a certain topic or social circumstance.¹⁴ another study of university students' attitudes against child abuse indicated that education was positively related to the participants' reaction to child abuse.¹⁵

In the immediate wake and soon following the abuse, a child's principal (or acute) repercussions are felt. Physical harm will cause the child discomfort and medical complications, as well as, in the worst-case scenario death. Whipping, Burns, punching, strangling, binding bruises, Cuts, kicking, and other physical injuries will fade over time, but emotional suffering, such as sadness, anxiety, and low self-esteem, can live long after the outward scars have healed. The age at which the abuse happens has an impact on the way the injuries or any long-term harm are handled.¹⁶

All forms of physical abuse should be considered serious public health issues that have a considerable influence on key contributors to the global burden of disease. Understanding the protracted effects of child abuse should inspire more accurate identification of individuals at risk and the development of effective treatments to keep children safe.¹⁶

CHAPTER 2: NEED FOR THE STUDY

Any sort of violence towards children is a violation of their fundamental rights. The recognition of the devastating long-term repercussions of child abuse during their childhood, children demand unconditional love and dedication from their parents, as well as the minimal minimum of resources for healthy physical, social, mental, and vocational development. As a result, rather than using force or threat, it is critical to discipline youngsters in a kind manner.¹⁷ It is the obligation of members of the same family and/or arbiters to protect students from various sorts of violence and to help them to develop into responsible and active members of the community. Family should be thought of as a warm, safe, personal, and quiet environment.¹⁸

The UNCRC (Agreement on the Children's rights of the United Nations) thinks that the primary environment for the growth and well-being of children is the family.¹⁹

The effects of physical abuse on a child's life may be long-lasting. When a parent, to whom a youngster turns for safety and protection, becomes a danger, it's much more upsetting. There is a high prevalence of traumatic stress responses in youngsters. For adolescents who have been physically abused, it may be difficult to make and maintain friendships. They have little confidence in those in authority positions.²⁰ They have a poor opinion of themselves and do not feel they deserve anything. They may blame themselves for the abuse and feel compelled to conceal what is occurring in their households. The age of the kid, the kind of the abuse, and the length of the abuse all affect the child's reaction. Many physically mistreated children develop violent or other behavioural problems as adults. Aggression and

"acting out" are prevalent, but there are a variety of appropriate responses.²¹ Some youngsters respond little, if at all. They have lost their innate fight-or-flight reactions, which serve to protect us from danger. These youngsters may also be oblivious to other hazards. They may give up on establishing friends, achieving academic success, and making future plans.²² Instead of growing numb and reclusive, some abused children experience anxiety and fear. When there is no predictable pattern of abuse, this occurs often. A child with little self-control has no notion when or to what extent a caregiver may resort to physical violence. There is a possibility that the youngster may grow more anxious.²³

Due to stress, poverty, living mitigating factors, marital strife, mental and/or psychological disorders of adults at home, inferior law enforcement, and absence of child protection mandates, the family is the most prevalent site where children suffer violence. Willful child neglect and exploitation of children by parents and other members of the immediate family have been reported all over the globe.²⁴ According to one study conducted in the United States, child physical abuse occurred in 14.0 percent of cases when it was combined with mental abuse.²⁵ Children are severely harmed by intra-parental violence. For example, one study indicated that when spouse psychological abuse was present in the family, children were at a significantly higher risk of maltreatment.²⁶

Mothers and dads the most prominent culprits of physical abuse were shown to be in a national survey conducted in the United Kingdom, while siblings were also involved.²⁷ Behaviors and cultural concepts play a significant role in child maltreatment in Indian society. 30.0percent of respondents of male teachers and

16.7percent of its total of female teachers in Kolkata believe in employing physical punishment to regulate kids.²⁸

Nearly one-fifth of the world's youngsters reside in India. Around 440 million people, or more than one-third of the population, are under the age of 18. According to one estimate, 40% of these children require care and protection, demonstrating the scope of the issue. In India, with its multilingual, culturally diverse, and multi ethnic population, disenfranchised and economically deprived minorities face many obstacles.²⁹

Physical, psychological, emotional, behavioural, and social development are all affected by child assault. Insecure alliances interrupt children's actual growth processes, which could affect their capacity to converse and connect with people throughout their lives.²⁹

More research is needed in India to better understand how children are physically abused in their homes. As far as we know, no similar research has been done on this topic in Karnataka. Therefore, this study aims to get a better comprehension of the determinants and consequences of adolescents (10-16 years old) in Belagavi, have indeed been subjected to physical abuse.

Primary objective: To assess the determinants and consequences of physical abuse among school going adolescent students (10 to 16 years age) in Belagavi.

Operational Operation definitions:

- Prevalence: In this study, prevalence refers to all the cases of physical abuse existing at a period of data collection in the selected population of school going adolescents in Belagavi. The Point prevalence is assessed in this study

that included the proportion of a population that has the characteristic of physical abuse expressed in terms of frequency and percentage.

- **Determinants:** In this study determinant refers to Family, Psychological, and Social factors that may increase a child's vulnerability to Physical maltreatment. The Point prevalence of determinants are assessed in this study that included the proportion of a population that has the characteristic of determinant factors of physical abuse and is expressed in terms of frequency and percentage.
- **Consequences:** In this study consequence refers to changes in adolescents behavior, & Anxiety, Depression as a result of physical abuse. The Point prevalence of consequences are assessed in this study that included the proportion of a population that has the characteristic of selected consequences due to physical abuse & are expressed in terms of frequency and percentage.
- **Physical Abuse:** According to the WHO, is defined as the deliberate use of physical force against a child that creates or has a high chance of causing impairment to the wellbeing of a child, safety, maturity, or integrity. This includes being hit, kicked, shaken, bitten, strangled, burned, poisoned, or suffocated.
- **Adolescents:** WHO defines adolescents as those between the ages of 10 and 19 years. In this research, teenagers aged 10 to 16 years old were enlisted as participants.

Conceptual Framework:

A conceptual framework based on Web Causation Theory

A conceptual model is made up of the key concepts of what it presents. A conceptual framework describes how the concepts are related to one another. A conceptual model is simply a description that is used to aid in the visualization of something that cannot be directly visualized. It is the internal relationship between concepts that underpins research proposals or theory (Neuman, 1972).

A conceptual framework is a collection of statements, each of which expresses a relationship. The statements are organized in a logically interconnected deductive system that allows new statements to be derived from them.

Cicchetti and Lynch developed an ecological and transformational model of interpersonal violence applicable to child abuse research (1993).³⁰ For a complete understanding of social problems, it is necessary to include both ecological and systemic factors as well as transactional and developmental factors. In order to contextualize the problem of child abuse within an ecological framework, the four structural levels were considered.

When conceptualizing the problem of physical abuse within an ecological setting, the four systemic levels were taken into account. This includes the following:

- Microsystem, identification of family factors identification of family income level, occupation of mother's and father, education level of mother and father and location of family and no of siblings.
- Ontogenic system, the individual factors.
- Macrosystem, identification of adolescent's religion and economic status,

and parental strict discipline, characteristics of aggressive behaviour in adolescents, relationship with peers

- Exosystem neighborhood environment and relationship with peers these many facets of the environment shape an individual's development and adaptability over time

The model states that the forces from each level of the ecology (i.e., macrosystem, exosystem, and microsystem) and the individual characteristics influence the development of adaptive and maladaptive developmental outcomes in abused children.

Individual system ontogenic factors (Child traits): The **ontogenic Individual factor** is characterized by the identification of individual factors as gender, age, grade, religion & number of siblings, influences the teenagers for likely to witness physical abuse.

Microsystem: The Microsystem factor characterized by the identification of family income level, occupation of mother's and father, education level of mother and father and location of family. Microsystem factor refers to "immediate context" (i.e., the family) in which the child experiences abuse or neglect, including the bidirectional influence of parent and child characteristics and other relationships (such as parental conflicts) that may impact Parent-child interactions can either directly or indirectly contributing factors for child physical abuse.

Macro system: The macro system component is characterized by identification of parenting characteristics and relationship with peers, etc. plays significant role in contributing for child physical abuse.

Exosystem: The Exosystem component is characterized by identification of adolescent's neighborhood environment which shapes an individual's development and adaptability over time.

In this research, an attempt has been made to conceptualize physical abuse among adolescents with the ecological contexts as comprising of nested layers that have significant levels of proximity. These many facets of the environment shape an individual's growth and adaptability over time through their dynamic interplay and interactions with one another.

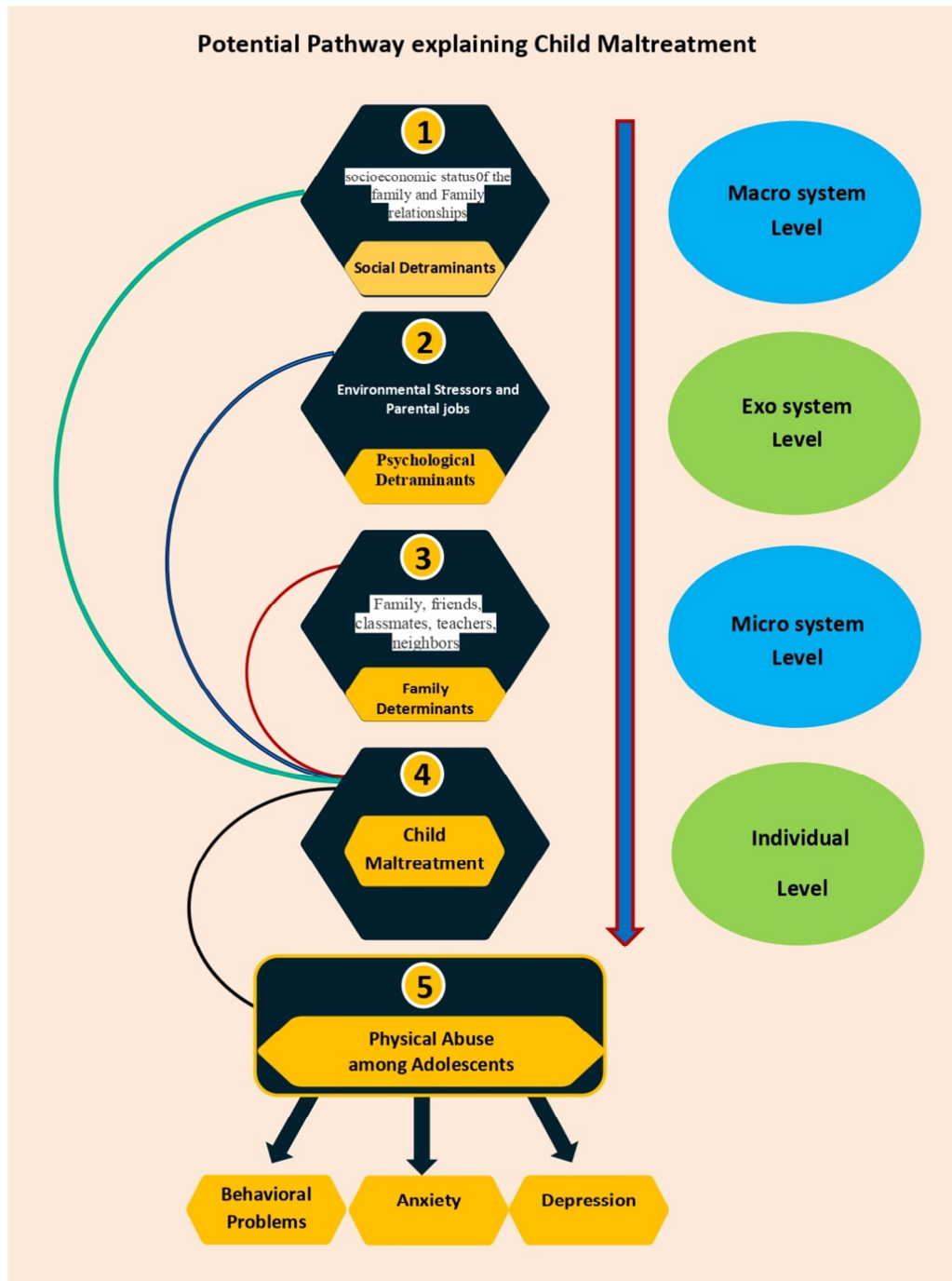


Figure 1: The conceptual framework on determinants and consequences of physical abuse among adolescents based on the ecological & transactional model of child abuse and neglect by Cicchetti and Lynch (1993).

CHAPTER 3: REVIEW OF LITERATURE

The literature was searched manually and using online databases including MEDLINE/PubMed, CINAHL, ProQuest, Ovid SP, Web of Science, Science Direct, Google Scholar, and Scopus. The information acquired for this literature study has been arranged into the following areas for clarity.

Prevalence and determinants of Physical abuse, among adolescents:

(Kumar MT et al., 2017) Conducted a survey among college students of South India Puducherry for the ubiquity of physical, psychological, and sexual child abuse. In all, 936 high school students were enrolled in the research. Participants mean was 14.2 ± 1.1 old. 56% of those questioned said they had been beaten as children, and 13.4% of them required emergency attention as a result. Researchers found that children abuse of all kinds, including physical, verbal, and sexual, is all too widespread. This calls for immediate action at the levels of the family, neighborhood, and state and federal government.³¹

(Daral et al., 2016) looked at how abuse of children in the past and more fighting in the family made the problem of child abuse worse. The study looked at 1060 girls in the 7th through 12th grades at government schools for girls in a semi-urban part of Delhi. Most were mid-teens. The research found that 70% of participants experienced abuse. 42.6percent of survey respondents were victims of physical abuse., Mother was most often responsible for physical abuse.No or poor father education increases physical and emotional abuse, whereas housewives reduce abuse and neglect.³²

(Charak R et al., 2014) studied with the use of a childhood trauma checklist, the incidence of abuse and neglect and its connections with gender, home type and parental education among Jammu adolescents. 702 Jammu-based 13- to 17-year-olds participated. This study have seen more teens report abuse than Child Traumatic Questionnaire-based Western studies (CTQ).Both parents' and children's educational backgrounds had little influence on school performance. ³³

(B. Meenakshi.et al., 2015) conducted a study of students in higher education about childhood physical, emotional, and sexual abuse. Researchers conducted the study with the help of South Indian college students. Selecting schools using stratified random sampling. TMWACHD Child Abuse Questionnaire for Young Adults was used to collect data.936 high schoolers filled out the survey. Participants averaged 14(fourteen) years old.48% of participants were harassed for their looks.56percent of respondents (524/936) of interviewees reported being beaten as children; 13.4percent of the total (70/524) needed medical care. Study concluded that, Emotional, physical, and sexual abuses are frequent in children and need rapid family, community, and governmental involvement. ³⁴

(R. P., Rajavel, S., Singh, S. K. et al., 2015) conducted a study to Estimate how often gender, physical, and emotional abuse happen in primary and secondary education. Abuse backgrounds were collected using the ISPCAN and ICAST Screening Tool. In this self-report, cross-sectional survey, 6,682 high schoolers from Thrissur, Kerala who went to school took part. 75.5%, of school adolescents reported Physical abuse. Most of the abuse was said to happen "sometimes" instead of "often. “More men than women said they had been abused: Many things, like being male, having a low income, having family members who use drugs and alcohol a lot, and

having trouble in school, make it much more likely that someone will use drugs. Children were less likely to report abuse if they enjoyed and felt comfortable at school. The findings demonstrate the need of addressing the issue of abuse in schools and mitigating its impacts.³⁵

(K.Nijhara, S Bhatia, et al., 2018) Examined the effects of mild disciplinary actions to physical abuse on cognitive performance, school participation, and social isolation in 658 participants in age group of 8- to 14-year-olds over the course of three years. Both caregiver and kid reports of physical abuse and harsh discipline were evaluated. Taking into consideration socio-demographic factors, only physical abuse was shown to be connected with intellectual abnormalities. All kinds of physical punishment decreased school involvement, and extreme corporal punishment increased peer isolation. The results were similar whether the children or caregiver reported physical punishment. The results of the study suggest that keeping children from being physically abused may help them do better in school, but it may not be enough to keep them interested and well-adjusted in school.³⁶

(Dass.N, et al., 2013) Conducted a survey in Trinidad to see whether there were any correlations between the occurrence of many traumatic experiences and specific mental health symptoms. Respondents age ranged from 13 to 17 years old; everyone was of Indoafrikan descent. They were all given the Traumatic Symptom Checklist for Children as part of their inquiry (TSCC). Multiple traumatic events, age, and gender were shown to have a significant impact on anxiety, anger, sadness, with post-traumatic stress disorder. The study's results imply that teenage mental health issues are linked to a variety of post-traumatic stress disorder (PTSD) symptoms. Younger teenage participants, on the other hand, had more psychological symptoms

than older adolescents. Females also showed more exacerbations than males throughout the investigation. The findings of this research have substantial consequences for health educators developing treatment plans for students in educational settings.³⁷

(Young Lives (2018) conducted survey about childhood poverty, The study reported that among 8 year aged children 93% of physical abuse. 68% of 15-year-olds said they had seen other children being physically punished. More than boy's experienced physical punishment than girls aged 8 years. The punishment was also more reported rural areas than urban areas.³⁸

(Sanjeeva GN et al., 2015) A research was done to predict the presence of physical abuse among the 303,10-19 year old adolescents. The accusation was made using a cross-sectional design. The researchers have found that 48.5% of children experienced the physical abuse and substance abuse among adolescents. The study summarized that adolescents from slum areas were reported physical abuse than non-slum children.³⁹

(Khawaja S, et al., 2015) Examined the prevalence of different forms of abuse and its relationship on academic success. There were 223 (54 percent) males and 191 (46 percent) girls out of 414 research participants with a mean age of 14.36 years. 140 (33.7%) individuals were physically assaulted and 236 (57%) people were verbally abused. During the previous year, 245 (59.2%) were engaged in a violent altercation, and 195 (47.1%) had been injured.⁴⁰

(Unasho YS et al., 2017) Studied childhood physical abuse in households and schools in Arba Minch Town, Ethiopia, among school adolescents. Through multi-stage random selection, 737 high school students were included. Students from 7th through 10th grade self-administered questionnaires and conducted interviews for the data, which was then analysed using SPSS (IBM 20).The study found that of the 462 pupils, 64 percent had been physically abused as children.77.3 percent were victims of parental abuse, while 58.4 percent were victims of abuse by members of the school community. Childhood physical abuse was exacerbated by the presence of intimate partner violence ⁴¹

(Saminathan TA et al., 2019) investigated the present state of physical abuse among Malaysian adolescents at home. In all, 497 high school students completed self-administered questionnaires as part of the study. Physical abuse at home was found to be 11.8 percent of the time among pupils, with 13-year-olds being the most susceptible. Among physically abused adolescents associated with mental health difficulties, drug misuse, and educational troubles, according to the study's results. According to the findings, physical abuse of teenagers at home should be addressed with appropriate measures.⁴²

(Bala MO et al., 2018) conducted a study to Study interpersonal abuse and physical injuries among Qatari high schools.Secondary data from Qatar's 2011 Global School-based Student Health Survey (GSHS) was used to determine the prevalence of physical fights and associated characteristics.Men 60.5% outnumbered females 37.6% in physical conflicts, according to the survey.Bullying, smoking, and parental monitoring were connected to fighting.⁴³

(Dipika Neupane et al., 2018) carried out a Cross-sectional research of child abuse in Kathmandu, Nepal's public secondary schools. Prevention of Child Abuse the International Society and Neglect established the globally certified questionnaire. The survey found 76.15% of physical abuse high schoolers. Adults most often abused children.⁴⁴

(Iglê Moura Paz Ribeiro et al., 2015) Performed a cross-sectional analysis of the degree of abuse suffered by Brazilian public school students aged 11 to 15, the conventional ICAST instrument was used to obtain data from 288 students. The research found that school students reported the greatest occurrence of physical violence (85.4%), followed by psychological violence (62.5%), and sexual violence (62.5%). (34.7 percent).The research found that students reported a higher prevalence of various sorts of violence.⁴⁵

(Zhou Y et al., 2019) Led a study to estimate the status of child maltreatment and associations with mental health among 1511 school children ($M_{age} = 11.48$ years) from western china. The results of the study revealed that total, 12.3%, of the children reported physical abuse. The study found a link between child maltreatment and psychological disorders like depression, and that boys were more likely to be mistreated than girls. As per the findings, population-based preventative and educational initiatives should highlight the substantial negative consequences of child maltreatment.⁴⁶

(Elghossain T et al., 2019) conducted a systematic to document the The study reviewed prevalence rate of violence among teenagers in 22 Arab league nations. peer reviewed journal articles using citation index of Medline and the social sciences data on different types of child maltreatment among nationally-representative, population-

based surveys. T According to the information published, Arab countries have a high rate of physical, sexual, and psychological abuse of children and adolescents. The study concluded that maltreatment among adolescents is higher and there is need to expand and improve the qualitative and quantitative research on violence against the adolescents.⁴⁷

Unicef (2018) the study findings reveled that physical abuse of children is prevalent throughout East Asia and the Pacific, with prevalence rates ranging from 17 to 35 percent for both boys and girls in low-income and low-middle income nations, and prevalence rates ranging from 1 to 13 percent in upper middle and high-income countries. When parents are explicitly questioned on physical abuse of their children, they report much higher prevalence rates.⁴⁸

(Julia M. Kobulsky et al., 2017) conducted nationwide census study among 636 (eleven to seventeen year old adolecents) both the parent and child instruments were used to collect the data. Physical abuse is linked to low parent–child collaboration. Low parent–child cooperation has been shown to be associated with physical abuse.⁴⁹

(Vidal HG et al. et al., 2019) undertook a five-year longitudinal research in Brazil to identified the prevalence of physical violence among schoolchildren. A total of 9783 cases were studied, with the majority of the participants being men (n=5447, or 55.7 percent). The victims' average age was 13 years and 9 months, and the most prevalent attackers were victims' friends (n=2538, or 25.9%).According to the findings, facial injuries were the most common, affecting little over a fifth of the overall sample (n=3673, or 20.1%).The research has found that dentists may play a

vital role in detecting and reporting physical violence against children and adolescents.⁵⁰

(Chandraratne NK et al., 2018) Conducted a study by Using multistage cluster sampling, researchers undertook a cross-sectional research to look at how often physical, emotional, and sexual abuse happened to 1500 students in Sri Lanka between the ages of 18 and 19. The data was gathered utilizing the ISPCAN child abuse screening programme. Physical violence was suffered by 45.4% of the participants. The prevalence of physical abuse was higher among male pupils (54.8 percent vs. 38.3 percent). The most prevalent perpetrators of physical and emotional abuse were parents and lecturers. As a substantial public health hazard, the research found that educational interventions are necessary.⁵¹

(Ngisa FS et al., 2017) Conducted a study by Using a survey methodological approach, conducted a study to analyse the influence of child maltreatment on school performance among public school pupils in the Kieni west sub-country. There were 52 school administrators, 560 lecturers, and 2,275 participants in the study. Questionnaires and interview schedules were used to gather information. The study's results indicated that students had a minimal knowledge of child exploitation. The study also discovered that child maltreatment had an adverse impact on school attendance, student conduct, and learning problems, and so all hypotheses were rejected.⁵²

(Schick M et al., 2016) undertaken research to evaluate the risk variables and prevalence of different types of abuse among adolescents in different countries and ethnicities background of immigration. Total 6787 adolescents were enrolled in the study. The study found that there are significant adjusted odds for physical abuse

among immigrant back round adolescents. The study also reported that poor socioeconomic factors were related for physical abuse among adolescents.⁵³

Determinants of Physical abuse:

(Daral s et al. et al., 2016) Executed research the most prevalent perpetrators of physical and mental abuse were mothers. Mothers who were housewives were less likely to be physically abused and neglected by their husbands than those who worked outside the home. Targeted respondents who had a history of parental maltreatment were more likely to be the victims of child maltreatment.⁵⁴

(Rode D et al., 2019) Conducted a study to explore parental intra violence pressure and physical abuse and its consequences among 11 to 14 years aged adolescents. The study reported that among adolescents who have experienced physical abuse were faced more consequences in the form of anxiety and aggressive behavior. The study has suggested that there is need of close observation and reporting the physical abuse among adolescents.⁵⁵

(Moylan CA et al., 2010) conducted a study to explore the relationship between family disharmony and abuse among 457 adolescents. The study concluded that abuse among a children and family violence are both have been interrelated each other, and adolescents are in more risk of having behavior problems those who have experienced child abuse.⁵⁶

(Widom CS et al., 2001) conducted a study to assess the relationship between alcohol abuse in parents and complications in children. According to the findings, there seem to be two dimensions to the association between child maltreatment and alcohol and/or drug use or abuse. To proceed with, some data indicates that parental

substance addiction is connected to physical or sexual abuse of children. However, the results of study in this field remain ambiguous. Secondly, being exploited as a child may lead to a higher risk of subsequently having alcohol-related disorders. This association has been best displayed by women who have been victims of childhood maltreatment. Coping capabilities, antisocial conduct, and emotional issues such as post - traumatic stress are all expected to have a part or have an influence on this link.

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(vertavahealth.com) *Evidence-based behavioral health treatment center*. The Editorial Team Vertava Health reported that every year, an estimated 700,000 children in the United States are abused. Nearly every one of these situations involves a family member of the child. Alcohol is present in many circumstances. Because of the way alcohol interacts with the brain, it is present in many cases of child abuse. Alcohol can create violent and aggressive tendencies in some people. Surviving abuse, on the other hand, can lead to alcoholism. Many persons who suffer with alcoholism have had a history of child maltreatment. There is a substantial link between alcoholism and child maltreatment. It's critical to understand how these two scenarios interact in order to break the cycle and prevent future abuse.⁵⁸

(verywellmind.com) *Recognizing alcoholism as a disease*: According to the verywellmind.com, many alcoholics believe their drinking will not really affect others. Children with alcoholic parents are endangered. If their alcoholic parent was harsh or aggressive while drunk, their teenage children may acquire a fear of angry people. They may avoid disagreements and confrontations for fear of violence.⁵⁹

According to WHO fact sheets, there is a strong correlation amongst child maltreatment and alcohol consumption, notably when drinking is harmful and toxic. Alcohol plays a big part in child maltreatment, and being mistreated as a kid raises the possibility of harmful drinking later in life, according to several research. This fact sheet discusses hazardous alcohol use and child maltreatment, as well as the long-term effect of maltreatment on alcohol use patterns in maltreated adolescents and the role of public health in prevention.⁶⁰

(Indianexpress.com (2019) Akhila Das Blah psychologist wrote on blog of the Indian express news room about “Why you should stop comparing your child to others” Parenthesis: When we compare our kid to others, we risk losing sight of what makes him distinctive. We’re all different. Our talents, interests, personality characteristics, and abilities define us. Comparing our kid to others increases his worry and tension. Unable to impress parents is distressing for kids. Teens' self-esteem may suffer if they think everyone is better than them. They think they can't do anything well. They may shun social interactions and group activities. They may think nothing they do is good enough, causing depression.⁶¹

(Rodriguez CM et al.,) Analyzed how child's psychological functioning altered as a consequence of their parents' reported punishment methods, and even the likelihood of child abuse. Children of parents who used greater harsh punishments and had a stronger potential for abuse were selected to examine whether they would have dysphoric attitudinal style and melancholy or anxious somatic symptoms. With their parents, 42 New Zealand youngsters aged 8 to 12 took part in the study. Parents' responses to physical discipline situations and the possibility for child abuse were compared to kid-reported measures of depression, anxiety, and attributional style.

Anxiety symptoms were more prevalent in children whose parents scored higher on the abuse probability scale and used harsher punishment methods. Depressive symptoms in children, as well as some components of a maladaptive attributional style, were detected in homes with a higher risk of abuse. Even without evidence of abuse, the findings reveal emotional issues similar to those experienced by maltreated youngsters.⁶²

Consequences

(Turner S et al., 2020) undertook a research to see whether sleep problems and adolescent child abuse are linked. The research examined 2910 14-to-17-year-olds. Various kinds of child abuse were connected to longer sleep episodes.⁶³

(Yoon S et al., 2018) Researched the long-term impact of repeated physical assault on the onset of psychological trauma and observed the stress-related disorders among adolescents in a detailed way. Three rounds were used to gather the data from a Survey of Childhood and Adolescent Well-Being. This research involved 491 adolescents between 11 to 13 years old. According to the study, greater levels of early PTS symptoms were associated with more difficulty externalising conduct. At every diagnostic level, physical abuse was linked to externalising behaviour issues and post-traumatic stress related (PTS) concerns. The research indicated that persistent physical abuse during adolescence necessitates continual examination and protection.

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(Kwok SY et al., 2008) Explored the connection between positive psychological variables and emotional skills, suicidal thoughts, and physical abuse among students, a cross sectional survey was undertaken among 527 adolescents from

Shanghai, with a mean age of 14 years. Suicidal thoughts was shown to be substantially and positively connected among teenagers who had undergone physical abuse, according to the results of the research. Moreover, the study found that problem-solving logically reduced the Female suicidal thoughts are affected by specific (physical) maltreatment. In this study, women who were more empathic and who had been physically abused by their parents were more likely to contemplate suicide. The research recommended that parents' views toward physical abuse be changed, that they be guided on acceptable parenting attitudes, knowledge, and abilities, and that teenagers' problem-solving skills be improved.⁶⁵

(Lau JT et al., 2008) **Conducted a study** to determine the relationship between adolescence family physical abuse and mental health issues among adolescents, a questionnaire survey was administered to 489 high school students. Three types of familial physical misconduct were reviewed: recent use of disciplinary actions, recent use of unjustifiable beatings, and recent use of injury-causing whippings. Researchers noticed that students who were physically abused were linked to good Achenbach CBCL outcomes, substance usage issues, self-injurious behaviors, and a lack of parental support, all of which have been associated with a higher risk of Achenbach CBCL outcomes. The research found that specific kinds of physical abuse in the family were linked to a variety of mental health issues.⁶⁶

(Chandraratne NK et al., 2018) Conducted a cross-sectional study among 1500 adolescents between the ages of 18 and 19, to find out the prevalence of physical, emotional abuse in childhood. ISPCAN, a child abuse screening measure, was used to analyze the information. And as per the findings, 45.4 percent of individuals reported physical abuse, 9.1 percent reported sexual abuse, and 27.9 percent claimed emotional

abuse as types of childhood abuse. A greater percentage of male students had reported having been physically mistreated than female pupils (54.8 percent vs. 38.3 percent). The most common perpetrators of physical and emotional abuse were parents and instructors. People should be educated about the dangers of smoking, according to the findings of the research.⁶⁷

(Cui N et al., 2018) Conducted extensive study on 296 children with an average age of 12.31 0.56 years to see if there would be a link between mother and father physical violence and child disruptive behavior. The data was taken using a parent-child conflict scale and a child behavior checklist to determine internalizing and externalizing behaviours. The outcomes of the research revealed that mother physical abuse was more prevalent and had particular links to child behaviour.⁶⁸

(Nilsson D et al., 2017) studied 3288 high school students See whether physical abuse of children is linked to mental health concerns including depression, anxiety, and a loss of self-worth. As according to research, physically assaulted students tend to report mental illness and negative opinions of their parents and parenting practices.⁶⁹

(Keene AC et al., 2016) conducted a study to examine relationship between helplessness, emotionality, and reticent behavior (narcissistic vulnerability) shame, and child physical abuse among 400 students, among total 400 students 134 students were experienced child physical abuse. Results of the study indicated that students who experienced child physical abuse have shown more anger and Aggressiveness and higher-level of shame and narcissistic vulnerability than non-abuse study participants. The study concluded that child maltreatment is a mediator of narcissistic vulnerability and shame-proneness in adolescence.⁷⁰

(Theoklitou D et al., 2012) conducted a study to investigate how the abuse in school environment effects in school grading of pupils among 1339 students studying in 4th to 6th class who lived in both urban and rural areas. The results found significant relationship between the two genders ($p < 0.001$), with boys being more experienced all forms of abuse. The study concluded that this study results will enlighten the ministry of education, educators, and parents on the issue.⁷¹

(Sunday S et al., 2008) examined the relationship between parenting by both parents and physical abuse among adolescence and gender difference. 51 girls and 45 boys, were included in the study. The data was collected through child protection service by using conflict tactile scale and parenteral bonding scales. According to the findings, fathers were shown to be the primary perpetrators of physical abuse in children, but moms were seen as more nurturing and less intrusive by both groups. And results also reported that abused girls were less close with the fathers. The study concluded that dysfunctional family relationships found among adolescents who experienced mild physical abuse and it may result in poor adult outcomes.⁷²

(Moretti MM et al., 2013) conducted a study to establish relationship between depression and child abuse among sample of high-risk youth ($n=179$) from juvenile justice clinical setting by 3 settings over the period of 5 years. The study results revealed that parental abuse was more related to have depressive symptoms among boys than girls. The study results concluded adolescence as a sensitive developmental period and abuse experience among adolescents have profound risk for later depression.⁷³

(Annerbäck EM et al., 2012) conducted extensive study on 296 children with an average age of 12.31 0.56 years to see if there would be a link between mother and father physical violence and child disruptive behavior. The data was taken using a parent-child conflict scale and a child behaviour checklist to determine internalising and externalising behaviours. The outcomes of the research revealed that mother physical abuse was more prevalent and had particular links to child behavior.⁷⁴

(Gallo EA et al., 2018) conducted a systematic review study on long term effects of child maltreatment on its effects on mental health, with a cohort, case control ,cross sectional design was used ,among adults experienced of child maltreatment during adolescence <18 years of age. The study results revealed that exposure of different kinds of maltreatment increased the odds of depression and anxiety. And the study results also found that maltreatment was higher among women than men, however there was no statistical significant associations found between genders. The study concluded that Physical abuse in childhood and adolescence are risk factors for depression/anxiety in adulthood.⁷⁵

(Adams J, Mrug S, Knight DC et al., 2018) conducted a study to assess forecasters of abnormal behaviors (psychopathology) due to childhood physical and sexual abuse, among 1270 emerging adults with mean age of mean age = 19.68; 51% females. Results of the study indicated that physical abuse among middle age were associated with all forms of abnormal behaviors in the form of posttraumatic stress disorders (anxiety and depression).the study concluded that abuse experiences among after age 5 may lead to serious impact on mental health of the children.⁷⁶

(Gardner MJ et al., 2019) conducted systematic review and meta-analysis to find out association between all forms of maltreatment among children and anxiety and depression symptoms. Total 604 studies were assessed and only 106 of them were met inclusion criteria. The study results found that there were significant association between all forms maltreatment and PTSD (posttraumatic stress disorders).⁷⁷

(Wang M et al., 2016) conducted a study to explore the relationship between maternal and paternal and physical aggression and anxiety among children in china. The results of the study revealed that maternal paternal aggression were significantly associated with children's anxiety. The study concluded that appropriate interventions and preventions are needed to paternal physical abuse and maternal corporal punishment.⁷⁸

(Fergusson DM et al., 2008) conducted a cohort study in New Zealand, to figure out what is going on between mental health concerns and physical and sexual abuse in 1000 young adults in early childhood. According to the findings, there is a link between physical and sexual abuse, anxiety, depression, and antisocial suicidal thoughts substance dependency in people aged 16 to 25. The research indicated that early childhood exposure to these two forms of maltreatment leads to significant mental illnesses in early adulthood.⁷⁹

(Miragoli S et al., 2018) Conducted a study to assess the parenting stress and child behavior perception among the parents and likelihood risk of child abuse among 259 parents by using processing model for social information ,this study also examined the how the parental stress influences the perpetration of the child abuse. The study results found that both parents perception about the child abuse was

positively associated the risk of child abuse. The study concluded that parental stress results in potential risk for abuse among the children.⁸⁰

(de Oliveira IR et al., 2018) Analyzed the influence of various forms of abuse and its connection with mental observations in 347 Brazilian samples (aged 11 to 17 years). The study results found that there were synchrony of child maltreatment, and also there was a significant association between symptoms of psychiatry among the population. The study concluded that these study findings enhanced our knowledge about the relationship between child maltreatment and possible psychiatric symptoms among the high-risk youth.⁸¹

(Ju S, Lee Y et al., 2018) conducted a study among 5th to 8th standard studying adolescents to assess the individual development progress with child maltreatment and its association with self-esteem attachment with peer & depression. The study results revealed that intensity of child abuse increases the risk for depression, and also abuse decreases the self-esteem with peer attachment. The study concluded that self-esteem plays as important role as protective factor in adolescents.⁸²

Anxiety

(Pelcovitz D et al., 2000) conducted extensive study to see if there would be a link between physical abuse, domestic violence, and mental illnesses in adolescents. Depression, mental problems, PTSD, and behaviour disorder were more prevalent in the first group than the second. First group seemed gloomy and nervous.⁸³

(Guo L et al., 2020) Evaluated the relationship between childhood maltreatment and worry symptoms in Chinese adolescents, with a specific emphasis on whether such relationships altered based on coping style choice. According to the data, physical abuse was revealed to be a significant contributor to teenagers' anxiety symptoms.⁸⁴

According to the WHO Newsroom, mental health is impacted by several scenarios; the more elements kids are exposed to, the worse their mental health will be. Adversity, peer pressures, and identity formation may induce adolescent stress. Media content and gender norms may worsen the gap among an adolescent's observed reality and their future beliefs or objectives. They are also impacted by how well they get along with their loved ones and how well they work with their coworkers. All of these factors have been shown to have a negative impact on mental health, including violence (particularly against women and bullying), parenting behaviors, and financial hardships.⁸⁵

(Fakunmoju SB et al., 2015) Conducted a study to find out how physical abuse at home and school affects anxiety disorders like depression in adolescents in Nigerian high schools. 502 youngsters and teens between ages of 13 and 20 were asked to take part in the study. The research explored the correlation among gender and physical abuse by parents and anxiety disorders, as well as the relationship between physical violence by parents or family teachers and depression in the sample, which included 39.6% of those who had been physically assaulted at home and in the classroom. Investigators found that physical abuse by parents is more likely to cause fear depression or anxiety than physical abuse by teachers. The results are viewed in terms of what those who mean for mental health, research, practice, and theory.⁸⁶

Lakhdar MP et al longterm study to investigate whether parent-to-child maltreatment causes GAD.Frequent abuse was connected to GAD symptoms in children with ignorant parents.⁸⁷

(Pandey R et al., 2020) conducted a study to assess the Childhood maltreatment and its effects on mental health in Indian adolescents who had worked as children. The study results revealed that A substantial percentage of the sample (83.36 percent) reported childhood abuse. All of these forms of maltreatment were linked to poor mental health.⁸⁸

(Slopen N et al., 2012) Adolescents' experiences with violence, despair, and anxiety were examined for common themes. The study concluded that exposure to high levels of violence—whether in a single domain or across several domains—raises the risk of MDD and GAD, and the risk rises with multiple domain exposure. As a result, widespread exposure to the largest risk of psychopathology development is related with violence. The study also reported that according to these findings, prevention and therapy efforts should focus on adolescents who are exposed to violence in a variety of settings.⁸⁹

(Nguyen DT et al., 2019) conducted a study to evaluate relationship between teenage self-esteem and health and welfare hazards and protective variables. The goal of the study was to find out how common poor self-esteem is among secondary school students in Vietnam, as well as the sociodemographic factors that influence anxiety, depression, educational stress, and suicidal ideation. The results found that A prevalence of 19.4% was found among students with low self-esteem. Attending coursework was revealed as a resilience factor for low self-esteem, but excessive scholastic pressure and emotional and physical maltreatment by parents or other

household adults were found as important risk factors. Poor self was characterized by feelings, sadness, and suicidal ideation.⁹⁰

(National Health Service UK) reported the factors contributing to a child's risk of depression: issues in the family Bullying includes verbal, physical, and emotional abuse. Sadness or other mental health issues run in the family. A single traumatic incident, such as the divorce of parents, a loss, or difficulties at school or with other children, can sometimes set off depression. A combination of factors is frequently to blame. Your child, for example, may have a proclivity for depression as well as a history of adversity.⁹¹

(Child Welfare Information Gateway USA) Child abuse and neglect may affect a person's physical and emotional health, says Child Welfare Information Gateway USA. Early childhood abuse may harm developing brain, leading to mental health difficulties over adolescence and adulthood. Abuse and neglect may cause isolation, fear, and a loss of integrity, which can lead to low identity, despair, relationship difficulties, and alcohol / drug addiction.⁹²

Summary

Various studies related to physical abuse, the prevalence of physical abuse, incidence of physical abuse among the adolescents, determinants and consequences of physical abuse, and its association between physical abuse with selected demographic variables of physical abuse were reviewed. From the available literature, it is evident that though the problem is extensive, very few studies were published in India on physical abuse compared to other parts of the world. The process of analyzing various literature, has provided new insight for the conduct of the present study. This, in turn, enabled the investigator to widen the knowledge on the topic of the study.

CHAPTER 4: MATERIAL AND METHODS

This chapter discusses the methodology used to find out the Determinants and consequences of physical abuse among adolescent students (10-16 years age) in Belagavi. The methodology will be divided into sub sections for convenience of description, such as study design, setting description, population, sample and sample size, sampling procedure, sampling criteria, ethical concerns, summary of data collection instrument, data collection methods, pilot test, and data analysis method.

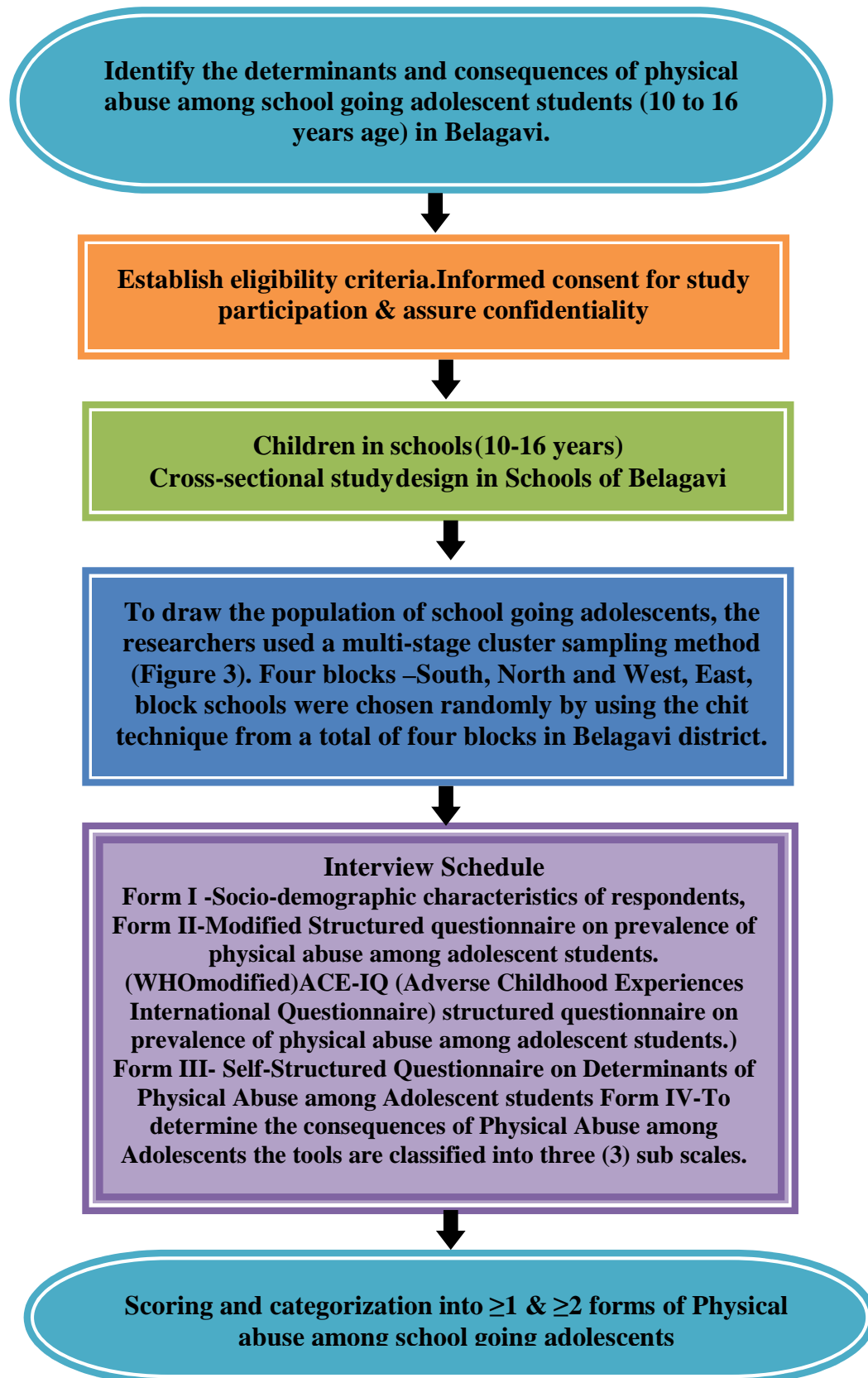
Research Approach:

The goal of the study was to describe determinants and consequences of physical abuse among adolescent students (10-16 years age) in Belagavi. A quantitative research study was done through cross-sectional method to achieve the objectives of the study.

Research Design

The Determinants and Consequences of Physical Abuse among Adolescent Students (10-16 Years Old) in Belagavi were studied using a cross-sectional survey approach. The flow diagram shows a schematic representation of the research design.

Figure 2: Flow diagram depicting the study design flow of the child participants



Research Setting & Population

The location was chosen based on the study's practicality, subject availability, and authority cooperation. A total of 785 school going adolescents aged 10 to 16 years, from 8 schools of both urban and rural regions schools were selected to collect the data.

Sample:

A sample is a subset of the population chosen to reflect the entire population. The accessible sample for the study consisted of 785 school going adolescents aged 10 to 16 years, of both urban and rural regions schools were included to collect the data.

Sample size & Sampling technique

Sample size: The sample size was calculated based on reported prevalence in areas (lowest being 42%) that are geographically and socio-culturally similar to the study area. After contacting a statistician, the sample size was calculated based on the outcomes of the prior study. Considering absolute error of 5% with 95% of confidence interval (inflation factor for cluster sampling considered as 2) the sample size was estimated to be 785.

Estimation of Sample size:

The following formula was used to obtain the sample size of 785 research participants.

$$n=4pq/d^2$$

p = Anticipated prevalence of 43.2% based on previous studies

$$q = 100-p$$

$d = \text{absolute error (5\%)} \text{ with } 95 \text{ \% of confidence interval}$

$$n = 4 \times 43.2(100-43.2) / (5)^2$$

$$= 392.6$$

Inflation factor for cluster sampling was considered as 2

So, the sample size was estimated as $392.6 \times 2 = 785$

The sampling technique followed for present study is as follows-

Institutions in Belagavi are divided into four regions: East, West, North, and South; by each region, clusters institutions were chosen using just a simple randomized approach; and teenagers aged 10 to 16 are selected from different classes. Simple Random technique is used to generate the appropriate sample sizes in proportional to strength of the class. The appropriate authorities granted the necessary administrative approval. Participants were also given information on the study's benefits and their right to withdraw. Meanwhile, the participants were told that, the information they provided would be kept private, and their agreement, as well as that of their parents in the case of minors, was secured. (From June 2017 through September 2019, researchers collected data for the study). The data were collected from 785 school going adolescents of Belagavi. The interview schedule was used to collect data from school going adolescents in a one-on-one interaction.

Sampling criteria:

Inclusion criteria

- Primary and high school students from 10 to 16 years of age were eligible for participation.
- Adolescents who all are willing to participate in the study
- Teenagers who were there when the data was obtained

Exclusion criteria

- Those adolescents whose parents fail to provide their assent were excluded.
- Individuals aged 10 to 16 years old who were experiencing a wide range of physical and behavioral health issues.

Data Collection tools:

The tools were classified into four types.

- I. Socio-demographic characteristics of respondents,
- II. Structured questionnaire on prevalence of physical abuse among adolescent students Tool for screening child abuse :(WHO)
- III. Structured Questionnaire on Determinants of Physical Abuse among Adolescent students,the self-structured questionnaires tools are classified into 3 types:
 - a) Family Determinants
 - b) Psychological Determinants
 - c) Social Determinants
- IV) To determine the consequences of Physical Abuse among Adolescents the tools are classified into three (3) sub scales.
 - a) Behavioural Assessment scale for adolescents,
 - b) Revised Children anxiety scale (RCAS)
 - c) The Revised Kutcher Adolescent Depression Scale was designed to determine depression levels in adolescents.

Interview schedule for school children:

Section I: was designed to gather information on socio- demographic characteristics of the school going adolescents, like their age, gender, religion, education status of the mother and father, Occupation of the mother and father, Income of the family, No of siblings.

Section II: Consisted of Prevalence (Indicators) of physical abuse among school going adolescents. There were a total of 10 questions, asking whether the teenager had been beaten and how the beating occurred. Have you ever been yelled at or screamed at? Is it true that you've been pushed, grabbed, or kicked? Have you been hit, beaten, and spanked with hand by anyone? When was the last time someone beat you up or smacked you in the face with something? Have you ever been choked or drowned? Do you know someone who has been burnt or scalded? Has someone ever confined you to a limited space? Have you ever had anybody tug your hair? Has somebody ever yanked, twisted, or twisted your ear? Have you ever been called names by someone?

Section III: Consisted interview tool about the determinants of Physical abuse among school going adolescents .The determinants were classified into three types family, psychological & social determinants. In family determinants fighting among family members, alcoholic history, and parental pressure, showing disagreement toward household rules were included in the tool. In the psychological determinants aggressive nature, dependency, shy or timid, attention deficit hyper active nature, lying and cheating, difficulty in performing activities, difficulty in following through instructions and fail to finish work. In social determinants difficulty in showing cooperation in group activities, difficulty in Showing good sportsmanship when

winning or losing, not able to stay calm, not apologizing for rude behaviour, questionnaires were included in the study.

Section IV Behavioural Assessment measures, anxiety and depression items were incorporated in the instruments to investigate the impact of physical abuse.

Content Validity

To ensure that the tool's content was accurate, five experts from the fields of paediatrics nursing, psychologists, and law were provided the tool - the child's baseline proforma, the study statement, objectives, and validation forms (Appendix 8B). To ensure content validity of the tool, the validators were invited to provide their helpful comments or ideas based on relevance, accuracy, and appropriateness. There were 59 elements in the tool (13 in Section A, 10 in Sections B and C fifteen, and 21 in Section D). There was complete agreement on every item. One validator proposed keeping the item on 'caste' optional. The expert's proposal was considered, and the necessary changes were implemented.

PILOT STUDY

Pilot study is primer research strategy or preliminary run, done in course of action of a crucial research process. Feasible path are not only an assessments by taking humble number of individuals and these are not brief test primers such examinations as may be coordinated among unobtrusive number of masses.

The pilot study was conducted at selected educational institution from belagavi to find out the feasibility of the tool. Prior to actually beginning the research, the required approval from the governments was obtained. According to the sample

parameters, around 80 teenage students (10percent) of the respondents of the overall population of the current survey) were chosen. The sampling were given explicit approval before standardized resources were given to the individuals. The instruments and design of the study were proven to be efficient after completing a research regarding pilot study.

Conclusion drawn from outcome of the pilot study are as follows –

- The research methodology and instruments were judged to be acceptable.
- There was good cooperation from the participants of pilot study and all the participants were participated with their own interest and they have given genuine responses for each item which was asked to them.
- The researcher was decided to translate the data collection tools in to Kannada language.It helped the researcher to decide about the statistical methods for the analysis of the data.

Reliability

The test-retest approach was used to determine the reliability coefficient with Cronbach alpha & Standardized alpha of the instrument. Split-half reliability & Guttman split-half was used to determine the reliability of the tool. The item analysis is done for each tool and questionnaire. 'Interview schedule for school children' among 80 school going adolescents. The tool was used for the first time on the first day and again on the tenth day. The calculated 'r' for the English and Kannada versions of the tool ($r=0.91$) was judged to be reliable ($r=0.86$).

Ethical Clearance:

- The ethical clearance certificate was obtained from the institutional ethics committee. (Meeting was held on 5th June 2017).
- Institutional Ethical committee (IEC) provided Approval for present research study. (Reference No: KLEU/EC/17-18/D-102; Dated 5/6/2017)

Informed consent and assent

Before enrolling the participants, they were given a full subject information sheet (Appendix-6A) on which the material was explained.

After displaying them the interview schedule and answering their questions, informed consent was obtained from participants (Appendix-6B), parents/caretakers. Children (over the age of 12) were asked for their informed assent (Appendix-6E). The study's goal and utility were also conveyed to the participants. They were also guaranteed that the information would be kept private.

Procedure for Data Collection:

The appropriate authorities granted the necessary administrative approval. Participants were also given information on the study's benefits and their right to withdraw. Meanwhile, the participants were told that, the information they provided would be kept private, and their agreement, as well as that of their parents in the case of minors, was secured. (From June 2017 through September 2019, researchers collected data for the study). The data were collected from 785 school going adolescents of Belagavi. The interview schedule was used to collect data from school going adolescents in a one-on-one interaction. According to prevalence questions, the individual who replies "most" or "always" is considered to have experienced physical abuse, while those who reply "never" or "sometimes" are considered to have not had

physical abuse. The last step was to tally up the results for all of the questions. Those who had an overall score of ≥ 1 were considered to have been physically abused; those who received an overall score of ≥ 2 were also considered to have been physically abused;

Statistical Analysis

- ❖ The frequency and percentage of categorical variables were analyzed using descriptive statistics. A pie chart as well as a bar graph are also used to display the data.
- ❖ To see whether the explanatory factors and outcome variables were connected, we used a single-variable binary logistic regression model. The unadjusted odds ratio and 95% confidence interval (CI) are reported.
- ❖ P value less than or equal to 0.05 was deemed statistically significant.
- ❖ Version 22 of IBM SPSS was utilised for statistical analysis.
- ❖ IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp. were used for statistical analysis

Summary:

This chapter describes the methodology of the study, including research method, design of the research, and a description of the setting, demography, sample, sample size, sample selection requirements, sampling technique, ethical considerations, tool description, validity, reliability, pre-testing, pilot study, methods of data collection, and data analysis method.

CHAPTER 5: RESULTS

The data was analyzed and interpreted in accordance with the study's objectives. Data was collected from 785 children among rural and urban schools of Belagavi Karnataka. The data was then coded and transmitted to IBM SPSS version 22 for Windows, where it was statistically calculated.

STATISTICAL METHODS:

- Physical abuse was considered as primary outcome variables. Determinants, consequences and demographic variables were considered as explanatory variables.
- Frequency and proportion for categorical variables descriptive analysis was carried out. Pie chart and bar graphs were also used.
- To investigate the relationship between the explanatory factors and the result variables, a Univariate Binary analysis of regression was applied. The unadjusted odds ratio is shown, along with the 95 percent confidence interval.
- Statistical significance was defined as a ($P < 0.05$). IBM SPSS version 22 for statistical analysis, was employed.
- IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.

The Study's Findings were discussed under the following headings.

1. Socio demographic characteristics of the study participants (Descriptive analysis, N=785)
2. Descriptive analysis of prevalence of physical abuse in the study population (N=785) prevalence of physical abuse (≥ 1 form & ≥ 2 form) in urban and rural areas of Belagavi
3. Descriptive evaluation of determinants of physical abuse among adolescent students in the study population (N=785)
4. Descriptive evaluation of consequences of physical abuse among adolescent students in the study population (N=785)
5. Comparison of demographic parameter between physical abuse (≥ 1 forms) (N=785)
6. Comparison of demographic parameter between physical abuse (≥ 2 forms) (N=654)
7. Comparison of determinants between physical abuse (≥ 1 forms) (N=785)
8. Comparison of consequences between physical abuse (≥ 1 forms) (N=785)
9. Comparison of determinants between physical abuse (≥ 2 forms) (N=654)
10. Comparison of consequences between physical abuse (≥ 2 forms) (N=654)
11. Descriptive analysis of determinants and consequences in the study population:
12. Comparison of median value of determinants factor with physical abuse status (≥ 2 form)
13. Comparison of median value of consequences with physical abuse (≥ 2 form)
14. Comparison of median value of determinants factor with physical abuse status (≥ 1 form)
15. Comparison of median value of consequences with physical abuse (≥ 1 form)

Table 1: Incidence and proportion distribution of participants as per the age in years (N=785)

Age	Frequency	Percentages
10 to 11 years	155	19.75
12 to 14 years	271	34.52
15 to 16 years	359	45.73

Figure 4: Incidence and proportion distribution of participants as per the age in years (N=785)

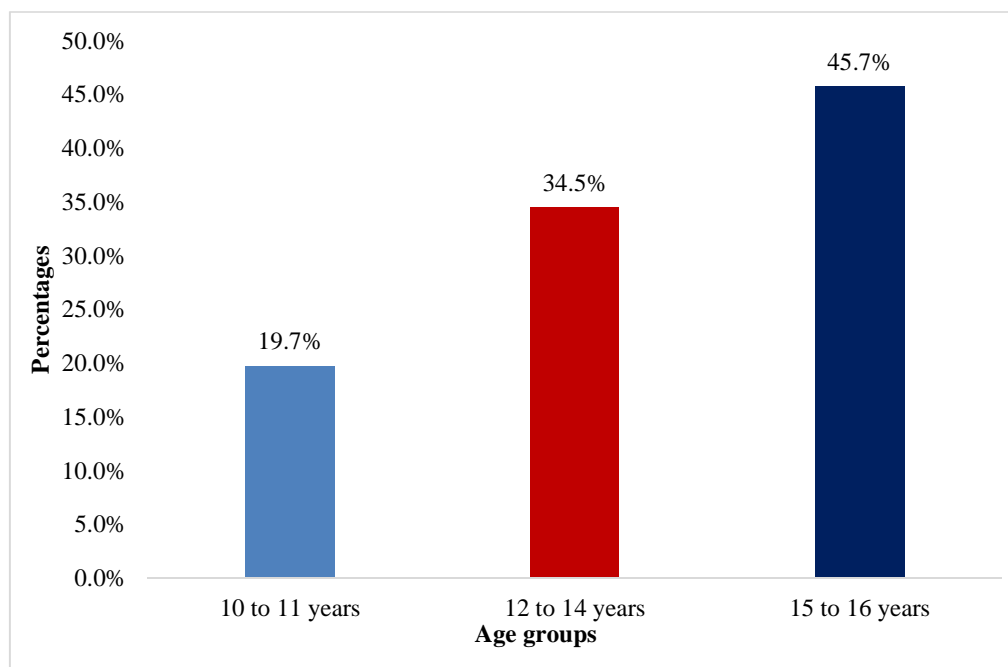


Table 2: Incidence and proportion participant's distribution as per their gender
(N=785)

Gender	Frequency	Percentages
MALE	438	55.80
FEMALE	347	44.20

Figure 5: Incidence and proportion participant's distribution as per their gender
(N=785)

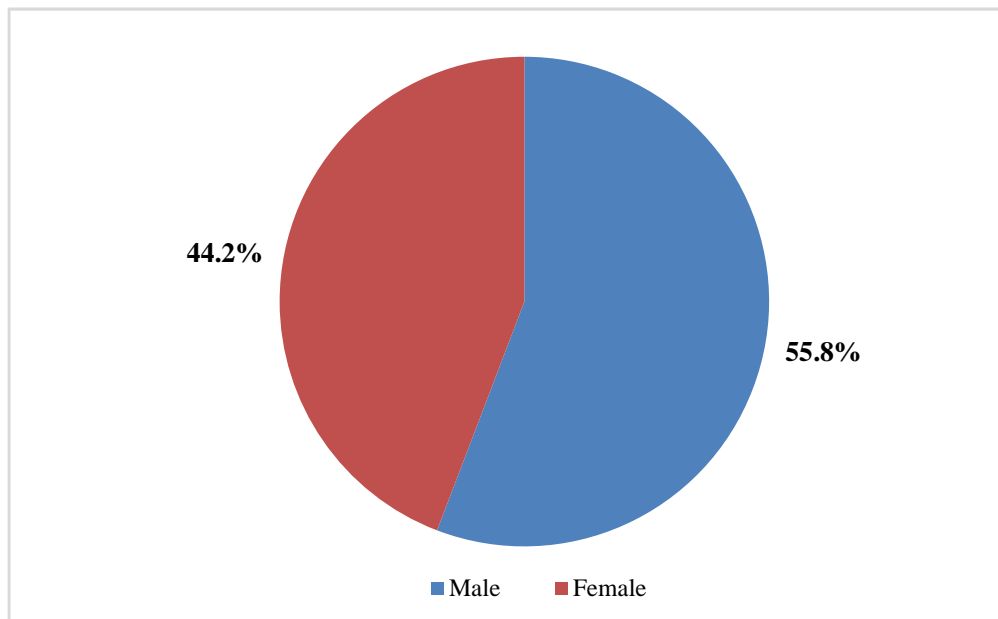


Table 3: Incidence and proportion participants distribution as per their Type of family (785)

Type of Family	Frequency	Percentages
Nuclear	653	83.18
Joint	129	16.43
Extended	3	0.38

Figure 6: Incidence and proportion participants distribution as per their Type of family (785)

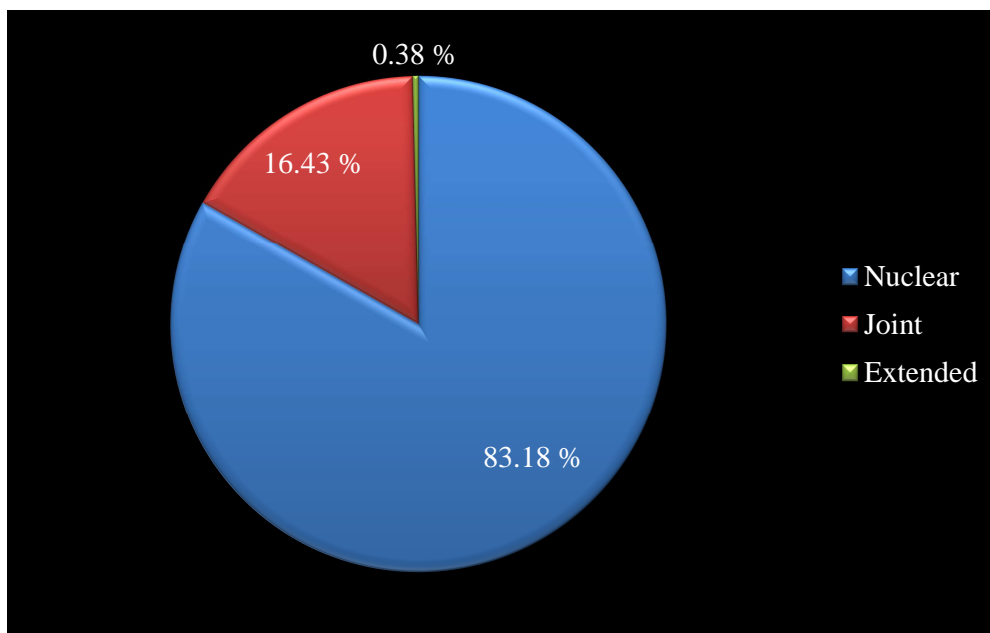


Table 4: Incidence and proportion participants distribution as per their Religion (N=785)

Religion	Frequency	Percentages
Hindu	662	84.33
Christian	33	4.20
Muslim	89	11.34
Others	1	0.13

Figure 7: Incidence and proportion participants distribution as per their Religion (N=785)

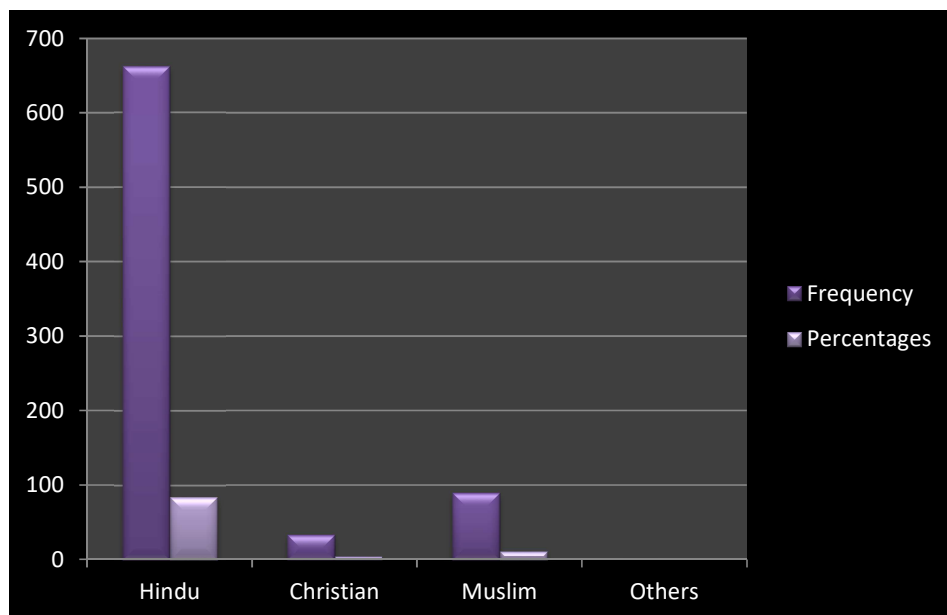


Table 5: Incidence and proportion participants distribution as per their Residence (N=785)

Residence	Frequency	Percentages
Urban	469	59.75
Rural	316	40.25

Figure 8: Incidence and proportion participants distribution as per their Residence (N=785)

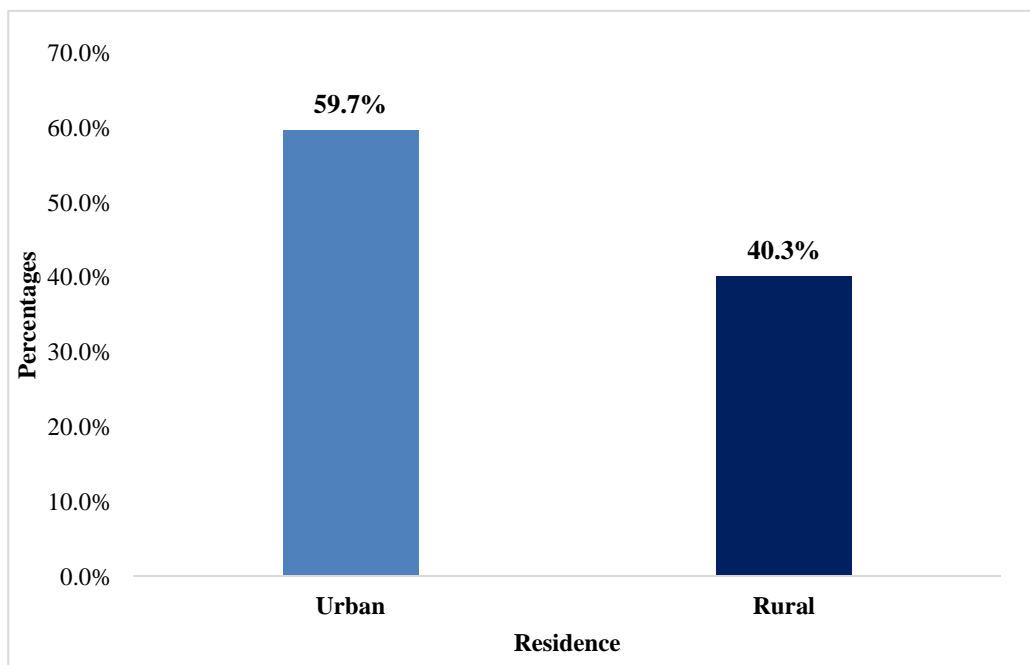


Table 6: Incidence and proportion participants distribution as per their Father & Mother Education (N=785)

Education	Fathers Education		Mothers Education	
	Frequency	Percentages	Frequency	Percentages
Illiterate	60	7.64%	48	6.11
Primary	107	13.63%	117	14.90
Secondary	220	28.03%	378	48.15
Higher Secondary	320	40.76%	213	27.13
Degree	78	9.94%	29	3.69

Figure 9: Incidence and proportion participants distribution as per their Father Education (N=785)

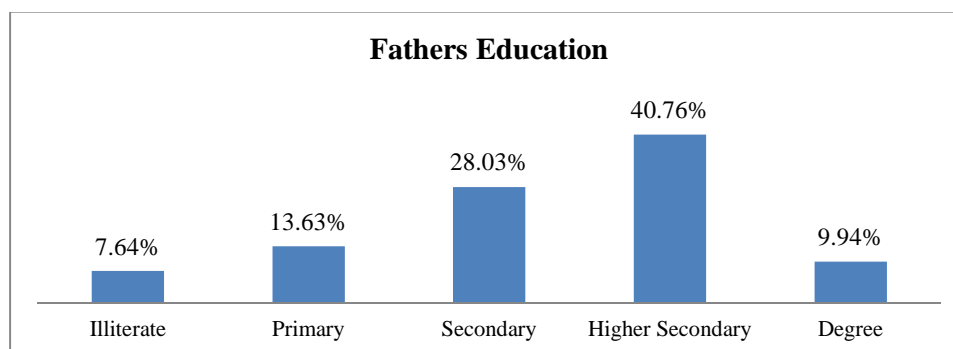


Figure 10: Incidence and proportion participants distribution as per their Mother Education (N=785)

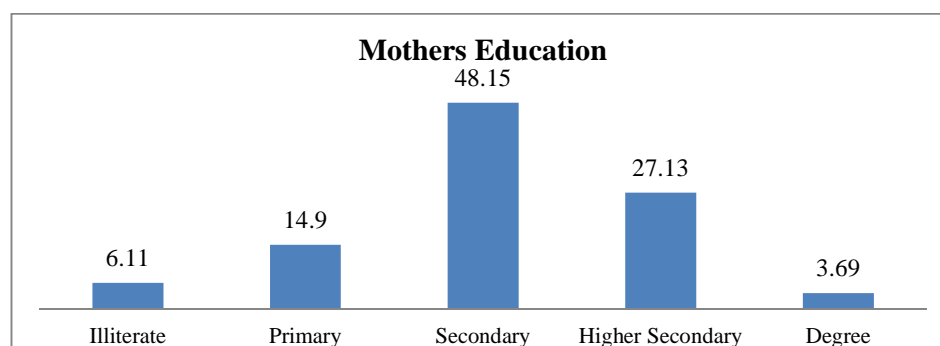


Table 7: Incidence and proportion participants distribution as per their Fathers Occupation (N=785)

Fathers Occupation	Frequency	Percentages
Farmer	186	23.69
Government employee	13	1.66
Self Employed	316	40.25
Private Employee	258	32.87
Professional	12	1.53

Figure 11: Incidence and proportion participants distribution as per their Fathers Occupation (N=785)

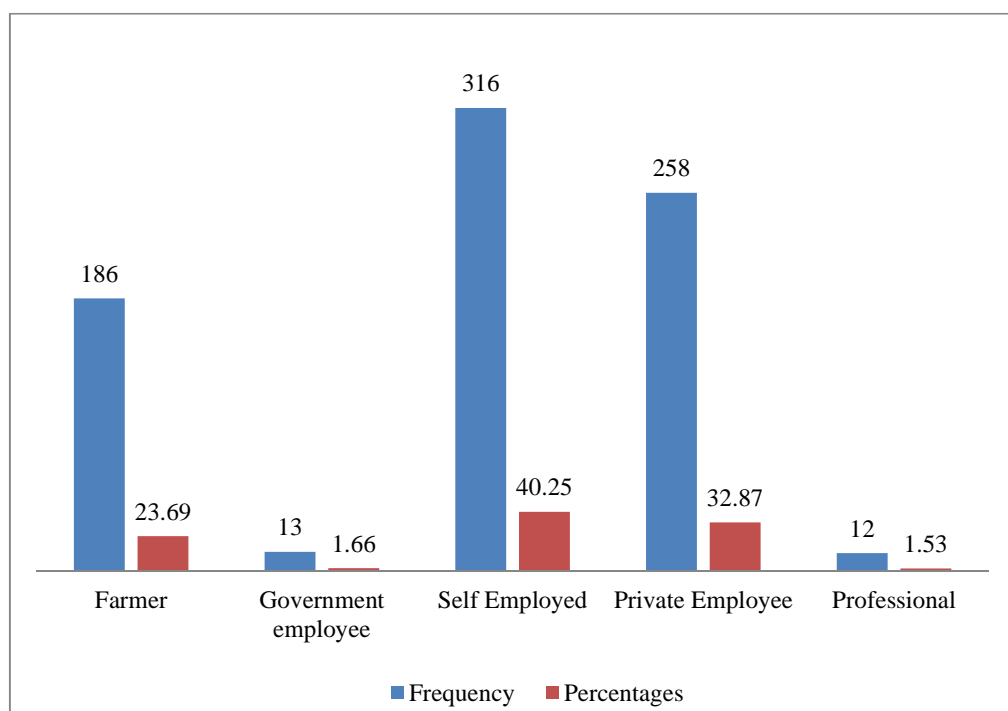


Table 8: Incidence and proportion participants distribution as per their Mothers Occupation (N=785)

Mothers Occupation	Frequency	Percentages
Farmer	143	18.22
Self Employed	344	43.82
Private Employee	250	31.85
Professional	27	3.44
House wife	21	2.68

Figure 12: Incidence and proportion participants distribution as per their Mothers Occupation (N=785)

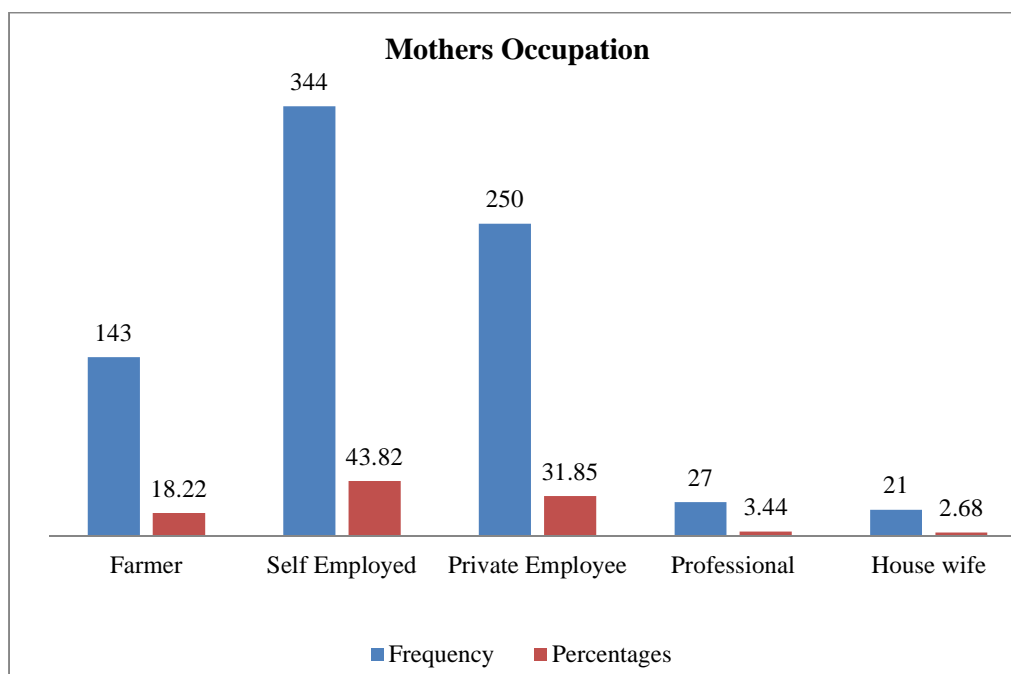


Table 9: Distribution of families on the basis of Socio economic status according to B G Prasad Scale (N = 785)

Socio economic status	Per capita monthly income	No. of Families	Percentages
Class I (Upper class)	≥ 5357	144	18.34
Class II (Upper Middle class)	2652-5356	412	52.48
Class III (Middle Class)	1570-2651	113	14.39
Class IV (Lower Middle class)	812-1569	88	11.21
Class V (Lower class)	≤ 811	28	3.56

Figure 13: Distribution of families on the basis of Socio economic status according to B G Prasad Scale (N = 785)

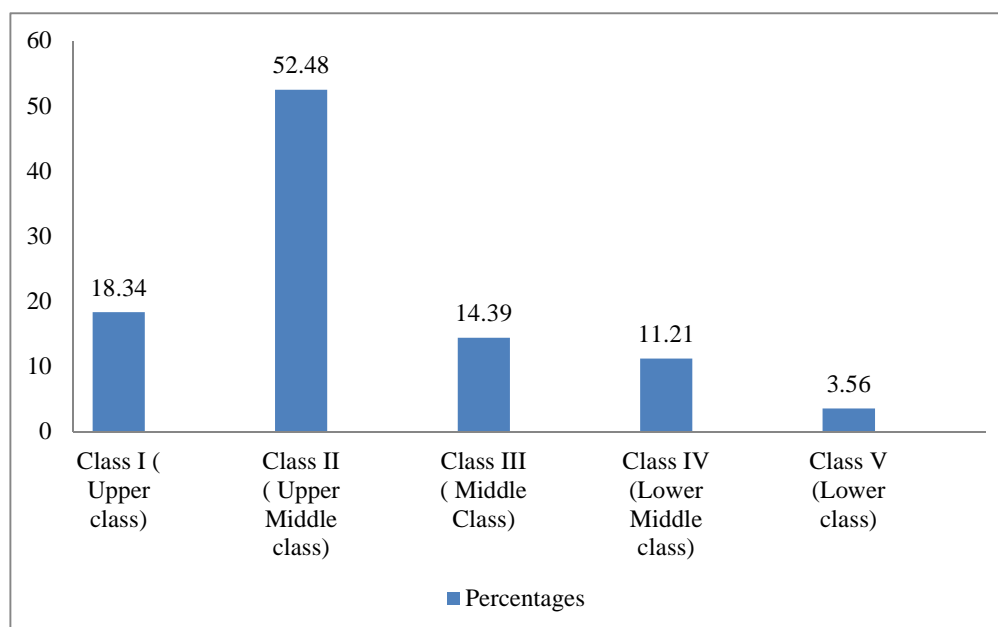
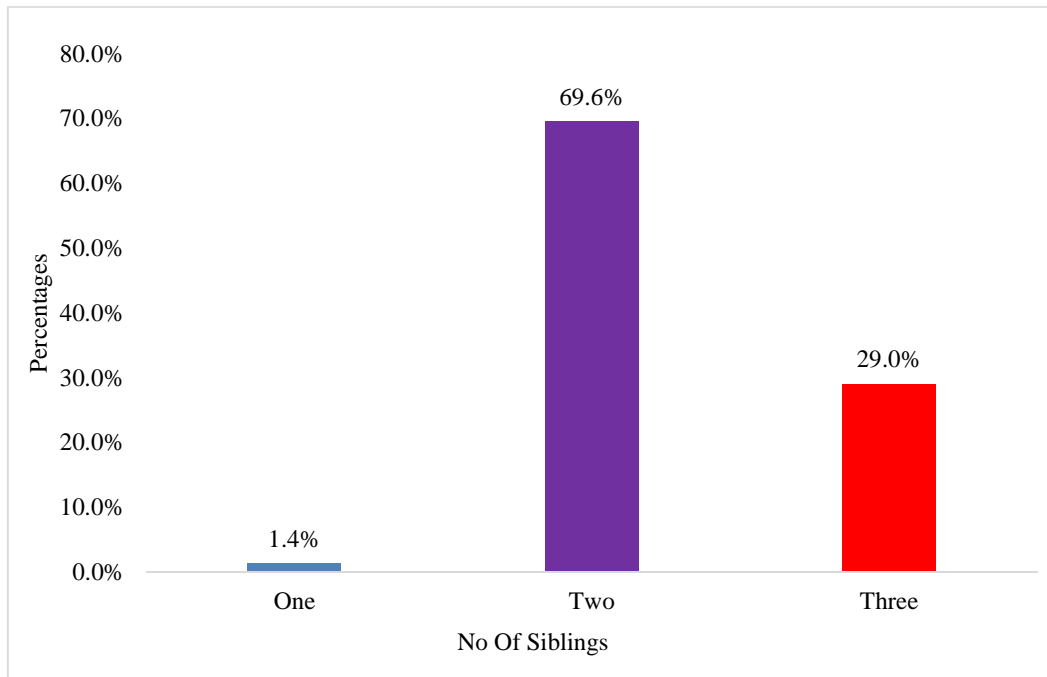


Table 10: Incidence and proportion participants distribution as per their No of Siblings (N=785)

No of Siblings	Frequency	Percentages
One	11	1.40
Two	546	69.55
Three	228	29.04

Figure 14: Incidence and proportion participants distribution as per their No of Siblings (N=785)



Demographic distribution of the study participants

Among the study population, 359(45.73%) of the participants age were between 15 to 16 years. Male participants 438(55.80%) were larger than female participants 347(44.20%). 653(83.18%) of the participants were belongs to nuclear family. 662(84.33%) of them were Hindu. 469(59.75%) of the participants from urban. 320(40.76%) of the participants father education were higher secondary, 378(48.15%) of participants mother education were secondary. 316(40.25%) of the participants father occupation were self-employed. 344(43.82%) of the participants mother occupation were self-employed. 412(52.48%) of the participants were from upper middle class (class II). 546(69.55%) of the participants had two siblings.

Table 11: Description of Physical abuse as reported by school going adolescent in the study population (N=785)

Sl. No	Questionnaires	Perpetrator	Never	Sometimes	Most of the time or Always
1	Have you been shouted, screamed at by anyone?	Guardian/ Family Member	159(20.3%)	577(73.5%)	49(6.2%)
		Friends	393(50.1%)	369(47%)	23(2.9%)
		Neighbours	582(74.1%)	189(24.1%)	14(1.8%)
2	Have you been pushed, grabbed or kicked by anyone?	Guardian/ Family Member	69(8.8%)	701(89.3%)	15(1.9%)
		Friends	505(64.3%)	243(31%)	37(4.7%)
		Neighbors	718(91.5%)	60(7.6%)	7(0.9%)
3	Have you been hit, beaten, and spanked with hand by anyone?	Guardian/ Family Member	17(2.2%)	755(96.2%)	13(1.7%)
		Friends	365(46.5%)	399(50.8%)	21(2.7%)
		Neighbours	722(92%)	52(6.6%)	11(1.4%)
4	Have you been hit, beaten, and spanked with object by anyone?	Guardian/ Family Member	496(63.2%)	275(35%)	14(1.8%)
		Friends	557(71%)	215(27.4%)	13(1.7%)
		Neighbours	746(95%)	39(5%)	0(0%)
5	Did someone try to choke or drown You?	Guardian/ Family Member	712(90.7%)	73(9.3%)	0(0%)
		Friends	755(96.2%)	30(3.8%)	0(0%)
		Neighbours	785(100%)	0(0%)	0(0%)
6	Have you been burned or scald by anyone?	Guardian/ Family Member	775(98.7%)	10(1.3%)	0(0%)
		Friends	782(99.6%)	3(0.4%)	0(0%)
		Neighbours	785(100%)	0(0%)	0(0%)

7	Have you been locked in small place by anyone?	Guardian/ Family Member	709(90.3%)	76(9.7%)	0(0%)
		Friends	783(99.7%)	2(0.3%)	0(0%)
		Neighbours	785(100%)	0(0%)	0(0%)
8	Have your hair been pulled by anyone?	Guardian/ Family Member	686(87.4%)	99(12.6%)	0(0%)
		Friends	637(81.1%)	148(18.9%)	0(0%)
		Neighbours	736(93.8%)	49(6.2%)	0(0%)
9	Have your ear been pulled, twisted or pinched by anyone?	Guardian/ Family Member	579(73.8%)	188(23.9%)	18(2.3%)
		Friends	606(77.2%)	179(22.8%)	0(0%)
		Neighbours	660(84.1%)	125(15.9%)	0(0%)
10	Have you been given bad words by anyone?	Guardian/ Family Member	649(82.7%)	136(17.3%)	0(0%)
		Friends	564(71.8%)	204(26%)	17(2.2%)
		Neighbours	780(99.4%)	5(0.6%)	0(0%)

Across the study population 49(6.2%) of the participants reported that most of the time they were been shouted and screamed by the Guardian/ Family Member ,23(2.9%) by friends, & 14(1.8%) by Neighbors.

15(1.9%) of the adolescents most of the times were hurt by family member, 37(4.7%) of the adolescents by friends , & 7(0.9%) of the adolescents by neighbors. The method was pushing, grabbing and kicking.

13(1.7%) of the adolescents most of the times were hurt by family member, 21(2.7%) of the adolescents by friends, & 11(1.4%) of the adolescents by neighbors. The method was hitting, beating, and spanking with hand.

14(1.8%) of the adolescents most of the times were hurt by family member, 13(1.7%) of the adolescents by friends. The method was hitting, beating, and spanking by the hard object.

73(9.3%) of the adolescents sometimes were hurt by family member, 30(3.8%) of the adolescents by friends. The method was choking and drowning.

10(1.3%) of the adolescents sometimes were hurt by family member, 3(0.4%) of the adolescents by friends. The method was burning.

76(9.7%) of the adolescents sometimes were hurt by family member, 2(0.3%) of the adolescents by friends. The method was locking in the room.

99(12.6%) of the adolescents were hurt by family member, 21(2.7%) of the adolescents by friends, & 49(6.2%) of the adolescents by neighbors. The method was pulled the hair badly.

18(2.3%) of the adolescents most of the times were hurt by family members. The method was pulling and twisting the ear badly.

188(23.9%) of the adolescents sometimes were hurt by family member, 179(22.8%) of the adolescents by friends, & 125(15.9%) of the adolescents by neighbors. The method was pulling and twisting the ear badly.

17(2.2%) of the adolescents most of the times were hurt by the friends. The method was by hearing bad words and insulting.

136(17.3%) of the adolescents sometimes were hurt by family member, 204(26%) of the adolescents by friends, & 5(0.6%) of the adolescents by neighbors. The method was by hearing bad words and insulting.

The participants who respond prevalence of questions as most of time/always, they were consider as had a physical abuse and scored as 1, who responds never and sometimes were consider as had not physical abuse and scored as 0. Then calculated overall score for each question. When overall score was ≥ 1 which was taken as ≥ 1 form of physical abuse, overall score was ≥ 2 only which was taken as ≥ 2 form of physical abuse.

Table 12: Prevalence of physical abuse (N=785)

Physical abuse (≥ 1 form)	Frequency	Percentage
Yes	188	23.9
No	597	76.1
Residence (≥ 1 form)		
Urban (N=469)	123	26.23
Rural (N=316)	65	20.57
Physical abuse (≥ 2 form)	Frequency	Percentage
Yes	57	8.7
No	597	91.3
Residence (≥ 2 form)		
Urban (N=469)	42	10.82
Rural (N=316)	15	5.64

Among the study population, the prevalence of physical abuse (≥ 1 form) was 23.9%, in urban it was 26.23% and in rural it was 20.57%. Among the study population, the prevalence of physical abuse (≥ 2 form) was 8.7%, in urban it was 10.82% and in rural it was 5.64%.

According to prevalence questions, the individual who replies "most" or "always" is considered to have experienced physical abuse, while those who reply "never" or "sometimes" are considered to have not had physical abuse. The last step was to tally up the results for all of the questions. Those who had an overall score of ≥ 1 were considered to have been physically abused; those who received an overall score of ≥ 2 were also considered to have been physically abused;

For the purpose of statistical analysis and interpretation the individual who replies "most" or "always" is considered to have experienced physical abuse marked as "Yes" and while those who reply "never" or "sometimes" are considered to have not had physical abuse marked as "No".

Figure 15: Physical abuse among school going adolescent in the study population (≥ 1 form)

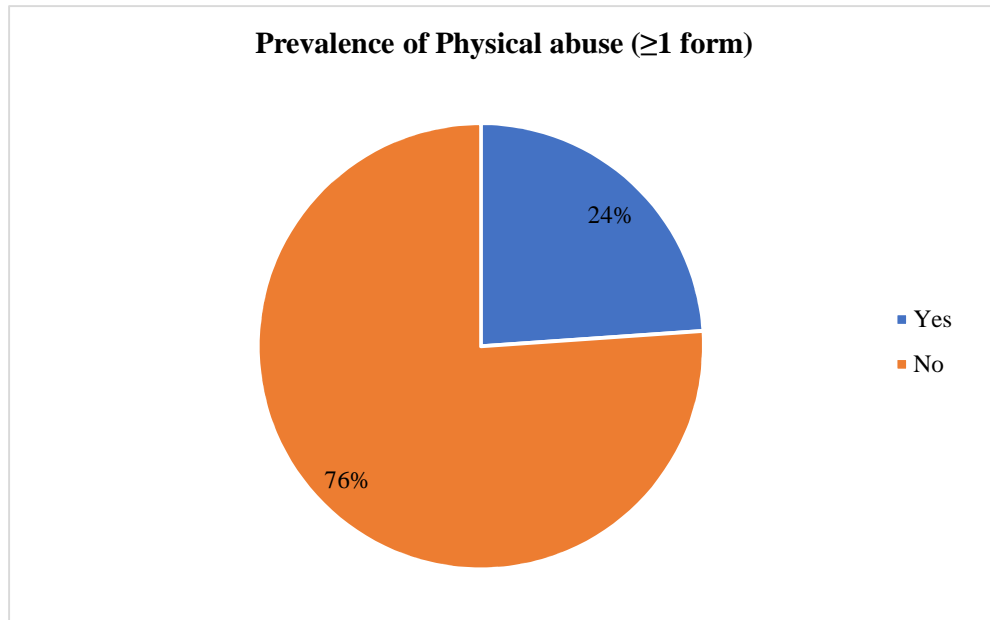


Figure 16: Resident wise prevalence of physical abuse (≥ 1 form)

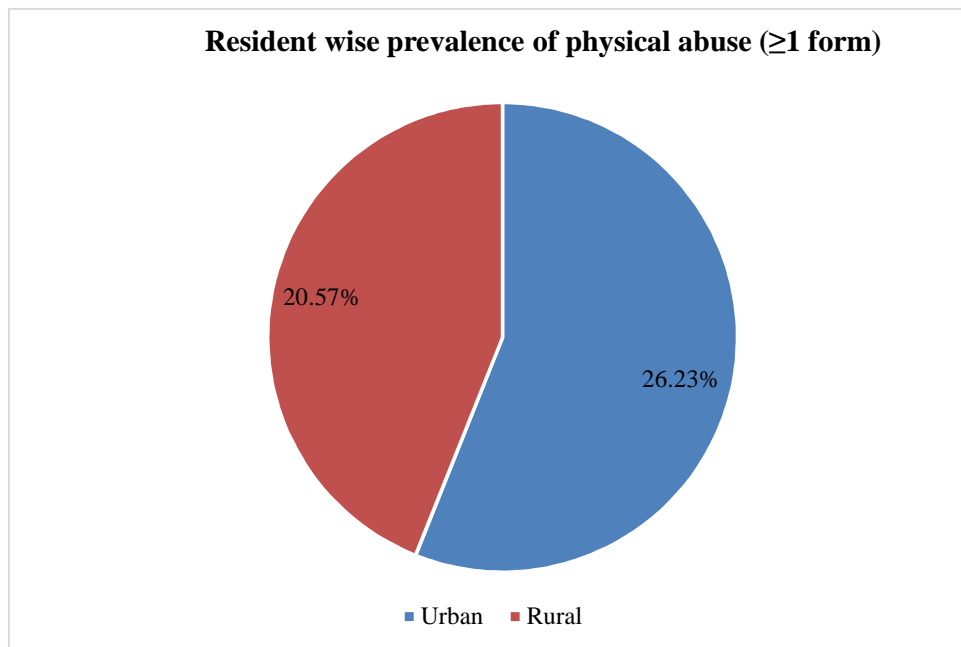


Figure 17: Reported prevalence of physical abuse among adolescents attending school (≥ 2 form)

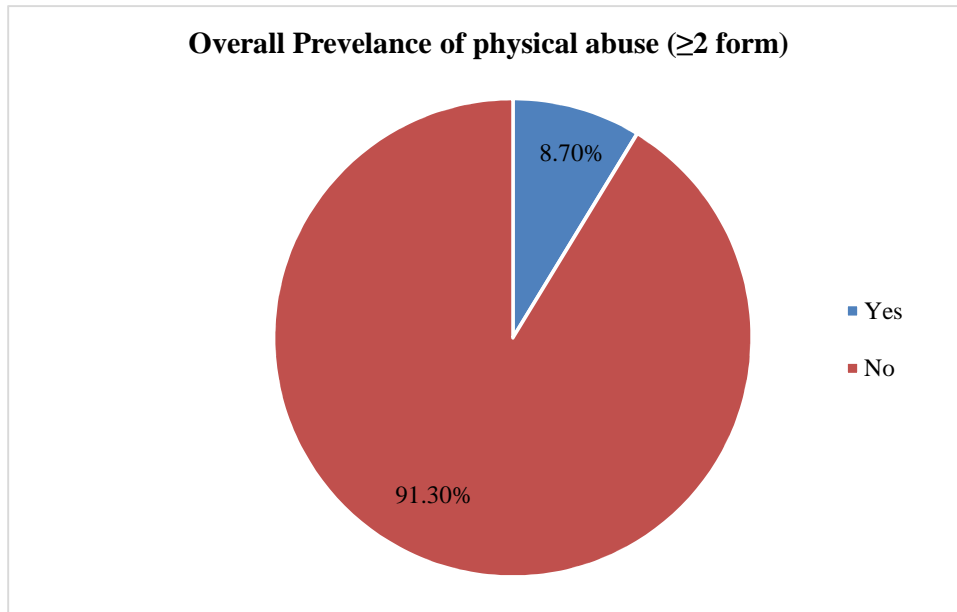


Figure 18: Prevalence of physical abuse by jurisdiction (Resident) among adolescents in school (≥ 2 form)

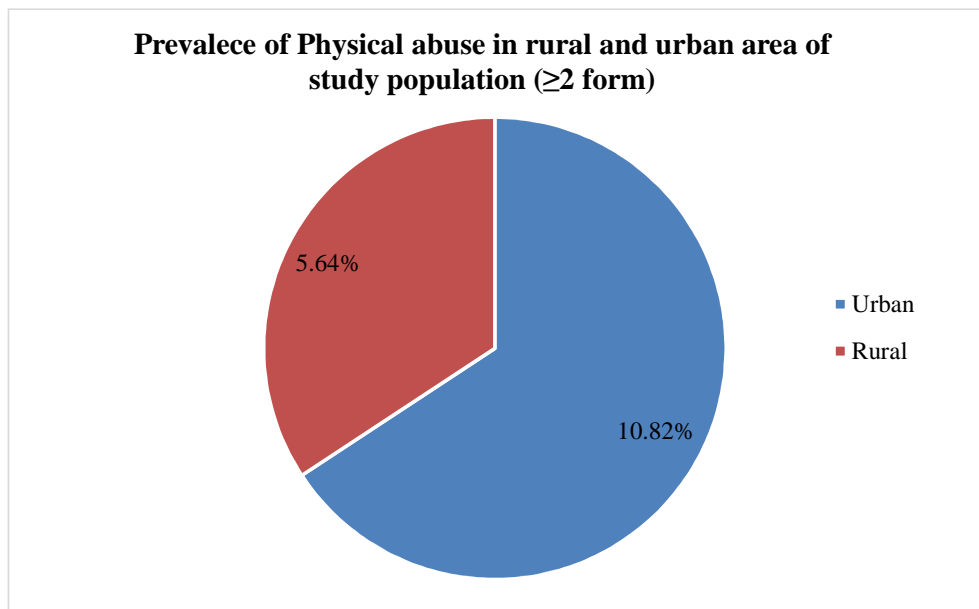


Table 13: Description of determinants of physical abuse among adolescent students in the study population (N=785)

Questionnaires	Never	Sometimes	Most of the time or Always
Family Determinants			
Do any of your family member/s quarrels in your presence?	406(51.7%)	377(48%)	2(0.3%)
Do you have any of your family member/s who is alcoholic?	559(71.2%)	204(26%)	22(2.8%)
Any of your family member/s expect too much from you? (e.g. in study, and in discipline)	389(49.6%)	289(36.8%)	107(13.6%)
Do you show disagreement over household rules (e.g. in study, play timings)	474(60.4%)	273(34.8%)	38(4.8%)
Does your family members compare you with other children (e.g.in studies, following the rules and discipline)	349(44.5%)	269(34.3%)	167(21.3%)
Psychological Determinants			
I argue a lot	438(55.8%)	342(43.6%)	5(0.6%)
I am too dependent on others	449(57.2%)	300(38.2%)	36(4.6%)
I am too shy or timid	677(86.2%)	107(13.6%)	1(0.1%)
I have difficulty in sustaining attention/interest in tasks/fun activities	455(58%)	323(41.1%)	7(0.9%)
I lie or cheat frequently	449(57.2%)	317(40.4%)	19(2.4%)

I feel difficulty in performing activities	375(47.8%)	389(49.6%)	21(2.7%)
I do not follow through instructions and fail to finish work	555(70.7%)	225(28.7%)	5(0.6%)
Social Determinants			
I have difficulty in showing cooperation in group activities.	392(49.9%)	366(46.6%)	27(3.4%)
I have difficulty in Showing good sportsmanship when winning or losing.	446(56.8%)	292(37.2%)	47(6%)
When I get frustrated, I am not able to stay calm	399(50.8%)	330(42%)	56(7.1%)
I don't apologize when I make a mistake	515(65.6%)	252(32.1%)	18(2.3%)

Among the abused adolescents, the hurt was mainly due to comparing with other children by the family members (21.3%) ,and abuse was also seen among those adolescents (13.6%) whose family members pressurize in studies and in discipline . Adolescents 4.6% were reported being hurt due to being much dependent in daily activities and studies. Frequently lying and cheating 2.4%,showing difficulty in performing daily activities 2.7% were the associated with being hurt were reported by the adolescents.

Table 14: Description of consequences of physical abuse among adolescent students in the study population (N=785)

Questionnaires	Never	Sometimes	Most of the time or Always
Behaviour Assessment items			
Do you show unusual aggression, rages, or tantrums	432(55%)	332(42.3%)	21(2.7%)
Are you afraid or reluctant to go home, or might run away	711(90.6%)	74(9.4%)	0(0%)
Do you feel nervous when touched	570(72.6%)	214(27.3%)	1(0.1%)
Do you observe change in school performance and attendance	653(83.2%)	130(16.6%)	2(0.3%)
Do you argue Constantly even over small things	652(83.1%)	119(15.2%)	14(1.8%)
Do you refuse to follow rules	556(70.8%)	209(26.6%)	20(2.5%)
Do you take responsibility for other’s actions or just pass the blame for everything	478(60.9%)	296(37.7%)	11(1.4%)
I feel spending more time with my friends instead of going home	446(56.8%)	299(38.1%)	40(5.1%)
I worry about things	277(35.3%)	412(52.5%)	96(12.2%)
Anxiety Assessment items			
Being alone at home scares the crap out of me	427(54.4%)	354(45.1%)	4(0.5%)
The thought of taking an exam makes me nervous	437(55.7%)	289(36.8%)	59(7.5%)
I'm afraid I'll fail in academics because of my insecurities.;	377(48%)	338(43.1%)	70(8.9%)
Whenever anything horrible happens to me, I'm constantly scared:	484(61.7%)	154(19.6%)	147(18.7%)

I worry what other people think of me;	652(83.1%)	127(16.2%)	6(0.8%)
I feel moments of sudden terror, fear, or fright:	617(78.6%)	168(21.4%)	0(0%)
I'm sceptical about having to speak in front of my compatriots:	540(68.8%)	141(18%)	104(13.2%)
In my head, I'm tormented by negative or ridiculous images or concepts	557(71%)	182(23.2%)	46(5.9%)
Low in mood, depressed, and thus unable to care for myself	502(63.9%)	282(35.9%)	1(0.1%)
Depression assessment items			
I feel useless, worthless, and like a mean guy; I don't believe inside myself.	531(67.6%)	232(29.6%)	22(2.8%)
Getting myself out of bed in the morning is a major struggle for me these days.	438(55.8%)	341(43.4%)	6(0.8%)
I feel worried, nervous, panicky&, tensed;	523(66.6%)	262(33.4%)	0(0%)

Adolescents who reported being harmed experienced effects such as behavioral changes, anxiety, and depression. Majority of the adolescents 12.2% reported that they worry about the activities they perform in the school and in the home. 5.1% of Adolescents reported they would like to spend more time with friends instead of going home. 13.2% of teenagers reported having trouble conversing with their friends. 18.7% were frightened that they will experience a horrific incident. 8.9% of teenagers expressed a concern of failing in their academics as a result of insecurities. About 2.8% of teenagers felt insignificant, incompetent, or lacking in confidence.

Table 15: Descriptive analysis of family determinants score in study population (N=785)

Parameter	Mean \pm SD	Median	Minimum	Maximum	95% C.I	
					Lower	Upper
Family Determinants	7.27 \pm 4.12	6.00	2.00	23.00	6.98	7.56

Among the study population, the mean Family Determinants score was 7.27 \pm 4.12 and it ranged from 2 to 23)

Table 16 : Descriptive analysis of psychological determinants score in study population (N=785)

Parameter	Mean \pm SD	Median	Minimum	Maximum	95% C.I	
					Lower	Upper
Psychological Determinants	2.79 \pm 1.63	3.00	0.00	9.00	2.68	2.91

Among the study population, the mean Psychological Determinants score was 2.79 \pm 1.63 and it ranged from 0 to 9)

Table 17 : Descriptive analysis of social determinants score in study population (N=785)

Parameter	Mean \pm SD	Median	Minimum	Maximum	95% C.I	
					Lower	Upper
Social Determinants	1.96 \pm 1.42	2.00	0.00	7.00	1.86	2.06

Among the study population, the mean Social Determinants score was 1.96 \pm 1.42 and it ranged from 0 to 7)

Table 18 : Descriptive analysis of child behaviour evaluation scale score in study population (N=785)

Parameter	Mean \pm SD	Median	Minimum	Maximum	95% C.I	
					Lower	Upper
Child Behavior Evaluation Scale	3.18 \pm 2.44	3.00	0.00	11.00	3.01	3.35

Among the study population, the mean Child Behavior Evaluation Scale was 3.18 \pm 2.44 and it ranged from 0 to 11)

Table 19 : Descriptive analysis of anxiety assessment scale score in study population (N=785)

Parameter	Mean \pm SD	Median	Minimum	Maximum	95% C.I	
					Lower	Upper
Anxiety Assessment Scale	3.71 \pm 2.56	4.00	0.00	13.00	3.53	3.89

Among the study population, the mean Anxiety Assessment Scale was 3.71 \pm 2.56 and it ranged from 0 to 13)

Table 20 : Descriptive analysis of depression scale score in study population (N=785)

Parameter	Mean \pm SD	Median	Minimum	Maximum	95% C.I	
					Lower	Upper
Depression Scale	1.59 \pm 1.24	2.00	0.00	6.00	1.51	1.68

Among the study population, the mean Depression Scale was 1.59 \pm 1.24 and it ranged from 0 to 6)

Table 21: Association between demographic parameter between physical abuse (≥1 forms) (N=785)

Demographic parameter	Physical Abuse		ODDS Ratio (95% C.I)	P value
	Physical Abuse (≥1 forms)	No Physical Abuse		
Age				
10 To 11 Years (N=155)	35 (22.58%)	120 (77.42%)	Baseline	
12 To 14 Years (N=271)	67 (24.72%)	204 (75.28%)	1.126 (0.706-1.796)	0.618
15 To 16 Years (N=359)	86 (23.96%)	273 (76.04%)	1.080 (0.690-1.690)	0.736
Gender				
Male (N=438)	102 (23.29%)	336 (76.71%)	0.921 (0.633-1.281)	0.626
Female (N=347)	86 (24.78%)	261 (75.22%)	Baseline	
Type of Family				
Nuclear (N=653)	144 (22.05%)	509 (77.95%)	Baseline	
Joint (N=129)	44 (34.11%)	85 (65.89%)	1.830 (1.216-2.752)	0.004
Extended (N=3)	0 (0%)	3 (100%)	0.00	0.999
Religion				
Hindu (N=662)	156 (23.56%)	506 (76.44%)	Baseline	
Christian (N=33)	14 (42.42%)	19 (57.58%)	2.390 (1.171-4.877)	0.017
Muslim (N=89)	18 (20.22%)	71 (79.78%)	0.822 (0.476-1.422)	0.484
Others (N=1)	0 (0%)	1 (100%)	<0.001	1.00
Residence				
Urban (N=469)	123 (26.23%)	346 (73.77%)	Baseline	
Rural (N=316)	65 (20.57%)	251 (79.43%)	0.728 (0.518-1.025)	0.069

Fathers Education				
Illiterate (N=60)	24 (40%)	36 (60%)	Baseline	
Primary (N=107)	21 (19.63%)	86 (80.37%)	0.366 (0.181-0.740)	0.005
Secondary (N=220)	61 (27.73%)	159 (72.27%)	0.575 (0.317-1.043)	0.069
Higher Secondary (N=320)	63 (19.69%)	257 (80.31%)	0.368 (0.205-0.660)	0.001
Degree (N=78)	19 (24.36%)	59 (75.64%)	0.484(0.233-1.003)	0.051
Mothers Education				
Illiterate (N=48)	6 (12.5%)	42 (87.5%)	Baseline	
Primary (N=117)	37 (31.62%)	80 (68.38%)	3.237 (1.265-8.288)	0.014
Secondary (N=378)	70 (18.52%)	308 (81.48%)	1.591 (0.651-3.889)	0.309
Higher Secondary (N=213)	68 (31.92%)	145 (68.08%)	3.283 (1.331-8.095)	0.010
Degree (N=29)	7 (24.14%)	22 (75.86%)	2.227 (0.667-7.441)	0.193
Fathers Occupation				
Farmer (N=186)	49 (26.34%)	137 (73.66%)	Baseline	
Government Employee (N=13)	9 (69.23%)	4 (30.77%)	6.291 (1.835-21.354)	0.003
Self Employed (N=316)	73 (23.1%)	243 (76.9%)	0.840 (0.553-1.276)	0.414
Private Employee (N=258)	54 (20.93%)	204 (79.07%)	0.740 (0.475-1.153)	0.183
Professional (N=12)	3 (25%)	9 (75%)	0.932 (0.242-3.583)	0.918
Mothers Occupation				
Farmer (N=143)	36 (25.17%)	107 (74.83%)	Baseline	
Self Employed (N=344)	79 (22.97%)	265 (77.03%)	0.886 (0.563-1.395)	0.601
Private Employee (N=250)	52 (20.8%)	198 (79.2%)	0.781 (0.480-1.269)	0.317
Professional (N=27)	8 (29.63%)	19 (70.37%)	1.251 (0.505-3.104)	0.628
House Wife (N=21)	13 (61.9%)	8 (38.1%)	4.830 (1.853-12.592)	0.001

Monthly Family Income				
>=5357	144	>=5357	Baseline	
2652-5356	412	2652-5356	2.442 (0.790-7.552)	0.121
1570-2651	113	1570-2651	1.768 (0.601-5.204)	0.301
812-1569	88	812-1569	2.075 (0.675-6.375)	0.203
<=811	28	<=811		
No of Siblings				
One (N=11)	3 (27.27%)	8 (72.73%)	Baseline	
Two (N=546)	134 (24.54%)	412 (75.46%)	0.867 (0.227-3.316)	0.835
Three (N=228)	51 (22.37%)	177 (77.63%)	0.768 (0.197-3.003)	0.705

The univariate logistic regression analysis had shown statistically not significant association. The univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 1 forms) with many demographic parameters. The strongest association was found with Government Employee (Fathers Occupation) House wife (Mother occupation) (odds ratio=6.291, 95% CI 1.835 to 21.354, P value 0.003), (Odds ratio= 4.830, 95% CI 1.853-12.592, P value 0.001)

Table 22: Comparison of demographic parameter between physical abuse (≥ 2 forms) (N=654)

Demographic parameter	Physical Abuse		(95% C.I) ODDS Ratio	P value
	Yes (≥ 2 forms)	No		
Age				
10 To 11 Years (N=132)	12 (9.09%)	120 (90.91%)	Baseline	
12 To 14 Years (N=226)	22 (9.73%)	204 (90.27%)	1.078 (0.515-2.257)	0.841
15 To 16 Years (N=296)	23 (7.77%)	273 (92.23%)	0.842 (0.406-1.749)	0.645
Gender				
Male (N=368)	32 (8.7%)	336 (91.3%)	0.096 (0.575-1.719)	0.984
Female (N=286)	25 (8.74%)	261 (91.26%)	Baseline	
Type of Family				
Nuclear (N=547)	38 (6.95%)	509 (93.05%)	Baseline	
Joint (N=104)	19 (18.27%)	85 (81.73%)	2.994 (1.649-5437)	<0.001
Extended (N=3)	0 (0%)	3 (100%)	0.00	0.999
Religion				
Hindu (N=557)	51 (9.16%)	506 (90.84%)	Baseline	
Christian (N=21)	2 (9.52%)	19 (90.48%)	1.044 (0.237-4.612)	0.954
Muslim (N=75)	4 (5.33%)	71 (94.67%)	0.559 (0.196-1.593)	0.276
Others (N=1)	0 (0%)	1 (100%)	<0.001	1.00
Residence				
Urban (N=388)	42 (10.82%)	346 (89.18%)	Baseline	
Rural (N=266)	15 (5.64%)	251 (94.36%)	0.492 (0.267-0.907)	

Fathers Education				
Illiterate (N=45)	9 (20%)	36 (80%)	Baseline	
Primary (N=92)	6 (6.52%)	86 (93.48%)	0.279 (0.093-0.842)	0.023
Secondary (N=174)	15 (8.62%)	159 (91.38%)	0.377 (0.153-0.930)	0.034
Higher Secondary (N=276)	19 (6.88%)	257 (93.12%)	0.296 (0.124-0.703)	0.006
Degree (N=67)	8 (11.94%)	59 (88.06%)	0.542 (0.192-1.532)	0.248
Mothers Education				
Illiterate (N=44)	2 (4.55%)	42 (95.45%)	Baseline	
Primary (N=94)	14 (14.89%)	80 (85.11%)	3.675 (0.797-16.937)	0.095
Secondary (N=325)	17 (5.23%)	308 (94.77%)	1.159 (0.259-5.196)	0.847
Higher Secondary (N=168)	23 (13.69%)	145 (86.31%)	3.331 (0.754-14.709)	0.112
Degree (N=23)	1 (4.35%)	22 (95.65%)	0.955(0.082-11.120)	0.970
Fathers Occupation				
Farmer (N=147)	10 (6.8%)	137 (93.2%)	Baseline	
Government Employee (N=7)	3 (42.86%)	4 (57.14%)	10.275 (2.016-52.380)	0.005
Self Employed (N=272)	29 (10.66%)	243 (89.34%)	1.635 (0.773-3.457)	0.198
Private Employee (N=218)	14 (6.42%)	204 (93.58%)	0.940 (0.406-2.178)	0.886
Professional (N=10)	1 (10%)	9 (90%)	1.522 (0.175-13.245)	0.703
Mothers Occupation				
Farmer (N=116)	9 (7.76%)	107 (92.24%)	Baseline	
Self Employed (N=289)	24 (8.3%)	265 (91.7%)	1.077 (0.485-2.392)	0.856
Private Employee (N=214)	16 (7.48%)	198 (92.52%)	0.961 (0.411-2.247)	0.926
Professional (N=23)	4 (17.39%)	19 (82.61%)	2.503 (0.699-8.956)	0.158
House Wife (N=12)	4 (33.33%)	8 (66.67%)	5.944 (1.496-23.619)	0.011

Monthly Family Income				
<=811()	28	3.56	0.00	0.998
2652-5356(412)	13 (13.13%)	86 (86.87%)	2.311 (0.883-6.045)	0.088
1570-2651(113)	37 (8.87%)	380 (91.13%)	1.488 (0.645-3.433)	0.351
812-1569(88)	7 (6.14%)	107 (93.86%)	Baseline	
>=5357(144)	0 (0%)	24 (100%)		
No of Siblings				
One (N=8)	0 (0%)	8 (100%)	0.00	0.999
Two (N=454)	42 (9.25%)	412 (90.75%)	1.203 (0.650-2.226)	0.556
Three (N=192)	15 (7.81%)	177 (92.19%)	Baseline	

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 2 forms) with many demographic parameters. The strongest association was found with house wife as (mother's occupation) (odds ratio=5.944, 95% CI 1.496 to 23.619, P value 0.011) and also the strongest association was found with adolescents belongs to joint family (odds ratio=2.994, 95% CI 1.649 to 5.437, P value 0.001) with physical abuse (≥ 2 forms) among adolescents.

Table 23: Association of various determinants between physical abuse (≥ 1 forms) (N=785)

Determinants	Physical Abuse		ODDS Ratio (95% C.I)	P value
	Yes (≥ 1 forms)	No		
Family Determinants				
Do Any of Your Family Member/S Quarrel in Your Presence?				
Never (N=406)	84 (20.69%)	322 (79.31%)	Baseline	
Sometimes (N=377)	104 (27.59%)	273 (72.41%)	1.460 (1.050-2.031)	0.024
Most of The Time or Always (N=2)	0 (0%)	2 (100%)	0.000	0.999
Do you have any of your family member/s who is alcoholic?				
Never (N=559)	132 (23.61%)	427 (76.39%)	Baseline	
Sometimes (N=204)	47 (23.04%)	157 (76.96%)	0.968 (0.662-1.416)	0.868
Most of The Time or Always (N=22)	9 (40.91%)	13 (59.09%)	2.240 (0.936-5.356)	0.070
Any of your family member/s expect too much from you? (e.g. in study, and in discipline)				
Never (N=389)	72 (18.51%)	317 (81.49%)	Baseline	
Sometimes (N=289)	77 (26.64%)	212 (73.36%)	1.599 (1.110-2.304)	0.012
Most Of The Time Or Always (N=107)	39 (36.45%)	68 (63.55%)	2.525 (1.579-4.038)	<0.001
Do you show disagreement over household rules (e.g. in study, play timings)				
Never (N=474)	105 (22.15%)	369 (77.85%)	Baseline	
Sometimes (N=273)	73 (26.74%)	200 (73.26%)	1.283 (0.909-1.811)	0.157
Most Of The Time Or Always (N=38)	10 (26.32%)	28 (73.68%)	1.255 (0.591-2.667)	0.555
Does your family members compare you with other children (e.g.in studies, following the rules and discipline)				
Never (N=349)	68 (19.48%)	281 (80.52%)	Baseline	
Sometimes (N=269)	72 (26.77%)	197 (73.23%)	1.510 (1.035-2.204)	0.033
Most Of The Time Or Always (N=167)	48 (28.74%)	119 (71.26%)	1.667 (1.087-2.555)	0.019

Psychological Determinants				
I argue a lot				
Never (N=438)	89 (20.32%)	349 (79.68%)	Baseline	
Sometimes (N=342)	98 (28.65%)	244 (71.35%)	1.575 (1.132-2.191)	0.007
Most Of The Time Or Always (N=5)	1 (20%)	4 (80%)	0.980 (0.108-8.880)	0.986
I am too dependent on others				
Never (N=449)	97 (21.6%)	352 (78.4%)	Baseline	
Sometimes (N=300)	83 (27.67%)	217 (72.33%)	1.388 (0.990-1.947)	0.058
Most Of The Time Or Always (N=36)	8 (22.22%)	28 (77.78%)	1.037 (0.458-2.348)	0.931
I am too shy or timid				
Never (N=677)	159 (23.49%)	518 (76.51%)	Baseline	
Sometimes (N=107)	28 (26.17%)	79 (73.83%)	1.155 (0.724-1.841)	0.545
Most Of The Time Or Always (N=1)	1 (100%)	0 (0%)	0.000	0.999
I have difficulty in sustaining attention/interest in tasks/fun activities				
Never (N=455)	101 (22.2%)	354 (77.8%)	Baseline	
Sometimes (N=323)	86 (26.63%)	237 (73.37%)	1.272 (0.913-1.771)	0.155
Most Of The Time Or Always (N=7)	1 (14.29%)	6 (85.71%)	0.584 (0.070-4.908)	0.621
I lie or cheat frequently				
Never (N=449)	98 (21.83%)	351 (78.17%)	Baseline	
Sometimes (N=317)	86 (27.13%)	231 (72.87%)	1.333 (0.955-1.862)	0.091
Most Of The Time Or Always (N=19)	4 (21.05%)	15 (78.95%)	0.955 (0.310-2.943)	0.936
I feel difficulty in performing activities				
Never (N=375)	79 (21.07%)	296 (78.93%)	Baseline	
Sometimes (N=389)	108 (27.76%)	281 (72.24%)	1.440 (1.032-2.009)	0.032
Most Of The Time Or Always (N=21)	1 (4.76%)	20 (95.24%)	0.187 (0.025-1.417)	0.105

I do not follow through instructions and fail to finish work				
Never (N=555)	126 (22.7%)	429 (77.3%)	Baseline	
Sometimes (N=225)	61 (27.11%)	164 (72.89%)	1.266 (0.888-1.806)	0.192
Most Of The Time Or Always (N=5)	1 (20%)	4 (80%)	0.851 (0.094-7.684)	0.886
Social Determinants				
I have difficulty in showing cooperation in group activities.				
Never (N=392)	85 (21.68%)	307 (78.32%)	Baseline	
Sometimes (N=366)	95 (25.96%)	271 (74.04%)	1.266 (0.906-1.770)	0.168
Most Of The Time Or Always (N=27)	8 (29.63%)	19 (70.37%)	1.521 (0.643-3.595)	0.340
I have difficulty in Showing good sportsmanship when winning or losing.				
Never (N=446)	105 (23.54%)	341 (76.46%)	Baseline	
Sometimes (N=292)	65 (22.26%)	227 (77.74%)	0.930 (0.654-1.322)	0.686
Most Of The Time Or Always (N=47)	18 (38.3%)	29 (61.7%)	2.016 (1.076-3.775)	0.029
When I get frustrated, I am not able to stay calm				
Never (N=399)	83 (20.8%)	316 (79.2%)	Baseline	
Sometimes (N=330)	85 (25.76%)	245 (74.24%)	1.321 (0.935-1.866)	0.114
Most Of The Time Or Always (N=56)	20 (35.71%)	36 (64.29%)	2.115 (1.164-3.845)	0.014
I don't apologize when I make a mistake				
Never (N=515)	97 (18.83%)	418 (81.17%)	Baseline	
Sometimes (N=252)	84 (33.33%)	168 (66.67%)	2.155 (1.530-3.035)	<0.001
Most Of The Time Or Always (N=18)	7 (38.89%)	11 (61.11%)	2.742 (1.036-7.256)	0.042

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 1 forms) with many family determinants factors. The strongest association was found with most of the time or always (any of your family member/s expects too much from you?) (odds ratio=2.525, 95% CI 1.579 to 4.038, P value <0.001)

The analysis of univariate regression had shown statistically not significant association with physical abuse (≥ 1 forms) with many psychological determinants' factors. The strongest association was found with sometimes (I argue a lot) (odds ratio=1.575, 95% CI 1.132 to 2.191, P value 0.007).

The Univariate logistic regression analysis had shown statistically significant association with physical abuse (≥ 1 forms) with many social determinants' factors. The strongest association was found with Most of The Time or Always (I don't apologize when I make a mistake) (odds ratio=2.742, 95% CI 1.036 to 7.256, P value 0.042).

Table 24: Comparison of consequences between physical abuse (≥ 1 forms) (N=785)

Consequences	Physical Abuse		ODDS Ratio (95% C.I)	P value
	Yes (≥ 1 forms)	No		
Behaviour Assessment items				
Do you show unusual aggression, rages, or tantrums:				
Never (N=432)	101 (23.38%)	331 (76.62%)	Baseline	
Sometimes (N=332)	78 (23.49%)	254 (76.51%)	1.006 (0.718-1.411)	0.970
Most Of The Time Or Always (N=21)	9 (42.86%)	12 (57.14%)	2.458 (1.007-6.00)	0.048
Are you afraid or reluctant to go home, or might run away:				
Never (N=711)	170 (23.91%)	541 (76.09%)	Baseline	
Sometimes (N=74)	18 (24.32%)	56 (75.68%)	1.023 (0.585-1.788)	0.937
Do you feel nervous when touched:				
Never (N=570)	138 (24.21%)	432 (75.79%)	Baseline	
Sometimes (N=214)	50 (23.36%)	164 (76.64%)	0.954 (0.659-1.382)	0.805
Most Of The Time Or Always (N=1)	0 (0%)	1 (100%)	0.000	0.999
Do you observe change in school performance and attendance:				
Never (N=653)	150 (22.97%)	503 (77.03%)	Baseline	
Sometimes (N=130)	37 (28.46%)	93 (71.54%)	1.334 (0.875-2.035)	0.181
Most Of The Time Or Always (N=2)	1 (50%)	1 (50%)	3.353 (0.208-53.93)	0.393
Do you argue Constantly even over small things:				
Never (N=652)	145 (22.24%)	507 (77.76%)	Baseline	
Sometimes (N=119)	37 (31.09%)	82 (68.91%)	1.578 (1.027-2.425)	0.038
Most Of The Time Or Always (N=14)	6 (42.86%)	8 (57.14%)	2.622 (0.895-7.680)	0.079
Do you refuse to follow rules:				
Never (N=556)	132 (23.74%)	424 (76.26%)	Baseline	
Sometimes (N=209)	50 (23.92%)	159 (76.08%)	1.010 (0.696-1.467)	0.958
Most Of The Time Or Always (N=20)	6 (30%)	14 (70%)	1.377 (0.519-3.654)	0.521

Do you take responsibility for other's actions or just pass the blame for everything:				
Never (N=478)	101 (21.13%)	377 (78.87%)	Baseline	
Sometimes (N=296)	83 (28.04%)	213 (71.96%)	1.455 (1.040-2.034)	0.029
Most Of The Time Or Always (N=11)	4 (36.36%)	7 (63.64%)	2.133 (0.612-7.429)	0.234
I feel spending more time with my friends instead of going home:				
Never (N=446)	102 (22.87%)	344 (77.13%)	Baseline	
Sometimes (N=299)	74 (24.75%)	225 (75.25%)	1.109 (0.787-1.563)	0.554
Most Of The Time Or Always (N=40)	12 (30%)	28 (70%)	1.445 (0.710-2.944)	0.310
I worry about things:				
Never (N=277)	63 (22.74%)	214 (77.26%)	Baseline	
Sometimes (N=412)	108 (26.21%)	304 (73.79%)	1.207 (0.845-1.724)	0.302
Most Of The Time Or Always (N=96)	17 (17.71%)	79 (82.29%)	0.731 (0.403-1.325)	0.302
Anxiety Assessment items				
Being alone at home scares the crap out of me				
Never (N=427)	100 (23.42%)	327 (76.58%)	Baseline	
Sometimes (N=354)	87 (24.58%)	267 (75.42%)	1.066 (0.766-1.482)	0.706
Most Of The Time Or Always (N=4)	1 (25%)	3 (75%)	1.090 (0.112-10.595)	0.941
I feel scared when I have to take a test:				
Never (N=437)	100 (22.88%)	337 (77.12%)	Baseline	
Sometimes (N=289)	74 (25.61%)	215 (74.39%)	1.160 (0.821-1.639)	0.401
Most Of The Time Or Always (N=59)	14 (23.73%)	45 (76.27%)	1.048 (0.553-1.988)	0.885
I'm afraid I'll fail in academics because of my insecurities.				
(N=377) Never	76 (20.16%)	301 (79.84%)	Baseline	
Sometimes (N=338)	93 (27.51%)	245 (72.49%)	1.503 (1.063-2.127)	0.021
Most Of The Time Or Always (N=70)	19 (27.14%)	51 (72.86%)	1.475 (0.823-2.645)	0.192

I worry that something bad will happen to me:				
Never (N=484)	116 (23.97%)	368 (76.03%)	Baseline	
Sometimes (N=154)	27 (17.53%)	127 (82.47%)	0.674 (0.424-1.074)	0.097
Most Of The Time Or Always (N=147)	45 (30.61%)	102 (69.39%)	1.400 (0.931-2.105)	0.106
I worry what other people think of me:				
Never (N=652)	151 (23.16%)	501 (76.84%)	Baseline	
Sometimes (N=127)	33 (25.98%)	94 (74.02%)	1.165 (0.753-1.802)	0.493
Most Of The Time Or Always (N=6)	4 (66.67%)	2 (33.33%)	6.636 (1.204-36.583)	0.030
I feel moments of sudden terror, fear, or fright';				
Never (N=617)	159 (25.77%)	458 (74.23%)	Baseline	
Sometimes (N=168)	29 (17.26%)	139 (82.74%)	0.601 (0.387-0.932)	0.023
I'm sceptical about having to speak in front of my compatriots:				
Never (N=540)	125 (23.15%)	415 (76.85%)	Baseline	
Sometimes (N=141)	32 (22.7%)	109 (77.3%)	0.975 (0.627-1.516)	0.909
Most Of The Time Or Always (N=104)	31 (29.81%)	73 (70.19%)	1.410 (0.885-2.245)	0.148
In my head, I'm tormented by negative or ridiculous images or concepts				
Never (N=557)	136 (24.42%)	421 (75.58%)	Baseline	
Sometimes (N=182)	48 (26.37%)	134 (73.63%)	1.109 (0.757-1.625)	0.596
Most Of The Time Or Always (N=46)	4 (8.7%)	42 (91.3%)	0.295 (0.104-0.837)	0.022
Low in mood, depressed, and thus unable to care for myself				
Never (N=502)	122 (24.3%)	380 (75.7%)	Baseline	
Sometimes (N=282)	65 (23.05%)	217 (76.95%)	0.933 (0.661-1.316)	0.693
Most Of The Time Or Always (N=1)	1 (100%)	0 (0%)	0.000	0.999
Depression assessment items				
I feel useless, worthless, and like a mean guy; I don't believe inside myself.				
Never (N=531)	135 (25.42%)	396 (74.58%)	Baseline	

Sometimes (N=232)	49 (21.12%)	183 (78.88%)	0.785 (0.542-1.138)	0.202
Most Of The Time Or Always (N=22)	4 (18.18%)	18 (81.82%)	0.652 (0.217-1.960)	0.446
Getting myself out of bed in the morning is a major struggle for me these days.				
Never (N=438)	96 (21.92%)	342 (78.08%)	Baseline	
Sometimes (N=341)	88 (25.81%)	253 (74.19%)	1.239 (0.889-1.727)	0.205
Most Of The Time Or Always (N=6)	4 (66.67%)	2 (33.33%)	7.125 (1.286-39.489)	0.025
I feel worried, nervous, panicky&, tensed				
Never (N=523)	128 (24.47%)	395 (75.53%)	Baseline	
Sometimes (N=262)	60 (22.9%)	202 (77.1%)	0.917 (0.646-1.301)	0.626

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 1 forms) with many Behaviour Assessment items. The strongest association was found with Most of The Time Or Always (Do you observe change in school performance and attendance) (odds ratio=3.353, 95% CI 0.208 to 53.93, P value 0.393).

The Univariate analysis of regression had shown statistically not significant association with physical abuse (≥ 1 forms) with many Anxiety Assessment items. The strongest association was found with Most of The Time or Always (I worry what other people think of me) (odds ratio=6.636, 95% CI 1.204 to 36.583, P value 0.030).

The Univariate analysis of regression had shown statistically not significant association with physical abuse (≥ 1 forms) with many Depression assessment items. The strongest association was found with Most of The Time or Always (Getting myself out of bed in the morning is a major struggle for me these days) (Odds ratio=7.125, 95% CI 1.286 to 39.489, P value 0.025).

**Table 25: Comparison of determinants between physical abuse (≥ 2 forms)
(N=654)**

Determinants	Physical Abuse		ODDS Ratio (95% C.I)	P value
	Yes (≥ 2 forms)	No		
Family Determinants				
Do Any of Your Family Member/S Quarrel in Your Presence?				
Never (N=338)	16 (4.73%)	322 (95.27%)	Baseline	
Sometimes (N=314)	41 (13.06%)	273 (86.94%)	3.022 (1.659-5.506)	<0.001
Most of The Time or Always (N=2)	0 (0%)	2 (100%)	0.00	0.999
Do you have any of your family member/s who is alcoholic?				
Never (N=465)	38 (8.17%)	427 (91.83%)	Baseline	
Sometimes (N=171)	14 (8.19%)	157 (91.81%)	1.002 (0.529-1.899)	0.995
Most Of The Time Or Always (N=18)	5 (27.78%)	13 (72.22%)	4.322 (1.463-12.771)	0.008
Any of your family member/s expect too much from you? (e.g. in study, and in discipline)				
Never (N=333)	16 (4.8%)	317 (95.2%)	Baseline	
Sometimes (N=240)	28 (11.67%)	212 (88.33%)	2.617 (1.382-4955)	0.003
Most Of The Time Or Always (N=81)	13 (16.05%)	68 (83.95%)	3.788 (1.741-8.240)	0.001
Do you show disagreement over household rules (e.g. in study, play timings)				
Never (N=406)	37 (9.11%)	369 (90.89%)	Baseline	
Sometimes (N=217)	17 (7.83%)	200 (92.17%)	0.848 (0.465-1.544)	0.589
Most Of The Time Or Always (N=31)	3 (9.68%)	28 (90.32%)	1.069 (0.310-3.684)	0.916
Does your family members compare you with other children (e.g.in studies, following the rules and discipline)				
Never (N=302)	21 (6.95%)	281 (93.05%)	Baseline	
Sometimes (N=220)	23 (10.45%)	197 (89.55%)	1.562 (0.841-2.901)	0.158
Most Of The Time Or Always (N=132)	13 (9.85%)	119 (90.15%)	1.462 (0.709-3.016)	0.304
Psychological Determinants				
I argue a lot				
Never (N=368)	19 (5.16%)	349 (94.84%)	Baseline	
Sometimes (N=282)	38 (13.48%)	244 (86.52%)	2.861 (1.611-5.081)	<0.001
Most Of The Time Or Always (N=4)	0 (0%)	4 (100%)	0.00	0.999
I am too dependent on others				
Never (N=385)	33 (8.57%)	352 (91.43%)	Baseline	
Sometimes (N=240)	23 (9.58%)	217 (90.42%)	1.131 (0.647-1.977)	0.667
Most Of The Time Or Always (N=29)	1 (3.45%)	28 (96.55%)	0.381 (0.050-2.890)	0.351
I am too shy or timid				
Never (N=561)	43 (7.66%)	518 (92.34%)	Baseline	
Sometimes (N=93)	14 (15.05%)	79 (84.95%)	2.135 (1.117-4.081)	0.022

I have difficulty in sustaining attention/interest in tasks/fun activities				
Never (N=383)	29 (7.57%)	354 (92.43%)	Baseline	
Sometimes (N=265)	28 (10.57%)	237 (89.43%)	1.422(0.836-2.486)	0.188
Most Of The Time Or Always (N=6)	0 (0%)	6 (100%)	0.00	0.999
I lie or cheat frequently				
Never (N=388)	37 (9.54%)	351 (90.46%)	Baseline	
Sometimes (N=251)	20 (7.97%)	231 (92.03%)	0.821 (0.465-1.451)	0.498
Most Of The Time Or Always (N=15)	0 (0%)	15 (100%)	0.000	0.999
I feel difficulty in performing activities				
Never (N=316)	20 (6.33%)	296 (93.67%)	Baseline	
Sometimes (N=318)	37 (11.64%)	281 (88.36%)	1.949 (1.104-3.439)	0.021
Most Of The Time Or Always (N=20)	0 (0%)	20 (100%)	0.000	0.999
I do not follow through instructions and fail to finish work				
Never (N=465)	36 (7.74%)	429 (92.26%)	Baseline	
Sometimes (N=185)	21 (11.35%)	164 (88.65%)	1.526 (0.865-2.691)	0.144
Most Of The Time Or Always (N=4)	0 (0%)	4 (100%)	0.000	0.999
Social Determinants				
I have difficulty in showing cooperation in group activities.				
Never (N=334)	27 (8.08%)	307 (91.92%)	Baseline	
Sometimes (N=299)	28 (9.36%)	271 (90.64%)	1.175 (0.676-2.043)	0.568
Most Of The Time Or Always (N=21)	2 (9.52%)	19 (90.48%)	1.197 (0.265-5.414)	0.815
I have difficulty in Showing good sportsmanship when winning or losing.				
Never (N=374)	33 (8.82%)	341 (91.18%)	Baseline	
Sometimes (N=245)	18 (7.35%)	227 (92.65%)	0.819 (0.450-1.491)	0.514
Most Of The Time Or Always (N=35)	6 (17.14%)	29 (82.86%)	2.138 (0.828-5.522)	0.117
When I get frustrated, I am not able to stay calm				
Never (N=341)	25 (7.33%)	316 (92.67%)	Baseline	
Sometimes (N=272)	27 (9.93%)	245 (90.07%)	1.393 (0.789-2.461)	0.254
Most Of The Time Or Always (N=41)	5 (12.2%)	36 (87.8%)	1.756 (0.633-4.869)	0.280
I don't apologize when I make a mistake				
Never (N=446)	28 (6.28%)	418 (93.72%)	Baseline	
Sometimes (N=194)	26 (13.4%)	168 (86.6%)	2.310 (1.316-4.057)	0.004
Most Of The Time Or Always (N=14)	3 (21.43%)	11 (78.57%)	4.071 (1.074-15.436)	0.039

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 2 forms) with many family determinants factors. The strongest association was found with most of the time or always (Do you have any of your family member/s who is alcoholic?) (odds ratio=4.322, 95% CI 1.463 to 12.771, P value 0.008).

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 2 forms) with many psychological determinants' factors. The strongest association was found with sometimes (I argue a lot) (odds ratio=2.861, 95% CI 1.611 to 5.081, P value <0.001).

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 2 forms) with many social determinants' factors. The strongest association was found with Most of The Time Or Always (I don't apologize when I make a mistake) (odds ratio=4.071, 95% CI 1.074 to 15.436, P value 0.039).

**Table 26: Comparison of consequences between physical abuse (≥ 2 forms)
(N=654)**

Consequences	Physical Abuse		ODDS Ratio (95% C.I)	P value
	Yes (≥ 2 forms)	No		
Behaviour Assessment items				
Do you show unusual aggression, rages, or tantrums				
Never (N=364)	33 (9.07%)	331 (90.93%)	Baseline	
Sometimes (N=275)	21 (7.64%)	254 (92.36%)	0.829 (0.468-1.468)	0.521
Most Of The Time Or Always (N=15)	3 (20%)	12 (80%)	2.508 (0.673-9.338)	0.171
Are you afraid or reluctant to go home, or might run away				
Never (N=594)	53 (8.92%)	541 (91.08%)	Baseline	
Sometimes (N=60)	4 (6.67%)	56 (93.33%)	0.729 (0.254-2.090)	0.556
Do you feel nervous when touched				
Never (N=474)	42 (8.86%)	432 (91.14%)	Baseline	
Sometimes (N=179)	15 (8.38%)	164 (91.62%)	0.941 (0.508-1.742)	0.846
Most Of The Time Or Always (N=1)	0 (0%)	1 (100%)	0.000	0.999
Do you observe change in school performance and attendance				
Never (N=547)	44 (8.04%)	503 (91.96%)		
Sometimes (N=106)	13 (12.26%)	93 (87.74%)	1.598 (0.828-3.083)	0.162
Most Of The Time Or Always (N=1)	0 (0%)	1 (100%)	0.000	0.999
Do you argue Constantly even over small things				
Never (N=547)	40 (7.31%)	507 (92.69%)	Baseline	
Sometimes (N=95)	13 (13.68%)	82 (86.32%)	2.009 (1.031-3.918)	0.041
Most Of The Time Or Always (N=12)	4 (33.33%)	8 (66.67%)	6.337 (1.829-21.958)	0.004
Do you refuse to follow rules				
Never (N=459)	35 (7.63%)	424 (92.37%)	Baseline	
Sometimes (N=177)	18 (10.17%)	159 (89.83%)	1.371 (0.755-2.491)	0.300
Most Of The Time Or Always (N=18)	4 (22.22%)	14 (77.78%)	3.461 (1.081-11.079)	0.036
“Do you take responsibility for other’s actions or just pass the blame for everything”				
Never (N=404)	27 (6.68%)	377 (93.32%)	Baseline	
Sometimes (N=239)	26 (10.88%)	213 (89.12%)	1.704 (0.970-2.996)	0.064
Most Of The Time Or Always (N=11)	4 (36.36%)	7 (63.64%)	7.979 (2.198-28.957)	0.002
“I feel spending more time with my friends instead of going home”				
Never (N=373)	29 (7.77%)	344 (92.23%)	Baseline	
Sometimes (N=249)	24 (9.64%)	225 (90.36%)	1.265 (0.718-2.229)	0.415
Most Of The Time Or Always (N=32)	4 (12.5%)	28 (87.5%)	1.695 (0.556-5.163)	0.353

“I worry about things”				
Never (N=233)	19 (8.15%)	214 (91.85%)	Baseline	
Sometimes (N=335)	31 (9.25%)	304 (90.75%)	1.149 (0.632-2.087)	0.649
Most Of The Time Or Always (N=86)	7 (8.14%)	79 (91.86%)	0.998 (0.404-2.465)	0.997
Anxiety Assessment items				
Being alone at home scares the crap out of me				
Never (N=352)	25 (7.1%)	327 (92.9%)	Baseline	
Sometimes (N=299)	32 (10.7%)	267 (89.3%)	1.568 (0.907-2.711)	0.108
Most Of The Time Or Always (N=3)	0 (0%)	3 (100%)	0.000	0.999
‘I feel scared when I have to take a test’				
Never (N=365)	28 (7.67%)	337 (92.33%)	Baseline	
Sometimes (N=237)	22 (9.28%)	215 (90.72%)	1.232 (0.687-2.208)	0.485
Most Of The Time Or Always (N=52)	7 (13.46%)	45 (86.54%)	1.872 (0.773-4.535)	0.165
I'm afraid I'll fail in academics because of my insecurities.				
Never (N=319)	18 (5.64%)	301 (94.36%)	Baseline	
Sometimes (N=276)	31 (11.23%)	245 (88.77%)	2.116 (1.156-3.874)	0.015
Most Of The Time Or Always (N=59)	8 (13.56%)	51 (86.44%)	2.623 (1.084-6.350)	0.033
“I worry that something bad will happen to me”				
Never (N=398)	30 (7.54%)	368 (92.46%)	Baseline	
Sometimes (N=140)	13 (9.29%)	127 (90.71%)	1.256 (0.635-2.482)	0.513
Most Of The Time Or Always (N=116)	14 (12.07%)	102 (87.93%)	1.684 (0.860-3.294)	0.128
“I worry what other people think of me”				
Never (N=544)	43 (7.9%)	501 (92.1%)	Baseline	
Sometimes (N=106)	12 (11.32%)	94 (88.68%)	1.487 (0.756-2.926)	0.250
Most Of The Time Or Always (N=4)	2 (50%)	2 (50%)	11.651 (1.601-84.772)	0.015
I feel moments of sudden terror, fear, or fright				
Never (N=506)	48 (9.49%)	458 (90.51%)	Baseline	
Sometimes (N=148)	9 (6.08%)	139 (93.92%)	0.618 (0.296-1.291)	0.200
I'm sceptical about having to speak in front of my compatriots:				
Never (N=449)	34 (7.57%)	415 (92.43%)	Baseline	
Sometimes (N=123)	14 (11.38%)	109 (88.62%)	1.568 (0.813-3.025)	0.180
Most Of The Time Or Always (N=82)	9 (10.98%)	73 (89.02%)	1.505 (0.693-3.269)	0.302
In my head, I'm tormented by negative or ridiculous images or concepts				
Never (N=461)	40 (8.68%)	421 (91.32%)	Baseline	
Sometimes (N=149)	15 (10.07%)	134 (89.93%)	1.178 (0.631-2.200)	0.607
Most Of The Time Or Always (N=44)	2 (4.55%)	42 (95.45%)	0.501 (0.117-2.148)	0.352
Low in mood, depressed, and thus unable to care for myself				
Never (N=416)	36 (8.65%)	380 (91.35%)	Baseline	
Sometimes (N=237)	20 (8.44%)	217 (91.56%)	0.973 (0.549-1.732)	0.925
Most Of The Time Or Always (N=1)	1 (100%)	0 (0%)	0.000	1.000

Depression assessment items				
I feel useless, worthless, and like a mean guy; I don't believe inside myself.				
Never (N=434)	38 (8.76%)	396 (91.24%)	Baseline	
Sometimes (N=201)	18 (8.96%)	183 (91.04%)	1.025 (0.570-1.845)	0.934
Most Of The Time Or Always (N=19)	1 (5.26%)	18 (94.74%)	0.579 (0.075-4.457)	0.600
Getting myself out of bed in the morning is a major struggle for me these days.				
Never (N=367)	25 (6.81%)	342 (93.19%)	Baseline	
Sometimes (N=283)	30 (10.6%)	253 (89.4%)	1.622 (0.931-2.826)	0.088
Most Of The Time Or Always (N=4)	2 (50%)	2 (50%)	13.680 (1.848-101.243)	0.010
“I feel worried, nervous, panicky&, tensed”				
Never (N=429)	34 (7.93%)	395 (92.07%)	Baseline	
Sometimes (N=225)	23 (10.22%)	202 (89.78%)	1.323 (0.759-2.306)	0.324

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 2 forms) with many Behaviours Assessment items. The strongest association was found with Most of The Time or Always (Do you take responsibility for other’s actions or just pass the blame for everything) (odds ratio=7.979, 95% CI 2.198 to 28.957, P value 0.002).

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 2 forms) with many Anxiety Assessment items. The strongest association was found with Most of The Time or Always (I worry what other people think of me) (odds ratio=7.125, 95% CI 1.601 to 84.772, P value 0.015).

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 2 forms) with many Depression assessment items. The strongest association was found with Most of The Time or Always (“Getting myself out of bed in the morning is a major struggle for me these days.”) (Odds ratio=13.680, 95% CI 1.848 to 101.243, P value 0.010).

Table 27: Descriptive analysis of determinants and consequences in the study population,

Parameter	Median (IQR)
Determinant factors	
Family Determinants (N=785)	3 (1 to 4)
Psychological Determinants (N=785)	3 (2 to 4)
Social Determinants (N=785)	2 (1 to 3)
Consequences	
Child Behavior Evaluation Scale (N=785)	3 (1 to 5)
Anxiety Assessment Scale (N=785)	4 (2 to 5)
Depression Scale (N=785)	2 (0 to 2)

Among the study population, the median family determinants score was 3 (1 to 4), the median psychological determinants score was 3 (2 to 4), it was 2 (1 to 3) for social determinants and the median child behavior score was 3 (1 to 5), it was 4 (2 to 5) for Anxiety Assessment score and it was 2 (0 to 2) for depression score. (Table 25)

Table 28: Comparison of median value of determinants factor with physical abuse status (≥ 2 form)

Determinants	Physical Abuse (≥ 2 form)		The Mann Whitney U Exam (P value)
	Yes (N=57) Median (IQR)	No (N=597) Median (IQR)	
Family Determinants (N=654)	3(2 to 4.5)	2 (1 to 4)	<0.001
Psychological Determinants (N=654)	3 (2 to 4)	3 (2 to 4)	0.024
Social Determinants (N=654)	2 (1 to 3)	2 (1 to 3)	0.026

Among the people with, the children those who had physical abuse the median family determinants score was 3 (IQR 2 to 4.5), the median psychological determinants score was 3 (IQR 2 TO 4) and the median social determinants score was 2 (IQR 1 to 3). The difference in the family, psychological, social determinants between physical abuse status was (P Value <0.05) relevant in terms of statistics.

Table 29: Comparison of median value of consequences with physical abuse (≥ 2 form)

Determinants	Physical Abuse (≥ 2 form)		The Mann Whitney U Exam (P value)
	Yes (N=57)	No (N=597)	
	Median (IQR)	Median (IQR)	
Family Determinants (N=654)	3 (2 to 5)	3 (1 to 5)	0.155
Psychological Determinants (N=654)	5 (3 to 6)	3 (2 to 5)	0.005
Social Determinants (N=654)	2 (1 to 3)	2 (0 to 2.5)	0.077

Among the people with, those who had physical abuse the median children behavior score was 3 (IQR 2 to 5), the average level of worry (anxiety) was 5 (IQR 2 TO 5) and median depressive score score was 2 (IQR 1 to 3). The difference in the anxiety score between physical abuse status was significant statistically (P Value 0.005). The difference in the child behavior, depression score between physical abuse status (P Value >0.05) was not significant statistically (P Value >0.05). (Table 27)

Table 30: Comparison of median value of determinants factor with physical abuse status (≥ 1 form)

Determinants	Physical Abuse (≥ 1 form)		The Mann Whitney U Exam (P value)
	Yes (N=188)	No (N=597)	
	Median (IQR)	Median (IQR)	
Family Determinants (N=785)	3(2 to 4)	2 (1 to 4)	<0.001
Psychological Determinants (N=785)	3 (2 to 4)	3 (2 to 4)	0.002
Social Determinants (N=785)	2 (1 to 3)	2 (1 to 3)	<0.001

Among the people with, the children those who had physical abuse the median family determinants score was 3 (IQR 2 to 4), the median psychological determinants score was 3 (IQR 2 to 4) and the median social determinants score was 2 (IQR 1 to 3). The difference in the family, psychological, social determinants between physical abuse status was statistically significant (P Value <0.05). (Table 28).

Table 31: Comparison of median value of consequences with physical abuse (≥ 1 form)

Determinants	Physical Abuse (≥ 1 form)		The Mann Whitney U Exam (P value)
	Yes (N=188) Median (IQR)	No (N=597) Median (IQR)	
Child Behavior Evaluation Scale (N=785)	3 (2 to 5)	3 (1 to 5)	0.30
Anxiety Assessment Scale (N=785)	4 (2 to 6)	3 (2 to 5)	0.146
Depression Scale (N=785)	2 (1 to 2)	2 (0 to 2.5)	0.824

Among the people with those who had physical abuse the median children behavior score was 3 (IQR 2 to 5), the anxiety median score was 2 (IQR 2 to 6) and depression median score was 2 (IQR 0 to 2.5). The difference in the child behavior, anxiety score, depression score between physical abuse status (P Value >0.05) significant not statistically (P Value >0.05). (Table 29)

Table 32: Descriptive analysis of determinants and consequences in the study population:

Parameter	Median (IQR)
Determinant factors	
Family Determinants (N=785)	3 (1 to 4)
Psychological Determinants (N=785)	3 (2 to 4)
Social Determinants (N=785)	2 (1 to 3)
Consequences	
Child Behavior Evaluation Scale (N=785)	3 (1 to 5)
Anxiety Assessment Scale (N=785)	4 (2 to 5)
Depression Scale (N=785)	2 (0 to 2)

Among the study population, the median family determinants score was 3 (1 to 4), the median psychological determinants score was 3 (2 to 4), it was 2 (1 to 3) for social determinants and the median child behavior score was 3 (1 to 5), it was 4 (2 to 5) for Anxiety Assessment score and it was 2 (0 to 2) for depression score. (Table 30).

Table 33: Comparison of median value of determinants factor with physical abuse status (≥ 1 form)

Determinants	Physical Abuse (≥ 2 form)		The Mann Whitney U Exam (P value)
	Yes (N=57) Median (IQR)	No (N=597) Median (IQR)	
Family Determinants (N=654)	3(2 to 4.5)	2 (1 to 4)	<0.001
Psychological Determinants (N=654)	3 (2 to 4)	3 (2 to 4)	0.024
Social Determinants (N=654)	2 (1 to 3)	2 (1 to 3)	0.026

Among the people with, the children those who had physical abuse the median family determinants score was 3 (IQR 2 to 4.5), the median psychological determinants score was 3 (IQR 2 TO 4) and the median social determinants score was 2 (IQR 1 to 3). The difference in the family, psychological, social determinants between physical abuse status was statistically significant (P Value <0.05). (Table 31)

Table 34: Comparison of median value of consequences with physical abuse (≥ 2 form)

Determinants	Physical Abuse (≥ 2 form)		The Mann Whitney U Exam (P value)
	Yes (N=57) Median (IQR)	No (N=597) Median (IQR)	
Child Behavior Evaluation Scale (N=654)	3 (2 to 5)	3 (1 to 5)	0.155
Anxiety Assessment Scale (N=654)	5 (3 to 6)	3 (2 to 5)	0.005
Depression Scale (N=654)	2 (1 to 3)	2 (0 to 2.5)	0.077

Among the people with those who had physical abuse the median children behavior score was 3 (IQR 2 to 5), the median anxiety score was 5 (IQR 2 TO 5) and the depression median score was 2 (IQR 1 to 3). The difference in the anxiety score between physical abuse status was statistically significant (P Value 0.005). The difference in the child behavior, depression score between physical abuse status was not statistically significant (P Value >0.05). (Table 32).

Table 35: Comparison of median value of determinants factor with physical abuse status (≥ 1 form)

Determinants	Physical Abuse (≥ 1 form)		The Mann Whitney U Exam (P value)
	Yes (N=188) Median (IQR)	No (N=597) Median (IQR)	
Family Determinants (N=785)	3(2 to 4)	2 (1 to 4)	<0.001
Psychological Determinants (N=785)	3 (2 to 4)	3 (2 to 4)	0.002
Social Determinants (N=785)	2 (1 to 3)	2 (1 to 3)	<0.001

Among the people with, the children those who had physical abuse the median family determinants score was 3 (IQR 2 to 4), the median psychological determinants score was 3 (IQR 2 to 4) and the median social determinants score was 2 (IQR 1 to 3). The difference in the family, psychological, social determinants between physical abuse status was statistically significant (P Value <0.05). (Table 33)

Table 36: Comparison of median value of consequences with physical abuse (≥ 1 form)

Determinants	Physical Abuse (≥ 1 form)		The Mann Whitney U Exam (P value)
	Yes (N=188) Median (IQR)	No (N=597) Median (IQR)	
Child Behaviour Evaluation Scale (N=785)	3 (2 to 5)	3 (1 to 5)	0.30
Anxiety Assessment Scale (N=785)	4 (2 to 6)	3 (2 to 5)	0.146
Depression Scale (N=785)	2 (1 to 2)	2 (0 to 2.5)	0.824

Among the people with, those who had physical abuse the median children behavior score was 3 (IQR 2 to 5), the median anxiety score was 2 (IQR 2 to 6) and the median depression score was 2 (IQR 0 to 2.5). The difference in the child behavior, anxiety score, depression score between physical abuse status was not statistically significant (P Value >0.05). (Table 34)

Major Findings of the study

- Among the study population, 359(45.73%) of the participants age were between 15 to 16 years. Male participants 438(55.80%) were larger than female participants 347(44.20%).653(83.18%) of the participants were belongs to nuclear family.662(84.33%) of them were Hindu. 469(59.75%) of the participants from urban. 320(40.76%) of the participants father education were higher secondary, 378(48.15%) of participants mother education were secondary. 316(40.25%) of the participants father occupation were self-employed. 344(43.82%) of the participants mother occupation were self-employed. 492(62.68%) of the participants monthly family income were Rs.6001-8000. 546(69.55%) of the participants had two siblings.
- Among the study population, the prevalence of physical abuse (≥ 1 form) was 23.9%, in urban it was 26.23% and in rural it was 20.57%. Among the study population, the prevalence of physical abuse (≥ 2 form) was 8.7%, in urban it was 10.82% and in rural it was 5.64%.
- Further, 6.2%(49) of the adolescents reported being hurt by their Guardian/ Family member mainly as a punishment at home. Moreover, 4.7% (37) of the adolescents were being hurt by friends either by pushing or by beating with a stick. 1.4% (11) of the adolescents were being hurt by neighbors either by pushing or by beating with a stick.
- Among the abused adolescents, abuse was mainly due to comparing with other children by the family members (21.3%) ,and abuse was also seen among those adolescents (13.6%) whose family members pressurize in studies and in discipline . Adolescents 4.6% were reported being hurt due to being much dependent in daily activities and studies. Frequently lying and

cheating 2.4%, showing difficulty in performing daily activities 2.7% were the associated with being hurt were reported by the adolescents

- Adolescents who reported being harmed experienced effects such as behavioral changes, anxiety, and depression. Majority of the adolescents 12.2% reported that they worry about the activities they perform in the school and in the home. 5.1% of Adolescents reported they would like to spend more time with friends instead of going home. 13.2% of teenagers reported having trouble conversing with their friends. 18.7% were frightened that they will experience a horrific incident. 8.9% of teenagers expressed a concern of failing in their academics as a result of insecurities. About 2.8% of teenagers felt insignificant, incompetent, or lacking in confidence.

CHAPTER 6: DISCUSSION

By contrasting the present study's findings with earlier research, we hope to arrive at some conclusions. Students in the Belagavi school district were studied in the present research in order to determine the adolescents' reactions to physical abuse (10-16 year old).

There was little analogous research done in India, according to the available literature. The research findings were explained, as well as the consequences for nursing and health care. The study's limitations are discussed as well. The chapter concludes with proposals for future research and recommendations.

Discussion will be discussed under following headings

6.1 Prevalence of Physical abuse among school going adolescents

6.2 Associations between physical abuse and the selected socio-demographic variables:

6.3 Associations between physical abuse and the determinants

6.4 Associations between physical abuse and the consequences

6.1 Prevalence of Physical abuse among school going adolescents:

In the present study, among the study population, the overall predominance of physical harassment (≥ 1 form) was 23.9%, the prevalence in urban school was 26.23% and in rural school was 20.57% respectively. Secondly, in the present study, overall predominance of physical harassment for more than 2 forms (≥ 2 form) was

8.7%, prevalence in urban school was 10.82% and 5.64 % in rural schools respectively.

In our study physical abuse (24.72%) is more reported in the age group of 12-14 yrs. Adolescents, Ratio of ODS= (1.126(95% C.I -0.706-1.796) p value 0.618. which did not showed any significant association.

In the current study found that, majority of girls (24.78%) than boys (23.29%) experienced physical abuse, difference was not statistically significant [CI- 0.096 (0.575-1.719) p values 0.984]. Six hundred and fifty-three (653) of the participants in the current research (83.18%) belonged to a single family. The participants from joint family had experienced more physical abuse (18.27%) compare to nuclear family, and also showed the significant association [OR=2.994 (95% C.I-1.649-5437) p value <0.001].

Approximately two-thirds of the participants in this research are Hindu (84.33 percent).The number of cases of child abuse reported varied significantly among respondents from various religious backgrounds, according to our research. Abuse was most frequent among Children of Christian religion (42.42%) [OR= 1.044 (95%C.I -0.237-4.612) P value- 0.954] which was not found to be statistically significant

The subsequent studies supported the findings of the present study.

Similar study conducted by *kumar MT et al.* reported that Teenagers in higher grade levels at school showed elevated physical abuse.A Similar study conducted in Semi urban area of Delhi, among total 1060 adolescent girls, 42.6% of adolescent's girls reported physical abuse (*Daral s et al*).A study done in Panjab revealed that

physical abuse among adolescents is also linked to the type of family they come from, The chi-square value was calculated to be very significant: $\chi^2(2) = 9.37$; $p < 0.001$. As a result, there are considerable variations in terms of maltreatment among adolescents from joint and nuclear homes (*Sukhinder Kaur & Suman Verma*). Abuse seemed to be least common among Hindu children (23.56%) and Muslim religion (20.22%). Nevertheless, the total rate of physical abuse remained high across all religion. *Daral s et al.* asserted that prevalence of physical abuse 70.8%, among adolescents of semi urban Schools in Delhi. Physical abuse was due to use of social media forms and increase of no of students in each class. In 2007, India's Ministry of Women and Child Affairs determined that adolescents were most often struck or slapped. A study done in India by *kumar MT et al.* reported 75.5% of physical abuse among 6682 school attending adolescents in Thrissur, Kerala, reported that Teenagers in higher grade levels at school showed elevated physical abuse.

da Silva Franzin LC et al., conducted exploratory descriptive study in Brazil with quantitative design among 19316 secondary data records, and the study reported physical violence, with 1341 reports (7.9%) among 5 to 14 years aged children. Physical abuse was reported in 7.1% of students in a Chinese prevalence study.

In order to evaluate the frequency of various types of maltreatment of children in Taiwan, a community investigation was carried out with 5,276 adolescents between the ages of 12 and 18 from 35 institutions spread over 17 townships and districts. Unidentified, self-report, structured questionnaires were filled out by 5,236 teenagers in total. Eighty-three percent ($n = 4,347$) of adolescents ($n = 4,788$) reported being exposed to maltreatment in the year prior, which represents the majority of cases (91%, $n = 4,788$). On September 1st, 2017, a thorough search of pertinent

publications was carried out in Pubmed, Wanfang Data, the China National Knowledge Infrastructure (CNKI), the China Biology Medicine Disc (CBMdisc), and the Chinese Scientific Journals Fulltext Database (CQVIP), the study found that the pooled prevalence was calculated using a random-effects model, and causes of variability were investigated using subgroup analysis. The study found that among the students, the prevalence of maltreatment was 64.7% (CI: 52.3%-75.6%). According to the study, the prevalence of childhood physical abuse was 17.4% (13.8%-21.3%; CPA).

A prevalence study conducted in Malaysia reported 11.8% of physical abuse among 13 years aged school going adolescents (*Saminathan TA et al.*). A study done in Arba Minch Town, Southern Ethiopia, reported highest 33.7% of physical abuse among 12- 15 years school going adolescents (*Unasho YS et al.*). A cross sectional school based survey done in Ethiopia with mean age of 14 to 16 years reported physical abuse 43.8% of physical abuse among adolescents (*Amare T et al.*).

6.2 Associations between physical abuse and the selected socio-demographic variables:

In the Present study, participants whose fathers had greater secondary education were more likely to experience physical abuse (OR=(95 percent C.I.) 0.368 (0.205-0.660)] P value 0.001) were shown to have the strongest association.

Research participants whose mothers had a higher secondary education were more likely to be physically abused (31.92 percent). There is no statistical significance to the odds ratio.

In the present study the physical abuse (28%) among adolescents was more prevalent in low income of the family. (OR=2.442 (95% C.I-0.790-7.552), P Value - 0.121.) Adolescents from lower-income homes were shown to be more often abused physically.

Over all study reveals, 316(40.25%) of the participants father occupation were self-employed. But the physical abuse among the study participants the strongest association was found with Government Employee (Fathers Occupation) (odds ratio=6.291, 95% CI 1.835 to 21.354, P value 0.003). In the present study the physical abuse (28.93%) among adolescents was more prevalent in low income of the family. (ODDS Ratio= 2.442 (95% C.I-0.790-7.552), P Value - 0.121.)

The subsequent studies supported the findings of the present study.

According to the study conducted in Tripura, India, 2007 (Modak and Deb 2007) found it more often in teenagers from income high in households. Study findings suggest that child abuse is linked to poverty, male gender or drug usage or alcohol by family members and other issues at school in Kerala, India. According to the report (NCIPCV) Caregivers with low education or income in the family was the individual risk factors of abuse. Study done by the *Lawrence M Berger* reported that In households with a single parent as well as those with two parents, mother alcohol usage, depression, and a thuggery in the family, all have a role in a child's likelihood of being mistreated. Furthermore, income is strongly related to violence against children in one guardian families. A cross sectional study from Jammu revealed that adolescents from Parents with a lower level of education and those who live in joint households have reported increased cases of abuse (*Ruby Charak et al*). Daral S et al. found that guardians who seemed to have no formal education had a higher likelihood

of abusing their children physically. (OR=1.571 (95% C.I - 1.122–2.201) p val-0.009).

A study carried out in Saudi Arabia also reported a statistically significant link between the occurrence of physical abuse and both a well-educated father and extended family members. (*Elarousy W, Shaiqi W*.. 2017;3:166.). Caregivers with inadequate education or poverty in the family were the individual risk factors of abuse, according to the research National Center for Injury Prevention and Control Division of Violence Prevention. A cross sectional study from Jammu revealed that adolescents from Parents with a lower level of education and those who live in joint households have reported increased cases of abuse (*Ruby Charak et al*).

Division of Violence Prevention, Prevention and control National Center of injury reported that Caregivers with low education or income in the family were the individual risk factors of abuse.

The study's findings of Panjab revealed that a high prevalence of abuse in low socioeconomic status families (*Sukhminder Kaur & Suman Verma*).(Berger LM.) Violating physically among teenagers earning, family traits, and toward children were associated importantly,(Berger LM.). Daral S et al also found that no or low education found among participants mother. (OR=(95% C.I) 0.531–1.005) p val-0.054.statistically no significant association is found.

Whereas the health line media newsletter reported that socioeconomic stress from financial issues, unemployment, or medical problems were the major risk factors of abuse among adolescents. Queensland government reported that financial strains, work anxieties, medical issues, or caring for a disabled family member can all cause

stress in parents and also these were factors for abuse in the children by the family (www.qld.gov.au/community/).

Abuse.net found that poverty may increase abuse risk, particularly when paired with other risk factors including depression, drug abuse, and social isolation. Poverty and unemployment increase a child's vulnerability to maltreatment. Deb and Modak (2007 India, Tripura) Adolescents from higher socioeconomic groups were more likely to be affected. Even while most poor individuals do not abuse their children, Daral s et al Physical abuse was more common in adolescents from low-income families, according to this study.

6.3 Associations between physical abuse and the determinants

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse with many family determinants factors. The strongest association was found with most of the time or always (Do you have any of your family member/s who is alcoholic?) (Odds ratio=4.322, 95% CI 1.463 to 12.771, P value 0.008). Children whose parents are regular drinkers are more likely to suffer physical and mental health problems.

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse with many psychological determinants' factors. The strongest association was found with most of the times /always (I argue a lot) (odds ratio=2.861, 95% CI 1.611 to 5.081, P value <0.001).

The Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 2 forms) with many social determinants' factors. The strongest association was found with Most of The Time Or Always (I

don't apologize when I make a mistake) (odds ratio=4.071, 95% CI 1.074 to 15.436, P value 0.039). The Univariate logistic regression analysis had

The subsequent studies supported the findings of the present study.

The significance of a few particular socioeconomic issues, such as poverty, parental depression and substance use, domestic (or intimate partner) violence, and other social determinants of child abuse and neglect, are explored. Lane, W. G., & Dubowitz, H. (2021). Social determinants of health, personalized medicine, and child maltreatment. *Pediatric research*, 89(2), 368-376.

(Stephenson, R., Sheikhattari, P 2006) study reported that male children were more likely than female children to report any type of child maltreatment. Residence in a rural area, poor parental relationships, and household members' use of addictive substances were all associated with an increased likelihood of reporting child maltreatment. Poor academic performance was linked to reports of school maltreatment. (Leung PW, Wong WC) study reported that the most commonly cited reasons for maltreatment included 'disobedience to parents', 'poor academic performance', and 'quarrelling between parents'. Physical maltreatments were discovered to be connected with age, parental education, place of origin, and type of housing. (Coulton, C. J., Korbin) reported that the likelihood of maltreatment is higher for children who reside in areas marked by poverty, an excessive number of children per adult resident, population instability, and the dominance of families headed by women.

6.4 Associations between physical abuse and the consequences

In the behavior of the physically abused children the strongest association was found with Most of The Time or Always (Do you observe change in school performance and attendance) (odds ratio=3.353, 95% CI 0.208 to 53.93, P value 0.393). In a comparable research,

The present study Univariate logistic regression analysis had shown statistically not significant association with physical abuse with many Anxiety Assessment items. The strongest association was found with Most of The Time or Always (I worry what other people think of me) (odds ratio=7.125, 95% CI 1.601 to 84.772, P value 0.015).

The present study Univariate logistic regression analysis had shown statistically not significant association with physical abuse (≥ 2 forms) with many Depression assessment items. The strongest association was found with Most of The Time Or Always (Getting myself out of bed in the morning is a major struggle for me these days.) (odds ratio=13.680, 95% CI 1.848 to 101.243, P value 0.010).

The subsequent studies supported the findings of the present study.

Calvete, E. (2007). The study results showed that justification of violence beliefs partially explained the higher levels of delinquent and aggressive behaviour in maltreated adolescents, and that a more unfavorable attitude toward social problem-solving partially mediated the higher levels of depressive symptoms in these adolescents. The findings demonstrate that exposure to both domestic violence and child maltreatment (dual exposure) raises a kid's risk of internalizing and externalizing outcomes in adolescence (Moylan, C. A., Herrenkohl, T. I.2010)

Ni, Y., Li, L., Zhou, X., & Hesketh, T. (2020) study findings showed that teenagers between the ages of ten and sixteen were asked to complete a questionnaire survey on their experiences with abuse and emotional/behavioral issues in two urban and two rural schools. 791 questionnaires in total qualified for analysis. The highest correlation between physical abuse and behavioural issues was severe physical abuse (RRR = 4.75 (95% confidence interval 1.74, 12.98), P = 0.002).

(Silverman, A. B., Reinherz, H. Z.) results concluded that At ages 15 and 21, abused subjects showed significant functional deficits in comparison to their nonabused counterparts, including higher levels of depressive symptoms, anxiety, psychiatric disorders, emotional-behavioral issues, and suicidal ideation and attempts. At ages 15 and 21, abuse victims performed much worse overall than their nonabused peers, although there were gender variations and unique patterns of functioning impairment.

Relevant studies, clinical review papers, and websites of child protection organizations were examined through a methodical search. Abuse of any kind harms children physically, emotionally, and psychologically and can have a long-term impact on how they behave and how their mental health develops. (Al Odhayani, A., Watson, W. 2013)

Childhood maltreatment and neglect had a considerable unfavorable impact on students' ability to adjust to school. Emotional/behavioral issues partially mediate between abuse/neglect and school adjustment. Academic proficiency slightly mitigated the impact of maltreatment on academic performance but did not mitigate the impact of abuse. (Oh, I., & Song, J. (2018))

There were high rates of anxiety, sadness, PTSD, and exposure to trauma. The study discovered a relationship between cumulative trauma exposure and PTSD and depression after controlling for sex, recent stressful life events, and childhood adversity. As the number of traumas increased, PTSD and depression symptoms also increased linearly ($F(4,912) = 7.60, P .001$) and $F(4,912) = 2.77, P .05$, respectively). (Suliman, S., Mkabile, S. G.2009).The study conducted by *Salzinger S et al.* reported that, Social expectations were generally found to mediate between abuse and internalizing problems among adolescents. Sandra J et al, found that physical abused adolescents had much more behavioral issues than their peers who had not been physically assaulted. The study reported by *Lan Guo et al.* found that Childhood abuse precedes teen anxiety. Meita Dhamayanti's research indicated that teenagers with a history of child maltreatment were more likely to be depressed. Children who were abused in any way have a strong link to depression.

CHAPTER 7: CONCLUSION

From June 2017 through September 2019 research was conducted to determine the “Determinants and consequences of adolescents who are enrolled in the study and suffer from physical abuse (10-16 year old) in Belagavi”, Karnataka. The research was carried out in different schools. The Determinants and Consequences of Physical Abuse among Adolescent Students (10-16 Years Old) in Belagavi were studied using a cross-sectional survey approach. The location was chosen based on the study's practicality, subject availability, and authority cooperation. The study concluded that:

- In the present study, among the study population, the overall predominance of physical harassment (**≥1 form**) was 23.9%, the prevalence in urban school was 26.23% and in rural school was 20.57% respectively. Secondly, in the present study, overall predominance of physical harassment for more than 2 forms (**≥2 form**) was 8.7%, prevalence in urban school was 10.82% and 5.64 % in rural schools respectively.
- In our study physical abuse (24.72%) is more reported in the age group of 12-14 yrs.
- Guardian, friends, and neighbors were the ones who hurt the adolescents, by beating with sticks and slapping. The reason being an argument and harassment from an alcoholic father when they were at home.
- The correlation between parent education and father's occupation had the strongest association with different forms of physical abuse. The strongest association was found between the participants who fought often and did not apologies after making a mistake, as well as those who had been subjected to

parental pressure with the physical abuse among adolescents. Performance in the school and shortage in school attendance have shown significantly association with different forms of physical abuse among school going adolescents.

- The statistically significant association found with physical abuses among school going adolescents those who have not taken responsibility after making mistake in day today activities in the school and in the home.
- The analysis had shown statistically significant association with physical abuse (≥ 2 forms) with psychological determinants, the strongest association was found with adolescents who all have argued a lot with the care givers. (Odds ratio=2.861, 95% CI 1.611 to 5.081, P value <0.001).
- The analysis had shown statistically significant association with physical abuse (≥ 2 forms) with many social determinants' factors. The strongest association was found with those who have not apologized for their mistake. (odds ratio=4.071, 95% CI 1.074 to 15.436, P value 0.039).
- The strongest association was found with Behaviours Assessment items with the physical abuse among adolescents those who have not taken responsibility of their mistake and blaming others for their own mistakes.(odds ratio=7.979, 95% CI 2.198 to 28.957, P value 0.002).
- The strongest association was found with Anxiety Assessment items among adolescents who have been physically hurt by others have experienced more as they have worried that what people think about them. (Odds ratio=7.125, 95% CI 1.601 to 84.772, P value 0.015).
- The strongest association was found with Depression assessment items as adolescents those have experienced physical abuse had difficulty in the

morning to get myself out of bed.(Odds ratio=13.680, 95% CI 1.848 to 101.243, P value 0.010).

- Comparison of median value of consequences with physical abuse (≥ 2 form):
Among the people with, those who had physical abuse the median children behavior score was 3 (IQR 2 to 5), the average level of worry (anxiety) was 5 (IQR 2 TO 5) and median depressive score score was 2 (IQR 1 to 3). The difference in the anxiety score between physical abuse status was significant statistically (P Value 0.005). The difference in the child behavior, depression score between physical abuse status (P Value >0.05) was not significant statistically (P Value >0.05).
- Comparison of median value of consequences with physical abuse (≥ 2 form):
Among the people with those who had physical abuse the median children behavior score was 3 (IQR 2 to 5), the median anxiety score was 5 (IQR2 TO 5) and the depression median score was 2 (IQR 1 to 3). The difference in the anxiety score between physical abuse status was statistically significant (P Value 0.005). The difference in the child behavior, depression score between physical abuse status was not statistically significant (P Value >0.05).

Summary of conclusions:

In conclusion, the study findings strongly Envisage providing accessible counseling centers for affected children as well as having a platform for creating mass awareness towards physical abuse and to reduce its impact on the children who are pillars for a better society tomorrow. child abuse has been an issue and it comes in many forms; physical, mental, emotional and/or sexual. Child abuse can and will affect the child's life, especially when they're growing older. They could become delinquents, suicidal, depressed, be an abuser themselves, or many other negative behaviors/ emotions. when

the adult next door sees something unusual with a child's appearance, meaning that if the child has bruises, broken bones, or any signs of physical abuse, they have to report it right away. Neighbors will be helpful to the child's life because they're saving them from being abused more from their parent or guardian. Just we need to remember that child abuse will affect the child's life negatively. And think about how abuse in their lives will lead to doing unacceptable behavior while growing up. Don't ever second guess yourself to reporting child abuse when you see it happening with your own eyes. Be a good samaritan and make a difference for that child's life.

Implications

The findings of the study will serve to offer preliminary information for society and health experts, as well as raise awareness among mothers and parents about physical abuse, perhaps reducing problems and the consequences of physical abuse.

Nursing practice

- This study finding will create awareness and gain knowledge regarding physical abuse its determinants and consequences among the nurses.
- The nurses can learn and use various tool like level of knowledge and awareness regarding physical abuse its determinants and consequences among parents of children.
- The nurses will provide health education to prevent physical abuse among parents in their clinical area

Nursing education

- The nurse educator creates the awareness to the students about the problems faced by the children have abuse in various domains such as physical, psychological and social.
- The nurse educators plan and conduct group discussion among nursing students to discuss various child abuse problems and its causes.
- Nursing faculties can educate the nursing students and motivate the students to prepare and educate child abuse prevention to children and their parents in community health postings

Nursing research

- The study findings will encourage further research studies to assess the level of knowledge and awareness and prevention programs regarding physical abuse and its determinants and consequences in various settings.
- Nurse researcher should come forward to develop and validate new strategies and tool and create awareness on child abuse.

Nursing Administration

- Administrator can encourage the nurses to identify the physical abuse in an early stage among pediatric clients.
- Nursing administration can arrange in service education or staff development programme especially for creation the awareness on problem and management of physical abuse among children.
- Nurse administrators should motivate the nurses to identify the symptoms of child abuse by using questionnaire like general knowledge and awareness questionnaire.

School and community Health Nursing services

- The school should create a safe learning environment, identify pupils who are suffering or at risk of harm and take suitable action. The school also needs to train staff in child protection.
- Staffs should be trained to identify signs of abuse including what to do if they or someone else is worried about a child
- Primary prevention services should be included in public education activities, parent education classes in the community, and family support programs.
- Parent education classes should be targeted for high-risk parents, respite care for parents of a child with a disability, or home visiting programs for new parents should be organized at community settings of Urban and rural areas.

Limitations

There were some limitations to this study

- The research design used in this study is descriptive survey design is the weak design as compared to experimental design
- Study is conducted on one group of adolescent's students. This limits the generalization of findings on other groups of population.
- The study findings were based on the participant's responses to the survey conducted using a self-administered questionnaire, which could be a subjective assessment method.
- Study is conducted in small geographical area limits the generalization of the findings
- The research design used in this study is descriptive survey design is the weak design as compared to experimental design

- Some parents have refused to give their children permission to participate in the study since they have not given their consent. The study did not include these children. A small number of parents requested explanation from the researcher as well as from school officials. This study was only allowed in a few schools.
- Despite these restrictions, the survey's participant responses were substantial. The results of this research will have a favorable impact on the younger generation's future outlook.

Strength of the study

- The study would also address the issue of physical abuse by breaking the silence.
- The study would contribute to the development of a extensive comprehension of the phenomena of abusing physically, allowing for the planning of appropriate receptive actions for the protection and care of children.
- The outcomes of the study will aid in the development of criteria for identifying children who have been abused
- It would, however, shed light on young adults' opinions toward physical abuse

Recommendations

These are some of the recommendations that may be drawn from the results of this study:

- Extend the research to additional Karnataka districts.
- To provide educational programs those promote healthy, nonviolent parenting.

- To provide child abuse risk assessment criteria for nurses as well as supportive interventions for at-risk households.
- To establish programs for the prevention of psychological abuse, thereby raising parental awareness.
- A nationwide survey employing qualitative methodologies, as well as awareness-raising efforts focusing on child abuse in girls based on the findings.
- Research can be done to promote nurse awareness of child abuse and then develop culturally responsive educational training materials to improve response capacity.
- A long-term study to track progress and find out what's working and what's not.

CHAPTER 8: SUMMARY

The current study was carried out in Belagavi to analyze “Determinants and consequences of adolescents who are enrolled in the study and suffer from physical abuse (10-16 year old) in Belagavi”, as far as we know, no similar research has been done on this topic in Karnataka. Therefore, the goal of this research is to better comprehend the determinants and consequences of adolescents (10-16 years old) in Belagavi, have indeed been subjected to physical abuse.

Among the study population 359 (45.73%) research participants were 15-16 years old.558 males (55.80%) were older than females.352 (44.20 percent).653(83.18%) participants were from nuclear families.84.33% were Hindu.469 (59.75%) urban participants.320 (40.76%) of fathers and 378 (48.15%) mothers had secondary education.316 (40.25%) fathers were self-employed.43.82% of mothers were self-employed.413(52.61%) members were upper middle class (class II).546 individuals (69.55%) had two siblings.

- In the present study, among the study population, the overall frequency of physical humiliation (≥ 1 form) was 23.9%, the frequency in urban school was 26.23% and in rural school was 20.57% respectively.
- Overall physical abuse frequency for more than 2 forms (≥ 2 form) was 8.7%, prevalence in urban school was 10.82% and 5.64 % in rural schools respectively.
- Slapping or striking was the most prevalent kind of physical abuse experienced by the teenagers in this research. In our study physical abuse (24.72%) is more reported in the age group of 12-14 yrs.

- In the current study found that, majority of girls (24.78%) than boys (23.29%) experienced physical abuse. Six hundred and fifty-three of the participants in the current research (83.18%) belonged to a small family.
- In our survey, there have been wide disparities in the religious backgrounds of those who reported abuse.
- When the father of the research participants had at least a bachelor's degree, the risk of physical abuse increased. (ODDS Ratio (95% C.I) 0.368 (0.205-0.660) (P value < 0.001), showed the strongest association.
- When the mother of research participants had a lower secondary education, the likelihood of physical abuse was observed to increased (31.92 percent).The physical abuse (28.93%) among adolescents was more prevalent in low income of the family.
- Among 316(40.25%) of the participants father occupation were self-employed. But the physical abuse among the study participants the strongest association was found with Government Employee (Fathers Occupation) (odds ratio=6.291, 95% CI 1.835 to 21.354, P value 0.003). In the present study the physical abuse (28.93%) among adolescents was more prevalent in low income of the family.
- The Univariate logistic regression analysis had shown statistically not significant association with physical abuse with many family determinants factors. The strongest association was found with most of the time or always (Do you have any of your family member/s who is alcoholic?).
- The Univariate logistic regression analysis had shown statistically significant association with physical abuse among school going adolescents those who

have not taken responsibility after making mistake in day today activities in the school and in the home.

- The Univariate logistic regression analysis had shown statistically strongest association with anxiety item as they concerned about what other people think of me. The strongest association among adolescents with physical abuse was I find it difficult to stay focused and often desire to relax or lay down.

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ANNEXURES

ANNEXURE I: ETHICAL CLEARANCE LETTER



KLE UNIVERSITY

(Formerly known as KLE Academy of Higher Education & Research, Belagavi)

[Declared as Deemed-to-be-University u/s 3 of the UGC Act, 1956 vide Government of India Notification No.F.9-19/2000-U.3(A)]

Accredited 'A' Grade by NAAC (2nd Cycle) Placed in Category 'A' by MHRD (GoI)

Office of the Director, Academic Affairs

JNMC Campus, Nehru Nagar, Bealavi-590 010, Karnataka State, India

☎: 0831-2444444/2493779 FAX: 0831-2493777 Web: <http://www.kleuniversity.edu.in> E-mail: diracademic@kleuniversity.edu.in

Ref.No.KLEU/EC/17-18/D-102

5th June 2017

To,
Mr. Gavisiddayya Salimath
Part Time Research Scholar,
2016-17 batch, Faculty of Nursing,
Institute of Nursing Sciences, **Belagavi**

Dear Research Scholar,

Sub:- Regarding Ethical Clearance.


The KLE University Ethics Committee on Human Subjects for Ph. D Research Project met on **22nd March 2017** to consider your application for approval of the research project **"Determinants and consequences of physical abuse among adolescent students (10-16 years age) in Belagavi-A school based study."**

As there are no ethical issues involved in your proposed research project, the committee has provided approval for this research project.

You are requested to report to Ethical Committee in case of the following:

1. Any deviation from or change of the protocol.
2. All serious adverse events.
3. Any changes in study documents.


(Dr. Anita Dalal)
Member Secretary,
Ph.D. Ethical Committee(Human),
K.L.E. University,
Belagavi.


(Dr. Anil Hogade)
Chairman
Ph.D. Ethical Committee(Human),
K.L.E. University,
Belagavi.

(Dr. Anil Hogade)

CC to: - The Director Academic Affairs, KLE University, Belagavi.

- The Director Research Foundation, KLE University, Belagavi.

- The Registrar, KLE University, Belagavi

Received
11/6/17

ANNEXURE II: CONSENT FORM

K.L.E.Institute of Nursing Sciences, Nehru Nagar, Belagavi- 590 010.

Determinants and consequences of physical abuse among adolescent students (10to16
Years age) in Belagavi: A School Based Study.

Research Scholar: Mr. Gavishiddhaya Salimath,

Supervisor: Dr. Sudha A. Raddi.

Introduction:

This is Ph.D. Research. Your child is being invited to participate in this study which aims to identify Determinants and consequences of physical abuse among the adolescents aged (10 to 16 Years age) of Belagavi.

Explanation of the procedure:

Written permission will be obtained from block education officer, and school authority. Informed consent will be obtained from parents and assent from adolescents. After obtaining permission from education officer and school authority and from parents and each adolescent will be asked through structured questionnaires to find out the prevalence of physical abuse its causes (related to family, adolescent psychological and social relationship problems) and its effects in the form of his change in the behavior, anxiety level, depression and self-esteem will be assessed by one to one interaction with privacy for 20 to 30 minutes. The entire procedure is totally non invasive & painless. It will not harm with child.

If you agree & allow your child to participate and if the child also agrees to participate in the study then he/she will be included. Any time during the study if you are your ward wish not continues with the study then your child can discontinue.

Risks:

This study does not involve any interventions. Due to your involvement in this study there will be no harmful effect on your health status.

Possible benefits:

It could be useful to find out determinants of physical abuse & its consequences among adolescents and can be benefit to society to prevent this problem in future.

Confidentiality:

Your child's identity will not be revealed. All information will be collected and coded & the information will be maintained confidential.

Withdrawal:

Participation in this study is voluntary. If you don't wish that your child should participate in this study, it will not impact the child in relation to school matters.

Cost of participation:

The cost of study will be borne by the researcher. There will be no additional cost to you for enrolling your child in the study.

Child assent:

In this research study you will have to answer some questions for 20 to 30 minutes related to your social and demographic aspects, related to prevalence of physical abuse (maltreatment) and its determinants (causes) and its consequences during your school timings only. If in case during the study you want to withdraw you are free to leave the study.

Questions:

If you have any questions about this study you can contact.

Mr. Gavishiddhayya Salimath.

Asst. Professor,

Dept of child Health Nursing,

KLEU Institute of Nursing Sciences,

Nehru Nagar, Belagavi- 590 010.

Mobile No : 9480033476.

Email ID : gavisalimath@gmail.com.

OR

Prof (Dr). Sudha A. Raddi.

Dean & Principal,

KLEU Institute of Nursing Sciences,

Nehru Nagar,

Belagavi- 590 010

Mobile No : 9448354712.

Legal Rights :

By signing this consent form, you are not waiving any of your legal rights.

Publication Rights:

The result of the study will be used for participation, however the participants will be kept confidential.

Informed Consent Statement.

“ I Volunteer and consent for my child’s participation in this study. I have read the content or it has been read to me in the languages i can understand and the study has been fully explained to me I may ask any questions at any time”.

1. Signature of the (Subject parent)

And Name:

Phone No:

2. Signature of the Investigator (Person obtaining consent)

And Name:

Date: _____ Place : _____

3. Signature of the Witness :

And Name:

Date: _____ Place: _____

KLE UNIVERSITY'S

K.L.E.Institute of Nursing Sciences, Nehru Nagar, Belagavi- 590 010.

ಸಮ್ಮತಿ ಪತ್ರ

ಹರೆಯದ ಮಕ್ಕಳಲ್ಲಿ ದೈಹಿಕ ಶೋಷಣೆಯ ಕಾರಣಗಳು ಹಾಗೂ ಪರಿಣಾಮಗಳು : ಬೆಳಗಾವಿ ಶಾಲೆಗಳಲ್ಲಿ

ಸಂಶೋಧನೆ

ಸಂಶೋಧಕರ ಹೆಸರು : ಶ್ರೀ ಗವಿಸಿದ್ದಯ್ಯ ಸಾಲಮಠ ಮಾರ್ಗದರ್ಶಕರು : ಡಾ. ಸುಧಾ ರೆಡ್ಡಿ.

ಸಂಶೋಧನೆಯ ಪರಿಚಯ :

ಇದು ಒಂದು ಪಿ.ಎಚ್.ಡಿ ಸಂಶೋಧನೆ. ನಿಮ್ಮ ಮಗನನ್ನು ಅಥವಾ ಮಗಳನ್ನು ಈ ಸಂಶೋಧನೆಯಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳಲು ನಿಮ್ಮ ಪರವಾನಗಿಯನ್ನು ಕೇಳುತ್ತಿದ್ದೇವೆ. ಈ ಸಂಶೋಧನೆಯಲ್ಲಿ ಮಕ್ಕಳ ಮೇಲಣ ದೈಹಿಕ ಹಲ್ಲೆ, ಕಾರಣಗಳು ಮತ್ತು ಅದರ ಮಾನಸಿಕ ದುಷ್ಪರಿಣಾಮಗಳ ಬಗ್ಗೆ ಸಂಶೋಧನೆಯನ್ನು ಮಾಡಲಾಗಿದೆ.

ಪ್ರಕ್ರಿಯೆಯ ವಿವರಗಳು :

ಈ ಸಂಶೋಧನೆಯಲ್ಲಿ ನಿಮ್ಮ ಮಗುವಿಗೆ ನಾವು ೧೫ ರಿಂದ ೨೦ ನಿಮಿಷಗಳವರೆಗೆ ದೈಹಿಕ ಹಲ್ಲೆಯ ಬಗ್ಗೆ ಕೆಲವೊಂದು ಸಿದ್ಧಪಡಿಸಿದ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಿ ಮಾಹಿತಿ ಪಡೆದುಕೊಳ್ಳಲಾಗಿದೆ.

ಈ ಪೂರ್ಣ ಪ್ರಕ್ರಿಯೆಯು ನೋವುಂಟುಮಾಡಿರುವುದಿಲ್ಲ. ನೀವು ಅನುಮತಿ ಕೊಟ್ಟು ನಿಮ್ಮ ಮಗನು ಅಥವಾ ಮಗಳು ಈ ಸಂಶೋಧನೆಯಲ್ಲಿ ಭಾಗವಹಿಸಲು ಸಮ್ಮತಿ ಕೊಟ್ಟಲ್ಲಿ ನಿಮ್ಮ ಮಗನನ್ನು ಅಥವಾ ಮಗಳನ್ನು ಸಂಶೋಧನೆಯಲ್ಲಿ ಸೇರಿಸಲಾಗುವುದು. ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ನಿಮಗೆ ಅಥವಾ ನಿಮ್ಮ ಮಗನಿಗೆ ಅಥವಾ ಮಗಳಿಗೆ ಈ ಸಂಶೋಧನೆಯ ಯಾವ ಷರತ್ತುಗಳಿಗೂ ಇಡಬೇಕೆನಿಸಿದ್ದಲ್ಲಿ ಸ್ವತಂತ್ರವಾಗಿ ಯಾವ ಷರತ್ತುಗಳಿಗೂ ಇಡಬಹುದು.

ಅಪಾಯ :

ಈ ವರೆಗೆ ಆದ ಸಂಶೋಧನೆ ಹಾಗೂ ಇತರ ವರದಿಗಳ ಪ್ರಕಾರ ಮಕ್ಕಳ ಮೇಲೆ ಯಾವುದೇ ಅಡ್ಡ ಪರಿಣಾಮ ಇರುವುದಿಲ್ಲ.

ಆಗಬಹುದಾದ ಲಾಭಗಳು :

ಈ ಸಂಶೋಧನೆಯಿಂದ ಮಕ್ಕಳ ಮೇಲಣ ದೈಹಿಕ ಹಲ್ಲೆ, ಕಾರಣಗಳು ಮತ್ತು ಅದರ ಮಾನಸಿಕ/ದೈಹಿಕ ದುಷ್ಪರಿಣಾಮಗಳನ್ನು ನಾವು ಸಮಾಜಕ್ಕೆ ತಿಳಿಸಿಕೊಟ್ಟು ಇದನ್ನು ತಡೆಗಟ್ಟಲು ಸಹಾಯವಾಗಬಹುದು.

ಮಾಹಿತಿ ಗೌಪ್ಯತೆ :

ನಿಮ್ಮ ಮಗನು ಅಥವಾ ಮಗಳ ಬಗ್ಗೆ ಗುರುತು ಹಾಗೂ ಎಲ್ಲಾ ಮಾಹಿತಿ/ವಿವರಗಳನ್ನು ಗೌಪ್ಯವಾಗಿ ಇಡಲಾಗುವುದು.

ಹಿಂಜರಿಯುವಿಕೆ :

ಈ ಸಂಶೋಧನೆಯಲ್ಲಿ ಭಾಗವಹಿಸುವುದು ಸಾರ್ವಜನಿಕವಾಗಿ ಸ್ವೀಕೃತವಾದ, ನೀವು ಭಾಗವಹಿಸಲು ಇಚ್ಛಿಸಿದರೆ ನಿಮ್ಮ ಮಗನು ಅಥವಾ ಮಗಳಿಗೆ ಶಾಲೆಯ ವಿಷಯದಲ್ಲಿ ಯಾವುದೇ ತರಹದ ಪರಿಣಾಮ ಇರುವುದಿಲ್ಲ.

ಭಾಗವಹಿಸುವ ಖರ್ಚು :

ಈ ಸಂಶೋಧನೆಯ ಖರ್ಚು-ವೆಚ್ಚಗಳನ್ನು ಸಂಶೋಧನೆಯ ಶೋಧಕನು ವಹಿಸಿಕೊಳ್ಳುತ್ತಾನೆ.

ಮಗುವಿನ ಮಾಹಿತಿಗಾಗಿ :

ಈ ಸಂಶೋಧನೆಯಲ್ಲಿ ನಿನ್ನ ಭಾಗವಹಿಸಲು ಇಚ್ಛಿಸಿದರೆ ಮಾತ್ರ ನಿನ್ನಿಗೆ ಸೇರಿಕೊಳ್ಳುವುದು. ನಾವು ನಿನ್ನಿಗೆ ದೈಹಿಕ ಹಲಗೆ ಹಾಗೂ ಅದರ ಕಾರಣಗಳು ಮತ್ತು ಮನಸ್ಸಿನ ಮೇಲಿನ ಪರಿಣಾಮಗಳ ಬಗ್ಗೆ ನಿನ್ನ ಅನುಭವಗಳನ್ನು ನಿರೀಕ್ಷಿಸಿದ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಿ ಅದರ ಉತ್ತರಗಳನ್ನು ಅರ್ಥವಾಗಿ ಕೇಳುತ್ತೇವೆ. ಈ ಎಲ್ಲ ಪ್ರಕ್ರಿಯೆಯು ಸಾರ್ವಜನಿಕವಾಗಿ ನೋಡಲಾಗುವುದಿಲ್ಲ. ನಿನ್ನಿಗೆ ಈ ಸಂಶೋಧನೆಯನ್ನು ಯಾವ ಹಂತದಲ್ಲಾದರೂ ಬಿಡಬೇಕೆಂದಿದ್ದರೆ ನಿನ್ನ ಈ ಸಂಶೋಧನೆಯನ್ನು ಬಿಡಲು ಸ್ವತಂತ್ರವಾಗಿರುತ್ತೀರಿ.

ಪ್ರಶ್ನೆಗಳು :

ನಿನ್ನಿಗೆ ಈ ಸಂಶೋಧನೆಯ ಬಗ್ಗೆ ಏನಾದರೂ ವಿವರಗಳು ಬೇಕಾದಲ್ಲಿ ಈ ಕೆಳಗೆ ಟಿಪ್ಪಣಿ ಅಥವಾ ವಿದ್ಯಾರ್ಥಿ ಸಂಪರ್ಕಿಸಬಹುದು.

ಶ್ರೀ.ಗವಿಸಿದ್ದಯ್ಯ ಸಾಲಮಠ,

ಉಪನ್ಯಾಸಕರು,

ಕೆ.ಎಲ್.ಇ. ಶಾಲಾ ಮಹಾವಿದ್ಯಾಲಯ,

ಬೆಂಗಳೂರು-೫೬೦ ೦೧೦

ಅಥವಾ

ಡಾ. ಸುಧಾ ರೆಡ್ಡಿ,

ಡಿಪನ್ ಮತ್ತು ಪ್ರಾಂಶುಪಾಲರು,

ಕೆ.ಎಲ್.ಇ. ಶಾಲಾ ಮಹಾವಿದ್ಯಾಲಯ,

ಬೆಂಗಳೂರು-೫೬೦ ೦೧೦.

ಕಾನೂನಿನ ಷರತ್ತುಗಳು :

ಈ ಸಮ್ಮತಿ ಪತ್ರ ಸಹಿ ಮಾಡುವುದರಿಂದ ನೀವು ಯಾವುದೇ ಕಾನೂನಿನ ಷರತ್ತುಗಳಿಂದ ವಂಚಿತರಾಗುವುದಿಲ್ಲ.

ಪ್ರಕಟಣೆ ಷರತ್ತುಗಳು :

ಈ ಸಂಶೋಧನೆಯ ಪರಿಣಾಮವನ್ನು ಪ್ರಕಟಿಸಲಾಗುವುದು. ಆದರೆ ಭಾಗವಹಿಸಿದ ಮಕ್ಕಳ ಗುರುತನ್ನು ಗುಪ್ತವಾಗಿಡಲಾಗುವುದು.

ಮಾಹಿತಿಯುಕ್ತ / ಅಳವಡಿಕೆಯುಕ್ತ ಸಮ್ಮತಿ ಪತ್ರ

ನಾನು ಸ್ವ-ಇಚ್ಛೆಯಿಂದ ನನ್ನ ಮಗನನ್ನು/ಮಗಳನ್ನು ಈ ಸಂಶೋಧನೆಯಲ್ಲಿ ಭಾಗವಹಿಸಲು ಸಮ್ಮತಿಸುತ್ತೇನೆ. ನಾನು ಈ ಮೇಲೆ ಕೆಲವು ಮಾಹಿತಿ ಒದಗಿಸುತ್ತೇನೆ. ಅಥವಾ ಈ ಮಾಹಿತಿಯನ್ನು ನನಗೆ ಅಳವಡಿಸುವಂತಹ ಭಾಷೆಯಲ್ಲಿ ಓದಿ ಅಳವಡಿಸಲಾಗಿದೆ. ಈ ಸಂಶೋಧನೆಯಲ್ಲಿ ನನಗೆ ಸಂಪೂರ್ಣವಾಗಿ ಅಳವಡಿಸಲಾಗಿದೆ ಮತ್ತು ನಾನು ಈ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸಂಬಂಧಪಟ್ಟ ಪ್ರಶ್ನೆಗಳನ್ನು ಯಾವ ಸಮಯಕ್ಕೆ ಬೇಕಾದರೂ ಕೇಳಬಹುದು.

೧. ಪಾಲಕರ ಸಹಿ _____

ಮತ್ತು ಹೆಸರು _____

ಫೋನ್ ನಂ _____

೨. ಸಂಶೋಧಕನ ಸಹಿ _____

ಮತ್ತು ಹೆಸರು _____

ತಾರೀಖು _____

ಸ್ಥಳ : _____

೩. ಸಾಕ್ಷಿಯ ಸಹಿ _____

ಮತ್ತು ಹೆಸರು _____

ತಾರೀಖು _____

ಸ್ಥಳ : _____

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बेळगावी मधील किशोरवयीन विद्यार्थ्यांमधील (10 ते 16 वर्षे वयोगटातील) शारीरिक शोषणाचे निर्धारक आणि परिणाम: एक शाळा आधारित □ भ्यास.

रिसर्च स्कॉलर: श्री. गविसिद्धय्या सलीमठ,

पर्यवेक्षक: डॉ. सुधा ए. रड्डी.

परिचय:

हे पीएच.डी. संशोधन. तुमच्या मुलाला या □ भ्यासामध्ये सहभागी होण्यासाठी आमंत्रित केले जात आहे ज्याचा उद्देश बेळगावीच्या (१० ते १६ वर्षे वयोगटातील) किशोरवयीन मुलांमध्ये शारीरिक शोषणाचे निर्धारक आणि परिणाम ओळखणे आहे.

प्रक्रियेचे स्पष्टीकरण:

ब्लॉक शिक्षणाधिकारी आणि शाळा प्राधिकरणाकडून लेखी परवानगी घेतली जाईल. पालकांकडून सूचित संमती आणि किशोरवयीन मुलांकडून संमती घेतली जाईल. शिक्षणाधिकारी आणि शाळा प्राधिकरणाकडून परवानगी घेतल्यानंतर आणि पालकांकडून आणि प्रत्येक किशोरवयीन मुलास संरचित प्रश्नावलीद्वारे शारीरिक शोषणाची कारणे (कौटुंबिक, किशोरवयीन मानसिक आणि सामाजिक संबंध समस्यांशी संबंधित) आणि त्याचे परिणाम शोधण्यासाठी विचारले जातील. त्याच्या वर्तनातील बदल, चिंता पातळी, नशाशय आणि आत्मसन्मान 20 ते 30 मिनिटांच्या गोपनीयतेसह एक ते एक संवादाद्वारे मूल्यांकन केले जाईल. संपूर्ण प्रक्रिया पूर्णपणे नॉन-□नवेसिव्ह आणि वेदनारहित आहे. यामुळे मुलाचे नुकसान होणार नाही.

जर तुम्ही सहमत □ साल आणि तुमच्या मुलाला सहभागी होण्यास परवानगी दिली आणि जर मूल देखील □ भ्यासात सहभागी होण्यास सहमत □ सेल तर त्याला/तिला समाविष्ट केले जाईल. □ भ्यासादरम्यान कोणत्याही वेळी जर तुम्ही तुमचा वॉर्ड □ साल तर तुमची □च्छा □ भ्यास सुरू ठेवत नसेल तर तुमचे मूल थांबवू शकते.

धोके:

या □ भ्यासामध्ये कोणत्याही हस्तक्षेपाचा समावेश नाही. या □ भ्यासात तुमच्या सहभागामुळे तुमच्या आरोग्याच्या स्थितीवर कोणताही हानिकारक परिणाम होणार नाही.

संभाव्य फायदे:

पौगंडावस्थेतील शारिरीक शोषणाचे निर्धारक आणि त्याचे परिणाम शोधणे उपयुक्त ठरू शकते आणि भविष्यात ही समस्या टाळण्यासाठी समाजाला फायदा होऊ शकतो.

गोपनीयता:

तुमच्या मुलाची ओळख उघड केली जाणार नाही. सर्व माहिती संकलित आणि कोड केली जाईल आणि माहिती गोपनीय ठेवली जाईल.

पक्षे काढणे:

या □ भ्यासात सहभाग ऐच्छिक आहे. तुमच्या मुलाने या □ भ्यासात सहभागी व्हावे □ शी तुमची □च्छा नसल्यास, शाळेतील बाबींशी संबंधित मुलावर त्याचा परिणाम होणार नाही.

सहभागाची किंमत:

□ भ्यासाचा खर्च संशोधक उचलेल. तुमच्या पाल्याला □ भ्यासात सहभागी करून घेण्यासाठी तुम्हाला कोणताही □ तिरिक्त खर्च लागणार नाही.

मुलाची संमती:

या संशोधन □ भ्यासात तुम्हाला तुमच्या सामाजिक आणि लोकसंख्याशास्त्रीय पक्षुंशी संबंधित, शारिरीक शोषण (दुष्प्रचार) आणि त्याचे निर्धारक (कारणे) आणि त्याचे परिणाम तुमच्या शाळेच्या वेळेत होणारे परिणाम यांच्याशी संबंधित 20 ते 30 मिनिटांसाठी काही प्रश्नांची उत्तरे द्यावी लागतील. जर □ भ्यासादरम्यान तुम्हाला मागे घ्यायचे □ सेल तर तुम्ही □ भ्यास सोडण्यास मोकळे आहात.

प्रश्न:

जर तुम्हाला या □ भ्यासाबद्दल काही प्रश्न □ सतील तर तुम्ही संपर्क करू शकता.

श्री गविसिद्धेय सलीमठ.

सहाय्यक प्राध्यापक,

बाल आरोग्य नर्सिंग विभाग,

KLEU ँस्टिट्यूट ऑफ नर्सिंग सायन्सेस,

नेहरू नगर, बेळगावी- 590 010.

मोबाईल क्रमांक : 9480033476.

ईमेल आयडी : gavisalimath@gmail.com.

किंवा

प्रा (डॉ.) सुधा ए. रड्डी.

डीन आणि प्राचार्य,

KLEU ंस्टिट्यूट ऑफ नर्सिंग सायन्सेस,

नेहरू नगर,

बेळगावी- 590 010

मोबाईल क्रमांक : ९४४८३५४७१२.

कायदेशीर हक्क:

या संमती फॉर्मवर स्वाक्षरी करून, तुम्ही तुमचे कोणतेही कायदेशीर ंधिकार सोडत नाही.

प्रकाशन हक्क:

ं भ्यासाचा निकाल सहभागासाठी वापरला जाईल, तथापि सहभागी गोपनीय ठेवले जातील.

सूचित संमती विधान.

“मी या ं भ्यासात माझ्या मुलाच्या सहभागासाठी स्वयंसेवक आणि संमती देतो. मी सामग्री वाचली आहे किंवा मला समजू शकत ं सलेल्या भाषांमध्ये ती वाचली गेली आहे आणि ं भ्यास मला पूर्णपणे समजावून सांगितला गेला आहे मी कधीही कोणतेही प्रश्न विचारू शकतो”.

1. (विषय पालक) ची स्वाक्षरी

आणि नाव:

दूरध्वनी क्रमांक:

2. ं न्वेषकाची स्वाक्षरी (संमती घेणारी व्यक्ती)

आणि नाव:

तारीख: _____ ठिकाण: _____

3. साक्षीदाराची स्वाक्षरी:

आणि नाव:

तारीख: _____ ठिकाण: _____

ANNEXURE III: DEMOGRAPHIC DATA COLLECTION FORM
SECTION I
STRUCTURED INTERVIEW SCHEDULE ON DETERMINANTS AND
CONSEQUENCES OF PHYSICAL ABUSE AMONG ADOLESCENT
STUDENTS

Name:

School Name:

Class:

CODE. NO:

SECTION I: SOCIO-DEMOGRAPHIC VARIABLES:

1. Age:
 - a. 10 – 11 years
 - b. 12- 14 years
 - c. 15- 16 years
2. Gender
 - a. Male
 - b. Female
3. Class
 - a. 5th Class
 - b. 6th Class
 - c. 7th Class
 - d. 8th Class
 - e. 9th Class
 - f. 10th Class
4. Type of Family
 - a. Nuclear
 - b. Joint
 - c. Extended
5. Religion
 - a. Hindu
 - b. Christian
 - c. Muslim
 - d. Other (Specify)

6. Residence
 - a. Urban
 - b. Rural
7. Fathers Education
 - a. Illiterate
 - b. Primary
 - c. Secondary
 - d. Higher Secondary
 - e. Degree
 - f. Post Graduate
8. Mothers Education
 - a. Illiterate
 - b. Primary
 - c. Secondary
 - d. Higher Secondary
 - e. Degree
 - f. Post Graduate
9. Fathers Occupation
 - a. Farmer
 - b. Government employee
 - c. Self Employed
 - d. Private Employee
 - e. Professional
 - f. Unemployed
10. Mothers Occupation
 - a. Farmer
 - b. Government employee
 - c. Self Employed
 - d. Private Employee
 - e. Professional
 - f. Housewife

11. Monthly family income

- a. ≥ 5357
- b. 2652-5356
- c. 1570-2651
- d. 812-1569
- e. ≤ 811

12. No of Siblings

- a. One
- b. Two
- c. Three
- d. More than Three
- e. None

13. Physically Challenged

- a. Yes
- b. No

ANNEXURE III A: SECTION II:
WHO (modified) ACE-IQ (Adverse Childhood Experiences International Questionnaire) structured questionnaire on prevalence of physical abuse among adolescent students. Please respond to each item by marking (✓)

Sl. No	Questionnaires	Perpetrator	Never	Sometimes	Most of the time or Always
1	Have you been shouted, screamed at by anyone?	Guardian/ Family Member			
		Friends			
		Neighbours			
2	Have you been pushed, grabbed or kicked by anyone?	Guardian/ Family Member			
		Friends			
		Neighbours			
3	Have you been hit, beaten, and spanked with hand by anyone?	Guardian/ Family Member			
		Friends			
		Neighbours			
4	Have you been hit, beaten, and spanked with object by anyone?	Guardian/ Family Member			
		Friends			
		Neighbours			
5	Did someone try to choke or drown You?	Guardian/ Family Member			
		Friends			
		Neighbours			
6	Have you been burned or scald by anyone?	Guardian/ Family Member			
		Friends			
		Neighbours			
7	Have you been locked in small place by anyone?	Guardian/ Family Member			
		Friends			
		Neighbours			
8	Have your hair been pulled by anyone?	Guardian/ Family Member			
		Friends			
		Neighbours			
9	Have your ear been pulled, twisted or pinched by anyone?	Guardian/ Family Member			
		Friends			
		Neighbours			
10	Have you been given bad words by anyone?	Guardian/ Family Member			
		Friends			
		Neighbours			

0= Never

1= Sometimes

2= Most of the time or Always

**ANNEXURE III B: Structured Questionnaire on Determinants of Physical Abuse
among Adolescent Students**

Sl. No	Questionnaires	Never	Sometimes	Most of the time or Always
1.	Do any of your family member/s quarrel in your presence?			
2.	Do you have any of your family member/s who is alcoholic?			
3.	Any of your family member/s expect too much from you?(e.g. in study, and in discipline)			
4.	Do you show disagreement over household rules(e.g. in study, play timings,)			
5.	Does your family members compare you with other children (e.g.in studies, following the rules and discipline)			
6.	I argue a lot			
7.	I am too dependent on others			
8.	I am too shy or timid			
10	I have difficulty in sustaining attention/interest in tasks/fun activities			
9.	I lie or cheat frequently			
10.	I feel difficulty in performing activities			
11.	I do not follow through instructions and fail to finish work			
12.	I have difficulty in showing cooperation in group activities.			
13.	I have difficulty in Showing good sportsmanship when winning or losing.			
14.	When I get frustrated, I am not able to stay calm			
15.	I don't apologize when I make a mistake			

0= Never

1= Sometimes

2= Most of the time or Always

Details of the Determinants questionnaires:

Question No.1 to 5 - Family Determinants items

Question No.6 to 11 – Psychological Determinants items

Question No.12to 15 – Social Determinants items

ANNEXURE III C: SECTION IV:
STRUCTURED QUESTIONNAIRE ON CONSEQUENCES OF PHYSICAL
ABUSE AMONG ADOLESCENT STUDENTS

Please respond to each item by marking (✓)

Sl. No	Questionnaires	Never	Sometimes	Most of the time or Always
1.	Do you show unusual aggression, rages, or tantrums			
2.	Are you afraid or reluctant to go home, or might run away			
3.	Do you feel nervous when touched			
4.	Do you observe change in school performance and attendance			
5.	Do you argue Constantly even over small things			
6.	Do you refuse to follow rules			
7.	Do you take responsibility for other's actions or just pass the blame for everything			
8.	I feel spending more time with my friends instead of going home			
9.	I worry about things			
10.	I would feel afraid of being on my own at home			
11.	I feel scared when I have to take a test			
12.	I worry that I will do badly at my school work			
13.	I worry that something bad will happen to me			
14.	I worry what other people think of me			
15.	I feel moments of sudden terror, fear, or fright			
16.	I feel afraid if i have to talk in front of my class			
17.	I get bothered by bad or silly thoughts or pictures in my mind			
18.	I feel low mood, sad, just can't be bothered.			
19.	I feel as i am worthlessness, hopelessness, not being a good person			
20.	I feel hard to get motivated, & want to rest or lie down a lot.			
21.	I feel worried, nervous, panicky &, tensed			

0= Never

1= Sometimes

2= Most of the time or Always

Details of the consequences questionnaires:

Question No.1 to 9 – Behaviour Assessment items


Question No.10 to 18 –Anxiety Assessment items

Question No.19to 21 – Depression assessment items

**ANNEXURE III D: LIST OF VALIDATORS FOR CONTENT VALIDATION
OF THE TOOL**

Sl.No	Name of the experts
1.	Dr. Shanmukh V. Kamble Professor, Department of Psychology Karnataka University Dharwad M: 9886714513
3.	Dr. Mallika B Clinical psychologist Dharwad Institute of Mental Health and Neurosciences-Dharwad. 9844491356
4.	Dr. Yasmin Nadaf Associate Professor/ Program Incharge Department of Psychology KAHER,Belagavi -590010
6.	Dr.Sanjay Peerapur Principal KLE Institute of Nursing Sciences Hubballi 9945076768
7	Shri Sureshgouda S Patil Professor & Head Department of Paediatric nursing BVVS Sajjalashree Institute of Nursing Sciences Bagalkot 8147716628
8.	Dr. Shashikumar Professor & Head Yenepoya Nursing College,Managalore 9620410946

ANNEXURE IV: Permission letter from DDPI of Belagavi




ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಬೆಳಗಾವಿ
ಉಪನಿರ್ದೇಶಕರ ಕಾರ್ಯಾಲಯ, ಸಾರ್ವಜನಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಬೆಳಗಾವಿ(ದ)
ದೂರವಾಣಿ ಸಂಖ್ಯೆ:0831-2407254 Email-ddpibelgaum@gmail.com

ಸಂಖ್ಯೆ:ಇ9/ವಿದ್ಯಾಭ್ಯಾಸಕ್ಕೆ. ಅನುಮತಿ/ವಿವ/ /2017-18 ದಿ:23-8-2018
ಜ್ಞಾಪನ 2416

ವಿಷಯ:ಬೆಳಗಾವಿ ಗ್ರಾಮೀಣ ಹಾಗೂ ನಗರ ಪ್ರದೇಶದಲ್ಲಿರುವ ಪ್ರಾಥಮಿಕ ಹಾಗೂ ಪ್ರೌಢ ಶಾಲೆಗಳಲ್ಲಿ ಸಂಶೋಧನೆ ಅಭ್ಯಾಸ ಮಾಡಲು ಅನುಮತಿ ನೀಡುವ ಕುರಿತು ಉಲ್ಲೇಖ:ಶ್ರೀ ಗವಿಷಿದ್ಧಯ್ಯಾ ಸಾಲಿಮಠ ಇವರ ಮನವಿ ದಿ:21-8-2017

ಮೇಲಿನ ವಿಷಯ ಹಾಗೂ ಉಲ್ಲೇಖಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಶ್ರೀ ಗವಿಷಿದ್ಧಯ್ಯಾ ಸಾಲಿಮಠ ಇವರು ಬೆಳಗಾವಿ ಗ್ರಾಮೀಣ ಹಾಗೂ ನಗರ ಪ್ರದೇಶದಲ್ಲಿರುವ ಪ್ರಾಥಮಿಕ ಹಾಗೂ ಪ್ರೌಢ ಶಾಲೆಗಳಲ್ಲಿ "Determinants and Consequences of Physical Abuse among Adolescents of rural and urban secondary of Belagavi" ವಿಷಯದ ಬಗ್ಗೆ ಸಂಶೋಧನೆ ಅಭ್ಯಾಸ ಮಾಡಲು ಅನುಮತಿ ನೀಡುವಂತೆ ಮನವಿಯನ್ನು ಸಲ್ಲಿಸಿರುತ್ತಾರೆ.

ಸದರಿಯವರ ಮನವಿಯನ್ನು ಪರಿಶೀಲಿಸಿ ಶಾಲೆಯಲ್ಲಿ ಮಕ್ಕಳಿಗೆ ವಿದ್ಯಾಭ್ಯಾಸಕ್ಕೆ ತೊಂದರೆಯಾಗದಂತೆ ಸಂಬಂಧಿಸಿದ ಶಾಲೆಯ ಮುಖ್ಯೋಪಾಧ್ಯಾಯರ ಹಾಗೂ ಮಕ್ಕಳ ಪಾಲಕರ ಅನುಮತಿ ಪಡೆಯುವ ಷರತ್ತಿಗೊಳಪಟ್ಟು ಬೆಳಗಾವಿ ಗ್ರಾಮೀಣ ಹಾಗೂ ನಗರ ಪ್ರದೇಶದಲ್ಲಿರುವ ಪ್ರಾಥಮಿಕ ಹಾಗೂ ಪ್ರೌಢ ಶಾಲೆಗಳಲ್ಲಿ "Determinants and Consequences of Physical Abuse among Adolescents of rural and urban secondary of Belagavi" ವಿಷಯದ ಬಗ್ಗೆ ಸಂಶೋಧನೆ ಅಭ್ಯಾಸ ಮಾಡಲು ಅನುಮತಿ ನೀಡಲಾಗಿದೆ.


ಉಪನಿರ್ದೇಶಕರು
ಸಾರ್ವಜನಿಕ ಶಿಕ್ಷಣ ಇಲಾಖೆ ಬೆಳಗಾವಿ(ದ)

ಗೆ,
Mr. Gavishiddhaya Salimath
Asst. professor Dept.of Pediatric Nursing
KLE Univercity Institute of Nursing Sciences
Neharu Nagar Belagavi
590010

ಅಭ್ಯಾಸ ಪ್ರತಿಯನ್ನು ಮಾಹಿತಿಗಾಗಿ
1)ಕ್ಷೇತ್ರ ಶಿಕ್ಷಣಾಧಿಕಾರಿಗಳು ನಗರ ವಲಯ ಬೆಳಗಾವಿ
2) ಕ್ಷೇತ್ರ ಶಿಕ್ಷಣಾಧಿಕಾರಿಗಳು ಗ್ರಾಮೀಣ ವಲಯ ಬೆಳಗಾವಿ

ANNEXURE V: CERTIFICATES



KRISHNA INSTITUTE OF MEDICAL SCIENCES
“ DEEMED TO BE UNIVERSITY ” KARAD.
 Accredited by NAAC with 'A' Grade (CGPA : 3.20 on 4 Point Scale)
 An ISO 9001 : 2015 Certified University

NATIONAL CONFERENCE ON
“FORENSIC SCIENCE IN HEALTH CARE PRACTICE”

CERTIFICATE

This is to certify that
 Dr. / Mr. / Mrs. / Miss. MR. GAVISHIDDHAYYA SALIMATH (Child abuse & Neglect)
 has participated as Delegate / Resource person / Presented poster in the **NATIONAL CONFERENCE ON “FORENSIC SCIENCE IN HEALTH CARE PRACTICE”** organized by Krishna Institute of Medical Sciences “Deemed To Be University”, Karad held at Jupiter hall, Krishna Institute of Medical Sciences, Karad on 29-02-2020


 ORGANIZING CHAIRPERSON
Dr. S. T. Mohite
 DEAN,
 Krishna Institute of Medical Sciences, Karad


 ORGANIZING CO-CHAIRPERSON
Dr. Shashikiran N. D.
 DEAN,
 School of Dental Sciences, Karad


 ORGANIZING SECRETARY
Dr. (Mrs) Vaishali R. Mohite
 DEAN,
 Krishna Institute of Nursing Sciences, Karad



KLE ACADEMY
OF HIGHER EDUCATION & RESEARCH
 (Deemed-to-be-University)
 Re-Accredited "A" Grade by NAAC (2nd Cycle) Placed in 'Category A' by MHRD

INSTITUTE OF NURSING SCIENCES
 BELAGAVI, KARNATAKA, INDIA

1st ONLINE / VIRTUAL INTERNATIONAL CONFERENCE
“COMBATING EMERGING INFECTIOUS DISEASES:
NEED FOR PARADIGM SHIFT”
 9th to 11th June, 2020

CERTIFICATE OF ORAL PAPER PRESENTATION (Online)

Presented to
MR. GAVISHIDDHAYYA SALIMATH
 For presenting Oral Paper on
“Correlation between Physical abuse and anxiety among school going adolescents (10-16 years age) of Belagavi-A School based study”
 on 9th June, 2020


 Jt. Organizing Secretary
Mrs. Namrata Devulkar
 Asst. Prof
 Community Health Nursing
 INS, KAHER


 Organizing Secretary
Mr. Shivarajkumar Dandagi
 Asst. Prof & HOD
 Community Health Nursing
 INS, KAHER


 Organizing Chairperson
Dr. Sudha A. Raddi
 Principal
 INS, KAHER






KLE ACADEMY OF HIGHER EDUCATION & RESEARCH
 (Deemed-to-be-University)
 Re-Accredited "A" Grade by NAAC (2nd Cycle) Placed in Category A by MHRD, (GOI)

INSTITUTE OF NURSING SCIENCES, BELAGAVI

INTERNATIONAL NURSING CONFERENCE

**“Is our Nursing Practice Evidence Based?
 A Review of Essential Skills in Healthcare & Nursing Education”**

Certificate Of Participation

KSNC Credit points 16

This is to certify that

Dr/Prof/Mr/Ms/Mrs Gowishiddhaya Salimath (Prevalence of physical abuse among school going adolescents in Belagavi)
- Pilot Study

has participated as Organizer / Delegate / Resource Person / Chairperson / Paper-Poster Presenter in the International Conference

held on 23rd & 24th November, 2018 at Institute of Nursing Sciences, KAHER, Belagavi, Karnataka, India

 Dr. Sangeeta Khande (India) FCC, CBG Writing Institute of Nursing Sciences, KAHER, Belagavi	 Mr. Rajeev Metri (Overseas) BQNH Medical Devices Co. Ltd 693 as Lane, D-116, 3, 156 Jinnah Park, London, N-2, United Kingdom, UK	 Dr. Sudha A. Raddi (India) Lectr. Faculty of Nursing KAHER, Belagavi	 Mr. Thippaswamy Billahalli (Overseas) Lectr Nurse - Charge & Clinical Formulation Services, Dept of Respiratory Medicine Home to: John's Bay Hospital, 415, 7th St, Hammersmith Row London, UK	 Dr. V. D. Patil 103/91/11 KAHER, Belagavi	
Organizing Secretaries		 Yashraj KSNC OBSERVER	Organizing Chairpersons		



Roll No: NPTEL19GE24S21110062

TO MR.GAVISHIDDHAYYA SALIMATH
 KLE NURSING COLLEGE STAFF QTRS NO. 23
 JNMC CAMPUS BELAGAVI.
 BELAGAVI
 BELGAUM
 KARNATAKA
 590010
 PH. NO :9480033476



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This certificate is awarded to

MR.GAVISHIDDHAYYA SALIMATH

for successfully completing the course

Health Research Fundamentalswith a consolidated score of **69 %**

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

(Jul-Sep 2019)

Prof. Dileep N. Malkhede
Advisor-I (Research, Institute & Faculty Development)
All India Council for Technical Education

Roll No: NPTEL19GE24S21110062

To validate and check scores: <http://nptel.ac.in/noc>

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
 F.No. AICTE / RIFD / FDP through MOOCs / 2017-18

ANNEXURE VI: PUBLICATIONS

*International Journal of Scientific Research and Reviews***Prevalence of Physical Abuse Among School Going Adolescents In Belagavi. A pilot Study**Gavishiddhayya B. S^{*1} and Sudha A. Raddi²^{1*} Department of Child Health Nursing, KAHER Institute of Nursing Sciences, Belagavi.[Email.gavisalimath@gmail.com](mailto:gavisalimath@gmail.com), mob: 9480033476² Dean & Principal, KAHER Institute of Nursing Sciences, Belagavi, India,Email: srdrishti@gmail.com, Mob: 9448354712**ABSTRACT:**

Introduction & Background: Every child has a virtuous to a safe childhood and a life free from cruelty. The experience of child abuse and neglect violate that right. Child misuse is a huge global problem with a serious smack on the victim's physical and mental health, well-being and development throughout their lives and, by appendage, on society in common.

Objective: The aim of this study was to estimate the prevalence of physical abuse among school going adolescent students (11 to 16 years age) in Belagavi city.

Material and Method: 139 school going adolescents aged between 11 to 16 years were selected for the study using stratified random sampling. The data was gathered by using WHO modified adverse childhood experiences International questionnaire scale (ACE-IQ).

Results: Approximately 84% of study subjects faced one or the other form physical abuse, common being among the age groups of 11 to 12 years. The most persistent perpetrator of physical abuse was guardian/ family member, followed by the friends and neighbors. Also the abuse was prevalent among the study subjects whose mother had low or no education, joint family life style, working mothers and those living with siblings, (*p<0.05)

Conclusion: It is important to give the education to school and health authorities to identify these signs and enquire about physical abuse from children and adolescents so as to protect and nurture them as healthy individuals and responsible citizens.

Keywords: Adolescents, Perpetrator, Physical abuse, school going adolescents

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INTRODUCTION & BACKGROUND

Every child has a virtuous to a safe childhood and a life free from cruelty. The experience of child abuse and neglect violate that right.¹ Each year millions of children around the world are the victims and witnesses of physical, sexual and emotional violence. Child misuse is a huge global problem with a serious smack on the victim's physical and mental health, well-being and development throughout their lives and, by appendage, on society in common.²

Child abuse is a global problem with serious life-long consequences.³ The World Health Organization (WHO) defines child abuse and child maltreatment as "all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power."⁴

In general worldwide 40 million children subjected to abuse each year.⁵ It is estimated that 1 in 14 children have been physically maltreated in UK.⁶ Physical abuse often does not occur in separation, but as part of a sort of behaviors including autocratic dominance, anxiety-provoking behavior, and a lack of parental warmth. **The WHO defines physical abuse as:** Intentional use of physical forces against the child that results in-or has a high likelihood of resulting in-harm for the child's health, survival, development or dignity. This includes hitting, beating, kicking, shaking, biting, strangling, scalding, burning, poisoning and suffocating. Much physical violence against children in the home is inflicted with the object of punishing.⁶

The ministry of women and child department, Government of India explored study in 2007 across the 13 states in India, and the study stipulated that an critically high percentage of children in state run schools i.e., 53.8% faced corporal punishment. This was followed by Physical abuse of girls in organizations was also very high. Higher percentages of children in the age group of 5-12 years were subjected to physical abuse in organizations.⁷ Over 6,000 children were identified as needing protection from physical abuse as per 2015 report in UK.⁶

B. Meenakshi. et. al, conducted study to document the prevalence of physical abuse during childhood among college students the study revealed that 56% (524/936) of the participants reported that they were beaten during their childhood, of which 13.4% (70/524) required medical treatment.¹⁶ K. Sebind, et. al, conducted study to estimate the prevalence of physical abuse in a school environment in a developing country; this study revealed that more males than females reported being victims of abuse.¹¹ All ages, races, ethnicities and socioeconomic backdrops are at risk for physical abuse. Physical abuse affects both boys and girls across locality, communities, and countries around the world.

India is home to almost 19% of the world's children. More than one-third of the country's population, throughout 440 million, is below 18 years of age.¹¹ There are many matters that may contribute to child abuse, but some factors increase the threats to children and make them more unsafe to abuse. They can be found in the scenario of parents, in the substantial situation and in virtues of the child themselves. Parental considerations include Parent has already ill-treated a child, it was unwanted pregnancy, Parent has a background of abuse when growing up, Young, unsupported mother often with lack of education, Parents have impractical assumptions of the child and lack of parent education, Parent is confined and has few substratum, Parent has a mental disorder or is abusing drugs or alcohol. Environmental factors include overabundance in the house, inadequacy or lack of opportunity to improve the family's resources, Family violence is present.¹²

A basic presumption of the United Nation Convention on the Rights of The Child (CRC) is that the family is the essential environment for the growth and prosperity of all its members-particularly for children.¹¹ A United Kingdom based national survey confessed that mothers and fathers were most often guilty for physical maltreatment, although violence by siblings was also reported.¹¹

Very few studies have been carried out in India about nature and magnitude of physical abuse experienced by the children in families. In Karnataka, no similar study has been conducted on the issue till date. Therefore, the present study will attempt to understand the prevalence of physical abuse experienced by the adolescents (11 -16 years age) in Belagavi.

MATERIAL METHODS:

Institutional ethical clearance was obtained from Institutional Ethical Committee before the start of the study, also permission was obtained from office of the directorate of education of Belagavi District and consent from the principals and parents and assent from the study samples were collected.

A cross sectional school based study design was used for this descriptive study. 139 students from 6 schools of age group between 11 to 16 years were selected as sample using the formula $n = Z^2 pq/d^2$ by stratified random sampling. The prevalence of abuse was taken based on the study documented by Daral. S et. al in the year 2016.¹⁴

Primary and secondary school going adolescents of aged 11-16 years, students who were willing to participate and present at time of data collection were included in the study. The students who declined to participate were excluded in the study.

The data was collected by using questionnaires based on socioeconomic profile of the family characteristics of the sample and WHO modified adverse childhood experiences International questionnaire (**ACE-IQ**) for the determination of prevalence of physical abuse among the sample. The questionnaires were given both in English and Kannada language and confidentiality was maintained at all the stages of data collection and analysis. The data collected was then subjected to statistical analysis using SPSS software.

RESULTS

(Table-1) shows the socio demographic characteristics of the study subjects, the mean age of the study subjects in this study was 13.05 years with majority of belonging to nuclear families where in 70% of the sample constituted male gender and remaining 30% were females. As per educational status of the parents 45.35% had completed Secondary Schools. Nearly majority of the parents of the sample were self-employed (56.80%) and from middle class (71.90%).the majority of sample had two siblings (74.10%).

(Graph-1) represents the overall prevalence of physical abuse among school going adolescents .Among 139 adolescents the overall prevalence of physical abuse perpetrated by family was **60.43%**, friends **51%** and neighbors **50.36%**, were respectively.

(Table-2-represents the characteristics of physical abuse among school going adolescents perpetrated by family)Out of the total 139 study subjects 55 (39.57%) had not faced physical abuse, while the remaining 84(60.43%) had faced physical abuse by one or the other perpetrator. The most common form of abuse most times was being spanking (109; 78.42%), kicking, pushing or grabbing (98; 70.50%), bullied or made to feel embarrassed (102; 73%),by family members.

(Table-3-represents the characteristics of physical abuse among school going adolescents perpetrated by friends)physical abuse most of times perpetrated by friends was shouting screaming (112;80.58%), pulling of hair, (86; 61.87%) choking (75; 53.96%), having been bullied or embarrassed by friends (84;60.43%), pulling, pinching/twisting ear (83; 59.71%), spanking with hand (74; 53.24%), spanking with object (56; 40.29%),

(Table-4-represents the characteristics of physical abuse among school going adolescents perpetrated by neighbors) physical abuse most of times perpetrated by neighbors was spanking (119; 85.61%),spanking by object (112; 80.58%), screaming (87; 62.59%), pulling hair (85; 61.15%), chocking (62; 44.60%), pulling, twisting of ear (73; 52.52), having been bullied and made to feel embarrassed (55.37%).

DISCUSSION

(Table-5) presents association between socio demographic characteristics with prevalence of abuse by Guardian/family, friends, neighbors. The present study found significant association with mother education, socioeconomic status with physical abuse being family as a perpetrator among school going adolescents ($p < 0.05$), and also found significant association with type of family education status of mother, and number of siblings with physical abuse being friend as perpetrator among adolescents ($p < 0.05$), the previous studies reported greater prevalence in younger children aged 5–12 years and those belonging to nuclear families. Present study reported that Physical abuse more in 11 to 12 years adolescent girls from families of low socioeconomic status, whereas Deb and Modak¹¹ reported it more in adolescents from high-income families.

CONCLUSION:

Children of all ages, races, ethnicities and socioeconomic backgrounds are at risk for physical abuse. Physical abuse affects both boys and girls across neighbourhoods, communities, and countries around the world. Children aged 4-7 years and 12-15 years are at the greatest risk of being physically abused. Very young children are most susceptible to receiving serious injuries.¹⁰

It is important to give the education to school and health authorities to identify these signs and enquire about physical abuse from children and adolescents so as to protect and nurture them as healthy individuals and responsible citizens of the future.

Table 1: Socio demographic profile of study participants (n=139)

Characteristics	Categories	No of respondents (%)	% of respondents
Age groups (Mean age \pm 13.05 years)	11-12yrs	28	20.10
	13-14yrs	76	54.70
	15-16yrs	35	25.20
Gender	Male	98	70.50
	Female	41	29.50
Types of family	Nuclear	91	65.50
	Joint	48	34.50
Religions	Hindu	107	77.00
	Muslims	18	12.90
	Others	14	10.10
Fathers education	Illiterates	4	2.90
	Primary	11	7.90
	Secondary	61	43.90
	Higher secondary	46	33.10
	Degree	17	12.20

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	PG	0	0.00
Mothers education	Illiterates	6	4.30

Perpetrated by Family (n = 139) Characteristics of Physical Abuse	Prevalence of Physical abuse	
	Some times (%)	Most of the time (%)
Hitting , beating , and spanking by hand	21(15.11)	109(78.42)
Bullied or embarrassed	28(20.14)	102(73.38)
Shouting , screaming	31(22.30)	101(72.66)
Pushing , grabbing or kicking	6 (4.32)	98(70.50)
Pulling hair	43 (30.94)	88(63.31)

	Primary	24	17.30
	Secondary	65	46.80
	Higher secondary	44	31.70
	Degree	0	0.00
Fathers occupation	Farmer	12	8.60
	Government employee	7	5.00
	Self employed	79	56.80
	Private employed	41	29.50
Mothers occupation	Farmer	4	2.90
	Government employee	5	3.60
	Self employed	72	51.80
	Private employed	48	34.50
	House wife	10	7.20
Socio economic status	Upper class	2	1.40
	Upper middle class	31	22.30
	Middle class	100	71.90
	Lower middle class	6	4.30
No of siblings	One	9	6.50
	Two	103	74.10
	Three and plus	27	19.40
	Total	139	100.00

Characteristics of physical abuse of study participants (n=139)

Table.2: Characteristics of physical abuse perpetrated by family

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Twisting or pinching of ear	42(30.22)	87(62.59)
Hitting , beating , and spanking by object	72(51.80)	62(44.60)
Locked in small place	29(20.86)	Nil
Tried to choke or drowned	25(17.99)	Nil

Table.3: Characteristics of physical abuse perpetrated by friends

Perpetrated by Friends (n = 139) Characteristics of Physical Abuse	Prevalence of Physical abuse	
	Some times (%)	Most of the time (%)
Shouting , screaming	19 (13.67)	112(80.58)
Pulling hair	45(32.37)	86(61.87)
Bullied or embarrassed	49(35.25)	84(60.43)
Twisting or pinching of ear	47(33.81)	83(59.71)
Tried to choke or drowned	58(41.73)	75(53.96)
Hitting , beating , and spanking by hand	58(41.73)	74(53.24)
Hitting , beating , and spanking by object	71(51.08)	56(40.29)
Locked in small place	80(57.55)	47(33.81)

Table.4: Characteristics of physical abuse perpetrated by neighbors

Perpetrator by neighbors (n = 139) Types of Physical Abuse	Prevalence of Physical abuse	
	Some times (%)	Most of the time (%)
Hitting , beating , and spanking by hand	Nil	119(85.61)
Hitting , beating , and spanking by object	12(8.63)	112(80.58)
Shouting , screaming	49(35.25)	87(62.59)
Pulling hair	47(33.81)	85(61.15)
Twisting or pinching of ear	58(41.73)	73(52.52)
Tried to choke or drowned	64(46.04)	62(44.60)
Bullied or embarrassed	79(56.83)	55(39.57)

Table.5: Association between socio demographic characteristics with prevalence of physical abuse among school going adolescents

Characteristics	Categories	N	Abuse by Guardian/family			Abuse by friends			Abuse by neighbors		
			No	%	P-value	No	%	P-value	No	%	P-value
Age groups	11-12yrs	28	21	75.00	0.1560	12	42.86	0.5700	15	53.57	0.5160
	13-14yrs	76	45	59.21		41	53.95		35	46.05	
	15-16yrs	35	18	51.43		19	54.29		24	57.14	
Gender	Male	98	57	58.16	0.3980	53	54.08	0.4050	49	50.00	0.8960
	Female	41	27	65.85		19	46.34		22	51.22	
Types of family	Nuclear	91	50	54.95	0.0690	40	43.96	0.011*	35	38.46	0.001*
	Joint	48	34	70.83		32	66.66		33	72.92	

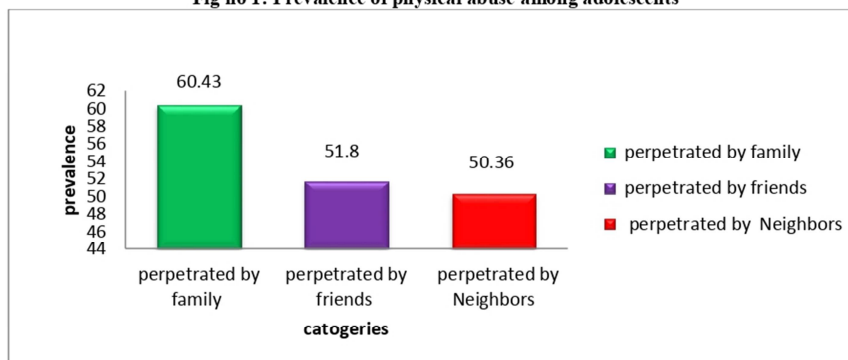
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Religions	Hindu	107	68	63.55	0.2980	58	54.21	0.4800	5	2	51.40	0.2000
	Muslims	18	8	44.44		7	38.89		6	33.33		
	Others	14	8	57.14		7	50.00		9	64.29		
Fathers education	Illiterates	4	4	100.00	0.2050	3	75.00	0.1570	4	100.00	0.0700	
	Primary	11	6	54.55		4	36.36		3	27.27		
	Secondary	61	39	63.93		26	42.62		3	52.46		
	Higher secondary	46	23	50.00		29	63.04		2	43.8		
	Degree	17	12	70.59		10	58.82		1	64.71		
Mothers education	Illiterates	6	5	83.33	0.0350*	6	100.00	0.025*	5	83.33	0.038*	
	Primary	24	20	83.33		16	66.67		1	70.83		
	Secondary	65	34	52.31		29	44.62		2	43.08		
	Higher secondary	44	25	56.82		21	47.73		2	45.5		
Fathers occupation	Farmer	12	7	58.33	0.5760	7	58.33	0.6200	6	50.00	0.6800	
	Government employee	7	6	85.71		5	71.43		5	71.43		
	Self employed	79	47	59.49		41	51.90		4	50.63		
	Private employed	41	24	58.54		19	46.34		1	46.39		
Mothers occupation	Farmer	4	2	50.00	0.0590	4	100.00	0.1000	2	50.00	0.9740	
	Government employee	5	0	0.00		1	20.00		2	40.00		
	Self employed	72	48	66.67		41	56.94		3	52.78		
	Private employed	48	28	58.33		21	43.75		2	47.92		
	House wife	10	6	60.00		5	50.00		5	50.00		
Socio Economic status	Upper class	2	0	0.00	0.0500*	0	0.00	0.2500	2	100.00	0.0620	
	Upper middle class	31	24	77.42		19	61.29		2	67.74		
	Middle class	100	57	57.00		49	49.00		4	44.00		
	Lower middle class	6	3	50.00		4	66.67		3	50.00		
No of siblings	One	9	5	55.56	0.7440	7	77.78	0.041*	4	44.44	0.8000	
	Two	103	61	59.22		56	54.37		5	49.51		

	Three and plus	27	18	66.67		9	33.		1	55.5	
	Total	139	84	60.43		72	51.		7	50.3	
							80		0	6	

*p<0.05

Fig no 1: Prevalence of physical abuse among adolescents



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Original Article:

Correlation Between Physical Abuse and Depression Among School Going Adolescents (10-16 years of age) - A School Based Study

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Abstract: Introduction: Every child had all the rights to a safe childhood and a life free from violence. The experience of child abuse and neglect infringe upon that right. An estimated 10–20% of adolescents globally experience mental health conditions, yet these remain underdiagnosed and undertreated. The experience of child abuse and neglect infringe upon that right. Childhood ill-treatment will cause severe mental health disorders in adolescents. Objectives: To find out correlation between physical abuse and anxiety among school going adolescents. Method: The study was conducted in eight schools in Belagavi using descriptive cross sectional research design with stratified cluster sampling. It included Primary and secondary schools of Belagavi. The study samples were consisted of 785 students. Self-structured physical abuse and Modified Kutcher Adolescent Depression Scale was used to find out prevalence & correlation between physical abuse and depression among the adolescents. Results: The results of the study showed that Out of total 785 study subjects 444(56.56%) had exposed to moderate physical abuse, 196 (24.97%) had exposed to low physical abuse, and 145(18.47%) had exposed to high level of physical abuse. The study findings showed that there is significant relationship between physical abuse and depression among adolescents, with r-value =0.1256 (p<0.0326) Conclusion: The study concluded that there is a significant positive relationship between physical abuse and depression among adolescents.

Key Words: Physical abuse, Depression, Adolescents

Introduction:

Every child has all the rights to a safe childhood and a life free from violence. The experience of child abuse and neglect infringe upon that right. Adolescence is a crucial period for developing and maintaining social and emotional habits, important for mental well-being. These include adopting healthy sleep patterns; taking regular exercise; developing coping, problem-solving, and interpersonal skills; and learning to manage emotions. Supportive environments in the family, at school and in the wider community are also important [1] An estimated 10–20% of adolescents globally experience mental health conditions, yet these remain underdiagnosed and undertreated. According to WHO reports, multiple factors

determine mental health outcomes. The more risk factors adolescents are exposed to, the greater the potential impact on their mental health. Other important determinants include the quality of their home life and relationships with peers. Violence (including harsh parenting and bullying) and socioeconomic problems are recognized risks to mental health [1]

The WHO defines physical abuse as intentional use of physical force against the child that results in – or has a high likelihood of resulting in – harm for the child's health, survival, development or dignity. This includes hitting, beating, kicking, shaking, biting, strangling, scalding, burning, poisoning and suffocating. Much physical violence against children in the home is inflicted with the object of punishing [2] The ministry of women and child department, Government of India, explored through a study in 2007 across the 13 states in India, and the study stipulated that a critically high percentage of children in state run schools i.e., 53.8%, faced corporal punishment [3] In a study by Daral S et al, [4], of 1060 adolescents, majority were in mid-adolescence and approximately 70% study subjects were victims of at least one form of maltreatment and 42.6% of adolescents exposed to physical abuse [4]

According to WHO report, one in six people aged 10–19 years show mental disease and injury. Of all mental health conditions, 50% trigger by 14 years of age but most cases are unexplored and not treated [1] Globally, illness and disability and also death rates due to depression among adolescents (15-19 year olds) is very high. The mental health conditions not treated in time will lead to severe mental health conditions in adulthood [1] According to WHO report globally 10-20% of adolescents suffer with mental health conditions, unipolar depressive disorder being more common among adolescents. Childhood ill-treatment will cause severe mental health disorders in adolescents. Suicide is a major risk from depression and it is the second main cause for the death. Depression also causes severe social and educational disability. Victims of physical, sexual, psychological abuse in children are highly associated with adolescent depression around the world, as also in India [1]

The present study examined physical abuse in primary and secondary school going adolescents and its relation with depression in Belagavi, in Karnataka state and attempted to understand the correlation between physical abuse and depression among school going adolescents (10-16 years age) in Belagavi.

Objectives of the study:

- To estimate the prevalence of physical abuse among school going adolescents (10 to 16 years age) in Belagavi.
- To estimate the prevalence of depression due to physical abuse among school going adolescents (10 to 16 years age) in Belagavi.
- To find out the correlation between physical abuse and depression among school going adolescents in Belagavi.

Materials and Methods

Design and setting:

The study was conducted in eight schools in Belagavi city using descriptive cross sectional research design. It included primary and secondary schools of Belagavi.

Sample:

This comprised school children of primary and secondary grades selected by stratified cluster random sampling. Belagavi city was divided into four strata, North, East, South, and West, 2 schools were randomly selected from each of the four strata. Eight schools having the maximum enrolment in each zone were selected and adolescents from these schools in the age group of 10-16 years were included in the study. The sample size was calculated to estimate a prevalence rate of physical abuse of 42.6% [4], and the required sample size was 785 students.

Tools for data collection:

Tool I: Sociodemographic questionnaire was used to collect data about socio-demographic characteristics of the study participants such as age, sex, type of family, mother and father education and occupation, income etc.

Tool II: Physical abuse interview tool, to find out prevalence of physical abuse at home with the methods of physical abuse such as hitting beating, with the hand and also with objects, choking, burning, locking in small place, etc. It contained 10 questions to be answered, with criteria 0 (never), 1 (sometimes), 2 (most of the times).

Tool III: Modified Kutcher Adolescent Depression Scale was used to find out levels of depression, 5 questions were included with criteria 0 (never), 1 (sometimes), 2 (most of the times). Total scores at above and 5 suggested for possible depression.

The reliability of the tool was assessed by test-retest method, the reliability value was 0.82. There was very high correlation coefficient and it was a good tool for identifying the physical abuse and levels of depression among adolescents.

Pilot study: The pilot study was carried out on sample of adolescents from other schools to test the clarity and reliability of the tool and feasibility of the tool. The tool was tested and necessary changes were done in the form of re-phrasing of some items. The pilot study participants were not included in the main study sample frame.

Field work: Institutional ethical clearance was obtained from Institutional Ethical Committee before the start of the study, also permission was obtained from office of the Directorate of Education (DDPI) of Belagavi District. Permission letter was also obtained by the all school headmasters, and consent from parents and assent from the study participants were obtained. The investigator met with students in the class room and explained the purpose of the study, and distributed the questionnaire forms to be completed.

Inclusion criteria

- Primary and secondary school going adolescents of aged 10-16 Years.

- Adolescent students who are willing to participate in the study.

- Adolescent students present at time of data collection.

Exclusion criteria

- Those Students whose parents declined to provide the informed consent.
- Students with cognitive, neurological, psychological and endocrinal disorder

Data analysis: The data were analyzed by using Karl Pearson's Correlation Coefficient to find out the correlation between physical abuse and depression among school going adolescents. The software used was Statistical Package for the Social Sciences Version 20.

Duration of the study: The time duration of the present study was two years, December 2017 to December 2019.

Results:

The socio-demographic characteristics of the study population are presented in Table 1. It shows that participants in this study belong to the age group of 10-16 years, the maximum students 359(45.73%) were in the age group of 15-16 years, followed by 273(34.78%) in the 13-14 years age group and 153(19.49%) students were 10-12 years old. The male to female ratio was 84.08:15.92 among the 785 study participants. In the present study, 653(83.18%) were from nuclear family and 132(16.82%) were from joint family. Out of 785 participants, most were 662(84.33%) Hindu, 90(11.20%) were of other religion, and 33(4.25%) were of Muslim religion. Out of 785 adolescents, 320(40.76%) fathers had completed higher secondary education, 220(28.03%) had completed secondary education, 107(13.63%) had completed primary education, and 78 of them had completed degree and 60 of them were illiterates. Out of 785 adolescents, 378 (48.15%) mothers had completed secondary education, 213(27.13%) completed higher secondary, 117(14.90%) completed primary education, and 29 had completed degree and 48 were illiterates. Out of 785 adolescents, 316(40.25%) fathers were self-employed, 258(32.87%) private employees, 186(23.69%) were farmers, and 13 (1.66%) government employees, 12 fathers (1.53%) were professionals. Out of 785 adolescents, 344(43.82%) mothers were self-employed, 250(31.85%) private employees, 143(18.22%) were farmers, and 27 (3.47%) professionals, 21 mothers (1.53%) were housewives. Total of 492 (62.68%) participant families were having 6001-8000 rupees income per month, 144(18.34%) participants had more than Rs. 8000 income, 121(15.41%) participants had Rs. 4000-6000 and 28(3.57%) participants had Rs. 2000-4000 income, and none of them had above 8000 rupees income per month. Out of 785 adolescents, 546(69.55%) of adolescents were having 2 siblings, 228(29.04%) had three or more siblings, 11 (1.40%) had only one sibling.

Table 1: Socio-demographic characteristics of school going adolescents (N=785)

Socio demographic characteristics	No of respondents	% of respondents
Age groups		
10-12yrs	153	19.49
13-14yrs	273	34.78
15-16yrs	359	45.73
Gender		
Male	660	84.08
Female	125	15.92
Types of family		
Nuclear	653	83.18
Joint	132	16.82
Religions		
Hindu	662	84.33
Muslims	33	4.20
Others	90	11.46
Residence		
Rural	469	59.75
Urban	316	40.25
Fathers education		
Illiterates	60	7.64
Primary	107	13.63
Secondary	220	28.03
Higher secondary	320	40.76
Degree	78	9.94
Mothers education		
Illiterates	48	6.11
Primary	117	14.90
Secondary	378	48.15
Higher secondary	213	27.13
Degree	29	3.69
Fathers occupation		
Farmer	186	23.69
Government employee	13	1.66
Self Employed	316	40.25
Private Employee	258	32.87
Professional	12	1.53
Mothers occupation		
Farmer	143	18.22
Self Employed	344	43.82
Private Employee	250	31.85
Professional	27	3.44
Housewife	21	2.68
Monthly family income		
Rs.2001-4000	28	3.57
Rs.4001-6000	121	15.41
Rs.6001-8000	492	62.68
More than Rs.8000	144	18.34
No of siblings		
One	11	1.40
Two	546	69.55
Three and plus	228	29.04
Total	785	100.00

Table 2 shows that out of total 785 study subjects, 444(56.56%) had got exposed to moderate physical abuse, 196 (24.97%) had got exposed to low physical abuse, and 145(18.47%) had got exposed high level of physical abuse at home.

Table 2: Overall Distribution of adolescent students with respect to Prevalence of physical (N=785)

Levels of physical abuse	No of respondents	% of respondents
Mild physical abuse	196	24.97
Moderate physical abuse	444	56.56
Severe physical abuse	145	18.47
Total	785	100%

Table 3 shows that out of 785 study subjects, 768 (97.83%) reported that they had experienced hitting, and being beaten, and spanked with hand by guardian/family member; 716 (91.21%) reported that they had been pushed and being grabbed and kicked by family member/guardian; 626 (79.75%) reported as being shouted and screamed by family member; 289(36.82%) reported hitting and being beaten and spanked by object by guardian /family member; 206 (26.24%) reported that their ear having been pulled and twisted/ pinched by family member/guardian; 99(12.61%) reported hair being pulled by family member/guardian; 76(9.68%) being locked in small place. Only 10(1.27%) reported that they had been burned/scalded by family member/guardian.

Table 3: Patterns of Physical abuse at home as perceived by school going adolescents perpetrated by family member/guardian.

Characteristics' of physical abuse	Present	%	Absent	%
Shouting/screaming	626	79.75	159	20.25
Pushed, grabbed or kicked	716	91.21	69	8.79
Hitting, beating, and spanked with hand	768	97.83	17	2.17
Hitting, beating, and spanked with object	289	36.82	496	63.18
Choking	73	9.30	712	90.70
Burned or scald	10	1.27	775	98.73
Locked in small place	76	9.68	709	90.32
Hair been pulled	99	12.61	686	87.39
Ear been pulled, twisted or pinched	206	26.24	579	73.76

Table 4 represents different symptoms/characteristics of depression among school going adolescents with different probe areas such as feeling low mood, sad, just can't be bothered, feeling worthlessness, hopelessness, not being a good person, feeling hard to get motivated, and wanting to rest or lie down a lot, feeling worried, nervous, panicky. Almost half of the adolescents, 341(43.44%), expressed about worthlessness, hopelessness, not being a as good person. A few adolescents 11(1.40%) expressed about hard to get motivated and feel to take rest.

Table 4: Overall distribution of students with respect to characteristics of depression

Depression characteristics	Never		Sometimes		Always	
	Never	%	Sometimes	%	Always	%
I feel low mood, sad, just can't be bothered.	531	67.64	232	29.55	22	2.80
I feel as i am worthless, hopelessness, not being a good person	438	55.80	341	43.44	6	0.76
I feel hard to get motivated & want to rest or lie down a lot.	523	66.62	262	33.38	11	1.40
I feel worried, nervous, panicky,& tensed	529	67.39	256	32.61	4	0.51

Table 5 shows that among 10-12 years age group school going adolescents, 24.18% had experienced mild physical abuse, 58.82% of them had experienced moderate physical abuse, 16.99% reported severe physical abuse. Among the 13-14 years age group of school going adolescents, 26.01% had experienced mild physical abuse, 54.21% reported moderate physical abuse and 19.78% reported severe physical abuse. Among the 15-16 years age group of school going adolescents, 24.51% experienced mild physical abuse and 56.56% reported moderate physical abuse and 18.18% reported severe physical abuse. The level of depression was also assessed in study participants. Among the 10-12 years age group of school going adolescents, 33.3% were in mild depression levels, 62.1% were in moderate level of depression, 4.6% were found to have severe level of depression. Among the 13-14 years age group of school going adolescents, 26.4% were in mild depression levels, 69.2% were in moderate level of depression, 4.4% were found to have severe level of depression. Among the 15-16 years age group of school going adolescents, 24.2% were in mild depression levels, 68.5% were in moderate level of depression, 7.2% were found with severe level of depression.

Table 5: Physical abuse and Adolescent students Depression levels

Age Groups	Levels of Physical abuse - Frequencies and Percentage (%)			Levels of Depression - Frequencies and Percentage (%)		
	Mild Physical abuse	Moderate Physical abuse	Severe Physical abuse	Mild Depression Levels	Moderate Depression Levels	Severe depression Levels
10-12yrs	37 (24.18%)	90 (58.82%)	26 (16.99%)	51 (33.3%)	95 (62.1%)	7 (4.6%)
13-14yrs	71 (26.01%)	148 (54.21%)	54 (19.78%)	72 (26.4%)	189 (69.2%)	12 (4.4%)
15-16yrs	88 (24.51%)	206 (56.56%)	65 (18.1%)	87 (24.2%)	246 (68.5%)	26 (7.2%)

Table 6 reveals that there is significant relationship between physical abuse and depression among adolescents, with r-value = 0.1256, p-value = 0.0326. This indicates there is linear relationship between physical abuse and depression among school going adolescents; as physical abuse increases there is tendency of depression among school going adolescents.

Table 6: Correlation between physical abuse scores and depression scores in adolescents by Karl Pearson's correlation coefficient method.

Variables	Physical abuse Perpetrated by Family member/Guardian among adolescents		
	r-value	t-value	p-value
Levels of depression	0.1256	3.5620	0.0326
*significant (p<0.05)			

Discussion:

The current findings of our study improve our knowledge of the relationship between physical abuse and levels of depression among school going adolescents. In this study, we found that 10 to 16 years aged school going adolescents were the victims of physical abuse, and study participants have also expressed their different levels of depression due to physical abuse which was perpetrated by the family member/guardian. Other similar study has also reported that victims of physical abuse have high levels of depression traits, and that depression among adolescents will effect brain functions related psychological ability of reasoning and alter the behavior among the adolescents, leading to maladjustment to their present environment, and more negative behaviors in their day today life. In our study among adolescents, hitting, being beaten and being spanked with hand was being most common form of physical abuse.[5] Study reported by Ministry of women and child welfare (MWCD, GOI), Government of India had reported higher prevalence of child maltreatment.[3] In our study we found significant relationship between physical abuse and depression among adolescents, with r-value = 0.1256, p-value = 0.0326. Similar study also conducted by Chang-Fang Yen et al in Taiwan indicated that among 1684 adolescents, 374 (22.2%) reported being victims of physical abuse in childhood, and the study also suggested that childhood physical abuse among adolescents will increase the risk of depression.[6] Carla Kmett Danielson et al also suggested in their study that young adolescents who are abused (physically, sexually) are at higher risk for depression.[7]

Strengths of the study:

The present study is the first to examine physical abuse in primary and secondary school going adolescents and its relation with depression level in Belagavi and also in Karnataka state. We included a variety of primary and secondary schools in Belagavi. Other strengths of the study are the use of a descriptive design and the fact that our measure of depression level and physical abuse were based on self-report rather than parental or teacher reports.

Limitations of the study:

In regard to sample characteristics, generalization from primary and secondary school students to other adolescents in the different schools may be limited. The other fact of concern is that depression levels may be influenced by genetic and environmental factors.

Conclusions of the study: Based on the findings of the study following conclusions were drawn. Out of total 785 study subjects, 444 (56.56%) were exposed to moderate physical abuse, 196 (24.97%) were exposed to mild physical abuse, and 145 (18.47%) were the victims of severe physical abuse. A total of 768 (97.83%) reported that they experienced hitting, and being beaten, and spanked with hand by guardian/family member. The study also found significant positive relationship between physical abuse and depression among adolescents, with r-value = 0.1256, p-value = 0.0326.

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Original Article

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Correlation between physical abuse and anxiety among school-going adolescents (10–16 years age) of Belagavi: A school-based study

Gavishiddhaya B. Salimath, Sudha A. Raddi¹

Abstract:

INTRODUCTION: The relationship between childhood maltreatment and bountiful range of mental divergence has been well assumed. Anxiety disorders are the usual mental health concern facing adolescents today, yet they are largely insufficiently treated. Physical abuse often does not occur in isolation, but as part of a constellation of behaviors including authoritarian control, anxiety-provoking behavior, and a lack of parental warmth.

OBJECTIVES: To find out the correlation between physical abuse and anxiety among school-going adolescents.

MATERIALS AND METHODS: The present study was conducted among eight schools at Belagavi, using descriptive cross-sectional research design with stratified cluster sampling. It included primary and secondary schools of Belagavi. The study samples were consisted of 785 students. Self-structured physical abuse and anxiety scales were used to find out correlation between physical abuse and anxiety among the adolescents.

RESULTS: The results of the study showed that out of total 785 study participants, 444 (56.56%) had exposed to moderate physical abuse, 196 (24.97%) had exposed to low physical abuse, and 145 (18.47%) had exposed to high level of physical abuse. The study findings showed that there is a significant positive relationship between physical abuse and anxiety among adolescents, with $r = 0.1021$.

CONCLUSIONS: The present study concluded that there is a significant positive relationship between physical abuse and anxiety among adolescents.

Keywords:

Adolescents, anxiety, physical abuse

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Introduction

The relationship between childhood maltreatment and bountiful range of mental divergence has been well assumed.^[1] Every child has a right to a safe childhood and a life free from violence. The experience of child abuse and neglect infringe upon that right.^[2] Anxiety disorders are the usual mental health concern facing adolescents today, yet they are largely insufficiently

treated. If the anxiety problems were untreated, this will lead to severe consequences in adulthood.^[3] Physical abuse often does not occur in isolation, but as part of a constellation of behaviors including authoritarian control, anxiety-provoking behavior, and a lack of parental warmth.^[4]

The WHO defines physical abuse as intentional use of physical force against the child that results in – or has a high likelihood of resulting in – harm for the child's health,

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survival, development, or dignity. This includes hitting, beating, kicking, shaking, biting, strangling, scalding, burning, poisoning, and suffocating. Much physical violence against children in the home is inflicted with the object of punishing.^[6] A pilot study has reported recently that approximately 84% of adolescents faced one or the other form physical abuse, common being among the age group of 11–12 years. The most persistent perpetrator of physical abuse was found as guardian/family member and followed by the friends and neighbors.^[5] The Ministry of Women and Child Department, Government of India explored the study in 2007 across the 13 states in India, and the study stipulated that a critically high percentage of children in state run schools, i.e., 53.8% faced corporal punishment.^[2] Daral *et al.* conducted a study among classes 7th–12th of government schools of Delhi, and a total of 1060 adolescents were included in the study. Majority were in mid-adolescence. Approximately 70% study participants' victims of at least one form of maltreatment. 42.6% of adolescents exposed to physical abuse.^[6]

Anxiety is mental health disorder characterized by feelings of worry, anxiety, or fear that are strong enough to interfere with one's daily activities. Anxiety disorders are the most prevalent mental health concern facing adolescents today, yet they are largely undertreated.^[3] One in six adolescents has one or the other anxiety traits in 10–19 years' age. Mental health conditions account for 16% of the global burden of disease and injury in people aged 10–19 years. Half of all mental health conditions start by 14 years of age, but most cases are undetected and untreated. Anxiety is the ninth-leading cause for adolescents aged 15–19 years and sixth for those aged 10–14 years. Emotional disorders can profoundly affect areas such as schoolwork and school attendance. Social withdrawal can exacerbate isolation and loneliness. At its worse, depression can lead to suicide.^[7]

Science revealed that early subjection to episodes that produce persistent fear and chronic anxiety can have life-long consequences by disrupting the developing architecture of the brain.^[8] Unfortunately, many young adolescents are unprotected to such situations. An early situation of threats leads to exceptional fearful events alters the developing brain, particularly in those areas involved in emotions and learning. For young children who perceive the world as a threatening place, a wide range of conditions can trigger anxious behaviors that then impair their ability to learn and to interact socially with others.^[9]

The present study is the first to examine physical abuse in primary and secondary school going adolescents and its relation with anxiety level in Belagavi and also in the Karnataka state. Therefore, the present study will

attempt to understand the correlation between physical abuse and anxiety among school-going adolescents (10–16 years age) in Belagavi.

Objectives of the study

- To estimate the prevalence of physical abuse among school-going adolescents (10–16 years age) in Belagavi
- To estimate the prevalence of anxiety due to physical abuse among school-going adolescents (10–16 years age) in Belagavi
- To find out the correlation between physical abuse and anxiety among school-going adolescents in Belagavi.

Materials and Methods

Design and setting

The study was conducted in eight schools in Belagavi city using the descriptive research design. It included primary and secondary schools of Belagavi.

Sample

This comprised school children of primary and secondary grades selected by stratified cluster random sampling. Belagum city was divided into four strata North, East, South, and West, 2 schools were randomly selected from each of the four strata. Eight schools having the maximum enrollment in each zone were selected and adolescents from these schools in the age group of 10–16 years were included in the study. The sample size calculated to estimate a prevalence rate of physical abuse of 42.6% (Daral *S et al.*, 2016), with the absolute precision, design effect 2, at 95% level of confidence. The required sample size was 785 students.

Tools for data collection

Tool I

Sociodemographic questionnaire was used to collect about sociodemographic characteristics of the study participants such as age, sex, type of family, mother and father education and occupation, and income.

Tool II

Physical abuse interview tool, to find out prevalence of physical abuse at home with the methods of physical abuse such as hitting beating, with the hand and also with objects, chocking, burning, locking in small place, etc. It contained 10 questions to be answered by with criteria 0 (never), 1 (sometimes), and 2 (most of the times).

Tool III

Anxiety assessment scale to find out the levels of anxiety, 9 questions were included with criteria 0 (never), 1 (sometimes), and 2 (most of the times). A score of 0–6 indicates mild anxiety.

The reliability of the tool

Was assessed by test-retest method the reliability value was 0.82. There was very high correlation coefficient, and it was a good tool for identifying the physical abuse and levels of anxiety among adolescents.

Pilot study

The pilot study was carried out on sample of adolescents from other schools to test the clarity and reliability of the tool and feasibility of the tool. The tool was tested and necessary changes were done in the form of re-phrasing of some items. The pilot study participants were not included in the main study sample frame.

Field work

Institutional ethical clearance was obtained from the Institutional Ethical Committee before the start of the study, also permission was obtained from office of the Directorate of Education (DDPI) of Belagavi District. Permission letter was also obtained by the all school headmasters, and consent from parents and assent from the study participants were obtained. The investigator met with students in the class room and explained the purpose of the study and distributed the questionnaire forms to be completed.

Inclusion criteria

- Primary and secondary school-going adolescents of aged 10–16 years
- Adolescent students who are willing to participate in the study
- Adolescent students present at time of data collection.

Exclusion criteria

- Those students whose parents decline to provide the informed consent
- Students with cognitive, neurological, psychological, and endocrinal disorders.

Data analysis

The data were analyzed by using Karl Pearson's correlation coefficient to find out the correlation between physical abuse and anxiety among school-going adolescents. The software used was the Statistical Package for the Social Sciences software version 20.

Duration of the study

The time duration of the present study was 2 years from December 2017 to December 2019.

Ethical clearance certificate was obtained from KLE University Ethics committee on Human subjects dated on 5th June 2017, Ref.No.KLEU/EC/17-18/D-102.

Results

Table 1 represents the sociodemographic characteristics

Table 1: Distribution of the study participants according to sociodemographic variables (n=785)

Sociodemographic characteristics	Number of respondents, n (%)
Age groups (years)	
10-12	153 (19.49)
13-14	273 (34.78)
15-16	359 (45.73)
Gender	
Male	660 (84.08)
Female	125 (15.92)
Types of family	
Nuclear	653 (83.18)
Joint	132 (16.82)
Religions	
Hindu	662 (84.33)
Muslims	33 (4.20)
Others	90 (11.46)
Residence	
Rural	469 (59.75)
Urban	316 (40.25)
Fathers education	
Illiterates	60 (7.64)
Primary	107 (13.63)
Secondary	220 (28.03)
Higher secondary	320 (40.76)
Degree	78 (9.94)
Mothers education	
Illiterates	48 (6.11)
Primary	117 (14.90)
Secondary	378 (48.15)
Higher secondary	213 (27.13)
Degree	29 (3.69)
Fathers occupation	
Farmer	186 (23.69)
Government employee	13 (1.66)
Self employed	316 (40.25)
Private employee	258 (32.87)
Professional	12 (1.53)
Mothers occupation	
Farmer	143 (18.22)
Self employed	344 (43.82)
Private employee	250 (31.85)
Professional	27 (3.44)
Homemaker	21 (2.68)
Monthly family income (Rs.)	
2001-4000	28 (3.57)
4001-6000	121 (15.41)
6001-8000	492 (62.68)
>8000	144 (18.34)
Number of siblings	
One	11 (1.40)
Two	546 (69.55)
Three and plus	228 (29.04)
Total	785 (100.00)

of the study population. Maximum students 359 (45.73%) were in the age group of 15–16 years, followed by

273 (34.78%) in the 13–14 years age group and 153 (19.49%) students were 10–12 years old. The male-to-female ratio was 84.08:15.92 among the 785 study participants. In the present study, 653 (83.18%) were from the nuclear family and 132 (16.82%) were from the joint family. Out of 785 participants, most of them were 662 (84.33%) Hindu, 90 (11.20%) were belongs to other religion, and 33 (4.25%) were belongs Muslim religion. Out of 785 adolescents, 320 (40.76%) fathers were completed higher secondary education, 220 (28.03%) completed secondary education, 107 (13.63%) were completed primary education, and 78 of them completed degree and 60 of them were illiterates. Out of 785 adolescents, 378 (48.15%) mothers were completed secondary education, 213 (27.13%) completed higher secondary, 117 (14.90%) were completed primary education, and 29 of them completed degree and 48 of them were illiterates. Out of 785 adolescents, 316 (40.25%) fathers were self-employed, 258 (32.87%) private employees, 186 (23.69%) were farmers, and 13 (1.66%) government employees, 12 fathers were (1.53%) professionals. Out of 785 adolescents, 344 (43.82%) mothers were self-employed, 250 (31.85%) private employees, 143 (18.22%) were farmers, 27 (3.47%) were professionals, and 21 mothers were (1.53%) homemakers. Four hundred and ninety-two (62.68%) participants family had 6001–8000 rupees income per month, 144 (18.34%) participants had more than 8000 income 121 (15.41%) participants had 4000–6000 and 28 (3.57%) participants had 2000–4000 income none of them had above 8000 rupees income per month. Out of 785 adolescents, 546 (69.55%) of adolescents had two siblings, 228 (29.04%) has three and more than three siblings, and 11 (1.40%) had only one sibling.

Out of total 785 study participants, 444 (56.56%) had exposed to moderate physical abuse, 196 (24.97%) had exposed to low physical abuse, and 145 (18.47%) had exposed high level of physical abuse at home [Table 2].

Characteristics of physical abuse among school-going adolescents [Annexure 1]

Out of 785 study participants, 768 (97.83%) reported that they had been exposed to hitting, and being beaten and spanked with the hand by guardian/family member. Seven hundred and sixteen (91.21%) reported that they had been pushed and being grabbed and kicked by family member/guardian. Six hundred and twenty-six (79.75%) exposed to shouting and screaming by family members and 289 (36.82%) exposed to hitting and beating and spanking by object by guardian/family member. Two hundred and six (26.24%) reported that their ear been pulled and twisted/pinched by family member/guardian. Ninety-nine (12.61%) reported that their hair been pulled by family member/guardian. Seventy-six (9.68%) being locked in small place,

Table 2: Prevalence of physical abuse among school-going adolescents (n=785)

Levels of physical abuse	Number of respondents, n (%)
Mild physical abuse	196 (24.97)
Moderate physical abuse	444 (56.56)
Severe physical abuse	145 (18.47)
Total	785 (100)

73 (9.30%) exposed to choking. Only 10 (1.27%) exposed to burn/scald by family member/guardian.

Characteristics of anxiety among school-going adolescents

Out of 785 study participants, 354 (45.10%) reported that sometimes they felt afraid of being alone at home only four of them they were expressed that they would feel always afraid of being alone at home. Three hundred and thirty-eight (43.06%) of adolescents reported that sometimes they worried about they will do badly at school work and 70 (8.92%) reported that they always worried about they will do badly at school work. Two hundred and eighty-nine (36.82%) of adolescents sometimes scared to take academic test, 59 (7.52%) of adolescents scared always to take academic test. Two hundred and eighty-two (35.92%) of adolescents sometimes felt low mood, with sadness and just cannot be bothered, only one adolescent reported it always. One hundred and eighty-two (23.18%) of adolescents reported sometimes bothered about silly thoughts and pictures in mind, 46 (5.86%) reported it always. One hundred and sixty-eight (21.40%) of adolescents reported sometimes felt sudden fear and terror or frightened. One hundred and fifty-four (19.62%) of adolescents reported that sometimes they worried about something bad will happen to me, 147 (18.73%) reported it for always. One hundred and twenty-seven (16.18%) of adolescents reported that sometimes they worried about what other people think of me, and only 6 of them felt it for always.

Levels of physical abuse and anxiety among school-going adolescents

Among 10–12 years age group school-going adolescents, 24.18% were experienced mild physical abuse and 58.82% of them were experienced moderate physical abuse. 16.99% were reported severe physical abuse. Among the 13–14 years' age group of school-going adolescents, 26.01% were experienced mild physical abuse, 54.21% reported moderate physical abuse, and 19.78% reported severe physical abuse. Among the 15–16 years' age group of school-going adolescents, 24.51% were experienced mild physical abuse and 56.56% reported moderate physical abuse and 18.18% reported severe physical abuse. The level of anxiety was also assessed in the study participants, Among the 10–12 years' age group of school-going adolescents, 23.5% were in mild anxiety levels, 54.2% were in moderate level of anxiety, and

22.2% were experienced severe level of anxiety. Among the 13–14 years' age group of school-going adolescents, 19.8% were in mild anxiety levels, 59.3% were in moderate level of anxiety, and 20.9% were experienced severe level of anxiety. Among the 15–16 years' age group of school-going adolescents, 21.4% were in mild anxiety levels, 53.2% were in moderate level of anxiety, and 25.3% were experienced severe level of anxiety.

Table 3 reveals that there is a significant positive relationship between physical abuse and anxiety among adolescents, with $r = 0.1021$, $P = 0.0042$. This indicates that as the level of physical abuse increases among adolescents, the level of anxiety will also increase. Therefore, this hypothesis was accepted.

Discussion

The current findings of our study improve our knowledge of the relationship between physical abuse and levels of anxiety among school-going adolescents. In this study, we found that 10–16 years aged school-going adolescents were the victims of physical abuse, and study participants have also expressed their different levels of anxiety due to physical abuse which was perpetrated by the family member/guardian. Similar study has reported that victims of physical abuse were observed to have high levels of anxiety traits; the study also reported that anxiety among adolescents will effect brain functions-related psychology ability of reasoning and alter in the behavior among the adolescents and this will lead to maladjustment to their present environment will have more negative behaviors in their day today life. In our study, among adolescents, hitting, being beaten and spanked with the hand was being most common form of physical abuse. This is supported by the similar study which has been carried out by Ministry of Women and Child Welfare (MWCD) Government of India had reported a higher prevalence of child maltreatment. In the present study, we found a significant positive correlation with physical abuse and anxiety among school-going adolescents. Similar study has conducted Bruce, L. C, *et al.* to assess the relationship between child maltreatment and anxiety disorders and the study results are found that there is a significant relationship between child maltreatment and the anxiety among the study participants ($r = 0.599$, physical abuse). In the present study, we found a significant relationship ($r = 0.1021$, $P < 0.05$) between physical abuse

Table 3: Correlation between physical abuse scores and anxiety scores in adolescents by Karl Pearson's correlation coefficient method

Variables	Physical abuse perpetrated by family member/guardian among adolescents		
	<i>r</i>	<i>t</i>	<i>P</i>
Levels of anxiety	0.1021	2.8731	0.0042*

*Significant ($P < 0.05$)

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and anxiety among school-going adolescents. Hence, the study proved that if the level of physical abuse increases the level of anxiety also increases.

Strengths of the study

The present study is the first to examine physical abuse in primary and secondary school-going adolescents and its relation with anxiety level in Belagavi and also in the Karnataka state. We included a variety of primary and secondary schools in Belagavi. Other strengths of the study are the use of a descriptive design and the fact that our measure of anxiety level and physical abuse were based on self-report rather than parental or teacher reports.

Limitations of the study

In regard to sample characteristics, generalization from primary and secondary school students to other adolescents in the different schools may be limited. The other fact that concerns is, anxiety levels may be influenced by the genetic and environmental factors.

Conclusion

Based on the findings of the study, following conclusions were drawn.

Out of total 785 study participants, 444 (56.56%) had exposed to moderate physical abuse, 196 (24.97%) had exposed to mild physical abuse, and 145 (18.47%) were the victims of severe physical abuse. Seven hundred and sixty-eight (97.83%) reported that they experienced hitting, and being beaten, and spanked with hand by guardian/family member. The present study also found a significant positive relationship between physical abuse and anxiety among adolescents, with $r = 0.1021$, $P = 0.0042$. This indicates that as the level of physical abuse increases among adolescents, the anxiety will also increase.

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Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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DATA COLLECTION PHOTOS





Errata Submission of the PhD thesis

Sl no	Observations	Clarifications	Corrected thesis copy P.N
1.	Observation 1. The guidelines of writing abstract to be followed	*The abstract has been revised as per the guidelines	xii-xiii
2.	Observation 2: Chapter 1: Statistical data to be quoted from authentic sources, avoid mentioning the names, place and follow proper referencing method.	*Authentic references are incorporated. *Authors names have been deleted *APA method for referencing has been adopted	1-4
3.	Observation 3: Chapter II: The primary Objective is not in measurable terms. The operational definitions not clear. Prevalence is not defined. Conceptual framework needs clarity and clear explanation	*The primary objective has been redefined and made measurable “To assess the determinants and consequences of physical abuse among school going adolescent students (10 to 16 years age) in Belagavi.” by using Modified WHO Adverse Childhood Experiences (ACE) tool *Operational definitions are redefined & made more specific *Prevalence is defined *Conceptual framework is modified with clear explanation	5-12
4.	Chapter III:Observation 4: Use Appropriate styles for Review of literature & summary of the review of literature and its contribution to this study	*APA referencing style has been adopted in review of literature & *summary of review of literature is mentioned. *Contribution of review of literature to the present study has been revised and rewritten as per your suggestions.	13-33

	<p>Observation 5 Continued: As the tool was international what modifications were done to suit to the Indian population as P/143 are very common in Indian culture .Item no.10 “Have you been given bad words by any one “ is not at clear.</p>	<p>*Since the WHO tool was international and included questions on emotional sexual abuse also, considering the objective of the present study and the age of the participants other unrelated questions were eliminated. * Since, P/143 of the who tool consisted the questions which are matched with present study requirements all such questions were included to seek the data on the physical abuse patterns. (No changes were made here) *The bad words were considered as those which meant offensive insulting or profane. Base on the language and maturity levels situation of study participants the researcher has made attempts to seek appropriate date here. (Listing such words may not be appropriate here.)</p>	
6	<p>Chapter Results: Observation No 6: There is repletion of the results in the table and figure. Figures are not numbered and titled properly (page no 47-55), use the table and figures according to the type of variable and its number of subdomains. P/54 check error for percentage.</p>	<p>*Figures are numbered properly *The tables and figures are renamed according to the variables and subdomains *P/54 percentage error in the table corrected</p>	45-103
	<p>Justify the tool used to measure the adverse childhood experiences is appropriate.</p>	<p>*The WHO tool is the intensive frequently used reference tool for measuring ACE. Since study objective was to assess the physical abuse this tool was found to be appropriate.</p>	
	<p>P/57 table 11, estimation of prevalence is not clear in the data presented. Table 12,p/60 asking participants “Yes”or “No” will not help in defining the prevalence. It is not matching the operational definition given in the page</p>	<p>*For the purpose of statistical analysis and interpretation the individual who replies "most" or "always" is considered to have experienced physical abuse marked as “Yes” and given score as =1 *While those who reply "never" or "sometimes" are considered to have not had physical abuse marked as “No”=0</p>	

	<p>P/63 table 13 the results of the determinants should be conclusive for interpretation and generalization.</p>	<p>*P/63 table 13 the results of the determinants have been modified and interpreted for generalization.</p>	
	<p>Stating the item wise percentage information for all the items will not provide conclusive findings.</p>	<p>*Item wise percentile information has been collated and conclusive findings are given</p>	
	<p>P/65,table 14, P/67,table15, P/70,table 18, P/74,table 21, P/77,table 22, P/81,table 23, P/84,table 24, P/88,table 26 P/89,table 27, P/91,table29, P/93,table 31, P/94,table 32, P/95,table 33, P/96,table 14, P/65,table 34. In all these tables what is the reference form for physical abuse form 1 and 2.</p>	<p>*The “NEVER” option is kept as reference form/baseline for physical abuse form 1 and 2 in all the mentioned tables.</p>	
	<p>As the consequences of physical abuse prevalence is not calculated, then how directly association is done</p> <p>All the tables to be presented in a way for easy interpretation of the data as per the study objectives.</p> <p>P/97 major findings are poorly written.</p>	<p>*The consequences of physical abuse association has done through the point prevalence that included the proportion of a population that has the characteristic of consequences of physical abuse expressed in terms of frequency and percentage.</p> <p>*All the tables have been described and presented according to the study objectives</p> <p>*The major findings of the study have been modified and rewritten in comprehensive manner</p>	

7	Chapter VI Discussion, Please organize based on the objectives .It has to be written comprehensively in comparison to other studies.	*The Discussion chapter has been revised and described in detail by comparing findings with other studies.	104-114
8	Chapter 7 p/108 all findings area are repeated no conclusions are drawn .Implications need to be specific ,no implication written for community health nursing, school health nursing .	*The conclusions are revised and rewritten with strong impact. *Implications are made more specific in terms benefits of the community & School health nursing.	115-122
9	Limitations are not specific	*Limitations of the study are specifically described.	120
10	References –follow particular style of writing	* Particular style writing references are followed	126-138
11	P/144 and p/145 check the details of the item given in the tool.	*The details of the tool are renumbered properly.	150-155

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Research Guide
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