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COMMUNITY SURVEY ON PREVALENCE OF ADVERSE CHILDHOOD EXPERIENCES IN ALBANIA

Report



Community survey on prevalence of adverse childhood experiences in Albania

Report

Gentiana Qirjako, Genc Burazeri, Dinesh Sethi and Vasil Miho

Abstract

The survey on the prevalence of adverse childhood experiences in Albania was conducted in a representative sample of young adults (N=1437) selected from public universities [971 females (67.6%) and 466 males (32.4%); mean age: 21.2 ± 2.3 years]. This survey aimed to describe the magnitude of adverse childhood experiences (ACE) in the Albanian young population, to identify socioeconomic characteristics, and find associations between ACE, health risk behaviour behaviours and health outcomes. Results showed that the prevalence of child maltreatment in this population is high: sexual abuse 6%, physical abuse 41.5%, emotional abuse 51%. Overall 14% of the students reported at least four ACE and almost half of them reported 2 or more ACE. ACE were positively associated with rural place of birth, parental education, father's unemployment, and inversely related to income level. Of importance the findings show that the odds of developing health risk behaviours such as smoking, alcohol, illicit drugs, multiple partners and suicide attempts increases with the ACE score, implying a causal relationship. Strategies are needed for the prevention of child maltreatment.

Keywords

1. ACCIDENT AND INJURY PREVENTION
2. CHILD ABUSE
3. CHILD ADVOCACY
4. CHILD WELFARE
5. COMMUNITY HEALTH SERVICES
6. HEALTH SURVEYS

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Contents

Abstract	2
Contents	3
Acknowledgements	4
Executive Summary	5
Introduction	7
Aim and Objectives of the Survey	14
Methodology	15
Results and Discussion	19
Chapter I: Distribution of socio-demographic and socioeconomic characteristics of the students and their respective parents	20
Chapter II : Prevalence of adverse childhood experiences in students included in the survey	22
Chapter III: Distribution of behavioural/ lifestyle factors of the students included in the survey	24
Chapter IV: Association of lifestyle/ behavioural factors with demographic and socioeconomic characteristics of the students and their parents	26
Chapter V: Association of adverse childhood experiences with demographic and socioeconomic characteristics and behavioural/lifestyle factors	34
Conclusions	45
Recommendations	49
Appendix 1	50
Appendix 2	57
References	65

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Gentiana Qirjako, Genc Burazeri, Dinesh Sethi and Vasil Miho

Executive Summary

The survey on the prevalence of adverse childhood experiences in Albania was conducted between November 2011 to May 2012 in a representative sample of young adults (N=1437) selected from public universities in Albania [971 females (67.6%) and 466 males (32.4%); mean age: 21.2 ± 2.3 years]. The survey aimed to describe the magnitude of adverse childhood experiences (ACE) in the Albanian young population, to identify socioeconomic characteristics, and find associations between ACE, health risk behaviours and health outcomes.

The main findings of this survey are briefly listed below:

- *Prevalence of adverse childhood events:* Overall, the prevalence of physical and sexual abuse during the first 18 years of life (referred to as *childhood*) was 41.5%, and 6% respectively. The rate of emotional abuse during childhood was similar in male and female students (51%).

Overall, about 30% of the students witnessed their mother treated violently and about 40% of them were bullied and were involved in physical fights during their childhood – characteristics which were significantly more prevalent in males than females.

- *Lifestyle/ Behavioural factors:* The prevalence of current smoking was 28% in males and 19% in females; the prevalence of problem drinking was about 15% in males and 11% in females; the prevalence of drug abuse was about 5% in males and 4% in females. The prevalence of early sexual intercourse (< 16years) was 20%. At least one episode of suicide attempt was reported in 2.4% of males and 4.5% of females. About 8% of females reported at least one episode of unwanted pregnancy.
- *Sexual experiences:* The prevalence of life-time sexual intercourse was significantly higher in males compared to the females (74.2% vs. 43.5%, respectively). 13.2% of students had sexual experiences with more than 3 partners. The mean number of lifetime sexual partners was similar in males compared with females (2.95 vs. 2.92, respectively).
- *Socio-demographic and socio-economic correlates of adverse childhood events:* In general, student's rural residence and origin, low parental education, father's unemployment status and low income level were significant predictors of witnessed and experienced physical abuse, bullying and fights.
- *Adverse childhood events and association with health risk behaviours:* Smoking, alcohol and drug abuse were all positively associated with witnessed and experienced physical abuse emotional and sexual abuse.
- The mean ACE score was significantly higher in males compared with the female students and slightly (non-significantly) higher among students aged over 24 years. Students born in rural areas and particularly those residing in rural areas displayed higher mean ACE scores compared with their urban counterparts. The mean ACE score was significantly higher among students who reported low parental education compared with those who reported middle and especially high parental education. The mean ACE score was substantially higher among students whose fathers were unemployed. As for the lifestyle/behavioural factors, the mean ACE score was considerably and significantly higher among students who were smokers and reported use of alcohol and drugs. Furthermore, the mean ACE score was significantly higher among students who reported sexual experiences, early sex (before 16 years) and had more than 3 sexual partners.
- About 14% of the students reported at least four ACEs. In addition, ACE was positively associated with rural place of birth, parental education, father's unemployment, and inversely related to income

level. As for the lifestyle/ behaviour factors, ACE was positively associated with current smoking, alcohol abuse, lifetime prevalence of sexual intercourse, number of sexual partners (> 3) and unwanted pregnancy, and the number of school days missed in the past month due to stress or depression. Further the odds of these risk behaviours increased with the ACE score, suggesting a causal relationship between exposure to ACE and health risk behaviours.

Findings of this survey are compatible, to some extent, with prior studies conducted in Albania. Furthermore, the main findings of this survey are comparable with reports from the region including Macedonia – a country facing similar challenges in the difficult process of accession in the European Union. This survey provides useful information about the magnitude and main determinants of adverse childhood experiences among Albanian youth in both sexes. Policymakers in Albania should be aware of the burden of ill health related to adverse childhood events and the resulting unhealthy lifestyle/ behavioural patterns in youth. There is an urgent need to identify and promote effective means of providing care and support as well as prevention and control strategies for childhood maltreatment and other adverse events in childhood. Furthermore, effective programs and activities should be designed and developed in order to control and prevent unhealthy behaviours in the Albanian youth including cigarette smoking, alcohol abuse, and use of street drugs and the prevention of unwanted pregnancies.

Introduction

Every child has the right to health and a life free from violence. Each year, though, millions of children around the world are the victims and witnesses of physical, sexual and emotional violence. Child maltreatment is a huge global problem with a serious impact on the victims' physical and mental health, well-being and development throughout their lives – and, by extension, on society in general.

According to the WHO, in the year 2002, an estimated 31000 deaths were attributed to homicide among children less than 15 years of age. However, the number of child deaths due to violence and other maltreatment might be largely underestimated¹.

Deaths represent only a small fraction of the problem of child maltreatment. Every year millions of children are victims of non-fatal abuse and neglect.

What is child maltreatment?

Child maltreatment refers to the physical and emotional mistreatment, sexual abuse, neglect and negligent treatment of children, as well as to commercial or other exploitation of children. It occurs in many different settings. The perpetrators of child maltreatment may be:

- parents and other family members;
- caregivers;
- friends;
- acquaintances;
- strangers;
- others in authority – such as teachers, soldiers, police officers and clergy;
- employers;
- health care workers; and
- other children.

Child maltreatment is a complex issue. Its dynamics and the factors that drive it, as well as effective prevention strategies, all differ markedly according to the victim's age, the setting in which maltreatment occurs, and the relationship between victim and perpetrator. Violence against children by adults within the family is one of the least visible forms of child maltreatment, as much of it takes place in the privacy of domestic life, and it is widely prevalent in all societies. Child maltreatment by parents and caregivers gives rise to particular difficulties when designing strategies for prevention and victim services, since the perpetrators of the maltreatment are at the same time the source of nurture for the child.

Child maltreatment is recognized internationally as a serious public health, human rights, legal and social issue. The nature and the severity of both the violence itself and its consequences vary. Child maltreatment can lead to death. Most maltreatment is non-lethal and may manifest as physical injuries and or affect the child's well-being to result in long-term consequences on a child's neurological, cognitive and emotional development and overall health.

Typology of violence

Child maltreatment is linked to other forms of violence – including intimate partner violence, community violence involving young people, and self-directed violence – both causally and through shared underlying risk factors. It is therefore useful to view child maltreatment within a wider categorization of violence. Following the typology presented in the *World report on violence and health*, violence can be divided into three broad categories, according to the context in which it is committed.

- **Self-directed violence** refers to violence where the perpetrator and the victim are the same person. It is subdivided into self-abuse and suicide.
- **Interpersonal violence** refers to violence between individuals. The category is subdivided into family and intimate partner violence, and community violence. The former includes child maltreatment, intimate partner violence and elder abuse. Community violence is broken down into violence by acquaintances and violence by strangers. It covers youth violence, assault by strangers, violence related to property crimes, and violence in workplaces and other institutions.
- **Collective violence** refers to violence committed by larger groups of people and can be subdivided into social, political and economic violence.

Conceptual definitions of child maltreatment

Child maltreatment

Child maltreatment is defined 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^{2,3}.

As already stated, the *World report on violence and health* and the 1999 WHO Consultation on Child Abuse Prevention distinguish four types of child maltreatment:

- physical abuse;
- sexual abuse;
- emotional and psychological abuse; and
- neglect.

Physical abuse

Physical abuse of a child is defined as the intentional use of physical force against a 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.

Sexual abuse

Sexual abuse is defined as the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared, or else that violates the laws or social taboos of society. Children can be sexually abused by both adults and other children who are – by virtue of their age or stage of development – in a position of responsibility, trust or power over the victim.

Emotional and psychological abuse

Emotional and psychological abuse involves both isolated incidents, as well as a pattern of failure over time on the part of a parent or caregiver to provide a developmentally appropriate and supportive environment. Acts in this category may have a high probability of damaging the child's physical or mental health, or its physical, mental, spiritual, moral or social development. Abuse of this type includes: the restriction of movement; patterns of belittling, blaming, threatening, frightening, discriminating against or ridiculing; and other non-physical forms of rejection or hostile treatment.

Neglect

Neglect includes both isolated incidents, as well as a pattern of failure over time on the part of a parent or other family member to provide for the development and well-being of the child – where the parent is in a position to do so – in one or more of the following areas:

- health;
- education;
- emotional development;
- nutrition; and
- shelter and safe living conditions.

Adverse childhood experiences

Child maltreatment is one of the more serious forms of adverse childhood experiences (ACE).

Adverse childhood experiences (ACE) may be one or more of emotional, physical and or sexual abuse, physical and or emotional neglect, or arise from household dysfunction, due to substance misuse and or mental illness amongst family members, violent treatment of mother, separation or divorce of parents, imprisonment of family member.

Magnitude of the problem

According to WHO, in the year 2002 an estimated 31 000 deaths were attributed to homicide among children less than 15 years of age, however, the number due to maltreatment might be much higher. Global estimates of child homicide suggest that infants and very young children are at greatest risk, with rates for infants more than double those for 1–5-year-olds.

Infants and pre-school children are at the greatest risk of fatal maltreatment as a result of their dependency, vulnerability and relative social invisibility. Their cases are least likely to come to the attention of those who are in a position to monitor their care and safety and who are not family members or caregivers. The risk of fatal abuse is two to three times higher in low-income and middle-income countries than it is in high income countries. It is also greater in societies with large economic inequalities than in those where wealth is more evenly distributed. The most common cause of death is head injury, followed by abdominal injuries and intentional suffocation. While it is not possible to specify the proportion of child homicides that are committed by parents and other family members, special studies conducted in mainly high-income countries suggest that members of the family are responsible for the majority of homicides in children aged 0–14 years.

Deaths represent only a small fraction of the problem of child maltreatment. Every year millions of children are victims of non-fatal abuse and neglect. Some international studies have shown that, depending on the country, between a quarter and a half of all children report severe and frequent physical abuse, which includes being beaten, kicked or tied up by parents.

A UNICEF report published in 2010 states that 52% of children aged 2-14 in Albania experienced violent discipline (physical punishment and/ or psychological aggression) in 2005-2006. Half of children experienced

physical punishment while a much smaller percentage (6%) of mothers and caregivers thought that physical punishment was necessary in childrearing⁴.

Much physical violence against children is inflicted as a punishment and is accepted by parents, prevailing social norms and even often by law as a correct means of discipline.

Only 33 states have actually abolished parental corporal punishment together with other forms of corporal punishment. Albania is part of them from the year 2010.

Studies from around the world also show that approximately 20% of women and 5%–10% of men report having been sexually abused as children. Many children are subjected to psychological and emotional abuse as well as to neglect, though the extent of these phenomena worldwide is unknown. In some countries, neglect constitutes the largest proportion of reported child maltreatment cases. In general, girls are more at risk of sexual abuse and boys are at greater risk of harsh physical punishment. In some regions, gender inequality and discrimination place girls at increased risk of death stemming from maltreatment. The practices here include female infanticide, so-called “honour killings”, and neglect arising from the child’s gender.

Evidence from Albania

After the breakdown of the communist regime in 1990, Albania has undergone major political, social and economic changes including an intensive internal migration from rural to urban areas⁵. Albania has been described as a patriarchal society^{6,7} and the available evidence points to a high prevalence of different types of violence^{8,9}. A cross-sectional study conducted in Albania in 2003 reported that more than a third of married women (37%) had experienced physical violence within the past year of interview⁷. The more empowered women (with university education and in ‘white collar’ jobs) were at greater risk⁷, or they report more willingly intimate partner violence –and interpret violent acts in marriage as violations.

On the other hand, the presence of violence is part of child ‘education/ upbringing’ in Albania. Even children have absorbed the idea that physical and psychological violence are needed, both at home and in schools. The belief that “*Whoever spanks you, loves you*” is quite widespread among parents, teachers, and children¹⁰.

According to a study conducted by UNICEF in 2006, the majority of adults maintain that physical and psychological violence has positive effects on a child’s education, even though they are also aware that there are negative consequences¹⁰. The overwhelming majority of respondents think that physical violence is more harmful than psychological violence; as a result, psychological violence is seen as acceptable and useful, both at home and in schools. According to the study, the most common forms of psychological violence exercised against children in the home are: *shouting* (95.3%); *resentfulness* (39.5%); *verbal threats* (39.0%); *name-calling and use of derogative nick names* (35.8%); *threatening physical violence with an object* (18.0%). While the main forms of physical violence reported by children both at home/ in schools within the last year are: *pulling of the ear* (60.1%/38.5%); *pinching* (55.7%/36.9%); *hitting with an object* (53.0%/ 51.8%); *smacking* (with an open hand) on the body (52.6%/ 34.3%) and head (49.2%/ 35.6%); *pulling hair* (41%/29.7%); *forcible pulling and pushing* (34.6%/39.1%); *kicking* (26.8%/25.8%).

Legal framework for protecting children’s right in Albania

During the last 10-years, the Albanian government has strengthened the adoption and ratification of international conventions and laws that protect the rights of vulnerable groups, among which children. However, this process has come more as a requirement of international institutions rather than as a systematic initiative by the Albanian government¹⁰.

Albania is actually one of the 33 countries who have a full abolition from all corporal punishments¹¹.

The Law on the Protection of the Rights of the Child (2010) was enacted on 4 November 2010 and came into force in May 2011. Despite the Government’s rejection of the 2009 UPR recommendations to prohibit all corporal punishment, this new law makes corporal punishment of children unlawful in all settings, including by parents in the family home.

Article 21 of the Law on the Protection of the Rights of the Child (2010) states:

Article 21: Protection from All Forms of Violence

“The child shall be protected from any form of:

- a) physical and psychological violence;
- b) corporal punishment and degrading and humiliating treatment;
- c) discrimination, exclusion and contempt;
- ç) maltreatment and abandonment;
- d) disrespect and neglect;
- dh) exploitation and abuse, and
- e) sexual violence.”

Article 3(ç) defines “physical violence” as “every attempt to damage or actual physical damage, or injury to the child, including corporal punishment, which are not accidental” (official translation). Corporal punishment is defined in article 3(f):

“Corporal punishment’ is any form of punishment resorting to the use of force aimed to cause pain or suffering, even in the slightest extent, by parents, siblings, grandparents, legal representative, relative or any other person legally responsible for the child. Corporal punishment includes such forms as: beating, torturing, violent shaking, burning, slapping, kicking, pinching, scratching, biting, scolding, forced action and use of substances to cause physical and mental discomfort.”
In addition, article 26 of the Law states: “No child shall be subjected to torture, punishment, cruel, inhuman or degrading treatment.”

The Law provides for its implementation through structures at central and local levels – at central level the National Council for Protection of Child Rights, the Minister Coordinating Action on Protection of Child Rights and the State Agency for the Protection of Child Rights, and at local level the Unit for the Rights of the Child at the Regional Council and the Children’s Protection Unit at municipality/ commune level – to work with non-profit-making organizations in line with rules determined by the Council of Ministers (articles 32 to 39).

Sanctions for violation of the law are provided for in article 40 and in the Criminal Code.

In the article 40 of the Law punishes by fines violations of the rights mentioned in articles 21 and 26 (and others), when they are not offences under criminal law.

The Criminal Code, as amended in 2008 by Law No. 9859, punishes “physical or psychological abuse of the child by the person who is obliged to care for him/ her” with imprisonment from three months to two years (article 124b).

Below are listed other legal documents that protect the rights of children:

I. The Albanian Constitution

Article 54

1. Children, pregnant women and new mothers are entitled to special protection by the state.
2. Children born out of wedlock have equal rights with those born in wedlock.
3. *Every child has the right to be protected from violence, abuse, exploitation and use for work, especially under the minimum age for child labour, which can harm the health, morals or endanger their life or normal development.*

II. Conventions and other international documents

- United Nations Convention “On Protection of Child Rights ratified by the Government in February 1992.
- European Social Charter (revised). Recognizes and protects the right to obtain social services.
- ILO Convention No. 138 “On the minimum age allowed to work”, ratified in 1998.
- ILO Convention No. 182 “On Prohibition and the elimination of all forms of child labour”, ratified in 2001.

III. Law 9669 dated 18.12.2006 “On measures against domestic violence

This law aims to:

1. Prevent and reduce domestic violence in all its forms by appropriate legal measures.
2. Guarantee protection through legal measures of family members who are victims of domestic violence, *paying special attention to children*, the elderly and persons with disabilities.

The consequences of child maltreatment

The health and social consequences of child maltreatment are more wide-ranging than death and physical injuries alone and include major harm to the somatic and mental health and development of victims. Studies have indicated that exposure to maltreatment and other forms of violence during childhood are associated with risk factors and risk-taking behaviours later in life. These include exposure to violence and the perpetration of violence, depression, smoking, obesity, high-risk sexual behaviours, unintended pregnancy, and alcohol and drug use. Such risk factors and behaviours can lead to some of the principal causes of death, disease and disability – such as heart disease, sexually transmitted diseases, cancer and suicide. An earlier review of the literature by Browne and Filkenhor (1986) shows that depression, feelings of isolation and stigma, poor self-esteem, distrust, substance abuse, and sexual maladjustment are the most frequently reported long-term effects of child abuse and neglect¹². More recent findings point to the same consequences but include a variety of other psychopathological disorders such as suicide, panic disorder, dissociative disorders, post-traumatic stress disorder, and antisocial behaviours^{13, 14, 15, 16, 17, 18, 19, 20, 21}. Child abuse and neglect also result in impaired brain development with long-term consequences for cognitive, language, and academic abilities^{22, 23}. Child maltreatment therefore contributes to a broad range of adverse physical and mental health outcomes that are costly, both to the child and to society, over the course of a victim’s life.

Susceptibility and risk factors

No single factor on its own can explain why some individuals behave violently towards children or why child maltreatment appears to be more prevalent in certain communities than in others. Child maltreatment is best understood by analysing the complex interaction of various factors at different levels – an understanding that is vital for dealing effectively with the problem of child maltreatment. Fig. 1 presents an ecological model outlining the interplay of these different factors.

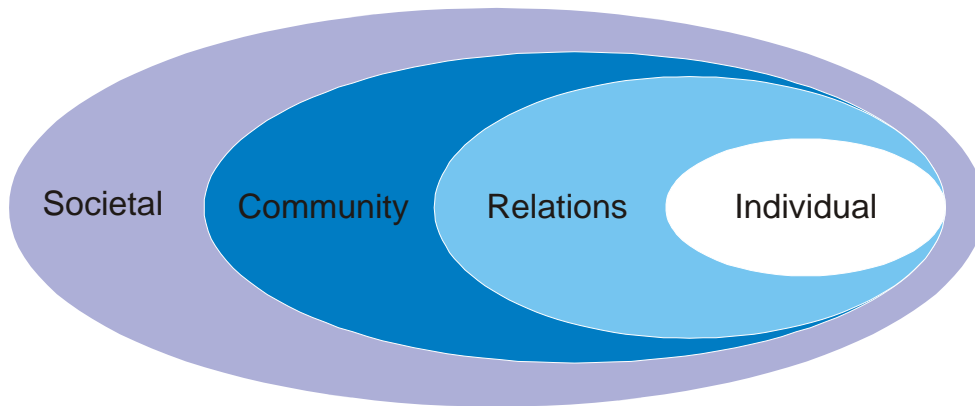
The first level of the model, that of the *individual*, deals with biological variables such as age and sex, together with factors of personal history that can influence an individual’s susceptibility to child maltreatment.

The *relationship* level examines an individual’s close social relationships – for instance, with family members or friends – that influence the individual’s risk of both perpetrating and suffering maltreatment.

Factors at the *community* level relate to the settings in which social relationships take place – such as neighbourhoods, workplaces and schools – and the particular characteristics of those settings that can contribute to child maltreatment.

Societal factors involve the underlying conditions of society that influence maltreatment – such as social norms that encourage the harsh physical punishment of children, economic inequalities and the absence of social welfare safety nets.

Figure 1. *Ecological model describing the risk factors for child maltreatment*



Source: *World report on violence and health, 2002*

Although more research is required to fully understand the dynamics of these factors in the ecological model, across different cultures, there already exists a substantial body of knowledge about what can increase susceptibility to child maltreatment.

Factors that increase susceptibility to child maltreatment are known as *risk factors*, and those decreasing susceptibility are referred to as *protective factors*. Some risk factors are modifiable and the identification of those factors are essential in the prevention of child maltreatment.

The risk factors listed below are not necessarily by themselves diagnostic of child maltreatment wherever they are detected. However, in places where resources are limited, children and families identified as having *several* of these factors should have priority for receiving services.

Aim and Objectives of the Survey

The aim of the survey was to describe the magnitude of adverse childhood experiences (ACE) (physical abuse, emotional abuse, sexual abuse, physical neglect, emotional neglect, or arising from household dysfunction due to substance misuse and or mental illness amongst household members, parental separation or violent treatment of mother, imprisonment of household member) in a representative sample of young adults selected from public universities in Albania, and to identify socioeconomic characteristics (parental education and employment, and income level) and behavioural/lifestyle factors (smoking status, alcohol consumption, and drug use) associated with ACE.

More specifically, the objectives of the survey were as follows:

- *To assess the prevalence of Adverse Childhood Events (during the first 18 years of life)*
 - *To assess the prevalence of child maltreatment:*
 - o prevalence of physical abuse in the first 18 years of life;
 - o prevalence of emotional abuse in the first 18 years of life;
 - o prevalence of sexual abuse in the first 18 years of life;
 - o prevalence of physical neglect in the first 18 years of life; and
 - o prevalence of emotional neglect in the first 18 years of life.
 - *To assess the prevalence of household dysfunction:*
 - o prevalence of witnessed violence in the first 18 years of life; and
 - o prevalence of illicit drug use, alcohol abuse, mental illness or incarceration among household members, and parental separation.
- *To assess the prevalence of the health risk behaviours*
- *To assess the association of adverse childhood experiences with socio-demographic and socioeconomic characteristics and behavioural/lifestyle factors.*
- *To assess the association between adverse childhood exposures and health risk behaviours and to determine whether ACE are causally linked to health risk behaviours.*
- *To assess the association between categories of adverse childhood exposures*

Methodology

The survey was conducted in line with the methods described in “*Preventing Child Maltreatment: A guide to taking action and generating evidence*” (WHO 2006) and the sampling methodology of Health Behaviour in School-Aged Children Study (<http://www.hbcs.org/overview.html>).

Though the past decade some studies have illuminated the links between child maltreatment, health-risk behaviours and various chronic diseases (¹³⁻²³). A blueprint for any new study investigating these links is provided by the Adverse Childhood Experiences (ACE) Study Questionnaires (see Appendix 1 and 2 for texts of the questionnaires).

Setting

The study was conducted at universities in Tirana, Vlora, Shkodra and Elbasan that cover the main geographical areas of Albania. The focus was on universities of each district included in the survey.

Study design

A cross-sectional study was conducted in 2011-2012 among 1437 students from public universities in Tirana, Vlora, Shkodra and Elbasan. Based on conservative calculations, WINPEPI²⁴, the required minimal sample size was about 1200 individuals for testing of some hypotheses related to socio-demographic and socioeconomic characteristics of the students and their respective parents, behavioural/ lifestyle factors of the students and their caregivers, and adverse childhood experiences of the students. The significance level (two-tailed) was set at 5%, and the power of the study at 80%. We decided to sample 1500 individuals in order to increase the power of the study, and accounting also for non-response bias.

Students' age and sex distribution at the universities

The targeted number of students from each district was as follows:

- 840 students from the University of Tirana (the largest university in Albania);
- 220 from “Ismail Qemali” University of Vlora (main university in South Albania);
- 220 from “Luigj Gurakuqi” University of Shkodra (main university in North Albania); and
- 220 from “Aleksander Xhuvani” University of Elbasan (main university in Central Albania).

The actual number of students who participated in the survey was as follows (figure 2):

- University of Tirana: N=817 (response rate: 817/ 840=97%);
- University of Vlora: N=207 (response rate: 207/ 220=94%);
- University of Shkodra: N=211 (response rate: 211/ 220=96%); and
- University of Elbasan: N=202 (response rate: 202/ 220=92%).

Overall number of participants: N=1437 (overall response rate: 1437/ 1500=96%)

In each of the four universities (namely in Tirana, Vlora, Shkodra and Elbasan), a multistage cluster sample with probability proportional to size (PPS) was drawn for each academic year (i.e. first year, second year, etc.).

etc.). Thus, initially the sampling frame in each university was stratified by academic year (to ensure age representativeness of the sample) and, subsequently, a multistage cluster sampling was performed. For each academic year in each of the 4 universities, in the first stage, a random sample of three Schools/ Faculties (cluster units) was drawn (with PPP). In the second stage, within each School/ Faculty, a sample of three study branches (cluster units) was drawn (with PPP). In the third stage, within each study branch, a sample of three classes (cluster units) was drawn (with PPP). All students from the classes which were randomly drawn were asked to participate in the survey. The sampling frames for all the four universities were made available by the respective university authorities.

Data collection – ACE instruments

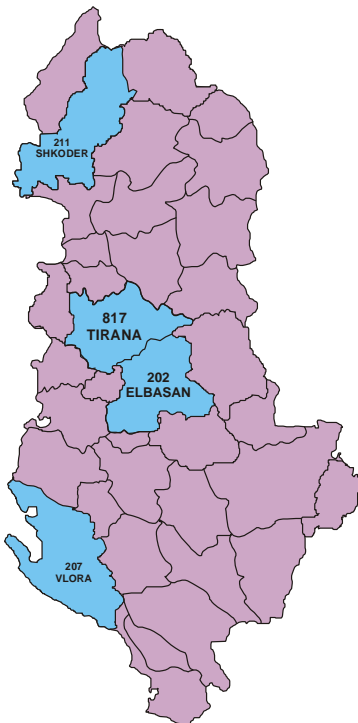


Figure 2: Geographical distribution of participants

The data collection consisted of an anonymous and self-administered structured questionnaire (The Family Health History and Physical Health Appraisal questionnaires) which consists of 68 questions examining various types of child maltreatment, childhood adversities rooted in household dysfunction, and risk factors. In our study we have used Family Health History questionnaire without applying the Physical Health Appraisal questionnaire, because the target population were adolescents and young adults, which usually are a healthy population group in terms of physical health.

Due to the gender differences in the questions, the questionnaires used have separate versions for male and female respondents and include questions for collecting information on childhood maltreatment, household dysfunction and other socio-behavioural factors²⁵ (included in the Annex 1 and Annex 2).

All the questions are introduced with the phrase “*While you were growing up, during your first 18 years of life...*”

For the different types of possible maltreatment, household dysfunction and risk factors, the questions then continue as follows.

Maltreatment by category

- *Physical abuse*

Questions: Did a parent or other adult in the household...

- sometimes, often or very often push, grab or slap you?
- sometimes, often or very often hit you so hard that you had marks or were injured?

- *Corporal punishment*

Question: How often were you spanked (as a form of discipline)?

- sometimes, often or very often spanked

- *Emotional abuse*

Questions: Did a parent or other adult in the household...

- often or very often swear at, insult or put you down?
- sometimes, often or very often act in a way that made you afraid that you would be physically hurt?

- *Emotional neglect*

Questions: You never felt loved

- Rarely, sometimes, often or very often you thought your parents wished you had never been born?
- Rarely, sometimes, often or very often you felt that someone in your family hated you?

- *Sexual abuse*

Questions: Did an adult or older relative, family friend or stranger at least 5 years older...

- Touch or fondle your body in a sexual way?
- Have you touch their body in a sexual way?
- Attempt to have any type of sexual intercourse with you?
- Actually have any type of sexual intercourse with you?

- *Physical neglect*

Questions:

- Did you ever had to wear dirty clothes?
- There was never someone to take you to a doctor if you needed it?
- Sometimes, often or very often you didn't have enough to eat, even when there was enough food?

Household dysfunction by category

- *Substance abuse*

Questions: Did you...

- live with anyone who was a problem drinker or alcoholic?
- live with anyone who used street drugs?

- *Mental illness*

Questions:

- Was a household member depressed or mentally ill?
- Did a household member attempt suicide?

- *Domestic violence – Violent treatment of mother*

Questions: Was your mother or step mother..

- sometimes, often or very often pushed grabbed or slapped or did she have things thrown at her?
- sometimes, often or very often kicked, beaten, hit with a fist, or with a hard object?
- ever hit repeatedly, for a period of at list few minutes?
- ever threatened with, or hurt by a knife or gun?

- *Criminal behaviour in household*

Questions:

- Did a household member ever go to prison?
- Did anyone in your household ever commit a serious crime?

- *Parental separation or divorce*
 - Were your parents ever separated or divorced?

Adopting the questionnaire according to local conditions

After translating into Albanian, the questionnaires were reviewed by the working group. Questions related to place of birth (1b), race (3a, 3b), level of parental education (10a and 10b) were adapted according to the cultural differences. Before the implementation of the study, a pre-test exercise was conducted including 42 students from the School of Public Health.

Ethical issues of the survey

All students were informed about the aim and objectives of the survey and were explained in sufficient details particularly the aspects related to anonymousness of the study and the successive aggregated data analyses.

The survey was approved by the Albanian Committee of Medical Ethics and Ministry of Education.

Data Analysis

The following methods have been used:

- Chi-square and/ or Fisher's exact test were used to compare the distribution of socioeconomic characteristics and behavioural/lifestyle factors in male vs. female students.
- Student's t-test and/ or Mann-Whitney test were used to compare the mean values of numerical variables in male vs. female students.
- Correlation coefficients (Spearman's rho) were used to measure the linear association of number of cigarettes smoked per day with age (numerical variable), and number of school days lost due to stress or depression.
- General linear model was used to compare mean values of dependent (numerical) variables by socio-demographic and socioeconomic characteristics of students and their respective parents.
- Binary logistic regression was used to assess the association of lifestyle/ behavioural factors and adverse childhood experiences (dependent variables expressed in a dichotomous/ binary scale) with socio-demographic and socioeconomic characteristics of students and their respective parents.

All the statistical analyses were performed using SPSS (Statistical Package for Social Sciences, version 17.0).

Results and Discussion

The “*Results and Discussion*” section is organized into the following chapters:

- **Chapter I:** Distribution of socio-demographic and socioeconomic characteristics of the students and their respective parents (age, sex, school performance, place of birth, place of residence, parental education and employment, income level).
- **Chapter II:** Prevalence of *adverse childhood experiences* (prevalence of physical abuse, frequency of physical abuse, prevalence of emotional/ psychological abuse, prevalence of sexual abuse, prevalence of physical and emotional neglected, unwanted pregnancies [in female students]) and prevalence of *household dysfunctions* (illicit drug use, alcohol abuse, mental illness, witnessed violence [mother treated violently], frequency of witnessed violence, incarceration, parental separation).
- **Chapter III:** Distribution of behavioural/ lifestyle factors (current smoking, number of cigarettes/ day, alcohol consumption, drug use, sexual intercourse).
- **Chapter IV:** Association of lifestyle/ behavioural factors with socio-demographic and socioeconomic characteristics of the students and their respective parents.
- **Chapter V:** Association of adverse childhood experiences with socio-demographic and socioeconomic characteristics and behavioural/lifestyle factors.

For each chapter, this report presents selected key variables for each domain of the survey.

Chapter I

DISTRIBUTION OF SOCIO-DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS OF THE STUDENTS AND THEIR RESPECTIVE PARENTS

Table 1 presents the distribution of demographic and socio-economic characteristics of the students and their respective parents. Overall, 1437 students participated in the survey: 971 females (67.6%) and 466 males (32.4%). Mean age (\pm SD) of the students was 21.2 ± 2.3 years. 13.8% of the students were born and 7.4% of them live in rural area.

Table 1: *Distribution of survey participants by demographic and socio-economic characteristics*

Demographic and socio-economic characteristics	N (%)
Sex:	
Male	466 (32.4)
Female	971 (67.6)
Age in years, mean (SD)	21.2 (2.3)
18-19 years	304 (21.2)
20-21 years	608 (42.3)
22-23 years	362 (25.2)
24+ years	163 (11.3)
Place of birth:	
Rural area	198 (13.8)
Urban area	1239 (86.2)
Place of residence:	
Rural area	106 (7.4)
Urban area	1331 (92.6)
Father's education:	
Low (0-8 years)	192 (13.4)
Middle (9-12 years)	734 (51.0)
High (>12 years)	511 (35.6)
Mother's education:	
Low (0-8 years)	223 (15.5)
Middle (9-12 years)	679 (47.3)
High (>12 years)	535 (37.2)

Demographic and socio-economic characteristics	N (%)
Father's employment status:	
Employed	886 (61.7)
Unemployed	356 (24.8)
Rest	152 (10.6)
N/A	43 (3.0)
Mother's employment status:	
Employed	
Unemployed	749 (52.1)
Rest	526 (36.6)
N/A	154 (10.7)
	8 (0.6)
Income level:	
Low	221 (15.4)
Middle	900 (62.6)
High	316 (22.0)

Chapter II

PREVALENCE OF ADVERSE CHILDHOOD EXPERIENCES IN STUDENTS INCLUDED IN THE SURVEY

Prevalence of Adverse Childhood Events (during the first 18 years of life)

Table 2 presents a summary of prevalence of adverse childhood experienced by gender as well as the ACE scores. The most common adverse childhood abuse events reported in the survey were psychological/ emotional abuse (51%) and physical abuse (41.5%). Boys were more neglected physically and emotionality compared to females, and these differences were statistically significant ($P < 0.001$).

As for household dysfunction, witnessed violence (mother treated violently) and alcohol misuse in family were the most common events.

About 14% of the students reported at least four ACEs.

Table 2: *Distribution of Adverse Childhood Events (during the first 18 years of life)*

ACE	Male		Female		P	Total	
	N	%	N	%		N	%
Childhood abuse and neglect							
Physical abuse	207	44.4	389	40.1	0.123	596	41.5
Emotional abuse	238	51.1	495	51.0	0.509	733	51.0
Sexual abuse	41	8.8	46	4.7	0.002	87	6
Physical neglect	47	10.1	47	4.8	< 0.001	94	6.5
Emotional neglect	73	15.7	88	9.1	< 0.001	161	11.2
Household dysfunction	N	%	N	%	P	N	%
Illicit drug use	10	2.1	13	1.3	0.266	23	1.6
Alcohol misuse	101	21.7	194	20.0	0.485	295	20.5
Mental illness in the family	30	6.4	67	6.9	0.823	97	6.8
Mother treated violently	144	30.9	288	29.7	0.667	432	30.1
Incarcerated family member	12	2.6	42	4.3	0.137	54	3.8
Separated/ divorced parents	38	8.2	57	5.9	0.112	95	6.6
Number of ACE:							
0	123	26.4	273	28.1		396	27.6
1	95	20.4	212	21.9		307	21.4
2	94	20.2	193	19.9		265	20.0
3	68	14.6	176	18.1	<i>Not</i>	238	17.0
4	16	3.4	49	5.0	<i>computed</i>	85	4.5

5	45	9.7	25	2.6	<i>(small numbers)</i>	52	4.9
6	15	3.2	24	2.5		47	2.7
7	6	1.3	12	1.2		28	1.3
8	3	0.6	4	0.4		11	0.5
9	1	0.2	32	0.2		6	0.2
Number of ACE:							
0	123	26.4	273	28.1	0.085	396	27.6
1	95	20.4	213	21.8		308	21.4
2	92	20.2	193	19.9		287	20.0
3	66	14.6	176	18.1		244	17.0
> 4	90	18.5	116	20.0		202	14.1

*A summary score was calculated for each individual including the following variables (each scored 0 (No) vs. 1 (Yes): emotional, physical and psychological abuse, physical and psychological neglect, substance abuse (illicit drug use, living with a problem drinker/ alcoholic), mental illness in the family, mother treated violently, incarcerated family member and parental separation.

Chapter III

DISTRIBUTION OF BEHAVIOURAL/LIFESTYLE FACTORS OF THE STUDENTS INCLUDED IN THE SURVEY

Table 3 presents the distribution of behavioural/ lifestyle factors of the students included in the survey. The prevalence of current smoking was significantly higher in male students than their female counterparts (28.1% vs. 19.3%). The mean number of cigarettes smoked per day was higher among males than females (9.2 vs. 7.4; Man-Whitney test: $P=0.058$).

The prevalence of problem alcohol drinking (as assessed by the question: “*Have you ever had a problem with your use of alcohol?*”) was significantly higher in male than female students (14.6% vs. 10.7%; Fisher’s exact test: $P=0.037$). However, only 6.7% of males and 4.5% of females had ever considered themselves to be alcoholic, (as assessed by the question: “*Have you ever considered yourself to be an alcoholic?*”), but this sex-difference was not statistically significant (Fisher’s exact test: $P=0.10$).

There was no significant difference in the prevalence of use of street drugs (upon question: “*Have you ever used street drugs?*”) in males as compared to females (4.7% vs. 3.9%, respectively; Fisher’s exact test: $P=0.483$).

Only 3.4% of males and 3.1% of females had ever had a problem with use of street drugs, and this small sex-difference was not statistically significant (Fisher’s exact test: $P=0.75$).

The percentage of female students who had ever attempted to commit suicide was higher than in male students (4.5% vs. 2.4%, respectively; Fisher’s exact test: $P=0.055$).

The prevalence of life-time sexual intercourse (“*Have you ever had sexual intercourse?*”) was significantly higher in males compared to the females (74.2% vs. 43.5%, respectively; Fisher’s exact test: $P<0.001$).

Among students that reported having had sexual experiences, the percentages of boys that had initiated sexual intercourse before or up to age 16 was significantly higher compared to female counterparts, (44.8% vs. 31% respectively; Fisher’s exact test: $P=0.055$). Mean number of lifetime sexual partners (“*With how many different partners have you ever had sexual intercourse?*”) was similar in males and females (2.95 vs. 2.92 years, respectively; Mann-Whitney: $P=0.868$). There was no difference in males vs. females with regard to more than 3 different sexual partner (26.6 vs. 23.4, respectively; Fisher’s exact test: $P=0.313$).

The prevalence of unwanted pregnancies in female students was 8.3%.

There was no significant difference in the mean number of school days missed due to stress in males vs. females (Mann-Whitney: $P=0.822$).

Table 3: Distribution of behavioural/ lifestyle factors of the students included in the survey

Variable	Male	Female	Total	P [†]
Current smoking	131* (28.1)	187 (19.3)	318 (22.1)	<0.001
Problem drinking	68 (14.6)	104 (10.7)	172 (12)	0.037
Alcoholic	31 (6.7)	44 (4.5)	47 (3.3)	0.10
Drug use	22 (4.7)	38 (3.9)	60 (4.2)	0.483
Problem drug use	16 (3.4)	30 (3.1)	46 (3.2)	0.75
Attempts to commit suicide	11 (2.4)	44 (4.5)	55 (3.8)	0.055
Sexual experiences	346 (74.2)	422 (43.5)	768 (53.4)	<0.001
Early sex (≤ 16 ys)	155 (44.8)	291 (31)	446 (3)	0.055
Lifetime sexual partner number(> 3)	92 (26.6)	98 (23.4)	190 (13.2)	0.313
Unwanted pregnancy	-	81 (8.3)	81 (8.3)	-

* Number of individuals and column percentages (in parenthesis).

† P-value from Fisher's exact test

‡ Among 971 women

Chapter IV

ASSOCIATION OF LIFESTYLE/BEHAVIOURAL FACTORS WITH DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS OF THE STUDENTS AND THEIR PARENTS

Smoking status and demographic and socioeconomic correlates

Table 4 presents the association of current smoking status with demographic and socioeconomic characteristics of the students and their respective parents. There was no evidence of a relationship of current smoking with age either treated as a numerical variable or as a categorical term. On the other hand, there was a highly significant association of current smoking with male sex ($P < 0.001$). There were no associations with place of birth, place of residence, or parental education. Father's unemployment was not associated with current smoking, whereas mother's employment was inversely related to smoking ($P = 0.002$).

Table 4: A association of current smoking with demographic and socioeconomic characteristics of the students and their parents

Socioeconomic characteristics	Non smokers (N=1119)*	Smokers (N=318)*	OR [†]	95%CI [†]	P [†]
Sex:	335 (29.9)	131 (41.2)	1.64	1.27-2.12	<0.001
Male	784 (70.1)	187 (58.8)	1.00	Reference	
Female					
Age (numerical)	-	-	0.97	0.92-1.03	0.322
Age-group:	228 (20.4)	76 (23.9)	1.31	0.83-2.08	0.168 (3)[‡]
18-19 years	466 (41.6)	142 (44.7)	1.20	0.78-1.84	0.248
20-21 years	295 (26.4)	67 (21.1)	0.90	0.56-1.43	0.400
22-23 years	130 (11.6)	33 (10.4)	1.00	Reference	0.639
24+ years					-
Place of birth:	154 (13.8)	(44 (13.8)	1.01	0.70-1.44	0.973
Rural area	965 (86.2)	274 (86.2)	1.00	Reference	
Urban area					
Place of residence:	80 (7.1)	26 (8.2)	1.16	0.73-1.83	0.537
Rural area	1039 (92.9)	292 (91.8)	1.00	Reference	
Urban area					
Father's education:	149 (13.3)	43 (13.5)	0.99	0.67-1.48	0.953 (2)
Low (0-8 years)	574 (51.3)	160 (50.3)	0.96	0.73-1.26	0.975
Middle (9-12 years)	396 (35.4)	115 (36.2)	1.00	Reference	0.768
High (>12 years)					-

Mother's education:	162 (14.5)	61 (19.2)	1.42	0.99-2.04	0.123 (2)
Low (0-8 years)	534 (47.7)	145 (45.6)	1.03	0.78-1.35	0.056
Middle (9-12 years)	423 (37.8)	112 (35.2)	1.00	Reference	0.859
High (>12 years)					-
Father's employment status:	269 (24)	87 (27.4)	1.19	0.90-1.58	0.227
Unemployed	856 (76)	231 (72.6)	1.00	Reference	
Rest					
Socioeconomic characteristics	Non smokers (N=1119)*	Smokers (N=318)*	OR[†]	95%CI[†]	P[‡]
Mother's employment status:	608 (54.3)	141 (44.3)	0.67	0.52-0.86	0.002
Employed	511 (45.7)	177 (55.7)	1.00	Reference	
Rest					
Income level:	164 (14.7)	57 (17.9)	1.56	1.02-2.34	0.111 (2)
Low	697 (62.3)	203 (63.8)	1.30	0.94-1.79	0.039
Middle	258 (23.1)	58 (18.2)	1.00	Reference	0.118
High					-

* Number of individuals and column percentages (in parenthesis).

† Odds ratios (OR: current smoking vs. no smoking), 95% confidence intervals (95%CI) and p-values from binary logistic regression.

‡ Overall p-value and degrees of freedom (in parenthesis).

Among smokers, the number of cigarettes smoked per day was not correlated with age (Spearman's rho: 0.046, P=0.418), or number of school days lost due to stress or depression (r= -0.055, P=0.325).

Alcohol problems and demographic and socioeconomic correlates

Table 5 presents the association of alcohol problems among the students with demographic and socioeconomic characteristics of the students and their respective parents. The prevalence of drinking problems was higher in male students compared with their female counterparts (P=0.034). No significant relationships were evident for age, place of birth or residence, parental employment status, or father's educational level. Conversely, drinking problems were positively associated with mother's educational level (P=0.054) and inversely and linearly related to income level (overall P=0.065).

Table 5: A association of alcohol problems among the students with demographic and socioeconomic characteristics of the students and their parents

Demographic and socioeconomic characteristics	No drinking problem (N=1265) *	Drinking problem (N=172) *	OR [†]	95%CI [†]	P [‡]
Sex:					
Male	398 (31.5)	68 (39.5)	1.42	1.03-1.98	0.034
Female	867 (68.5)	104 (60.5)	1.00	Reference	
Age (numerical)	-	-	0.94	0.87-1.02	0.120
Age-group:					0.353(3)[‡]
18-19 years	261 (20.6)	43 (25)	1.75	0.98-3.31	0.083
20-21 years	534 (42.2)	74 (43)	1.48	0.81-2.69	0.204
22-23 years	321 (25.4)	41 (23.8)	1.36	0.72-2.57	0.345
24+ years	149 (11.8)	14 (8.1)	1.00	Reference	-
Place of birth:					
Rural area	175 (13.8)	23 (13.4)	0.96	0.60-1.53	0.869
Urban area	1090 (86.2)	149 (86.6)	1.00	Reference	
Place of residence:					
Rural area	96 (7.6)	10 (5.8)	0.75	0.38-1.47	0.405
Urban area	1169 (86.2)	162 (94.2)	1.00	Reference	
Father's education:					0.896 (2)
Low (0-8 years)	168 (13.3)	24 (14)	1.02	0.62-1.68	0.951
Middle (9-12 years)	649 (51.3)	85 (49.4)	0.93	0.66-1.32	0.688
High (>12 years)	448 (35.4)	63 (36.6)	1.00	Reference	-
Mother's education:					0.069 (2)
Low (0-8 years)	186 (14.7)	37 (21.5)	1.55	0.99-2.41	0.054
Middle (9-12 years)	605 (47.8)	74 (43)	0.95	0.66-1.36	0.782
High (>12 years)	474 (37.5)	61 (35.5)	1.00	Reference	-
Father's employment status:					
Unemployed	309 (24.4)	47 (27.3)	1.16	0.81-1.67	0.409
Rest	956 (75.6)	125 (72.7)	1.00	Reference	
Mother's employment status:					
Employed	665 (52.6)	84 (48.8)	0.86	0.63-1.18	0.358
Rest	600 (47.4)	88 (51.2)	1.00	Reference	
Income level:					0.065 (2)
Low	188 (14.9)	33 (19.2)	1.88	1.09-3.23	0.022
Middle	788 (62.3)	112 (65.1)	1.52	0.98-2.37	0.062
High	289 (22.8)	27 (15.7)	1.00	Reference	-

* Number of individuals and column percentages (in parenthesis).

† Odds ratios (OR: alcohol problems vs. no alcohol problems), 95% confidence intervals (95%CI) and p-values from binary logistic regression.

‡ Overall p-value and degrees of freedom (in parenthesis).

Use of street drugs and demographic and socioeconomic characteristics

Table 6 presents the association of use of street drugs among the students with demographic and socioeconomic characteristics of the students and their respective parents. The prevalence of use of street drugs was not significantly related to sex or age of the students. Similarly, there was no association with place of birth and residence, parental employment status, or father's educational level. Conversely, there was evidence of a positive association of use of street drugs with low education of students' mothers (P=0.017) and with low income level (P=0.055).

Table 6: A association of use of street drugs among the students with demographic and socioeconomic characteristics of the students and their parents

Demographi and socioeconomic characteristics	No use of street drugs (N=1337) *	Use of street drugs (N=60) *	OR [†]	95%CI [†]	P [†]
Sex:					
Male	444 (32.2)	22 (36.7)	1.22	0.71-2.08	0.474
Female	933 (67.8)	38 (63.3)	1.00	Reference	
Age (numerical)	-	-	1.03	0.93-1.15	0.539
Age-group:					0.788 (3) ‡
18-19 years	291 (21.1)	13 (21.7)	0.99	0.39-2.55	0.993
20-21 years	586 (42.6)	22 (36.7)	0.84	0.35-1.99	0.687
22-23 years	344 (25)	18 (30)	1.17	0.48-2.85	0.736
24+ years	156 (11.3)	7 (11.6)	1.00	Reference	-
Place of birth:					
Rural area	192 (13.9)	6 (10)	0.69	0.29-1.62	0.388
Urban area	1185 (86.1)	54 (90)	1.00	Reference	
Place of residence:					
Rural area	103 (7.5)	3 (5)	0.65	0.20-2.12	0.475
Urban area	1274 (92.5)	57 (95)	1.00	Reference	
Father's education:					0.493 (2)
Low (0-8 years)	183 (13.3)	9 (15)	1.43	0.63-3.62	0.397
Middle (9-12 years)	700 (50.8)	34 (56.7)	1.41	0.78-2.56	0.255
High (>12 years)	494 (35.9)	17 (28.3)	1.00	Reference	-
Mother's education:					0.046 (2)
Low (0-8 years)	207 (15)	16 (26.7)	2.36	1.17-4.75	0.017
Middle (9-12 years)	652 (47.3)	27 (45)	1.26	0.68-2.34	0.461
High (>12 years)	518 (37.6)	17 (28.3)	1.00	Reference	-
Father's employment status:					
Unemployed	342 (24.8)	14 (23.3)	0.92	0.50-1.70	0.792
Rest	1035 (75.2)	46 (76.7)	1.00	Reference	

Demographic and socioeconomic characteristics	No use of street drugs (N=1337) *	Use of street drugs (N=60) *	OR [†]	95%CI [†]	P [‡]
Mother's employment status:					
Employed	713 (51.8)	36 (60)	1.40	0.83-2.37	0.214
Rest	664 (48.2)	24 (40)	1.00	Reference	
Income level:					0.133 (2)
Low	209 (15.2)	12 (20)	2.54	0.98-6.54	0.055
Middle	859 (62.4)	41 (68.3)	2.11	0.94-4.75	0.072
High	309 (22.4)	7 (11.7)	1.00	Reference	-

* Number of individuals and column percentages (in parenthesis).

† Odds ratios (OR: use of street drugs vs. no use of street drugs), 95% confidence intervals (95%CI) and p-values from binary logistic regression.

‡ Overall p-value and degrees of freedom (in parenthesis).

Attempts to commit suicide and demographic and socioeconomic characteristics

Table 7 presents the association of students' attempts to commit suicide with demographic and socioeconomic characteristics of the students and their respective parents. Male students reported a significantly lower risk for attempting to commit suicide than female students (P=0.048). As expected, age was positively and significantly associated with attempts to commit suicide. There were no associations with place of birth or residence, parental employment, or father's educational level. On the other hand, there was evidence of an inverse and linear association of attempts to commit suicide with mother's educational attainment (overall P=0.015) and income level (overall P=0.065).

Table 7: A association of students' attempts to commit suicide with demographic and socioeconomic characteristics of the students and their parents

Demographic and socioeconomic characteristics	No attempts (N= 1382) *	Attempts to commit suicide (N= 55) *	OR [†]	95%CI [†]	P [‡]
Sex:					
Male	455 (32.9)	11 (20)	0.51	0.26-1.00	0.048
Female	927 (67.1)	44 (80)	1.00	Reference	
Age (numerical)	-	-	1.17	1.08-1.27	< 0.001
Age-group:					0.003 (3)[‡]
18-19 years	297 (21.5)	7 (12.7)	0.27	0.11-0.70	0.007
20-21 years	593 (42.9)	15 (27.3)	0.29	0.14-0.63	0.002
22-23 years	342 (24.7)	20 (36.4)	0.68	0.33-1.39	0.287
24+ years	150 (10.9)	13 (23.6)	1.00	Reference	-

Demographic and socioeconomic characteristics	No attempts (N=1382)*	Attempts to commit suicide (N=55)*	OR†	95%CI†	P‡
Place of birth:					
Rural area	190 (13.7)	8 (14.5)	1.07	0.50-2.30	0.866
Urban area	1192 (86.3)	47 (85.5)	1.00	Reference	
Place of residence:					
Rural area	100 (7.2)	6 (10.9)	1.57	0.66-3.75	0.311
Urban area	1282 (92.8)	49 (89.1)	1.00	Reference	
Father's education:					0.170 (2)
Low (0-8 years)	184 (13.3)	8 (14.5)	1.67	0.68-4.08	0.265
Middle (9-12 years)	700 (50.7)	34 (61.8)	1.86	0.97-3.56	0.061
High (>12 years)	498 (36)	13 (23.6)	1.00	Reference	-
Mother's education:					0.015 (2)
Low (0-8 years)	208 (15.1)	15 (27.3)	3.14	1.45-6.83	0.004
Middle (9-12 years)	651 (47.1)	28 (50.9)	1.88	0.94-3.72	0.073
High (>12 years)	523 (37.8)	12 (21.8)	1.00	Reference	-
Father's employment status:					
Unemployed	340 (24.6)	16 (29.1)	1.26	0.69-2.28	0.450
Rest	1042 (75.4)	39 (70.9)	1.00	Reference	
Mother's employment status:					
Employed	719 (52)	30 (54.5)	1.11	0.64-1.90	0.714
Rest	663 (48)	25 (45.5)	1.00	Reference	
Income level:					0.065 (2)
Low	208 (15.1)	13 (23.6)	3.23	1.21-8.63	0.019
Middle	864 (62.5)	3 (5.5)	2.15	0.90-5.16	0.086
High	310 (22.4)	6 (10.9)	1.00	Reference	-

* Number of individuals and column percentages (in parenthesis).

† Odds ratios (OR: attempts to commit suicide vs. no attempts), 95% confidence intervals (95%CI) and p-values from binary logistic regression.

‡ Overall p-value and degrees of freedom (in parenthesis).

Experiences of sexual intercourse and demographic and socioeconomic characteristics

Table 8 presents the association of students' experiences of sexual intercourse with demographic and socioeconomic characteristics of the students and their respective parents. Male students reported a considerably higher prevalence of sexual intercourse than females ($P < 0.001$). Logically, age was strongly and positively associated with sexual intercourse. There was no association with place of birth, but a positive and statistically significant relationship with rural residence ($P = 0.037$). Parental education was inversely and linearly associated with sexual intercourse of the students. There was no relationship with mother's employment status, whereas father's unemployment was positively associated with students' sexual intercourse ($P = 0.016$). Finally, income level was inversely and linearly associated with sexual intercourse of the students (overall $P = 0.013$).

Table 8: A association of students' lifetime sexual intercourse with demographic and socioeconomic characteristics of the students and their parents

Demographic and socioeconomic characteristics	Never had sexual intercourse (N= 669)*	Sexual intercourse (N= 768)*	OR [†]	95%CI [†]	P [†]
Sex:					
Male	120 (17.9)	346 (45.1)	3.75	2.94-4.78	< 0.001
Female	549 (82.1)	422 (54.9)	1.00	Reference	
Age (numerical)	-	-	1.22	1.16-1.30	< 0.001
Age-group:					< 0.001(3) ‡
18-19 years	181 (27.1)	123 (16)	0.28	0.18-0.41	< 0.001
20-21 years	312 (46.6)	296 (38.5)	0.38	0.26-0.56	< 0.001
22-23 years	129 (19.3)	233 (30.3)	0.73	0.49-1.09	0.127
24+ years	47 (7)	116 (15.1)	1.00	Reference	-
Place of birth:					
Rural area	86 (12.9)	112 (14.6)	1.16	0.86-1.57	0.343
Urban area	583 (87.1)	656 (85.4)	1.00	Reference	
Place of residence:					
Rural area	39 (5.8)	67 (8.7)	1.54	1.03-2.32	0.037
Urban area	630 (94.2)	701 (91.3)	1.00	Reference	
Father's education:					< 0.001 (2)
Low (0-8 years)	63 (9.4)	129 (16.8)	2.19	1.55-3.10	< 0.001
Middle (9-12 years)	342 (51.1)	392 (51)	1.23	0.98-1.54	0.078
High (> 12 years)	264 (39.5)	247 (32.2)	1.00	Reference	-
Mother's education:					< 0.001 (2)
Low (0-8 years)	77 (11.5)	146 (19)	1.92	1.39-2.65	< 0.001
Middle (9-12 years)	323 (48.3)	356 (46.4)	1.12	0.89-1.40	0.348
High (> 12 years)	269 (40.2)	266 (34.6)	1.00	Reference	-
Father's employment status:					
Unemployed	146 (21.8)	210 (27.3)	1.35	1.06-1.72	0.016
Rest	523 (78.2)	558 (72.7)	1.00	Reference	
Mother's employment status:					
Employed	362 (54.1)	387 (50.4)	0.86	0.70-1.06	0.159
Rest	307 (45.9)	381 (49.6)	1.00	Reference	
Income level:					0.013 (2)
Low	87 (13)	134 (17.4)	1.68	1.19-2.39	0.003
Middle	417 (62.3)	483 (62.9)	1.27	0.98-1.64	0.072
High	165 (24.7)	151 (19.7)	1.00	Reference	-

* Number of individuals and column percentages (in parenthesis).

† Odds ratios (OR: sexual intercourse vs. never had sexual intercourse), 95% confidence intervals (95%CI) and p-values from binary logistic regression.

‡ Overall p-value and degrees of freedom (in parenthesis).

Among students who reported ever having had sexual intercourse, of the age at first sexual contact was not significant (Spearman's $\rho=0.022$, $P=0.549$) nor the number cigarettes smoked per day ($r=0.095$, $P=0.163$). On the other hand, there was a weak inverse but statistically significant correlation between age of initiation of sexual intercourse with school days missed during the past month due to stress or depression ($r= -0.07$, $P=0.055$). Surprisingly, there was no correlation between the sexual debut and the number of lifetime sexual partners ($r= -0.06$, $P=0.071$).

Chapter V

ASSOCIATION OF ADVERSE CHILDHOOD EXPERIENCES WITH DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS AND BEHAVIOURAL / LIFES TYLE FACTORS

Physical abuse, socioeconomic characteristics and lifestyle/ behavioural factors

Table 9 presents the association of students' physical abuse during the first 18 years of life with demographic and socioeconomic characteristics and lifestyle/behavioural factors. There was no statistically significant sex-difference in self-reported rates of physical abuse. There was no association of physical abuse with age. Rural residence was strongly positively associated with students' experience of violence ($P=0.041$), a finding not evident for place of birth. Parental education was strongly, inversely, and linearly associated with experienced violence. Father's unemployment was positively associated with students' physical abuse ($P=0.001$). Low income level was a significant predictor of physical abuse among students ($P=0.001$).

The associations of students' physical abuse with socioeconomic factors, however, were less strong compared with the witnessed violence. Conversely, compared with the witnessed violence, there was evidence of a stronger relationship of physical abuse with number of school days missed in the past month due to stress or depression. Finally, there was a strong positive association of students' physical abuse with them having witnessed violence ($P<0.001$).

As for the lifestyle/ behavioural determinants, the positive associations of physical abuse with current smoking, alcohol problems, and use of street drugs were all much stronger than the respective relationships with having witnessed violence. The association of students' physical abuse with lifetime sexual intercourse was remarkable high ($OR=74.6$, $95\%CI=48.5-114.9$, $P<0.001$). Also, having more than 3 sexual partners was significantly and positively associated with students' physical abuse ($P<0.009$).

Rates of self-reported emotional abuse during the first 18 years of life were significantly higher among students who had experienced physical abuse ($P<0.001$) [not shown in Table 38]. Similarly, there was a positive graded relationship of student's having experienced physical abuse with the occurrence and frequency of both bullying and physical fights during their first 18 years of life (not shown).

Among females who reported at least one episode of unwanted pregnancy ($N=81$), the odds of reporting physical abuse during their first 18 years of life were considerable high compared with their counterparts who did not report any occurrence of unwanted pregnancies ($OR=14.5$, $95\%CI=7.1-29.3$, $P<0.001$) [not shown].

Table 9: A ssociation of physical abuse with demographic and socioeconomic characteristics of the students and their parents

Demographic and socioeconomic characteristics	No physical abuse (N=841)*	Physical abuse (N=596) *	OR[†]	95%CI[†]	P[†]
Sex:					
Male	259 (30.8)	207 (34.7)	1.20	0.96-1.50	0.117
Female	582 (69.2)	389 (65.3)	1.00	Reference	
Age (numerical)	-	-	1.02	0.98-1.07	0.324
Age-group:					0.571(3)[‡]
18-19 years	176 (20.9)	128 (21.5)	0.90	0.61-1.32	0.577
20-21 years	353 (42)	255 (42.8)	0.89	0.63-1.26	0.514
22-23 years	222 (26.4)	140 (23.5)	0.78	0.54-1.13	0.187
24+ years	90 (10.7)	73 (12.2)	1.00	Reference	-
Place of birth:					
Rural area	111 (13.2)	87 (14.6)	1.12	0.83-1.52	0.449
Urban area	730 (86.8)	509 (85.4)	1.00	Reference	
Place of residence:					
Rural area	52 (6.2)	54 (9.1)	1.51	1.02-2.25	0.041
Urban area	789 (93.8)	542 (90.9)	1.00	Reference	
Father's education:					<0.001(2)
Low (0-8 years)	89 (10.6)	103 (17.3)	2.01	1.43-2.81	<0.001
Middle (9-12 years)	428 (50.9)	306 (51.3)	1.24	0.98-1.56	0.071
High (>12 years)	324 (38.5)	187 (31.4)	1.00	Reference	-
Mother's education:					<0.001 (2)
Low (0-8 years)	99 (11.8)	124 (20.8)	2.07	1.50-2.83	<0.001
Middle (9-12 years)	409 (48.6)	270 (45.3)	1.09	0.86-1.37	0.476
High (>12 years)	333 (39.6)	202 (33.9)	1.00	Reference	-
Father's employment status:					
Unemployed	181 (21.5)	175 (29.4)	1.52	1.19-1.93	0.001
Rest	660 (78.5)	421 (70.6)	1.00	Reference	
Mother's employment status:					
Employed	450 (53.5)	299 (50.2)	0.88	0.71-1.08	0.212
Rest	391 (46.5)	297 (49.8)	1.00	Reference	
Income level:					0.002 (2)
Low	106 (12.6)	115 (19.3)	1.77	1.25-2.51	0.001
Middle	539 (64.1)	361 (60.6)	1.09	0.84-1.42	0.504
High	196 (23.3)	120 (20.1)	1.00	Reference	-
Number school days missed in the past month	-	-	1.42	1.29-1.55	<0.001

Demographic and socioeconomic characteristics	No physical abuse (N=841)*	Physical abuse (N=596) *	OR[†]	95%CI[†]	P[†]
Witnessed violence during the first 18 years:					
Yes	661 (78.6)	344 (57.7)	2.69	2.13-3.39	<0.001
No	180 (21.4)	252 (42.3)	1.00	Reference	
Lifestyle/behavioural factors	Not witnessed violence (n=1005)	Witnessed violence (n=432)	OR*	95%CI*	P*
Current smoking:					
Yes	729 (86.7)	390 (65.4)	3.44	2.65-4.46	<0.001
No	112 (13.3)	206 (34.6)	1.00	Reference	
Problems with alcohol:					
Yes	794 (94.4)	471 (79)	4.48	3.15-6.39	<0.001
No	47 (5.6)	125 (21)	1.00	Reference	
Use of street drugs:					
Yes	817 (97.1)	560 (94)	2.19	1.29-3.71	0.004
No	24 (2.9)	36 (6)	1.00	Reference	
Lifetime sexual intercourse:					
Yes	644 (76.6)	25 (4.2)	74.65	48.52-114.91	<0.001
No	197 (23.4)	571 (95.8)	1.00	Reference	
Early sex					
≤16 years			0.92	0.66-1.29	0.652
>16 years			Reference	-	
Number of lifetime sexual partners					
>3 partners			1.72	1.14-2/59	0.009
≤3 partners			Reference	-	

* Number of individuals and column percentages (in parenthesis).

† Odds ratios (OR: experienced violence vs. no experienced violence), 95% confidence intervals (95%CI) and p-values from binary logistic regression.

‡ Overall p-value and degrees of freedom (in parenthesis).

Witnessed violence, socioeconomic characteristics and lifestyle/ behavioural factors

Table 10 presents the association of students' witnessed violence during the first 18 years of life with demographic and socioeconomic characteristics and lifestyle/ behavioural factors. There was no sex-difference in self-reported rates of witnessed violence. Overall, there was no association of witnessed violence with age, notwithstanding an inconsistent and non-significant graded relationship with age introduced as a categorical term. Rural residence and place of birth were both positively associated with students' having witnessed violence. Parental education was strongly, inversely, and linearly associated with having witnessed violence. Father's unemployment was strongly positively associated with having witnessed violence ($P<0.001$). Low income level was a strong and significant predictor of witnessed violence among students ($P<0.001$). Number of school days missed in the past month due to stress or depression was positively and significantly associated with having witnessed violence.

As for the lifestyle/ behavioural determinants, there was evidence of a positive and significant association of having witnessed violence with current smoking ($P=0.016$), alcohol problems ($P=0.007$), use of street drugs ($P=0.047$), and lifetime sexual intercourse ($P<0.001$).

Table 10: A association of witnessed violence with demographic and socioeconomic characteristics of the students and their parents

Demographic and socioeconomic characteristics	Not witnessed violence (N=1005)*	Witnessed violence (N=432)*	OR [†]	95%CI [†]	P [†]
Sex:					
Male	322 (32)	144 (33.3)	1.06	0.83-1.35	0.631
Female	683 (68)	288 (66.7)	1.00	Reference	
Age (numerical)	-	-	1.02	0.97-1.07	0.385
Age-group:					0.197 (3)[‡]
18-19 years	211 (21)	93 (21.5)	0.76	0.51-1.13	0.173
20-21 years	429 (42.7)	179 (41.4)	0.72	0.50-1.03	0.072
22-23 years	262 (26.1)	100 (23.1)	0.66	0.44-0.97	0.035
24+ years	103 (102)	60 (13.9)	1.00	Reference	-
Place of birth:					
Rural area	107 (10.6)	91 (21.1)	2.24	1.65-3.04	<0.001
Urban area	898 (89.4)	341 (78.9)	1.00	Reference	
Place of residence:					
Rural area	55 (5.5)	51 (11.8)	2.31	1.55-3.45	<0.001
Urban area	950 (94.5)	381 (88.2)	1.00	Reference	
Father's education:					<0.001 (2)
Low (0-8 years)	81 (8.1)	111 (25.7)	6.41	4.45-9.24	<0.001
Middle (9-12 years)	503 (50.0)	231 (53.5)	2.15	1.63-2.83	<0.001
High (>12 years)	421 (41.9)	90 (20.8)	1.00	Reference	-
Mother's education:					<0.001 (2)
Low (0-8 years)	105 (10.4)	118 (27.3)	4.02	2.88-5.60	<0.001
Middle (9-12 years)	482 (48)	197 (46.5)	1.46	1.12-1.90	0.005
High (>12 years)	418 (41.6)	117 (27.1)	1.00	Reference	-
Father's employment status:					
Unemployed	147 (14.6)	209 (48.4)	5.47	4.23-7.08	<0.001
Rest	858 (85.4)	223 (51.6)	1.00	Reference	
Mother's employment status:					
Employed	532 (52.9)	217 (50.2)	0.90	0.72-1.13	0.347
Rest	473 (47.1)	215 (49.8)	1.00	Reference	

Demographic and socioeconomic characteristics	Not witnessed violence (N=1005)*	Witnessed violence (N=432)*	OR [†]	95%CI [†]	P [‡]
Income level:					<0.001 (2)
Low	96 (9.6)	125 (28.9)	3.93	2.75-5.75	<0.001
Middle	671 (66.8)	229 (53)	1.04	0.77-1.40	0.789
High	238 (23.7)	78 (18.1)	1.00	Reference	-
Number school days missed in the past month	-	-	1.09	1.03-1.16	0.003
Lifestyle/behavioural factors	Not witnessed violence (n=1005)	Witnessed violence (n=432)	OR*	95%CI*	P*
Current smoking:					
Yes	800 (79.6)	319 (73.8)	1.38	1.06-1.80	0.016
No	205 (20.4)	113 (26.2)	1.00	Reference	
Problems with alcohol:					
Yes	900 (89.6)	365 (84.5)	1.57	1.13-2.19	0.007
No	105 (10.4)	67 (15.5)	1.00	Reference	
Use of street drugs:					
Yes	970 (96.5)	407 (94.2)	1.70	1.01-2.88	0.047
No	35 (3.5)	25 (5.8)	1.00	Reference	
Lifetime sexual intercourse:					
Yes	526 (52.3)	143 (33.1)	2.22	1.75-2.81	<0.001
No	47.7 (47.7)	289 (66.9)	1.00	Reference	
Early sex					
≤16 years	182 (38)	104 (36)	0.91	0.67-1.24	0.577
>16 years	297 (62)	185 (64)	Reference	-	
Number of lifetime sexual partners					
>3 partners	117 (24.4)	73 (25.3)	1.04	0.74-1.46	0.795
≤3 partners	362 (75.6)	216 (74.7)	Reference	-	

* Number of individuals and column percentages (in parenthesis).

† Odds ratios (OR: witnessed violence vs. no witnessed violence), 95% confidence intervals (95%CI) and p-values from binary logistic regression.

‡ Overall p-value and degrees of freedom (in parenthesis).

Adverse Childhood Events (ACE) and demographic and socioeconomic characteristics of the students and their parents

Table 11 presents the association of Adverse Childhood Events (ACE) and demographic and socioeconomic characteristics of the students and their parents. ACE (at least one vs. none) was positively associated with place of birth ($P=0.048$), parental education ($P<0.001$), father's unemployment ($P<0.001$), number of school days missed in the past month due to stress or depression ($P<0.001$), and inversely related to income level ($P<0.001$).

As for the lifestyle/behaviour factors, ACE was positively associated with current smoking ($P<0.001$), alcohol abuse ($P<0.001$), lifetime prevalence of sexual intercourse ($P<0.001$), having more than 3 sexual partners ($P=0.033$) and unwanted pregnancy ($P<0.001$).

Table 11: A association of Adverse Childhood Events (ACE) with demographic and socioeconomic characteristics of the students and their parents

Demographic and socioeconomic characteristics	OR*	95%CI*	P*
Sex:			
Male	1.09	0.85-1.40	0.494
Female	1.00	Reference	
Age (numerical)	1.04	0.99-1.10	0.103
Age-group:			0.448 (3)[†]
18-19 years	0.75	0.48-1.15	0.191
20-21 years	0.88	0.59-1.31	0.555
22-23 years	0.95	0.62-1.46	0.844
24+ years	1.00	Reference	-
Place of birth:			
Rural area	1.43	1.00-2.05	0.048
Urban area	1.00	Reference	
Place of residence:			
Rural area	1.40	0.87-2.26	0.161
Urban area	1.00	Reference	
Father's education:			< 0.001 (2)
Low (0-8 years)	2.96	2.13-4.10	< 0.001
Middle (9-12 years)	2.64	1.00-1.63	0.05
High (> 12 years)	1.00	Reference	-
Mother's education:			< 0.001 (2)
Low (0-8 years)	2.98	1.99-4.46	< 0.001
Middle (9-12 years)	1.14	0.89-1.44	0.297
High (> 12 years)	1.00	Reference	-
Father's employment status:			
Unemployed	2.96	2.13-4.10	< 0.001
Rest	1.00	Reference	

Income level:			< 0.001 (2)
Low	3.62	2.27-5.77	< 0.001
Middle	1.22	0.92-1.60	0.151
High	1.00	Reference	-
Lifestyle/ behavioral factors	OR*	95%CI*	P*
Current smoking:			
Yes	4.00	2.81-5.70	< 0.001
No	1.00	Reference	
Problems with alcohol:			
Yes	46.45	11.47-188.13	< 0.001
No	1.00	Reference	
Use of street drugs:	Not computed – unstable estimates		
Yes			
No			
Attempts to commit suicide	Not computed – unstable estimates		
Yes			
No			
Lifetime sexual intercourse:			
Yes	7.69	5.53-10.15	< 0.001
No	1.00	Reference	
Early sex			
≤ 16 years	0.93	0.57-1.49	0.768
> 16 years	1.00	Reference	
Number of lifetime sexual partners			
> 3 partners	1.97	1.04-3.73	0.033
≤ 3 partners	1.00	Reference	
Unwanted pregnancy			
Yes	5.35	2.30-12.45	< 0.001
No	1.00	Reference	
Number of school days missed in the past month due to stress or depression	1.47	1.25-1.72	< 0.001

* Odds ratios (OR: at least one A CE vs. none), 95% confidence intervals (95%CI) and p-values from binary logistic regression.

† Overall p-value and degrees of freedom (in parenthesis).

Mean values of Adverse Childhood Events (ACE) by socioeconomic characteristics and behavioural factors

Table 12 presents the mean values of Adverse Childhood Events (ACE) by socioeconomic characteristics and behavioural factors. The mean ACE score was significantly higher in males compared with the female students (2.12 vs. 1.86, respectively; P=0.017). The mean ACE score was slightly (non-significantly) higher among students 24+ years of age. Students born in rural areas and particularly those residing in rural areas displayed higher mean ACE scores compared with their urban counterparts. The mean ACE score was significantly higher among students who reported a low parental education compared with those who reported middle and especially high parental education. The mean ACE score was substantially higher among students whose fathers were unemployed. As for the lifestyle/behavioural factors, the mean ACE score was considerably and significantly higher among students who were smokers and reported use of alcohol and drugs. Furthermore, the mean ACE score was significantly higher among students who reported sexual experiences/ early sex (before 16 years) and had had more than 3 sexual partners.

Table 12: Mean values (from the General Linear Model) of Adverse Childhood Events (ACE) by socioeconomic characteristics and behavioural factors

Demographic and socioeconomic characteristics	Mean *	95%CI*	P*
Sex:			
Male	2.02	1.85-2.17	0.015
Female	1.78	1.66-1.88	
Age-group:			0.794[†]
18-19 years	1.83	1.63-2.03	0.364
20-21 years	1.84	1.77-1.98	0.350
22-23 years	1.84	1.65-2.02	0.374
24+ years	1.99	1.71-2.25	-
Place of birth:			
Rural area	2.13	1.89-2.38	0.016
Urban area	1.81	1.71-1.90	
Place of residence:			
Rural area	2.33	1.99-2.66	0.004
Urban area	1.81	1.72-1.91	
Father's education:			< 0.001
Low (0-8 years)	2.43	2.18-2.68	< 0.001
Middle (9-12 years)	1.85	1.72-1.98	0.035
High (> 12 years)	1.64	1.49-1.79	-
Mother's education:			< 0.001
Low (0-8 years)	2.49	2.26-2.71	< 0.001
Middle (9-12 years)	1.75	1.61-1.87	0.849
High (> 12 years)	1.73	1.58-1.87	-
Father's employment status:			
Unemployed	2.40	2.22-2.58	< 0.001
Rest	1.67	1.57-1.78	

Mother's employment status:			
Employed	1.83	1.70-1.95	0.528
Rest	1.89	1.75-2.01	
Income level:			< 0.001
Low	2.41	2.18-2.64	< 0.001
Middle	1.79	1.68-1.90	0.175
High	1.63	1.44-1.83	-
Lifestyle/ behavioral factors	Mean*	95%CI*	P*
Current smoking:			
No	1.53	1.44-1.63	< 0.001
Yes	2.97	2.78-3.15	
Problems with alcohol:			
No	1.56	1.47-1.64	< 0.001
Yes	4.01	3.78-4.25	
Use of street drugs:			
No	1.72	1.63-1.80	< 0.001
Yes	5.00	4.58-5.41	
Attempts to commit suicide			
No	1.71	1.63-1.80	< 0.001
Yes	5.00	4.58-5.41	
Lifetime sexual intercourse:			
No	0.82	0.71-0.93	< 0.001
Yes	2.75	2.65-2.86	
Unwanted pregnancy			
No	1.66	1.54-1.76	< 0.001
Yes	3.12	2.76-3.48	
Early sex			
< 16 years	2.91	2.70-3.10	0.069
> 16 years	2.67	2.51-2.82	
Number of lifetime sexual partners			
< 3 partners	2.65	2.51-2.79	0.005
> 3 partners	3.06	2.81-3.31	

* Mean values (range of the ACE summary score was from 0 [none] to 8 [eight adverse events]), 95% confidence intervals (95%CI) and p-values from the General Linear Model.

† Overall p-value.

Prevalence and adjusted relative odds of health risk behaviours by type and number of Adverse Childhood Experiences

Table 13 presents the prevalence and adjusted relative odds of health risk behaviours by type of Adverse Childhood Exposures (ACEs). In general, each ACE was positively associated with students' lifestyle/behaviour factors. In addition, those who were psychologically, physically and sexually abused, were more likely to smoke and to use alcohol and drugs. On the other hand, those who were sexually abused were 11 times more likely to attempt suicide and 3 times to have an unwanted pregnancy.

Alcohol and substance abuse among family members was very strongly related to students' life style. Those who had lived with a drinker were more likely to smoke, to use illicit drugs and alcohol. Also, having a family member incarcerated, suffering a mental illness or being alcoholic, increased the odds of attempting suicide.

Table 14 as well as Graphic 1 presents the prevalence and adjusted relative odds of health risk behaviours by number of Adverse Childhood Exposures (ACEs). In general it shows a strong graded relationship between health-risk behaviours and number of ACEs, concerning current smoking, alcohol and drug use, and unwanted pregnancy and more than four different forms of ACE.

Table 13: Prevalence and adjusted relative odds of health risk behaviours by type of adverse childhood exposures

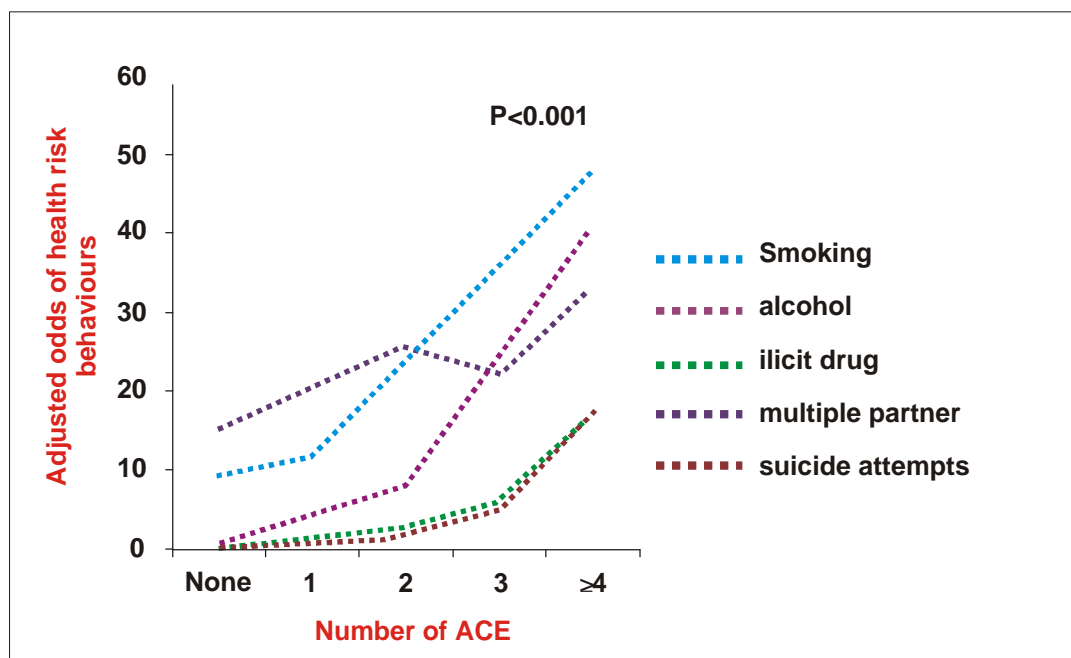
	Current smoker	Alcohol use	Drug abuse	Early sex _{≤16y}	Multiple partners _{>3}	Unwanted pregnancy*	Suicidal attempts
Prevalence (%)	318 (22.1%)	172 (12%)	60 (4%)	286 (19.9%)	190 (13.2%)	81(8.3%)*	55 (3.8%)
Emotional abuse	2.96 (2.26-3.88)	3.78 (2.6-5.5)	2.51 (1.42-4.5)	1.02 (0.71-1.46)	1.71 (1.09-2.67)	10.12 (4.82-21.24)	5.17 (2.51-10.6)
Physical abuse	3.43 (2.64-4.46)	4.48 (3.14-6.38)	2.18 (1.3-3.7)	0.92 (0.66-1.3)	1.72 (1.14-2.6)	14.46(7.13-29.3)	3.96 (2.16-7.24)
Sexual abuse	2.16 (1.37-3.41)	1.72 (0.97-3.04)	1.11 (0.39-3.14)	3.23 (1.95-5.32)	2.65 (1.61-4.35)	3.34 (1.59-7.01)	2.37 (1.04-5.41)
Emotional neglect	1.75 (1.22-2.5)	2.63 (1.75-3.94)	3.38 (1.88-6.1)	2.1 (1.46-3.3)	1.16 (0.74-1.84)	1.46 (0.72-2.95)	5.47 (3.1-9.7)
Physical neglect	2.22 (1.43-3.4)	2.76 (1.68-4.53)	3.5 (1.75-6.98)	2.67 (1.68-4.18)	1.09 (0.65-1.82)	2.8 (1.30-6.02)	6.85(3.67-12.81)
Substance abuse in family (drug)	39.5 (9.2-169.3)	Not computed (unstable estimates)	Not computed (unstable estimates)	0.93 (0.31-2.81)	3.12 (1.08-9.01)	0.91 (0.11-7.12)	134 (47.2-380.27)
Substance abuse in fam. (alcohol)	6.93 (5.22-9.2)	85.47 (48.9-149.4)	90.92 (28.23-292.78)	0.91 (0.66-1.25)	1.20 (0.84-1.70)	1.9 (1.15-3.14)	13 (6.98-24.22)
Mother treated violently	1.38 (1.06-1.8)	1.57 (1.13-2.18)	1.7 (1-2.88)	0.91 (0.67-1.24)	1.04 (0.74-1.46)	2.26 (1.42-3.58)	2.15 (1.25-3.7)
Incarcerated family member	2.73 (1.57-4.76)	7.24 (4.13-12.7)	27 (14.36-50.7)	1.22 (0.6-2.54)	0.43 (0.15-1.27)	1.16 (0.4-3.35)	67.9 (34.85-132.2)
Mental illness	3.54 (2.32-5.4)	9.13 (5.9-14.16)	32.36 (18.17-57.61)	0.76 (0.42-1.36)	1.09 (0.59-2.02)	0.87 (0.34-2.25)	15.16 (8.4-27.1)
Parental divorce or separation	2.18 (1.41-3.37)	5.41 (3.44-8.5)	13.33 (7.56-23.5)	0.91 (0.5-1.7)	2.10 (1.15-3.86)	1.31 (0.54-3.16)	8.24 (4.48-15.14)

*Among 971 women

Table 14: Prevalence and adjusted odds of health risk behaviours by number of ACE

Health risk behavior		Number of adverse childhood exposures				
		None (n= 396)	1 (n= 307)	2 (n= 265)	3 (n= 238)	≥ 4 (231)
Current smoker	prevalence% OR(95%CI)	9.1	11.7	22.6	34.4	48
	1.0 reference		1.32(0.81-2.16)	2.92(1.88-4.54)	5.25(3.40-8.09)	9.23 (5.95-14.34)
Current alcohol use	prevalence% OR(95%CI)	0.5	3.6	7.7	22.1	41.1
	1.0 reference		7.32(1.61-33.27)	16.35(3.81-70.13)	55.98(13.50-232.07)	137.40(33.29-566.98)
Illicit drug use	prevalence% OR(95%CI)**	0	1.0	2.4	6.1	17.3
	1.0 reference		Not computed (unstable estimates)			
Early sex (<= 16y)	prevalence% OR(95%CI)	38.8	40.5	33.7	34.1	42.8
	1.0 reference		1.07 (0.57-2.03)	0.80 (0.44-1.37)	0.81 (0.48-1.38)	1.18 (0.69-2.01)
Multiple partners (>= 3)	prevalence% OR(95%CI)	15	20.3	25.6	22	33.2
	1.0 reference		1.43 (0.63-3.27)	1.95 (0.97-3.89)	1.59 (0.80-3.18)	2.81 (1.41-5.57)
Unwanted pregnancy*	prevalence% OR(95%CI)	2.2	1.4	11.4	13.6	22.4
	1.0 reference		0.63 (0.15-2.58)	5.72 (2.27-14.40)	7.02 (2.81-17.56)	12.85 (5.12-32.23)
Suicide attempt	prevalence% OR(95%CI)	0	0.3	2	4.9	17.3
	1.0 reference		Not computed (unstable estimates)			

Graphic 1: A djusted odds of health risk behaviours by number of ACE



Conclusions

Our survey presents the magnitude and character of adverse childhood experiences and associations between those experiences, socio-demographic factors, socio-economic characteristics and lifestyle/ behavioural factors among Albanian university students.

A high prevalence of emotional/ psychological abuse and physical violence were reported by the students.

Only small gender differences were found in the prevalence of adverse childhood experiences. As in other studies, in which male children appear to be at greater risk of harsh physical punishment^{26, 27, 28, 29} in our study, male students were more likely than female students to report physical and emotional abuse as well as combined physical and emotional abuse. These findings may relate to the traditional and historical customs in Albania where parents pay special attention and provide more care for female children notwithstanding their gender preference for male children.

14% of the students reported at least four ACEs and almost half of them reported 2 or more ACE. Male students reported higher rates of cigarette smoking, alcohol consumption and drug abuse. Household dysfunction, alcohol and substance abuse among family members were strongly related to students' own lifestyle. Hence, students who had lived with an alcoholic person were more likely to smoke, use alcohol and illicit drugs. Also, suicidal attempts were more frequently reported among students who reported having had a family member alcoholic, with a mental illness, or incarcerated.

Of importance the findings show (graph 1) that the odds of developing health risk behaviours such as smoking, alcohol, illicit drugs, multiple partners and suicide attempts increases with the ACE score, implying a causal relationship^{30, 31}.

The prevalence of smoking, alcohol abuse and drug intake was substantially higher among students who reported psychological, physical and sexual abuse. Students who reported sexual abuse were more likely to have attempted to commit suicide, or to have experienced an unwanted pregnancy.

Physical abuse

Physical violence against children is a global problem. In our study the prevalence of physical abuse during childhood was higher (41.5%) than in some other European countries. Below are presented some comparative researches, which demonstrate the role of legislation in the physical abuse decreasing.

- A 2009 report compared approval of and estimates of the prevalence of physical punishment in 2005 and 2009 in Bulgaria, Latvia, Lithuania, Macedonia, Moldova, Poland and Ukraine. Latvia prohibited all corporal punishment in 1998; Bulgaria in 2000; Ukraine in 2004 and Moldova in 2008. (Poland has also since prohibited all corporal punishment, in 2010). Data was gathered through a nationwide survey of 500-1,500 people and a survey of 150-250 teachers in capital city schools in each country.

In the nationwide survey, respondents' estimates of the prevalence of both "spanking" and "severe corporal punishment" declined between 2005 and 2009 in nearly all cases. During the same time, the percentage of respondents who stated that corporal punishment should never be used increased in all countries except Lithuania and Ukraine. In Macedonia the increase was 21%; in Moldova, 18%.

Most respondents to the 2009 survey of teachers agreed that "the way parents treat their children should be regulated by law" in all countries, ranging from 61.6% in Latvia to 87.5% in Moldova. A majority in all countries also agreed that corporal punishment by parents should be legally banned, ranging from 52.8% in Latvia to 83.7% in Macedonia³²

- A study carried out between October and December 2007 examined five European countries: Sweden, Austria and Germany, which have prohibited corporal punishment, and France and Spain which had not prohibited corporal punishment at the time of the study (Spain prohibited all corporal punishment in December 2007). Five thousand parents (1,000 in each nation) were interviewed about their use of and attitude towards corporal punishment, their own experiences of violence and their knowledge and beliefs about the law.

Nearly all forms of corporal punishment were used significantly less in countries which had prohibited than in those where corporal punishment was still lawful. For example, while over half of French and Spanish parents had “spanked” their child’s bottom, only 4% of Swedish parents and around 17% of Austrian and German parents had done so. Nearly half of Spanish and French parents had used severe corporal punishment (a resounding slap on the face, beating with an object or severe beating) on more than one occasion, compared with 14% of Austrian and German parents and 3.4% of Swedish parents.

- A longitudinal study carried out in Germany from 1996 to 2008 showed that the number of German parents believing that corporal punishment is legally admissible declined for almost all forms of corporal punishment throughout this time. For example in 1996, 83% of parents surveyed believed that a “mild slap on the face” was legally admissible, but by 2008, only 25% of parents thought so. Corporal punishment was prohibited in Germany in 2000. The researcher stated that “legal prohibition combined with continuous public discussion on nonviolent childrearing can influence beliefs about what is legally admissible over the course of time” (p. 13).

Parents in nations where corporal punishment was prohibited at the time of the study showed less acceptance of justifications for corporal punishment: 20% of Spanish and 27% of French parents agreed that “a slap on the face is sometimes the best/ quickest way to deal with a situation”, compared with 15% of German, 13% of Austrian, and 4% of Swedish parents.

The data was analysed to examine the influence of parents’ knowledge of the law and attitudes and beliefs on their use of corporal punishment. In Sweden, Austria and Germany, parents’ knowledge of the prohibition of corporal punishment was one of four factors which most affected whether or not they used corporal punishment. The other factors were parents’ approval of corporal punishment, definition of physical violence and experiences of violence during their own childhood.

The study concludes that information campaigns which are not accompanied by law reform are not very effective, while information campaigns which accompany law reform can have a significant effect on attitudes and behaviour, and that “there can no longer be any doubt about the violence-reducing effect of a ban on childrearing violence”³³.

- A 2002 study of countries that accord children full legal protection from physical punishment gives details of the context of reform, public education measures and research on the effects of reform in Sweden, Finland, Norway, Austria, Cyprus, Denmark, Latvia, Croatia, Israel and Germany, as well as in Italy (where a Supreme Court ruling banning all corporal punishment is yet to be confirmed in legislation). See below for details of research in individual countries.

The report also discusses common features and differences between the countries, noting that:

- “Half-measures” (such as unclear law reform or law reform prohibiting only some corporal punishment) to prohibit corporal punishment have been unsuccessful and often led to public and professional confusion.
- In all countries studied except Finland, majority public opinion was not in favour of reform at the time of the law change. However, introducing legislation can hasten declining support for and use of physical punishment.
- Public education which is not underpinned by legal reform has limited success. However, public education coupled with law reform can lead to significant shifts in attitudes and behaviours.

The report recommends that more research, including comparative international research, be undertaken into the effects of law reform, that public education is carried out alongside law reform, and that more collaborative work across the European Union takes place³⁴.

Exposure to violence in childhood may also result in greater susceptibility to lifelong social, emotional, and cognitive impairments, such as anxiety and depressive disorders, hallucinations, impaired work performance, memory disturbances, as well as aggressive behaviour and suicidal acts. It is also related to health-risk behaviours such as smoking, substance abuse and early sexual activity^{35,36}, and hence associated to lung, heart, and liver diseases and sexually transmitted diseases later in life. Child maltreatment and adverse childhood experiences are more likely to occur in association with intimate partner violence^{37,38}. Similarly, our study found associations between both witnessed and experienced violence and current smoking, alcohol problems, use of street drugs, and early sexual intercourse.

Witnessed violence

Children can be psychologically and emotionally damaged by witnessing violence against another family member³⁹. Evidence from a range of studies shows that witnessing repeated domestic violence may severely affect a child's well-being, personal development and its social relationships both in childhood and adulthood. Furthermore, these children may later on exhibit the same behavioural and psychological disturbances as those who have been exposed to violence^{40,41,42}. We found, however, a strong association between experienced violence and witnessed violence ($P < 0.001$). Strong and significant predictors of witnessed violence were student's rural residence and origin, low parental education, father's unemployment status and low income level.

The prevalence of witnessed violence in our study (30.1%) was higher than a survey report conducted in Albania in 2009 among all students of the Medicine Faculty (26%)⁴³. It was also higher than that reported in some reports from non-Western countries, including Sri Lanka (16%), Vietnam (16%)⁴⁴, Philippines (26.3%)⁴⁵, but substantially lower than a report from Uganda (52.7%).

Sexual abuse

Adults are often outspoken about the risk of sexual violence their children face at school or in general in the community, but they rarely speak of children's risk of sexual abuse within the home and in the family context. The shame, secrecy and denial associated with familial sexual violence against children fosters a pervasive culture of silence, where children cannot speak about sexual abuse they have suffered, where adults neglect the risk of sexual violence in the home, and where adults do not know what to do or say if they suspect someone they know is sexually abusing a child. In our study the prevalence of *sexual abuse* (sexual intercourse with an adult during the first 18 years of life) was significantly higher in male students compared with their female counterparts (8.8% vs. 4.7%, respectively). According to a review of epidemiological surveys from 21 countries, mainly high- and middle-income countries, found that at least 7% of females (ranging up to 36%) and 3% of males (ranging up to 29%) reported sexual victimization during their childhood⁴⁶. The sex differences in our study compared to previous studies may be due to the broad definition of 'sexual abuse' which was used in our survey. We did not ask specifically about 'non-consensual' sexual experiences, nor specified the age of the youth.

Health risk behaviours

As for health risk behaviours, the prevalence of smoking (28.1% vs. 19.3%), alcohol consumption (14.6% vs. 10.7%) and use of street drugs (4.7% vs. 3.9%) was significantly higher among males than females. According to the Albanian Demographic and Health Survey the prevalence of smoking among females with university level of education in Albanian population is 15% and among females 20-24 years old is 7%.⁴⁷ These results, of a positive relationship between level of education and smoking behaviour, show that female students in Albania are more prone to engaging in such behaviour. In addition, in our survey, a strong graded relationship between health-risk behaviours and the number of ACEs exists. Significantly, current smoking, alcohol and drug use, and unwanted pregnancy increase as the number of ACEs increase to 4 or more.

Physical fights

The 2001/02 HBSC survey revealed large differences in the prevalence of physical fights during the last 12 months among schoolchildren in different European countries, from 25% in Finland to 49% in Lithuania, and that physical fights were far more common among boys than girls⁴⁸. This finding is similar to the results of our study, where the prevalence and frequency of physical fights during the first 18 years of life was significantly higher in male students than female students (Chi-square test: $P < 0.001$). Recent surveys, done as part of the GSHS in developing countries, show a higher prevalence of fighting among school children⁴⁹.

Survey limitations

- The long time required for filling in the questionnaire (4% of the participants didn't finish the questionnaire).
- Potential underreporting of sensitive issues including witnessed or experienced violence within the family, attempts to have forced sex, sexual intercourse with an adult.
- The survey sample is confined to university students, and, therefore, findings of this survey cannot be generalized to Albanian youth.

In conclusion, the high prevalence of adverse childhood experiences and its association with health risk behaviours suggests that this is a public health priority in Albania. The prevention of maltreatment and other adversity in childhood demands increased public awareness, legalisation and national policies and programming to prevent and control the physical, emotional and sexual abuse and neglect of children. It includes the prohibition of corporal punishment of children at home and in the society, measures for an early detection and intervention in cases of child maltreatment, and access to services that aim to reduce the health consequences of adverse childhood experiences. There is a need for inter-sectoral effort based on current knowledge on the scale and consequences of child maltreatment, about the risk factors and the evidence base for prevention programmes. Preventive approaches require multidisciplinary approaches involving health, justice, education and social welfare sectors and such actions would be better coordinated with the development of a national action plan on the prevention of child maltreatment. Public health researchers' policy makers and practitioners have a key role to play in the prevention of adverse childhood experiences.

Recommendations

Developing a national action plan for the prevention of child maltreatment

There is a need for a national action plan for the prevention of child maltreatment which will coordinate preventive actions from different sectors such as health, social welfare, education and justice.

Implementing child maltreatment prevention programmes

Programmes focused on family functioning and parenting practices have resulted successful in reducing home and family violence against children in many countries. These programmes need to be widely implemented in all districts of Albania, headed by health and social professionals.

National capacity building through improvement of training and education of professionals to screen and provide care for victims of violence, etc.

Health and educational professionals have a special responsibility in the field of child maltreatment prevention. Researchers in the field of medicine and public health must have the skills to design and conduct investigations of abuse. Capacity building for the prevention of child maltreatment needs to be included or revised in the curricula of medical and public health students as well as in the training programmes of social and behavioural sciences.

Strengthening of schools for prevention of negative behaviours in children: healthy lifestyle

Implementation of life skills education to enable students to build personal skills is a very important process. Schools are the main settings where children can be encouraged to learn self-respect, respect for others and how to express their feeling and negotiate for what they want without resort to physical or psychological violence.

Research: nationwide population-based sample

More research is needed for a better understanding of how broader social, cultural and economic factors influence family life. Such factors are believed to interact with individual and family factors to produce coercive and violent patterns of behaviour.

Policy development: targeting overall population vs. high-risk groups

In public health, there are two approaches to control and prevent a whole range of unhealthy behavioural patterns. The first strategy namely the public health approach deals with the overall population regardless of specific individual risks. Conversely, the high risk strategy focuses on individuals with excess risk for certain conditions. Therefore, strategies and programs for the control and prevention of adverse childhood events and unhealthy behavioural patterns in the Albanian youth should consider both a targeted strategy focusing on those at high-risk and also should aim to reduce the magnitude of risk in the general population at large⁵⁰.

APPENDIX 1

Family Health History

Men's

Patient: Please complete both sides and return in the enclosed envelope. Please check each answer for every question to the best of your recollection. The confidential information you provide here is an important part of a special project we are doing to help improve our understanding of how life events affect one's health.

Use a pen, place a or an in the appropriate box or fill in the blank space where applicable.

For example: or

or Month August Year 1997

1. What is your birth date?

Month _____ Year _____

1b. Your place of birth

_____ Urban area? Rural area?

2. What is your sex?

Male Female

3. What is your race?

White Roma

Gypsy Other

4. What is your current marital status? Are you now...

Married

Not married but living together with
a partner

Widowed

Separated

Divorced

Never married

5. If married, during what month and year were you first married?

Month _____ Year _____

Never married

6a. How many days of college/ school did you miss in the past 30 days due to stress or feeling depressed?

Number of days: _____

6b. How many days of college/ school did you miss in the past 30 days due to poor physical health?

Number of days: _____

7. For most of your childhood, did your family own their home?

Yes No

8a. During your childhood how many times did you move residences even in the same town?

Number of times: _____

8b. How long have you lived at your current residence?

Less than 6 months

Less than 1 year

Less than 2 years

2 or more years

9. How old was your mother when you were born?

Age: _____

10a. Number of schools year of mother _____

10b. Number of schools year of father _____

11a. Which of the following best describes the current employment

Status of your mother?

Full-time (35 hours or more)

Part-time (1-34 hours)

Not employed outside the home

11b. Which of the following best describes the current employment

Status of your father?

Full-time (35 hours or more)

Part-time (1-34 hours)

Not employed outside the home

12a. Have you smoked at least 100 cigarettes in your entire life?

Yes

No

12b. How old were you when you began to smoke cigarettes fairly regularly?

Age: _____

12c. Do you smoke cigarettes now?

Yes

No

12d. If "Yes : on average, about how many cigarettes a day do you smoke?

Number of cigarettes: _____

If you used to smoke cigarettes but don't smoke now:

13a. About how many cigarettes a day did you smoke?

Number of cigarettes: _____

13b. How old were you when you quit?

Age: _____

During your first 18 years of life

14a. Did your father smoke?

Yes

No

14b. Did your mother smoke?

Yes

No

15a. During the past month, about how many days per week did you exercise for recreation or to keep in shape?

0 1 2 3 4

5 6 7

15b. During the past month, when you exercised for recreation or to keep in shape how long: did you usually exercise (minutes)?

0 1-19 20-29

30-39 40-49 50-59

60 or more

16a. How old were you when you had your first drink of alcohol other than a few sips?

Age: _____

Never drank alcohol

16b. During the past month, how many days per week did you drink any alcoholic beverages on average?

0 1 2 3 4

5 6 7

16c. On the days when you drank, about how many drinks per day did you have on average?

1 2 3 4 or more

Didn't drink in past month

16d. Considering all types of alcoholic beverages, how many times during the past month did you have 5 or more drinks on an occasion?

Number of times: _____

16e. During the past month, how many times have you driven when you had perhaps too much to drink?

Number of times: _____

16f. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?

Number of times: _____

17. Have you ever had a problem with your use of alcohol?

Yes

No

18. Have you ever considered yourself to be an alcoholic?

Yes

No

19a. During your first 18 years of life did you live with anyone who was a problem drinker or alcoholic?

Yes

No

19b. If "Yes : check all who were:

Father Other Relative

Mother Other non-relative

Brothers Sisters

20. Have you ever been married to someone (or lived with someone as if you were married) who was a problem drinker or alcoholic?

Yes

No

21a. Have you ever used street drugs?

Yes

No

21b. If "Yes : How old were you the first time you used them?

Age: _____

21c. About how many times have you used street drugs?

0 1-2 3-10 11-25

26-99 100+

21d. Have you ever had a problem with your use of street drugs?

Yes No

21e. Have you ever considered yourself to be addicted to street drugs?

Yes No

21f. Have you ever injected street drugs?

Yes No

22. Have you ever been under the care of psychologist, psychiatrist, or therapist?

Yes No

23a. Has a doctor, nurse, or other health professional ever asked you about family or household problems during your childhood?

Yes No

23b. How many close friends or relatives would help you with your emotional problems or feelings if you needed it?

None 1

2 3 or more

While you were growing up, during your first 18 years of life :

24. Did you live with anyone who used street drugs?

Yes No

25a. Were your parents ever separated or divorced.

Yes No

25b. Did you ever live with a stepfather?

Yes No

25c. Did you ever live with a stepmother?

Yes No

26. Did you ever live in a foster home?

Yes No

27a. Did you ever run away from home for more than one day?

Yes No

27b. Did any of your brothers or sisters run away from home for more than day?

Yes No

28. Was anyone in your household depressed or mentally ill?

Yes No

29. Did anyone in your household attempt to commit suicide?

Yes No

30a. Did anyone in your household ever go to prison?

Yes No

30b. Did anyone in your household ever commit a serious crime?

Yes No

31a. What is the most you have ever weighed?

Weight in pounds: _____

31b. How old were you then?

Age: _____

32a. Have you ever attempted to commit suicide?

Yes No

32b. If "Yes : how old were you the first time you attempted suicide?

Age: _____

32c. If "Yes : how old were you the last time you attempted suicide?

Age: _____

32d. How many times have you attempted suicide?

Number of times: _____

32e. Did any suicide attempt ever result in an injury, poisoning or overdose that had to be treated by a doctor or nurse?

Yes No

In order to get a more complete picture of the health of our patients, the next three questions are about voluntary sexual experiences only.

33a. How old were you the first time you had sexual intercourse?

Age: _____

Never had intercourse

33b. With how many different partners have you ever had sexual intercourse?

Number of partners: _____

33c. During the past year, with how many different partners have you had sexual intercourse?

number of partners: _____

34a. Have you ever gotten someone pregnant?

Yes No

34b. If “Yes : how old were you the first time you got someone pregnant?

Age: _____

Never got someone pregnant

34c. What was the age of the youngest woman you ever got pregnant?

Age: _____

Never got someone pregnant

34d. How old were you then?

Age: _____

Sometimes physical blows occur between parents. While you were growing up in your first 18 years of life, how often did your father (or stepfather) or mother s boyfriend do any these things to your mother (or stepmother)?

35a. Push, grab , slap or throw something at her?

Never Often
Once, twice Very often
Sometimes

35b. Kick, bite, hit her with a fist, or hit her with something hard?

Never Often
Once, twice Very often
Sometimes

35c. Repeatedly hit her over at least a few minutes?

Never Often
Once, twice Very often
Sometimes

35d. Threaten her with a knife or gun , or use a knife or gun to hurt her?

Never Often
Once, twice Very often
Sometimes

Some parents spank their children as a form of discipline. While you were growing up during the first 18 years of life :

36a. How often were you spanked?

Never Many times in a year
Once, twice Weekly or more
A few times a year

36b. How severely were you spanked?

Not hard Quite hard
A little hard Very hard
Medium

36c. How old were you the last time you remember being spanked?

Age: _____

While you were growing up, during your first 18 years of life, how true were each of the following statements:

37. You didn't have enough to eat.

Never true Often true
Rarely true Very often true
Sometimes true

38. You knew there was someone to take care of you and protect you.

Never true Often true
Rarely true Very often true
Sometimes true

39. People in your family called you things like “ lazy” or “ugly”

Never true Often true
Rarely true Very often true
Sometimes true

40. Your parents were too drunk or high to take care of the family.

Never true Often true
Rarely true Very often true
Sometimes true

41. There was someone in your family who helped you feel important or special.

Never true Often true
Rarely true Very often true
Sometimes true

42. You had to wear dirty clothes.

Never true Often true
Rarely true Very often true
Sometimes true

43. You felt loved.

Never true Often true
Rarely true Very often true
Sometimes true

44. You thought your parents wished you had never been born.

Never true Often true
Rarely true Very often true
Sometimes true

45. People in your family looked out for each other.

Never true Often true
Rarely true Very often true
Sometimes true

46. You felt that someone in your family hated you.

Never true Often true
Rarely true Very often true
Sometimes true

47. People in your family said hurtful or insulting things to you.

Never true Often true
Rarely true Very often true
Sometimes true

48. People in your family felt close to each other.

Never true Often true
Rarely true Very often true
Sometimes true

49. You believe you were emotionally abused.

Never true Often true
Rarely true Very often true
Sometimes true

50. There was someone to take you to the doctor if you needed it.

Never true Often true
Rarely true Very often true
Sometimes true

51. Your family was a source of strength and support.

Never true Often true
Rarely true Very often true
Sometimes true

Sometimes parents or other adults hurt children. While you were growing up, that is, during your first 18 years of life, how often did a parent, stepparent, or adult living in your home:

52a. Swear at you, insult you, or put you down?

Never Often
Once, twice Very often
Sometimes

52b. Threaten to hit you or throw something at you, but didn't do it?

Never Often
Once, twice Very often
Sometimes

52c. Actually push, grab, shove, slap, or throw something at you?

Never Often
Once, twice Very often
Sometimes

52d. Hit you so hard that you had marks or were injured?

Never Often
Once, twice Very often
Sometimes

52e. Act in a way that made you afraid that you might be physically hurt?

Never Often
Once, twice Very often
Sometimes

Some people, while growing up in their first 18 years of life, had a sexual experience with an adult or someone at least five years older than themselves. These experiences may have involved a relative, family friend, or stranger. During the first 18 years of life, did an adult or older relative, family friend, or stranger ever:

	The first time this happened, how old were you?	The first time, did this happen against your wishes?	The last time this happened, how old were you?	About how many times did this happen to you?	How many different people did this to you?	What was the sex of the person(s) who did it?
59a. Touch or fondle your body in a sexual way? Yes <input type="checkbox"/> No <input type="checkbox"/> If "Yes" →	_____ age	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ age	_____ times	_____ people	Male Female Both
60a. Have you touch their body in a sexual way? Yes <input type="checkbox"/> No <input type="checkbox"/> If "Yes" →	_____ age	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ age	_____ times	_____ people	Male Female Both
61a. Attempt to have any type of sexual intercourse (oral, anal, or vaginal) with you? Yes <input type="checkbox"/> No <input type="checkbox"/> If "Yes" →	_____ age	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ age	_____ times	_____ people	Male Female Both
62a. Actually have any type of sexual intercourse (oral, anal, or vaginal) with you? Yes <input type="checkbox"/> No <input type="checkbox"/> If "Yes" →	_____ age	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ age	_____ times	_____ people	Male Female Both

If you answered “No “ to each of the last 4 questions (53a-56a) about sexual experiences with older persons, please skip to question 61a.

Did any of these sexual experiences with an adult or person at least 5 years older than you involve:

63a. A relative who lived in your home?

Yes No

64b. Being given alcohol or drugs?

Yes No

63b. A non-relative who lived in your home?

Yes No

64c. Threats to harm you if you didn't participate?

Yes No

63c. A relative who didn't live in your home?

Yes No

64d. Being physically forced or overpowered to make you participate?

Yes No

63d. A family friend or person whom you knew and who didn't live in your home?

Yes No

65a. Have you ever told a doctor, nurse or other health professional about these sexual experiences?

Yes No

63e. A stranger?

Yes No

65b. Has a therapist or counselor ever suggested to you that you were sexually abused as a child?

Yes No

63f. Someone who was supposed to be taking care of you?

Yes No

66. Do you think that you were sexually abused as a child?

Yes No

63g. Someone you trusted?

Yes No

Did any of these sexual experiences involve:

Apart from other sexual experiences you have already told us about, while you were growing up during your first 18 years of life:

64a. Trickery, verbal persuasion, or pressure to get you to participate?

Yes No

61a. Did a boy or group of boys about your own age ever force you or threaten you with harm in order to have sexual contact?

Yes No

61b. If “Yes : did the contact involve someone touching your sexual parts or trying to have intercourse with you (oral or anal)?

Yes No

61c. If “Yes : how many times did someone do this to you?

Once 6-10 times
 Twice More than
 3-5 times 10 times

61d. Did the contact involve a person actually having intercourse with you (oral or anal)?

Yes No

61e. If “Yes : how many times did someone do this to you?

Once 6-10 times
 Twice More than
 3-5 times 10 times

62a. As an adult (age 19 or older), did anyone ever force or threaten you with harm in order to have sexual contact?

Yes No

62b. If “Yes : did the contact involve someone touching your sexual parts or trying to have intercourse with you (oral, anal, or vaginal)?

Yes No

62c. If “Yes : how many times did someone do this to you?

Once 6-10 times
 Twice More than
 3-5 times 10 times

62d. Did the contact involve someone actually having intercourse with you (oral, anal, or vaginal)?

Yes No

62e. If “Yes : how many times did someone do this to you?

Once 6-10 times
 Twice More than
 3-5 times 10 times

63	These next questions are about BEING BULLIED when you were growing up. Bullying is when a young person or group of young people say or do bad and unpleasant things to another young person. It is also bullying when a young person is teased a lot in an unpleasant way or when a young person is left out of things on purpose. It is not bullying when two young people of about the same strength or power argue or fight or when teasing is done in a friendly and fun way.		
	When you were growing up, during the first 18 years of your life . . .		
	63.1 How often were you bullied?	Many times [] A few times [] Once [] Never [] Refused []	
	63.2 How were you bullied most often?	I was hit, kicked, pushed, shoved around, or locked indoors [] I was made fun of because of my race, nationality or colour [] I was made fun of because of my religion [] I was made fun of with sexual jokes, comments, or gestures [] I was left out of activities on purpose or completely ignored [] I was made fun of because of how my body or face looked [] I was bullied in some other way [] Refused []	
This next question is about PHYSICAL FIGHTS. A physical fight occurs when two young people of about the same strength or power choose to fight each other.			
When you were growing up, during the first 18 years of your life . . .			
63.3	How often were you in a physical fight?	Many times [] A few times [] Once [] Never [] Refused []	
64	These next questions are about how often, when you were a child, YOU may have seen or heard certain things in your NEIGHBOURHOOD OR COMMUNITY (not in your home or on TV, movies, or the radio).		
	When you were growing up, during the first 18 years of your life . . .		
	64.1	Did you see or hear someone being beaten up in real life?	Many times [] A few times [] Once [] Never [] Refused []
	64.2	Did you see or hear someone being stabbed or shot in real life?	Many times [] A few times [] Once [] Never [] Refused []
64.3	Did you see or hear someone being threatened with a knife or gun in real life?	Many times [] A few times [] Once [] Never [] Refused []	

Thank you for completing this form in ink.

Please go back and make sure your answer marks fill the correct box.

APPENDIX 2

Family Health History

Women's

Patient: Please complete both sides and return in the enclosed envelope. Please check each answer for every question to the best of your recollection. The confidential information you provide here is an important part of a special project we are doing to help improve our understanding of how life events affect one's health.

Use a pen, place a or an in the appropriate box or fill in the blank space where applicable.

For example: or

or Month August Year 1997

1. What is your birth date?

Month _____ Year _____

1b. Your place of birth

_____ Urban area? Rural area?

2. What is your sex?

Male Female

3. What is your race?

White Roma

Gypsy Other

4. What is your current marital status? Are you now...

Married

Not married but living together with a partner

Widowed

Separated

Divorced

Never married

5. If married, during what month and year were you first married?

Month _____ Year _____

Never married

6a. How many days of college/ school did you miss in the past 30 days due to stress or feeling depressed?

Number of days: _____

6b. How many days of college/ school did you miss in the past 30 days due to poor physical health?

Number of days: _____

7. For most of your childhood, did your family own their home?

Yes

No

8a. During your childhood how many times did you move residences even in the same town?

Number of times: _____

9. How old was your mother when you were born?

Age: _____

10a. Number of schools year of mother _____

10b. Number of schools year of father _____

11a. Which of the following best describes the current employment

Status of your mother?

Full-time (35 hours or more)

Part-time (1-34 hours)

Not employed outside the home

11b. Which of the following best describes the current employment

Status of your father?

Full-time (35 hours or more)

Part-time (1-34 hours)

Not employed outside the home

12. Have you ever been pregnant?
Yes No

If NO, skip to item 16

13a. Are you pregnant now?
Yes No Don't know

13b. How many times have you been pregnant?
Number: _____

13c. How many of these pregnancies resulted in the birth of a child?
Number: _____

13d. How old were you the first time you became pregnant?
Age: _____

13e. The first time you became pregnant how old was the person who got you pregnant?
Age: _____

13f. During what month and year did your first pregnancy end?
Month _____ Year _____

13g. How did your first pregnancy end?
Live birth(s)
Stillbirth/ miscarriage
Tubal or ectopic
Elective abortion
Other

13h. When your first pregnancy began did you intend to get pregnant at that time in your life?
Yes No Didn't care

14. Were you ever pregnant a 2nd time?
Yes No

If NO, skip to item 16

15a. During what month and year did your second pregnancy end?
Month _____ Year _____

15b. How did your second pregnancy end?
Live birth(s)
Stillbirth/ miscarriage
Tubal or ectopic
Elective abortion
Other

15c. When your second pregnancy began did you intend to get pregnant at that time in your life?
Yes No Didn't care

In order to get a more complete picture of the health of our patients, the next three questions are about voluntary sexual experiences only.

16. How old were you the first time you had sexual intercourse?
Age: _____
Never had intercourse

17. With how many different partners have you ever had sexual intercourse?
Number of partners: _____

18. During the past year, with how many different partners have you had sexual intercourse?
number of partners: _____

19a. Have you smoked at least 100 cigarettes in your entire life?
Yes No

19b. How old were you when you began to smoke cigarettes fairly regularly?
Age: _____

20c. Do you smoke cigarettes now?
Yes No

20d. If "Yes": on average, about how many cigarettes a day do you smoke?
Number of cigarettes: _____

If you used to smoke cigarettes but don't smoke now:

21a. About how many cigarettes a day did you smoke?
Number of cigarettes: _____

21b. How old were you when you quit?
Age: _____

During your first 18 years of life

22a. Did your father smoke?
Yes No

22b. Did your mother smoke?
Yes No

23a. During the past month, about how many days per week did you exercise for recreation or to keep in shape?

0 1 2 3 4
5 6 7

23b. During the past month, when you exercised for recreation or to keep in shape how long: did you usually exercise (minutes)?

0 1-19 20-29
30-39 40-49 50-59
60 or more

24a. What is the most you have ever weighed?

Weight in pounds: _____

24b. How old were you then?

Age: _____

25a. How old were you when you had your first drink of alcohol other than a few sips?

Age: _____

Never drank alcohol

25b. During the past month, have you had any beer, wine, wine coolers cocktails or liquor?

Yes No

25c. During the past month, how many days per week did you drink any alcoholic beverages on average?

0 1 2 3 4
5 6 7

25d. On the days when you drank, about how many drinks per day did you have on average?

1 2 3 4 or more

Didn't drink in past month

25f. Considering all types of alcoholic beverages, how many times during the past month did you have 5 or more drinks on an occasion?

Number of times: _____

25g. During the past month, how many times have you driven when you had perhaps too much to drink?

Number of times: _____

25h. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?

Number of times: _____

26. Have you ever had a problem with your use of alcohol?

Yes No

27. Have you ever considered yourself to be an alcoholic?

Yes No

28a. During your first 18 years of life did you live with anyone who was a problem drinker or alcoholic?

Yes No

28b. If "Yes" : check all who were:

Father Other Relative
Mother Other non-relative
Brothers Sisters

29. Have you ever been married to someone (or lived with someone as if you were married) who was a problem drinker or alcoholic?

Yes No

30a. Have you ever used street drugs?

Yes No

30b. If "Yes" : How old were you the first time you used them?

Age: _____

30c. About how many times have you used street drugs?

0 1-2 3-10 11-25
26-99 100+

30d. Have you ever had a problem with your use of street drugs?

Yes No

30e. Have you ever considered yourself to be addicted to street drugs?

Yes No

30f. Have you ever injected street drugs?

Yes No

31. Have you ever been under the care of Psychologist, psychiatrist, or therapist?

Yes No

32a. Has a doctor, nurse, or other health professional ever asked you about family or household problems during your childhood?

Yes No

32b. How many close friends or relatives would help you with your emotional problems or feelings if you needed it?

None 1
2 3 or more

During your first 18 years of life :

33. Did you live with anyone who used street drugs?

Yes No

34a. Were your parents ever separated or divorced.

Yes No

34b. Did you ever live with a stepfather?

Yes No

34c. Did you ever live with a stepmother?

Yes No

35. Did you ever live in a foster home?

Yes No

36a. Did you ever run away from home for more than one day?

Yes No

36b. Did any of your brothers or sisters run away from home for more than day?

Yes No

37. Was anyone in your household depressed or mentally ill?

Yes No

38. Did anyone in your household attempt to commit suicide?

Yes No

39a. Did anyone in your household ever go to prison?

Yes No

39b. Did anyone in your household ever commit a serious crime?

Yes No

40a. Have you ever attempted to commit suicide?

Yes No

40b. If "Yes : how old were you the first time you attempted suicide?

Age: _____

40c. If "Yes : how old were you the last time you attempted suicide?

Age: _____

40d. How many times have you attempted suicide?

Number of times: _____

40e. Did any suicide attempt ever result in an injury, poisoning or overdose that had to be treated by a doctor or nurse?

Yes No

Sometimes physical blows occur between parents. While you were growing up in your first 18 years of life, how often did your father (or stepfather) or mother's boyfriend do any these things to your mother (or stepmother)?

41a. Push, grab , slap or throw something at her?

Never Often

Once, twice Very often

Sometimes

41b. Kick, bite, hit her with a fist, or hit her with something hard?

Never Often

Once, twice Very often

Sometimes

41c. Repeatedly hit her over at least a few minutes?

Never Often

Once, twice Very often

Sometimes

41d. Threaten her with a knife or gun , or use a knife or gun to hurt her?

Never Often

Once, twice Very often

Sometimes

Some parents spank their children as a form of discipline. While you were growing up during the first 18 years of life :

42a. How often were you spanked?

Never Many times in a year

Once, twice Weekly or more

A few times a year

42b. How severely were you spanked?

- | | | | |
|---------------|--------------------------|------------|--------------------------|
| Not hard | <input type="checkbox"/> | Quite hard | <input type="checkbox"/> |
| A little hard | <input type="checkbox"/> | Very hard | <input type="checkbox"/> |
| Medium | <input type="checkbox"/> | | |

42c. How old were you the last time you remember being spanked?

Age: _____

While you were growing up, during your first 18 years of life, how true were each of the following statements:

43. You didn't have enough to eat.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

44. You knew there was someone to take care of you and protect you.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

45. People in your family called you things like "lazy" or "ugly"

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

46. Your parents were too drunk or high to take care of the family.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

47. There was someone in your family who helped you feel important or special.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

48. You had to wear dirty clothes.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

49. You felt loved.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

50. You thought your parents wished you had never been born.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

51. People in your family looked out for each other.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

52. You felt that someone in your family hated you.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

53. People in your family said hurtful or insulting things to you.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

54. People in your family felt close to each other.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

55. You believe you were emotionally abused.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

56. There was someone to take you to the doctor if you needed it.

- | | | | |
|----------------|--------------------------|-----------------|--------------------------|
| Never true | <input type="checkbox"/> | Often true | <input type="checkbox"/> |
| Rarely true | <input type="checkbox"/> | Very often true | <input type="checkbox"/> |
| Sometimes true | <input type="checkbox"/> | | |

57. Your family was a source of strength and support.

- Never true Often true
 Rarely true Very often true
 Sometimes true

Sometimes parents or other adults hurt children. While you were growing up, that is, during your first 18 years of life, how often did a parent, stepparent, or adult living in your home:

58a. Swear at you, insult you, or put you down?

- Never Often
 Once, twice Very often
 Sometimes

58b. Threaten to hit you or throw something at you, but didn't do it?

- Never Often
 Once, twice Very often
 Sometimes

58c. Actually push, grab, shove, slap, or throw something at you?

- Never Often
 Once, twice Very often
 Sometimes

58d. Hit you so hard that you had marks or were injured?

- Never Often
 Once, twice Very often
 Sometimes

58e. Act in a way that made you afraid that you might be physically hurt?

- Never Often
 Once, twice Very often
 Sometimes

Some people, while growing up in their first 18 years of life, had a sexual experience with an adult or someone at least five years older than themselves. These experiences may have involved a relative, family friend, or stranger. During the first 18 years of life, did an adult or older relative, family friend, or stranger ever:

	The first time this happened, how old were you?	The first time, did this happen against your wishes?	The last time this happened, how old were you?	About how many times did this happen to you?	How many different people did this to you?	What was the sex of the person(s) who did it?
59a. Touch or fondle your body in a sexual way? Yes <input type="checkbox"/> No <input type="checkbox"/> If "Yes" →	_____ age	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ age	_____ times	_____ people	Male Female Both
60a. Have you touch their body in a sexual way? Yes <input type="checkbox"/> No <input type="checkbox"/> If "Yes" →	_____ age	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ age	_____ times	_____ people	Male Female Both
61a. Attempt to have any type of sexual intercourse (oral, anal, or vaginal) with you? Yes <input type="checkbox"/> No <input type="checkbox"/> If "Yes" →	_____ age	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ age	_____ times	_____ people	Male Female Both
62a. Actually have any type of sexual intercourse (oral, anal, or vaginal) with you? Yes <input type="checkbox"/> No <input type="checkbox"/> If "Yes" →	_____ age	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ age	_____ times	_____ people	Male Female Both

If you answered “No “ to each of the last 4 questions (59a-62a) about sexual experiences with older persons, please skip to question 67a.

Did any of these sexual experiences with an adult or person at least 5 years older than you involve:

63a. A relative who lived in your home?

Yes No

63b. A non-relative who lived in your home?

Yes No

63c. A relative who didn't live in your home?

Yes No

63d. A family friend or person whom you knew and who didn't live in your home?

Yes No

63e. A stranger?

Yes No

63f. Someone who was supposed to be taking care of you?

Yes No

63g. Someone you trusted?

Yes No

Did any of these sexual experiences involve:

64a. Trickery, verbal persuasion, or pressure to get you to participate?

Yes No

64b. Being given alcohol or drugs?

Yes No

64c. Threats to harm you if you didn't participate?

Yes No

64d. Being physically forced or overpowered to make you participate?

Yes No

65a. Have you ever told a doctor, nurse or other health professional about these sexual experiences?

Yes No

65b. Has a therapist or counselor ever suggested to you that you were sexually abused as a child?

Yes No

66. Do you think that you were sexually abused as a child?

Yes No

Apart from other sexual experiences you have already told us about, while you were growing up during your first 18 years of life:

67a. Did a boy or group of boys about your own age ever force you or threaten you with harm In order to have sexual contact?

Yes No

67b. If “Yes : did the contact involve someone touching your sexual parts or trying to have intercourse with you (oral , anal or vaginal)?

Yes No

67c. If “Yes : how many times did someone do this to you?

Once 6-10 times

Twice More than

3-5 times 10 times

67d. Did the contact involve a person actually having intercourse with you (oral, anal, or vaginal)?

Yes No

67e. If “Yes : how many times did someone do this to you?

Once 6-10 times

Twice More than

3-5 times 10 times

68a. As an adult (age 19 or older), did anyone ever force or threaten you with harm in order to have sexual contact?

Yes No

68b. If “Yes : did the contact involve someone touching your sexual parts or trying to have intercourse with you (oral , anal , or vaginal)?

Yes No

68c. If “Yes : how many times did someone do this to you?

Once 6-10 times

Twice More than

3-5 times 10 times

68d. Did the contact involve someone actually having intercourse with you (oral , anal, or vaginal)?

Yes No

68e. If “Yes : how many times did someone do this to you?

Once 6-10 times

Twice More than

3-5 times 10 times

70.1	Did you see or hear someone being beaten up in real life?	Many times []
		A few times []
		Once []
		Never []
		Refused []
70.2	Did you see or hear someone being stabbed or shot in real life?	Many times []
		A few times []
		Once []
		Never []
		Refused []
70.3	Did you see or hear someone being threatened with a knife or gun in real life?	Many times []
		A few times []
		Once []
		Never []
		Refused []

69	<p>These next questions are about BEING BULLIED when you were growing up. Bullying is when a young person or group of young people say or do bad and unpleasant things to another young person. It is also bullying when a young person is teased a lot in an unpleasant way or when a young person is left out of things on purpose. It is not bullying when two young people of about the same strength or power argue or fight or when teasing is done in a friendly and fun way.</p> <p>When you were growing up, during the first 18 years of your life . . .</p>	
69.1	How often were you bullied?	Many times [] A few times [] Once [] Never) [] Refused []
69.2	How were you bullied most often?	I was hit, kicked, pushed, shoved around, or locked indoors [] I was made fun of because of my race, nationality or colour [] I was made fun of because of my religion [] I was made fun of with sexual jokes, comments, or gestures [] I was left out of activities on purpose or completely ignored [] I was made fun of because of how my body or face looked [] I was bullied in some other way [] Refused []
<p>This next question is about PHYSICAL FIGHTS. A physical fight occurs when two young people of about the same strength or power choose to fight each other.</p> <p>When you were growing up, during the first 18 years of your life . . .</p>		
69.3	How often were you in a physical fight?	Many times [] A few times [] Once [] Never [] Refused []
70	<p>These next questions are about how often, when you were a child, YOU may have seen or heard certain things in your NEIGHBOURHOOD OR COMMUNITY (not in your home or on TV, movies, or the radio).</p> <p>When you were growing up, during the first 18 years of your life . . .</p>	

Thank you for completing this form in ink.

Please go back and make sure your answer marks fill the correct box.

If you are unsure about any of your answers or would like to talk to someone privately, please tell your medical examiner.

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