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Rīgas Stradiņa universitāte

Lauma Spriņģe

HEALTH PROBLEMS CAUSED BY VIOLENCE IN CHILDREN AND YOUNG ADULTS IN LATVIA

Summary of the Doctoral Thesis
for obtaining the degree of a Doctor of Medicine
Speciality – Public Health and Epidemiology

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ANNOTATION

Introduction. The goal No. 16.1 of the UN Sustainable Development Goals aims to significantly reduce all forms of violence. Children are the part of society that must be particularly protected from violence and its adverse effects. To identify and successfully solve the problem of violence, it is necessary to identify the extent of the problem, as well as to understand its impact on children's health and well-being in the long term. Violence is a multifactorial phenomenon, therefore, the influence of beliefs and values of family, local community, culture and social values must be considered when researching, interpreting the results and addressing the problem of violence.

The aim of the thesis was to assess the prevalence of violence and its forms in the population of children and young adults of Latvia, and its relationship between the risk factors associated with family, health and its associated disorders, as well as to find out the expert opinions on how the child victims perceive the violence, the consequences of violence, and coping mechanisms and rehabilitation.

Material and Methods. In the quantitative part of the research data from representative cross-sectional study on the adverse childhood experiences of young adults in Latvia were used. Based on the WHO recommendations, the study tool used was a questionnaire from the Adverse Childhood Experiences (ACE) Study. Overall, 1223 cases were analysed. The frequency distribution, cross tabulation and Chi-Square Test (χ^2) were used for statistical data processing. The relationships were calculated by odds ratio, stratified odds ration based on Mantel-Haenszel's method, Spearman's rank correlation coefficient and multiple logistic regression.

In the qualitative part of the study to find out the experiences of experts dealing with child victims of violence, in-depth semi-structured expert interviews were conducted with psychologists and doctors-psychotherapists,

working with child victims of violence. Overall, 14 experts were interviewed. The method used for the interview data processing was thematic analysis.

Results. Most often young adults in childhood have experienced emotional violence (31.5%), physical (27.0%) and emotional (23.8%) neglect, but less frequently suffered from physical (16.4%) and sexual (10.3%) violence. Women have experienced violence more often than men. Children whose families had the following risk factors: low socio-economic status, parents' divorce, father's violence against mother, psycho-emotional health problems and alcohol abuse, had higher odds for experiencing one or more forms of violence, as compared to the children from families without the above mentioned risk factors. Multivariate regression analysis suggested that the young adults who had experienced some form of violence (except sexual abuse) in childhood, had a 1.2–2.2 times (depending on the form of violence) higher odds for poor health self-assessment, compared to young adults who did not witness violence in childhood. Physical and emotional violence experienced during childhood increased the odds ratio of excessive alcohol use in adolescence by 1.4 and 1.2 times. Young adults who experienced physical and emotional violence, and emotional neglect during childhood, had a respectively 2.6, 2.3 and 2.1 times higher odds of developing mental health problems during adolescence, compared to young adults without such experience. Violence (except sexual violence) experienced during childhood increased the odds of suicide attempts at adolescence by 2.0–4.0 times, compared to young adults without violent experience.

Following the interpretation of the interviews, the question section on the victims' experience of violence and the understanding of the concept of violence, highlighted three topics: the conceptual diversity of the notion of violence, characteristics of the experience of child violence, and child's openness on the experienced violence. The section on the impact of violence on child's health, outlined two topics: effects on the physical and psycho-emotional health, and the

factors that influence health effects. The section dealing with the way in which the child victims of violence overcome the caused disorders, and what is the role of institutions in this process, outlined three topics: characterization of strategies for overcoming disorders, dealing with the child victim of violence, systemic requirements of rehabilitation.

Conclusions. Violence against children is a pressing issue of public health. Children from dysfunctional families have higher odds to experience violence. Violence experienced in childhood is associated with increased odds for having a bad health self-assessment, excessive alcohol consumption, development of psycho-emotional health problems, and suicide attempts in young adult age. The key topics in the analysis of the expert interviews were: conceptualization of the notion of violence, characteristics of the experience of violence, effects of violence and coping mechanisms, as well as the child victim's needs in rehabilitation process.

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ABBREVIATIONS

CM	Cabinet of Ministers
SES	socio-economic status
UN	United Nations
WHA	World Health Assembly
WHO	World Health Organization

1. INTRODUCTION

1.1 Novelty of the problem

Violence is a pressing issue in society, which not only restricts the individual's rights to a safe and violence-free living space, but also creates a lasting adverse impact on the health of the individual and the common public health. The goal No. 16.1 of the UN Sustainable Development Goals aims to significantly reduce all forms of violence (United Nations, 2017). Based on that objective, at the 69th World Health Assembly on May 27, 2016, the WHA endorsed a resolution (WHA 69.5) to reduce violence, with particular emphasis on women and children as the most vulnerable groups of society (World Health Organization [WHO], 2014a) .

Children are one of the groups of society who need special protection against violence. According to the statistics, approximately 850 children aged under 15 (WHO, 2013a) die in a violent death every year in the European region, but the number of children who from day to day are victims of one or more forms of violence, like physical or emotional violence, sexual abuse or neglect, is even higher. Although the family is a place where the child can receive the necessary care and support to develop and successfully prepare for an independent life, the family can also be a place where child's health and well-being are threatened, since violence against children most commonly occurs in the family (Gilbert et al., 2009).

Discovering the prevalence of violence against children is one of the tasks assigned by the WHO. The prevalence of violence experienced in childhood was calculated based on several studies and reported in a WHO European report on reducing violence against children. Most often children had suffered from emotional (29.1%) and physical (22.9%) violence, but 18.4% had been victims of emotional neglect and 16.3% had suffered from physical neglect. Sexual

violence against the child is the least frequent violence, 13.4% of girls and 5.7% of boys were reported to be victims (WHO, 2013a). The report highlights the necessity for new studies to better identify the burden of violence on children, particularly paying attention to emotional violence and neglect.

The interpretation of the prevalence indicators of violence against children is based on a number of specific aspects which may affect the value of indicators. First of all, the data source used is of key importance. The cases of violence against children registered in institutions cover only a part of all cases of violence against children. Epidemiological studies are used to identify and research the issue more comprehensively, surveying respondents about their experience of violence. The number of instances of violence against children identified in the institutions is estimated to vary up to ten times when compared to the number of cases identified in the population-based studies (Gilbert, 2009). The second major issue is associated with the perception and understanding of the concept of violence in society. Violence against children as a specific issue of the public appeared only in the last century; however, certain forms of violence, such as emotional violence against a child as a separate form of violence, has only been studied and described over the past 25 years (Cindy and Miller-Perrin, 2013). Therefore, the concept of violence against children and its different forms is not ambiguous in the society, and the concept of violence also is impacted by local communities, cultural and community values, views and attitudes (Pinheiro, 2006). Taking into account the topicality of the issue and the high prevalence rates, as well as the variety of the interpretations of violence, it is important to discover the prevalence of violence against children in the population of Latvia as well.

Violence during childhood causes not only immediate negative consequences, but may also have long-term adverse effects on the health and well-being of the affected person in a later life. Evidence from epidemiology and neurobiology studies has shown that the stress experienced during childhood

results in changes in the brain structure and physiology of the affected person, which may influence human behaviour in the long term, as well as cause long-term adverse health effects (Anda et al., 2006). Studies observe different health and health-related behaviour indicators, depending on whether the respondent has experienced any violence during childhood.

Young adults are the human capital of the future, and one of the priorities in public policy documents. In the Latvian Youth Policy Plan 2016-2020 (2016 No. 256), the health of young adults is identified as one of the essential preconditions for the successful migration of the individual from child to adult age, and full integration of young adults into society. It was demonstrated in a survey that the rate of health self-assessment of 16 to 24 year old young adults was higher than the rate of health self-assessment of the total population of Latvia; however, among the EU member states, the Latvian young adults have the lowest proportion of good or very good health self-assessment (LR Centrālā statistikas pārvalde [CSP], 2014). Health is one of the components of the quality of life and an essential precondition for productivity and social welfare, which is why it is essential to clarify and identify the potentially influential elements of the health of young adults.

The parameters associated with the mental health reflect the ability of young adults to cope with the challenges and problems of their age. Data from population health behaviour studies show that 39.3% of young people aged 15–24 have experienced tension, stress and depression in the last month (Slimību profilakses un kontroles centrs [SPKC], 2015). There is also a high level of suicides in the youth population of Latvia, which is the second most frequent cause of death in this age group (WHO, 2017).

An association between childhood experience of violence and excessive alcohol consumption during a later period of life has been observed in studies on childhood experiences of violence. Excessive consumption of alcohol in the youth population of Latvia is one of the public health problems. According to the

results of the international study ESPAD, 63% of boys and 67% of girls aged 15 have used alcohol in the last month. In Latvia, this figure is higher than the total population of the study, which includes 35 countries of the European region (SPKC, 2016).

Based on the health and health-related behaviour developments of young adults in the population of Latvian youth, as well as studies conducted in other parts of the world on the adverse effects of violence experienced during childhood on the individual's later life, the focus of the doctoral thesis was to analyse the impact of the violence experienced during childhood on the health self-assessment, excessive alcohol consumption, psycho-emotional health problems and suicide attempts of young adults in Latvia.

1.2 Aim of the thesis

The aim of the thesis was to assess the prevalence of violence and its forms in the population of children and young adults of Latvia, and its relationship between the risk factors associated with family, health and its associated disorders, as well as to find out the expert opinions on how the child victims perceive the violence, the consequences of violence, and coping mechanisms and rehabilitation.

1.3 Objectives of the thesis

1. To find out the gender-specific prevalence of childhood experienced physical, emotional, sexual violence, and neglect in the population of young adults;
2. To analyse the associations between violence experienced in childhood with the social, economic and psycho-emotional factors of the family;

3. To identify the association between violence experienced in childhood with parameters associated with the health of young adults;
4. To evaluate the effect of violence experienced in childhood on the parameters associated with health, when adjusted to parameters associated with demographics and family of the young adults;
5. To find out the experience and views of psychologists and psychotherapists working with children who are victims of violence, and their views on how the child victims perceive the violence, the consequences of violence, and coping mechanisms and rehabilitation.

1.4 Hypotheses of the thesis

1. There is a relationship between risk factors associated with family and violence and neglect forms experienced in childhood in gender groups of young adults;
2. There are differences in the parameters associated with health between groups of young adults with different experiences of childhood violence.

1.5 Research question of the thesis

What are the experts' opinions on the child victim's experience of violence, and its impact on health and rehabilitation?

2. MATERIAL AND METHODS

2.1 Quantitative research

2.1.1 Data sources and extraction

The data in the thesis was derived from the Disease Prevention and Control Centre 2011 study on the adverse childhood experiences of young adults of Latvia. The design of the study is a retrospective cross-sectional study. The target population of the study is the young adults of Latvia. The study tool is an internationally recognised and developed questionnaire on the adverse childhood experiences.

2.1.2 Variable characteristics and grouping of the subjects

Dependent characteristics

Health self-assessment. Responses were dichotomized into two groups – good (combining responses of 'good' and 'fairly good') and bad (combining responses of 'fair', 'bad', 'very bad') health self-assessment.

Excessive alcohol consumption was defined as having been intoxicated at least once in the past 30 days.

Psycho-emotional health problems were identified if the respondent had experienced at least two of the four complaints (depression, irritability, nervousness, and difficulty falling asleep) at least once a week in the past six months. To establish suicide attempts, the respondents had to respond to question: 'Have you ever attempted to commit suicide?'

Independent variables

The experience of **physical violence** was identified by questions: 'While you were growing up, how often a parent or other adult in the household: (1) grab, push, slap, or throw something at you; (2) ever hit you so hard that you had marks or were injured'. Physical violence was identified if the answers to the first question were 'often', 'very often', and/or the answers to the second question were 'one, two times', 'sometimes', 'often', 'very often'.

The experience of **emotional violence** was identified by two questions: 'While you were growing up, how often a parent or other adult in the household: (1) swear at you, insult you or humiliate you, (2) and act in a way that made you afraid that you might be physically hurt'. Emotional violence was identified if the answers to the first question were 'often' or 'very often', and/or the answers to the second question were 'one, two times', 'sometimes', 'often', 'very often'.

To assess **sexual violence**, the respondents were asked two questions: 'During your first 18 years of life, did an adult, older relative, family friend or stranger ever perform the following activities?: (1) touch or fondle your body in a sexual manner, (2) try to have any kind of intercourse (oral, anal, or vaginal) with you'. Sexual violence was established if the answer to one or both questions was 'yes'.

Physical neglect against children was identified, using five statements: 'How often each one of these statements is true when considering the first 18 years of your life: 1) you didn't have enough to eat; 2) Your parents were too drunk or high to take care of the family; 3) you had to wear dirty clothes; 4) you knew that there is someone who takes care and protects you; 5) there was someone to take you to the doctor if you needed it.' Physical neglect was established if the respondent replied 'often', 'very often' to one of the first three questions, but responded with 'never', 'rarely' to the last two questions.

Emotional neglect was identified by the following questions: 'How often each one of these statements is true when considering the first 18 years of your

life: 1) There was someone in your family who made you feel important or special; 2) you felt loved in your family; 3) people in your family looked out for each other; 4) you felt like someone in your family hates you; 5) you felt like your parents wished you were never born.' Emotional neglect was defined if the respondent replied 'never', 'rarely' to one of the first three questions, but responded with 'sometimes', 'often', 'very often' to question four and five.

A number of independent variables reflecting the respondent's family environment were included in the thesis. To define the **socio-economic situation of the family,** the Family Affluence Scale was used.

To find out about **parental divorce or separation**, the respondents were asked whether their parents had ever lived separately or been divorced.

Father's violence against mother was determined by asking four questions with answers 'never', 'one, two times', 'sometimes', 'often', 'very often': 'While you were growing up, how often your father/stepfather or mother's partner: (1) pushed, grabbed, or had something thrown at your mother?; (2) kicked, pulled hair or hit your mother with a fist or something hard; (3) repeatedly hit your mother over at least a few minutes; (4) threatened your mother with a gun or knife with the intention to hurt her?' Violence against a woman in the family was defined if the respondent answered 'often', 'very often' to the first question, 'sometimes', 'often', 'very often' to the second question, or if they responded with 'one, two times', 'sometimes', 'often', 'very often' to the third and fourth question.

Excessive alcohol consumption in the family was defined if the respondent gave an affirmative response to whether there was a problem drinker or alcoholic in the family.

Mental health problems in the family were defined if the respondent replied affirmatively to one of these questions: 1) Was a household member depressed or mentally ill; 2) Did a household member ever attempted to commit a suicide.

2.1.3 Characteristics of the study population

In total, 1223 respondents (615 males and 608 females) aged 18 to 25 years were included in the data analysis. The average age of respondents was 18.6 years (standard deviation 0.98). Of all respondents, 89.9% were aged 18-20 years. Among all respondents, 59.3% (n = 725) were high school students, and 40.7% (n = 498) were students of a vocational education institution. Only 10 respondents in general secondary schools were older than 19 years, but the age distribution in vocational education institutions was as follows: 18 years (37.1%), 19 years (35.5%), 20 years (14.9%), 21 years (5.8%), 22 years (3.1%), 23 years (1.9%), 24 years (1.0%) and 25 years (0.8%).

2.1.4 Statistical analysis

Methods used for data analysis were descriptive statistics: frequency distribution, calculation of the mean value, cross tabulation. Chi-square test in 2 × 2 tables was used for comparison of respondent subgroups. For comparison of independent groups whose number exceeds two groups, the method used was determination of binomial proportion confidence interval, by using Wilson Score Interval (Erdoğan and Gülhan, 2016). Spearman's rank correlation coefficient was used to measure the correlation between types of violence.

To determine the relationship between the dependent and independent characteristic of the study, the calculation of odds ratio was used. For association between the childhood experience of violence and risk factors associated with family, a gender stratification analysis in 2 × 2 × k tables was performed to determine the two-factor relationship differences in gender groups. Calculations were performed by using the Mantel-Haenszel method, where the null hypothesis states that there is no relationship between gender strata. The null hypothesis was

rejected if the Mantel-Haenszel test p value was less than 0.05 (McDonald, 2014).

The impact of various types of violence on the parameters associated with the health of young adults - health self-assessment, complaints about psycho-emotional health, excessive alcohol consumption and suicide attempts, was analysed in the multiple logistic regression. Association between violence experienced in childhood and factors associated with health, was adjusted to the respondent's gender and factors associated with family. Separate multivariate regression analysis was performed for each type of violence.

The independent variables included in the regression model were tested for collinearity, to determine whether the independent features do not mutually correlate too closely. The purposeful selection method was used for the selection of variables that would be included in the multivariate regression models. Initially, the relationship between each variable and the result was defined by using univariate regression analysis. Variables with a p value < 0.025 were included in the regression models. This value, instead of the conventional 0.05, of the p value was defined to include all variables which are significant independent variables of the regression model. The effect of confounding factor was tested in regression models. The variable was assumed to be the confounding factor when the odds ratio was observed to change for at least 15% when adjusted to other variables included in the regression model (Bursac, Gauss, Williams and Hosmer, 2008). Multiplicative interaction of independent variables with other independent variables was tested in regression models.

Value of (p) 0.05 was defined for all statistical tests. The results were considered statistically significant at $p < 0.05$. Software MS Excel and IBM SPSS were used for data analysis.

2.2 Qualitative research

2.2.1 Data extraction

In the qualitative part of the study for obtaining information on the experience of experts dealing with child victims of violence, in-depth and semi-structured interviews with experts (psychotherapists, psychologists and psychotherapists-doctors) were used as a tool of data extraction. Qualitative research draws attention to the processes, the nature and structural characteristics of the phenomenon, and helps the researcher to look into the research phenomenon (Flick, Kardoff and Steinke, 2004). In empirical social research, expert interviews are a suitable and often used tool to help the researcher understand the main problems in the research field and provide the field's contextual characteristics. The expert interviews in the thesis are an additional source of information providing a contextual knowledge of the target population (child victims of violence) (Bogner and Menz, 2009).

The protocol of the questions of the expert interviews consisted of three sections of questions. In the first section, the experts were asked about the experience of child victims of violence, and how the children understand the phenomenon of violence. The second section of questions clarified the experts' experience on the consequences of violence on the victim's health. The third section established the opinions of the experts on the overcoming strategies of violence of the child victims, and the role of institutions in this process.

A permission of the Ethics Committee of Rīga Stradiņš University to conduct expert interviews was received. The principles of qualitative research ethics were observed - obtaining informed consent, providing confidentiality and responsibility for the consequences of the research (Rohleder et al., 2015). The consent of the experts for participation in the study was based on a voluntary basis. In order to ensure responsibility towards the potential adverse effects of

the study on the research participants, rather than interviewing child victims of violence themselves, expert interviews were conducted as a means of acquisition of the data, since interviewing the victims pose a retraumatization risk of the violent event.

2.2.2 Selection and profile of respondents

Interviews with experts were conducted between November 29, 2013 and January 20, 2014. Overall, 14 experts were interviewed. In the selection of experts for interviews, maximum variation sampling (Patton, 2002) was used to obtain information from experts with different experience. The main criterion was work experience with child victims of violence, and a consent to be interviewed. To ensure the diversity of the experience of interviewees, the following additional criterion were defined:

- Speciality: psychologists, psychotherapists and doctors-psychotherapists;
- Workplace: public, municipal, private;
- Geographical coverage: various cities and municipalities in Latvia.

The initial recruitment of experts was based on a list of psychologists, psychotherapists and social workers who had completed the 'Training program for psychologists, psychotherapists and social workers for the rehabilitation of abused children'. Experts who work in the following cities in Latvia were interviewed: Rīga, Ventspils, Talsi, Jūrmala, Valmiera, and Daugavpils. All interviews were conducted in the workplaces of the experts. The average duration of the interview was 1 hour and 6 minutes. The shortest interview lasted 38 minutes, but the duration of the longest interview was 1 hour and 49 minutes. Audio files of the interviews were transcribed. The transcriptions of the interviews were conducted between December 1, 2013 and February 24, 2014.

2.2.3 Data processing method

Thematic analysis was used for data processing, which allows to identify, analyse and interpret patterns or themes within qualitative data. Data coding was done manually. The data coding of interviews means allocation of codes to phrases with similar contents. The code includes the basic analytical concept of the study topic (Braun, Clarke and terrace, 2015). The codes were combined into themes, which were based on the three sections of the protocol for interview questions – experience of child victims of violence and understanding of the concept of violence, impact of violence on health, coping strategies for overcoming disorders caused by violence and the role of institutions.

The thematic analysis was performed through the process of six phases (Braun and Clarke, 2006):

1. Familiarization with data. The interviews were transcribed and the transcriptions of the interviews were read several times.
2. Generating initial codes. When reading the text, initial codes based on the context of the conversations were generated.
3. Searching for themes. At this stage, more interpretive analysis was performed and similar codes were combined into initial topics.
4. Reviewing themes. The initial themes were either merged or divided, ensuring uniformity (internal homogeneity) and clearly identifiable differences (external heterogeneity). For structuring and visual display of the obtained results, a thematic map was created.
5. Defining themes. The main idea was identified in each theme by 'cleaning and redefining' the themes.
6. Producing the report. At this stage the report was being written and appropriate quotes from the interviews with experts were used.

3. QUANTITATIVE RESEARCH RESULTS

3.1 The prevalence of violence and the interrelation of types of violence

Of all respondents, 56.0% (n = 578) noted that they have experienced at least one type of violence. Although women generally experienced violence more frequently than men, respectively 58.4% (n = 308) of women and 53.5% (n = 270) of male subjects, gender difference is not statistically significant ($p > 0.05$). All forms of violence, except for emotional neglect, were experienced more often by women, however, statistically significant differences in gender groups occurred only with childhood experience of sexual violence (see table 3.1).

Table 3.1

The prevalence of violence in gender groups, %

Types of violence	Men			Women		
	n	%	95% CI	n	%	95% CI
Physical violence	90	14.9	12.2–17.9	108	17.9	15.0–21.1
Emotional violence	170	28.0	24.6–31.7	212	35.1	31.4–29.0
Sexual violence	36	6.8	5.0–9.3	74	13.7	11.1–16.9
Emotional neglect	144	24.0	20.8–27.6	141	23.5	20.3–27.1
Physical neglect	155	26.1	22.7–29.8	165	28.0	24.5–31.8

Some respondents experienced more than one form of violence. 16.0% (n = 165) had experienced two types of violence, 8.9% (n = 92) — three types of violence, 4.7% (n = 48) experienced four types of violence during childhood, and 0.8% (n = 8) had experienced all five types of violence.

All correlations between the types of physical, emotional, and sexual violence, and physical and emotional neglect were statistically significant. The correlation coefficient showed an insignificant relationship ($r < 0.30$) between

the analysed types of violence, except for the physical and emotional violence (r = 0.49), and emotional and physical neglect (r = 0.32), in which a weak positive relationship was observed.

3.2 Violence experienced in childhood in relation to risk factors associated with family

The distribution of the respondents in groups of the SES of family is as follows: The family SES is low in 29.4% (n = 356), average in 37.2% (n = 451), and high in 33.4% (n = 405) of the respondents. Statistically significant relationship with the SES level of family is observed only in the cases of physical violence and emotional neglect. Young adults from families with low SES, have 1.4 (95% CI = 1.0–2.1) times higher odds to experience physical violence and 1.6 (95% CI = 1.1–2.2) times higher odds to experience emotional neglect, compared to young adults from families with high SES.

Of all respondents, 42.3% (n = 513) have experienced parental divorce or separation. All young adults whose parents were divorced or separated, had 2.0 (95% CI = 1.4–3.0) times higher odds to experience sexual violence in childhood, 1.4 (95% CI = 1.0–1.9) times higher odds to suffer from physical violence, and had 1.5 (95% CI = 1.2–1.9) times higher odds of suffering from emotional violence, compared to young adults whose parents were not divorced or separated. There is no statistically significant association between parental divorce or separation and emotional and physical neglect.

The odds for physical, emotional and sexual violence in the case of parental divorce or separation are gender-specific. Men compared to women are more likely to experience physical and emotional violence in the case of parental divorce or separation. Women whose parents are divorced or separated have 1.9 (95% CI = 1.2–3.2) times higher odds of suffering from sexual violence, compared to women whose parents were not divorced or separated, but for men this association is not statistically significant. The association in gender groups

between physical and emotional neglect with parental divorce or separation does not differ.

Of all respondents, 12.6% (n = 152) experienced father's violence against mother. The father's violence against the mother increase the odds of violence against a child several times. If there is violence against the mother in the family, the odds of a child to experience emotional violence are 5.6 (95 % CI = 3.9–8.1) times higher than in cases where there is no violence against the mother. High odds of physical violence (OR = 4.9 (95% CI = 3.4–7.1)) and emotional neglect (OR = 3.9 (95% CI = 3.4–7.1) against the child are also reported in families where there is violence against the mother.

In families where children experience violence among adult family members, violence against children is also more frequent, but there are gender differences in the victims. The odds of sexual violence (OR = 3.0; 95 % CI = 1.7–5.3) and emotional neglect (OR = 4.4; 95 % CI = 2.8–6.6) in families with violence against the mother, are higher in the female population. With regard to sexual violence, gender groups are not homogeneous ($\chi 2 = 8.3$; $p < 0.05$). There was only one male respondent who had experienced both sexual violence and father's violence against mother, which is not enough of respondents to carry out an association analysis between the two variables. Men, in families where there is violence against mother, have higher odds to suffer from physical (OR = 6.9; 95% CI = 3.8–12.8) and emotional (OR = 6.4; 95% CI = 2.4–6.3) violence, and physical (OR = 3.7; 95% CI = 2.0–6.6) neglect, compared to men in families where there is no violence against the mother.

44.1% of the respondents indicated excessive alcohol use in the family. There is a relationship between excessive alcohol use in family and violence against children. Those young adults from families with alcohol abuse problems had 3 (OR = 3.0; 95% CI = 2.4–3.9) times higher odds for suffering from emotional violence and had 1.5 to 2 times higher odds to suffer from emotional neglect, sexual and physical violence in childhood.

The association between violence experienced in childhood and excessive consumption of alcohol in gender groups differs for the following types of violence: physical, emotional, sexual violence and emotional neglect, but the association between physical neglect and alcohol abuse in family is the same for men and women ($\chi 2 = 2.7$; $p > 0.05$). In families with excessive consumption of alcohol, women have higher odds to suffer from violence. The women in families with excessive consumption of alcohol are more likely to suffer from emotional (OR = 3.2; 95% CI = 2.3–4.6) and sexual (OR = 2.2; 95% CI = 1.3–3.8) violence, compared to women in families with no excessive consumption of alcohol.

19.3% (n = 235) of the respondents indicated family history of mental health problems. The presence of mental health problems in the family increases the odds for children to suffer from all types of violence several times. The highest odds are seen for physical (OR = 4.3 95% CI = 3.1–6.0) and emotional (OR = 4.0; 95% CI = 3.0–5.4) violence. Men are more likely than women to suffer from violence if there is a family member suffering from mental health problems. Men who were growing up in families where a member had mental health problems, were more likely to suffer from physical (OR = 4.7; 95% CI = 3.0–7.3) and emotional neglect (OR = 4.4; 95% CI = 2.9–6.6), compared to men from families with no such problems. Women in families with mental health problems were more likely to suffer from physical and emotional violence, compared to women in families with no such problems.

3.3 The factors associated with the health and family of young adults

The health self-assessment demonstrates the subjective health assessment of the respondents. The number of respondents with good health self-assessment is 80.4% (n = 967), but the number of respondents with bad health self-assessment is 19.3 (n = 236). Statistically significant results ($\chi 2 = 3.7$;

$p < 0.001$) are observed in the gender groups. Of all men, 87.4% (n = 527) assessed their health as good, while only 73.3% (n = 440) of women reported to have good health. The health self-assessment is also linked to the factors associated with the family of the young adult. A higher proportion of young adults, who rated their health as poor, have lived in families with low SES. Young adults from families with low SES, have 1.7% (95% CI = 1.2–2.4) times higher odds to have a poor health self-assessment, compared to young adults from families with high SES. But for average and high SES of the family odds of differences for a poor health self-assessment were not observed. Parental divorce or separation (OR = 1.8; 95% CI = 1.4–2.5) and father's violence against mother (OR = 1.9; 95% CI = 1.3–2.8) adversely affect the health assessment of young adults, as well. Similarly, young adults with family history of excessive alcohol use have 2.1 (95% CI = 1.5–2.7) times higher odds for a poor health self-assessment, compared to young adults from families with no such history. Poor health self-assessment of the young adults is also associated with family members with mental health problems living in the household. Young adults living with a family member suffering from mental health problems, have 2.5 (95% CI = 1.8–3.5) times higher odds of having a poor health self-assessment, compared to young adults from families with no such problems.

Among all the young adults interviewed, 45.1% (n = 548) indicated that they had not been drunk in the last month, but 55.9% (n = 667) of the respondents indicated that in the past month they had been drunk at least once. Men were drunk more frequently in the past month than women, respectively, 62.1% (n = 378) of men and 47.7% (n = 289) of women. Differences in gender groups are statistically significant ($\chi 2 = 25.4$, $p < 0.001$).

Excessive alcohol use is more common among young adults from families with high and medium SES, compared to young adults who live in families with low SES. Association analysis shows that young adults who live in a family with a high SES have higher odds to be exposed to excessive alcohol use in the past

month, compared to young adults from families with low SES (OR = 0.7; 95% CI = 0.5–1.0). For the other risk factors associated with family such as parental divorce or separation, violence against the mother, excessive alcohol use in family and mental health problems, statistically significant differences linked to excessive use of alcohol in young adults are not observed ($p > 0.05$).

Psycho-emotional problems were observed in 31.6% (n = 180) of men and 42.4% (n = 250) of women. Differences are statistically significant ($\chi2 = 14.5$, $p < 0.001$). Differences of the prevalence of psycho-emotional health problems are observed in every group of risk factors associated with family, except for the factor of SES of family. If there has been violence against the mother in the family, prevalence of mental health problems in young adults is three times higher, compared to those young adults from families with no such violence. Similarly, the presence of mental health problems in the family increases the odds of development of psycho-emotional problems of young adults by three times, but excessive use of alcohol in the family is associated with 2.4 (95% CI = 1.9–3.0) times higher odds of development of psycho-emotional problems in young adults.

Of all respondents, 6.1% (n = 74) have attempted suicide. 3.1% (n = 19) of men have attempted suicide, while the number of women who have attempted suicide is higher - 9.2% (n = 55). Differences in gender groups are statistically significant ($\chi2 = 19.2$, $p < 0.001$). The age of the first suicide attempt ranged from 11 to 20 years. The average age of the first suicide attempt was 15.1 (standard deviation 2.0).

It was observed in the analysis of associations between the SES of family and suicide attempts that, the largest proportion of suicide attempts are among young adults from families with low SES (7.7% (n = 27; 95% CI = 5.3–10.9)), followed by suicide attempts by respondents from families with average SES (5.0% (n = 22; 95% CI = 3.3–7.4)), and high SES (6.2% (n = 25; 95% CI = 4.2–9.0), however, the differences are not statistically significant.

For the other factors associated with family, statistically significant differences are observed in the proportion of young adults who have attempted to commit a suicide. Higher odds of suicide attempts are observed in young adults whose parents were divorced or separated, whose family had experienced violence against mother and excessive use of alcohol. Particularly high odds ratio of suicide attempts (OR = 4.8; 95% CI = 3.0–7.8) are observed in families with mental health problems.

3.4 Violence experienced in childhood and factors associated with the health of young adults

The results of the analysis of the associations indicate that exist differences in the health self-assessment of young adults who have suffered from violence and respondents who have not. The young adults who suffered from physical violence and physical neglect, had, respectively, 2.6 and 2.4 times higher odds for a poor health self-assessment, compared to the young adults who did not suffer from these types of violence. Other types of violence in childhood also increases the odds of a poor health self-assessment in young adult age. Only the relationship between sexual violence during childhood and health self-assessment in young adult age is not statistically significant (see Table 3.2.).

The analysis of the multivariate logistic regression shows that women have more than two times higher odds of a poor health self-assessment than men. This relationship is observed in all regression models of violence types experienced during childhood, except for regression model which includes sexual violence (OR = 1.0 (0.7–1.3)). Young adults from families with low SES have about 1.5 times higher odds of having poor health self-assessment, compared to young adults from families with high SES. 1.5 times higher odds for poor health self-assessment is also observed in young adults whose parents are divorced or separated, and whose families have drinking problems, compared to young adults from families which do not have such problems. Presence of

mental health problems in the family are associated with 1.7 to 2.2 (depending on the type of violence included in the multivariate regression model) times higher odds to have poor health self-assessment in young adult age, compared to young adults from families with no cases of mental health problems. Father's violence against mother in the multivariate regression model was not statistically significantly associated with health self-assessment in young adults.

Table 3.2

Prevalence of psycho-emotional health problems and odds ratio in relation to the types of violence experienced during childhood

Type of violence		n	%	OR 95% CI[a]	Adjusted OR 95% CI[b]
Physical violence**	No	167	16.7	1.0	1.0
	Yes	67	34.5	2.6 (1.9–3.7)	2.2 (1.5–3.2)
Emotional violence**	No	126	15.4	1.0	1.0
	Yes	108	28.6	2.2 (1.7–3.0)	1.6 (1.2–2.3)
Sexual violence	No	178	18.8	1.0	1.0
	Yes	27	24.5	1.4 (0.9– 2.2)	1.2 (0.7–1.9)
Emotional neglect**	No	146	16.1	1.0	1.0
	Yes	88	31.2	2.4 (1.7–3.2)	2.2 (1.6–3.2)
Physical neglect**	No	146	17.1	1.0	1.0
	Yes	85	27.0	1.8 (1.3– 2.4)	1.8 (1.3–2.5)

* $p < 0.05$
**$p < 0.001$
[a] Odds ratio is calculated separately for each type of violence
[b] The odds ratio has been calculated for each type of violence separately and adjusted to gender, SES of the family, parental divorce, father's violence against the mother, excessive use of alcohol, and mental health problems in the family

The odds of excessive use of alcohol in young adults due to physical violence, adjusted with the respondent's gender, is 1.4 (95% CI = 1.0–2.0) times higher than in young adults who have not suffered from physical violence. The odds of excessive use of alcohol in young adult age of young adults who had experienced emotional violence in childhood, are 1.2 (95% CI = 1.0–1.6) times

higher than in those young adults who have not experienced this type of violence (see Table 3.3.). The odds of excessive use of alcohol in young adult age differ by gender groups. Men have 1.8 (95% CI = 1.5–2.3) times higher odds of excessive use of alcohol than women, and these odds are the same, regardless of whether the association is adjusted with the experience of physical or emotional violence during childhood.

Table 3.3

Prevalence of excessive alcohol consumption and odds ratio in relation to the types of violence experienced during childhood

Type of violence		n	%	OR (95% CI)[a]	Adjusted OR (95% CI)[b]
Physical violence*	No	540	53.7	1.0	1.0
	Yes	121	61.4	1.4 (1.0–1.9)	1.4 (1.0–2.0)
Emotional violence	No	442	53.7	1.0	1.0
	Yes	218	57.4	1.2 (1.0–1.6)	1.2 (1.0–1.6)
Sexual violence	No	521	54.8	1.0	1.0
	Yes	63	57.3	1.1 (0.7–1.7)	–
Emotional neglect	No	497	54.6	1.0	–
	Yes	174	55.0	1.0 (0.8–1.3)	–
Physical neglect	No	469	54.6	1.0	–
	Yes	174	54.9	1.0 (0.8–1.3)	–

* $p < 0,05$

[a] Odds ratio is calculated separately for each type of violence

[b] Odds ratio is calculated separately for each type of violence and adjusted to the gender of respondents

Both univariate association analysis and multivariate regression analysis show that psycho-emotional health problems in young adults are associated with childhood experiences of violence. Young adults who have suffered from physical violence in childhood have 3.6 (95% CI = 2.6–5.0) times higher odds of development of psycho-emotional health problems, but those young adults who suffered from emotional violence in childhood have

3.3 (95% CI = 2.6–4.3) times higher odds for psycho-emotional problems. Adjusting this association with the respondent's gender and factors associated with family, the coherence of the association weakens and is respectively 2.6 times in the cases of physical violence and 2.3 times in cases of emotional violence. The experience of sexual violence and physical neglect in childhood in the univariate analysis is associated with higher odds of development of psycho-emotional health problems in young adults, but it becomes statistically insignificant in multivariate analysis (see Table 3.4.)

Table 3.4

Prevalence of psycho-emotional health problems and odds ratio in relation to the types of violence experienced in childhood

Type of violence		n	%	OR (95% CI)[a]	Adjusted OR (95% CI)[b]
Physical violence**	No	310	32.1	1.0	1.0
	Yes	118	63.1	3.6 (2.6–5.0)	2.6 (1.8–3.7)
Emotional violence**	No	220	28.1	1.0	1.0
	Yes	208	56.4	3.3 (2.6–4.3)	2.3 (1.7–3.0)
Sexual violence	No	323	35.0	1.0	1.0
	Yes	49	46.7	1.6 (1.1–2.4)	1.3 (0.8–1.9)
Emotional neglect**	No	278	31.7	1.0	1.0
	Yes	146	55.1	2.7 (2.0–3.5)	2.1 (1.5–2.8)
Physical neglect	No	296	35.6	1.0	1.0
	Yes	128	43.2	1.4 (1.1–1.8)	1.1 (0.9–1.5)

* $p < 0.05$
**$p < 0.001$
[a] Odds ratio is calculated separately for each type of violence
[b] The odds ratio has been calculated for each type of violence separately and adjusted to gender, parental divorce, father's violence against the mother, excessive use of alcohol, and mental health problems in the family

The experience of physical violence and emotional neglect is associated with five times higher odds for suicide attempts, compared to those respondents who did not experience these types of violence. The experience of emotional

violence in childhood is associated with 3.3 (95% CI = 2.0–5.3) times higher odds for suicide attempts, physical neglect is associated with 2.4 (95% CI = 1.5–3.9) times higher odds for attempting a suicide, but sexual violence is associated with 2.2 (95% CI = 1.1–4.1) times higher odds for suicide attempts. When adjusted with the respondent's gender and factors associated with the family, the relationship decreases between violence experienced in childhood and suicide attempts at a later period of life, but the relationship between experiences of sexual violence in childhood and suicide attempts does not show an association (see Table 3.5.).

Table 3.5

Prevalence of suicide attempts and odds ratio in relation to the types of violence experienced in childhood

Type of violence		n	%	OR 95% CI[a]	Adjusted OR (95% CI)[b]
Physical violence**	No	40	4.0	1.0	1.0
	Yes	34	17.4	5.1 (3.1–8.3)	3.7 (2.1–6.2)
Emotional violence**	No	31	3.8	1.0	1.0
	Yes	43	11.4	3.3 (2.0–5.3)	2.2 (1.3–3.7)
Sexual violence	No	55	5.8	1.0	1.0
	Yes	13	11.8	2.2 (1.1–4.1)	1.1 (0.5–2.2)
Emotional neglect**	No	31	3.4	1.0	1.0
	Yes	43	15.4	5.1 (3.2–8.3)	4.0 (2.3–6.8)
Physical neglect**	No	39	4.6	1.0	1.0
	Yes	33	10.4	2.4 (1.5–3.9)	2.2 (1.3–3.7)

* $p < 0.05$
** $p < 0.001$
[a] Odds ratio is calculated separately for each type of violence
[b] The odds ratio has been calculated for each type of violence separately and adjusted to gender, parental divorce, father's violence against mother, excessive alcohol consumption, and mental health problems in the family

4. QUALITATIVE RESEARCH RESULTS

4.1 Experience of child victims of violence and understanding of the concept of violence

4.1.1 Diversity of the conceptualization of violence

Following the interpretation of the interviews, the question section on the victims' experience of violence and the understanding of the concept of violence, underlined three topics: the conceptual diversity of the notion of violence, characteristics of the experienced violence, and child's openness on the experienced violence. The experience of experts shows that the child victims do not have a clear understanding about the experienced violence. Since violence against children most often occurs within the family, child's emotional attachment to their family members and ambivalent feelings towards the abuser makes it difficult to objectively perceive the situation. The environment of the family is perceived by the child as self-evident, so that processes and human behaviour happening in the family, including violence, are also perceived as normal. The child begins to analyse and compare their family with other families in adolescence age. Experts observe that children have incomplete understanding of violence as a concept, but note that violence among children is recognised as an activity or as a situation. Some experts pointed out that in some cases they have observed children manipulating adults by using violence as an instrument.

4.1.2 Characteristics of the children's experience of violence

Most commonly the children who had come to the attention of the interviewed experts were victims of emotional violence. The second most frequent type of experienced violence was neglect. Most rarely the children were

victims of sexual violence, however, this type of violence usually leaves the most serious consequences on the child's future health. The experience of experts shows that children often experience more than just one type of violence, and the combinations of types of violence tend to vary. Members of the family are identified to be the most frequent perpetrators, which can be explained by abuse of parental authority.

4.1.3 The openness of the child victim about the violence

The experience of experts on the child's ability to openly tell about the violence differs. Some experts pointed out that younger children and girls talk about the violence more openly. The amount of time period that has passed since the violence is also crucial - the sooner the violence has been noticed, the easier it is for the child to talk about it. As the main reasons why children remain silent about the abuse, the experts mention a potential manipulation of the child's testimony and manipulation of the child by the violent or non-violent parent. Similarly, the child's inner feelings of shame, guilt or fear can affect the ability to openly talk about the violence.

4.2 The impact of violence on health

4.2.1 The impact on the physical and psycho-emotional health

Violence causes short and long-term adverse effects on the health of the child victim. Violence can cause various consequences on the physical health of the child - injuries, diseases, unwanted pregnancies. In all interviews, experts pointed to psycho-somatic and cognitive disturbances due to the stress from experienced violence. The behavioural and psycho-emotional disorders of the

child are described as externalized or internalised psychiatric disorders, the first causing aggressive and antisocial behaviours, while the other is the culprit for low self-esteem, anxiety and depressive mood. Similarly, child victims experience difficulties in socialising and establishing normal, socially acceptable relationships with the peers.

4.2.2 The factors that influence health effects

In several of the interviews, the experts pointed out that in the long term the most varied effect on the child is caused by emotional violence, but as the second most common type of violence with regard to the severity of the resulting consequences, sexual violence was noted, but physical violence was often classified as the least harmful to the child's health in the long term. The duration of the violence is also significant, whether it was a single episode, or lasting and repeated events of violence. Episodes of violence that are long and repeated cause more severe consequences on child's health. The effects of violence on health also depend on the child's own resources, the degree of personal and intelligence development, as well as biological factors, such as heredity.

4.3 Strategies for overcoming disorders caused by violence, the role of institutions

4.3.1 The characterization of coping strategies for overcoming disorders

Children's reactions to the experience of violence are different. Sometimes the child victims blame themselves for what happened, but sometimes the reaction is the opposite - anger and aggression oriented outwards, which is particularly seen in boys. Similarly, often seen is the strategy of denial and exclusion of violence from the consciousness. A positive coping strategy for

overcoming the disorders caused by the violence would be if child victims sought help and support themselves, but experts note that in their experience it happens rarely. More frequently observed are the negative coping strategies of disorders caused by violence, such as deviant behaviour, violation of generally accepted social roles, excessive use of substances, self-mutilation and suicide attempts.

4.3.2 Dealing with child victim

Early detection of violence against child is essential for reducing the violence and successfully rehabilitating the child victim. The experience of experts suggests that violence is not always immediately detected after the violent event. A few days up to several years can pass before the violent event is discovered. Violence against a child can be recognised by changes in the behaviour or external appearances of the child. Most commonly, the institutions that sight and report possible cases of child violence are schools and social services, while medical practitioners report cases of violence relatively rarely.

The basic prerequisites for a successful rehabilitation from violence are security and support. The most important is the support of the child's own family, but it can also be provided by other adults: relative, teacher, coach and others. The type of support is also significant. It is important to believe the child, to be understanding and in no way condemning. The child should receive professional help from a psychologist or psychotherapist, who can objectively evaluate what has happened and help the child to deal with disorders induced by the stress of the violence. The cases when children suffer from institutions were pointed out by experts as the weaknesses of rehabilitation. Those are situations when the child victims are supposed to receive support and assistance from various types of institutions (social service, police, Orphan's Court, etc.), but in reality, interaction with different specialists creates even greater harm and psycho-emotional trauma. The most frequent risks include the unresponsiveness of

specialists and poor professional skills, the lack of systemic and sustained action by the institutions in tackling the cases of violence against children, as well as the issues of confidentiality and the leakage of information.

4.3.3 The systemic requirements of rehabilitation

Highly trained professionals and their availability are an important resource for the rehabilitation of child victims of violence. Training is necessary for specialists in different sectors involved in the detection and solving of cases of violence against children. Successful solving of cases of violence against children require inter-institutional cooperation. The experts who experienced this kind of cooperation in dealing with cases of violence against children rate the results positively.

In addition to existing programmes and services, support programmes should be provided not only to the child victim but to the whole family of the child, as children's parents often lack the knowledge and understanding of violence against the child. Similarly, systemic solving of cases of violence against children should provide assistance programmes for the perpetrator, in order to prevent new potential cases of violence against the same child or another person. It is important to take preventive measures to reduce violence, such as educating the public and parents on violence against children, more efficient monitoring of sexual violence offenders and other measures. In order to protect the child in the investigation of the violence against the child, it is important that the regulatory framework provides for the perpetrator to leave the house, not the child victim. It is also important that the child testifies and the testimony is recorded in the least possible period of time since the event of violence, so that the testimony could be used in the investigation, as well as to prevent the testimony of the child from being influenced by other parties. With regards to the rehabilitation of child victims, the experts noted that it would be beneficial to

differentiate the length of treatment for child victims, evaluating each case individually and carefully assessing the need for placing the child in a crisis centre, ensuring as much as possible that the child is left in the usual environment and providing rehabilitation services at home.

5. DISCUSSION

The first hypothesis of the thesis has been confirmed - there is a relationship between the risk factors associated with family and the types of violence experienced in childhood for gender groups of young adults. Statistically significant relationships were observed between different factors associated with family and violence against children (see Table 5.1). The second hypothesis, which provided that there are differences in parameters associated with health between groups of young adults with different experiences of violence in childhood, was partly confirmed (see Table 5.1). Namely, a relationship between the parameters associated with health of young adults and physical and emotional violence and neglect was observed, but a relationship between the parameters and sexual violence in childhood was not observed.

The prevalence of **emotional violence** in the population of young adults in Latvia is higher than in other countries, but the indicators of the level of emotional neglect in childhood are similar or even lower. The results of the thesis match with the results of a study published in 2004 on the comparison of emotional and physical violence rates between teenagers and young adults in four Baltic and Eastern European countries (Sebre et al., 2004). Including the 2004 study, the experience rate of emotional violence in the population of Latvia was one of the highest among the rates of other countries involved in the study. The national studies of other countries on the adverse childhood experiences show lower prevalence of emotional violence in young adults than in the Latvian population: in the U.S. (10.3%) (Dube et al., 2006), Great Britain (17.3%) (Belize et al., 2014) and the Netherlands (12.9%) (Enns et al., 2006). The prevalence of **emotional neglect** (23.6%) is higher than in the US study (14.8%) (Dube et al., 2006), but is at a similar level with the prevalence in the Netherlands (25.2%) (Enns et al., 2006). A meta-analysis study in 2013 showed results of 16 studies on the prevalence of neglect in childhood. The compiled prevalence rate was

18.4% for emotional neglect and 16.3% for physical neglect. The prevalence of both emotional and **physical neglect** in the population of young adults in Latvia was higher, respectively, 23.6% and 27.0%.

Emotional violence and neglect are one of the most difficult forms of violence to recognize, since the damage caused is not immediately recognizable and the adverse effects are felt only in the long term. Emotional violence against children as a separate form of violence was defined relatively recently - about 25 years ago (Cindy and Miller-Perrin, 2013), thus the research and understanding of this type of violence is a relatively new. Similarly, the emotional violence and its recognizability may vary in different societies. The results of the study on physical and emotional violence against children in the Baltic and Eastern European countries show that there exist differences even between the Latvian and Lithuanian societies, which territorially are located next to each other. Regarding the emotional violence against the children by parents, the most common type of violence in Lithuania was the active form of emotional violence – screaming at the child, while in the population of Latvia, parents most commonly used the passive form of emotional violence that causes the child to feel guilt. Other studies have shown that it is important to study the forms of emotional violence against children separately, since they can cause severe and adverse consequences on the health and well-being of the child in the long-term (McCabe, 2003; Crosson-Tower, 1999; Rose & Fife, 2012). The experts' experience of working with child victims of violence indicates that emotional violence and neglect of the child are among the most common forms of violence experienced by children, and the experience of these forms of violence leave significant consequences on the long-term well-being of the victims. The fact that the indicators of the prevalence of emotional violence and neglect are higher in the Latvian population of young adults than in the population of other countries, and that the information found in scientific literature regarding the negative impact of this violence on the physical, mental and social health in the

future, point to the importance of minimizing this type of violence in the society of Latvia.

The prevalence of **physical violence** experienced in childhood in the young adult population (16.3%) of Latvia is lower than in a similar study in the U.S (26.7%) (Dube et al., 2006), but is higher than in some European countries: the United Kingdom (14.3%) (Belize et al., 2014), the Netherlands (8.7%) (Enns et al., 2006) and Sweden (15.2%) (Annerback, Wroutin and Gusstafsson, 2010). Perhaps this can be explained by the differences in the legality of physical punishments in different countries. For example, in Sweden, the use of any kind of physical punishment in raising children has been prohibited since 1979 (Pinheiro, 2006), but in Latvia it was banned in 1998. The U.S., on the other hand, is the only UN member state that has not ratified the Convention on the Rights of the Child (1989) and in the U.S. it is still not fully prohibited to physically punish children with the intention of discipline. Attitude towards the use of physical punishment of children for disciplinary purposes could also be one of the influencing factors in physical violence against children. Studies have collected information on various factors associated with society that contribute to the use of physical punishment. They are: legitimacy and acceptance of violence in society, inequalities in society and the family, cultural beliefs about the necessity and innocence of physical punishments, agricultural and industrial society model in contrast to post-industrial society model (Straus, 2010). A part of the society in Latvia is still inclined in favour of the use of physical punishment for disciplining children. The results from the survey on the attitude of the Latvian population towards the violence against children, indicate that approximately half of respondents considered that hitting children as a form of punishment may be used sometimes, while approximately a third of respondents thought that physical punishment of children should not be prohibited by law (Pirsko, 2010).

The literature analysis shows that the prevalence of **sexual violence** experienced during childhood varies from 7.0% (Enns et al., 2006) to 21.3% (Bellis et al., 2014). The compiled rate in a meta-analysis study on the results of 217 studies on the prevalence of sexual violence in childhood was 11.8% (Stoltenborgh, van IJzendoorn, Euser and Bakermans-Kranenburg, 2011), which is close to the ratio of prevalence (10.4%) of sexual violence experienced in childhood of Latvian young adults. Explanations, why the prevalence of childhood experiences of different types of violence differs in study populations, vary. The variation of indicators may also be affected by the differences in the study methodology, for example, the case definition used for the study, scales used for measurement, and assessment tools. The prevalence of sexual violence has been identified to vary widely according to the forms of sexual abuse included in the case definition of the study. The prevalence indicator compiled in the meta-analysis study showed that, if any kind of sexual violence was included in the definition of violence, then prevalence rate for girls was 25.3% and 8.7% for boys, but narrowing the definition of violence to instances with penetration, the prevalence rate was 5.3% in girls and 1.9% in boys (Ezzati, Lopez, Rodgers and Murray, 2004). The source of data used in the study may also have an important role. Population surveys show approximately ten times higher ratios of violence in childhood than is reported to child protection authorities (Fergusson, Horwood and Woodward, 2000; MacMillan, Jamieson and Walsh, 2003). This indicates that sexual violence in most cases is hidden and thus more likely to recur.

In families where child violence is present, relationship can be found between different factors associated with environment of the family. This is supported by the Bronfenbrenner's socio-ecological theory (Bronfenbrenner, 1979). Statistically significant relationships (see Table 5.1) between different factors associated with family and violence experienced in childhood were also found in the thesis.

One of the hypotheses of the thesis was that there are differences in the parameters associated with young adults, depending on the experience of violence in childhood. Based on the health and health-related behavioural developments in public health of young adults, as well as evidence from scientific research, the following health parameters were selected: health self-assessment of young adults, excessive consumption of alcohol, psycho-emotional health complaints and suicide attempts. The health outcomes, which demonstrated a statistically significant relationship with the violence experienced in childhood are identified in Table 5.1.

Evidence from neurobiology studies explains how adverse experiences during childhood can have implications on the mental and physical development of a child and contribute to long-term health problems, while epidemiological studies conducted in large populations with many participants demonstrate the presence of the relationship between these connections at the level of population. Although some studies have been carried out in the form of cohort studies, and have demonstrated causal relation between adverse experiences during childhood and health-related disorders in a later life period, in many of the studies, including the thesis study, adult respondents were surveyed about their childhood experiences. It should be noted that this kind of design of the study may be associated with systematic recall bias (Sklzo and Nieto, 2014), namely wrongly classifying the people who suffered from violence as people who did not experience violence, or vice versa. Therefore, recall bias may affect the actual strength of the relationship between the parameters associated with violence experienced in childhood and parameters associated with health in young adults. To verify the accuracy of the answers of respondents on adverse childhood experiences, the study compared the data on adverse childhood experiences of violence with information from objective sources (official records, information from other parties). It was concluded that the self-reported information was sufficiently accurate and can be used, however, potential systematic deviations

need to be taken into account. It was also concluded that by using the retrospective survey of respondents, the actual prevalence of violence experienced in childhood might be estimated lower than it is in reality (Hardt and Rutter, 2004). This suggests that the number of cases of childhood violence could be higher.

Table 5.1

The relationship between risk factors associated with family and health outcomes of young adults with various types of violence experienced in childhood

Risk factors and health outcomes	Type of violence				
	Physical violence	Emotional violence	Sexual violence	Emotional neglect	Physical neglect
Family risk factors					
Low SES	√			√	
Parental divorce	√	√	√		
Violence against mother	√	√	√	√	√
Excessive use of alcohol	√	√	√	√	√
Mental health problems	√	√	√	√	√
Health outcomes for young adults					
Poor health self-assessment	√	√		√	√
Excessive use of alcohol	√	√			
Psycho-emotional health problems	√	√		√	
Suicide attempts	√	√		√	√

√ – statistically significant associations between variables

The study on the adverse experiences acquired during childhood was conducted as a cross-sectional study, in which information was obtained retrospectively from study participants. It should be noted that this kind of study

design does not allow an assessment of the cause-and-effect relationship. The results of the study may also be affected by the systematic recall bias, the case definition used in the study and the data collection tools.

In order to obtain information in the thesis on the rehabilitation of child victims of violence, experts were asked about the coping strategies for overcoming disorders caused by violence, and the involvement of institutions in recognizing violence and rehabilitation of child victims. To decrease violence and its effects on children, it is essential for society to detect instances of violence as early as possible, since it can improve the rehabilitation results of child victims. The Section No. 73 of the Protection of the Rights of the Child Law determines that every person has the duty to inform the police, Orphan's Court or another competent authority, but health care, pedagogical, social field or police employees, and elected State and local government officials, who have received information regarding violations of rights of the child and who have failed to inform the institutions referred to in regard to such, shall be held liable as laid down in law for such failure to inform. The experts in their work experience have noted that instances of violence are most often reported by schools and social services, as well as neighbours of the child victim, but are relatively less often reported by health care professionals. Despite that health professionals are legally bound to involve and recognise cases of violence against children, and are bound to inform authorities, in practice it is not always successfully done. The WHO recommendations to reduce violence against children state that health sector workers, especially primary health care and emergency specialists and paediatricians, play an important role in detecting instances of violence, therefore it is necessary to train these specialists to recognise violence by injuries, diseases and child's behaviour, and instruct them on how to take action in the event of suspected violence (WHO and International Society for Prevention and child abuse and Neglect, 2006). Considering the previously mentioned, to detect instances of violence against children more

successfully, obstacles and potential solutions for reporting instances of violence against children should be identified by the health care sector.

The experts noted in the interviews that support, safety and organized environment with predictable everyday routine should be ensured in the rehabilitation process. The most important support is the child victim's family, so assistance programs must be also provided to the child victim's family members. In the course of rehabilitation, the child also requires assistance from a professional psychologist or psychotherapist. The WHO recommendations for reducing violence against children indicate that, according to evidence from research, the most effective methods for dealing with child victims of violence are the behavioural and cognitive intervention techniques (WHO and International Society for Prevention and Child Abuse and Neglect, 2006). However, psychological help service cannot always be provided for all child victims. In a US study on the extent of psychological assistance for children who have suffered from violence, it was concluded that the service was provided to only half of the children who needed it (Petrenko, Culhane, Garrido and TausCode, 2011). Cabinet of Ministers Regulation No. 89 on the procedures for the necessary assistance for child victim who has suffered from illegal activities provide that social rehabilitation services for the child victims of violence are available at their place of residence (up to ten 45-minute consultations) and at a social rehabilitation institution (up to 30 to 60 days), however, the experience of experts show that in some cases child victims require longer psychological help and support than it is currently prescribed by the law.

As an important aspect of successful combating of violence against children and recovery of child victims, experts indicated the development and provision of interdisciplinary practice. The WHO recommendations for reducing violence against children provide for the need of multi-sectoral cooperation between educational, social welfare, judicial, health and other parties in local administrations, experts and non-governmental organisations (WHO, 2013a).

An important role in detection of violence and rehabilitation of child victims plays the specialists' professionalism, knowledge and understanding of child violence and its consequences, therefore, experts agree that training about the violence against children, its forms and consequences are necessary, as well as training on the professional duties when interacting with specialists from different sectors dealing with child violence. The opinions of experts coincide with the WHO recommendations, which highlight the necessity for educating and training specialists in different sectors (Krug et al., 2002).

7. CONCLUSIONS

1. Most often young adults in childhood have experienced emotional violence (31.5%), physical (27.0%) and emotional (23.8%) neglect, but less frequently suffered from physical (16.4%) and sexual (10.3%) violence.
2. All forms of violence, except for emotional neglect, were experienced more often by women, however, statistically significant differences in gender groups were identified only with childhood experience of sexual violence (13.7% women and 6.8% men).
3. Low SES of family is associated with 1.4 times higher odds for physical violence and 1.6 times higher odds for emotional neglect when compared to families with high SES. Differences in gender groups were not identified.
4. Parental divorce or separation is associated with 1.4 times higher odds for physical violence, 1.5 times for emotional violence, and 2.0 times higher odds for sexual violence, compared to young adults whose parents were not divorced. Men had higher odds to suffer from emotional and physical violence, while the female population was more subjected to sexual violence.
5. Violence against mother increased the odds to suffer from all types of violence against children - physical (OR = 4.9), emotional (OR = 5.6) and sexual (OR = 2.4) violence, emotional (OR = 3.9) and physical (OR = 2.9) neglect, compared to young adults from families with no violence against mother. Men had higher odds of experiencing physical and emotional violence and physical neglect, but women had higher odds of experiencing sexual abuse and emotional neglect.
6. Excessive use of alcohol in the family increased the odds for physical (OR = 2.0), emotional (OR = 3.0), sexual (OR = 1.9) violence and emotional (OR = 1.5) and physical (OR = 1.3) neglect. The odds ratio to suffer from all types of violence was higher in the female population.

7. Mental health problems in the family are associated with 4.3 times higher odds for physical, 4.0 times for emotional, 2.4 times for sexual violence, and 3.3 and 1.4 times higher odds for emotional and physical neglect, respectively, compared to young adults from families that did not have mental problems. Odds for suffering from all types of violence, except for physical neglect, were increased in the male population.
8. The young adults who had experienced some form of violence (except sexual abuse) in childhood, had 1.2–2.2 times (depending on the form of violence) higher odds for poor health self-assessment, when compared to young adults who did not witness violence in childhood and when adjusting to the gender and risk factors associated with family.
9. Physical and emotional violence experienced during childhood increased the odds of excessive alcohol use in adolescence by 1.4 and 1.2 times, compared to young adults without experience of violence. The association is adjusted to the respondent's gender.
10. Young adults who experienced physical and emotional violence, and emotional neglect during childhood, had respectively 2.6, 2.3 and 2.1 times higher odds of developing mental health problems during adolescence, compared to young adults without such experience and when adjusting to the factors associated with family and respondent's gender.
11. Violence (except sexual violence) experienced during childhood increased the odds of suicide attempts in young adult age by 2.0–4.0 times, compared to young adults without violent experience and when adjusted to factors associated with family and respondent's gender.
12. The child victims do not always have full understanding of the concept of violence. Often violence is understood as an activity or situation, less frequently as a phenomenon, and the understanding of the concept depends on such factors as the child's age and education.

13. Early detection of instances of violence against children depends on the type of violence, child's relation to the perpetrator, education and action of the competent professionals and institutions. Although reporting instances of violence against children are mandated by law, the results show that medical practitioners report these instances rarely.
14. In the process of rehabilitation of child victims of violence, it is important to ensure support, safety and organized environment, as well as psychological help for child victims.
15. In the process of detection of violence against children and rehabilitation of child victims, it is necessary to provide multi-sectoral cooperation and training of specialists involved in the field of violence against children on the forms and consequences of violence, as well as professional responsibilities when faced with instances of child violence.

8. PRACTICAL RECOMMENDATIONS

1. Health care professionals need to acquire skills that would allow them to identify violence against children based on specific signs. There are different forms of violence against children, so visible marks of violence cannot always be seen on the victim's body during a physical examination. Experience of violence can also be identified by other signs, such as the child's behavioural and developmental problems. Therefore, it is important to train health care specialists on the physical and psycho-emotional health characteristics of child victims of violence. Given the negative impact of violence on child's health in the long term, it is essential to recognise and report these cases to competent institutions in time. Early detection of cases of violence and assistance to the victims would reduce the adverse effects of violence, such as psycho-emotional health problems and substance abuse, in young adolescence age.
2. Social workers should pay more attention to families with risk factors associated with family – violence against mother, excessive alcohol consumption, psycho-emotional health problems, parental divorce, and they should take a pro-active action to identify instances of violence against children in time and help the family in dealing with competent authorities.
3. Psychologists and psychotherapists should engage in the evaluation of the instances of violence and provide assistance, taking into account the child's needs and contextual factors of the situation, as well as ensuring the confidentiality of the information. In the process of psychological rehabilitation, services should also be also provided to the family of the child victim. To the extent possible, the duration of psycho-emotional assistance should be adjusted by evaluating each instance independently.
4. Violence against children should be prioritised by the public health policy makers as one of the public health priorities. The public health approach

provides for the development and introduction of evidence-based and problem-prevention measures. Given the specific evidence-based public health requirements and the impact of violence on victims' health both in the short and long term, the development and management of policy for the reduction of violence is the responsibility of the Ministry of Health. The WHO recommendations for reducing violence against children also stresses the role of the Ministry of Health as the coordinating authority for reducing violence against children at a national level. Systematic and mutually coordinated actions are needed to address the problem of violence against children. They are:

a. Monitoring and data collection to identify the extent of the problem. Evidence from studies shows that a large proportion of violence against children is not identified. Identifying the scale of the problem is necessary to determine the target population and to assess the effectiveness of the implemented measures over a longer period of time;
b. Data analysis and identification of risk factors to identify the needs of the child victims of violence, the risk factors for violence and the factors that may be used to reduce violence;
c. The development of intervention measures based on evidence-based public health decision-making, which takes into account three key points: the best available evidence of an effective programme, the characteristics of the target population based on the needs and values, and resources available, including specialist resources;
d. Implementation of activities and the provision of their sustainability for reducing the violence against children. Successful cross-sectoral cooperation plays an important role in reducing violence. The Ministry of Health should be competent to coordinate policy on reducing violence against children in the country and ensure cross-sectoral cooperation. It is

also important to educate the public and train specialists in different sectors on the violence against children.

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