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Community survey of elder maltreatment:

A report from the former Yugoslav Republic of Macedonia

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Abstract

The survey on the prevalence of elder maltreatment in the former Yugoslav Republic of Macedonia was conducted in a representative sample of older people aged 65 and over (N=960) living in private households in different regions in the country (530 females (55.3%) and 430 males (44.7%)). This survey aimed to describe the prevalence of elder maltreatment and to identify risk factors for its occurrence. Results showed that the prevalence of elder maltreatment in this population is high: psychological abuse 25.7%, financial abuse 12%, neglect 6.6%, and physical abuse 5.7%. Of those reporting abuse, 5.6% reported frequent (at least monthly) abuse of one type and 15.7% reported frequent abuse of more than one type. The perpetrator was most often a family member. Risk factors included female gender, older age, physical or mental ill health, sensory dysfunction, lower household income or education. Strategies are needed for the prevention of elder maltreatment which involve multisectoral action from the health, social and justice sectors.

Keywords

1. ACCIDENT AND INJURY PREVENTION
2. ELDER ABUSE
3. HEALTHY AGEING
4. COMMUNITY HEALTH SERVICES
5. HEALTH SURVEYS

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Contents

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Acronyms

ABUEL	Elder abuse: a multinational prevalence survey
AVOW	Prevalence Study of Violence and Abuse Against Older Women
HPPAE	Hartford Partnership Program for Aging Education
INPEA	International Network for Prevention of Elder Abuse
MIPAA	Madrid International Plan of Action on Ageing
MKD	Macedonian dinar
MMSE	Mini Mental State Examination
NGO	non-governmental organization
UN Woman	United Nations Entity for Gender Equality and the Empowerment of Women
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNTF	United Nations Trust Fund
WHA	World Health Assembly
WHO	World Health Organization
WHOQOL–OLD	WHO Quality of life – Old

Executive summary

Introduction

Elder abuse and neglect are complex problems. Elder abuse is increasing as a specific form of abuse. The problem was first identified in developed countries, where most of the existing research has been conducted. However, case studies and reports from some developing countries have indicated that it is a universal phenomenon. This report presents the results of the first prevalence study on abuse and neglect of people aged 65 years and over in the former Yugoslav Republic of Macedonia. The study obtained information about the prevalence of elder abuse and neglect of people aged 65 and over living in private households, and its association with sociodemographic, sensory functioning and health variables.

Conceptual framework for elder maltreatment

In both developed and developing countries, there will be a dramatic increase in the older population. Researchers and policy-makers use diverse definitions of elder maltreatment, determined by different perspectives on needs and different research questions. One commonly used definition of elder abuse is that adopted by WHO and the International Network for Prevention of Elder Abuse (INPEA) which was used in this survey.

Ecological model of understanding elder abuse

Several theoretical approaches attempt to explain the causes of elder abuse. This study has tried to explain the risk factors and their interrelations with elder abuse and neglect based on the ecological model. This model explores the interactions between the individual and contextual factors. It considers abuse as the result of complex interplay between the perpetrator's and the victim's individual characteristics (biology, personal history), close interpersonal relationships, characteristics of the community in which the person lives or works, and societal factors such as policies and social norms.

Scope and objectives of the study

The study is a community-based household survey at national level. The main objective was to explore the phenomenon of elder maltreatment (of people aged 65 years and over) in the former Yugoslav Republic of Macedonia. The principal goal of the study was to collect data and determine the magnitude, scope and extent of the problem of elder abuse and to explore different types of elder maltreatment. The methodology used enables our findings to be compared with studies from other European Region countries.

For whom is this research intended?

The study was designed to contribute to the specific need for setting up policies and programmes for elder maltreatment prevention and victim services. It is expected that the results from this study might provide support to policy-makers at national level; programme planners at national and local level; and service providers (governmental organizations and non-governmental organizations (NGOs)) at local level.

Methodology of the study

The study obtained information about the prevalence of elder abuse and neglect of people aged 65 and over living in private households, and its association with sociodemographic, sensory functioning and health variables. Data were collected using a culturally adopted questionnaire based on the ABUEL (Elder abuse: a multinational prevalence survey) and AVOW (Prevalence Study of Violence and Abuse against Older Women) questionnaires.

The field research took place in all regions of the country during December 2011 and data analysis and report writing were undertaken during January and February 2012. The research was conducted through face-to-face interviews in participants' own homes, and participants were asked to sign a letter of consent confirming their agreement to participate in the study.

Potential participants for this field research were men and women aged 65 and over, without dementia. The sample of respondents was selected according to the region, city and village where they lived. The number of respondents per region, city and village reflected the distribution of population in the country. All potential participants completed the Mini Mental State Examination (MMSE) test. Those who have high scores on MMSE were included in the survey.

The ratio of men to women in the sample (44.7% male to 55.3% female) reflected the gender distribution in the country as a whole for people aged 65 and over (44.6% male, 55.4% female). Most participants were in the age group 65–69 years (32.1%), with the smallest group aged over 85 years (4.3%). The distribution of respondents according to ethnicity was Macedonian 76.4%, Albanian 16% and others 7.6%. The highest percentage of participants had only completed primary education (26.8%), and the lowest percentage of participants held higher degrees (0.6%).

Results

This study provides information on the prevalence of abuse and neglect of older people (65 years and over), covering the following types of maltreatment: psychological abuse, physical abuse and physical injuries, financial abuse, sexual abuse, and neglect. It includes different patterns of abuse in relation to each type of abuse and also data about the intensively/severity of abuse, and combinations of different types of abuse. It also reports data on alleged perpetrators. In the questionnaire, possible perpetrators included family members, relatives, neighbours, and friends. The report also includes information about the psychological and emotional consequences of abuse. Sociodemographic factors included as possible risk factors were: age, gender, education, region, household income, household facilities, with whom the older person lives, the owner of the household where the older person lives, level of sensory functioning, depression and health.

The prevalence rates obtained show that 307 (32.0%) of the total number of participants reported that they had suffered abuse or neglect.

The most common type of abuse experienced was psychological abuse (247 respondents – 25.7%). Physical abuse had been experienced by 55 respondents (5.7%), physical injury by 30 respondents (3.1%), financial abuse by 115 respondents (12.0%), sexual abuse by 13 respondents (1.3%) and neglect by 63 respondents (6.6%).

Of the total number of respondents, 18.0% had experienced one type of abuse, 8.8% had experienced two types of abuse, and 5.0% had experienced three or more types of abuse.

Abuse may be of low density (only one form of abuse) or it can be high density (frequently happening during the last 12 months). The abuse could take place at four levels:

1) Being exposed to one type of abuse occurring rarely (1–6 times per year) was reported by 67.3% of respondents who reported experiencing any type of abuse.
2) Of the respondents who had experienced abuse, 11.4% had experienced more than one type of abuse, but rarely.
3) Frequent (monthly or even more frequent) exposure to one type of abuse had been experienced by 5.6% of respondents.
4) Frequent exposure to more than one type of abuse had been experienced by 15.7% of respondents.

The main place where abuse occurred was the elderly person's home, followed by the street, the home of another person, and finally 'other' places.

Psychological abuse was mostly carried out by sons (29.5%), partners (25.5%) and daughters-in-law (22.6%). The most frequently reported type of psychological abuse was being insulted or sworn at (14.5%).

Physical abuse was mostly carried out by partners (30.9%), daughters-in-law (23.6%) and sons (20.0%). The most frequently reported types of physical abuse were being pushed (1.1%), kicked (0.8%), grabbed (0.8) and slapped (0.6%).

Physical injuries were mostly caused by partners or spouses (40.0%) and sons (20.0%). The most frequently reported physical injuries were sprains, bruises or cuts (0.9%).

Perpetrators of financial abuse were mostly victims' sons (47.0%) or their partners or spouses (8.7%). The most frequently reported types of financial abuse were trying to make the older person give them money (4.0%) or taking their money (3.8%).

Respondents reported sexual abuse primarily from a partner or spouse (76.9%) and some other people they knew (23.1%). The most frequently reported type was the most serious pattern of sexual abuse: forced to have intercourse against their will (0.3%). Only women reported sexual abuse.

Perpetrators who neglected older people were daughters-in-law (50.8%), sons (47.6%) and partners (17.4%). Getting to the doctor (3.1%), shopping (2.1%) and transportation (2.0%) were the primary areas for which older people did not receive help from their family.

All previously mentioned independent variables were investigated as potential risk factors for elder abuse.

The following independent variables were identified as risk factors for elder abuse and neglect at the individual level:

1. Gender: females experience more abuse than males.
2. Education: levels of significance occur at two levels of education – primary and secondary school (the latter group contained the highest percentage of participants). Those who had only completed primary school experienced more abuse than those who had completed secondary school.
3. Some chronic diseases appear to be risk factors for abuse: cardiovascular diseases, rheumatism, psychological or mental health problems, stomach diseases and diabetes.
4. Sensory functioning was another potential risk factor for elder abuse. Those participants who had lower vision and hearing reported more frequent abuse/neglect.

At the level of relationships, the following independent variables were identified as risk factors for elder abuse:

1. Cohabiting status: a statistically significant difference was found in cases where respondents lived with a partner and children (lowest level of abuse/neglect was reported by those who lived with a partner and children). Higher levels of abuse/neglect were reported by respondents who lived with close relatives.
2. Household income: those respondents who were less satisfied with the household income experienced more abuse/neglect than those who were more satisfied with total household income.
3. Another independent variable which can be included as a risk factor for elder abuse is household facilities**.** Those respondents who lived in a poorly equipped home suffered more abuse/neglect.

The only independent variable in the domain of wider society level of the ecological model is region. The survey findings showed that the region where older people live can be a risk factor for abuse/neglect. Living in the eastern part of the former Yugoslav Republic of Macedonia can be a risk factor for elder abuse. Participants living in the Skopje region experienced less abuse/neglect. These findings may be explained by socioeconomic and cultural factors.

While it is hard to identify potential victims of elder abuse, statistical tests, including binary logistic regression, were applied to the study responses. The overall regression analysis of participants who experienced abuse and neglect and those who did not, and all the variables mentioned above, indicated

that relevant independent variables which can be indicators for elder abuse include gender, physical and mental problems, smoking cigarettes, living with a partner and not having one's own house or apartment.

There are different responses to abuse and neglect according to type. Emotional reactions are the most frequent when abuse or neglect occur. Verbal reactions are predominantly reported in almost all types of abuse/neglect except for financial abuse. Physical reactions are predominant in financial abuse, followed by physical injuries and physical abuse.

Victims of elderly abuse and neglect very rarely report any type of abuse. The abuse/neglect was not reported in 77.3% of cases. Psychological abuse and neglect are the least likely to be reported.

Limitations of the study and future research

The study comprised face-to-face research with older people which attempted to measure the prevalence of elder abuse or neglect and to identify possible risk factors. The most vulnerable groups of older people were not included in this survey: for example, older people who have severe dementia and also older people who live in care homes or are in hospital or prison. This survey did not identify some other societal factors which might be relevant for elderly abuse (ageism, efficiency of social and health care, etc.).

Discussion

Defining the specifics of elderly abuse and neglect in our country can facilitate support of abused older people and, most importantly, can help in developing policy and programmes targeted to prevention and response. Coordination between scientists and practitioners can improve decision-making in prevention of and response to elder abuse and neglect.

There are many surveys which have focused on elder abuse and neglect. A review of such surveys showed that prevalence of elder abuse has been estimated in different settings and various methods for data collection have been used. Findings on the prevalence of elder abuse and neglect usually come from major epidemiological studies, agency reports, health care professionals, caregivers and family, and medical record review.

In general, studies have explored the prevalence of abuse and neglect, profiles of perpetrators and risk factors. Usually the risk factors included in surveys were age, gender, living arrangements, acute or chronic health conditions, mental health status, cognitive functions, social support and use of alcohol and cigarettes, mental health/personality disorders in the abusers, quality of the relationship between the caregiver and the recipient of care, cognitive dysfunctions or impairment in the abused, particularly in the oldest ones, and social isolation of older people. Risk factors from other studies show similarities with those found in the Macedonian survey.

Existing evidence in most of the studies indicates that abused older people are more likely to be female, cognitively impaired, in poor physical health, and dependent on other people. Illnesses (such as depression, hypertension, stroke, and heart attacks) are often triggered by abuse, with these illnesses contributing to the burden of abuse. In our study, the risk factors for elder maltreatment which were identified are gender (women are more likely to be abused than men), older people living with a partner were more likely to be abused compared with those who live without a partner (except in the case of neglect), physical diseases, depression (except for financial abuse), smoking (only for physical injuries), ownership of house/flat (except for neglect).

Conclusions

The overall prevalence rate and prevalence rate obtained for different types of abuse and neglect are higher than prevalence rates of abuse obtained in other countries, except for Croatia (which is a country in the same region of Europe). The differences in prevalence rates come from differences in definition of the research problem, methodology and statistical tests used.

Risk factors identified for elder abuse at the individual level (according to the ecological model) were gender (females are more exposed to abuse than males), education, some chronic diseases (cardiovascular diseases, rheumatism, psychological or mental health problems, stomach diseases and diabetes), and sensory functioning (vision and hearing). At the level of relationships, the following independent variables were identified as risk factors for elder abuse: cohabiting status (lowest level of abuse was reported by those who lived with partner and children and higher level of abuse by respondents who lived with close relatives); household income; household facilities. Region is the only independent variable of the ecological model in the domain of wider society. Living in the east of the country can be a risk factor for elder abuse. Participants living in the Skopje region are less exposed to elder abuse. These findings may be explained by socioeconomic and cultural factors.

The higher prevalence rates may arise from differences in the definition of the research problem, or methodology and statistical tests used. In a developing country such as the former Yugoslav Republic of Macedonia, it could be hypothesized that older people may have been more exposed to different types of abuse and neglect partly as a result of poverty and its social effects. We could also stress that in many cases, the elderly person is the only breadwinner in the family, bearing in mind the very high rate of unemployment (31%) in the country, which could be a potential risk factor for abuse and neglect.

Many countries do not have specific legislation on elder abuse: it is addressed by broader general legislation, as is the case in the former Yugoslav Republic of Macedonia (e.g., domestic abuse or criminal law). The development of specific national policies regarding elder abuse varies between countries. Most of the good practice involve awareness-raising, followed by education and training and empowerment and participation.

1. Introduction

Maltreatment of older people, termed 'elder abuse', was first described in British scientific journals in 1975 *(1).* Later, in the 1980s in some countries, scientific research and government action emerged. In 1996, the Forty-Ninth World Health Assembly (WHA) adopted Resolution WHA49.25 *(2)*, declaring abuse a major and growing public health problem across the world. For a long time the phenomenon of elder abuse was seen as a social and criminal justice problem, but following the 2002 *World health report*, it has been clearly identified as a public health problem *(3).* With WHA Resolution 56.24 *(4)*, abuse was put on the international agenda as a leading worldwide public health problem. The WHA drew attention to the serious consequences of abuse – both in the short term and the long term – for individuals, families, communities and countries, and stressed the damaging effects of abuse on health care services.

The Political Declaration and Madrid International Plan of Action on Ageing (MIPAA) in 2002 *(5)* pointed out that one of the most common forms of elderly abuse is neglect or failure to fulfill a caregiving responsibility and stressed that although this may be intentional, the perpetrator often has no intention to cause physical or emotional harm. In the first five-year cycle of the global review and appraisal of the MIPAA, the United Nations Commission for Social Development agreed on the modalities for the review and appraisal of the MIPAA, which invited the United Nations regional commissions to organize regional conferences of review and appraisal. The 2007 Ministerial Conference in León adopted the Ministerial Declaration "A Society for All Ages: Challenges and Opportunities" *(6)*.

Life expectancy in developed countries is increasing, as a result of improved medical technology and improved quality of life in general. The world's elderly population – people 60 years of age and older – is 650 million. By 2050, this older population is forecast to reach 2 billion *(7).*

A common myth is that older people live in the developed world. While it is true that the process of population ageing started to accelerate in Europe in the early 1900s, the vast majority of older people (60 plus) now live in the developing world. Today, the most rapid demographic changes are occurring in developing countries, with predicted increases of 200–400% in their older populations during the next 30 years *(8).*

Abuse of older people has only recently been recognized as a global problem. INPEA's advocacy work and the emphasis given to elder abuse prevention by WHO have contributed significantly to raising awareness worldwide *(9)*. Many changes associated with the process of ageing have made this population vulnerable in some respects. During this period there is retirement from work, there is the high possibility of loss of spouse, but increased importance of siblings and friends. Nonetheless, old age can be a healthy period, despite the presence of some chronic diseases. Some chronic diseases can lead to disability and this is the most important reason for needing to rely on others for help with daily life. Dependence can increase the demands on family caregivers and this can cause problems for them. For too many, old age brings a high risk of social isolation and poverty, with limited access to affordable, high-quality health and social services *(10).*

The prevalence of elder maltreatment in the community and other settings is high in the European Region. Studies of older people living in the community suggest that, in the previous year, about 2.7% of older people had experienced maltreatment in the form of physical abuse – equivalent to 4 million people aged 60 years and older in the Region. For sexual abuse, the proportion is lower at 0.7%, equivalent to 1 million older people; for mental (physical) abuse, this is far higher at 19.4%, equivalent to 29 million older people; and 3.8% had been subjected to financial abuse, equivalent to 6 million older people. It is therefore important to define the type of maltreatment being measured. Elder maltreatment may lead to lasting harmful physical and mental effects among older people, or others may survive and be resilient. The societal costs of elder maltreatment are thought to be high but need to be better studied in the Region *(7).*

Elder abuse and neglect are complex problems. Elder abuse is increasing as a specific form of abuse. This problem was first identified in developed countries, where most of the existing research has been conducted. However, case studies and reports from some countries have showed that it is a universal phenomenon *(11).*

In the former Yugoslav Republic of Macedonia, a systematic scientific approach to elder maltreatment has been lacking until recently. Gaining its independence, the country has gone through a period of transition which has had a major impact on the health and social care system and contributed to the loss of social networks. Increased unemployment, reaching almost 31% (2010), has affected the structure of the working population *(12).* Older people who have pensions are very often the only source of income in the family, making the younger generation dependent on them. At the same time, being themselves sometimes physically and psychologically dependent on other family members, they are susceptible to abuse and neglect. National reports on abuse and health have highlighted elder abuse as a public health concern. However, the only data on elder maltreatment are based on reports of maltreatment to agencies working in the area of domestic abuse *(13).* It has been observed that 4% of reported cases of intimate partner abuse are among older people. The National SOS line for victims of domestic abuse in 2010 identified 495 calls from victims aged over 60 years of age, which represents 17% of the total number of calls. Another 24-hour SOS line identified 35% of calls are made by people aged over 65, reporting abuse by their children and grandchildren *(14).*

2. Conceptual framework for elder maltreatment

2.1 Definition of elderly and older people

There are many terms which have been used to describe old age. In this study the terms 'elderly' or 'older people' are used and refer to people aged 65 years and older. Among this group, age-related physical changes (e.g., sensory decline, loss of muscle mass and bone density, increased risk of fractures) may alter the context in which self-management tasks are performed. The majority of older adults take several prescription and non-prescription drugs, and have more than one chronic illness *(15).*
According to the definition for elderly people given by WHO, the critical age for classification as old is 65 years *(3,16)*. This definition is not universal, however. Most developed countries accept the chronological age of 65 years and over as a definition of elderly, but in some parts of the developing world, for example, this is not the case *(16)*.

2.2 Definitions of elder maltreatment

In both developed and developing countries there will be a dramatic increase in the older population. Different researchers, policy-makers and others use diverse definitions of elder maltreatment, arising from different perspectives on needs and research questions. One commonly used definition of elder abuse is that adopted by WHO and INPEA: "Elder abuse is a single or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust, which causes harm or distress to an older person" *(3,17)*. According to WHO, it can take the various forms of physical, psychological, emotional, sexual and financial abuse. It can also result from intentional or unintentional neglect.

2.3 Types of elder abuse

In the different studies and literature *(3,18)* the following types of elder abuse have been identified:

- **Physical abuse**. This includes violent actions which can cause physical pain or injuries to the older person.
- **Psychological/emotional abuse**. This category refers to actions which can cause mental pain or distress through verbal or nonverbal acts.
- **Financial/material abuse**. This type of abuse refers to all actions of financial duress or illegal use of an older person's property, money or other type of material private property.
- **Sexual abuse**. This refers to sexual activity without the consent of the older person. Sexual abuse can also be described as the intention to control the older person sexually.
- **Neglect**. Neglect can be passive or active. Passive neglect refers to unintentional failure to provide necessary care for an older person. Active neglect refers to intentional failure to provide basic necessary elements of care (cleaning, cooking, medication and nutrition or other everyday activities important for a person's normal life).

Violation of personal rights was added as a type of elder abuse in the AVOW study *(19).* This involves violation of privacy and the right to autonomy, freedom and so on. When discussing abuse/neglect of older people, the cultural context has to been taken into consideration.

The study *Missing voices: views of older persons on elder abuse (17)* indicated that older people perceive abuse under three broad areas: neglect (isolation, abandonment and social exclusion), violation (of human, legal and medical rights) and deprivation (of choices, decisions, status, finances and respect).

2.4 Who are the perpetrators?

Elder abuse is a multifaceted problem that can emerge from several different causes and often has its roots in multiple factors. These factors include family situations, care giving, and cultural issues.

Studies on elder abuse have demonstrated that the primary abusers of older people are family members (children or partners), and for older people not living in their own home perpetrators are those who are in a duty-of-care relationship *(20)*. In both cases, it is more likely that elder abuse occurs

at home. It has been suggested that family stress, psychological, physical or financial problems might be contributing factors for elder abuse. Some studies have confirmed that children exposed to abuse, whether they are victims of or witnesses to abuse, are more likely later to become perpetrators *(21).* A UK prevalence study found that overall, 51% of maltreatment involved a partner/spouse, 49% another family member, 13% a care worker and 5% a close friend *(22)*. Findings of the National Center on Elder Abuse in the United States of America illustrate that usually the victims of elder abuse are women and perpetrators are men. Research showed that overall, adult children are most often perpetrators of elder abuse, followed by other family members and spouses. The findings highlighted that institutional abuse of elderly people (i.e. , in hospitals, convalescent homes and residential homes) is also becoming a major concern, particularly since more families are unable to provide appropriate care for older people at home *(23)*. A Croatian study of elder abuse found that perpetrators were most often husbands (30.15%), sons (16.64%), daughters (14.01%) and wives (9.21%) *(24)*.

Similar findings can be obtained from other sources on elder abuse/neglect. For example, the Hartford Partnership Program for Aging Education (HPPAE) in the United States of America found that 40% of perpetrators are children, 14% are partners or spouses, and 25% are other family members *(21)*. Abusers are most often the primary caregiver. Adult children are more likely to abuse than spouses. Males abuse more than females. The abuser is often financially dependent on the victim *(25,26).* By identifying potential abusers, we may be able to intervene earlier or prevent maltreatment.

3. Ecological model of understanding elder abuse

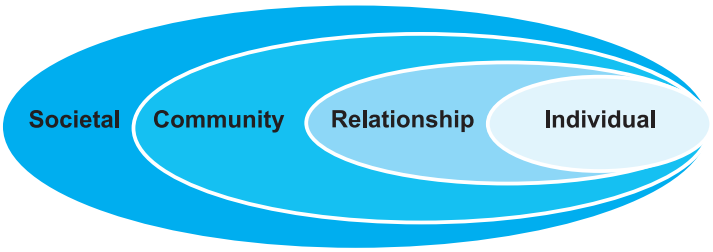
Several theoretical approaches attempt to explain the causes of elder abuse. So-called situational theory claims that an overburdened and stressed caregiver creates an environment for abuse; exchange theory addresses reciprocity and dependence between the abused and the perpetrator; intra-individual dynamics (psychopathology) theory claims a correlation between a mentally or emotionally disturbed abuser and abuse. Intergenerational transmission or social learning theory states that an adult's behaviour relates to learned behaviour as a child, thus reverting to the same pattern in adulthood; feminist theory is based on domestic abuse models, highlighting the imbalance of power within relationships and how men use abuse as a way to demonstrate power. Political economic theories have criticized the emphasis on individualistic theories, claiming that structural forces and the marginalization of elders within society have created conditions that lead to conflict and abuse *(25).*

The ecological model explores the interactions between the individual and contextual factors. It considers abuse as the result of the complex interplay between a person's individual characteristics (biology, personal history), close interpersonal relationships, characteristics of the community in which the person lives or works and societal factors such as policies and social norms. The ecological model allows elder abuse to be linked to broader social issues *(27).*

The ecological model of abuse has its roots in Bronfenbrenner's ecological paradigm which was first introduced in 1970, and it represents a redaction of most of the surveys conducted in the domain of developmental psychology *(27)*. His model is a holistic approach to human development: Bronfenbrenner asserts that in order to understand human development, one must consider the entire ecological system in which growth occurs *(28)*. The ecological model is still being developed and refined as a conceptual tool. Its strength is that it helps to distinguish between the myriad influences on abuse, while at the same time providing a framework for understanding how they interact *(7).*

The public health approach in the ecological model of abuse gives a framework for understanding abuse in general, including abuse, abuse or neglect of older people.

Fig. 3.1. The ecological model of abuse



Source: Krug et al. *(3)*

Risk factors at the individual level refer to the physical and personal factors which can make one a victim or perpetrator of abuse: age, income, education, personality, and so on. Prevention strategies at this level are often designed to promote changes in individuals' attitudes, beliefs and behaviour.

Risk factors at the second level refer to interpersonal relationships. Risk factors at this level include close peers, partners and family members. Relationships with these people influence experiences, actions and behaviour. At this second level the characteristics of the household and household income are also important factors. Prevention strategies can be focused on programmes designed to reduce conflict.

The third level of risk concerns the community and includes the contexts in which social relations occur. These can be neighbourhoods or social organizations. Risk factors here may include mobility, socioeconomic status and so on. Social links and networks may be useful means to prevent abuse.

The fourth level of the ecological framework is society, or macro factors. Those factors are cultural values, the economic situation and the political situation *(29)*.

4. Scope and objectives of the study

The study was a community-based household survey at national level.

The general objective of this study was to explore the phenomenon of elder maltreatment (of people aged 65 years and over) in the former Yugoslav Republic of Macedonia. The principal goal of this study was to collect data and determine the magnitude, scope and extent of the problem of elder abuse and to explore different types of elder maltreatment. The methodology used enables our findings to be compared with studies from other European Region countries. The study was designed to contribute to the specific need for setting up policies and programmes for elder maltreatment prevention and victim services.

The following specific objectives were defined:

- to identify the level of elder abuse in women and men aged 65 years and over;
- to collect data on the prevalence of different types of elder abuse;
- to identify the risk factors for elder abuse;
- to consider which factors are dominant at individual level, interpersonal level, community and society level and their interrelationships;
- to identify multiple types of elder maltreatment;
- to identify the dominant types of elder abuse;
- to identify the profile of perpetrators;
- to identify the emotional, behavioural and interpersonal reactions to abuse;
- to assess and recommend preventive measures, and policy guidelines using the study results.

In order to accomplish the study objectives, a major programme of field research was carried out, through face-to-face interviews, using a questionnaire as a tool for data collection.

5. For whom is this research intended?

A large portion of elder maltreatment is never reported to protection and law enforcement authorities. Elders suffer in silence, and sometimes this suffering becomes their reality. They might come to the attention of health, legal and social services sectors, which are the most affected by the consequences of elder maltreatment and most involved in efforts to deal with it. It is expected that this study will provide data which will contribute to bridging the gaps in knowledge necessary for applying a public health approach, detecting the magnitude and extent of the problem, and identifying risk and protective factors, which will further encourage the implementation of evidence-based interventions in the sectors of health, social services and the law. It is expected that the results from this study might provide support to:

- policy-makers at national level;
- programme planners at national and local level; and
- service providers (governmental organizations and NGOs) at local level.

6. Methodology of the study

6.1 The main hypothesis of the study

6.1.1 Individual risk factors can influence elder abuse and neglect

The indicators for individual risk factors included in the study were: socioeconomic factors (income (personal and family), employment and educational level); sociodemographic determinants (age, marital status); health status (physical health status, mental health status – depression); life style factors (smoking and alcohol risk behaviours); and subjective perception of sensory system functioning.

6.1.2 Risk factors at the level of relationship can trigger elder abuse and neglect

The indicators at relationship level included in the study were household size, household composition (cohabiting with partner, children, grandchildren, etc.) and household income.

6.1.3 Risk factors at the level of community and macro/societal factors

One indicator for the community level was included in the study: the region in which people lived, according to the nationally defined regions.

6.2 Preparatory phase

6.2.1 Identification and selection of relevant research instruments

This national prevalence study on elder maltreatment used two questionnaires that had already been developed and applied in research:

- **ABUEL** (Elder abuse: a multinational prevalence survey) – a multinational prevalence survey, conducted in Germany, Greece, Italy, Lithuania, Portugal, Spain, Sweden, 2008 *(30)*
- **AVOW** (Prevalence Study of Abuse and Abuse against Older Women) – a multicultural survey conducted in Austria, Belgium, Finland, Lithuania and Portugal, 2011 *(31)*.

The questionnaire used in the Macedonian survey followed the structure of the ABUEL survey questionnaire but some questions were taken from the AVOW questionnaire where they were more user-friendly.

6.2.2 Qualitative analysis of the questionnaire

The questionnaire was translated into the Macedonian and Albanian languages. Qualitative analysis of the final questionnaire was undertaken with a focus group of experts and the Scientific Committee of the study. The comments of both groups of experts were then incorporated into the final version of the questionnaire.

The final version of the questionnaire used in this study contains questions addressing:

- sociodemographic factors;
- life-style factors (smoking, alcohol use, diet);
- diseases;
- physical health and mental health (using the Geriatric Depression Scale);
- abuse/neglect:
  - psychological abuse;
  - physical abuse;
  - physical injury;
  - financial maltreatment;
  - sexual abuse; and
  - neglect.

In the section of the questionnaire about abuse and neglect, the participants were asked to declare whether they had experienced any of the above-mentioned types of abuse and neglect in the previous 12 months, or previously.

Mental health (depression) was measured using the Geriatric Depression Scale. This scale was developed as a basic screening instrument for depression in old age *(32).* We used the Serbian translation of the short version of this scale, with 15 items *(33)*. This short version of the scale has been previously used to identify depression among older people in hospital, in residential care homes and in community settings. The 15-item version is most widely used through self- reporting or informant reporting and it takes 5–10 minutes to complete *(32).*

6.2.3 Ethical Committee approval of the study

The final questionnaire and consent letter were reviewed by the Ethical Committee of the study. The questionnaire was approved and the consent letter was adjusted in line with the criteria for confidentiality of the data and anonymity.

6.2.4 Defining the sample

The target population for this study was a sample of people aged 65 years or older, living in private households. The selection criterion for involvement in the study was absence of mental impairment to participation (such as dementia). Potential participants were screened using a series of questions from the **Mini-Mental State Examination (MMSE)**[1]. The MMSE is a widely used screening tool for evaluation of cognitive impairment. It briefly measures orientation to time and place, immediate recall, short-term verbal memory, calculation, language and construction ability *(34,35,36)*. Older people with high scores were included in the sample and were invited to complete the survey.

The percentage of people aged over 65 years in the Macedonian population is 11.7% *(37)*. Table 6.1 represents the distribution of the older population in the former Yugoslav Republic of Macedonia according to age and gender, presented in numbers and percentages.

Table 6.1. Population in the country according to gender and age

Population	Total	Male	Female
aged 65 and over	239 756	106 837	132 919
%	100.0	44.6	55.4

Source: State Statistical Office *(37)*

Our desired sample was 960, which represents 0.4% of the total number of people over the age of 65 years. This sample would include the appropriate ratio of men and women and was constructed according to the following criteria: gender, ethnic background, municipality, city/village and region *(38)*.

Sampling was carried out by **quota**. The first step was selection of potential participants by quota, based on criteria of gender, ethnicity, residence (city/village), and municipality (percentage of respondents from each municipality should correspond to its contribution to the total population). The quota of respondents depended on population distribution.

1 The MMSE has been in use in the Geriatrics Unit of the Psychiatric Hospital, Skopje for several years, and verified by a group of experts.

6.2.5 Selection of the field researchers and their training

The selected field researchers were psychologists, psychiatrists, social workers, anthropologists, educators and other relevant professionals. All were trained in use of the consent letter and questionnaire; participant recruitment in their selected catchment area (male/female, ethnicity, city/village); use of the MMSE; elder maltreatment; and available telephone help line.

6.2.6 Pilot study

Before conducting the main study a pilot study was performed on a convenience sample of 100 respondents, mainly living in the capital city of Skopje.

The pilot study was conducted for the following purposes:

- to test the cognitive, language, psychological acceptance and understanding of the questions;
- quantitative analysis of the Geriatric Depression Scale. Factor analysis and Cronbach's Alpha Coefficient were used for adoption of the instrument on this particular population. (See details in Annex 1.)
- sensitization of the field researchers for face-to-face interviews with particular target groups.

Following the pilot study, a second revision of the questionnaire was made to take into consideration the accessibility of the questionnaire for our target group and its cultural acceptability.

6.3 Main Study

6.3.1 Conducting the field research

Field research was conducted during December 2011.

6.3.2 Data analysis and methods used

Data input and data analysis were done using SPSS(v19)[2], using correlation, factor analysis, chi-square analysis and binary logistic regression. Statistical significance was set at $p<0.05$ for all analysis.

2 SPSS is a computer program used for statistical analysis; version 19 was used for data analysis in this study.

7. Results

7.1 Data analysis and methods used

This section of the report presents the independent variables described in the sample. Table 7.1.1 presents the sample figures according to gender.

Table 7.1.1. Gender of participants

Sample	Total	Male	Female
aged 65 and over	960	430	530
%	100.0	44.7	55.3

The achieved percentages of men and women are almost identical to the planned percentages as per population age distribution (see Table 6.2.4.1). Table 7.1.2 shows the distribution of the sample according to age.

Table 7.1.2. Age of participants

Age	Total %	Male %	Female %
65–69	32.0	14.4	17.6
70–74	28.9	12.8	16.1
75–79	22.1	9.8	12.3
80–84	12.7	5.7	7.0
Over 85	4.3	2.0	2.3
Total	100.0	44.7	55.3

Most of the study participants were in the age group 65–69 years (32.1%), and the smallest group was aged over 85 years (4.3%). The distribution of the participants according to ethnicity is presented in Table 7.1.3.

Table 7.1.3. Ethnicity of participants

Ethnicity	Total %	Male %	Female %
Macedonian	76.4	33.8	42.6
Albanian	16.0	7.6	8.4
Roma	1.9	0.9	1.0
Serb	1.1	0.3	0.8
Vlach	0.5	0.2	0.3
Turkish	2.1	1.0	1.1
Bosnian	1.0	0.3	0.7
Other	1.0	0.6	0.4
Total	100.0	44.7	55.3

Most of the participants were from the Macedonian population (76.4%). The next largest ethnic group is Albanian (16.0%) followed by other groups as per country population distribution.
The former Yugoslav Republic of Macedonia has eight regions and Table 7.1.4 shows distribution of participants by region.

Table 7.1.4. Regional distribution of participants

Region	Total %	Male %	Female %
Pelagonija	13.5	5.0	8.5
Vardar	8.0	4.0	4.0
North-eastern	7.4	3.4	4.0
South-western	9.8	4.6	5.2
Skopje	30.2	14.2	16.0
South-eastern	9.1	3.9	5.2
Polog	10.8	4.4	6.4
Eastern	11.2	5.2	6.0
Total	100.0	44.7	55.3

Table 7.1.5 shows the level of education of participants, from which it will be seen that the highest percentage of participants had finished primary school (26.8%), and the lowest percentage of participants held higher degrees (0.6%).

Table 7.1.5. Educational level of participants

Level of education	Total %	Male %	Female %
No education	10.4	2.9	7.5
Did not complete primary school	25.8	7.1	18.7
Primary school	26.8	12.0	14.8
Secondary education	25.2	14.3	10.9
University/other higher education	11.2	8.0	3.2
Specialist, MA, PhD, MS	0.6	0.4	0.2
Total	100.0	44.7	55.3

Table 7.1.6 presents the distribution of participants according to marital status. The highest percentage of participants were married or in civil partnerships (56.7%).

Table 7.1.6. Marital status of participants

Marital status	Total %	Male %	Female %
Single (never married)	3.6	1.7	1.9
Married/civil partnership)	56.7	32.3	24.4
Divorced	2.0	0.4	1.6
Widowed	37.7	10.3	27.4
Total	100.0	44.7	55.3

The percentage of participants living with a partner is little bit higher than that for participants without a partner (Table 7.1.7).

Table 7.1.7. Partnership status of participants

Living with or without partner	Total %	Male %	Female %
With partner	56.7	32.3	24.4
Without partner	43.3	12.4	30.9
Total	100.0	44.7	55.3

Table 7.1.8 shows the distribution of participants living in different sizes of households. Older people living alone make up 15.8% of the sample, while the highest percentage of participants were living in households with more than four members (39.3%).

Table 7.1.8. Household size of participants

Household size	Total %	Male %	Female %
1	15.8	4.4	11.4
2	29.6	16.3	13.3
3	6.4	2.9	3.5
4	8.9	3.7	5.2
>4	39.3	17.4	21.9
Total	100.0	44.7	55.3

Table 7.1.9 presents the distribution of occupational status among participants. Most participants were already fully retired (87.5%). This made this variable non-disctinctive and it was not used for further statistical analysis.

Table 7.1.9. Occupational status of participants

Occupational status	Total %	Male %	Female %
Fully retired	87.5	41.8	45.7
Full-time employed	0.6	0.5	0.1
Part-time employed	0.4	0.2	0.2
Unemployed	11.5	2.2	9.3
Total	100.0	44.7	55.3

The following three tables refer to personal income, household facilities and household income. Table 7.1.10 represents the amount of personal income of the participants. The highest percentage of participants (40.8%) reported an income between 5001.00 and 9000.00 MKD.

Table 7.1.10. Personal income of participants

Personal income in MKD	Total %	Male %	Female %
Up to 5000.00	7.4	2.9	4.5
5001.00–9000.00	40.8	14.0	26.8
9001.00–14 000.00	27.5	15.2	12.3
14 001.00–19 000.00	10.8	6.8	4.0
19 001.00–24 000.00	3.4	2.8	0.6
24 001.00–29 000.00	1.3	0.9	0.4
<30 000.00	0.9	0.6	0.3
No income	7.9	1.5	6.4
Total	100.0	44.7	55.3

Table 7.1.11 shows the existence of household facilities or equipment (own room, heating, cooling, light, toilet and shower). ''Fully equipped'' was defined as having own room, heating, air conditioning, toilet, light and shower. ''Average'' covers households which have between three and six of the facilities mentioned; and ''low'' is applied when respondents have less than three of the facilities mentioned. The highest percentage of participants had an average number of facilities (63.7%).

Table 7.1.11. Household facilities of participants

Level of household facilities	Total %	Male %	Female %
Fully equipped	27.7	11.5	16.2
Average	63.7	29.8	33.9
Not completely equipped	8.6	3.4	5.2
Total	100.0	44.7	55.3

Table 7.1.12 presents the percentages for participants' answers to the question "Does your household income satisfy your needs?". The highest percentage of participants answered that total household income partially satisfied their needs (49.6%).

Table 7.1.12. Satisfaction with household income

Satisfaction	Total %	Male %	Female %
Completely	17.1	9.3	7.8
Partially	49.6	23.0	26.6
Not at all	33.3	12.4	20.9
Total	100.0	44.7	55.3

7.2 Prevalence of elder maltreatment and perpetrators of abuse and neglect

7.2.1 Overall prevalence rates of elder maltreatment

The number of participants who reported occurrence of any type of abuse and neglect was 307 (32.0%). The number of participants who did not report any type of maltreatment was 653 (68.0%).

Table 7.2.1. Overall prevalence rates of abuse/neglect

Prevalence of abuse/neglect	Total %	Male %	Female %
No abuse/neglect	68.0	32.1	35.9
Abused	32.0	12.6	19.4
Total	100.0	44.7	55.3

Table 7.2.2 shows the overall distribution of all types of abuse/neglect.

Table 7.2.2. Prevalence of different types of abuse/neglect

Type of abuse	Total %	Male %	Female %
Psychological abuse	25.7	9.5	16.2
Physical abuse	5.7	1.7	4.0
Physical injury	3.1	0.8	2.3
Financial abuse	12.0	5.5	6.5
Sexual abuse	1.3	0	1.3
Neglect	6.6	1.9	4.7

N=960

Psychological abuse was the most frequent (25.7%), followed by financial abuse (12.0%), physical abuse (5.7%), physical injury (3.1%) and sexual abuse (1.3%).

Table 7.2.3 presents the results for the level of multiple types of abuse, amongst all participants.

Table 7.2.3. Prevalence of multiple types of abuse/neglect amongst all participants

Number of types of abuse/neglect	Total %	Male %	Female %
1 type	18.0	7.8	10.2
2 types	8.8	3.3	5.5
3 types	3.1	1.3	1.9
4 types	1.3	0.3	0.9
5 types	0.6	0	0.6
6 types	0.2	0	0.2
No abuse/neglect	68.0	32.0	36.0
Total*	100.0	44.7	55.3

***N=960**

The data given in Table 7.2.4 show the prevalence of multiple forms of abuse, by gender, amongst those participants who had reported any type of abuse. A single form of abuse was reported by 56.4% of participants experiencing any abuse, and two types of abuse by 27.4% of participants reporting abuse.

Table 7.2.4. Prevalence of one or more types of abuse/neglect by gender

Number of types of abuse	Total number	Male	Female	Total %	Male %	Female %
1 type	173	75	98	56.4	24.4	32.0
2 types	84	31	53	27.4	10.1	17.3
3 types	30	12	18	9.7	3.9	5.8
4 types	12	3	9	3.8	1.0	2.8
5 types	6	0	6	2.0	0	2.0
6 types	2	0	2	0.7	0	0.7
Total abused	307	121	186	100.0	39.4	60.6

7.2.2 Frequency and intensity of different types of abuse and neglect

Elder maltreatment may be a single event (only one event) or it can occur frequently (frequently happening during the last 12 months and taking many forms). The AVOW survey employs a typology of four levels:

- level I: single type of abuse and happened rarely (1–2 times in the last year)
- level II: high multiple types of abuse (more than one type of abuse) but rarely (1–2 times in the last year)
- level III: low multiple types of abuse (one type of abuse) but frequently (monthly or even more often)
- level IV: high multiple types of abuse (more than one type of abuse) and frequently (monthly or even more often)

This four-level analysis was done separately for each type of abuse, and at the end for all types of abuse.

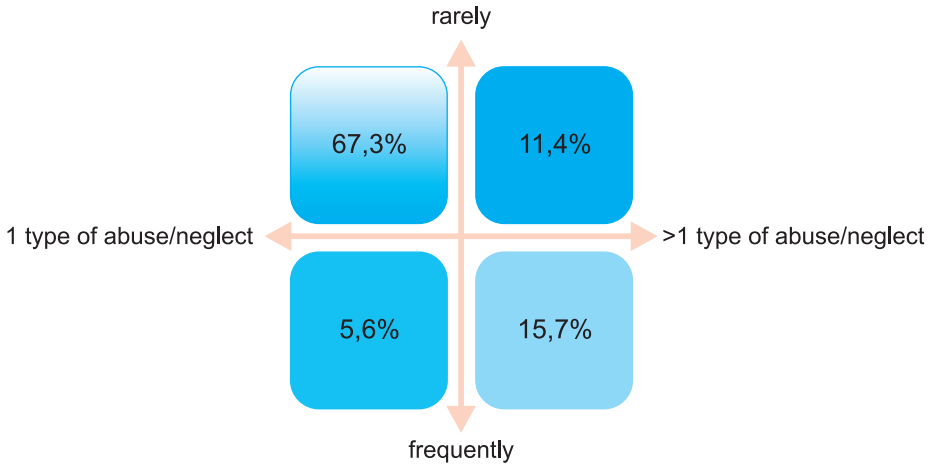


Fig. 7.1. Four levels of overall abuse/neglect

The analysis was undertaken on the 307 participants who reported abuse and neglect. Fig. 7.1 illustrates that 5.6% of these 307 participants had experienced one type of abuse, frequently (level III), 67.3% had experienced one type of abuse but rarely (level I), 11.4% had experienced more than one type of abuse but rarely (level II) and 15.7% had experienced more than one type of abuse and frequently (level IV).

7.3 Types of abuse and neglect

7.3.1 Psychological abuse

Data gathered from this survey showed that psychological or emotional abuse was the most prevalent form of abuse (25.7%). Psychological abuse was measured by 11 indicators. Findings for each indicator are presented in Table 7.3.1, from which it can be seen that the most frequent type of psychological abuse is insulting or swearing at, followed by shouting or yelling at.

Table 7.3.1. Types of psychological abuse

Type of abuse	Total %	Male %	Female %
Insulted or sworn at	14.5	5.1	9.4
Threatened	2.8	0.7	2.1
Undermined or bullied	7.2	2.4	4.8
Excluded	7.2	2.1	5.1
Threatened to harm	1.1	0.2	0.9
Prevented from seeing other people	0.7	0.1	0.6
Shouted or yelled at	8.7	2.9	5.8
Did something out of spite	3.4	1.1	2.3
Called ugly names	5.8	1.8	4.0
Destroyed personal belongings	2.3	0.5	1.8
Threatened to hit or throw something at	2.3	0.5	1.8
Overall abuse*	25.7	9.6	16.1

*N=960

7.3.1.1 Perpetrators of psychological abuse

The results shown in Table 7.3.2 indicate that in most cases older people are psychologically abused by sons (29.5%), by partners or spouses (25.5%) and by daughters-in-law (22.6%).

Table 7.3.2. Perpetrators of psychological abuse

Perpetrator	Total %	Male %	Female %
Partner or spouse	25.5	7.3	18.2
Daughter	6.1	0.8	5.3
Son	29.5	8.1	21.4
Daughter-in-law	22.6	7.6	15.0
Son-in-law	2.4	0.4	2.0
Sister	1.6	0	1.6
Brother	4.0	1.6	2.4
Niece	6.5	0.4	6.1
Nephew	7.7	1.2	6.5
Other female relatives	8.0	2.4	5.6
Other male relatives	3.6	2.8	0.8
Friend (female)	2.4	1.2	1.2
Friend (male)	6.9	5.6	1.3
Acquaintance (female)	1.6	1.6	0
Acquaintance (male)	5.3	5.3	0
Neighbour (female)	11.7	3.6	8.1
Neighbour (male)	16.6	9.7	6.9

Note: Table 7.3.2 includes only participants who had experienced psychological abuse (247 people, 25.7%).

7.3.1.2 Frequency and intensity of psychological abuse

Psychological abuse of older people may also be analysed according to the four-level typology used in AVOW and the analysis was undertaken on the 307 participants who reported abuse. Fig. 7.2 illustrates that 9.0% of them had experienced one type of psychological abuse, frequently (level III), 46.1% had experienced one type but rarely (level I), 9.2% had experienced more than one type of psychological abuse but rarely (level II) and 35.7% had experienced more than one type and frequently (level IV).

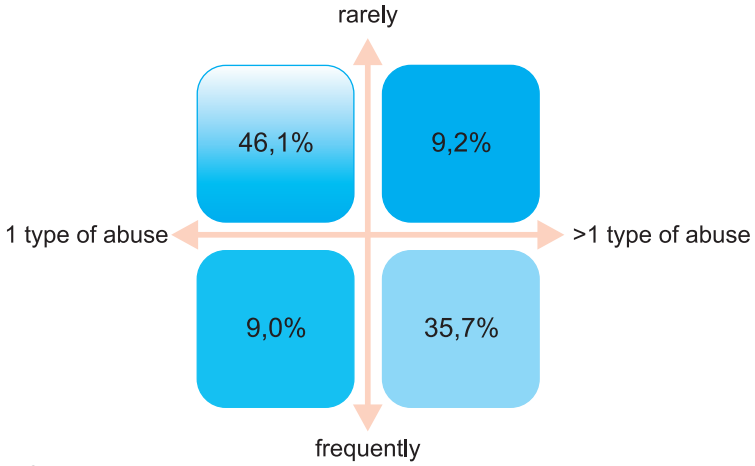


Fig. 7.2. Four levels of psychological abuse

7.3.2 Physical abuse

This survey included 17 indicators for physical abuse, which are listed in Table 7.3.3, from which it will be seen that overall prevalence of physical abuse was 5.7%. Overall physical abuse for men was 1.7% and for women was 4.0%.

Table 7.3.3. Types of physical abuse

Type of abuse	Total %	Male %	Female %
Slapped	0.6	0	0.6
Grabbed	0.8	0	0.8
Kicked	0.8	0.2	0.6
Pushed	1.1	0.1	1.0
Burned	0.2	0	0.2
Choked	0.2	0	0.2
Having something thrown at	0.5	0.2	0.3
Twisted ankle	0.4	0	0.4
Used knife or gun	0	0	0
Punched	0.6	0.2	0.4
Slammed	0.4	0	0.4
Beaten up	0.3	0	0.3
Tied up	0	0	0
Restrained	0	0	0
Locked in room	0	0	0
Given drugs or medicine	0	0	0
Threatened with knife or gun	0.1	0	0.1
Overall physical abuse*	**5.7**	**1.7**	**4.0**

*N=960

The most frequent types of physical abuse were slapping, kicking grabbing and pushing. In general, women experienced more types of physical abuse, and more often than men who experienced some type of physical abuse.

7.3.2.1 Perpetrators of physical abuse

Partners or spouses (30.9%) were most frequently reported as perpetrators of physical abuse, with daughters-in-law (23.6%) second, and then sons (20.0%).

Table 7.3.4. Perpetrators of physical abuse

Perpetrator	Total %	Male %	Female %
Partner or spouse	30.9	0	30.9
Daughter	3.6	1.8	1.8
Son	20.0	1.8	18.2
Daughter-in-law	23.6	3.6	20.0
Son-in-law	1.8	0	1.8
Sister	1.8	0	1.8
Brother	5.4	1.8	3.6
Niece	5.4	0	5.4
Nephew	0	0	0
Other female relatives	5.4	1.8	3.6
Other male relatives	3.6	1.8	1.8
Friend (female)	0	0	0
Friend (male)	1.8	1.8	0
Acquaintance (female)	0	0	0
Acquaintance (male)	3.6	0	3.6
Neighbour (female)	3.6	1.8	1.8
Neighbour (male)	3.6	3.6	0

Note: Table 7.3.4 includes only participants who had experienced psychical abuse.

7.3.2.2 Frequency and intensity of physical abuse

When the four-level analysis was undertaken on the 54 respondents who reported physical abuse, it showed that 3.7% of them had experienced one type of abuse, frequently (level III), 75.9% had experienced one type of abuse but rarely (level I), 7.4% had experienced more than one type of abuse but rarely (level II) and 13.0% had experienced more than one type of abuse and frequently (level IV), as illustrated in Fig. 7.3.

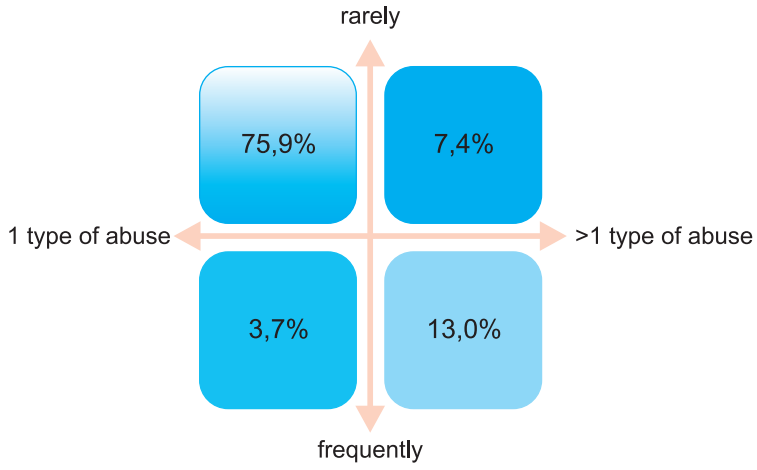


Fig. 7.3. Four levels of physical abuse

7.3.3 Physical injuries

The severe forms of physical abuse mentioned in 7.3.2 of this report may result in physical injuries. In this survey four types of physical injuries were used as indicators of severe physical abuse of older people, which are listed in Table 7.3.5, which gives the percentage of participants who reported experience of each type of physical injury, by gender.

Table 7.3.5. Physical injuries

Type of injury	Total %	Male %	Female %
Sprain, bruise, cuts	0.9	0.3	0.6
Passed out	0.3	0.1	0.2
Broken bones	0.2	0	0.2
Physical pain that still hurt next day	0.8	0.2	0.6
Other	0.1	0	0.1
Overall physical injuries*	3.1	0.8	2.3

*N=960

The most frequent types of physical injuries were sprains, bruises and cuts from being hit. Women experienced this type of abuse more frequently than men. However, it must be pointed out that there is no significant difference between the genders in experiencing these types of injuries.

7.3.3.1 Perpetrators of physical injuries

Table 7.3.6 shows that the most common perpetrators of physical injuries were partners or spouses (40%), sons (20%), and daughters-in-law (10%). It is interesting to note that male neighbours show up as perpetrators in 16.7% of reports.

Table 7.3.6. Perpetrators of physical injuries

Perpetrator	Total %	Male %	Female %
Partner or spouse	40.0	0	40.0
Daughter	0	0	0
Son	20.0	3.3	16.7
Daughter-in-law	10.0	0	10.0
Son-in-law	0	0	0
Sister	0	0	0
Brother	3.3	0	3.3
Niece	3.3	0	3.3
Nephew	0	0	0
Other female relatives	3.3	0	3.3
Other male relatives	0	0	0
Friend (female)	0	0	0
Friend (male)	0	0	0
Acquaintance (female)	0	0	0
Acquaintance (male)	3.3	3.3	0
Neighbour (female)	3.3	0	3.3
Neighbour (male)	16.7	16.7	0

Note: Table 7.3.6 includes only respondents who had experienced physical injuries (30 people, 3.13%).

7.3.3.2 Frequency and intensity of physical injuries

Physical injuries may be uncommon (only one form of abuse) or they can be high multiple types (frequently happening during the last 12 months). The four-level analysis was undertaken on the 30 participants who reported physical injuries, and Fig. 7.4 illustrates that 3.6% of older people had experienced one type of injury, frequently (level III), 71.4% had experienced one type of injury but rarely (level I), 17.9% had experienced more than one type of injury but rarely (level II) and 7.1% had experienced more than one type of injury and frequently (level IV).

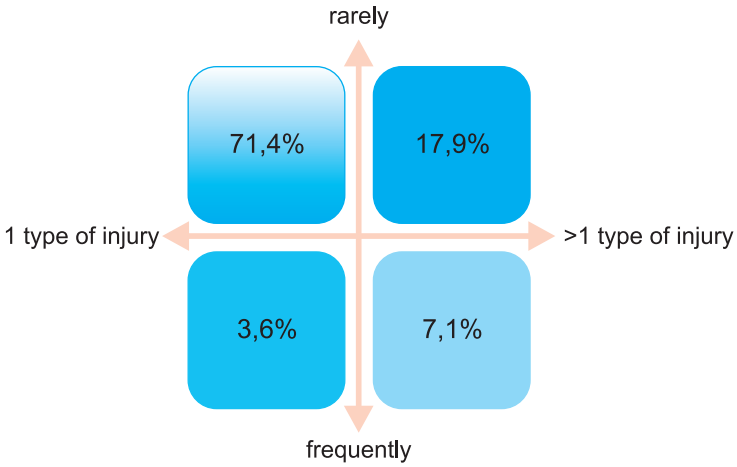


Fig. 7.4. Four levels of physical injuries

7.3.4 Financial abuse

Financial abuse refers to illegal use of an older person's material goods against their will. This type of abuse includes all actions where an older person's material goods are taken by force. In this survey, as indicators for financial abuse we used the eight types of financial abuse used in the AVOW study. Table 7.3.7 presents the indicators of financial abuse and the percentages of participants who reported each type of abuse, by gender.

Table 7.3.7. Financial abuse

Type of financial abuse	Total %	Male %	Female %
Made you hand over your money	2.8	0.1	2.7
Tried to make you give money	4.0	1.2	2.8
Tried to take or keep power against will	0.7	0.2	0.5
Attempted to steal money	1.6	0.4	1.2
Stole money	2.0	0.8	1.2
Used fraud to take your money	1.5	0.4	1.1
Took power over you	0.4	0.2	0.2
Did something else to take your money	0.7	0.1	0.6
Overall financial abuse*	11.9	5.4	6.5

**N=960

The data in Table 7.3.7 show that the overall rate of financial abuse in older women is 6.5%, in older men is 5.4% and overall is 11.9%. As the data show, the most frequent types of financial abuse are making the older person hand over their money against their will, attempting to make the older person hand over money against their will and stealing money (or any other type of possession).

7.3.4.1 Perpetrators of financial abuse

Table 7.3.8 presents the perpetrators of financial abuse. As can be seen, the most common perpetrators were partners or spouses, sons, and daughters-in-law.

Table 7.3.8. Perpetrators of financial abuse

Perpetrator	Total %	Male %	Female %
Partner or spouse	8.7	2.6	6.1
Daughter	5.2	1.7	3.5
Son	40.8	11.3	29.5
Daughter-in-law	18.3	2.6	15.7
Son-in-law	1.7	0.8	0.9
Sister	0	0	0
Brother	5.2	2.6	2.6
Niece	4.3	0.9	3.4
Nephew	5.2	1.7	3.5
Other female relatives	2.6	1.7	0.9
Other male relatives	4.3	3.5	0.8
Friend (female)	1.7	0.8	0.9
Friend (male)	2.6	0	2.6
Acquaintance (female)	0.9	0.9	0
Acquaintance (male)	5.2	3.5	1.7
Neighbour (female)	1.7	0	1.7
Neighbour (male)	10.4	7.0	3.4
Other	20.0	16.5	3.5

Note: Table 7.3.8 only includes respondents who had experienced financial abuse (115 people, 12%).

Sons were the most frequent perpetrators of financial abuse (40.8%), followed by daughters-in-law (18.3%). Partners or spouses are cited by 10% of participants who reported financial abuse.

7.3.4.2 Frequency and intensity of financial abuse

Financial abuse of older people may be analysed according to the four-level typology. The analysis was conducted on the 115 respondents who reported financial abuse. Fig. 7.5 illustrates that 3.5% of older people had experienced one type of financial abuse, frequently (level III), 66.1% had experienced one type of abuse but rarely (level I), 14.8% had experienced more than one type but rarely (level II) and 15.6% had experienced more than one type and frequently (level IV).

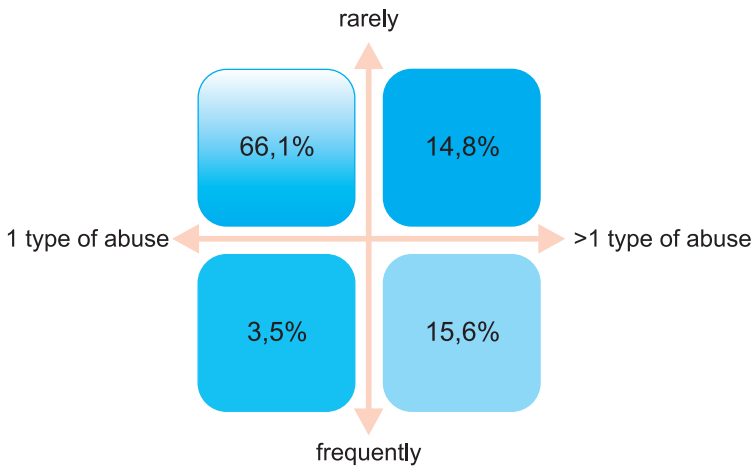


Fig. 7.5. Four levels of financial abuse

7.3.5 Sexual abuse

This survey used seven indicators to identify sexual abuse among older people, which are listed in Table 7.3.9. No male respondents reported sexual abuse.

Table 7.3.9. Sexual abuse

Type of sexual abuse	Female %
Talked to you in a sexual way	0.2
Touched you	0.2
Tried to touch you	0.2
Made you watch pornography	0
Tried to make you watch pornography	0
Tried to have sexual intercourse against will	0.3
Forced you to have sexual intercourse against will	0.3
Other	0
Overall sexual abuse*	1.35

*N=960

As Table 7.3.9 illustrates, the severest type of sexual abuse was the most frequent, followed by attempted sexual intercourse against the person's will.

7.3.5.1 Perpetrators of sexual abuse

Table 7.3.10 shows that the majority of older women who experienced sexual abuse reported that the perpetrator was their partner or spouse (76.9%), with male acquaintances second most common (23.1%).

Table 7.3.10. Perpetrators of sexual abuse

Perpetrator	Total %
Partner or spouse	76.9
Other male relatives	7.7
Friend (male)	7.7
Acquaintance (male)	23.1
Neighbour (male)	7.7
Other	15.4

Note: Table 7.3.10 includes only participants who had reported sexual abuse (13 people, 1.35%).

7.3.5.2. Frequency and intensity of sexual abuse

The four-level analysis was carried out on the 13 participants who reported sexual abuse. Fig. 7.6 illustrates that 7.7% of this small group of older people had experienced one type of sexual abuse, frequently (level III), 76.9% had experienced one type of sexual abuse but rarely (level I), 7.7% had experienced more than one type of sexual abuse but rarely (level II) and 7.7% had experienced more than one type and frequently (level IV).

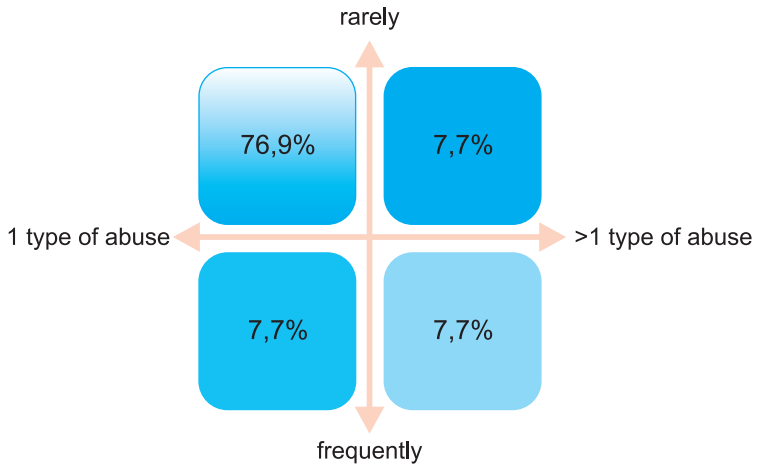


Fig. 7.6. Four levels of sexual abuse

7.3.6 Neglect

Neglect refers to the unsatisfied need of a dependent older person from their caregivers. The neglect can be defined as insufficient support by caregivers providing food, shelter, transport, health care or other types of activity necessary for daily living. The 14 indicators included are listed in Table 7.3.11. Participants were asked to indicate if they needed help and whether they received it or not. The majority of the participants did not report any need for help. Rates of neglect have been calculated in respect of those respondents who declared that they had been refused assistance in some type of care. Table 7.3.11 shows that 6.5% of participants experienced some type of neglect. The percentages of older woman who experienced neglect (4.7%) is higher than the percentage of older men who experienced neglect (1.8%).

Table 7.3.11. Neglect

Type of neglect	Total %	Male %	Female %
Shopping	2.1	0.3	1.8
Preparing meals	1.7	0.4	1.3
Using toilet	0.2	0	0.2
Transportation	2.0	0.5	1.5
Getting in and out of bed	0.3	0.1	0.2
Laundry	1.4	0.4	1.0
Washing	0.4	0.1	0.3
Dressing and undressing	0.2	0.1	0.1
Eating	0.4	0.2	0.2
Other household activities	1.5	0.2	1.3
General mobility in the house	0.9	0.3	0.6
Buying medications	2.0	0.2	1.8
Help with timing of medication	1.3	0.2	1.1
Getting to the doctor	3.1	0.9	2.2
Other	0.4	0.2	0.2
Overall*	6.5	1.8	4.7

*N=960

7.3.6.1 Perpetrators of neglect

The results shown in Table 7.3.12 indicate that, in most cases, older women were neglected by their sons (41.2%) and partners (15.8%) and both men and women by their daughters-in-law (50.8%). Nephews and brothers also show up as perpetrators (both at 12.7%).

Table 7.3.12. Perpetrators of neglect

Perpetrator	Total %	Male %	Female %
Partner or spouse	17.4	1.6	15.8
Daughter	6.3	1.5	4.8
Son	47.6	6.3	41.2
Daughter-in-law	50.8	15.8	35.0
Son-in-law	6.3	0	6.3
Sister	0	0	0
Brother	12.7	3.2	9.5
Niece	6.3	0	6.3
Nephew	12.7	0	12.7
Other female relatives	1.6	0	1.6
Other male relatives	1.6	1.6	0

Friend (female)	1.6	0	1.6
Friend (male)	3.2	3.2	0
Acquaintance (female)	1.6	0	1.6
Acquaintance (male)	0	0	0
Neighbour (female)	6.3	0	6.3
Neighbour (male)	4.7	4.7	0
Other	4.7	3.1	1.6

Note: Table 7.3.12 includes only respondents who had experienced neglect (63 people, 6.5%).

7.4 Risk Factors

Risk factors have been elaborated in line with the ecological model: individual risk factors, risk factors at relationship level and society risk factors. Risk factors for abuse and neglect of older people, in particular, are variables that make someone vulnerable to violent behaviours and attitudes *(39).*

Information on the prevalence of elder abuse and neglect and the distribution of types of abuse among people aged 65 and over has been presented in the preceding sections. This section examines the risk factors for elder abuse. As a statistical test, chi-square tests of the categories of independent variables and cross tabulations were devised.

Risk factors were grouped into three categories, as noted in Section 6, Methodology (page 17), building on an ecological conceptual framework.

This research investigated the following individual factors: socioeconomic (personal income, employment, and educational level); sociodemographic determinants (age, marital status); health status (physical health status, mental health status (depression)); life-style factors (smoking and alcohol use); and subjective perceptions of sensory system functioning. Risk factors at the level of relationship were investigated: household size, household composition (cohabiting with partner, children, grandchildren, etc.) and household income. One risk factor at the third level, society, was investigated – the region where the older people live.

7.4.1 Risk factors at individual level

7.4.1.1 Gender

Gender was considered an important risk factor at individual level. Cross tabulation and chi-square statistics were used to identify if there was statistical significance of gender and reporting abuse. Table 7.4.1 represents the distribution by percentage among older people who experienced maltreatment, by gender.

Table 7.4.1. Gender and abuse/neglect

Gender	No abuse/neglect %	Abuse/neglect %
Male*	47.2	39.4
Female*	52.8	60.6
Total	100.0	100.0

Value % *p<0.05

Gender can be considered a relevant risk factor for elder abuse (chi-square 5.06 p<0.05). Older women are more likely to be victims of abuse than older men.

From the data given in Table 7.4.1, the percentage of non-abused men was higher than those who experienced abuse. In contrast, the percentage of female respondents who experienced abuse was higher than those who had not experienced abuse.

7.4.1.2 Educational levels

Chi-square coefficient (chi-square 14.4 p<0.01) analysis shows that educational level was a factor which can be considered a risk factor in our study. Of the women who had experienced abuse, 27.7% had not completed primary education, and 20.3% had only completed primary education.

Table 7.4.2. Education and abuse/neglect

Education	No abuse/neglect %	Abuse/neglect %
No education	10.7	10.1
Did not complete primary school	25.0	28.1
Primary school**	24.1	33.0
Secondary education**	27.7	20.3
High	12.5	8.5
Total	100.0	100.0

Value% **p<0.01

The percentage of those who had only finished primary school and had experienced abuse is significantly higher than those who had only completed primary school and had not experienced abuse. In contrast, the percentage of those who had finished secondary school and experienced abuse was significantly lower than those who had not experienced any type of abuse. It appears that the higher the level of education, the lower the risk of being a victim of abuse.

7.4.1.3 Health and illness

Self-reported health information was collected from participants in this study. Participants were asked if they suffered from the following conditions: allergies, asthma, diabetes, cardiovascular disease, liver disease, stomach disease, lung disease, cancer, rheumatism, mental health problems (depression, etc.) and cerebrovascular disease. Statistical analysis indicates that having experience of some of these conditions is likely to be a risk factor for elder abuse and neglect. Older people with specific health conditions (cardiovascular disease, rheumatism, mental health problems, stomach disease and diabetes) are more likely to be victims of abuse and neglect (see Table 7.4.3). Older people need additional support from other people, usually family members and relatives, and that can be a reason why these diseases occur as risk factors for elderly abuse and neglect.

Table 7.4.3. Health conditions and abuse/neglect

Disease	No abuse/neglect %	Abuse/neglect %	Chi-square coefficient
Cardiovascular	46.3	57.3	10.5 **
Rheumatism	49.3	61.6	14.3 **
Psychological	10.9	20.5	19.3**
Stomach	10.9	22.2	28.0 **
Diabetes	21.2	27.6	4.9 *

**p<0.01

*p<0.05

WHO defines chronic diseases as diseases of long duration and relatively slow progression. The following have been designated chronic diseases: cardiovascular diseases, diabetes, respiratory diseases and cancer. According to WHO, those are leading factors for death *(7)*.

7.4.1.4 Depression

The most common functional disorders in elderly people include depression, paranoid reactions, hypochondria and chronic anxiety *(40)*, with depressive reactions being the most frequent. Depression is characterized by extreme sadness, social withdrawal, inhibition, lowered self-esteem, pessimism, indecision, and occasionally a slowing down of mental processes and physical movement. Loss is a common factor for depression among elderly people. For some elderly people, the loss of physical

vigour or diagnosis of a chronic illness can trigger a depressive reaction. Also, depression can be a reaction to the death of a friend and relative loss of peer group or status after retirement, or to having to relocate to a smaller, more affordable residence *(40)*. In this survey depression was measured using the Geriatric Depression Scale (explained in Section 6, Methodology). The data from the survey was grouped into three levels: participants with low depression, medium depression and high depression.

Table 7.4.4. Depression and abuse/neglect

Level of depression	No abuse/neglect %	Abuse/neglect %
Low level**	14.3	33.2
Medium level	22.4	31.9
High level**	63.3	34.9
Total	100.0	100.0

Value% **p<0.01

Depression was identified as a risk factor for elderly abuse and neglect (chi-square test 87.88 p<0.01). As the level of depression increases, the level of abuse among the respondents decreases (r=-0.29, p<0.01). This finding can be explained by the depressed person's withdrawal from social and relationship situations. Having a low level of need makes caregivers less engaged.

7.4.1.5 Sensory functioning

One of the aspects of quality of life is the effectiveness of the senses, particularly vision and hearing. The scale for sensory functioning from the WHO Quality of life – Old (WHOQOL–OLD) questionnaire, which was used in the ABUEL survey, was used in this survey, using questions from the WHO questionnaire. The condition of two senses were examined: vision and hearing, as these are the most important in old age *(40)*.

7.4.1.5.1 Vision

Old age is often associated with the loss of sensory functioning. Visual disorders are more commonly diagnosed in late adulthood. Table 7.4.5 gives the percentage of respondents experiencing abuse, according to their level of visual functioning.

Table 7.4.5. Vision and abuse/neglect

Level of vision	No abuse/neglect %	Abuse/neglect %
Very weak	3.5	4.9
Weak*	19.6	29.0
Neither good nor bad*	19.9	25.7
Good**	51.8	33.9
Very good	5.2	6.5

Value % **p<0.01

Value % *p<0.05

There is significant difference between respondents with weak vision who experienced abuse and neglect. Statistical significance (chi-square 27.68 p<0.01) refers to the conclusion that decreasing visual functioning can be a risk factor for elderly abuse or neglect.

7.4.1.5.2 Hearing

Probably the most usual sensory loss associated with ageing is hearing. In old age, presbyacusis occurs, which is a progressive loss of hearing, especially for tones of high frequency, caused by degenerative changes in the auditory system *(40)*. Cross-tabulation gives the distribution of intensity of good or bad hearing function and experience of abuse and neglect.

Table 7.4.6. Hearing and abuse/neglect

Level of hearing	No abuse/neglect %	Abuse/neglect %
Very weak	2.0	1.3
Weak	12.0	12.1
Neither good nor bad**	12.3	21.2
Good**	64.3	56.3
Very good	11.4	9.1

Value % **p<0.01

We can say with 99.9% security that decrease of hearing function can be a risk factor for elderly abuse (chi square 14.34 p<0.01).

7.4.2 Risk factors at relationship level

This study identified the following risk factors at relationship level as relevant for experiencing abuse and neglect: cohabiting status, household income, and household facilities.

7.4.2.1 Cohabiting status

Respondents were asked to indicate with whom they cohabited: a partner, adult children, grandchildren, parents, sibling or lived alone.

Table 7.4.7. Cohabitating status and abuse/neglect

Cohabitating status	No abuse/neglect %	Abuse/neglect %
Alone	15.1	16.4
Partner	28.0	22.5
Partner/child*	18.3	11.8
Child	15.1	17.1
Close relative**	20.2	30.9
More distant relative	3.3	1.3
Total	100.0	100.0

Value % *p<0.05 ; Value % **p<0.01

Significance of the chi-square test (chi-square 22.83 p<0.01) showed that cohabiting status can be counted as a risk factor for elderly abuse. Higher levels of abuse/neglect were reported among respondents who lived with close relatives.

7.4.2.2 Household income

The risk factor considered here is household income, which is a summary income of all people who live in the same household. It includes all types of income: salaries, wages, pensions, etc. Average amount of household income can be an indicator for people's well-being.

The question about household income in this survey was not designed to elicit the actual amount of household income, but respondents' subjective estimation of satisfaction of their personal needs according to the total family income. Table 7.4.8 presents the distribution of respondents according to their satisfaction with total household income and their experience of abuse/neglect.

Table 7.4.8. Satisfaction with material household income and abuse/neglect

Satisfaction	No abuse/neglect %	Abuse/neglect %
Completely satisfied*	19.2	12.7
Partially satisfied	49.5	49.5
Completely unsatisfied*	31.3	37.8
Total	100.0	100.0

Value % *p<0.05

Amongst respondents who replied that the total family income did not completely satisfy their needs, more were exposed to abuse/neglect (37.8%) than not (chi-square 7.42 p<0.05). Statistical analysis showed that satisfaction of personal needs by total family income is a risk factor for elderly abuse.

7.4.2.3 Household facilities

Another factor which should be taken into consideration is household facilities. Six questions were asked:

1. Do you have your own room?
2. Do you have heating?
3. Do you have air conditioning?
4. Is there enough light?
5. Do you have a toilet?
6. Do you have a shower?

The responses to these questions were grouped into three categories (See Table 7.4.9).

Table 7.4.9 Household facilities and abuse/neglect

Household facilities	No abuse/neglect %	Abuse/neglect %
Fully equipped**	28.2	16.2
Partly equipped	66.5	69.2
Less equipped **	5.3	14.6
Total	100.0	100.0

Value % **p<0.01

A higher percentage of respondents living in homes which were less well equipped reported some type of abuse or neglect (14.6%). Household facilities can thus be considered as a risk factor for elderly abuse/neglect (chi-square 33.93 p<0.01).

7.4.3 Risk factors at society level

7.4.3.1 Region

Region is considered an important risk factor in the study. As can be seen from Table 7.4.10 below, there are differences among respondents experiencing abuse and neglect according to the region where they live.

Table 7.4.10. Region and abuse/neglect

Region	No abuse/neglect %	Abuse/neglect %
Pelagonija	14.0	12.4
Vardar	7.7	8.8
North-eastern*	6.0	10.1
South-western	10.2	9.1
Skopje**	34.0	22.1
South-eastern**	6.7	14.0
Polog*	9.0	14.3
Eastern	12.4	9.2
Total	100.0	100.0

Value % **p<0.01Value % *p<0.05

Higher levels of abuse/neglect were reported by respondents living in the north-eastern, south-eastern, and Polog regions of the country. The lowest level of abuse/neglect was reported in the region of Skopje. Taking these data into consideration, region of residence can be considered a risk factor for elder abuse (chi square 35.07 p<0.01).

7.5 Influence of the risk factors on different types of elder abuse

A binary logistic regression analysis was conducted to compare the probability of having experience of abuse as a dependent categorical variable and all independent variables included in the research (gender, region, marital status, age, level of education, ethnicity, personal income, household income, household facilities, occupational status, health problems, depression, and cohabitation).

7.5.1 Gender

Gender was a risk factor for elder abuse. Being female was a risk factor for psychological abuse, physical abuse, physical injuries, sexual abuse and neglect. Gender was not a relevant factor only in the case of financial abuse.

Table 7.5.1. Gender as a risk factor for elder abuse

Gender	Abuse/ neglect	Psychological abuse	Physical abuse	Physical injuries	Financial abuse	Neglect
	Odds ratio					
Female/ male	1.372*	1.496**	2.045*	2.274*	0.997	2.113**

Binary Logistic Regression coefficient *p<0.05 and **p<0.01

Older women were more likely to have been abused in the last 12 months than older men in general. In particular, older women were 1.5 times more likely to be victims of psychological abuse, twice as likely to be victims of physical abuse, 2.3 times more likely to be victims of physical injuries, and 2.1 times more likely to be victims of neglect than older men.

7.5.2 Physical diseases

Table 7.5.2 shows the associations between different types of health problems and different types of abuse.

Table 7.5.2. Physical diseases as a risk factor for elder abuse

Diseases	Abuse/ neglect	Psycholo-gical abuse	Physical abuse	Physical injuries	Financial abuse	Sexual abuse	Neglect
	Odds ratio						
Allergy	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*5.934***	*(ns)*
Asthma	*(ns)*	*1.875**	*2.502**	*(ns)*	*(ns)*	*(ns)*	*2.857***
Diabetes	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*1.762**
Cardio-vascular	*(ns)*	*1.370**	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*
Liver	*(ns)*	*2.466***	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*
Stomach	*2.056***	*1.790***	*(ns)*	*(ns)*	*1.694**	*(ns)*	*(ns)*
Lung	*(ns)*	*0.550**	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*
Cancer	*0.229**	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*
Cerebral-vascular diseases	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*	*(ns)*
Rheumatism	*(ns)*	*1.396**	*2. 292**	*(ns)*	*(ns)*	*(ns)*	*(ns)*
Mental health problems	*1.877***	*1.578**	*5.806***	*5.149***	*1.506**	*15.214***	*3182***

Binary Logistic Regression coefficient *p<0.05 and **p<0.01

Older people having stomach disease are twice as likely to be victims of abuse and neglect, and older people with mental health problems are 1.8 times more likely to be victims of abuse/neglect. With regard to psychological abuse, it is 1.9 times more likely in older people with asthma, 1.4 times more likely for cardiovascular diseases, 2.5 times more likely for liver disease, 1.8 times more likely for stomach disease, 1.4 times more likely for rheumatism, and 1.6 times more likely for mental health problems.

Physical abuse of elders is 2.5 times more likely in the case of asthma, 2.3 times more likely for rheumatism, and 5.8 times more likely for mental health problems.

Physical injuries in elders are 5.2 times more likely to be reported in cases where elders have mental health problems.

Financial abuse of elders is significant and is 1.7 times more likely in cases of stomach disease and 1.5 times more likely with mental health problems.

Sexual abuse of elderly women in our study is 5.9 times more likely when the person has asthma and 15.2 times more likely with mental health problems.

Neglect of elders is significant and is 2.6 times more likely in the case of asthma, 1.8 times more likely with diabetes, and 3.2 times more likely with mental health problems.

Mental health problems are a risk factor for all types of abuse and neglect.

7.5.3 Health risk behaviours

Table 7.5.3. Smoking as a risk factor for elder abuse

Behaviour	Physical abuse	Physical injuries
	Odds ratio	
Smoking	1.223**	1.773**

Binary Logistic Regression coefficient **p<0.01

Of all health risk behaviours, such as alcohol consumption and smoking, only smoking was detected as a risk factor for physical abuse, where it is 1.2 times more likely to be present, and physical injuries, where it is 1.8 times more likely to be present.

7.5.4 Living with partner/living without partner

Older people living with a partner were at greater likelihood of being abused in the last 12 months compared with those living without a partner.

Table 7.5.4. Living with or without partner as a risk factor for elder abuse

Partnership status	Abuse	Psychological abuse	Physical abuse	Physical injuries	Financial abuse	Sexual abuse	Neglect
	Odds ratio						
With/ without	1.055*	1.025*	3.407**	4.481**	1.589*	7.347**	(ns)

Binary Logistic Regression coefficient *p<0.05 **p<0.01

7.5.5 Property ownership

Older people who do not own their house/flat were more likely to be victims of abuse and neglect (see Table 7.5.5).

Table 7.5.5. Ownership of house/flat as a risk factor for elder abuse

Ownership	Abuse	Physical injuries	Sexual abuse	Neglect
	Odds ratio			
Property	2,978**	3.287**	8.948**	2.706**

Binary Logistic Regression coefficient *p<0.05 **p<0.01

7.6. How were the abuse and neglect addressed by victims?

Abuse has both short- and long-term effects on a person's physical, mental, emotional and spiritual well-being. Those people affected first have to cope with the pain, stress and other direct impacts of the abuse. As such, elder abuse is a serious problem that needs to be detected and remedied quickly and effectively – and preferably prevented *(41)*. Elder abuse can have several physical and emotional effects on an elderly person. Many victims suffer physical injuries. Some are minor, like cuts, scratches, bruises and welts. Others are more serious and can cause lasting disability. These include head injuries, broken bones, constant physical pain and soreness. Physical injuries can also lead to premature death and make existing health problems worse. Elder maltreatment can have emotional effects as well. Victims are often fearful and anxious. They may have problems with trust and be wary around others *(42)*.

Older people who reported that they had experienced abuse or neglect were asked about their reactions after the act of abuse they had experienced and also any psychological effect(s) of abuse. Surveys from other countries have found that each type of elder abuse increased the likelihood of reporting emotional symptoms *(43)*.

This section of the report presents the findings regarding reactions/ responses after the experience of abuse/neglect, related to each type of abuse (psychological, physical, financial, sexual abuse and neglect).

Table 7.6.1. Reaction after abuse/neglect

Reaction	Psychological abuse %	Physical abuse %	Physical injuries %	Financial abuse %	Sexual abuse %	Neglect %
Verbal	54.7	45.5	56.7	19.6	23.1	43.6
Physical	4.1	30.9	40.0	52.7	30.8	1.6
Emotional	48.5	60.0	7.3	52.3	84.6	47.6
Reported	8.5	34.6	36.7	31.8	23.1	1.6
No reaction	32.0	27.3	20.0	14.3	69.2	1.6
Other reaction	4.5	10.9	0	8.9	0	15.0

There were different reactions to different types of abuse. Verbal reactions were predominantly reported after almost all types of abuse with the exception of financial abuse. Physical reactions were predominantly reported following financial abuse, followed by physical injuries and physical abuse. Emotional reactions were most often reported following sexual abuse, and then in the case of physical, financial and psychological abuse. The least reported types of abuse are psychological abuse and neglect. Sexual abuse was followed by no reaction by most (69.2%) of the small number of people experiencing this.

Table 7.6.2 presents reported feelings following psychological abuse, by percentage.

Table 7.6.2. Feelings after being exposed to psychological abuse

Feeling	Not at all	Somewhat	Moderately	Considerably
Felt cut off from family or friends	44.8	21.6	13.7	19.9
Felt angry	10.7	14.8	34.3	40.2
Felt afraid	42.6	17.0	16.2	24.2
Felt upset	10.6	12.7	27.7	49.0
Felt ashamed	39.9	15.6	16.4	28.1

In general, abused older people did not feel cut off from family, they still felt accepted and belonging to their 'nest', they felt angry (40.3% of respondents felt considerably angry) and they were upset (49.0% of respondents felt considerably upset).

Table 7.6.3 presents reported feelings following physical abuse, by percentage.

Table 7.6.3. Feelings after being exposed to physical abuse

Feeling	Not at all	Somewhat	Moderately	Considerably
Felt cut off from family or friends	25.5	27.2	7.3	40.0
Felt angry	5.4	14.7	23.5	56.4
Felt afraid	14.6	10.9	21.8	52.7
Felt upset	5.5	1.8	12.7	80.0
Felt ashamed	16.4	10.8	16.4	56.4

The highest percentage of participants felt considerably cut off from family or friends (40.0%), angry (56.4%), afraid (52.7%), upset (80.0%) and ashamed (56.4%).

Table 7.6.4. Feelings after being exposed to physical abuse which caused injuries

Feeling	Not at all	Somewhat	Moderately	Considerably
Felt cut off from family or friends	23.3	23.3	3.4	50.0
Felt angry	10.0	3.3	20.0	66.7
Felt afraid	10.0	13.3	10.0	66.7
Felt upset	7.5	4.3	10.8	77.4
Felt ashamed	16.7	10.0	13.3	60.0

Deeper psychological trauma occurred when a person experienced physical abuse from family members or relatives resulting in injuries. Half felt cut off from family or friends, 66.7% felt considerably angry and afraid, 77.5% felt considerably upset and 60.0% of participants who experienced this type of abuse felt ashamed.

Table 7.6.5 presents feelings reported after experiences of financial abuse.

Table 7.6.5. Feelings after being exposed to financial abuse

Feeling	Not at all	Somewhat	Moderately	Considerably
Felt cut off from family or friends	50.5	14.4	9.0	26.1
Felt angry	12.3	16.9	22.1	48.7
Felt afraid	33.0	15.2	25.9	25.9
Felt upset	9.7	11.5	19.5	59.3
Felt ashamed	51.4	13.5	17.1	18.0

After being financially abused, older people felt considerably upset (59.3%) and angry (48.7%).

Table 7.6.6. Feelings after being exposed to sexual abuse

Feeling	Not at all	Somewhat	Moderately	Considerably
Felt cut off from family or friends	23.1	30.7	23.1	23.1
Felt angry	0	30.8	15.3	53.9
Felt afraid	7.6	30.8	23.1	38.5
Felt upset	0	23.1	15.4	61.5
Felt ashamed	0	15.4	15.4	69.2
other	25.0	25.0	12.5	37.5

The most frequent reactions experienced after sexual abuse were considerable feelings of shame (69.2%) anger (53.9%), upset (61.5%) and fear (38.5%).

Table 7.6.7. Feelings after being exposed to neglect

Experience	Not at all	Somewhat	Moderately	Considerably
Felt cut off from family or friends	20.3	34.4	23.4	21.9
Felt angry	4.7	29.7	40.6	25. 0
Felt afraid	35.9	31.3	26.5	6.3
Felt upset	4.8	20.3	39.1	35.8
Felt ashamed	25.8	25.4	33.3	15.9

Older people who were neglected experienced considerable anger (25.0%) or upset (35.8%) and 21.9% of neglected older people felt considerably cut off from family or friends.

Table 7.6.8 presents the older people's subjective perception of why their caregiver did not afford them the necessary assistance (neglected them).

Table 7.6.8. Causes of neglect

Response	Number	Percentage
Caregiver at work	16	30.1
Caregiver sick	5	9.4
Caregiver on holiday	5	9.4
Caregiver forgot	8	15.0
Caregiver busy	23	43.4
I did not ask for help	11	20.0

The most frequently given explanations were caregiver busy (43.4%) and caregiver at work (30.2%).

7.7 Location where the abuse or neglect took place

Table 7.7.1 presents the data regarding where the act of elder maltreatment took place, by percentage.

Table 7.7.1. Location where the abuse or neglect took place

	Psychological abuse %	Physical abuse %	Physical injuries %	Financial abuse %	Sexual abuse %	Neglect %
Home	69.6	80.0	76.7	81.6	84.6	85.7
In the home of another person	12.1	14.6	20.0	9.5	25.0	31.3
On the street	35.6	21.8	33.3	9.4	16.7	0
Public transport	0.4	3.6	3.3	0.9	8.3	0
Restaurant	0.4	5.5	3.3	0.9	0	0
Shop	3.2	1.8	0	2.8	0	0
Other place	20.3	23.6	33.3	27.4	25.0	28.8

The highest percentage of participants reported their home as the place where abuse occurred (from 69.6% to 85.7%), followed by two other categories: 1) in the home of another person (from 31.3% to 9.4%) and 2) on the street (35.6% to 9.4%).

8. Limitations of the study and future research

This study used face-to-face research with older people which attempted to measure the prevalence of elder abuse or neglect and to identify possible risk factors.

There were a few limitations to this study, which did not cover many aspects of elder abuse:

1. The most vulnerable groups of older people were not included in this survey: for example, older people with severe dementia and also older people who live in care homes or were in hospital or prison.
2. A second aspect which was not covered in this research was the identification of perpetrators' profiles or characteristics and which of such factors can be counted as risk factors.

This survey did not identify other factors at society level which can be relevant for elderly abuse (ageism, efficiency of social and health care, etc.).

9. Discussion

Elder abuse is a phenomenon which provokes interest among social and health professionals in general, but it is also important for the academic community. Identification of the prevalence of elder abuse and neglect as well as the risk factors can help further focus efforts to improve preventive and response mechanisms. To plan effectively for later life, it is important to identify expectations and assumptions about growing older *(44)*. Defining this phenomenon in the context of our country can facilitate support of abused older people and, most importantly, may help develop policy and programmes targeting prevention and response. Coordination between scientists and practitioners can improve decision-making in prevention and response to elder abuse and neglect.

There have been many surveys focused on elder abuse and neglect. One of the systematic reviews of elderly abuse for the period 1975 to 2008 *(45)* analysed the results of 32 such surveys. The review showed that elder abuse prevalence has been estimated in different settings; also various methods were used for data collection in these studies. A sample of various studies that depict elder abuse prevalence is presented from major epidemiological studies, agency reports, health care professionals, caregivers and family, and medical record review. Overall prevalence rates of elder abuse have varied considerably across studies, from 2.6% in the United Kingdom, 3.2% in Boston, 4% in Canada, 5.4% in Ahtari, Finland, 5.6% in Amsterdam, to 6.3% in a district of Seoul *(45)*.

In prevalence studies on elder abuse, rates range between 1% and 35% depending on definitions in the survey and sample methods. These figures, however, may represent only the tip of the iceberg, and some experts believe that elder abuse is underreported by as much as 80%. These low rates may be due to the isolation of older people, the lack of unified surveillance systems and the general resistance of people – including professionals – to report suspected cases of elder abuse and neglect *(46)*.

In *The national survey on elder abuse and neglect in Israel*, overall 18.4% of participants (men and women over 65 years) had been victims of abuse during the previous year *(47,48)*. Another Israeli study showed that 25% of elderly people were subject to neglect, which means deprivation of basic needs in various domains *(49)*. In the United Kingdom, the findings of a household prevalence study *(22,50,51)* for people over 65 years (in England, Scotland, Wales and Northern Ireland) showed that 2.6% of the sample had been victims of abuse. In 2000, a telephone survey in a randomly selected, community-based population in urban and rural South Australia identified that 2.7% of the older population (65 years and over) had been victims of abuse *(52)*. Between 4% and 10% of older Canadians each year are estimated to experience abuse of one or multiple forms *(53)*. The AVOW study (which included women aged between 60 and 97 years, living in private households) showed that overall 28.1% of older women had experienced some kind of abuse (Portugal (39.4%), Belgium (32.0%), Finland (25.1%), Austria (23.8%), and Lithuania (21.8%)) *(19,31)*. In a Croatian study, the data that were collected on exposure to abuse in the family for a sample of 303 older people showed that 61.1% of elders had been exposed to at least some form of abuse in the family during the previous year *(24,54)*. Findings from the current Macedonian household survey on prevalence of elder abuse and neglect, in comparison with all studies mentioned above (except for the Croatian study), showed much higher rates of overall abuse and neglect, at 32.0% for men and women 65 years and over. It may be that since research was first carried out, sensitivity toward different forms of abuse and neglect in general has increased, thus helping elderly people to recognize different forms of abuse and encouraging them to report it. The differences could also be the result of different definitions of elder abuse used in each study, and other methodological issues. More likely the reason for these findings can be located in the traditional norms and beliefs in society, education, household income, health consequences, etc. *(55)*.

Focusing on different types of abuse in the Israeli study, 18% had suffered neglect, 8% verbal abuse, 2% physical or sexual abuse, and 6.6% financial abuse *(47,48)*. The 18% who suffered neglect reported it in primary needs such as nutrition, medical services and personal hygiene *(49)*. By comparison, in our study psychological abuse was the most common form of abuse experienced (25.7%), followed

by financial abuse (12.0%), physical abuse 5.7% and physical injury 3.1%. In our study, 6.6% of the participants reported being neglected, and sexual abuse was reported by 1.3% of survey participants. The ABUEL study *(30)* collected data on men and women aged 60 years and over in seven European Union Member States (Germany, Greece, Italy, Lithuania, Portugal, Spain, Sweden) by means of standardized assessment instruments and methods *(56)*. Across these countries, psychological abuse occurred more often in Sweden (29.7%) and Germany (27.1%), which is very similar to the prevalence rate in our study (25.7%). Physical abuse occurred more often in Sweden (4%) and Lithuania (3.8%), similar to our findings (5.7%). Sexual abuse occurred more often in Greece (1.5%) and Portugal (1.3%), similar to our findings (1.3%). Financial abuse occurred more in Portugal (7.8%) and Spain (4.8%), but our findings for financial abuse (12.0%) are higher than other countries noted. Injuries occurred more often in Lithuania (1.5%) and Greece (1.1%), which is lower than our prevalence rate for physical injuries (3.1%).

In the United Kingdom household prevalence study of people aged 65 years and over, in total 2.6% reported abuse, 1.1% experienced neglect, 0.7% financial abuse, 0.4% psychological abuse, 0.4% physical abuse and 0.2% sexual abuse *(22,50,51)*. The prevalence of abuse was higher among women (3.8%) than among men (1.1%), as is the case in our study (19.4% among women and 12.6% among men), but the different types of abuse and neglect are much higher in our study.

In Australia, 2.7% of the older population (65 years or older) reported being abused. The most common form of abuse reported was psychological, with financial being the next most common, followed by physical abuse and neglect *(52)*. This confirms the findings of our study, where psychological abuse is the most frequent type of abuse, followed by financial abuse.

A national survey on elder abuse in Canada found that financial abuse was most commonly reported (2.5%), followed by chronic verbal aggression (1.4%), physical abuse (0.5%), and neglect (0.4%) *(53,57)*. In our study the leading type of abuse is psychological abuse and in the Canadian case it is financial abuse.

In the AVOW study, emotional abuse was the most common form of abuse experienced (23.6%), followed by financial abuse (8.8%), violation of rights (6.4%) and neglect (5.4%). Sexual abuse (3.1%) and physical abuse (2.5%) were the least reported forms *(58)*. Our study also has a similarity with the results of the AVOW study: psychological abuse (25.7%), followed by financial abuse (12.0%), physical abuse 5.7% and physical injuries 3.1%, and 6.6% for neglect. Overall levels of sexual abuse are lower in the Macedonian study (1.3%), reported only by women, than in any country included in the AVOW study (the lowest percentage reported was in Austria, 2.1%) *(31).*

Similarities have been found with our study and a Hong Kong study with regard to psychological abuse, 25.7% compared with 20.8% *(59)*. A Russian Federation study (respondents older than 60 years) has similarly identified gender as a risk factor, as in our study. In the Russian Federation study, 24.4% of women and 4.2% of men were found to have experienced some form of abuse *(60)*.

Although data on risk factors for elderly abuse have emerged in the past year, most of the information is based on studies from the United States and the United Kingdom (and recently in other countries in the European Union). Among the risk factors identified are mental health/personality disorders in the abusers, quality of the relationship between the caregiver and the recipient of care, cognitive dysfunctions or impairment in the abused, particularly in the oldest ones, and social isolation of older people *(20)*.

A Spanish study gives a victim profile for elder abuse. According to this study, the following factors are relevant for elder abuse: gender (women are almost twice as often victims of abuse (63.2%) as men (36.8%)); age (57.9% of victims are over 74 years); and having chronic diseases (musculoskeletal: 31.6%, diabetes: 21.1%, physical disability: 15.8%, cardiovascular problems: 10.5%, digestive and

excretory system: 10.5%) *(39)*. Similarities have been found with our study in the case of all risk factors mentioned except age.

Data from a study in New Zealand have examined risk and protective factors. Among the risk factors noted were isolation, poor health, mental competence, household living arrangements, and ongoing partner abuse *(61)*. Our study identified risk factors for elder maltreatment as gender (women are more likely to be abused than men), older people living with a partner were more likely to be abused compared to those who live without a partner (except in the case of neglect), physical diseases, depression (except in the case of financial abuse), smoking (only for physical injuries), and property ownership (except for neglect).

Data obtained from other surveys indicate that the most common victims of elder abuse and neglect are female, over the age of 75, and reliant on others for help meeting their daily needs. Eurobarometer surveys show that almost 47% of Europeans think that neglect and abuse of older people is widespread in their country *(62)*. In our study being female is a risk factor for elder maltreatment (chi-square = 5.06 $p< 0.05$ and statistical significance of percentage $p< 0.05$).

The United Kingdom study highlighted depression as a very important risk factor for elderly abuse *(22)*. The study findings were confirmed by the findings from our survey, where depression was identified as a risk factor for any type of abuse and neglect, except financial abuse (binary logistic regression coefficient $p<0.05$ and $p< 0.01$).

A study from Ireland *(63)* found that lower levels of education and household income are relevant risk factors for older people being abused, as in the Macedonian study. Regarding education (chi-square 14.4 $p< 0.01$), there is a statistically significant difference between percentages among respondents, particularly regarding primary and secondary school education. Older people with only primary education are at higher risk of being abused. Also respondents who say that the total family income cannot completely satisfy their needs are more exposed to abuse (37.8%) than those who do not (chi-square 7.42 $p<0.05$).

Newer prevalence studies in the United States and Europe reveal that financial exploitation is one of the more common forms of elder maltreatment. In 2008, data published by the National Social Life, Health and Aging Project identified a 3.5% prevalence of financial mistreatment in the United States of America, ranking it the second most common form of elder mistreatment after verbal abuse *(64,65)*. The most common risk factors highlighted in exploration of the phenomenon of elderly abuse were age, gender, living arrangements, acute or chronic health conditions, mental health status, cognitive functions, social support and use of alcohol and cigarettes *(66,67,68)*.

The first United States population-based, national study (participants between 57 and 85 years old) found that 9% of older adults reported verbal mistreatment, 3.5% financial mistreatment and 0.2% physical mistreatment by a family member. The odds of maltreatment varied by demographic characteristics, as in the Macedonian survey. In the United States study, women were about twice as likely as men to report verbal mistreatment but did not differ in the odds of reporting financial mistreatment *(67)*. In our study, 16.2% of women and 9.5% of men experienced psychological abuse and 6.4% of women and 5.4% of men experienced financial abuse. Our study found that women were more likely to have been abused in the last 12 months than older men in general. In particular, older women were 1.5 times more likely to be victims of psychological abuse, twice as likely to be victims of physical abuse, 2.3 times more likely to be victims of physical injuries, and 2.1 times more likely to be victims of neglect than older men. However, existing evidence indicates that abused older people are more likely female, cognitively impaired, in poor physical health, and dependent on other people *(68)*. Abuse often triggers illnesses such as depression, hypertension, stroke, and heart attacks, with these illnesses contributing to the burden of abuse *(69)*.

Being in need of care often leads to mutual dependency of family members. This circumstance often changes the entire family system and can lead to a change of habits that affects the family's complete life situation. In these situations parents undergo a loss of autonomy and both sides experience a change of roles. Another factor increasing the risk of abuse is shared long-term living arrangements between the perpetrator and victim. When caregiver and care receiver live in the same household, there are not many possibilities to keep a distance from each other *(70)*. Similarly in our study, statistical significance (binary logistic regression $p<0.05$) of reported abuse was found between respondents who live with another person. Older people living with a partner were at greater likelihood of being abused compared with those living without a partner, for every type of abuse. Those living with a partner were three times more likely to be physically abused, four times more likely to be physically injured and seven times more likely to be sexually abused (for women).

In the Macedonian survey, only 22.7% of victims reported the abuse or neglect and 77.3% did not. Similar data have been found in a United States study, where 21% of abuse was reported to Adult Protective Services (APS) agencies, with the remaining 79% not being reported. It can be concluded from these figures that almost four times as many new incidents of elder abuse, neglect and/or self-neglect were unreported than were reported *(71,72)*.

Evidence from Israel indicates that most elderly abuse occurs within domestic contexts, typically by adult offspring (45%) or a spouse (41%) *(47,48)*, which is similar to our findings. All types of abuse and neglect occurred in a domestic context, ranging from 69.6% to 85.7%. In our study, spouses and adult male offspring are the most frequent perpetrators for all types of abuse, except in the case of neglect, where a daughter-in-law was the most frequently reported perpetrator (50.8%). This would be more in line with the female role of taking care of the elders in the family. Data obtained in the Macedonian study show that the most frequent perpetrators were partners/spouses, sons and daughters-in-law. In our study partners/spouses were the most common perpetrators of sexual abuse (76.9%), physical injuries (40.0%) and physical abuse (30.9%). Sons were the most frequent perpetrators of financial (40.8%) and psychological (29.5%) abuse, and daughters-in-law were the main perpetrators of neglect (50.8%), as in the AVOW study (40.6%) *(31)*. Spouses/partners were the most common perpetrators of psychological (34.8%) and physical (33.7%) abuse in the ABUEL study *(30)*. In the same study, friends/acquaintances/neighbours were the most common perpetrators of sexual abuse (30.3%). Data obtained from the AVOW study show that the most common perpetrators of financial abuse were partners (33.7%) and adult children, and children-in-law (28.7%).

According to the European Commission Special Eurobarometer survey on the perception of citizens about the perceived poor treatment, neglect and abuse of dependent elderly people, close to half of Europeans are of the view that poor treatment, neglect and even abuse of dependent elderly people are fairly or very widespread occurrences in their country (47%) and less than one European in ten considers them very rare (8%) *(73).*

10. Conclusion

This study provides information on the prevalence rates of abuse and neglect among older people, covering the following types of elder abuse: psychological abuse, physical abuse and physical injuries, financial abuse, sexual abuse and neglect. It includes different patterns of abuse in relation to each type of abuse and it obtained data about the intensity/severity of abuse and the possible combination of different types of abuse. It also reports data about alleged perpetrators. In the questionnaire, possible perpetrators included family members, relatives, neighbours and friends. The report also includes information about the psychological and emotional consequences of abuse. Sociodemographic factors which were included as possible risk factors were grouped according to the ecological model of abuse. Risk factors at the individual level were age, gender, education, physical and mental health, level of sensory functioning. Risk factors at relationship level were household income, household facilities, with whom the older person lives and the owner of the household where they live. The only risk factor at society level was region.

Elder abuse and neglect were addressed in a face-to-face household survey conducted at national level in the former Yugoslav Republic of Macedonia during December 2011. The survey was conducted on a representative sample of inhabitants (men and women) aged 65 years and over, and it included 960 respondents (430 male and 530 female). The MMSE test was used as a pre-selection method Participants were asked to sign a letter of consent, if they agreed to take part in the survey. Data were collected using a adapted culturally questionnaire which was constructed building on the ABUEL and AVOW questionnaires and Geriatric Depression Scale (with 15 items). SPSS v.19 was used for statistical analysis of the data obtained and the following statistical tests were used: factor analysis, Cronbach's Alpha (both were used for reliability checking of the Geriatric Depression Scale), correlation, chi square, cross tabulation, statistical significance of difference among percentage and binary logistic regression.

The prevalence rates obtained established that 307 (32.0%) of the total number of participants reported that they had been abused or neglected. The highest percentage experienced one type of abuse (56.4%), 27.4% of respondents experienced two types of abuse and 16.2% experienced three types or more. Of the respondents who reported abuse or neglect, 19.4% were female and 12.6% male. Findings indicated that psychological abuse was the most frequent type of abuse (25.7%), followed by financial abuse (12.0%), neglect (6.6%), physical abuse (5.7%), physical injuries (3.1%) and sexual abuse. Most of the studies conducted in other countries showed that psychological abuse (verbal or emotional, as it is named in different studies) is the most frequently reported type of elderly abuse. In the Macedonian study, exposure to sexual abuse was reported only by females and it is the least reported type of elderly abuse (which is similar to findings obtained in other surveys).

The overall prevalence rate and prevalence rate obtained for different types of abuse (and neglect) are higher than prevalence rates of abuse obtained in other countries, except in the Croatian study (which is a country from the same region as the former Yugoslav Republic of Macedonia). The differences in prevalence rates might result from differences in definition of the problem for research, the methodology and statistical tests used. In a developing country such as the former Yugoslav Republic of Macedonia, it could be hypothesized that older people may have been more exposed to different types of abuse and neglect partly owing to poverty and its social effects. We could also stress that in many cases the elder is the only breadwinner in the family, bearing in mind the very high rate of unemployment in the country (around 31%), which could be a potential risk factor for being abused and neglected.

Risk factors for elder abuse identified at the individual level were gender (females are more exposed to abuse and neglect than males); education (levels of significance occur at the two levels of primary and secondary school education, with those who only completed primary school being more exposed to elder abuse than those who completed secondary school); some chronic diseases (cardiovascular diseases, rheumatism, psychological or mental health problems, stomach diseases, and diabetes); and sensory functioning (poorer vision and hearing). At the level of relationships, the following independent

variables were identified as risk factors for elder abuse and neglect: cohabiting status (the lowest level of abuse was reported by those who lived with a partner and children and a higher level of abuse by respondents who lived with close relatives); household income (less satisfied with household income were more exposed to elder abuse); household facilities (living in a poorly equipped house can be a potential risk factor for elderly abuse). The only independent variable in the domain of the wider society level of the ecological model is region. Living in the east of the country can be a risk factor for elder abuse. Participants living in the Skopje region are less exposed to elder abuse. These findings may be explained by socioeconomic and cultural factors.

Relevant independent variables which can be assumed as predictors for elder abuse included gender, physical and mental problems, smoking, living with a partner and not having one's own house or apartment.

Regarding the location where abuse and neglect took place, home was top of the list, followed by in the street, at the home of another person, and in other places.

Psychological abuse was mostly carried out by sons (29.5%), partners (25.5%) and daughters-in-law (22.6%). The most frequently reported pattern of physiological abuse was being insulted or sworn at (14.5%).

Physical abuse was mostly carried out by partners (30.9%), daughters-in-law (23.6%) and sons (20.0%). The most frequently reported patterns of physical abuse were being pushed (1.1%), being kicked (0.8%), being grabbed (0.8) and being slapped (0.6%).

Physical injuries were mostly caused by partners or spouses (40.0%) and sons (20.0%). The most frequently reported results of physical injuries were sprains, bruises or cuts (0.9%).

Perpetrators of financial abuse were mostly sons (47.0%) or partners or spouses (8.7%). The most frequently reported types of financial abuse were trying to make the older person give them money (4.0%) or taking their money (3.8%).

Older people reported sexual abuse primarily from a partner or spouse (76.9%) and other people they knew (23.1%). The most frequently reported type was the most serious pattern of sexual abuse, intercourse against their will (0.3%). Only women reported sexual abuse.

The most frequently reported people who neglected older people were daughters-in-law (50.8%), sons (47.6%) and then partners (17.4%). Getting to the doctor (3.1%), shopping (2.1%) and transportation (2.0%) were the forms of assistance for which older people did not receive help from their family in most of the cases.

Emotional reactions were the most frequent reactions in cases of abuse or neglect. Verbal reactions were predominantly reported in almost all types of abuse and neglect with the exclusion of financial abuse. Physical reactions were predominantly reported in financial abuse, then in the case of physical injuries and physical abuse.

Victims of elder abuse and neglect very rarely report any type of abuse (22.7%). The least reported types of abuse were psychological abuse and neglect.

Many countries have in place practices for prevention, detection, and intervention for abuse of older adults, but there is little evidence from which to identify best practices *(74)*.

Difficulties in assessing the scope of the phenomenon, though, are the result of problems in definitions and methodology, which create difficulties in comparing data from various countries; lack of social and

family awareness; isolation of some elders, especially migrants; elder abuse as a 'hidden issue' that usually occurs in the privacy of the home and is viewed as a family affair; limited access to institutional settings. Difficulties also exist in constructing a unifying research framework to study the phenomenon owing to a lack of comparison groups, a lack of representative national surveys and difficulties in measurement *(66).*

The development of specific national policies regarding elder abuse varies between countries, with many countries not having specific legislation concerning elder abuse. In these countries elder abuse is addressed within broader general legislation, such as domestic abuse or criminal law, as is the case in the former Yugoslav Republic of Macedonia.

There are some examples of good practice in elder abuse prevention and treatment. Most of the good practice involves awareness-raising, followed by education and training, empowerment and participation. One interesting example in the category of awareness-raising is the national Dutch campaign entitled 'End elder abuse', while the annual 'Say no to ageism' week in Ireland provides an example of empowerment and participation *(75).*

11. Recommendations

The findings of our survey have the potential to be used by the relevant institutions in the country to create evidence-based policies for prevention and response to elder abuse and neglect.

In this respect, the WHO recommendations in the *World report on abuse and health (3)* highlight the future challenges for the health, social and other sectors in prevention of elder abuse and neglect, through fulfilment of proposed recommendations:

- development and implementation of multisectoral national action plans on elder abuse and neglect with full implementation of the international and national legislation for prevention of elder abuse and neglect and enforcement of legislation with preventive measures, treatment, social care and support for victims of abuse. This survey has given an indication of possible policy and legal intervention that should be addressed in relevant future programmes and policy documents.
- strengthening of capacities for data collection and needs assessment through development of an integrated system for monitoring elder abuse and neglect. In order to develop effective preventive strategies in the former Yugoslav Republic of Macedonia, there is a need for better information, particularly on the number and types of elder abuse and neglect, circumstances in which it occurs, risk population, risk factors, and trends. Development of a unified reporting form (protocol for elder abuse and neglect), which should be completed by each professional coming into contact with possible victims of abuse, could help avoid secondary victimization of victims of abuse and will provide information for overall reviews of cases of abuse. Education and seminars on all relevant factors should be promoted, for health professionals, social workers, police and NGOs, to help in the implementation of protocols and evidence about elder abuse.
- supporting research into causes, consequences, costs and prevention of elder abuse and neglect, including promotion of safety. This survey has given some of the answers regarding the prevalence of elder abuse and neglect, identifying the major risk factors for elder abuse.
- promotion of primary prevention of elder abuse and neglect with enlargement of the role of health, social and other sectors in primary prevention, promotion of evidence-based practices (incorporating prevention in home visiting programmes, and implementation of family support programmes); capacity-building (education and training for professionals in government and NGOs for prevention of elder abuse and neglect at all levels, with particular focus on primary prevention); and public awareness campaigns to change cultural norms.
- strengthening response and support for victims of elder abuse and neglect through extensions of the role of health, social and other relevant sectors in secondary and tertiary prevention of elder abuse and neglect; improvement of the quality of health care; piloting and implementing services on evidence-based practices; establishing services for older people who witness abuse.
- integrating prevention of elder abuse and neglect into social and education policy, as well as the promotion of gender and social equality, with preparation of guidelines for promotion and realization of the rights of older people in various sectors through programmes; prevention and educational campaigns.

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Annex 1

Table A1: Component matrix for Geriatric Depression Scale

Questions	1 factor	2 factor
Are you basically satisfied with your life?	-0.65	0.22
Have you dropped many of your activities and interests?	0.53	0.22
Do you feel that your life is empty?	0.7	-0.19
Do you often get bored?	0.7	0.12
Are you in good spirits most of the time?	-0.75	-9.14 E-04
Are you afraid that something bad is going to happen to you?	0.54	-3.24 E-02
Do you feel happy most of the time?	-0.73	-3.09 E-02
Do you often feel helpless?	0.71	-4.02 E-02
Do you prefer to stay at home, rather than going out and doing new things?	0.35	0.66
Do you feel you have more problems with memory than most?	0.50	8.79 E-02
Do you think it is wonderful to be alive now?	-0.27	0.46
Do you feel pretty worthless the way you are now?	0.69	-0.10
Do you feel full of energy?	-0.61	-0.37
Do you feel that your situation is hopeless?	0.72	-0.27
Do you think that most people are better off than you are?	0.60	-3.20 E-02

After some relevant variables have been excluded, this is the result of the factor analysis with four questions excluded.

Table A2: Component matrix of reduced Geriatric Depression Scale

Questions	1 factor
Have you dropped many of your activities and interests?	0.54
Do you feel that your life is empty?	0.71
Do you often get bored?	0.70
Are you afraid that something bad is going to happen to you?	0.56
Do you often feel helpless?	0.74
Do you feel you have more problems with memory than most?	0.56
Do you feel pretty worthless the way you are now?	0.73
Do you feel that your situation is hopeless?	0.77
Do you think that most people are better off than you are?	0.63

Table A2 presents results from the factor analysis after reduction of the Geriatric Depression Scale. It can be clearly seen that this instrument has one factor (four questions have been excluded after first factor analysis, see tables).

Reliability analysis allows study of the items which are the property of the measurement scale. In this case Cronbach's Alpha has been used as a model of internal consistency, based on the average inter-item correlation. Cronbach's Alpha for this form of scale is 0.84, which refers to the high consistency of the scale.

The minimum score on the reduced scale can be 9 and the maximum score can be 18 points. Each question can take 1 or 2 points. Higher scores (above 16) indicate severe depression.

The maximum score on the original short form of this scale can be 15 and the lowest can be 0. The highest intensity of depression can be assumed if the score is above 10.

According to the manual for use of this scale, each score takes two points. Scores over 16 (in this scale with nine items) almost always point to depression *(76)*. Scores of 16 and above were reported by 41.4% of respondents.

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