



**SURVEY OF EFFECTS OF CENTRES
FOR HEALTHY AGEING ON OLDER PERSONS
IN BOSNIA AND HERZEGOVINA**

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Acronyms

AIDS	Acquired immune deficiency syndrome
BiH	Bosnia and Herzegovina
CHA	Centre for Healthy Ageing
BD	Brčko District
FBiH	Federation of Bosnia and Herzegovina
HIV	Human immunodeficiency virus
HPV	Human papilloma virus
KAP	Knowledge, attitudes and practices
NGO	Non-governmental organization
PPH	NGO Partnership for Public Health
RS	Republika Srpska
WHO	World Health Organization
UN DESA	United Nations Department for Economic and Social Affairs
UNFPA	United Nations Population Fund

Table of Contents

1. Introduction.....	3
2. Purpose of survey	6
3. Tasks for survey	6
4. Methodology of survey.....	7
4.1. Type of survey	7
4.2. Survey sample	7
4.2.1. Design of sample.....	7
4.3. Survey tools.....	8
4.3.1. Piloting the questionnaire.....	9
4.4. Work on the survey	9
4.4.1. Selection and training of interviewers for fieldwork	9
4.4.2. Control and supervision in the field.....	10
4.4.3. Procedure of interviewing	10
4.5. Entering and processing data.....	10
4.5.1. Data entering	10
4.5.2. Data processing.....	11
4.6. Survey management	11
4.7. Limitations of the survey.....	11
5. Results of the survey.....	13
5.1. General, demographic and socio-economic characteristics.....	13
5.2. Health and quality of life	17
5.3. Social interactions and inclusion	18
5.4. Health risks.....	22
5.4.1. Nutrition.....	22
5.4.2. Physical activity	24
5.4.3. Smoking.....	26
5.5. Using health care services	26
5.6. Promotion of health of older persons in the community	30
5.7. Sexual health	31
6. Conclusions.....	38
7. Recommendations.....	41
APPENDICES.....	44

1. Introduction

Although ageing is a normal process in the individual life cycle of every person, it is still viewed in every community as a special challenge for various sectors and institutions. Ageing persons are population groups with particular demands and needs, whose health conditions are associated with various health-related factors, dominance of chronic non-communicable diseases and inequality in using health and social care services.¹

Demographic trends on the global scale are characteristic of a population growth, within which the share of ageing persons is also growing. According to UNFPA data, the share of over-60-year-old people is 12.3%, globally, with an assessment that this share will increase to 22% by 2050².

The population of the WHO European Region, too, shows a trend of a growing share of older people of 14% in 2010, and it has been assessed to amount to 25% by 2050. Life expectancy of the population of nearly all countries in the European Region has increased, but with great differences in health and quality of life of older persons.³

Similar to the countries in the region, BiH also shares the trends of demographic transition, in which, due to a declining birth rate and improved

living, the population ages faster than it grows, the consequence of which is a constant increase of the share of ageing population in the total population.

According to the WHO indicators for 2012, older persons participate with 16% in total population of Bosnia and Herzegovina, while life expectancy at birth for the population of Bosnia and Herzegovina in 2011 was 77 years, of which 74 years for men and 79 years for women.⁴

Analysing the health condition of older persons is one of the fundamental factors for planning, organization and evaluation of health and social care. According to the data of the BiH Agency for Statistics and reports of entity Institutes for Public Health, the dominant causes of diseases and mortality among older persons in BiH are chronic non-communicable diseases, in particular diseases of the circulatory system and malignant neoplasms which have a considerable impact on the health and life quality of older persons, and which also increase the costs of health and social care in BiH.^{5,6} On the basis of research conducted so far, it could be concluded that an accelerated trend of population ageing was particularly marked in developed countries after World War II, while this trend has been accelerating in developing countries in the recent decades, accompanied by a declining

¹ WHO, Towards policy for healthy ageing, <http://www.who.int/ageing>

² Ageing in the Twenty First Century, UNFPA, <http://www.unfpa.org>

³ Strategy and action plan for healthy ageing in Europe 2012-2020, <http://euro.who.int/healthyageing>

⁴ European Health for all database (HFA-DB), <http://www.euro.who.int/countries/bosniaandherzegovina/data>

⁵ Demography 2014, Thematic bulletin, <http://www.bhas.ba>

⁶ Report on health condition of the population and organization of health protection in the Federation of BiH 2014, <http://www.zzjzfbih.ba>

fertility, which, in some countries, fell below the level required for natural regeneration of the population. The result of these trends, with United Nations support, was the adoption of the Madrid International Plan of Action on Ageing. In line with the recommendations of the Madrid International Plan of Action on Ageing and the European Social Charter, BiH – similar to other countries – is faced with the need to adopt adequate programmes for older persons in the form of a strategic framework and action plans based on intersectoral cooperation mechanisms^{7,8}

However, while the rights in the field of health care and social protection are defined within the framework of current legislative arrangements in both entities, older persons in BiH are not recognized adequately in the laws as beneficiaries and agents of societal development. Also, there are still no systemic and intersectoral policies or strategies in BiH to respond to demographic changes and the trend of an increasing share of older persons and their specific health care and social protection needs.^{9, 10, 11, 12}

Contrary to internationally recommended interventions for promotion of health of older persons in a community, the dominant form of addressing the needs of older persons in BiH thus far has been the institutional approach by means of older people's homes, the responsibility for which mainly lies with the responsible ministries and

social welfare centres, which partially participate in sharing the expenses of accommodation of the beneficiaries, with an ever present challenge of the need for accommodation which constantly surpasses the capacities of these institutions.¹³

The Ombudsmen for Human Rights in Bosnia and Herzegovina stress in their reports the problem of vulnerability and social alienation of a certain number of older persons in BiH due to non-existence of a special and adequate normative framework to support older persons in the exercise of their rights. They also underlined the outreach to a relatively small number of older persons through the provision of social care to the vulnerable, who are mainly accommodated in older people's homes or other institutions, which are insufficient in number. Also, some of older people's homes function outside of the social protection system, meaning they operate on purely business terms and offer little or no protection to those older persons who are unable to cover the costs of services.

In the same report, the Ombudsmen for Human Rights in BiH indicate that there is a need to develop non-institutional forms of protecting older people and ensure their participation in social activities through programmes which would include not only institutions protecting older people but the society

⁷ Madrid International Plan of Action on Ageing, MIPAA, <http://www.un.org/esa/socdev/ageing>

⁸ European Social Charter, <http://www.mhrr.gov.ba>

⁹ RS Law on Health Care, RS Official Gazette, No 106/09, <http://www.vlada.rs>

¹⁰ Law on Health Care of the Federation of BiH, Official Gazette of the Federation of BiH, No 46/10, <http://www.fmz.gov.ba>

¹¹ Law on Health Insurance in the Federation of BiH, Official Gazette of the Federation of BiH, Nos. 30/97, 7/02, 70/08, 48/11.

¹² Law on Rights, Obligations and Responsibilities of Patients in the Federation of BiH, Official Gazette of the Federation of BiH, No 46/10, <http://www.fmz.gov.ba>

¹³ Caritas analysis of the condition of older persons in need, www.carbkbih.org

as a whole, to prevent and reduce social isolation and discrimination against older persons.¹⁴

In terms of promotion of older persons' health in the communities in BiH, an important step was made with the implementation of the project entitled "Promotion of Networks for Healthy Ageing", which was supported financially in 2009 by the "Social Transformation Programme (Matra)", of the Ministry of Foreign Affairs of the Netherlands. The project was implemented by the Stichting Yanos Public Health from the Netherlands and the NGO Partnership for Public Health from Bosnia and Herzegovina, together with the Stichting Zorgbeheer De Zellingen from the Netherlands.¹⁵

As part of this project, first Centre for Healthy Ageing (CHA) was opened in the Municipality of Novo Sarajevo. The work of the Centre was based on the strengthening of health-related self-protection, improvement of the quality of life and active engagement of older persons in the community, delay or prevention of institutional accommodation in older people's homes and promotion of partnerships with families and health and social workers with a view to promoting health of older persons in the community.

With a view to responding adequately to health and social needs of older persons, the CHAs use in their work multidisciplinary teams of professionals in various disciplines and volunteers with various professions, skills and knowledge. Rendering services in the field of health care and social protection, such as health education, information dissemination, individual counselling, group work

such as art and culinary activities, participation in clubs and promotional campaigns in the community, and occupational therapies, the CHAs represent a model for promoting health and quality of life for ageing people, which makes an informed contribution to the promotion of the health of the population and elimination of wasteful and improper use of health care and social protection.

In cooperation with various institutions and professionals in various disciplines, the CHAs organize lectures and educational workshops for their beneficiaries on a daily basis, with the topics which are relevant from the health-social aspects of ageing, health risk factors, such as nutrition, physical activity, addiction diseases, mental health, etc.¹⁶

After the first CHA was opened in Bosnia and Herzegovina, and based on the experience collected in its work as a model for promotion of health of older persons in a community, UNFPA has so far provided support for opening of two new CHAs in Bosnia and Herzegovina, in cooperation with the NGO Partnership for Public Health. At the time of writing this report, the following new CHAs were opened: CHA Velešići and CHA Centre in Sarajevo; CHA in Domaljevac-Šamac, CHA in Modriča, and CHA in Tuzla.

The work of the UNFPA on the activities of promoting health of older persons in BiH is based on the conclusions of the International Conference on Population and Development and the Madrid International Plan of Action on Ageing from 2002, aimed at promoting health and wellbeing in old age

¹⁴ Special report on the condition of human rights of older persons in BiH, 2010 www.obmudsmen.gov.ba

¹⁵ Partnership for public health, <http://www.pjz>

¹⁶ CHA Sarajevo, <http://www.zdravostarenje.ba>

and ensuring and enabling an environment conducive to supporting older persons.¹⁷

The UNFPA in BiH also supports government institutions in the development of strategies for older persons, which will be aligned with the Madrid International Plan of Action on Ageing. Upon a request of the Ministry of Human Rights and

Refugees of Bosnia and Herzegovina, in accordance with the UNFPA Programme for Bosnia and Herzegovina and in cooperation with the UN DESA and many other ministries and NGOs in Bosnia and Herzegovina, the UNFPA initiated drafting of Guidelines for Development of Social Policies to be used for drafting entity-level strategies and Brčko District strategy for older persons.¹⁸

2. Purpose of survey

The basic purpose of this survey is to compile and calculate indicators on the effects and impact of CHAs on health and life quality of their beneficiaries in support of defining benchmarks for systemic interventions to promote health of older persons in Bosnia and Herzegovina.

The data collected in this survey should serve as scientifically founded arguments for disseminating information to the broader public, professionals in various disciplines and relevant institutions, and for promoting further the CHAs as a model for promotion of health of older persons in the communities in Bosnia and Herzegovina.

3. Tasks for survey

- Comparative analysis of assessments of health and life quality of the beneficiaries of CHA services and older persons who are not beneficiaries of CHA services;
- Assessment of impact of CHAs on health and life quality of older persons with a focus on the

knowledge and behaviour related to health risks, self-perception of health and life quality, using health care, promotion of health of older persons in the community, and knowledge and practices related to their sexual health.

¹⁷ UNFPA in BiH,
www.unfpa.ba/bih/programskekomponente

¹⁸ UNFPA in BiH,
www.unfpa.ba/bih/populacijskeirazvojnestrategije

4. Methodology of survey

4.1. Type of survey

The methodology of the survey was developed in accordance with the principles of the Helsinki Declaration, adopted by the 18th World Assembly of the World Medical Association held in June 1964 in Helsinki, which represents a series of ethical recommendations to be used when conducting population research. The survey was conducted as a comparative, descriptive and analytical study of the quantitative type, with the use of the KAP methodology, based on the analysis of knowledge, attitudes and behaviour practices of older persons.

Methodologically, the survey was conceived in such a way as to enable collection of data which has the significance of professional arguments in the drafting of strategic papers for the promotion of health and life quality of older persons, and the promotion of the CHA network concept in Bosnia and Herzegovina. The research utilized the survey technique in the form of a face-to-face interview with the respondents. This method of collecting data is still the best when one wants to minimize the number of unanswered questions and maximize the quality of collected data, and when one wants to research topics which are sensitive for the observed group of respondents.

4.2. Survey sample

The survey was conducted on a representative sample consisting of respondents who were beneficiaries of CHA services on the territory of the Municipality of Novo Sarajevo and Municipality of Modriča, aged 60 and over (main sample) and a

representative sample of the inhabitants of the Municipality of Novo Sarajevo and Municipality of Modriča, aged 60 and over, who were not beneficiaries of CHA services (control group of respondents).

This survey covered a total of 402 respondents, of whom 214 were beneficiaries of CHA Novo Sarajevo and CHA Modriča services and 188 beneficiaries were in the control group of respondents.

4.2.1. Design of sample

For the purposes of this survey, two different sample designs were prepared: one for the selection of CHA beneficiaries (experimental or Group C) and the other for the selection of respondents who were not beneficiaries of CHA (control group or group K).

The sample framework were the databases of CHA beneficiaries from the two target municipalities (Novo Sarajevo and Modriča) which contained data on the names and surnames, sex, date of birth, municipality of residence, address, telephone number, number of household members, diagnosis of disease and date of membership. The sample for the selection of beneficiaries was a systematic one-stage random sample. Age and sex were used as ancillary variables in the systematic selection of the beneficiaries, which insured allocation of selected units in the same proportion as in the beneficiary population in each target municipality individually. The systematic random selection of the units ensured equal probabilities for sample selection for each unit from the population.

Since there is no updated sample framework for selection of non-beneficiaries of CHA (control group), the main sample of households and their members from the target municipalities was used as provided by the BiH Agency for Statistics in June 2009. The sample for the selection of the respondents in the control group was a two-stage stratified random sample. The first stage of the sample selection was selection of census circles into the main sample using the method of simple random sampling within the initial strata. The initial strata were created by means of a cross-classification of the entities and the Brčko District in BiH (F BiH, RS and Brčko District of BiH) and the type of settlements (urban and rural). In this way, 6 initial strata were created. In the second stage, the respondents from the target municipalities were selected using the method of systematic random sampling. Age and sex of the respondents were used as ancillary variables in the systematic selection of the non-beneficiaries of CHAs. In this way, equal probabilities of the selection for each sample unit from the second selection stage were ensured.

4.3. Survey tools

For the purposes of this survey, a questionnaire was designed in accordance with the recommendations contained in the relevant documents of government institutions and NGOs involved in interventions of protecting health of older persons in Bosnia and Herzegovina as well as research

instruments of relevant international organizations used in similar population research.^{19,20,21,22}

For the purposes of this survey, a structured questionnaire was designed, which offered open and closed type questions with the use of the Likert scale of assessment (See Section “Appendices” at the end of the Report).

The questionnaire consisted of 80 questions in total, formulated through the following modules:

- A** – General data, demographic and socio-economic characteristics (questions 1-10),
- B** – Assessment of health and quality of life (questions 11-24),
- C** – Health risks (questions 25-36),
- D** – Using health care (questions 37-52),
- E** – Promotion of health of older persons in the community (questions 53-71), and
- F** – Sexual health (questions 72-80).

The following questions were included within the module:

- A) **General data, demographic and socio-economic characteristics** (sex, age, employment status, marital status, family members and income),
- B) **Assessment of health and quality of life** (assessment of health condition, satisfaction with the quality of life, daily habits, perception of family relations and

¹⁹ CHA Sarajevo, <http://www.zdravostarenje.ba>

²⁰ Study of condition of health of the population in the Federation of BiH 2012, <http://zzjzfbih.ba>

²¹ Multiple Indicator Cluster Survey (MICS) and Millennium Development Goals (MDG) Indicators for

Bosnia and Herzegovina 2011/2012, Agency for Statistics of BiH, available at: <http://www.bhas.ba>

²² Ageing and sexual health. *Entre Nous* No. 77, WHO Regional office for Europe, 2013, available at: <http://www.euro.who.int/en>

- social interaction, exposure to violence and injury),
- C) **Health risks** (knowledge, attitudes and practices related to health, nutrition, physical activity, smoking and use of alcohol),
 - D) **Using health care** (health insurance, access to health care, using preventive health care and satisfaction with the adjustment of health care to the needs of older persons),
 - E) **Promotion of health of older persons** (perception of the society's concern for the needs of older persons, assessment of intergenerational solidarity, perception of CHA role in the health of older persons, satisfaction with CHA services and proposals for improvement of CHA work), and
 - F) **Sexual health** (sexual activity and knowledge about sexually transmitted diseases).

4.3.1. Piloting the questionnaire

With a view to collecting comments and suggestions for the improvement of the content and the concept of the questionnaire, before the commencement of the survey, the questionnaire was piloted on a sample of 15 CHA Novo Sarajevo beneficiaries. During the piloting, CHA beneficiaries gave suggestions related to the order of the modules of questions, comprehension of the questions and offered answers and the time required to fill in the questionnaire. This was taken into consideration in the preparation of the final questionnaire and organization of the survey activities.

4.4. Work on the survey

4.4.1. Selection and training of interviewers for fieldwork

For the purposes of this survey, a total of six interviewers were hired (of whom four for Novo Sarajevo and two for Modriča). Interviewer selection was performed on the basis of age, highest level of education, prior experience in similar population surveys, recommendations from previous jobs, experience in work with older persons, voluntary work and activities of intergenerational solidarity, predisposition for teamwork, good organizational skills, communication skills and knowledge of the geographic area in which the survey is conducted. In the process of selecting the interviewers, sex structure was also taken into account.

After the applications and short biographies of the candidates were received by the NGO Partnership for Public Health (PPH), the selection of the persons responsible for the survey work was made by the chief researcher with the assistance of the members of the research team in Sarajevo and Modriča, as well as representatives of the PPH and UNFPA.

The selected interviewers took part in a one-day training in conducting the survey where they familiarized themselves with the concept and goals of the survey, methodology of the survey, sample and techniques of work on the ground and the survey questionnaire. The trainers were the chief researcher and members of the research team, with the assistance of the PPH and supervision of the UNFPA representative. The interviewers were given respondent lists for whom they were

responsible as well as survey documentation (questionnaires and a form of a logbook for daily records during the survey).

In order to ensure objectivity and impartiality and because of some sensitive questions for the interviewers, the interviewers who did not have working/volunteering experience in the centres were selected for the group of respondents who were CHA Novo Sarajevo and CHA Modriča beneficiaries.

4.4.2. Control and supervision in the field

Two supervisors who were also members of the research team were selected to monitor the work of the interviewers in the field. Assistance and help in the supervision were also provided by NGO PPH representatives. The controllers were responsible for monitoring the work of the interviewers, dynamics of the interviewing and the quality of filled questionnaires before they were entered in the database.

4.4.3. Procedure of interviewing

The collection of data was completed in the period between 9th and 30th of November 2015 for both groups of respondents in the CHA Novo Sarajevo and CHA Modriča. The respondents who were CHA beneficiaries were interviewed on the premises of the CHA at the times when they were most available considering their daily routine. To respect the principle of confidentiality and anonymity, the interviewing did not take place in shared rooms/assembly room, but special rooms were selected for the interviews. The participation of the respondents in the research was on a voluntary basis. If the interviewers received information that

a certain CHA beneficiary who was in the sample would not be available at the time of the interviewing, they had an option to replace them with an appropriate beneficiary from the reserve list.

The respondents of the control group were interviewed in their homes, at the times when they were most available according to an assessment made by the interviewers. The interviewers received lists with names and surnames of the respondents who were in the sample, addresses, number of household members, and telephone numbers if it was available in the main sample. In case of unsuccessful contact, the interviewers had an obligation to try to contact the respondent at least three times before replacing him or her with another respondent from the reserve list. Because of the principle of confidentiality and anonymity, the interviewing of the respondents did not take place in the shared rooms in the apartments/houses where all household members gather, but a separate room was selected for the interview.

4.5. Entering and processing data

4.5.1. Data entering

Data entering was implemented in Excel and was organized in two locations (Sarajevo and Modriča as the localities in which the survey was conducted). Excel tables were prepared in the form of data matrices with the dimensions $n \times k$, where n was the number of units in the sample, and k was the number of variables in the questionnaire. Each sample unit had its unique ID number and for each variable in the questionnaire the modalities were

coded in the way which enabled straightforward data entries.

Before the entering of the data, a short training was organized for the persons responsible for data entering within the one-day training for interviewers with a view to familiarizing them with the administrative procedures of data entering and processing. After the entering of the data, they were transferred to the SPSS database which was prepared for data validation, i.e. descriptions of all variables and their modalities were entered.

In the next stage, the data was edited and several errors in the collection/entering were rectified, and the missing data was imputed (mainly by such answers as “refuses to answer or does not know the answer” or by a logical value ensuring consistency with the answers to other questions.

4.5.2. Data processing

Data processing was carried out using the methods of descriptive and inferential statistical analysis. The descriptive statistical analysis was performed by means of a description of frequency distribution and making of cross tables of a certain number of variables defined in the questionnaire, such as the socio-economic status in relation to one's own perception of health and quality of living in relation to the exposure to the risk factors and using health care services by older persons. Besides, various graphic representations of statistically most important variables were also made.

A considerable part of the statistical analysis was made using the method of inferential statistics or statistical conclusion with an intention to encompass the analysis of relations between older

persons using CHA services and those who are not, with a view to emphasizing the role and impact of CHA services on the promotion of health of older persons. For this purpose, the appropriate statistical tests were used:

- χ^2 - association or independence test,
- Mann-Whitney U-test,
- Kruskal-Wallis test, and
- T-test for independent samples.

4.6. Survey management

In cooperation with the UNFPA, the following research team was formed for the preparation and implementation of the activities, and for supervision and evaluation of all segments of the survey:

- Chief researcher and research team manager (Dr Aida Ramić-Čatak),
- Assistant to chief researcher (Dr Stela Stoisavljević),
- Consultant for preparation of the sample and the database for data entering and processing and statistical analysis (Edin Šabanović),
- Consultant for survey methodology and statistical analysis of data (Gorana Knežević)
- Support in the implementation of the survey – PPH (Sejdefa Bašić-Čatić).

4.7. Limitations of the survey

When interpreting the results obtained in this survey, one should take into consideration certain limitations, which were elaborated in the preparation of the survey methodology.

Primarily, the limited number of respondents in the sample which was defined in relation to the current number of beneficiaries of the CHAs in only two locations, in Sarajevo and Modriča, which leaves this survey without the argument of being a population research representative for the whole area of BiH.

The results obtained should also be analysed considering the evident differences in the sex structure of the C and K groups of respondents, or beneficiaries and non-beneficiaries of CHA services. There is a considerable difference between the respondents in terms of their sex representation,

where Group C has a considerably higher number of women, while Group K is equal by sex.

And finally, the results obtained through this survey should be primarily interpreted with a focus on the similarities and differences in the responses of the respondents in relation to whether they are beneficiaries of the CHAs or not (C and K groups), which satisfies the basic goal of the survey – to collect indicators on the effects and impact of CHAs on health and quality of life of their beneficiaries in support of defining benchmarks for systemic interventions to promote health of older persons in Bosnia and Herzegovina.

5. Results of the survey

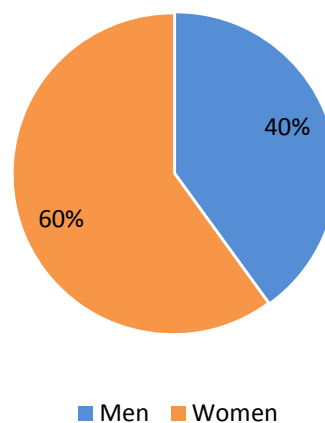
5.1. General, demographic and socio-economic characteristics

A total of 402 respondents participated in the survey, of whom 214 respondents were CHA beneficiaries (hereinafter: Group C) and 188 respondents who were not CHA beneficiaries as a control group (hereinafter: Group K).

With regard to the sex structure, 60% of the respondents were women and 40% were men.

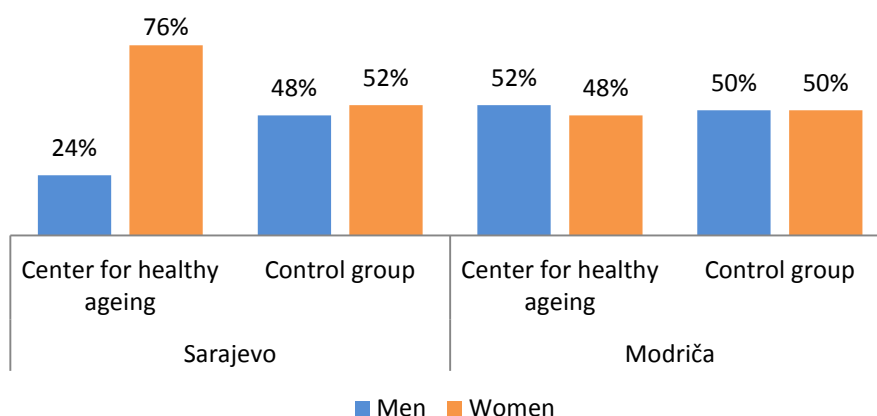
Differences in respondents' sex structure in some localities of the survey are recorded. Women dominated in the CHA Novo Sarajevo with 76%

Graph 1. Respondents' sex structure



compared to the CHA Modriča, where women accounted for 48% of respondents.

Graph 2. Respondents' sex structure by survey locality



The collected data was the basis for an examination of a hypothesis of independence of the sex structure of the respondents who were beneficiaries of CHA services and respondents of the control group. There is a considerable

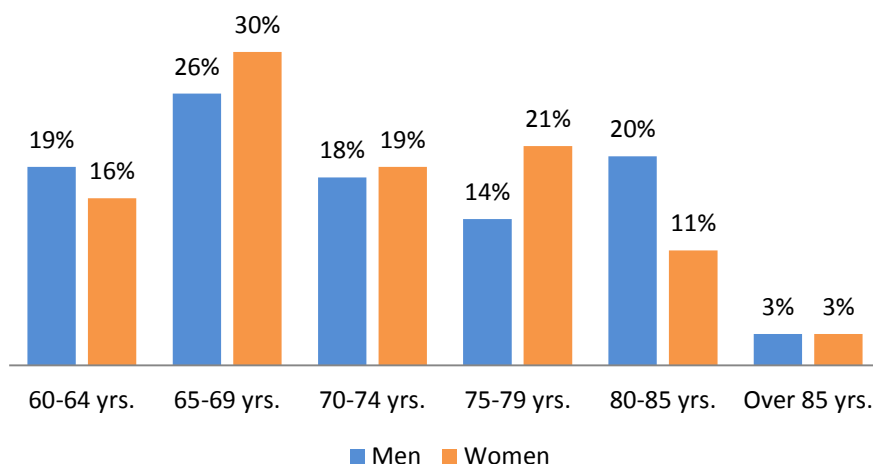
difference between the respondents by sex, where Group C has a considerably higher number of women, while Group K was equal in terms of sex structure²³.

²³ ($\chi^2=11.575$; $p=0.001<0.05$)

The research encompassed older persons aged 60 and over. In the analysis of the age and sex structure of the respondents it was noted that the

largest number of men and women in the research was in the 65-69 year age group.

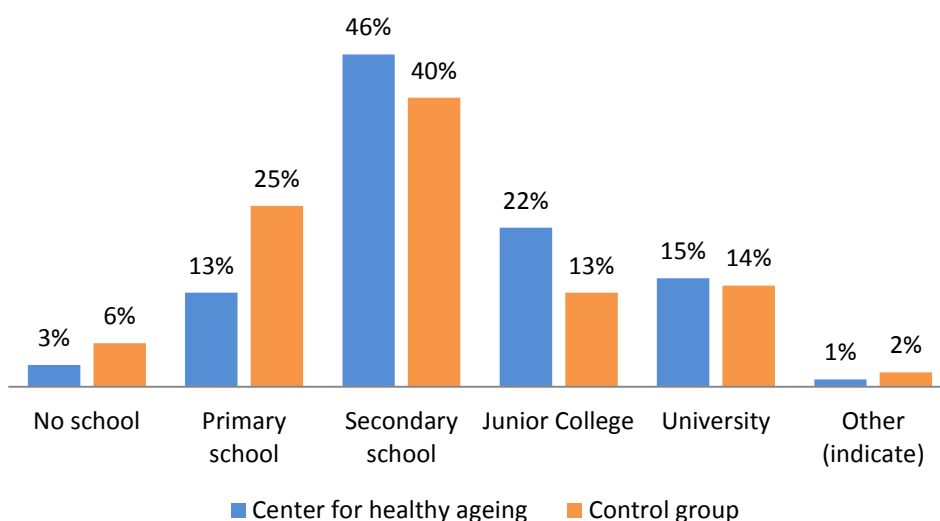
Graph 3. Respondents' age and sex structure



In terms of the education structure, Group C and Group K respondents differed in terms of the level of highest education attainment, where Group C respondents had a higher level of education in relation to the Group K respondents (a larger number of Group C respondents completed a

secondary school or a post-secondary school compared to Group K, whose respondents dominated in the completion of primary school or said that they had not attained any education level).²⁴

Graph 4. Highest education level, by respondent group

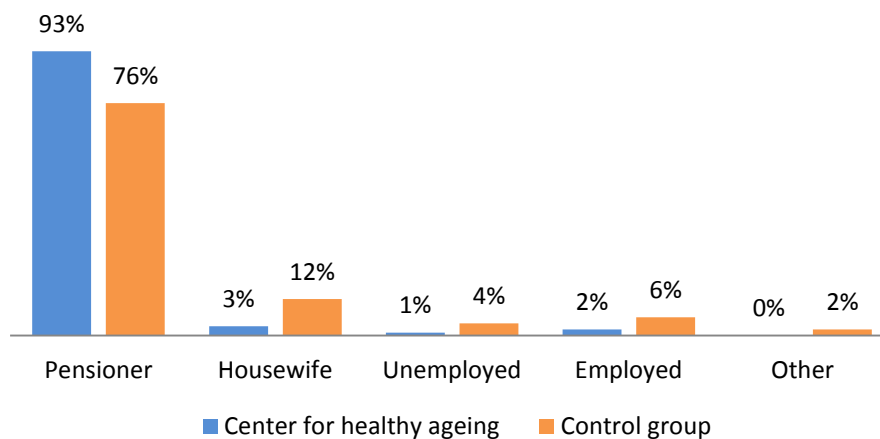


²⁴ ($\chi^2=14.868$; $p=0.011<0.05$)

With regard to the employment status, pensioners dominate in Group C (93%) compared to 75% in Group K. There are considerably more housewives

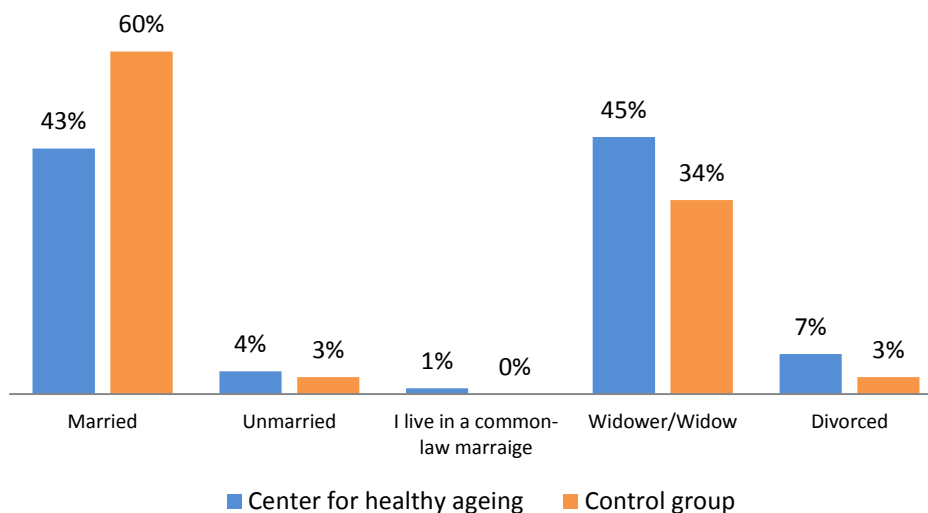
in Group K (12%) compared to Group C (3%). Also, there are more employed persons in Group K (6%) compared to Group C (2%).²⁵

Graph 5. Employment status, by respondent group



Group C and Group K respondents differ in their marital status. Group C has more widowers/widows, while Group K has more married persons²⁶.

Graph 6. Marital status, by respondent group



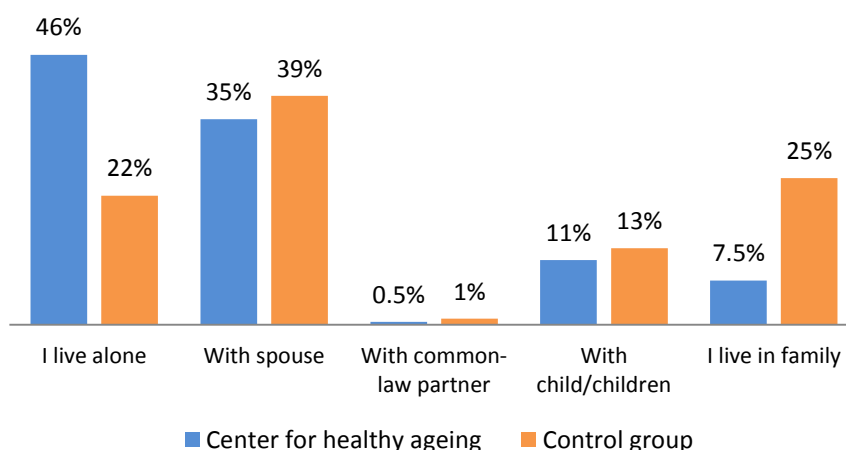
Group C and Group K respondents differ in terms of the number of members of the households they live in. Group C has more persons who live in single-member households, compared to Group K respondents²⁷.

²⁵ ($\chi^2=25.315$; $p=0.000<0.05$)

²⁷ ($\chi^2=36.130$; $p=0.000<0.05$)

²⁶ ($\chi^2=14.747$; $p=0.005<0.05$)

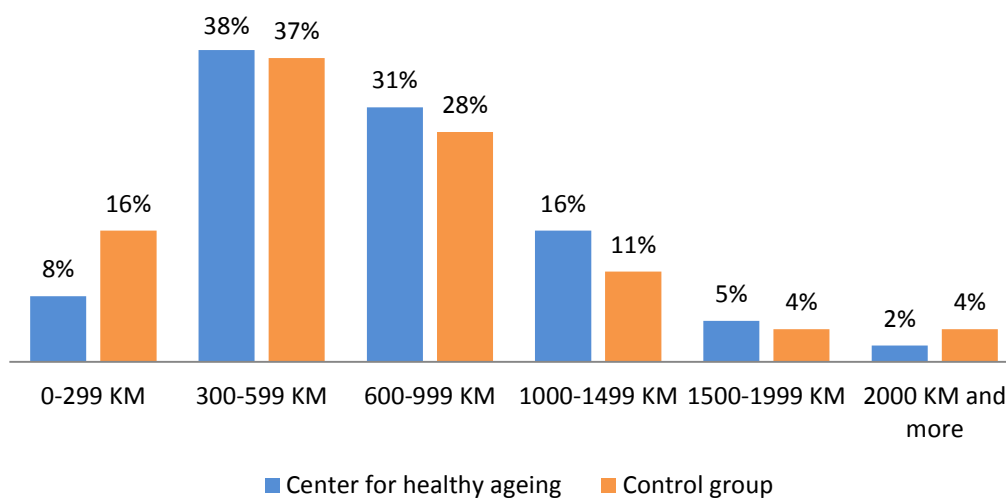
Graph 7. Household structure, by respondent group



The largest number of the respondents (37.9% in Group C and 37.2% in Group K) declared monthly incomes between BAM 300 and 599, while 30.8% in Group C and 28.2% in Group K declared incomes

ranging between BAM 600 and 999, so a conclusion can be drawn that respondents of Group C and Group K do not differ in terms of household income²⁸.

Graph 8. Respondents' monthly incomes



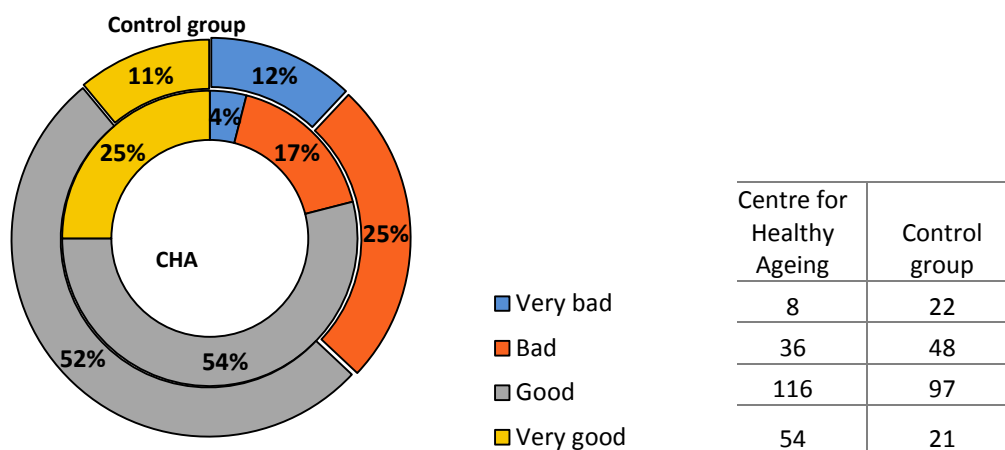
²⁸ ($\chi^2=8.466$; $p=0.132>0.05$)

5.2. Health and quality of life

In terms of health self-assessment, considerable differences are recorded between respondents in Group C and Group K. Since a higher value of

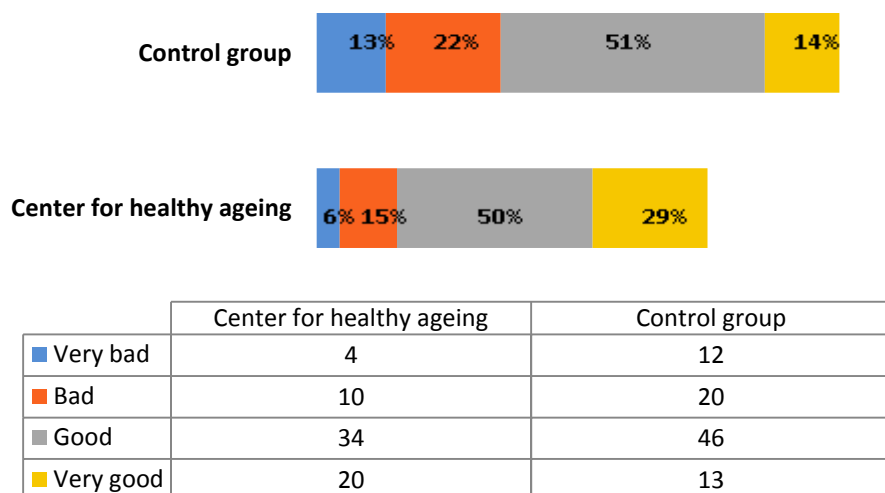
response modality concerning this question meant better health (4-very good to 1-very bad), Group C respondents assessed their health to be considerably better than the self-assessment of health by respondents of Group K²⁹.

Graph 9. Health assessment, by respondent group



With regard to health self-assessment in relation to sex, considerable differences are recorded where men in Group C assessed their health considerably better than men in Group K³⁰.

Graph 10. Health assessment, by respondent group – men



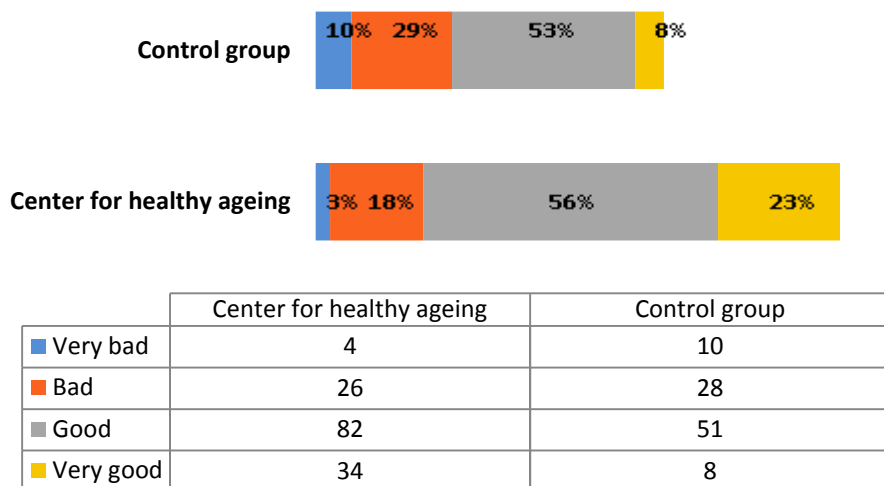
²⁹ (U= 15,157.000; p=0.000<0.05)

³⁰ (U= 2384.00; p=0.008<0.05)

Considerable differences are recorded in women, too, in terms of their self-assessment of health, where women in Group C assessed their health

considerably better compared to the self-assessment of health by women in Group K³¹.

Graph 11. Health assessment, by respondent group – women

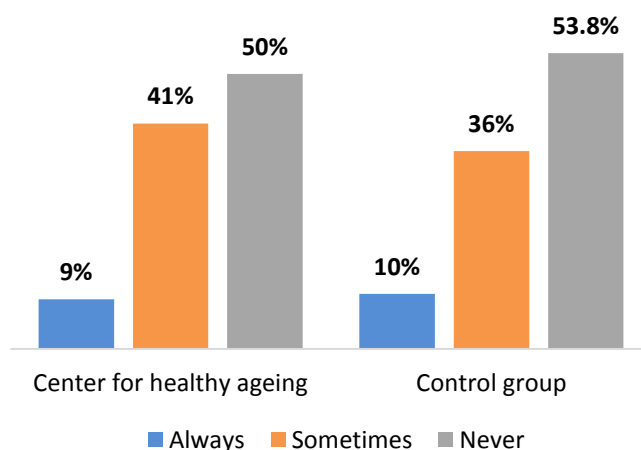


5.3. Social interactions and inclusion

In the assessment of social interactions and quality of life of older persons, an important indicator is

how much of their time the respondents spend alone. In terms of the time the respondents spend alone, there are no considerable differences between the respondents in Group C and Group K³².

Graph 12. Respondents who spend their time mostly alone, by respondent group



Also, there are no significant differences between men³³ and women³⁴ in Group C and Group K in terms of the time they spend alone.

³¹ (U= 2384.00; p=0.008<0.05)

³² (U=18315.000; p=0.093>0.05)

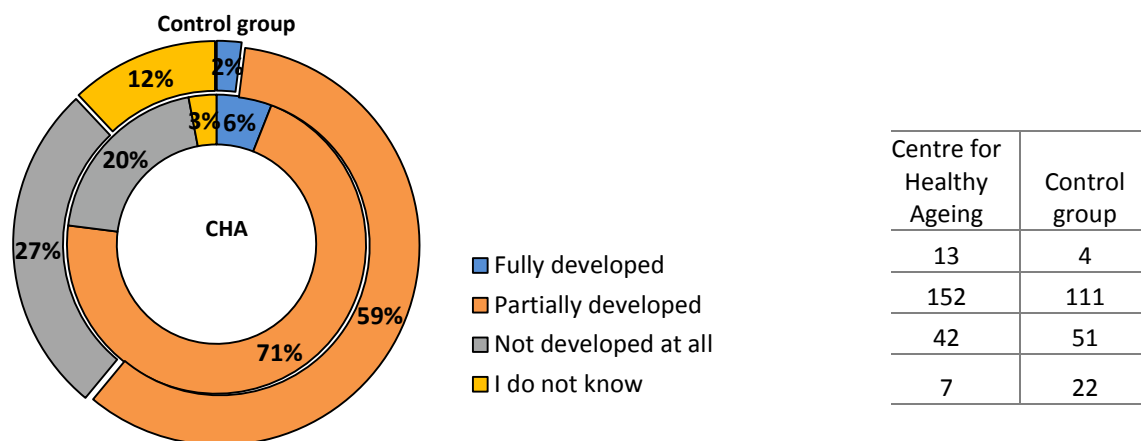
³³ (U= 3002.000; p=0.720>0.05)

³⁴ (U= 6704.000; p=0.447>0.05)

In terms of the opinions and views about developed intergenerational solidarity, considerable differences are recorded between the respondents. The respondents in Group C have a more

pronounced opinion that intergenerational solidarity is fully or partially developed, compared to the respondents of Group K³⁵.

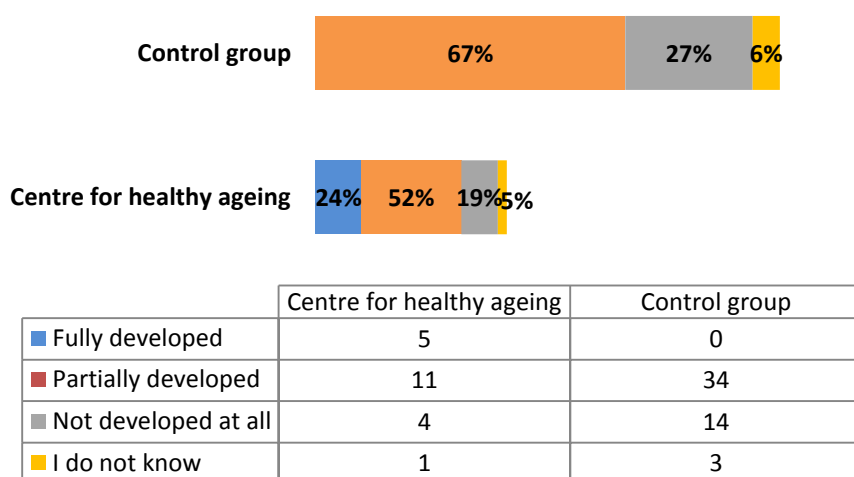
Graph 13. Opinion on developed intergenerational solidarity, by respondent group



Considerable differences are recorded between the respondents in terms of their opinions and views about developed intergenerational solidarity in relation to sex structure. Men in Group C have more

pronounced opinions that intergenerational solidarity is fully developed, compared to the respondents in Group K³⁶.

Graph 14. Opinion on developed intergenerational solidarity, by respondent group – men



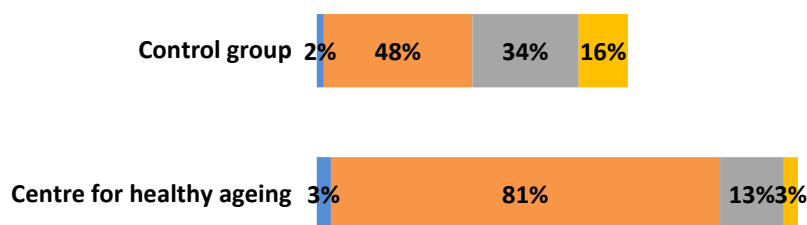
³⁵ (X²=18.180; p=0.000<0.05)

³⁶ (X²=10.754; p=0.013<0.05)

Women in Group C also have a pronounced opinion that intergenerational solidarity is fully or partially

developed, compared to the female respondents in Group K³⁷.

Graph 15. Opinion on developed intergenerational solidarity, by respondent group – women

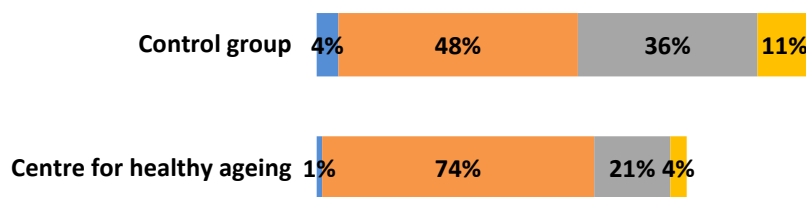


	Centre for healthy ageing	Control group
■ Fully developed	2	1
■ Partially developed	55	21
■ Not developed at all	9	15
■ I do not know	2	7

There are no considerable differences between the respondents in Group C and Group K in terms of the orientation of social protection to respond to the needs and demands of ageing persons³⁸. However, men in Group C and Group K differ considerably on this issue. Men in Group C in all age groups believe

more that social protection is fully or partially directed towards the needs of older persons, while the respondents in Group K believe more that it is not or are unaware that it is oriented in that way³⁹. On the other hand, women in Group C and Group K do not differ considerably on this issue⁴⁰.

Graph 16. Opinion about the orientation of social protection to respond to the needs of older persons, by respondent group – men



	Centre for healthy ageing	Control group
■ Fully developed	1	4
■ Partially developed	50	44
■ Not oriented	14	33
■ I do not know	3	10

³⁷ (X²=13.540; p=0.004<0.05)

³⁸ (X²=7.121; p=0.068>0.05)

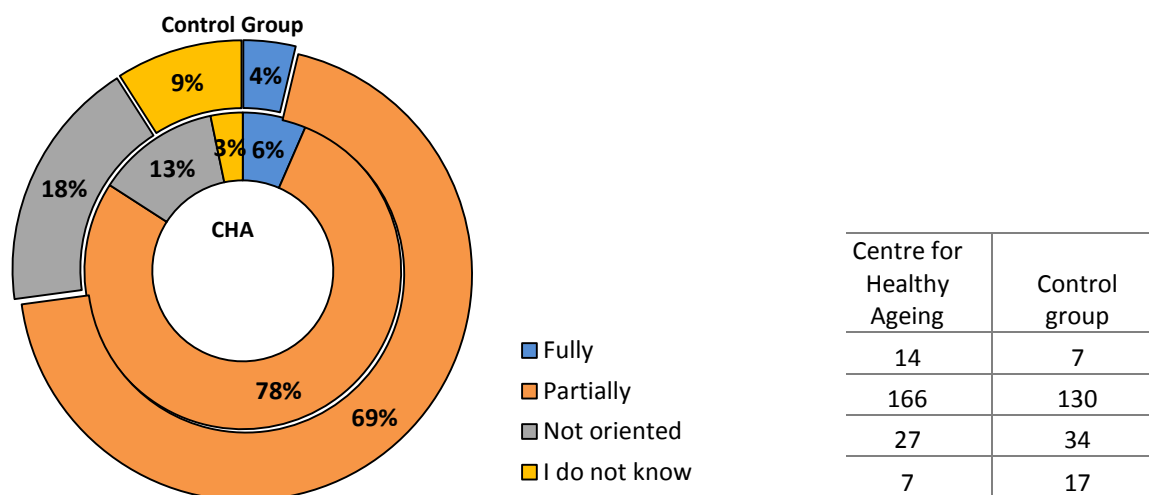
³⁹ (X²=10.526; p=0.015<0.05)

⁴⁰ (X²=2.174; p=0.537>0.05)

With regard to the opinion about the media orientation to the needs of older persons, respondents in Group C and Group K differ considerably. Respondents in Group C believe more

that the media are fully or partially oriented to the needs of older persons in relation to the respondents in Group K. ⁴¹

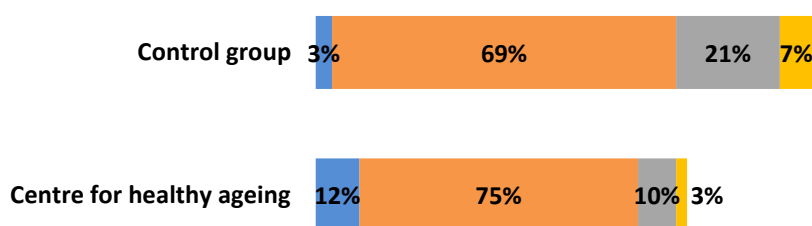
Graph 17. Opinion about the orientation of the media to the needs and demands of older persons, by respondent group



Centre for Healthy Ageing	Control group
14	7
166	130
27	34
7	17

Men in Group C have a more pronounced opinion about the media, compared to Group K⁴², while the opinions of female respondents in Group C and Group K do not differ considerably⁴³.

Graph 18. Opinion on the orientation of the media to the needs and demands of older persons, by respondent group – men



	Centre for healthy ageing	Control group
Fully	8	3
Partially	51	63
Not oriented	7	19
I do not know	2	6

⁴¹ (X²=10.042; p=0.018<0.05)

⁴³ (X²=6.403; p=0.094>0.05)

⁴² (X²=7.913; p=0.048<0.05)

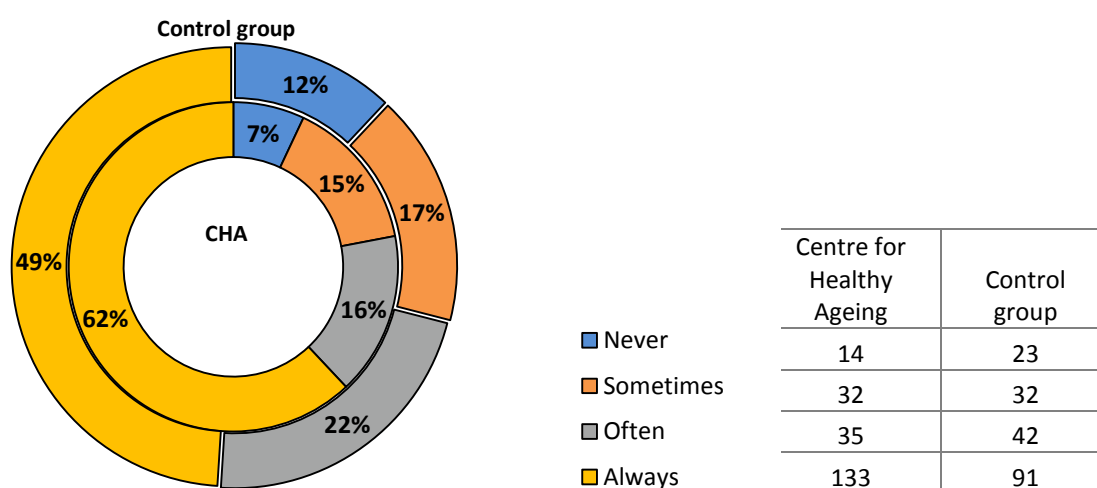
5.4. Health risks

5.4.1. Nutrition

Since improper and unbalanced nutrition represents a considerable risk to the health of an older person, the survey collected the data allowing an analysis of dietary habits and assessment of adjustability of nutrition to the needs and health condition of an older person.

In terms of the habits of purchasing and preparing food and the quality of certain foodstuffs, respondents in Group C and Group K showed considerable differences, where Group C gave considerably more thought to the quality of nutrition when preparing and purchasing foodstuffs, compared to Group K⁴⁴.

Graph 19. Respondents who think about food quality when purchasing and preparing food, by respondent group



While the men in Group C and Group K do not differ considerably by their thinking about food quality when purchasing and preparing food⁴⁵, women in

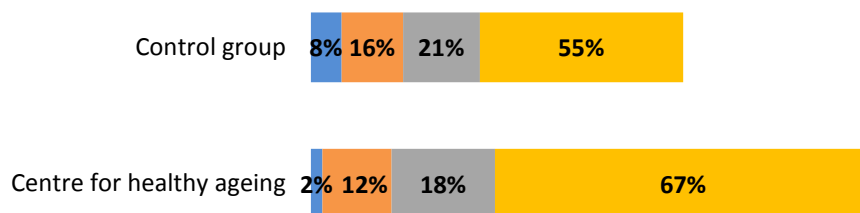
Group C often or always think about food quality, compared to women in Group K⁴⁶.

⁴⁴ (U= 17210.500; p=0.006<0.05)

⁴⁵ (U= 2927.500; p=0.538>0.05)

⁴⁶ (U= 6035.000; p=0.024<0.05)

Graph 20. Respondents who always think about food quality when purchasing and preparing food, by respondent group – women

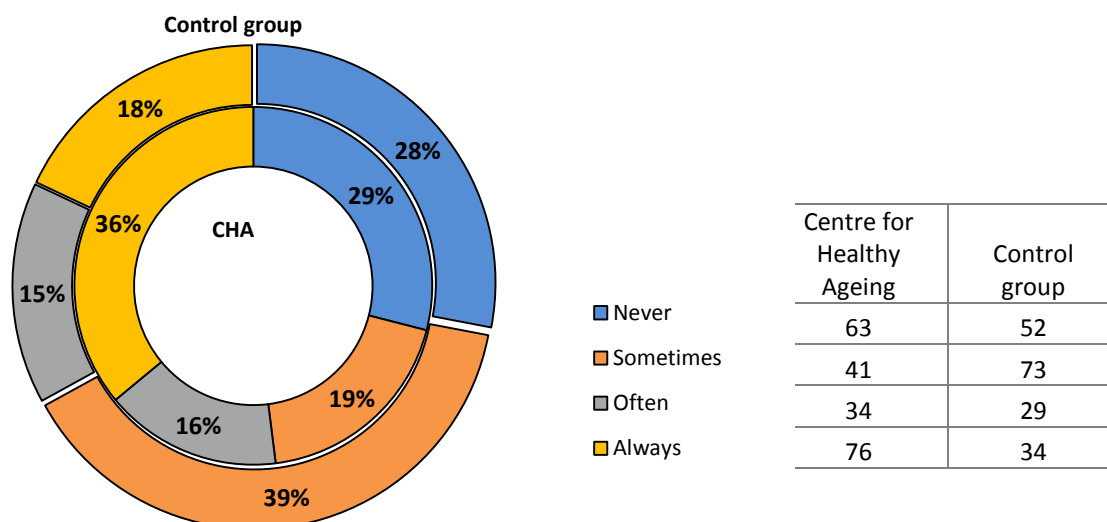


	Centre for healthy ageing	Control group
■ Never	3	8
■ Sometimes	18	16
■ Often	27	20
■ Always	98	53

In terms of the respondents' consideration of the importance of calories of certain foodstuffs when purchasing and preparing food, considerable differences were recorded, where Group C

respondents gave more consideration to the caloric value of foodstuffs than the respondents in Group K⁴⁷.

Graph 21. Respondents who always consider caloric value of food when purchasing and preparing food, by respondent group

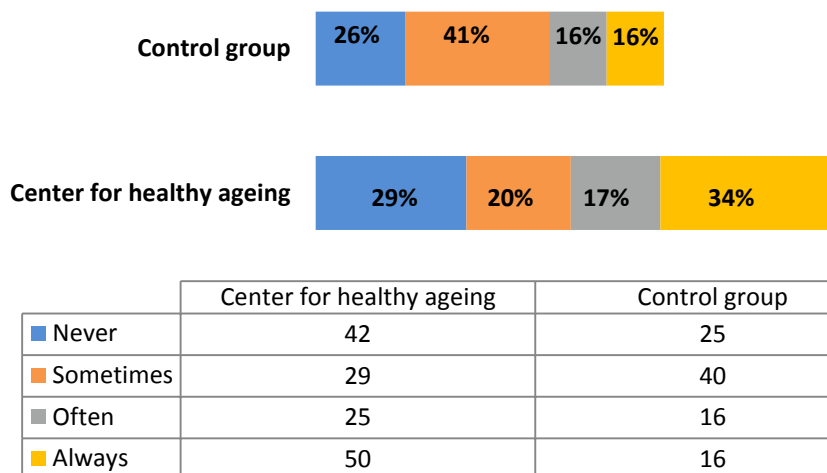


⁴⁷ (U= 17226.500; p=0.010<0.05)

While the men in Group C and Group K again do not differ considerably in their consideration of caloric value of food⁴⁸, women in Group C and Group K differ considerably, where women in Group C

considerably more often think about the caloric value of foodstuffs compared to the respondents in Group K⁴⁹.

Graph 22. Respondents who always consider caloric value of food when purchasing and preparing food, by respondent group - women



Respondents in Group C and Group K do not differ considerably in their consumption of fruits⁵⁰, and, in this case, no differences were recorded in relation to their sex^{51,52}.

Also, no considerable differences were recorded in terms of consumption of poultry meat by all respondents in Group C and Group K^{53,54,55}.

5.4.2. Physical activity

Regular performance of some form of physical exercise is very important for improving health of older persons. The survey data indicates that respondents in Group C and Group K differ considerably in their physical activity, i.e. respondents in Group C are considerably more physically active than the respondents in Group K⁵⁶.

⁴⁸ (U= 2652.000; p=0.110>0.05)

⁴⁹ (U= 6057.000; p=0.048<0.05)

⁵⁰ (U=18592.000; p=0.056>0.05)

⁵¹ Men in C and K groups (U=2778.500; p0.118>0.05)

⁵² Women in C and K groups (U= 6688.000; p=0.277>0.05)

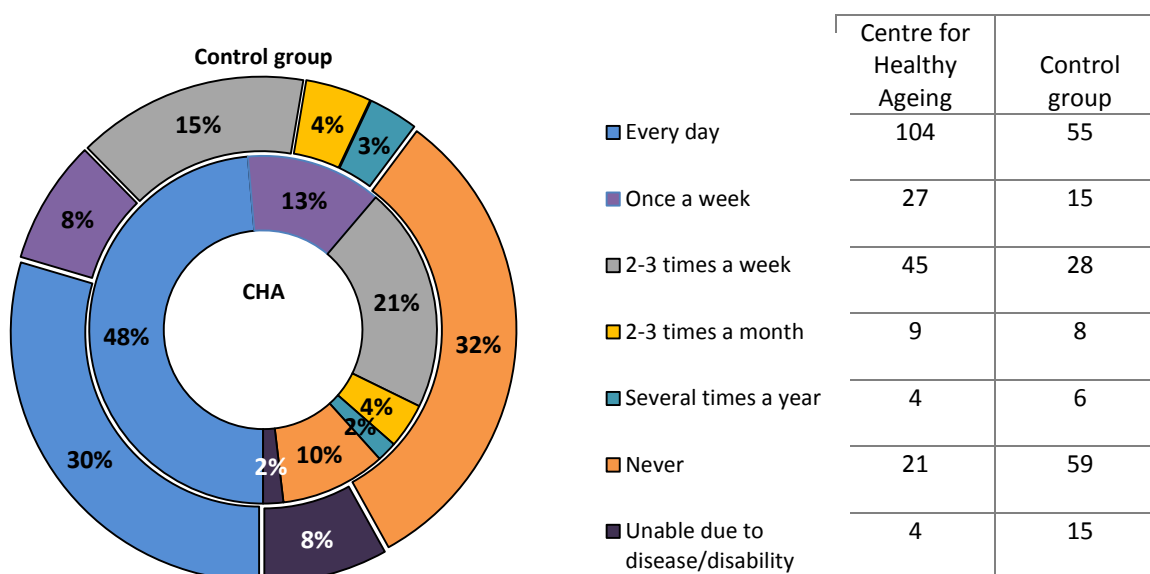
⁵³ (U=19129.500; p=0.313>0.05)

⁵⁴ Men in C and K groups (U=2915.500, p=0.486>0.05)

⁵⁵ Women in C and K groups (U=6824; p=0.610>0.05)

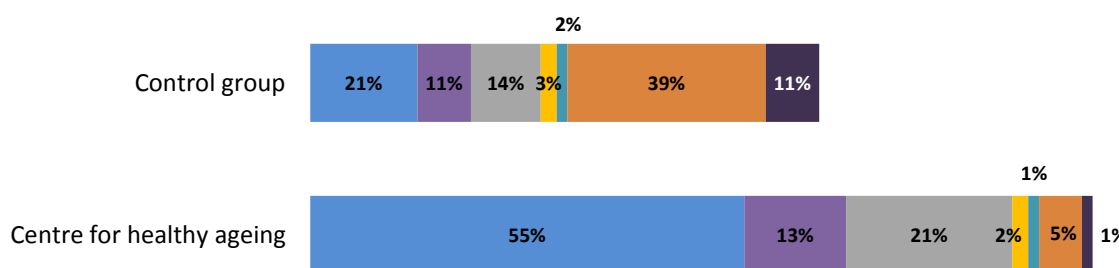
⁵⁶ (χ²=45.629; p=0.000<0.05)

Graph 23. Physical activity for at least 30 minutes, by respondent group



Men in Group C and Group K do not differ considerably in terms of physical activity⁵⁷, while women in Group C are more physically active than women in Group K⁵⁸.

Graph 24. Physical activity for at least 30 minutes, by respondent group – women



	Centre for healthy ageing	Control group
Every day	81	20
Once a week	19	10
2-3 times a week	31	13
2-3 times a month	3	3
Several times a year	2	2
Never	8	37
Unable due to disease/disability	2	10

⁵⁷ ($\chi^2=4.331$; $p=0.632>0.05$)

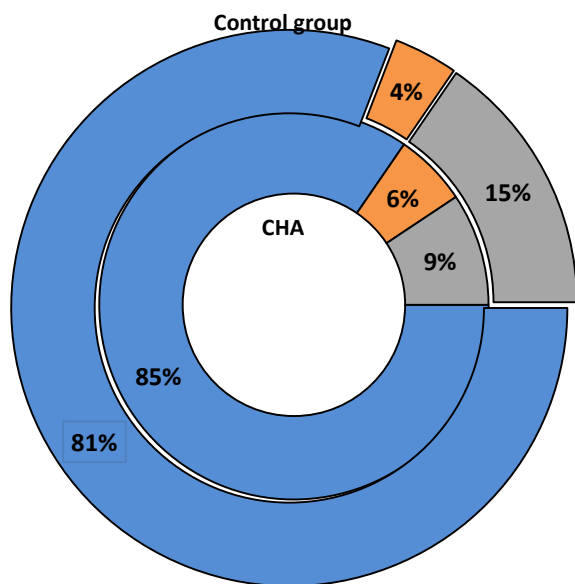
⁵⁸ ($\chi^2=63.052$; $p=0.000<0.05$).

5.4.3. Smoking

In terms of the smoking status, while a somewhat higher number of regular smokers are recorded in

Group K compared to Group C, there are no considerable differences between them⁵⁹.

Graph 25. Smoking status, by respondent group



- No
- Yes, occasionally
- Yes, every day during the last month

Centre for Healthy Ageing	Control group
181	152
13	7
20	29

No considerable differences in smoking status of the respondents are recorded in relation to their sex structure either. While there are more men who are regular smokers in Group K than in Group C, the groups do not differ considerably in smoking⁶⁰. As in men, there are no considerable differences in smoking status in women either⁶¹.

between the respondents in Group C and Group K⁶², but, when the reasons are taken into consideration, the male respondents in Group K go to see a family medicine doctor because of a disease more often than the male respondents in Group C. Female respondents in Group C and Group K do not differ on account of the reasons for visiting a family doctor⁶³.

5.5. Using health care services

In terms of using services of a doctor of family medicine, there are no considerable differences

⁵⁹ ($\chi^2=4.315$; $p=0.116>0.05$)

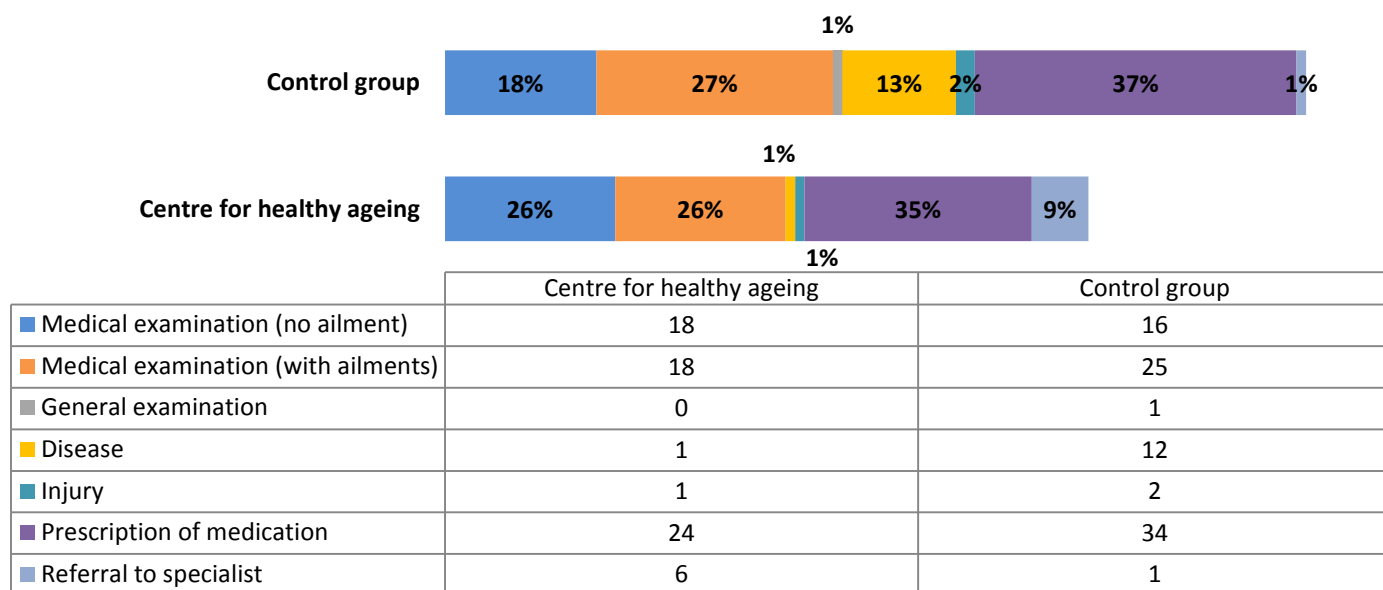
⁶⁰ ($\chi^2=5.286$; $p=0.071>0.05$)

⁶¹ ($\chi^2=0.342$; $p=0.843>0.05$)

⁶² ($\chi^2=15.729$ $p=0.073>0.05$)

⁶³ ($\chi^2=6.973$ $p=0.540>0.05$)

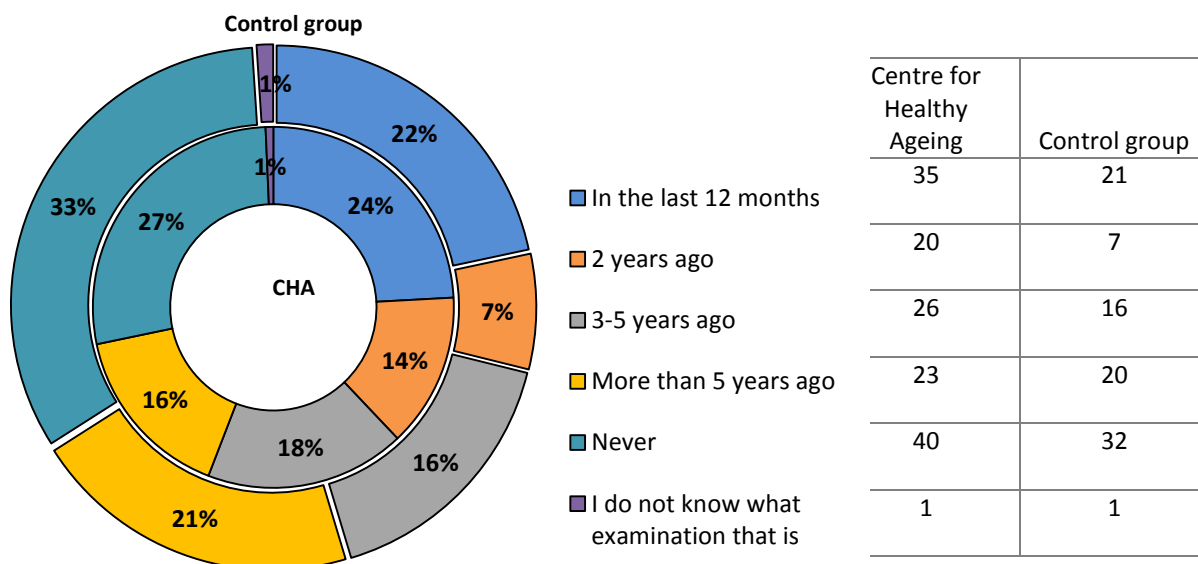
Graph 26. Using services of doctors of family medicine, by respondent group – men



In terms of using specialist services of urologists and/or dermatovenerologist, respondents in Group C and Group K do not differ considerably⁶⁴.

While the female respondents in Group C have mammography more often compared to the female respondents in Group K, there are no considerable differences between them⁶⁵.

Graph 27. Mammographic examination, by respondent group – women



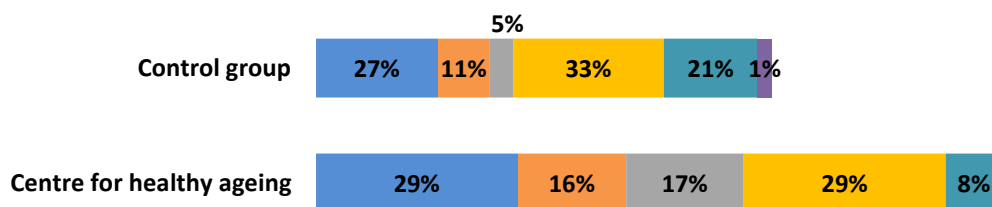
⁶⁴ (U= 3061.000; p=0.904>0.05)

⁶⁵ (U=6332.000; p=0.178>0.05)

In terms of frequency of gynaecological examinations or cervical smear test or Pap test, there is a considerable difference between the

female respondents, where female respondents in Group C have the examination more often than the female respondents in Group K.⁶⁶

Graph 28. Frequency of gynaecological examinations/Pap test, by respondent group – women

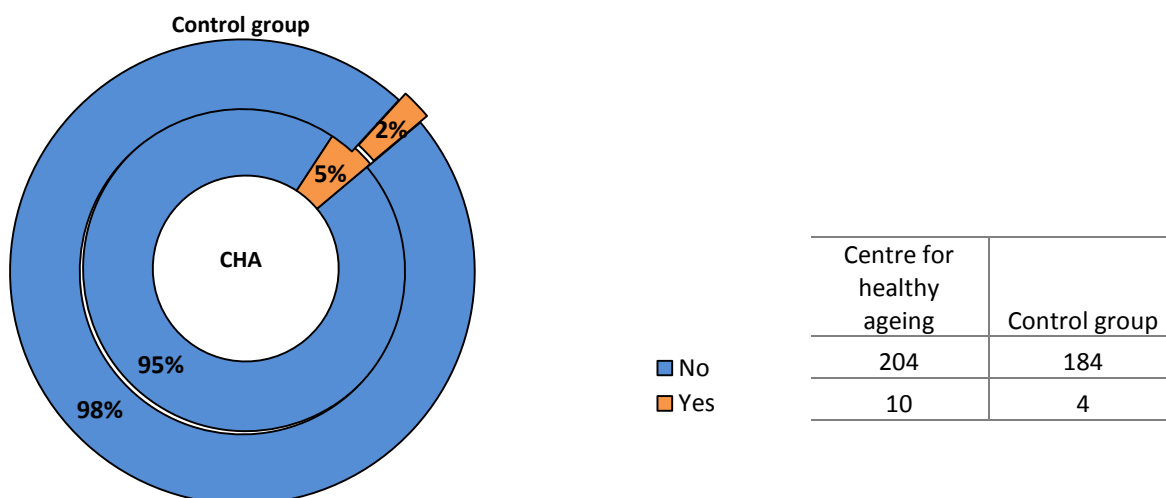


	Centre for healthy ageing	Control group
In the last 12 months	43	26
2 years ago	23	11
3-5 years ago	25	5
More than 5 years ago	43	32
Never	12	20
I do not know what examination that is	0	3

In this survey, data was collected on whether the respondents were ever in their lives subjected to testing for sexually transmitted diseases. The respondents in Group C were tested for Hepatitis B

more often than the respondents in Group K, but there are no considerable differences by the respondent group⁶⁷.

Graph 29. Testing for hepatitis B, by respondent group



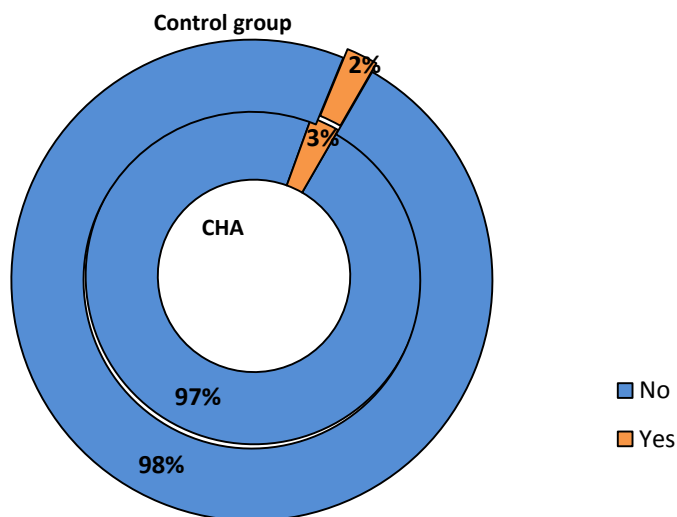
⁶⁶ ($\chi^2=20.790$, $p= 001<0.05$)

⁶⁷ ($X^2=1.929$; $p=0.165>0.05$)

In terms of sex structure, there are no considerable differences between the respondents in Group C and Group K who were ever tested for Hepatitis B, in men⁶⁸, or in women⁶⁹.

Also, with regard to the testing for hepatitis C, the respondents in Group C were tested more often than the respondents in Group K, but there are no considerable differences by respondent group⁷⁰.

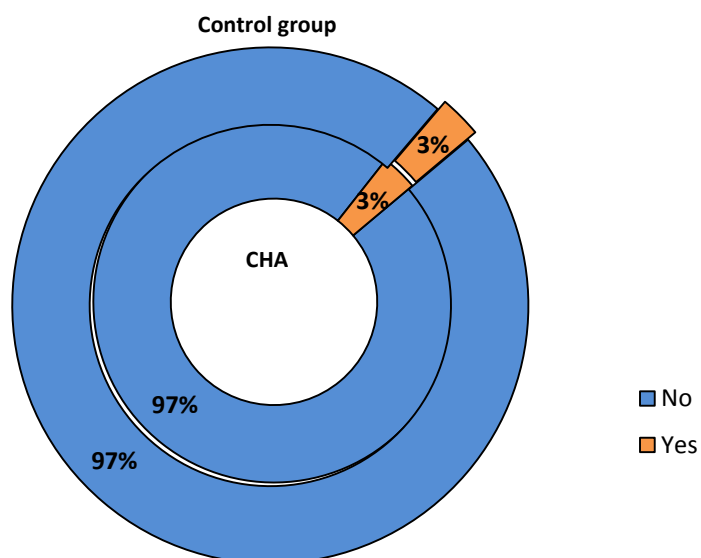
Graph 30. Testing for hepatitis C, by respondent group



Centre for healthy ageing	Control group
208	184
6	4

In terms of sex structure, there are no considerable differences between the respondents in Group C and Group K who were ever tested for hepatitis C, in men⁷¹, or in women⁷².

Graph 31. Testing for HIV, by respondent group



Centre for healthy ageing	Control group
207	183
7	5

⁶⁸ (X²=0.043; p=0.835>0.05)

⁶⁹ (X²=1.171; p=0.279>0.05)

⁷⁰ (X²=1.929; p=0.165>0.05)

⁷¹ (X²=0.752; p=0.386>0.05)

⁷² (X²=0.169; p=0.681>0.05)

Also, with reference to the testing for HIV, the respondents in Group C were tested more often than the respondents in Group K, but statistically there are no considerable differences by respondent group⁷³. In relation to sex structure, there are no considerable differences between the respondents in Group C and Group K who ever tested for HIV, in men⁷⁴, or in women⁷⁵.

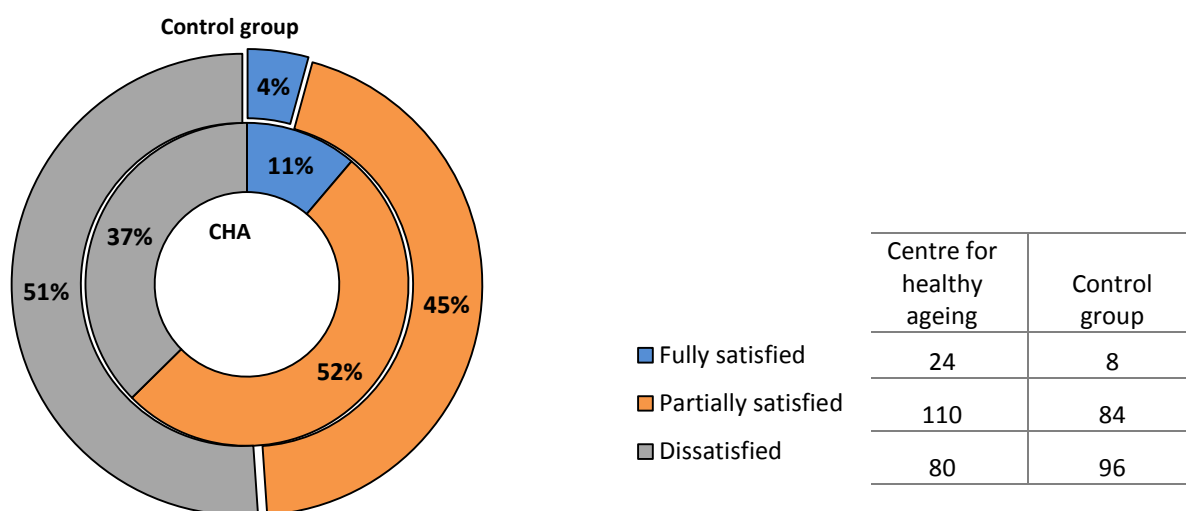
5.6. Promotion of health of older persons in the community

While the respondents in Group C are somewhat more informed than the respondents in Group K

about the existence of special programmes in the community focused on the needs of older persons, there are no considerable differences between them⁷⁶, or between men⁷⁷ and women⁷⁸ in Group C and Group K.

On the other hand, there are considerable differences in the respondents' opinions of, and satisfaction with, the care of the society for ageing persons. The respondents in Group C were more satisfied with the care of the society for older persons compared to the respondents in Group K⁷⁹.

Graph 32. Satisfaction of the respondents with the care of the society for older persons, by respondent group



	Centre for healthy ageing	Control group
Fully satisfied	24	8
Partially satisfied	110	84
Dissatisfied	80	96

A considerable difference is recorded in men, where men in Group C are more satisfied with the care of the society for older persons compared to the men in Group K⁸⁰.

⁷³ (X² =0,129 p=0,719>0,05)

⁷⁴ (X² =0.714 p=0.398>0.05)

⁷⁵ (X² =0.080 p=0.777>0.05)

⁷⁶ (X² =0.140;p=0.708>0.05)

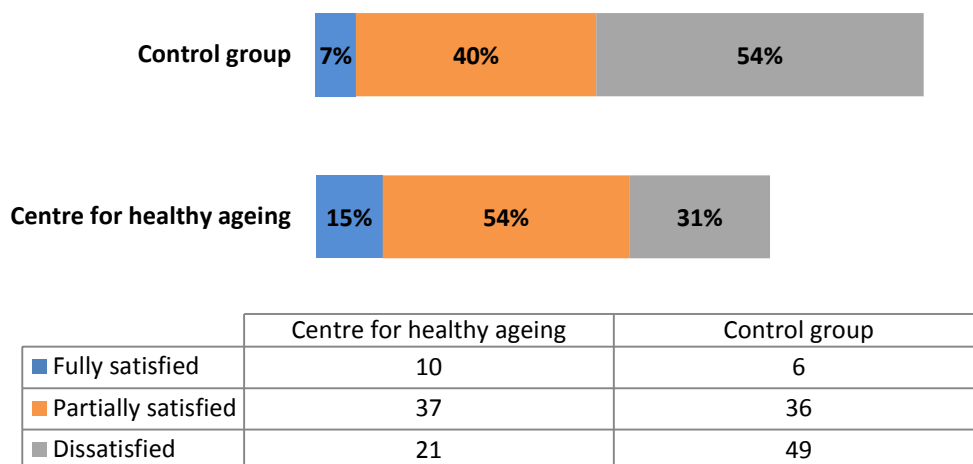
⁷⁷ (X² =0.140;p=0.708>0.05)

⁷⁸ (X² =3.129;p=0.077>0.05)

⁷⁹ (U= 16756.000; p=0.001<0.05)

⁸⁰ (U= 2304.500; p=0.002<0.05)

Graph 33. Satisfaction of respondents with the care of the society for older person, by respondent group – men

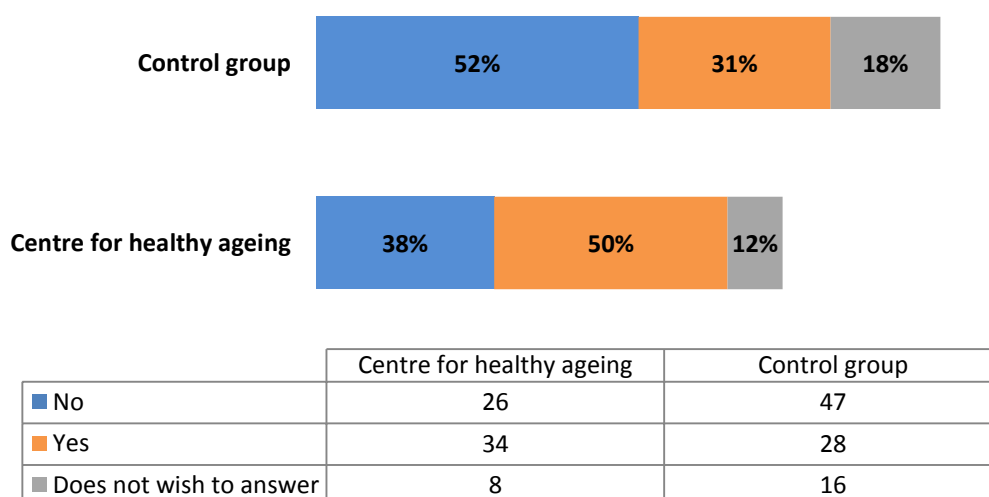


On the other hand, there is no significant difference in women in Group C and Group K in terms of the satisfaction with the care of the society for older persons⁸¹.

5.7. Sexual health

In this survey, data was collected for assessment of sexual health in older persons. Respondents in Group C and Group K differ significantly on the issue of sexual activity, by sex. Men in Group C are more sexually active compared to men in Group K⁸².

Graph 34. Sexual activity, by respondent group – men

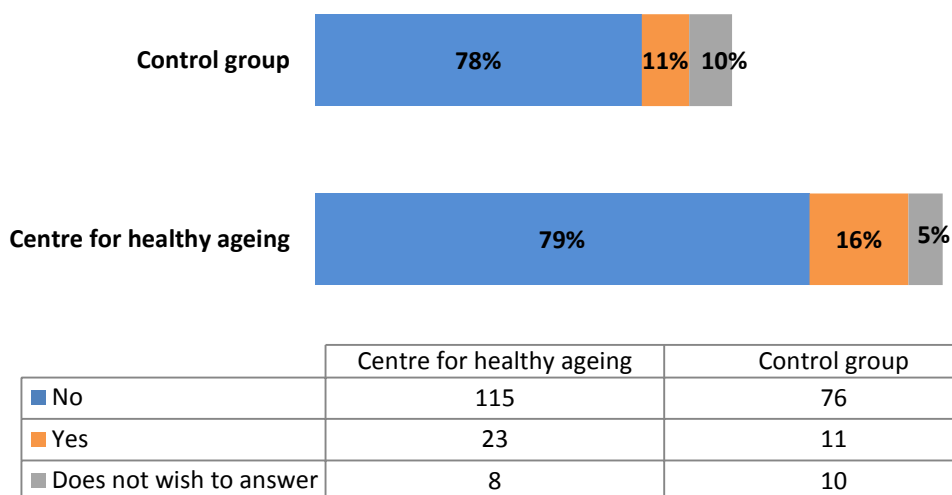


⁸¹ (U= 6248.500; p=0.082>0.05)

⁸² (X²=6.089; p=0.048<0.05)

Also, women in Group C are somewhat more sexually active in relation to the women in Group K, although there are no significant differences between them⁸³.

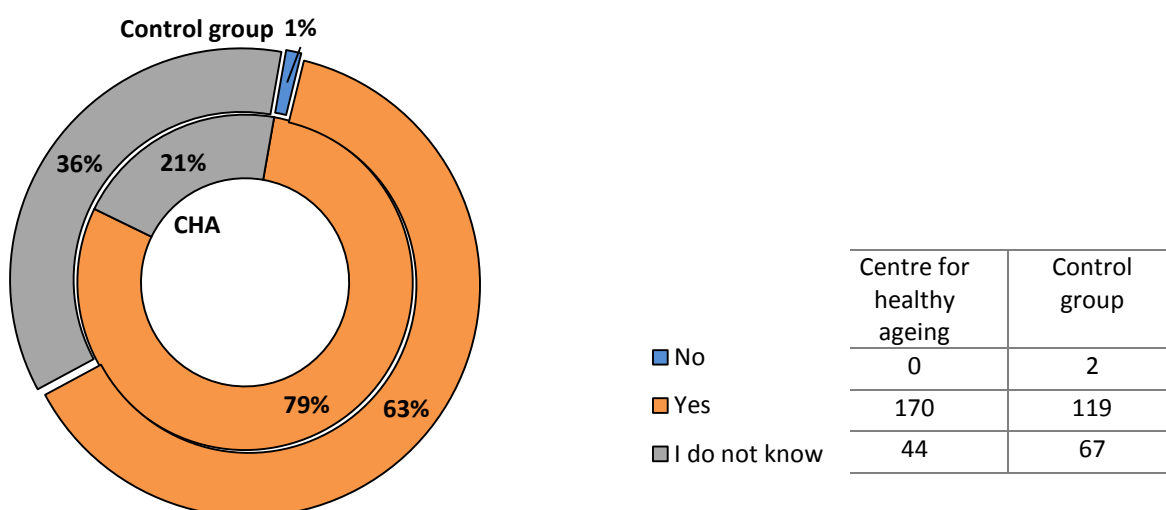
Graph 35. Sexual activity, by respondent group – women



Respondents in Group C and Group K differ considerably on the issue of knowledge about transmission of HIV through sexual intercourse,

while respondents in Group C had more knowledge about HIV, compared to the respondents in Group K⁸⁴.

Graph 36. Knowledge about transmission of HIV through sexual intercourse, by respondent group



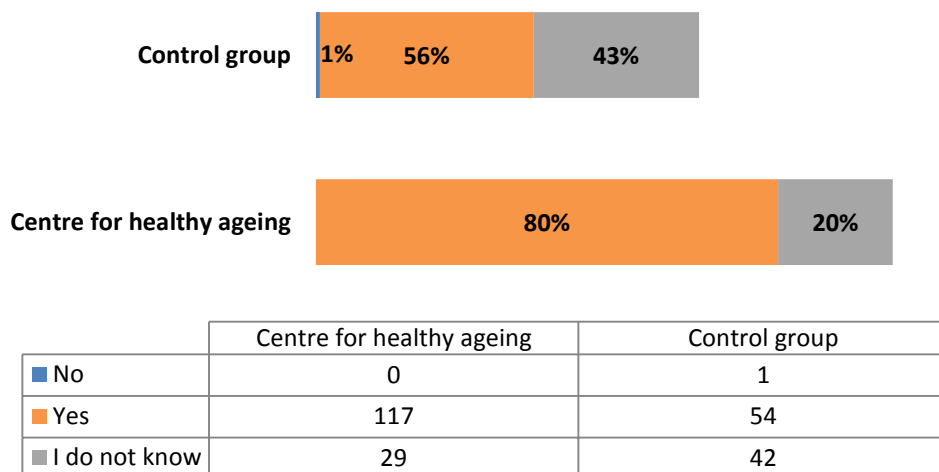
⁸³ (X²=2.648; p=0.266>0.05)

⁸⁴ (X²=14.990; p=0.003<0.05)

Looking by sex, men in Group C and Group K do not differ significantly on the issue of knowledge about HIV transmission through sexual intercourse⁸⁵, while women in Group C and Group K differ

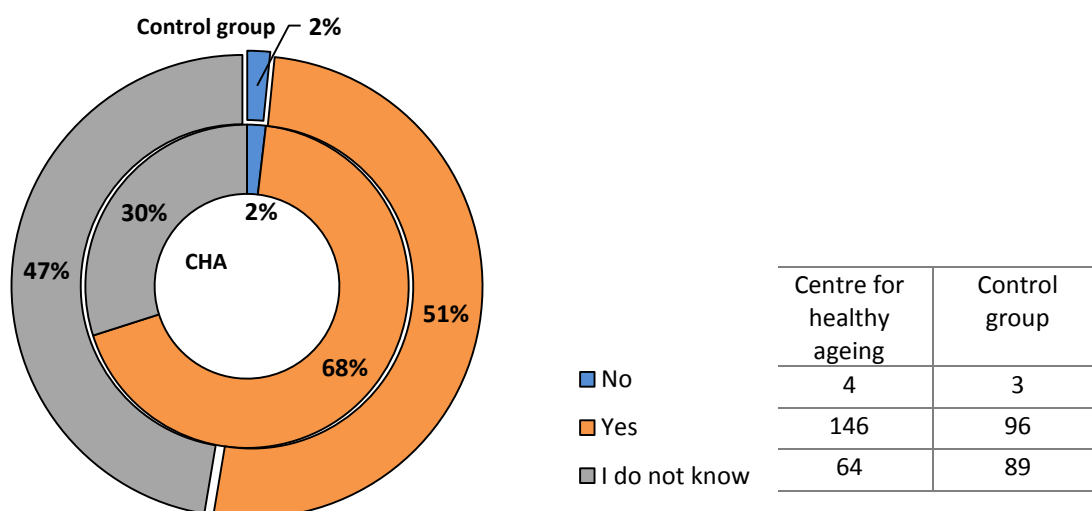
significantly on this issue, where women in Group C have more knowledge about HIV than the women in Group K⁸⁶.

Graph 37. Knowledge about HIV transmission through sexual intercourse, by respondent group – women



In terms of the knowledge that HIV weakens the immune system and defensive strength of the body, the respondents in Group C and Group K also differ significantly, where the Group C respondents have more knowledge than Group K respondents⁸⁷.

Graph 38. Knowledge that HIV weakens immunity and the body's defence system, by respondent group



⁸⁵ (X²=1.423; p=0.491>0.05)

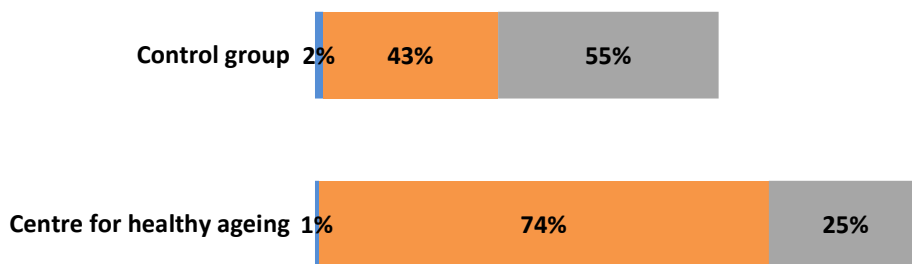
⁸⁶ (X²=17.492; p=0.001<0.05)

⁸⁷ (X²=13.020; p=0.005<0.05)

By sex, men in Group C and Group K do not differ significantly in their knowledge that HIV weakens immunity and defensive strength of the body⁸⁸,

while considerable differences are again recorded in women, where women in Group C have more knowledge, compared to women in Group K⁸⁹.

Graph 39. Knowledge that HIV weakens immunity and the body's defensive system, by respondent group – women

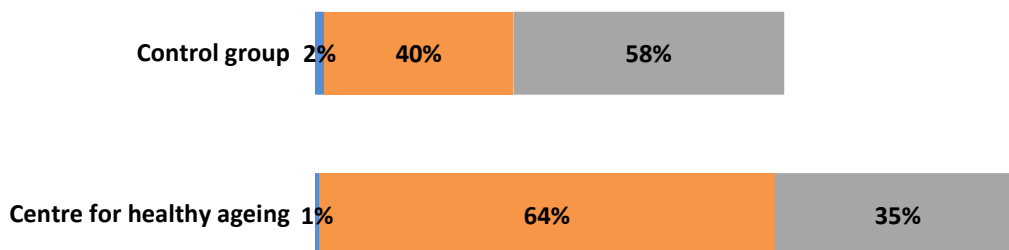


	Centre for healthy ageing	Control group
No	1	2
Yes	108	42
I do not know	37	53

In terms of the knowledge that the cause of AIDS is a virus, no significant differences were recorded⁹⁰. Also, there are no considerable differences in the responses of men in Group C and Group K⁹¹, but

considerable differences were recorded between the responses of women, where women in Group C have better knowledge than women in Group K⁹².

Graph 40. Knowledge that AIDS is caused by the virus, by respondent group – women



	Centre for healthy ageing	Control group
No	1	2
Yes	94	39
I do not know	51	56

⁸⁸ (X²=1.778; p=0.411>0.05)

⁸⁹ (X²=23.362; p=0.000<0.05)

⁹⁰ (X²=6.811; p=0.078>0.05)

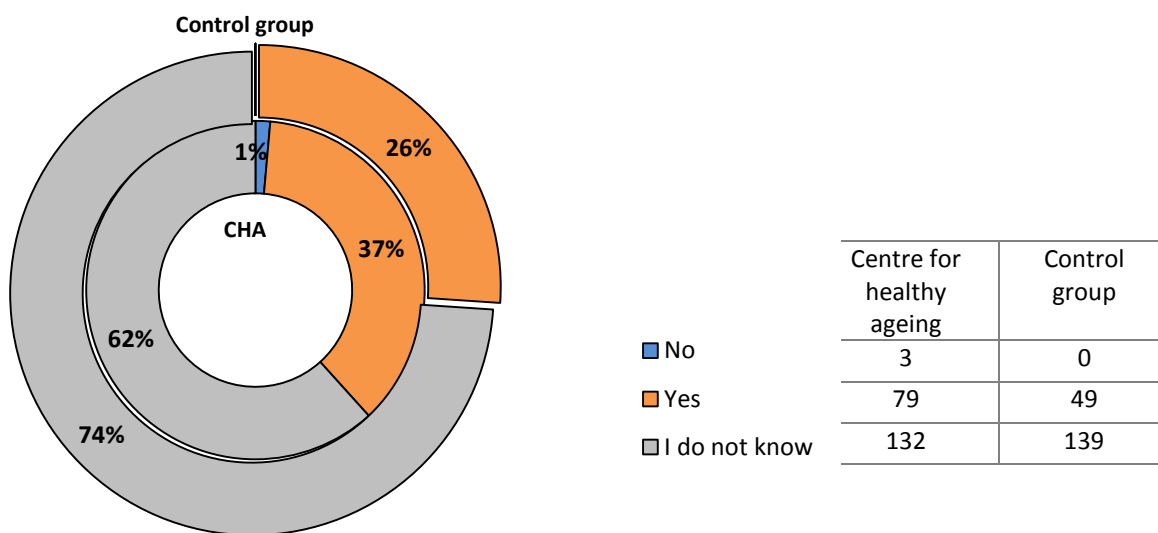
⁹¹ (X² = 1.383;p=0.501>0.05)

⁹² (X²=14.264; p=0.003<0.05)

The research provided an opportunity to collect the data on the knowledge of respondents about HPV infections. In terms of the knowledge about the diagnostics of the causes of HPV infections through

the Pap test and specific tests, respondents in Group C and Group K differ, where respondents in Group C have better knowledge, compared to the respondents in Group K⁹³.

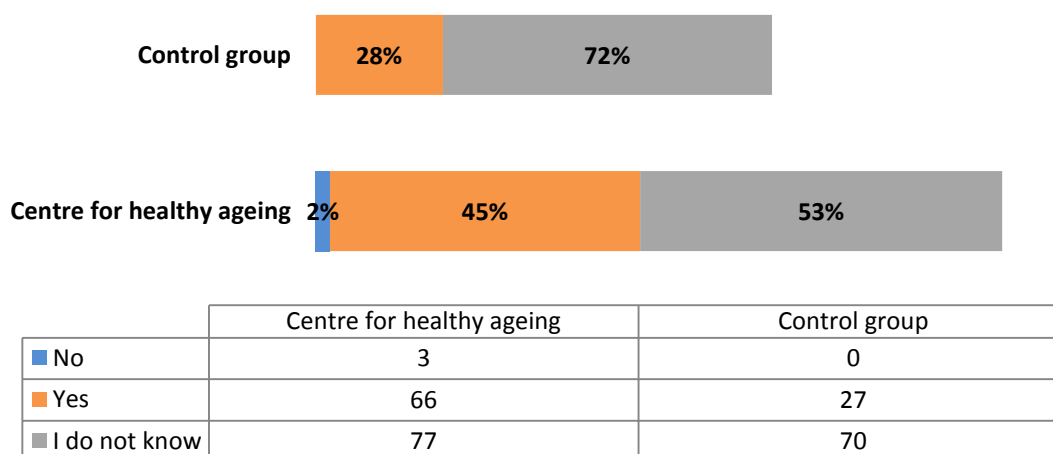
Graph 41. Knowledge of respondents about diagnosing HPV infections, by respondent group



From the aspect of sex and knowledge about diagnosing HPV through Pap test and specific tests, there are no considerable differences in the responses of men in Group C and Group K⁹⁴, but

considerable differences are recorded between the responses of women, where women in Group C have better knowledge than women in Group K.⁹⁵

Graph 42. Knowledge of the respondents about diagnosing HPV infections, by respondent group – women



⁹³ (X²=10.253;p=0.017<0.05)

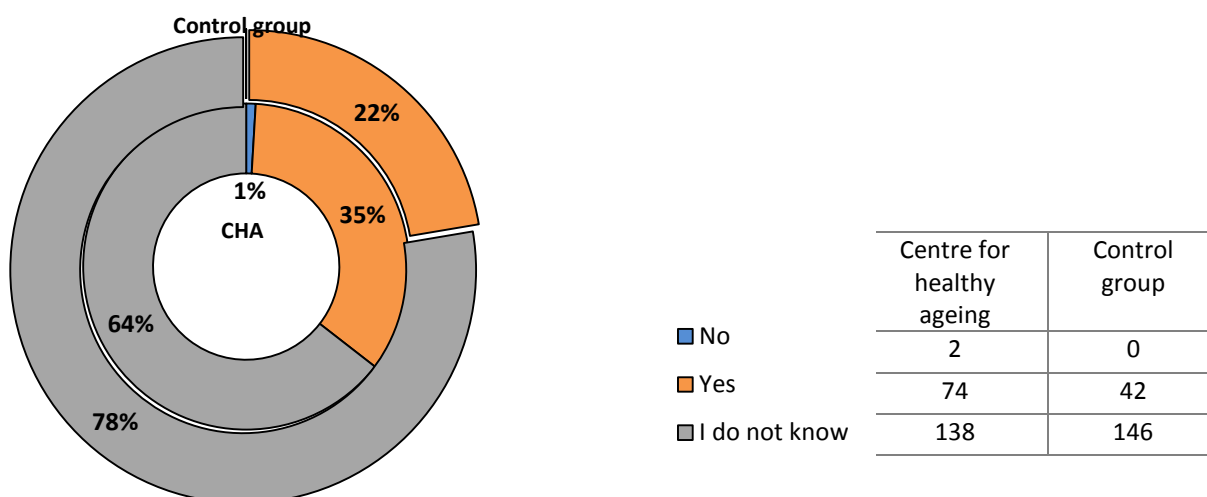
⁹⁵ (X²=10.253;p=0.017<0.05)

⁹⁴ (X²=0.580;p=0.446>0.05)

In terms of knowledge about the transmission of HPV infections through sexual intercourse, considerable differences are recorded between the

respondents in Group C and Group K, where the respondents in Group C have better knowledge, compared to the respondents in Group K⁹⁶.

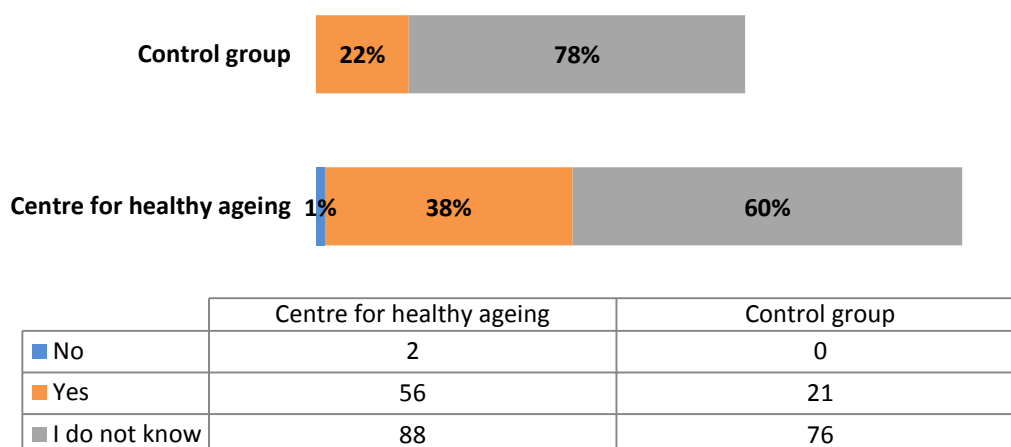
Graph 43. Knowledge of the respondents about transmission of HPV infections through sexual intercourse, by respondent group



With regard to respondents' sex and their knowledge about transmission of HPV infections through sexual intercourse, men in Group C and Group K do not differ considerably⁹⁷, but

considerable differences are recorded between the responses by women, where the women in Group C have better knowledge than women in Group K.⁹⁸

Graph 44. Respondents' knowledge about the transmission of HPV infections through sexual intercourse, by respondent group – women



⁹⁶ (X²=11.595; p=0.011<0.05)

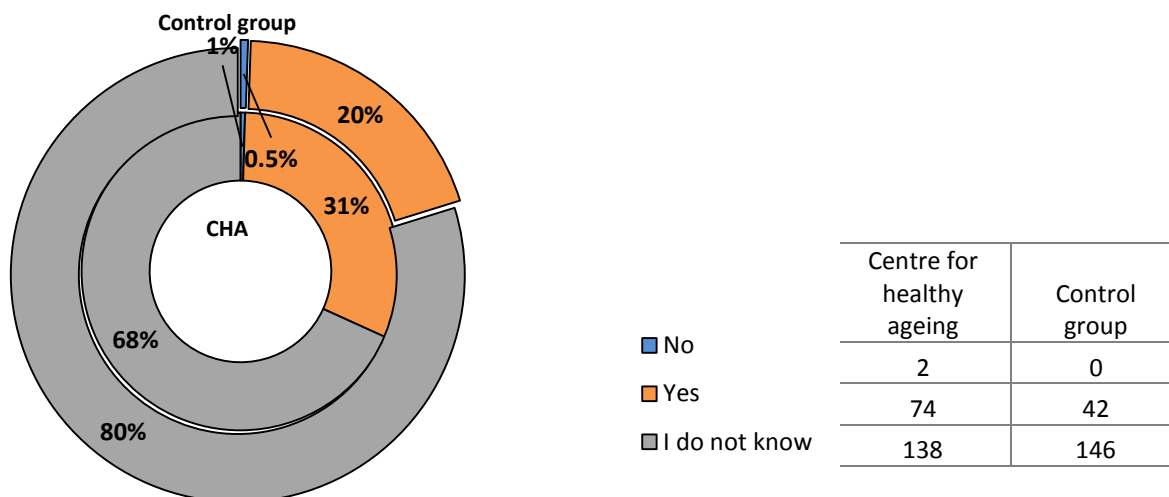
⁹⁸ (X²=11.720; p=0.008<0.05)

⁹⁷ (X²=0.242; p=0.623>0.05)

With regard to the knowledge about the cause of HPV infections, considerable differences are recorded between the respondents in Group C and

Group K, where the respondents in Group C show better knowledge about the causes of HPV infections than the respondents in Group K⁹⁹.

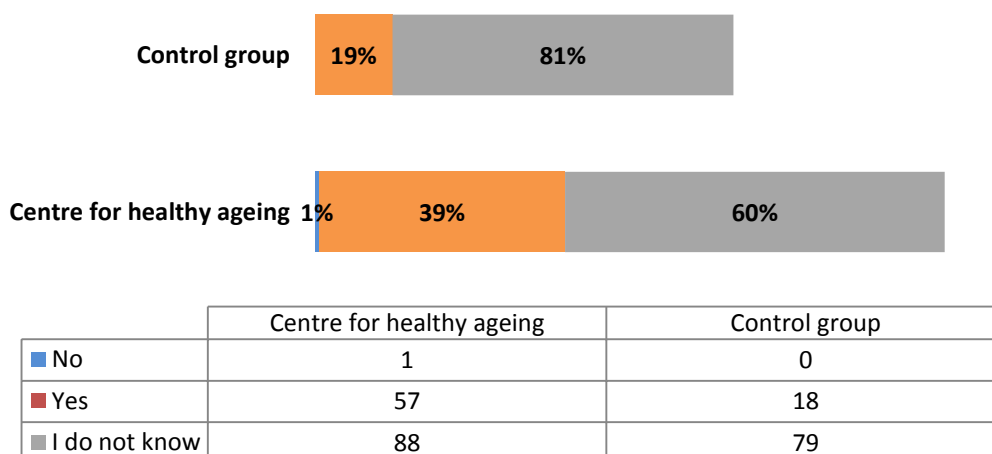
Graph 45. Knowledge that HPV infections are caused by a virus, by respondent group



With regard to sex, men in Group C and Group K again do not differ considerably in their knowledge about the cause of HPV infections¹⁰⁰, while

considerable differences are recorded in women, where the women in Group C show better knowledge on this than the women in Group K¹⁰¹.

Graph 46. Knowledge that HPV infections are caused by a virus, by respondent group – women



⁹⁹ (X²=8.813; p=0.032<0.05)
¹⁰⁰ (X²=1.814; p=0.404>0.05)

¹⁰¹ (X²=14.685; p=0.002<0.05)

6. Conclusions

When analysing and interpreting the findings of this survey, we should take into account certain demographic and socio-economic characteristics of the respondents in the sample, as well as the differences between the groups. The basic difference between the experimental and control groups is sex, where Group C has considerably more women, while Group K is more even. Also, the respondents in Group C on average have a somewhat higher education level in relation to the respondents in Group K, and a higher number of pensioners, in contrast to a higher number of housewives, unemployed and employed persons in Group K, while the income between the groups is even. Group C has more widowers/widows than Group K, as well as more persons who live in a single-member household.

Taking this into consideration, it is evident that women show a greater need for CHA membership, and that a need for socialization is more developed among better educated population, as well as among singles (regardless of whether they are widowed or divorced persons). And finally, it could be concluded that, on average, the conditions in which CHA members live are at a somewhat higher level in relation to those of the control group. This conclusion is borne out by the fact that monthly incomes in Group C are somewhat higher than in Group K, even though the respondents in Group C are mainly pensioners and singles, which means that their income per household member is somewhat higher.

With regard to the health and quality of life, the respondents (both men and women) who are CHA

beneficiaries, assess their health considerably better in relation to the self-assessment of health made by the respondents in Group K. The same conclusion can be drawn for the respondents' dietary habits, where it is evident that CHA members give more consideration to the quality of food and selection of foodstuffs when purchasing. It should be pointed out that women give more consideration to food quality, while men in either group do not show particular concern for this topic. These results are expected, taking into consideration that female family members are engaged more in the purchase and preparation of food. However, considering a high number of single-member households and the fact that cardiovascular diseases are a dominant cause of death, this data is worrying because it shows that there is no tendency in single-member male households to embrace a preventive approach to the solution of health issues in this way.

Similar conclusions can be drawn from the data on respondents' physical activity, where there is an evident difference in physical activity between the groups, i.e. Group C is much more physically active than Group K. As in the previous case, CHA female members are much more physically active than the respondents in Group K and CHA male members, too. If we take into consideration that physical activity, as well as regular and balanced nutrition, are equally important for prevention of non-communicable diseases, we can conclude again that men are under more threat, in particular if they come from single-member households. In relation to smoking, while a somewhat higher number of regular smokers are recorded in Group K than in

Group C, no significant differences are recorded between them.

This research also addressed the frequency and reasons for using health services at various levels of health care. With regard to using family doctor services, it was shown that respondents in Group K visit family doctors more often because of disease than the respondents in Group C. Taking into consideration the earlier better self-assessment of health by CHA beneficiaries, it is evident that they live healthier than the respondents in the control group. Since the survey was more focused on the contacts with family medicine doctors than on specialist examinations, it is not possible to determine the types of diseases (communicable, non-communicable, mental, etc.) which the members of either group suffer from, and for this purpose a new survey should be conducted.

With regard to sexual health, we can conclude that CHA female members are much better informed about the causes and ways of transmission of certain diseases such as hepatitis B, hepatitis C, HIV and HPV than CHA male members and the complete Group K. It was also shown that CHA members somewhat more often had specialist gynaecological examinations for the purpose of Pap test or mammography than the respondents in Group K, while a very small number of women in either group, as well as men, get tested for sexually transmitted disease. Taking into consideration that both men and women who are CHA members reported that they were sexually more active than the respondents in the control group, and taking into account that older women have already been through their menopause, one can assume that the respondents in neither group think it is necessary to

use modern contraceptives. For this reason, unexpected infections may occur by the causes transmitted through sexual intercourse, which in a large number of cases do not have visible symptoms (such as Chlamydia), but which can greatly affect an individual's health.

The survey also took into consideration the respondents' opinion of and satisfaction with the society's care of older persons. It was shown that CHA members are much more satisfied in this respect than the respondents in Group K, although the level at which either group is informed about special programmes in the community focusing on the needs of older persons is relatively equal. The same conclusion can be drawn on the issue of intergenerational solidarity, where CHA members believe it is much more developed than the respondents in Group K. The reason for this belief are probably the many programmes CHAs are implementing in their communities, with the involvement of younger persons as volunteers. Involvement of student volunteers from foreign countries was recorded in some communities, which certainly contributes to better trust and exchange of experience between the generations.

On the other hand, the majority of the respondents are of the opinion that social protection is not adjusted to the needs and demands of older persons, while the opinion of the respondents concerning the media orientation to the needs and demands of older persons is divided, where a somewhat higher number of CHA male members have a more optimistic opinion on this topic than other respondents. One can assume that occasional visits to CHAs by the media contribute to the raising of awareness and improvement of the opinions of

the members concerning media coverage of the issues of interest to this population.

Finally, it could be concluded that the survey has clearly shown that members of CHAs have better

quality of life than their counterparts in the control group. However, the role of CHAs in acquiring that extra quality has yet to be proven through additional researches/surveys to be conducted.

7. Recommendations

The findings of this survey are important from a number of aspects and can be a basis for defining priorities in the development of policies, strategies and action plans oriented towards promoting a healthy ageing concept in BiH, and the survey methodology represents a good framework for further research, which is undoubtedly necessary with a view to collecting additional information and analyses of health and quality of life of older persons in BiH. This is particularly important for issues related to promotion of mental health of older persons. Other surveys¹⁰² have shown that there is an increase in the number of cases of mental diseases among older population (in particular among social welfare beneficiaries and persons accommodated in older people's homes). Further on, additional survey is required (including preventive testing) concerning sexual health. Because of a large number of older persons who stated that they are still sexually active, it is necessary to establish the real degree of exposure to sexually transmitted diseases first, and then react in order to prevent the spreading of these diseases.

The survey compiled and measured the indicators which present arguments that the activities realized through the work of CHAs in BiH represent a model that strengthens promotion of health in a community, with an effect on the promotion of knowledge, attitudes and practices of older persons with regard to supervision and prevention of risk factors, proper use of health care and their self-

perception of health, quality of life, intergenerational solidarity and status of older persons in the community. On the other hand, it is necessary to promote programmes offered by CHAs to their members and place focus on the male population who, as it was shown, have somewhat less developed awareness on the issues of proper nutrition and regular exercising in comparison with women, which, in the end, can considerably promote their health. Although the survey did not focus on limitations to HAC services, given the number of HACs and costs of their establishment, it would be beneficial to design programmes for older persons which would be implemented in the community (outside of CHAs) to include those who are not CHA members and whose needs are equally important. This approach could have a double benefit. First, older persons would be socialized and sensitized which would lead to an increased membership in the CHAs, even from those communities which (for now) do not have developed CHAs, which would enable advocacy for further expansion of the CHA network. On the other hand, activities in the community would lead to raised awareness among the older population on the topics which are vital for them. This would also lead to an improvement of their living conditions (primarily from the health aspect) through training and practical application of the acquired knowledge. A good example of this, which can be implemented relatively easily and with little funds, is fitness equipment installed in the recent years in some locations, which attract more and more older

¹⁰² Situational analysis for the purpose of drafting strategies on ageing in BiH, conducted by UNFPA and UN DESA.

people and which give an indirect contribution to the improvement of life of older persons.

Although the survey has shown that many older persons live alone, yet there are many who live with their children but feel like living alone due to the lack of interaction. For this reason, and apart from the programmes for older persons, it is necessary to work on the training of children/families of older persons, who do not have adequate knowledge and because of this interpret incorrectly (or neglect) the declining health of their parents. Education of children would achieve a better balance of co-existence in the family, a positive intergenerational relationship, being better informed and a better position for advocacy for a more dignified status of older persons in the society.

Equally important is the inclusion of young populations in the activities related to the exchange of experience and help to older persons. Inclusion of young volunteers in occasional activities in the community has already shown great benefits to both population groups, and thus can promote considerably the understanding between the generations and contribute to the raising of awareness of young people about what kind of problems they can face in old age and what preventive actions are necessary to reduce the difficulties of old age to the lowest possible degree. Occasional activities in the community, organized outside of CHAs, can be planned in cooperation with the local communities, which (predominantly in larger, urban areas) have premises available which can be used for occasional gatherings and activities with older persons, and in cooperation with the Red Cross, which already has programmes developed for helping older persons. It is very

important to point out that local communities often bring older persons together, and what is needed is to design activities to promote their socialization and attract other older persons (particularly those from single-member households).

Further on, it is necessary to work on the advocacy towards various levels of government which can contribute to the expansion of CHA network to those communities in which such a need was not expressed before or a possibility for their establishing. Apart from advocacy with various levels of government, it would be good to launch a media campaign for the purpose of promoting existing CHAs and the benefits which older persons can have of these centres, to increase the membership with these centres and by virtue of this fact improve health of a large number of persons.

Although activities for drafting a strategy on ageing in the F BiH, RS and BD were initiated during the drafting of this report, it is necessary to include lower levels of government in the discussion on the expansion of CHA networks because it is the local levels of government that assume the co-financing of CHAs from the moment of their establishment, which greatly contributes to their sustainability.

Finally, as concluded in the previous section, it is necessary to undertake additional researches to better understand the effects of the CHAs membership on the various characteristics of their clientele e.g. a longitudinal study of a selected group of the CHAs participants. Alternatively, the two sub-groups within the C group could be compared: the sub-group of relatively longer-term members of the CHA against the short-term ('new')

members of the CHA. Also, a survey that would explore whether the existing methodologies of CHA work are adequate in urban and rural areas, in what way this methodology could be expanded/perfected to suit the needs of the older

population better and in what way the principle of CHA work could be institutionalized so that it can be replicated more easily in various areas in BiH would be beneficial for making further conclusions.

APPENDICES

Questionnaire Code: |_|/|_|/|_|/|_|_|_|

First box – Entity: 1 Federation of BiH, 2 Republika Srpska

Second box – Locality of research: 1 Sarajevo, 2 Modriča

Third box – C (Centre beneficiary) or K (Control group)

Final three boxes: Respondent's serial number: from Centre beneficiary or control group (e.g. 001, 234, 520)

QUESTIONNAIRE

This before you is a Questionnaire intended for an assessment of needs to promote the quality of life of older persons. Please answer all questions so that we can assess the views of all respondents as accurately as possible. We thank you in advance for your patience and time you will spend in the filling in of this questionnaire. *The survey is anonymous and your answers will solely be used for further development and improvement of health of older persons and promotion of the network of centres for healthy ageing.*

A. General information, demographic and socio-economic characteristics

1. Sex:

- 1 Male
 2 Female

2. Age group:

- 1 60-64 yrs.
 2 65-69 yrs.
 3 70-74 yrs.
 4 75-79 yrs.
 5 80-85 yrs.
 6 Over 85 yrs.

3. Highest level of completed education:

- 1 No school
 2 Primary school
 3 Secondary school
 4 Junior college
 5 University
 6 Other (indicate): _____

4. Employment status:

- 1 Pensioner
 2 Housewife
 3 Unemployed
 4 Employed
 5 Other (indicate): _____

5. Marital status:

- 1 Married
 2 Unmarried
 3 Living in common-law marriage
 4 Widower/widow
 5 Divorced

6. Number of children: _____

7. Number of grandchildren: _____

8. Who currently lives with you in the same household?

- 1 I live alone
- 2 With spouse
- 3 With common-law partner
- 4 With child/children
- 5 Other (indicate): _____

9. Current total number of household members: _____

10. Total monthly household income:

- 1 0-299 BAM
- 2 300-599 BAM
- 3 600-999 BAM
- 4 1000-1499 BAM
- 5 1500-1999 BAM
- 6 2000 BAM and above

B. Assessment of health and quality of life

11. How do you assess your health in general?

- 1 Very bad
- 2 Bad
- 3 Good
- 4 Very good

12. How do you assess your satisfaction with life?

- 1 Very bad
- 2 Bad
- 3 Good
- 4 Very good

13. What is your movement capability?

- 1 I have full mobility
- 2 I use mobility tools (cane, crutches, device, prosthesis)
- 3 I use a wheelchair
- 4 I am immobile

14. How do you most often spend your time during the day?

	Always	Sometimes	Never
a) Housework	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) Gardening	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c) Visiting friends	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d) Shopping	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
e) Walking	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
f) Playing sports	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
g) Watching TV	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
h) Reading	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
i) Taking care of other family members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
j) Spending time with child/grandchild	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
k) Voluntary work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
l) Education (courses)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
m) Other (indicate): _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

15. Who do you spend the most of your time with?

	Always	Sometimes	Never
a) Alone	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) With partner	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c) With children	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d) With grandchildren	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
e) With friends	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
f) With neighbours	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
g) With people of similar age	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
h) With young people	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
i) Other (indicate): _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

16. Were you tense, under stress/pressure in the past 4 weeks?

- 1 No
- 2 Yes, sometimes, but not more than other people
- 3 Yes, more than other people
- 4 Yes, my life is almost unbearable

17. Did you have emotional problems (sorrow, low spirits, worry, dejection) in the past 4 weeks?

- 1 No
- 2 Yes

18. In the past 4 weeks, how often did you feel?

	Always	Sometimes	Never
a) Full of enthusiasm	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) Very irritable	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c) Sad	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d) Happy	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
e) Tired	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

19. What are the main reasons that affect your mood?

	Always	Sometimes	Never
a) Loneliness	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) Lack of company	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c) I do not go out enough	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d) I do not have enough money	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
e) Health problems	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
f) Concern about somebody else	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
g) Other (indicate): _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

20. Were you exposed to any form of physical violence in the past 12 months?

	No	Yes	Do not wish to answer
a) At home	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) In the family	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c) On the street	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d) Other	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

21. Were you exposed to any form of mental abuse (offense, humiliation, blackmailing...) in the past 12 months?

	No	Yes	Do not wish to answer
a) At home	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) In the family	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c) On the street	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d) Other	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

(Note: Go to Question 23 if your answers to Question 20 and Question 21 were: 1 No or 3 Do not wish to answer)

22. If you were exposed to any form of physical or mental abuse in the past 12 months, did you seek anyone's help?

	No	Yes
a) Health worker	<input type="checkbox"/> 1	<input type="checkbox"/> 2
b) Social worker	<input type="checkbox"/> 1	<input type="checkbox"/> 2
c) Police	<input type="checkbox"/> 1	<input type="checkbox"/> 2
d) Relative, friend	<input type="checkbox"/> 1	<input type="checkbox"/> 2
e) Other (indicate): _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2

23. Were you injured (fall, fracture, laceration, burn...) in the past 12 months?

- 1 No ⇒ go to Question 25.
2 Yes

24. Where did the last injury take place?

- 1 In a transport vehicle
2 On the street
3 At home
4 In a sports field
5 Other (indicate): _____

C. Health risks

25. In your opinion, what impact do the following factors have on your health?

	Considerable	Moderate	No impact	Do not know
a) Proper nutrition	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b) Regular physical activity	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c) Smoking	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
d) Non-smoking	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
e) Avoiding alcohol	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
f) Stress	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

26. State your eating habits:

	Never	Sometimes	Every day
a) Breakfast	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) Snack between meals	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c) Lunch	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d) Supper	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

27. Do you think about the quality of your food when purchasing or preparing food?

- 1 Never
2 Sometimes
3 Often
4 Always

28. Do you think about the caloric value of your food when purchasing and preparing food?

- 1 Never
2 Sometimes
3 Often
4 Always

29. In the past week, how often did you consume the following in your food?

	Never	Sometimes	Every day
a) Fruits	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) Vegetables	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

- | | | | |
|----------------------------------|----------------------------|----------------------------|----------------------------|
| c) Cereals | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| d) Fish | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| e) White meat (chicken, turkey) | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| f) Red meat (veal, beef, lamb) | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| g) Eggs | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| h) Sweet non-alcoholic beverages | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| i) Crisps and other snacks | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| j) Fast food and grilled food | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |

30. How often do you perform some form of physical activity for at least 30 minutes, which makes you breathe faster or sweat?

- 1 Every day
2 Once a week
3 2-3 times a week
4 2-3 times a month
5 Several times a year
6 Never
7 Unable due to disease/disability

31. Are you exposed to passive smoking/other people's tobacco smoke during the day?

- | | No | Yes, always | Yes, sometimes |
|----------------------------|----------------------------|----------------------------|----------------------------|
| a) At home: | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| b) In a transport vehicle: | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| c) In public places: | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |

32. Have you ever smoked in your life?

- 1 No
2 Yes

33. Do you smoke now?

- 1 No ⇒ go to Question 36.
2 Yes, occasionally
3 Yes, every day in the past month

34. How much do you currently smoke a day?

- a) Factory produced cigarettes _____ pieces
 b) Manually rolled tobacco/cigarettes _____ pieces
 c) Pipe _____ pieces
 d) Other (indicate): _____ pieces

35. Do you wish to quit smoking?

- 1 No
2 Yes
3 Not sure
4 I have quit

36. How often did you consume alcoholic drinks in the past 12 months?

- 1 Daily
2 Once or several times a week
3 Several times a month
4 Never

D. Using health care

37. Do you have health insurance?

- 1 No
2 Yes

38. Do you have a family doctor?

- 1 No
- 2 Yes

39. How often do you visit your family doctor?

- 1 Once in 7-15 days
- 2 Once in 30 days
- 3 Several times a month
- 4 Once in 3-6 months
- 5 Once in 12 months
- 6 Never
- 7 I do not know

40. State the main reason for your latest visit to the family doctor?

- 1 Medical examination (no ailments)
- 2 Medical examination (with ailments)
- 3 General medical examination
- 4 Disease
- 5 Injury
- 6 Prescription of medication
- 7 Referral to a specialist

41. When did you last have a laboratory test upon a recommendation of your family doctor?

- 1 Two months ago
- 2 3-5 months ago
- 3 6-11 months ago
- 4 12 months ago
- 5 3-5 years ago
- 6 Never
- 7 I do not know

42. When did you last check your blood pressure or had an ECG examination by your family doctor?

- 1 Two months ago
- 2 3-5 months ago
- 3 6-11 months ago
- 4 12 months ago
- 5 3-5 years ago
- 6 Never
- 7 I do not know

43. When did you last have a general medical examination by your family doctor or a specialist?

- 1 In the last 12 months
- 2 2 years ago
- 3 3-5 year ago
- 4 More than 5 years ago
- 5 Never
- 6 I do not know

44. When did you last have your prostate examined by an urologist and/or dermatovenerologist?

(Question only for men)

- 1 In the last 12 months
- 2 2 years ago
- 3 3-5 year ago
- 4 More than 5 years ago
- 5 Never
- 6 I do not know what examination that is

45. When did you last have a radiographic examination of breasts (mammography)? (Question only for women)

- 1 In the last 12 months
- 2 2 years ago
- 3 3-5 year ago
- 4 More than 5 years ago
- 5 Never
- 6 I do not know what examination that is

46. When did you last see a gynaecologist for a cervical smear examination (Pap test)? (Question for women only)

- 1 In the last 12 months
- 2 2 years ago
- 3 3-5 year ago
- 4 More than 5 years ago
- 5 Never
- 6 I do not know what examination that is

47. Have you ever been tested for a sexually transmitted infections?

	No	Yes	Do not wish to answer
a) HIV/AIDS	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) HPV infection	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c) Hepatitis B	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d) Hepatitis C	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

48. When were you last hospitalized for medical reasons?

- 1 In the last 6 months
- 2 12 months ago
- 3 2 years ago
- 4 3-5 years ago
- 5 More than 5 years ago
- 6 Never
- 7 I do not know

49. How often were you advised by your family doctor to change your habits and practices related to health?

- 1 In each examination
- 2 Sometimes
- 3 Never
- 4 I do not know

50. In your opinion, how much is health care oriented towards needs and demands of third age persons?

- 1 Fully
- 2 Partially
- 3 Not at all
- 4 I do not know

51. In your opinion, how much are older persons familiar with their rights and obligations in the field of health care?

- 1 Fully
- 2 Partially
- 3 Not at all
- 4 I do not know

52. In your opinion, what impact on your knowledge, opinions and practices concerning your health do the following information sources have:

	Considerable	Moderate	No significance	I do not know
a) Health workers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b) Social care	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c) Family members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
d) Friends	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
e) Centre for Healthy Ageing	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
f) NGO	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
g) Media	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

E. Promotion of health of older persons in the community

53. Do you know whether there is some special policy or strategy focused on the needs of older persons at the level of the municipality, canton, entity or BiH?

- 1 No
2 Yes, indicate: _____
3 I do not know

54. Do you know whether there are special programs focused on the needs of older persons at the level of your local community?

- 1 No
2 Yes, indicate: _____
3 I do not know

55. Do you have access to funds or grants to submit projects oriented towards the needs of older persons in your local community?

- 1 Yes, but I do not participate in them
2 Yes, I participate in them
3 There are no available funds/grants
4 I do not know what this means

56. Do you have access to life-long learning programmes on the territory of your local community oriented towards the needs of older persons?

- 1 Yes, but I do not participate in them
2 Yes, I participate in them
3 There are no available programmes
4 I do not know what this means

57. Are you generally satisfied with the care of our society for older persons?

- 1 Fully satisfied
2 Partially satisfied
3 Dissatisfied

58. How satisfied are you with the attitude of the young towards third age persons in our society?

- 1 Fully satisfied
2 Partially satisfied
3 Dissatisfied

59. In your opinion, how developed is intergenerational solidarity in our society among the young concerning the needs of older persons?

- 1 Fully developed
2 Partially developed
3 Not developed at all
4 I do not know

60. In your opinion, how much is social care in our society oriented towards responding to the needs and demands of older persons?

- 1 Fully
- 2 Partially
- 3 Not oriented
- 4 I do not know

61. In your opinion, how much is media content oriented towards the needs of third age persons?

- 1 Fully
- 2 Partially
- 3 Not oriented
- 4 I do not know

62. How informed are you about the content of work of the Centre for Healthy Ageing (CHA) in the area of your city/municipality?

- 1 Fully
- 2 Partially
- 3 Not informed

63. How did you find out about the work of the Centre for Healthy Ageing (CHA)?

- 1 I do not know what the Centre for Healthy Ageing is
- 2 Accidentally passing by the Centre
- 3 From health workers
- 4 From social workers
- 5 From young volunteers
- 6 From the family
- 7 From friends
- 8 From participation in promotional campaigns
- 9 From the media
- 10 Other (indicate): _____

64. If you are not a member, would you like to become a member of the Centre for Healthy Ageing? (Only for persons who are not beneficiaries of the Centre, respondents from the control group)

- 1 No
- 2 Yes
- 3 I do not know

65. If you became a member of the Centre for Healthy Ageing, what would your expectations be? (Only for persons who are not beneficiaries of the Centre, respondents from the control group)

- 1 Meet people of the same age for company
- 2 New knowledge and information
- 3 Learning new skills for life
- 4 Strengthen one's own independence
- 5 I do not have special expectations

FURTHER ANSWERS ARE TO BE PROVIDED ONLY BY MEMBERS/BENEFICIARIES OF THE CENTER FOR HEALTHY AGEING

66. How long have you been an active member of the Centre for Healthy Ageing?

- 1 4 years
- 2 3 years
- 3 2 years
- 4 Less than 1 year

67. How satisfied are you with the following services/activities in the Centre for Healthy Ageing?

	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied
a) Organization of work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b) Location	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c) Space	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
d) Equipment	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
e) Employees' conduct	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
f) Volunteers' conduct	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
g) Selection of activities/clubs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
h) Cooperation with community	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
i) Cooperation with social welfare centre	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
j) Cooperation with health institutions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

68. In your opinion, how do you assess the impact of the following activities of the Centre for Healthy Ageing on your health and quality of life?

	Considerably	Moderately	No significance	I do not know
a) Corrective gymnastics	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b) Visual arts club	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c) Music club	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
d) Internet	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
e) English language	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
f) Bazaar	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
g) Library	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
h) Healthy nutrition and cookery	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
i) Excursions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
j) Work with the young	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
k) Voluntary work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
l) Health promotion campaigns	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

69. What impact has your membership in the Centre for Healthy Ageing had on your habits and practices?

	Considerably	Moderately	No significance	I do not know
a) Better information about health	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b) Knowledge of health risk factors	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c) Develop. of healthy habits and pract.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
d) Strengthening of responsib. for health	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
e) Proper use of health care	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
f) Strengthening self-reliance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
g) Reduced feeling of isolation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
h) Strengthening independence	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
i) Better relations in family	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
j) Better relations with other people	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

70. By which of these activities can the Centre for Healthy Ageing impact most effectively public awareness raising about the role and importance of older persons:

	Considerably	Moderately	No significance	I do not know
a) Thematic lectures	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b) Thematic workshops	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c) Promotional materials	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
d) Cooperation with community	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
e) Promotional campaigns	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
f) Participation of young volunteers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
g) Cooperation with NGOs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
h) Cooperation with the media	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
i) Other (indicate): _____				

71. What impact did your membership in the Centre for Healthy Ageing have in terms of changing your knowledge and practice concerning health and quality of life?

- 1 Full
- 2 Partial
- 3 No particular impact
- 4 I do not know

F. Sexual health

72. Are you still sexually active?

- 1 No ⇒ go to Question 77.
- 2 Yes
- 3 Do not wish to answer

73. If yes, state the most frequent form of sexual activity?

- 1 Sexual intercourse
- 2 Emotional intimacy without sexual intercourse
- 3 Does not wish to answer

74. Do you use medication or other means for sexual activity?

(Note: To be answered by the persons whose answer to Question 73 was 1)

- 1 I do not
- 2 Yes, sometimes
- 3 Yes, often
- 4 Always
- 5 I do not wish to answer

75. In what way do you use medication or other means for sexual activity?

(Note: To be answered by the persons whose answer to Question 74 was 2 to 4)

- 1 I do not use
- 2 I use on my own initiative
- 3 I use on pharmacist's recommendation
- 4 I use on recommendation of my doctor
- 5 I use on recommendation of other persons
- 6 Do not wish to answer

76. Do you use a condom for sexual activity?

(Note: To be answered by the persons whose answer to Question 73 was 1)

- 1 I do not use
- 2 Yes, sometimes
- 3 Yes, often
- 4 Always
- 5 Do not wish to answer

77. What do you know about HIV/AIDS?

	No	Yes	I do not know
a) Caused by a virus	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) Weakens immune system and body's defence	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c) Incubation lasts 6 mths to 10 yrs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d) Transmitted through sexual intercourse	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
e) Infection confirmed by testing 2 to 6 weeks after transmission	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

78. What do you know about hepatitis B?

	No	Yes	I do not know
a) Caused by a virus	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b) Transmitted through sexual intercourse	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

- | | | | |
|--|----------------------------|----------------------------|----------------------------|
| c) Transmitted through blood and body fluids | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| d) Infection confirmed by blood testing | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| e) There is effective vaccination | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |

79. What do you know about hepatitis C?

- | | No | Yes | I do not know |
|--|----------------------------|----------------------------|----------------------------|
| a) Caused by a virus | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| b) Leads to liver cirrhosis or liver cancer | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| c) Transmitted through infected blood | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| d) Risk for transmission - injury and/or surgery, blood transfusions | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| e) Infection confirmed by blood testing | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |

80. What do you know about HPV infection?

- | | No | Yes | I do not know |
|--|----------------------------|----------------------------|----------------------------|
| a) Caused by HPV virus | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| b) Transmitted through sexual intercourse | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| c) Diagnosis in women determined by Pap test and specific tests | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| d) Types of viruses causing considerable changes on Pap test are "high risk types" | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| e) Can lead to cancer of cervix, vagina, anus or penis | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |

THANK YOU FOR YOUR TIME AND PARTICIPATION IN THE SURVEY!