



# Senior organizations at the time of SARS-CoV-2 pandemic. Part I

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## Abstract

**Introduction and Objective.** Senior Clubs are the most commonly available and, in most cases, free form of activation of older people. The aim of their functioning is improvement in the quality of life of seniors through education and activation. By using research tools to assess the needs of seniors it is possible to determine the direction of intervention related with an effective therapeutic, educational and activation procedures. An individual approach to seniors seems to be the key to knowing their real needs, which significantly determine the quality of life, and may also help limit the escalation of gerontophobia occurring in the society. Research was conducted among participants in Senior Clubs and Universities of the Third Age. The aim of the study was verification of the needs, expectations, and potential barriers faced by seniors at the time of the SARS-CoV-2 pandemic.

**Materials and Method.** The basic tool used in the study was an author-constructed, anonymous questionnaire including items from the standardized European Health Literacy Survey Questionnaire (HLS-EU-Q47). Participation in the survey was voluntary, and the selection criterion was participation in meetings of senior organisations located in the Lublin Province of eastern Poland.

**Results.** The study showed that the distance between the place of residence of seniors and the location of senior institutions was the factor determining participation in the classes. In addition, during the period of sanitary regime the seniors had increased difficulties with access to medical care and medical specialists.

**Conclusions.** Senior institutions and organizations should consider the needs of seniors and adjust their offer to the challenges resulting from the period of social isolation.

## Key words

needs, challenges, seniors, pandemic, Senior Clubs.

## INTRODUCTION AND OBJECTIVE

During the 20th century the demographic structure of many countries underwent significant reconstruction. An increase in life expectancy by over 30 years, a reduction in infant mortality, low birth rate and increased life span, led to a process of deep social revolution. Forecasts of the Central Statistical Office for the years 2023–2060 indicate that in 2060 in Poland, the expected life span will be 85.14 for females, and 78.63 for males, whereas in 2000 these indicators were 78 and 69.74 years, respectively. It is noteworthy that after the period of the SARS-CoV2 pandemic, the life span increased considerably, and the prognosticated growth rate will be higher for males than females [1, 2, 3].

The basic guarantee of active ageing is the process of the optimization of capabilities in the area of health, participation and safety, aimed at the improvement of the quality of life of older and ageing people [4, 5]. According to the WHO, older people will be able to maintain their health and wellbeing by increasing their participation in daily activities. This is also especially important during a period of social isolation, an example of which was the COVID-19 pandemic. It was shown that during that time, seniors had difficulties accessing health care system services, and their psychological condition was worse than before. The COVID-19 pandemic highlighted


the need for the inclusion of seniors into social life, and concern about their health [6]. From this perspective of active ageing it was explicitly emphasized that activity should not be associated merely with professional activity or physical fitness, because it relates to all spheres of life: social, economic, cultural, spiritual, or civic [7, 8].

A solution facilitating achievement of the goal of active ageing assumed by the WHO can be an ecological model, which is the result of interaction between the environment and individual competences. The theory proposed by M. P. Lawton and L. Nahemow was based on the assumption that human needs can be grouped according to their nature [9, 10]. The ecological model of ageing provides a general framework for understanding the effect of the environment on the activities and wellbeing of seniors, and allows determination of factors encouraging seniors to participate in social life [11, 12]. In this context, Senior Clubs and Universities of the Third Age are important institutions activating older people.

The aim of the study was verification of the needs, expectations, and potential barriers faced by seniors at the time of the SARS-CoV-2 pandemic.

## MATERIALS AND METHOD

As part of the project, a survey was carried out based on the ecological model of ageing. The basic tool used in the study was an author-constructed, anonymous questionnaire including items from the standardized European Health

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Literacy Survey Questionnaire (HLS-EU-Q47). Due to limited resources, data related to disorders occurring in the state of health of seniors, as well as some questions from the HLS Q47 questionnaire not directly related to this scope of problems, were not taken into consideration.

Participation in the survey was voluntary, and the selection criterion was participation in meetings of senior organisations located in the Lublin Province of eastern Poland. The results obtained were statistically analysed using Statistica software. The research material was compiled using descriptive statistics methods and calculations performed by the  $\chi^2$  test of independence. The p value  $p \leq 0.05$  was considered statistically significant.

The research was carried out in 2023 and included 140 seniors aged over 60 who were associated with four senior organizations located in the Lublin Province.

Considering the volume of research material, the study was divided into two parts. The first part focused on the analysis of needs, as well as limitations and potential barriers (including those related to information technologies) at the time of the SARS-CoV-2 pandemic.

## RESULTS

**Characteristics of the study group.** The study was conducted among 140 seniors who were active members of senior organizations located in the Lublin Province (27 males and 113 females). The respondents mean age according to gender was similar – 72 in males and 71.6 in females. The mean age of all seniors participating in the study was 71.7. The modal value was 19 for persons aged 70. Other socio-demographic variables analyzed included respondents' marital status (55.7% married; 35.7% widowed). Among the respondents, those with secondary or post-secondary school education (43.6%) dominated. Such a level of qualifications was declared by 43.4% of females and 44.4% of males. Nearly every fourth respondent had higher education – 24.3%. (Fig. 3). The majority of respondents described their material standard as mediocre – 61.4%), followed by good – 35%. A considerably smaller number of respondents reported that their financial situation was very good – 2.9%, or very bad – 0.7%). None of the respondents evaluated it as bad. The majority of respondents were urban inhabitants – 57.9%, whereas 42.1% of respondents lived in rural areas (Tab. 1).

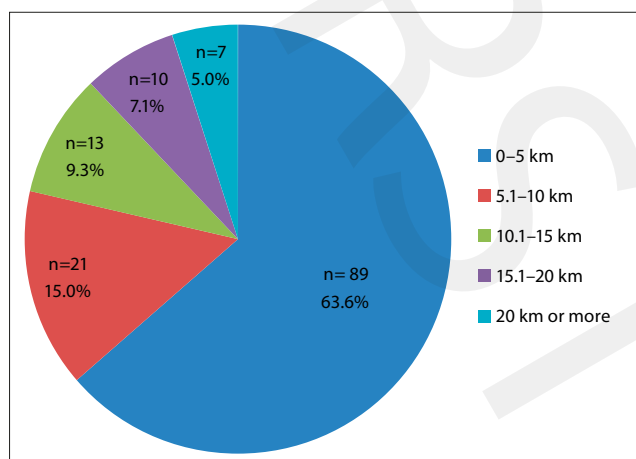
**Participation in senior organizations.** The largest number of respondents reported participation in a Senior Club or University of the Third Age from 2020 (16.4%). A slightly smaller number of seniors joined such an organization the previous year (15.7%), or in 2021 (14.3%). These results indicate that during the period of the pandemic, seniors may have been more interested in participating in such initiatives.

More than a half of respondents lived at the distance within 5 kilometres from the nearest Senior Club/University of the Third Age (63.6%). The following group of respondents declared the distance from such an institution to be within 5–10 km (15%). The fewest respondents specified this distance to be above 20 km (5%) (Fig. 1). The vast majority of seniors reported that they had no communication problems with commuting to classes (87.1%). Only 12.9% of respondents mentioned such difficulties. An investigation was conducted to discover whether there was a correlation between the

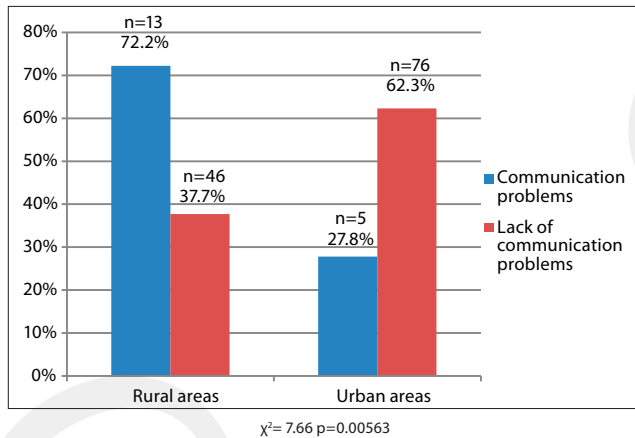
**Table 1.** Characteristics of the study group – personal and socio-demographic data

<i>Gender</i>		
Female	113	80.7%
Male	27	19.3%
<i>Age</i>		
55–60	1	0.7%
61–65	14	10%
66–70	49	35%
71–75	47	33.6%
76–80	19	13.6%
81–85	9	6.4%
86–90	0	0%
91 and over	1	0.7%
<i>Education level</i>		
Higher	34	24.3%
Secondary or post-secondary	66	43.6%
Primary vocational	30	21.4%
Primary	15	10.7%
<i>Marital status</i>		
Married	78	55.7%
Widowed	50	35.7%
Other	12	8.6%
<i>Self-assessed material standard</i>		
Very good	4	2.9%
Good	49	35%
Mediocre	86	61.4%
Very bad	1	0.7%
<i>Place of residence</i>		
Urban	81	57.9%
Rural	59	42.1%

respondents' place of residence and communication problems. Statistical analysis showed that persons living in rural areas considerably more often had problems with commuting to classes (72.2%), compared to the seniors who were urban inhabitants (37.7%). This relationship was statistically significant ( $p < 0.05$ ). These data may evidence that the location of senior institutions in the vicinity of the place of residence is an important factor exerting an effect on the willingness to participate in this type of initiatives (Fig. 2).



**Figure 1.** Distance from place of residence to the nearest seniors' institution



**Figure 2.** Place of residence and communication problems with commuting to the classes

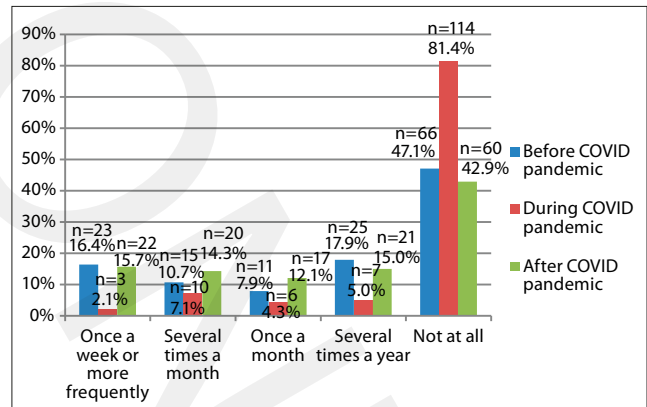
Seniors were asked about the frequency of their participation in activities within 3 time frames: before the COVID pandemic, during the pandemic, and after the pandemic. The data obtained demonstrated that before the pandemic meetings took place at least once a week (64.3%), and at that time a considerable part of the respondents did not attend the classes (17.8%). During the pandemic, the vast majority of seniors did not attend such meetings (78.6%). The attendance situation noticeably improved after the end of the pandemic period – seniors again mostly attended at least once a week (63.6%), and a smaller number, compared to the period before the pandemic, did not participate in this type of initiative (8.6%). These data may indicate that seniors, after a difficult period of isolation, were more willing to attend classes.

Nearly 90% of respondents did not participate in online classes/telephone classes during the SARS-CoV-2 pandemic within senior organisations. Only 12.1% of respondents declared participation in such meetings.

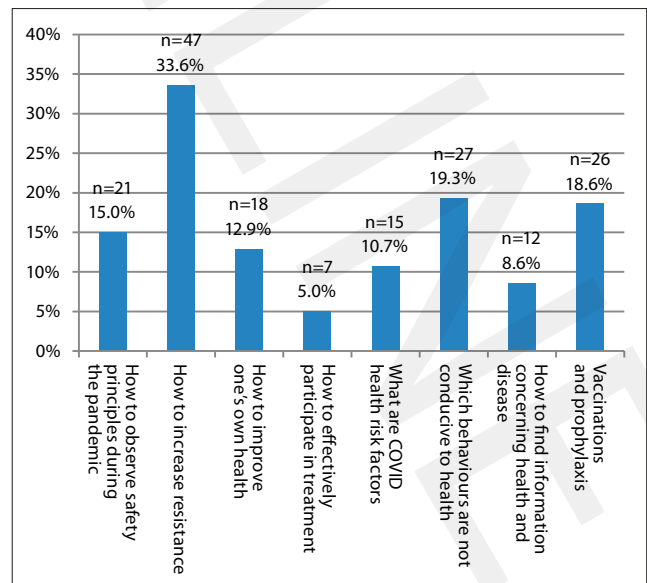
#### Participation of seniors in activities of senior organisations.

Respondents were asked about the frequency of their participation in health education activities within 3 time frames: before, during, and after the COVID pandemic. The data demonstrated that before the pandemic the majority of seniors did not attend this type of classes (47.1%), and nearly 18% of them attended classes several times a year. More than 16% of respondents reported that health education workshops were held once a week, or more often. During the pandemic the vast majority of respondents did not attend such classes (81.4%). The situation regarding attendance at health education classes improved after the end of the pandemic period – seniors more frequently attended classes at least once a week (15.7%), and a part of them declared such an activity several times a year (15%). Nearly 43% of seniors did not participate in this type of activity after the end of the pandemic period (Fig. 3).

From among the total number of respondents, nearly one-third declared participation in workshops concerning increasing the resistance of one's own body, and every fifth respondent mentioned participation in classes concerning behaviours not conducive to health. A considerably smaller number of seniors (10.7%) declared attending classes on learning about COVID risk factors: 8.6% – classes on seeking information about health/disease, while only 5% – classes on active participation in treatment (Fig. 4).



**Figure 3.** Frequency of participation in health education classes



\*Percentages do not sum up to 100, respondent could provide more than one answer

**Figure 4.** Participation in health education classes according to the scope of problems

The majority of respondents (77.9%) did not attend workshops on health promotion, while nearly a half of them (40.7%) declared participation in classes on using modern technological solutions. The seniors participated in the following trainings: using a computer (37.1%), using the Internet (32.9%), using mobile phone (15%), applications (7.1%), senior wristbands (11.4%), operation of smart watches (2.9%), use of instant messaging (4.3%), or other classes related to modern technologies (0.7%).

It is noteworthy that a noticeable part of seniors were apprehensive about attending meetings held at the location of senior organisations during the COVID pandemic (38.6%). Slightly less respondents (30%) did not agree with such a statement, whereas 31.4% of the seniors did not attend this type of meetings at that time. Moreover, respondents tried to avoid social contact during the pandemic (64.3%). In addition, the study showed that nearly in a half of cases (46.2%) this situation exerted a negative effect on their wellbeing or psychological health.

**Information technology in the lives of seniors.** The majority of the seniors (62.1%) declared that they use the Internet. Those who answered affirmatively, mostly used it

daily (54%) or several times a week (28.7%). Nearly a half of respondents (41.1%) who declared using a computer were also users of an 'E-patient' account, although only 15.7% used the 'Home Quarantine' app during the COVID pandemic. Respondents were also asked to identify the topics they search for on the Internet. The most popular problems included: information about diseases (52.3%) and their treatment (36.4%), finding contacts to outpatient/physicians (33%), information concerning the effect of drugs (31.9%), prophylactic examinations (20.5%), and searching for tips on how to be healthier (20.5%).

It was decided to investigate whether there was a correlation between use of the Internet and age of the respondents. According to the data obtained, seniors at a younger age considerably more often used the Internet than those who were older, which showed statistical significance ( $p < 0.05$ ) (Fig. 5). The same applied to education, where a significant correlation was found between higher education and use of the Internet (Fig. 6). However, no significant differences were observed according to the respondents' place of residence, marital status, or material standard ( $p > 0.05$ ).

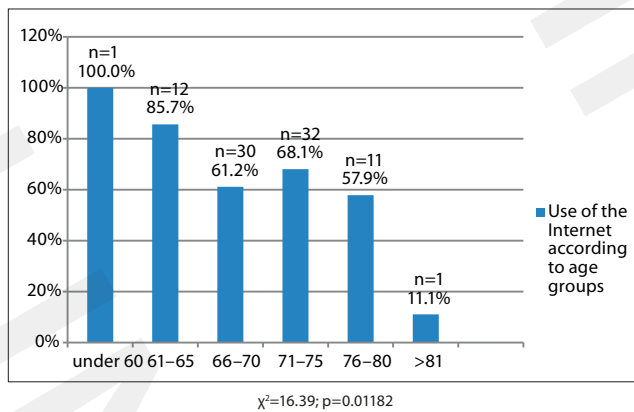


Figure 5. Use of the Internet according to individual age groups

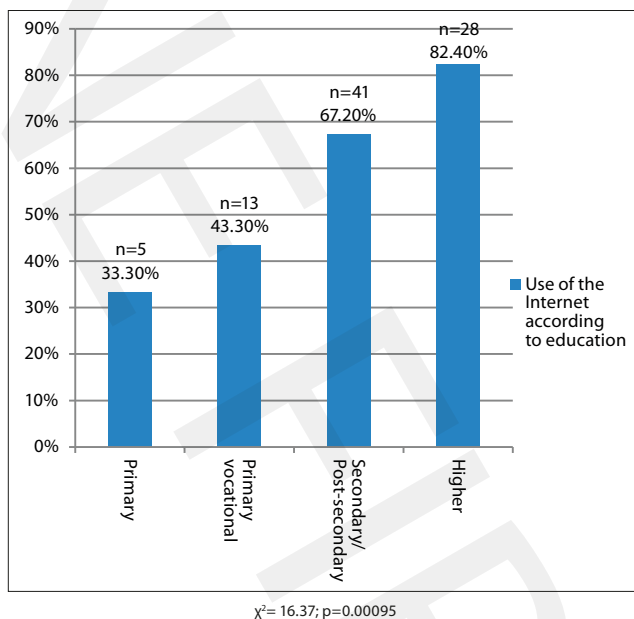
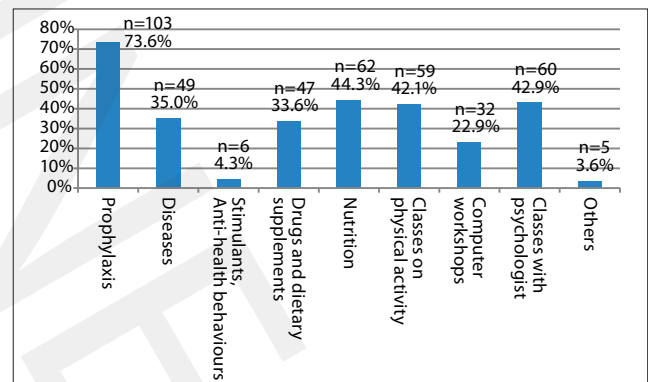


Figure 6. Use of the Internet according to respondents' education

**Needs of seniors.** Participants of classes in senior organisations were asked what they would like to change

about their institution's activities if pandemic restrictions were to be re-imposed. Although the majority of seniors did not have an opinion on the subject, or did not see the need for introducing such changes (57.9%), a noticeable number of respondents wanted to increase the number of meetings/workshops in such a situation (24.3%). According to respondents, their greatest medical needs during the coronavirus pandemic were primarily: consultations with a general practitioner (68.6%), access to specialists (57.9%), or access to nursing services, vaccinations and examinations (15%).

In order to better recognize the educational needs of seniors, a detailed analysis of their expectations was performed in this area. Prevention enjoyed the greatest popularity among the respondents (73.6%). In addition, nearly a half of them mentioned educational demand in the area of: nutrition (44.3%), classes with a psychologist (42.9%), or classes on physical activity (42.1%). Data concerning the needs of seniors in the area of education are shown in Figure 7.



\*Percentages do not sum up to 100, respondent could provide more than one answer

Figure 7. Thematic needs of seniors in the form of trainings/lectures

Another category of needs, particularly relevant at the time of the coronavirus pandemic was interpersonal relationships of seniors. Within a year from completing the questionnaire, the respondents most frequently used contact with the environment in the form of: social meetings (81.4%), instant messaging (1.4%), whereas 16.4% of persons had no opportunities for such meetings. The majority of respondents (71.4%) declared that during this period they had the opportunity to talk to someone about their problems which, by contrast, was lacking in 28.6% of the seniors. The primary source of seniors' knowledge concerning the SARS CoV-2 pandemic was a physician (68.6%), followed by family/acquaintances/neighbours (35%), or the media (13.6%).

The above-presented data show that both face-to-face social meeting and problem-free access to physicians who, at the same time, play the most important educational role, were important needs of the seniors in the study.

## DISCUSSION

The ageing process, characterised primarily by a decline in motor and mental performance, should be accompanied by regular activities which delay the decline. Senior Clubs and other senior organisations are currently the most widely accessible and often a free form of local activation for older people [13, 14]. Despite this, some older people, especially

those living in rural areas, often face difficulties related not only with access to senior facilities and limited mobility, but also with technological barriers. This concerns, among other things, the use of the Internet, which offers a wide range of information about events organized in the local area, or convenient forms of contact with close persons via instant messaging. These problems may especially concern single people who cannot rely on emergency assistance from their family or acquaintances [15, 16].

According to a 2023 report, the greatest problems of seniors with which they expect assistance include: health (46%), loneliness (25%) and finances (21%), or the need for digitalisation (20%) [17]. An increasing number of older people in Poland live alone (33%) and meet family or friends only a few times a year (25%). The presented study shows that avoiding social contact during the pandemic exerted a negative effect on the respondents' wellbeing or psychological health. These data may evidence that during times of social isolation, the problem of loneliness among seniors may be even twice as high. The social solution facilitating contact with relatives included instant messaging. Although, according to the before-mentioned report, every fifth person expected support in the area of digitisation, more than a half of seniors affiliated with senior organisations declared daily use of the Internet, which could be the result of computer classes provided by these clubs. However, it is noteworthy that only 1.4% of respondents used instant messaging, while as many as 81.4% preferred social meetings. In addition, some respondents expressed the belief that there is a need for a larger number of trainings in this area. This may indicate that digital needs were not a significant barrier for those affiliated with senior organisations, and that online meetings were less important to them than regular social contact. The use of technology is an important facilitator in various areas of daily life, which was particularly evident at the time of the pandemic. Although a part of the seniors needed additional training and those affiliated with senior organisations seemed to have slightly higher digital competences, human interaction, mentioned in the WHO agenda, is an essential part of proper human social functioning [18, 19]. The answer to these needs may lie in senior institutions, which are not only places for social meetings and workshops, but also for cultural events. Therefore, accessibility to such institutions is important, especially for rural inhabitants. According to the results of the current study, the majority of respondents lived at the distance not longer than 5 km from the nearest Senior Club. Urban inhabitants did not report any communication problems related with commuting to the classes, in contrast to persons living in rural areas. The results of the survey indicate that the location of senior institutions in the vicinity of the place of residence is an important factor affecting the willingness to participate in this type of events.

The pandemic negatively affected the psychological health and wellbeing of seniors and, at the same time, attracted attention to the need for senior organisations to support and adapt their activities to changing circumstances. Seniors may need greater support from physicians, senior organizations, and other institutions in understanding their own needs and obtaining appropriate advice, primarily concerning health. More targeted and effective actions on behalf of seniors seem necessary. Senior institutions and organisations should take into account the needs of seniors and adapt their offers to new challenges, such as those resulting from

the period of social isolation. Results of studies by other researchers confirmed that loneliness had a significant effect on the deterioration of seniors' health and sense of security. Considering an increasing percentage of seniors in the global population, their role should be transformed from 'passive dependants' to 'active participants' in social activities [20, 21, 22]. Cooperation between seniors, physicians, and senior organisations seems to be crucial for ensuring an effective education, good state of health and wellbeing for seniors, as well as to minimize social exclusion.

## CONCLUSIONS

1. Polish seniors from the Lublin Province of eastern Poland expressed many needs resulting from sanitary restrictions caused by the SARS-CoV-2 pandemic. The most important of these needs included: easier access to physicians, additional classes on health issues, and the possibility to socialize.
2. The location of senior institutions in the vicinity of the recipients' place of residence is a key factor in determining participation in this type of undertakings. It is therefore important to disseminate information about the activities of Senior Clubs, to increase access to such facilities, and to facilitate logistical issues for seniors.
3. Application of the ecological model of ageing may be the key to recognition of the real needs of seniors. Therefore, senior organisations should adapt their programmes to these challenges and the needs of seniors by offering dedicated meetings with specialists.

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