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ORIGINAL ARTICLE

ALTERNATIVE COMMUNICATION TOOLS FOR THE ELDERLY IN TIMES OF RESTRICTED SOCIAL CONTACTS

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Summary

Background and objective: Nursing homes are threatened by external and internal threats, effect of which may result in a crisis situation (state of emergency). While managing an already existing emergency, it is necessary to create conditions allowing the elderly to maintain their fundamental human and civil rights. Any interference with human and civil rights is acceptable only in a state of emergency when crisis measures are applied. Social isolation was one of the emergency measures within the Covid-19 pandemics and involuntary social isolation may result in one´s state of depression. To eliminate this prediction, it is necessary to create such conditions that enable the elderly to maintain their basic human needs as well as civil rights. The authors therefore aim to identify and evaluate the effectiveness of possible alternative communication tools and strategies in the nursing homes along with the ways of a potential reduction of negative effects of social contacts restrictions.

Methods: On the basis of an online questionnaire, a community of experts evaluated alternative communication tools on a scale from 1 to 5, considering three factors: 1. benefit for the elderly; 2. financial requirements for purchasing/provision for a nursing home; 3. organization requirements for a nursing home. A cost-benefit evaluation was performed to determine a ranking of individual alternative tools.

Results: The acquired results of questionnaire survey served as a tool to determine the ranking of importance of individual alternative communication tools that are feasible depending on specific conditions of a nursing home.

Conclusion: The research identified useful tools that may help in the nursing homes to mitigate the impacts resulting from restrictions applied in the state of emergency and associated initiatives in the field of mental health.

Key words: Alternative communication tools; Nursing home; Mental health; Communication; Crisis measures; Crisis management; state of emergency; Restrictions; The elderly; Social isolation

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1. Introduction

A nursing home (NH) is a place of provision of a social service designed for elder persons (65+), (1) who need permanent assistance of a second person due to decreased independence caused by higher age and associated diseases. The aim of NH personnel is to provide a dignified environment and treatment for their clients and to secure protection of their health and life both in a daily routine and in the time of crisis situations (state of emergency), (2) As a part of crisis management, crisis measures of various character may be applied (3). Restricting social contacts belonged to crucial crisis measures in the pandemics. Residents of NH suffered mentally, physically and socially by the applied restrictive measures. (4-8). The mandated isolation of residents of NH was also inconsistent with the theories on self-determination and aging (9-12) and reflected forced and involuntary lack of personal communication with relatives and close ones of the elder people (NH residents).

The authors therefore strive to identify and evaluate the effectiveness of possible alternative communication tools in NH as a mitigating measure to eliminate negative effects of social contacts restriction in the state of emergency.

Reducing vulnerability of elder people is not primarily about creating special services for them. It is about ensuring equal access to vital needs and services. For elderly, ensuring equal access is about making social service providers more aware of their specific problems and the barriers they face (2).

1.1 Findings from Expert Studies

The involuntary lack of personal communication of NH residents with their relatives and close ones was an associated aspect of social isolation (SI) during a state of emergency and was addressed differently by management of each NH. Literature reviews include expert studies on alternative communication tools substituting social contact and confirm diversified attitude in individual countries.

The difficulties of balancing to ensure the right of elderly people to communicate and to ensure their safety were addressed in a manuscript by authors from Italy (13). The manuscript comments on legislative measures aimed at restricting access to NH facilities by visitors in Italy. The NH management was the target group of the research. According to the authors, the research (13) showed an interesting result in a question that addressed an issue whether or not alternative forms of communication with relatives were implemented. Six facilities out of 1356 admitted implementation of no alternative forms of communication to substitute personal visits. A total of 68.8% of the facilities that implemented alternative methods of communication reported that they typically used telephone or video calls to communicate between the elderly and their relatives. Only 19.4% reported implementing communication through video calls and 6.5% only through telephone calls and occasionally by e-mail contact. It was also found that in some facilities, the right for communication was not guaranteed (13). In conclusion, the authors point to the inalienable right for elder people and NH residents to social contact and communication with outside world. The questionnaire results emphasise the necessity to change the approach to the visitors of elderly people. The aim is to find a balance between protection of rights of elderly people to communicate and their safety. Feelings of loneliness could be significantly reduced by possibility of telecommunication or videocalls. However, it was also proved, that not all family members have always access and knowledge of necessary technological tools (13).

A Dutch cross-sectional study (14) focused on the assessment of the perspectives of relatives of elderly people living in NH under visitation restrictions during a pandemic. The target group of the survey was solely relatives of the elderly and the online survey was conducted with 1997 respondents who communicated their opinion on the visitation ban. The survey focused on 4 key areas:

- Communication approach to elderly people;
- Possible unfavourable effects of visitation restrictions on elderly people and relatives;
- Possible protection effects of visitation restrictions on elderly people
- Important aspects for relatives within visitation restrictions.

Each of the four key areas comprises several survey questions. A Likert scale way employed to measure different levels of attitudes and opinions (14). The results (14) present that satisfaction with communication approach

to elderly people in NH was highest when the respondents (relatives) had the opportunity to communicate with elderly people via telephone connection or when visual contact through a glass panel was facilitated to keep a greater physical distance. The study (14) points to a discrepancy in respondents´ views on the adverse effects resulting from visitation ban and on applied crisis measures (isolation) to protect physical health of the elderly. The respondents expressed their need for more information (frequency and correctness) and for more of various forms of communication.

Another Dutch national study (15) concentrated on impacts of restrictive no-visit measures on well-being (Well-Being) of the elderly. Presented results indicate that despite the use of technological innovations as videocalls or other creative solutions (boxes separated by plexiglass outside NH facility), the residents of NH felt socially isolated, namely people suffering from dementia since they usually benefit from physical proximity of relatives more than from a remote conversation (15).

The primary aim of the Irish brief outline "Video calls for reducing social isolation and loneliness in older people" (16) was to assess the effectiveness of videocalls on reducing social isolation and loneliness in the elderly. The authors (16) evaluated the influence of videocalls on reducing symptoms of loneliness, depression and on improving quality of live in NH residents. The authors concluded that they did not obtain valid data on effectiveness of videocalls in reducing loneliness in the elderly. Evidence regarding the effectiveness of videocalls to mitigate the symptoms of depression and social isolation (SI) were not conclusive (16).

The authors from Oklahoma City (USA) also conducted a brief literature review (17) to compare psychosocial and mental health of the elderly before pandemics and within pandemics. Pandemic measures made the negative consequences of social isolation more visible and highlighted communication problems. The overall research question examined the effect of communication problems and social isolation on cognitive changes in the elderly (17). The authors declare that involuntary closing of NH disrupted ways of communication among all participants (staff, clients, relatives) and among NH residents as well, resulting in increased perception of social isolation and profound feeling of loss (17). They also mention the existence of valid evidence that communication and human contact may mitigate negative consequences. However, specific alternatives to face-to-face communication were not addressed by the authors.

An expert paper from France (18) focused on tools of virtual communication with relatives and friends of the elderly. Overall, 132 respondents participated in the study and the authors analysed the influence of age in the context of a choice between two alternative communication tools – communication via telephone with no video transmission or via videocall. The most frequent way of communication was a telephone without video transmission (18). Majority of the elderly owned a mobile phone, or it was lent to them. The elderly people were able to make the phone calls more independently than videocalls. Satisfaction rates were similar in both ways of communication with relatives. If NH residents were provided with adequate assistance in making the communication, then they were more satisfied with video calls (18). The research (18) did not address the issue of alternative communication tools for clients with visual impairment who do not benefit as much from video calls.

California research (19) aimed to assess and examine ways to safely increase social connections of the elderly when the crisis measures against virus spread are applied. 21 NH residents participating in the research, were asked to describe their coping mechanisms with the "stay at home" measure that was introduced in March 2020, including its effect on their physical and mental health. Transcriptions of focus groups were analysed using qualitative methods.

The analysed qualitative data provided four themes:

1. Quarantine impact on health and well-being of the elderly;
2. Communication innovations and use of technologies;
3. Effective ways of coping with quarantine
4. Improving approach to technologies and training (education) in their use (19).

Participants reported threat to their physical and mental health that was directly connected with quarantine and that even deteriorated as a consequence of social isolation and decreased physical activity. Technologies were

identified as a lifeline for people socially isolated from their friends and families. Respondents actively using communication platforms ZOOM and Skype, proposed using these platforms even for virtual book clubs, as a support for discussion groups with specific topics, interactive group games, or even group dinners. There was also a suggestion to learn from each other. The suggested approach could facilitate safe and pleasant environment allowing NH residents to communicate and learn to better use their own or borrowed devices (19). In conclusion, the authors confirm a need to have the access to technologies, appropriate connectivity and literacy as potential changes in supporting mental and physical health in the elderly which must be a priority in future research (19).

Another manuscript (20) presents results of a questionnaire survey conducted in NH in Scotland, the intention of which was to evaluate information regarding communication patterns between personnel and NH residents and their relatives. The Scottish study (20) depicts NH personnel response to the first wave of pandemics and the steps taken to maintain communication between residents and families to support emotional well-being. 21 employees participated in the survey (20) and, according to the acquired data, employees initially communicated with relatives individually via phone calls and emails. NH managers regularly sent messages once in a fortnight. Subsequent inquiries from relatives concerning mental and physical health of the elderly escalated and NH management decided to use other communication channels, such as Facebook, Facebook Messenger, Facebook Workplace, WhatsApp, ZOOM, Skype, not only for individual communication but also for general information (20). Management of some NH purchased iPads for the residents to borrow to communicate with their families. Some of the residents used their own phones for videocalls. Unfortunately, people suffering from dementia or other mental disorder, had difficulty understanding the principle of using technologies and the employees had to assist them with their phone calls (20).

Another research of the authors from the USA (21) focused on the quality of communication among three focus groups – relatives of residents, employees who took care after them and among the residents themselves. The focus of the qualitative descriptive study (21) was subsequently defined as relatives´ perception of quality and possibilities of communication with the elderly who were in a terminal stage of life when a protective measure prohibiting personal contacts was applied. A total of 328 relatives of residents participated in the questionnaire survey and the data were analysed using qualitative content analysis. On the basis of the results obtained, the authors (21) present statements that the communication of the staff was not adequate to the situation and was of little use to both the elderly and their relatives (21). Family members identified contextual factors, which in their opinions, affected quality of communication. Characteristics of perceived quality of communication included willingness of staff to communicate remotely and to provide information on a patient´s condition and a plan of care. Poor quality communication with staff was perceived as a result of limited access to staff, insufficient informing on a resident´s condition and cases where the family member was not consulted about a resident´s care. The quality of communication was facilitated or hindered by the availability and use of technologies allowing remote communication through video.

The situation was sometimes complicated by a current condition of a resident in which communication over the telephone was limited, or difficult to implement. Staff had to be present at all times to assist the resident with the use of the telephone. Only a minimum of seniors used communication platforms such as Skype, ZOOM, Facetime, because the staff had limited knowledge and experience with these applications and thus could not assist in their use (21). Some family members wrote letters or emails to their relatives. This activity was very much appreciated by the residents of the facilities. In the summertime, it was possible to communicate from the window or balcony, but this method was not suitable for patients suffering from hearing loss (21).

The conclusion of the descriptive study (21) presents a view that communication between residents, families and medical teams at the end of life remains critically important, even when personal visits are prohibited. The families declare that poor quality communication causes profound distress that may affect quality of dying and grieving. Innovative strategies are thus necessary to ensure quality communication, despite visitation ban associated with pandemics.

The authors of a brief but highly beneficial paper (22) suggest easy-to-implement strategies that may help prevent loneliness and SI in institutionalized persons, in long-term care facilities, and during crisis measures of no personal contact. Implementation of the nine proposed strategies is accomplished at little or no cost, with no need to hire additional staff. The strategies can reduce residents' feelings of loneliness in NH or other care communities (22).

Strategies recommended by the authors (22) include, for example, asking families of NH residents to send cards and letters. Clients like to receive "artwork" from their grandchildren or great-grandchildren. Letters can include copies of pictures from the past that the residents enjoy seeing again and can reminisce about pleasant experiences in their lives. Another recommendation is in line with the belief that some residents with dementia are comforted by realistic toys - dogs, cats or dolls that resemble life. If the resident shows a liking for any of these toys, then the family should agree to acquire them. There is also some evidence that robotic animals (robopets) may be effective in reducing loneliness in elder people staying in long-term care facilities (22). Another proposed strategy, which is also an alternative tool to face-to-face communication, is simulated presence therapy (23). It's another way families can stay in touch with an NH resident. The family member makes a recording in which questions are asked, e.g., "Do you remember when you lived in a small community..."; "Do you remember what you did with your Boy Scout troop?" Then a certain part of the recording is left wordless so that the resident can respond. The recording could be similar to a phone call in which a family member may ask about pleasant experiences from the past and leave room for the resident to respond. If an elder person suffers from dementia, the recording can be played repeatedly. A study (23) found that simulated presence therapy improved the well-being of residents with dementia and those with behavioural symptoms of dementia.

1.2 Sub-conclusion

All countries affected by Covid-19 applied a protective “stay at home“ and “isolate yourselves“ measure which was recommended by government representatives and health experts in order to protect public health. However, mandatory isolation is particularly difficult for people living in care facilities and care communities (22). Group activities were cancelled in given facilities and residents were isolated in their rooms as communal dining was also cancelled. Although the ban of group activities and prohibition of personal visits reduced the risk of spreading infection, loneliness of the residents increased significantly (22). Preventing loneliness in institutionalised people is highly important. Implementation of alternative communication tools and strategies may serve as a mitigating measure to compensate negative impacts of social contacts restriction within the state of emergency (24). The implementation of communication tools and strategies require certain costs for the purchase of required items and for the training of caring personnel, however, the effort made may improve the quality of lives of the elderly.

The aim of this paper was therefore to identify suitable alternative communication tools, to evaluate their effectiveness and to define ranking of their importance for NH residents within the Czech Republic (CR). Quantitative evaluation results from conducted survey are presented in chapter 3.

2. Materials and methods

The initial step of the survey was to determine possible alternative communication tools. Three sources of data and information were used for their determination. Literature reviews from expert studies (13-23), the topic of which was communication during the period of social contacts restriction between elderly residents in NH, their relatives and NH personnel, served as the first source. The second source of data and information was the results from conducted national research in a project (25) funded by European sources. Interviews with professionals working in social services and facilities for the elderly (26-28) served as the third source. On the basis of identifying fifteen alternative communication tools (presented in table 1), a questionnaire, using the online tool Microsoft Forms, was created, purpose of which was to evaluate the effectiveness of determined tools in NH in the Czech Republic. The evaluation of the tools in question was performed on the basis of three criteria:

1. Its benefit to the elderly in terms of compensation of negative effects of social contact restriction in the state of emergency;
2. Financial requirements of the alternative tool implementation;
3. Organisational complexity of the alternative communication tool implementation for NH staff.

Representatives of the expert community working in residential facilities for the elderly (NH management, NH caring staff, representatives of the Association of Social Service Providers) were contacted to participate in the survey. Representatives of the expert community formed a group of evaluators. The group of evaluators consisted of 34 members in total. The distribution of the online questionnaire was provided via email communication that included

an electronic link to the relevant questionnaire. The members of the evaluation group rated the above criteria in relation to each alternative communication tool on a scale from 1 to 5 (presented in Table 2).

The obtained answers served as a basis to calculate:

1. the average score of the benefit of the alternative communication tools for the elderly, denoted by the symbol B;
2. the average score of financial requirements for implementing the alternative communication tool, denoted by the symbol C_F;
3. the average score of organisational complexity of implementation for NH staff, denoted by the symbol C_O

In addition, cost (C) was determined as the average score assigned to the alternative tool by the evaluator under the financial and organisational complexity criteria (i.e., $C = (C_F + C_O) / 2$). Based on the calculated values of B and C, the Benefit-Cost Ratio (BCR = B / C) was further calculated. The BCR values were used to determine the ranking of each alternative communication tool, which are summarized in the following Table 1.

Table 1. Identified alternative communication tools.

No.	Alternative communication tools
1	TV set in the room
2	Radio in the room
3	Regular distribution of daily newspapers to the residents
4	Land line in the room (possibility of receiving calls from relatives and friends)
5	Mobile phones to be loaned to the residents (possibility of receiving calls from relatives and friends)
6	Laptops or tablets to be loaned to the residents (possibility of receiving videocalls from relatives and friends)
7	Regular distribution of letters from family / friends of the residents
8	Showing pre-prepared audio-visual recordings from relatives / friends of the residents
9	Presence of a priest at regular times physically or remotely (e.g., video conferencing)
10	Regular communication with volunteers
11	Using isolation visitation box allowing communication with visitors
12	Possibility of communication with relatives or friends remotely through a window / balcony
13	Possibility of communication among the residents themselves (e.g., internal telephone connection)
14	Using robotic pets to reduce loneliness in the residents
15	Television system allowing showing films, series of the choice of the facility staff

Source: (13-23), (24), (25-27)

A comprehensive approach to objectifying the desired outcomes was further defined by developing an evaluation scale for the three criteria assessed (Table 2).

3. Results and Recommendations

The evaluation results of the questionnaire survey are presented in Table 3 and shown in Figure 1. The evaluators considered regular distribution of letters from relatives or friends of the elderly to be the most effective tool. The ability to communicate remotely through a window or balcony with relatives and friends, the presence of a priest physically or remotely at regular times, and the provision of radios in rooms were rated as very effective tools. The results confirm a fundamental preference for the application of tools offering direct physical contact and/or visual communication. A common feature of the tools was the low financial and organizational cost for the NH and it is due to this circumstance that the adoption of these alternative communication tools can be generally recommended for all NH.

Table 2. Evaluation scale to assess individual criteria.

Abbreviation of criterion	Criterion evaluated by respondents	Evaluation scale
B	The benefit of an alternative communication tool for the elderly in terms of compensating for the negative effects of restrictions during the state of emergency	1 negligible benefit 2 low benefit 3 medium benefit 4 high benefit 5 substantial benefit
C_F	Financial requirements for the implementation of the alternative instrument	1 financially inexpensive 2 low cost 3 medium cost 4 high cost 5 very high cost, not feasible from the facility's budget due to financial requirements
C_O	Organisational complexity of implementing an alternative tool for NH personnel	1 easy to organise 2 low organisational intensity 3 medium organisational intensity 4 high organisational intensity 5 very high organisational intensity, not feasible with current number of staff

Source: authors´ own work.

Table 3. Evaluation of alternative communication tools by the expert group.

No.	B	C	C_F	C_O	BCR	Rank
1	3.59	2.13	2.41	1.85	1.69	5
2	3	1.74	1.79	1.68	1.72	4
3	2.79	1.71	1.71	1.71	1.63	6
4	1.94	2.1	2.21	2	0.92	14
5	2.97	2.26	2.21	2.32	1.31	12
6	3.5	2.47	2.47	2.47	1.42	10
7	3.62	1.24	1.18	1.29	2.92	1
8	3.21	2.09	1.97	2.21	1.54	7
9	2.79	1.5	1.24	1.76	1.86	3
10	2.82	1.9	1.35	2.44	1.48	8
11	3.74	2.68	2.62	2.74	1.4	11
12	2.82	1.43	1.24	1.62	1.97	2
13	2.82	1.97	1.91	2.03	1.43	9
14	1.5	2.46	2.65	2.26	0.61	15
15	2.74	2.13	2.18	2.09	1.29	13

Source: authors´ own work.

Legend chart: The average scores for each criterion, achieved on the basis of evaluation by the expert group, are presented.
No. - corresponds to the serial number of the alternative tool listed in Table 1;
B - the benefit of the tool for the elderly as assessed by evaluators;
C - the cost of the tool in terms of its financial and organisational complexity for the NH concerned, i.e., the average score of the tool achieved under the C_F and C_O criteria according to Table 2;
BCR – benefit cost ratio, i.e., BCR = B / C;
Rank - the ranking of the effectiveness of each alternative tool is determined on the basis of the BCR values.

A graphical representation of the results obtained is presented in Figure 1 below.

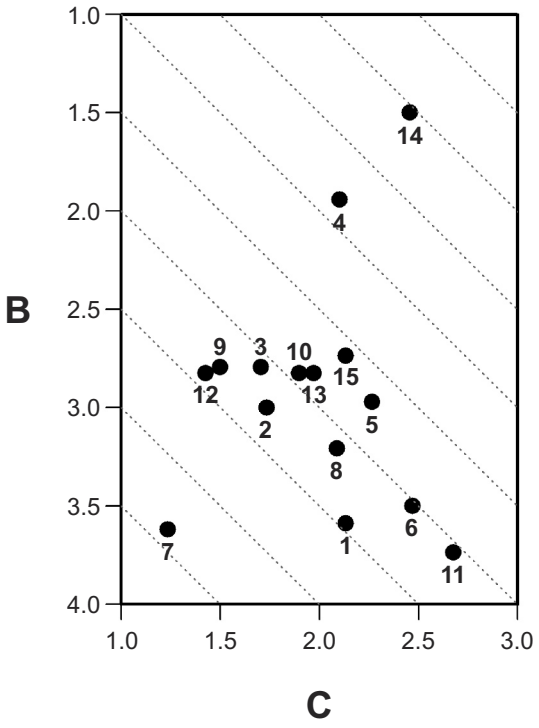

Figure 1. Results of the evaluators' assessment of each alternative communication tool.
Source: the authors´ own work.

Legend chart: The numbers of each tool correspond to the serial numbers of the tools listed in Table 1;
B - the benefit of the tools for the elderly as assessed by the evaluators;
C - the cost of the tools in terms of their financial and organisational complexity for the respective NH (i.e., the average score of the tool achieved in the C_F and C_O criteria according to Table 2);
the individual grey dashed lines represent possible outcomes with a constant difference between the benefit (B) and cost ratings of alternative communication tools (C).

Another tool that was rated as effective (BCR = 1.69) was the provision of televisions in each room. Despite the relatively high financial cost of the tool provided, it can also be recommended as its usefulness was assessed to be very high by the evaluation group (B = 3.59).

The strategies, evaluated as the most effective, could become the general standard of alternative communication tools and strategies applied in times of restricted social contacts of the elderly with their families and friends. The summary results are presented in Table 3.

The results of the expert survey also showed highly beneficial tools for communication with the elderly in times of restricted social contacts, but financially or organizationally challenging for the NH management. These are the alternative tools of a visitation box allowing communication with the visitor, lending a laptop or tablet to the elderly with the possibility of receiving video calls from relatives and friends of the elderly and showing pre-prepared audio-visual recordings from relatives or friends of the elderly. The implementation of the above-mentioned tools can be recommended if the financial and personnel resources of the NH allow it, and unless their application result in limitation of other essential activities and services (e.g., limitation of other investments in NH equipment). The tools in question could represent an extended standard of alternative communication tools in the conditions of the Czech Republic in the period of social contact restrictions and they can be perceived as a recommendation of what the NH management should gradually achieve.

4. Discussion

The presented discussion addresses a summary of significant foreign experiences focusing mainly on the forms and possible techniques of feasibility of communication with the elderly in times of pandemics and subsequent differences in the results of the research conducted in the Czech Republic.

The authors of an Italian study (13) aimed to define forms and frequency (frequency/reality) of introduction/use of alternative communication tools in NHs within the first wave of pandemics in Italy. On the basis of the survey conducted, the authors (13) declare that six facilities admitted not introducing any alternative forms of communication. The second finding showed that almost 70% of the nursing homes contacted had implemented alternative means of communication only in the form of a telephone call or a video call. Subsequently, the authors commented on the first policy and administrative document explicitly mentioning the right of seniors to communicate and to socially interact. In contrast to this study (13), the presented paper does not address the provisions from a medical-legal perspective, however, based on the recognition of social and emotional value of face-to-face communication, it presents the importance and usefulness of appropriate alternative communication tools that may be used in clinical and other practice.

The target group of a Dutch cross-sectional study (14) was solely represented by relatives of the elderly as one of the researched areas was the communication approach towards the elderly. Among other things, the study (14) found that respondents would prefer more forms of communication. The data and information resulting from the survey conducted on the 15 identified communication tools designed on the basis of the specific knowledge and conditions of the NHs may be used to fulfil such preferences. The identified tools provide both unilateral and bilateral options of communication and their suitability and usefulness is comprehensively oriented towards all parties involved (seniors, relatives of seniors, NH care staff).

Findings from another expert study (17) stem from the area of communication problems in NH clients suffering from dementia. The existence of valid evidence (17) supports the claim that communication and human contact can mitigate negative consequences of social isolation. However, specific alternatives to face-to-face communication were not addressed by the authors, which may be due to the fact that personal contact, physical presence and physical touch between the client with dementia and their loved one may usually be replaced by only a few forms of communication tools (20) such as, for example, simulated presence therapy (23), which can be implemented through audio visual recordings being played repeatedly to an individual (23). This communication tool was also evaluated in the conducted research and ranked seventh in terms of effectiveness (rank, Table 3). However, the criterion of an individual's health disadvantage (suffering from dementia) was not taken into account in the definition of the ranking. Nevertheless, the identified tool is ranked as the more effective one for both groups of clients (with and without dementia).

Telephone calls and video calls are the most frequently used communication tools within pandemics according to the literature (13-21). Video calls and other tools requiring the use of an individual's vision are generally not appropriate for clients with visual impairment (18) as they are not as beneficial for them. The usefulness of communication tools where only hearing is used can be interpreted analogously. For persons with hearing impairment, it is usually not possible to replace personal or visual perception with a telephone conversation itself. The above-mentioned disabilities of an NH client (visual, auditory), in relation to the definition of the appropriate and effective usable alternative communication tool was not addressed in the survey.

The aim of this paper was to evaluate usefulness of alternative communication tools in terms of three criteria (usefulness, financial and organizational complexity) and to define the order of their importance for current NH clients in the Czech Republic. The content structure of the research in the assessment of alternative forms of communication in the Czech Republic significantly coincided with the findings of foreign research. However, a fundamental difference in assessing their applicability was the selection of the above-mentioned evaluation criteria responding to the actual economic and personnel possibilities of NHs. This approach is not addressed by foreign literature sources.

Even in the Czech Republic, alternative communication tools included, for example, television, radio and the daily press. The actual effectiveness of these tools is lower due to unilateral communication. According to the survey

results, the use of written communication with loved ones or communication with a physically present priest is a priority for the elderly. The results obtained show that currently there is still a generation that does not prefer electronic communication, but written, personal or just classical media. It is possible to predict that future generations of seniors will change their attitude towards alternative communication tools. The significance and originality of the topic and results presented may be seen in its uniqueness. In the literature research conducted so far, solely one manuscript on a similar topic was identified, in which the authors (22) propose easy-to-implement strategies that may help to prevent loneliness and social isolation in institutionalized persons. However, they do not address their evaluation in terms of the selected criteria nor they determine the order of importance.

The subjective assessment of the identified alternative communication tools by a group of 34 evaluators affects and thus limit the conducted survey. The evaluators have been active in the expert community of residential nursing homes for a long time, but the differentiated approach of the top management to the use of alternative communication tools in individual NH (without methodological guidance) was formed on the basis of their personal opinion/perspective on the potentiality of solving an unprecedented situation. The second limitation can be perceived in relation to the differentiated composition of clients in the given NHs. The application of modern alternative communication tools and the knowledge and ability to use them by contemporary clients are influenced by many factors. Determining factors include, for example, a client's age, education and former occupation, a client's current mental and physical health, as well as the client's current financial security. These factors thus largely affect whether the client is able to actively use and benefit from the current alternative tools. The knowledge and skills of care staff or volunteers (students or IT companies), who have the opportunity to teach and support the elderly in the active use of contemporary communication tools, also influence a client's ability to use them.

5. Conclusion

Reducing the vulnerability of older people is not primarily about creating special services for them. It is about ensuring equal access to vital services and needs. For elder people, ensuring equal access is about making social service providers more aware of their specific problems and the barriers they face (2) which means involving the elderly in the planning and provision of services and supporting their ability to live full lives, within their capabilities and in accordance with their needs. Successful interventions include both social care and rehabilitation as well as addressing necessary communication support, even in the context of the capacities of their families and close communities.

Questionnaire survey results were used to determine the order of importance of alternative communication tools that can be implemented depending on the specific conditions of nursing homes. On the basis of three factors, the expert community rated a regular distribution of letters from relatives or friends of a resident as the most effective. Remote communication with relatives and friends through a window or balcony, the presence of a priest at regular times physically or remotely and the provision of radios in rooms also belong to a group of highly effective tools.

The manuscript addressed alternative communication tools that may be included in the required psychosocial support for the elderly in periods of involuntary social isolation. In relation to the evaluation criteria presented in Table 2, it appears that an integral part of the successful implementation of alternative tools, strategies and psychosocial support for the elderly is the desirable strengthening of the autonomy of NH directors. The autonomy of NH management is necessary to modify restrictive measures in accordance with the nature of the NH, the residents and their mental and physical health.

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Author Contribution

The authors contributed equally to this study.

Conflict of interests

The authors declare no potential conflict of interests.

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Compliance with ethical standards

Not applicable. The research was not conducted on humans or other living beings. Group of evaluators were informed of the purpose of the study and their anonymity in accordance with the principle of voluntariness.

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