

Aspects of the quality of life of seniors in nursing homes during the emergency during the covid-19 pandemic

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Abstrakt As part of a project of the Technology Agency of the Czech Republic, a joint project focused on the analysis of the impact of crisis measures associated with the declaration of a state of emergency on the psychological state and various aspects of the quality of life of seniors in homes for the elderly and setting up a system of communication not only with the elderly themselves, but also with the nursing staff and the family community in such a way that it is possible to identify the effects of social isolation as a result of the ordered measures and to analyse the other effects of communication procedures and thus prevent negative effects. The goal of the project is to develop a methodology to define appropriate communication procedures and tools with the above-mentioned groups, which can reduce the negative effects on the psychological state of seniors.

Klíčová slova Covid-19, seniors, state of emergency, psychological impact

1. INTRODUCTION AND BRIEF OUTLINE OF A PANDEMIC SITUATION

We have already depicted the issue of quality of life of the elderly in shared facilities during the Covid-19 pandemics in the Czech Republic elsewhere [1], the following text is thus an extension of our existing findings. The pandemics of a new serious disease covid-19 represented a significant source of stress for people of all ages, not only for the elderly. This is a situation that society last experienced more than 100 years ago. We can neither overlook a fact that the majority of the population, especially in developed countries, has been convinced for many years that medicine and other biological sciences are at such level that something similar cannot occur, since we are able to handle any epidemics at its onset. While the scientific community, or at least a part of it, predicted the possibility of a similar agent, the general population did not and thus the outbreak of the Covid-19 pandemics was very close to the so-called black swan effect.

The inability to predict who would fall ill, how severe the illness would be and how long would it last, led to the increase in feelings of uncertainty and helplessness. These feelings were strengthened,

with a few exceptions, by the confusing communication of risks by relevant authorities. The covid-19 virus has threatened and continues to threaten the health and lives of (not only) the elderly, and anti-Covid-19 measures have a negative impact on people's mental health. For the elderly, these impacts are amplified by other aspects of increased vulnerability, such as their social isolation, reduced mobility and the accumulation of chronic diseases [2].

A situation such as pandemics which are significantly unusual, induce feelings of frustration and stress. Stress is a complex psychophysiological response manifesting itself on a psychological level through feelings of overstrain and deterioration of physical and mental well-being, and thus affects all the levels of an individual [3]. The transactional theory of stress by R. S. Lazarus [4, 5] understands it as a reaction of an individual to an overly straining situation, or a situation that is interpreted as such.

The increase in stress depends not only on severity of the problem, but also on how a person perceives the problem. The situation must be perceived as threatening and one has to worry that they may not be able to cope with it. Finding the meaning of stressful events is a process in which people try to answer the questions "what happened and why" or how the situation may be handled. If a person thinks that he or she can at least partially control and influence the situation, they will not experience such stress as if they believe that they are completely powerless. People tend to explain stressful situation in accordance with their experience and understanding of the laws of the world around them which serves as a source of security. The uncertainty in understanding new and unknown situation, such as the Covid-19 pandemics, strengthen the need to find an explanation as soon as possible, whichever the explanation may be, and it is one of the reasons for easy acceptance of nonsense opinions and conspiracy theories. However, it would be a mistake to see stress as a merely subjective phenomenon. Stressors may be generally divided into subjective and objective ones, thus, in each situation, it is necessary to distinguish which stressors are objective and act regardless of one's perception, and, on the contrary, which stressors are subjective, i.e. those, perception and subsequent cognitive processing of which may be affected. Within the Covid-19 pandemics context, we may talk about both subjective and objective stressors which have affected the quality of seniors' lives in shared facilities.

The explanation of stressful events will significantly affect their perception and subsequent expectations, regardless of whether it is adequate or not [5, 6]. The state of emergency declared by the government of the Czech Republic in the context of the Covid-19 pandemics lasted a total of 286 days in 2020-2021, almost 4/5 of a year (detailed in Table 1).

Table 1 Overview of the duration of the state of emergency in the Covid-19 pandemics

type	from	to	number of days
pandemics	12 March 2020	17 May 2020	67
pandemics	5 October 2020	14 February 2021	133
pandemics	15 February 2021	26 February 2021	12
pandemics	27 February 2021	11 April 2021	44
pandemics	26 November 2021	25 December 2021	30

This situation affected mental health of many citizens of the Czech Republic, namely seniors. Of this group, the most affected were residents of nursing homes, who were isolated not only from their families, but in the home itself as free movement and possibilities to leave their rooms were significantly restricted. Additionally, due to the high sickness rate of the staff, there were frequent changes in

nursing staff which negatively affected the residents of the homes as the need for routines generally increases in elderly people and any changes are increasingly difficult to accept.

On the basis of these findings, a project was submitted and accepted by Technology Agency of CR (TA CR), the aim of which is to address the issue of negative effects on mental health of the elderly resulting from emergency measures that may be declared during the state of emergency, regardless of the reason for their declaration. The aim of the project is to create, on the basis of an analysis of the effects of emergency measures associated with the declaration of the state of emergency on the mental health and quality of lives of the elderly in nursing homes, a methodology to set up a communication system not only concerning the elderly, but also the nursing staff and community of relatives. The resulting methodology will therefore contain namely the definition of such communication steps and tools with the aforementioned participants that may mitigate the negative impacts of the state of emergency. These results will be achieved mainly on the basis of psychological assessment of the elderly with the aim to clearly identify the impacts of social isolation resulting from the declared measures and of an analysis of further effects of communication procedures to mitigate the negative impacts.

2. METHODOLOGY

The first phase of the project mainly focuses on a comprehensive analysis of possible effects of emergency measures associated with the declaration of the state of emergency, for all three target groups (the elderly, nursing staff, family members). Literature research was conducted to obtain the current state of knowledge, a comparison of relevant foreign research projects, mainly within the European Union, was performed, and a review of current knowledge on the issue of psychosocial impacts of the Covid-19 pandemics in seniors was carried out. The research team established and strengthened personal contacts with the representatives of nursing homes in selected regions of the Czech Republic (Central Bohemia, South Bohemia, Hradec Králové, Vysočina, South Moravia and Moravia-Silesia). The cooperation with the Association of Social Care Providers of the CR is a significant factor reducing potential risks of the solution. In accordance with the planned phases of the project, the research team elaborated, analysed and subjected structured questionnaires for individual tested groups of respondents.

2.1 Questionnaire development and concept

Creating the conceptual design of the questionnaire and finding its form was the first step in the phases that took place within the questionnaire creation and validation. For the final form of the questionnaire, it was crucial to reflect on the aims of the project, i.e., to create methodology of such communication steps and tools that may through communication and contacts mitigate the impacts on mental health of seniors within pandemics, and also to review the current state of knowledge on the given issue. Extensive research has clearly shown that exploratory methods, mainly online and offline questionnaires survey, represent a predominant research strategy for identification of the impacts of changes caused by the pandemics on various population groups. Within this strategy, self-constructed questionnaires aimed to enable targeted mapping of pandemic-induced changes and reactions of the population groups under study are preferred. The final form of the questionnaires was, among others, inspired by existing psychodiagnostic methods, namely SCL-90-S, ESK (The Existence Scale), The Stress Profile and Life Satisfaction questionnaire.

2.2 Questionnaire structure

Questionnaire structure includes three exploratory factors:

- factor I – assessment of life quality in nursing homes within the pandemics
- factor II – impacts of Covid-19 pandemics on psychosocial condition of the elderly in nursing homes;
- factor III – changes in communication in nursing homes during pandemics regarding tools and steps.

This structure was developed on the basis of so-called internal content validation, in which the fundamental tool is logical reasoning and application of relevant theory. It is therefore internal or intrinsic validation with simultaneous involvement of content validation. In order to create questionnaire items for each factor, the research team discussed the possibility of using a standardized questionnaire method, e.g., from the instrumentation of psychological diagnostics (SCL-90-S, ESK (The Existence Scale), Stress Profile and Life Satisfaction Questionnaire). However, this possibility of operationalization was evaluated as inadequate given the aim of the project, the specifics of pandemics and respondents. Therefore, questionnaire items for the three factors were formulated on the basis of the procedures of thematic analysis of nursing homes' regulations and expert interviews with the representatives of application guarantor (factor I and III) while using expert studies of psychosocial impacts of pandemics on the elderly. Subsequently, a formulation of the questions (so called Prioritisation technique) was carried out as a part of preparatory phase of the empirical research. In addition, questionnaires for other two groups of respondents were simultaneously prepared, specifically nursing homes workers and relatives or close people of the elderly. These versions of questionnaires represented flipped and modified set of questions structured in three given exploratory factors. In order to simplify the data collection and subsequent data evaluation, the questionnaire for individual target groups of respondents was digitalized.

2.3 Results of the pilot version of the questionnaire – validation

To validate the questionnaire, a procedure of external validation was selected. Pilot validation of the first version of the questionnaire for the elderly was carried out at the end of summer and during September 2021. 50 questionnaires were processed for the group of elderly, 20 questionnaires for the group of nursing staff and 20 questionnaires for the group of relatives. The evaluation confirmed that selected questions are clear and understandable to the respondents and cover the aim of the survey. In addition, consultations with the cooperating directors of nursing homes were held. Pilot validation also provided the following key findings: the length of the questionnaire is mentally demanding for the elderly people, especially those of higher age. The questionnaire (including making contact with the respondents and brief instructions) takes about 70 minutes to complete and seniors' attention and motivation decreases in time. Therefore, at an online meeting from 6 October, 2021, the research team decided to partially reduce the questionnaires. The procedure for reduction was based on the following criteria:

- Proportionality of reduction in all three factors
- Elimination of overlapping/crossover terms, i.e., overlapping questions were omitted in Factor I (quality of life) and factor III (changes in communication processes within the Covid-19 pandemics). In order to evaluate the data collected within a pilot study, a correlation analysis of individual items of the questionnaire was performed, on the basis of which selected

items, those which strongly correlated and did not thus bring any new information, were subsequently removed. These questions elicited respondents' attitudes, opinions and experience of identical circumstances or phenomena using different formulations.

- Simplification of formulations and reduction of questions in Factor II, i.e., impacts of Covid-19 measures on mental health of the elderly. Formulation of questions is now focused on direct capture of main changes in mental health and the mood of respondents within the critical time of pandemics.

2.4 Final version of questionnaire

Constructed questionnaires bring empirical data on the basis of which the aim of the project will be fulfilled, i.e., „based on the analysis of the impact of emergency measures associated with the declaration of the state of emergency on the mental health and quality of life of seniors in nursing homes, to create methodology to set up a system of communication not only with the seniors themselves but also with the nursing staff and community of relatives“. The methodology must namely contain the definition of such communication steps and tools with the aforementioned participants that may mitigate the impact on mental health of seniors. Such defined aims show that the exploratory methods should bring the findings on:

- changes in quality of life in nursing homes during the Covid-19 pandemics (Factor I);
- definition of key changes that negatively affected psychosocial condition of seniors (Factor II);
- mapping and determination of communication processes in the Covid-19 pandemics (Factor III).

The differentiation of three research sets opens up the possibility to obtain comprehensive data related to the problem under study from different perspectives, i.e., from the perspective of a senior in a nursing home, from a perspective of a member of nursing staff, and from the perspective of a relative. These empirical data, their evaluation and interpretation allow to determine the outcomes of appropriate communication steps and tools that may mitigate negative impacts on mental health of seniors. On the basis of relevant researches on psychosocial impacts of pandemics, it may be presumed that social isolation and loneliness, i.e., lack of communication and contacts may have worsened mental health of the elderly. Evidence-based optimisation of communication processes in nursing homes may significantly contribute to maintaining or improving the quality of life specifically within pandemics.

Final version of the questionnaire for seniors and simultaneously for nursing staff and relatives of seniors was created by the end of December 2021. This final version is based on internal and external validation processes.

3. CURRENT PROJECT STATUS

Data collection is now complete and statistical analysis is underway. The first findings show no significant differences among individual regions, situations associated with the state of emergency and the feeling of threat to one's own health which can become fatal was perceived identically. Vast majority of seniors confirmed the prevalence of homesickness and above all personal contact which could not be overcome even by regular phone calls or even visual contacts. Another negative consequence of Covid-19 was restricted movement of the residents which naturally affected their mental health. Many people negatively perceived television Broadcasting,

namely ČT24 channel, which was almost continuously reporting on the situation surrounding Covid-19, including its serious complications. Radio Broadcasting was slightly better but also evaluated negatively. Interestingly, relatives, on the contrary, reported that seniors had very little information on the coronavirus. This suggests that the problem is not in the poor work of media but rather in one's ability to appropriately dose and filter the large amount of available information. The media, especially the public media, fulfil their duty to inform the public and it would be naive to ask them to change the approach (e.g., to devote to the current issue only few minutes a day). On the contrary, it is the viewer/listener/reader who is responsible for the amount and quality of information they receive. People who are, for various reasons, partially or even completely incapable of such control, need to find ways how to monitor the amount and quality of information. In our case, it is the adequate provision of information to seniors by nursing staff or relatives that seems to be the key. The reference to the fact that seniors did not have, according to their relatives, sufficient information may be explained, among others, by very poor communication of the risks from responsible authorities and institutions, which was often unclear, confusing, delayed or contradictory making it difficult to understand the situation not only for seniors but for everyone.

On the basis of interviews with staff and relatives, the research team concluded that, with a few exceptions, mutual relationships were correct and family members respected the measures of medical staff and social workers.

4. CONCLUSION

Covid-19 pandemics has clearly demonstrated that majority of the citizens of the Czech Republic is not prepared for emergencies and

health care and social facilities and institutions are no exception. The cause of this state is not important. Be it a natural or industrial disaster, social tension or armed conflict. The aim of the project is not to process the methodology on how nursing staff should proceed in taking care of seniors in both outpatient and inpatient care. The meaning of the project is to find a way how to prepare for these situations in a qualified way, so that if such situation arises, the members of staff would be able to overcome it with the clients, especially psychologically and methodically, and prevent the elderly people from fear and worries as well as manage to comprehend such situation

Zdroje

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