

Increasing Knowledge and Partnerships on Mental Health and Psychosocial Support for Helpers in Pandemics (IPP)

D 2.2 Report on needs of helpers and status quo

30.11.2021



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Introduction

Recent studies about the psychosocial consequences of nonpharmacological measures associated with the COVID-19 pandemic show negative impacts on the mental health of the population in general. Relatively high rates of symptoms of anxiety, depression and also trauma symptoms alongside decreased wellbeing are reported (Xiong et al., 2020). Health care workers are especially affected due to higher exposition, loss of a feeling of safety and experience of moral distress (Pappa et al., 2020; Kreh et al., 2020). Exhaustion and frustration increase over the course of the pandemic, as recovery phases are rare.

Helpers are facing unique challenges, working under extraordinary circumstances and extreme pressure, while worried about contracting the disease or transmitting it to their families.

This has revealed the importance of Mental Health and Psychosocial Support (MHPSS) for all helpers in an epidemic or pandemic. While some peer support is in place in partner countries, this is often not the case for hospital staff or ad-hoc established crisis teams. In Armenia and Georgia many MHPSS structures are just being developed with support of the National Red Cross Societies and Universities.

This report gives an overview of the research on helpers' needs in pandemics as well as international guidelines and best practices on MHPSS for helpers in pandemics. It furthermore contains data analysis of a mixed methods study conducted in the partner countries Georgia and Armenia on the status quo of helpers in the Red Cross, nursing homes, hospitals and hotline operators.

Needs of helpers

There is a vast amount of literature about healthcare workers' needs and concerns in the pandemic. A qualitative study by an Australian team for example showed the following seven aspects of concern and uncertainty (Digby, Winton-Brown, Finlayson, Dobson & Bucknall, 2021).

- Concerns about patient care
- Change in working conditions
- Working in unknown environment
- Effects of the pandemic (economic, private etc.)
- Personal isolation and uncertainty
- Leadership and Management (e.g. lack of information, inconsistent information, rapidly changing information, lack of transparency and participation)
- Need for additional support for staff

Other studies show a broad amount of needs and concerns that have to be addressed adequately in order to give good support to HCW.

Need of information, safety, resources

Especially in the beginning of the pandemic PPE was scarce which led to a diminished feeling of safety (Chen et al., 2020; Kang et al., 2020). This changed in the further course of the pandemic (Digby et al., 2021).

Social needs

A qualitative study on H1N1 shows the need of HCW to get adequate childcare during the pandemic (Ives et al., 2009). The same happened in the Covid 19 pandemic. In many cases HCW were stigmatized (Taylor, Landry, Rachor, Paluszek und Asmundson, 2020; Dye et al., 2020).

Special needs during Quarantine

Many studies show that quarantine has especially negative effects on healthcare workers (Hawryluck et al., 2004; Robertson, Hershenfield, Grace & Stewart, 2004; Reynolds et al., 2008).

Moral and ethical needs

In the Covid pandemic many moral and ethical dilemmas arise for HCW (Dunham, Rieder & Humbyrd, 2020; Greenberg, Docherty, Gnanapragasam & Wessely, 2020; Kreh et al., 2021; Williams, Brundage & Williams, 2020).

Many situations arise where HCWs have the feeling they have to act against their moral principles (dealing with dead bodies in a certain de-ritualized manner, refusing to let relatives see their dying loved ones etc.) or they feel that the management or decision makers take decisions that go against moral principles.

Recommended Interventions

According to the literature, interventions shall be done on different levels. Yasin, Muzaini, Samsudin, Selamat and Ismail (2020) recommend a strong medical lead, clear pandemic planning, strategy and protocols, as well as continuous training. Additionally PPE, psychosocial support and adequate means for rest and recreation are recommended.

Zace et al. (2021) recommend interventions on four levels:

- Instrumental support (protection, safety)
- Informational support (training)
- Organisational support (organizational resilience)
- Emotional and psychological support (practical face to face support)

For further recommendations see Chen et al. (2020), Maunder et al. (2008), Wu et al. (2009).

Principal concerns and key interventions

Shanafelt et al. (2020) present an excellent overview of healthcare workers' needs and concerns in the pandemic and what to do about it. According to them, main concerns and needs as well as main components of response are listed below.

Principal concerns and needs

- Uncertainty whether leaders recognize the most pressing concerns of frontline health care professionals and whether local physician expertise regarding infection control, critical care, emergency medicine and mental health is being appropriately harnessed to develop organization-specific responses
- Concern about access to appropriate personal protective equipment, taking home infection to family members, and not having rapid access to testing through occupational health if needed
- Concern about not being able to provide competent nursing/medical care if deployed to new area (e.g. all nurses will have to be intensive care unit nurses) and about rapidly changing information/communication challenges
- Need for support for personal and family needs as work hours and demands increase and schools and daycare closures occur
- Uncertainty that the organization will support/take care of personal or family needs if the health care professional develops infection

The key components of response as stated by the authors addresses five main needs.

Key components of response

Hear me

- Listen to and act on healthcare professionals' expert perspective and frontline experience and understand and address their concerns to the extent that organizations and leaders are able to
- Create an array of input and feedback channels (listening groups, email suggestion box, town halls, leaders visiting hospital units) and make certain that the voice of health care professionals is part of the decision-making process

Protect me

- Reduce the risk of healthcare professionals acquiring the infection and/or being a portal of transmission to family members

Prepare me

- Provide rapid training to support a basic, critical knowledge base and appropriate backup and access to experts
- Provide the training and support that allows provision of high-quality care to patients
- Provide adequate personal protective equipment, rapid access to occupational health with efficient evaluation and testing if symptoms warrant, information and resources to avoid taking the infection home to family members, and accommodation to health care professionals at high risk because of age or health conditions
- Clear and unambiguous communication must acknowledge that everyone is experiencing novel challenges and decisions, everyone needs to rely on each other in this time, individuals should ask for help when they need it, no one needs to make difficult decisions alone, and we are all in this together

Support me

- Provide support that acknowledges human limitations in a time of extreme work hours, uncertainty, and intense exposure to critically ill patients
- Provide support for physical needs, including access to healthy meals and hydration while working, lodging for individuals on rapid-cycle shifts who do not live in close proximity to the hospitals, transportation assistance for sleep-deprived workers, and assistance with other tasks, and provide support for childcare needs
- Provide support for emotional and psychological needs for all, including psychological first aid deployed via webinars and delivered directly to each unit (topics may include dealing with anxiety and insomnia, practicing self-care, supporting each other, and support for moral distress), and provide individual support for those with greater distress

Care for me

- Provide holistic support for the individual and their family should they need to be quarantined
- Provide accommodation for individuals living apart from their families, support for tangible needs (e.g. food, childcare), check-ins and emotional support, and paid time off if quarantine is necessary.

Guidelines on MHPSS for helpers

Further best practices for adequate response are analyzed in task 2.4 'Collecting and analysing international best practices in MHPSS for helpers in pandemics/epidemics via desk research as well as best practice templates that have been circulated among partners. First results of the guideline desk research with special focus on new forms of support/interventions adapted to the pandemic, new forms of training adapted to the pandemic, forms of long term support required due to the long duration of the crisis and best practice examples that cater to the needs of specific target groups can be found in the annex.

Additionally to what has been said above on an individual/team level there are some recommendations on an organisational or policy level. The following interventions are recommended:

On the level of healthcare organisations:

1. Sufficient resources (personnel)
2. Safety/Security (resources, protection, training, support)
3. Decentralized decision making
4. Organisational Justice
5. Good Communication (proactive, transparent, honest, dialogue)
6. Empathic leadership (interest for individual co-worker)
7. Support of leadership especially on lower levels (e.g. head of ward)
8. Peer support systems
9. Direct MHPSS on scene support by colleagues or field experienced mental health professionals

On a governance level the following is recommended:

1. Resources (personnel)
2. Salaries
3. Experienced HCP in management positions and chief nursing officer in government
4. Showing stress and achievements of HCWs, giving them a voice and let the public see what is done
5. Justice in resource distribution

In the following we will describe our study and address our findings on needs and experiences of helpers in the partner countries Armenia and Georgia.

Status Quo in partner countries

Research Question and aim

In order to enhance MHPSS activities for helpers in the current pandemic, detailed insights are necessary on how working lives are experienced during the pandemic and which factors can positively or negatively impact this experience. Our aim is to shed light on helpers' wellbeing, stress as well as helpful coping strategies in the two countries Armenia and Georgia.

The following table (1) lists our research questions that were addressed as well as the methods that we used to answer these questions. The overall aim was to analyze the status quo in the partner countries and identify target groups and their specific needs in MHPSS.

Methods

We used a mixed methods approach. With our quantitative methods we aimed at measuring stress, wellbeing, and the extent of perception of work related stressors. With our qualitative methods, we aimed at exploring stressors, resources and best-practice examples for adequate psychosocial support.

Table 1: research questions and methods

Research questions	methods	
How high are levels of stress and well-being of different groups of workers in the health care sector in Georgia and Armenia?	survey	Quantitative methods
What outside factors (e.g. training, MHPSS, personal protective equipment, ...) influence levels of stress and well-being?	survey	
Which strategies are associated with lower stress levels and higher well-being?	survey	

What are the main stressors experienced throughout the pandemic?	Focus Groups (in-depth interviews)	Qualitative methods
What are the main stress reducing factors experienced throughout the pandemic?	Focus Groups (in-depth interviews)	
What examples of national and international best-practices in MHPSS activities can be collected? (A 2.4)	Focus Groups, templates, experience exchange (in-depth interviews)	

Our methods were aiming at health care workers during the current COVID-19 pandemic. That included the following target groups:

- staff and volunteers of the Armenian and Georgian Red Cross
- Nurses in care homes for older people
- Hospital staff
- Hotline operators in COVID-19 helplines

In the following, we will describe methods and research design in more detail.

1. Survey

A survey was developed in collaboration with all partners during several online meetings and was sent out to the partner organisations. The survey contains questions for the measurement of stress and wellbeing as well as influencing factors of health care workers. The following questionnaires were included:

- a. Perceived Stress Scale
- b. WHO-5 Wellbeing
- c. Negative Emotions-Scale
- d. Perception of support measures
- e. Risk perception and perceived stigmatization
- f. Sociodemographics (e.g. age, gender, living environment, working environment, vaccination, ...)

All scales are scientifically validated tools that have widely been used in different contexts (e.g. Betsch et al., 2020; Cohen et al. 1983; Searle & Gow, 2010; Topp et al., 2015).

The questionnaire can be found in the Annex.

2. Focus groups

In addition to the questionnaire focus group discussions were conducted with the respective target groups in each partner country. The focus groups were conducted by partners from the Georgian Red Cross, Armenian Red Cross, and Ilia State University. A focus group discussion format was developed with the project partners via several online meetings in April and May 2021. The discussions focused on the following questions:

- How was the COVID-19 pandemic experienced with regard to working lives
- How did working in the COVID-19 pandemic influence staff and volunteer's private lives
- Which challenges were perceived while working during the pandemic
- Which lessons were learned, which needs and required changes in working conditions were identified
- Which were positive and helpful aspects such as achievements over the course of the pandemic
- What were the expectations for the near future

Data Analysis

The questionnaire was translated and tested in a small pilot run among partners to check comprehensibility as well as practicability and length. It was then sent out to the defined target groups via google forms from 19th of August until 5th of September. Quantitative data were analysed using SPSS (Version 24). We calculated t-tests and ANOVAs in order to identify group differences.

Qualitative data were transcribed and analysed by the use of qualitative content analysis (Mayring, 1991). With this method data is reduced, summarized and selected according to predefined categories like stressors, coping strategies etc. Main categories were the following:

- Challenges and positive outcomes
- Influence on private life
- Coping strategies
- Dynamics according to waves
- Best practice experiences
- Views on Vaccination
- Vision of future

Results

The status quo of helpers in Covid-19 in Armenia

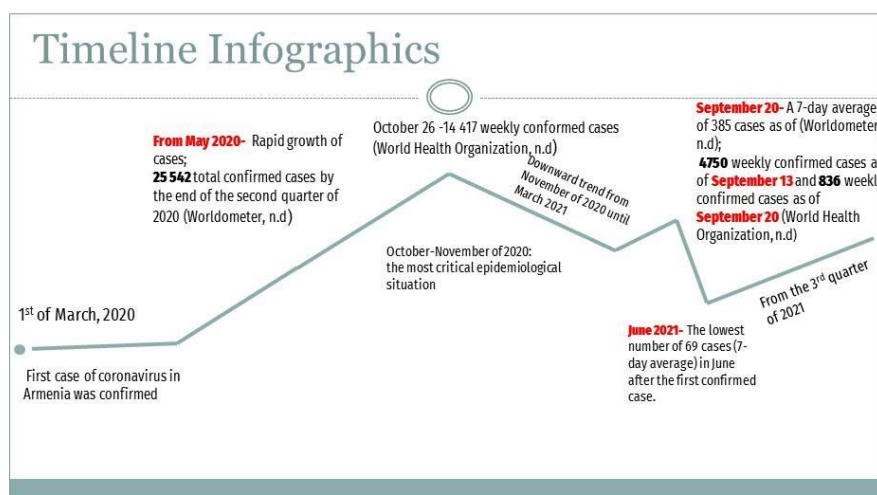
According to the World Health Organization (n.d), Armenia has 254 436 confirmed cases and 5161 deaths as of September 21, 2021; The first case of coronavirus in Armenia was confirmed on the 1st of March, 2020.

The number of cases has started to grow rapidly already from May 2020, reaching 25 542 total confirmed cases by the end of the second quarter of 2020 (Worldometer, n.d)

In October-November of 2020, Armenia had the most critical epidemiological situation, with 14 417 weekly confirmed cases as of October 26 (World Health Organization, n.d).

According to the Worldometer (n.d), already from November 2020 the number of new cases declined- Armenia was maintaining this downward trend until the end of May and the middle of April, after which new cases have started to decline again, coming down to the lowest number of 69 cases (7-day average) in June after the first confirmed case.

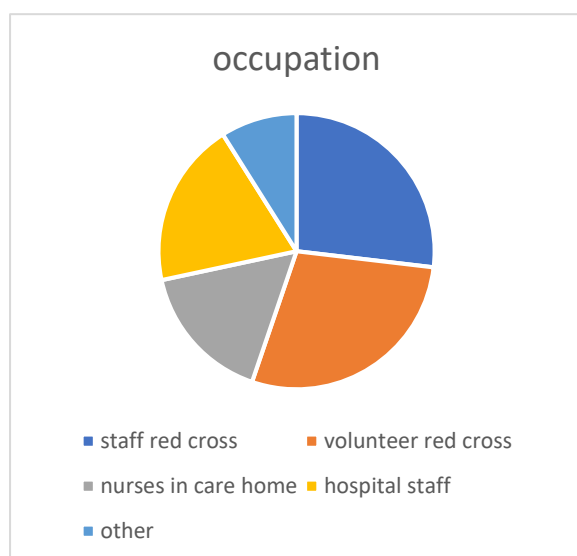
From the 3rd quarter of 2021 cases have been on the rise again with a 7-day average of 385 cases as of September 20, 2021 (Worldometer, n.d), 4750 weekly confirmed cases as of September 13 and 836 weekly confirmed cases as of September 20, 2021 (World Health Organization, n.d).



Quantitative Results

Sample

A number of 134 Armenian responders took part in the survey. Of the participants, 36 (26.9%) are staff of the red cross, 38 (28.4%) volunteer of the red cross, 22 (16.4%) were nurses in a care home for older people, 26 (19.4%) were hospital staff, 4 (3%) doctors, 2 (1.5%) ambulance workers and 6 (4.5%) worked in other professions. 11.9% of respondents have held a leadership/management position in the last 2 months prior to the survey, whereas 88.1% do not. 65.7% of respondents stated that they have less than 5 years of job experience, 17.9% have between 5 and 10 years of experience, whereas 14.2% had more than 10 years of experience.



Participants ranged from age 14 until an age of 64 years. The mean age is 34.63 years (SD=13.22). 20.9% of the participants are men and 79.1% are women. 41% were single, 47.8% married/domestic partnership, 3.7% widowed and 7.5% separated/divorced.

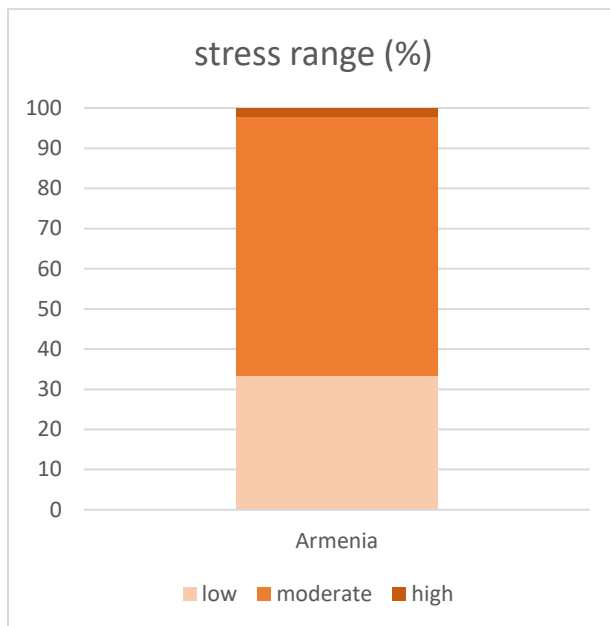
8.2% had daily contact with COVID-19 patients over the given timespan. 12.7% had contact several times per week, 1.5% once per week, 3.7% less than once per week, while 73.9% did not have any contact with COVID-19 patients. 49.3% see themselves as part of a risk group for a COVID-19 infection, while 50.7% do not. 35.1% of respondents said they had lived with people who were particularly vulnerable to COVID-19 in the past 2 months due to age or pre-existing medical condition, while 64.9% said they had not.

Results

Stress perception (PSS-10)

Individual scores on the Perceived Stress Scale can range from 0 to 40 with higher scores indicating higher perceived stress. The mean value among all participants is $M = 15.3$ ($SD = 5.44$).

If we categorize stress levels into ranges of low stress, moderate stress and high stress as recommended by the Employee Assistance Program, State of New Hampshire, we see that overall 33.6% percent are in the low stress range, while 64.2% perceive moderate stress. 2.2% can be considered in the high stress range.



However, it should be stated that scientific evidence on cut-off values of the PSS Scale is low and that the PSS scale has a much higher benefit in comparing mean values of different subgroups in order to define potential risk groups.

In group comparisons we see that men ($M=12,00$, $SD=4,9$) have significantly lower stress levels than women ($M=16,19$, $SD=5,25$) with, $t(132)=-3,803$, $p<.001$.

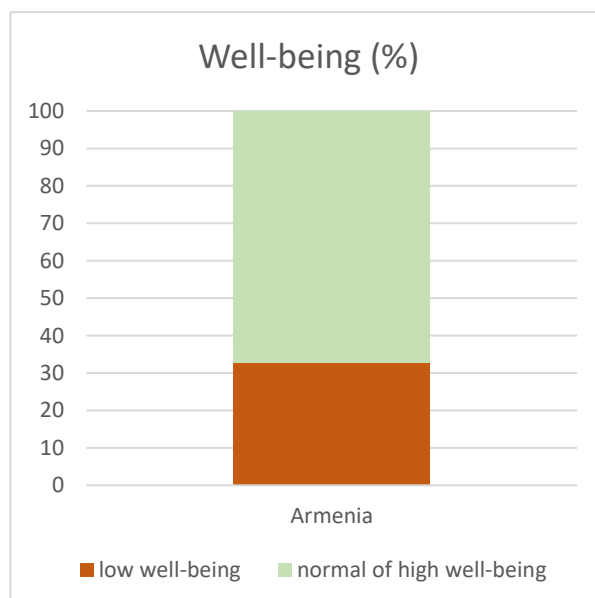
While differences are not statistically significant we see a tendency for higher stress levels of nurses in care homes for older people than in the other occupation groups.

We furthermore see a tendency for lower stress levels in responders in leadership positions ($M=13,56$, $SD=4,43$) as compared to those who do

not hold a leadership position ($M=15,55$, $SD=5,54$). However, the difference is not statistically significant.

We do not see any differences or tendencies with regard to age or job experience. We do not see any differences with regard to civil status or between those who live with minor children in the same household compared to those who don't.

Well-being (WHO-5)



"The WHO-5 is a short questionnaire consisting of 5 simple and non-invasive questions, which tap into the subjective well-being of the respondents. The scale has adequate validity both as a screening tool for depression and as an outcome measure in clinical trials and has been applied successfully across a wide range of study fields." (Topp et al., 2015)

On a scale from 0 to 100, people with a WHO-5 score of 50 or lower are considered at risk of depression (Topp et al, 2015). According to the European Quality of Life Survey, conducted every 4 years in the EU, 22% of the population were at risk of depression in 2016. In 2011 the percentage was 25% (Eurofound, 2017).

The mean value among all participants in our study is $M = 56.84$ ($SD = 21.3$). 32.8% score below the

threshold indicating risk of depression in one third of our sample.

We see a slightly higher well-being in men ($M=63$, $SD=23,99$) than women ($M=55,21$, $SD=20,35$). Considering that men have lower stress levels we tested for one-tailed significance and found a significant difference, $t(132)=1,735$, $p<.05$.

While differences are not statistically significant we see a tendency for lower well-being in nurses in care homes for older people than in the other occupation groups.

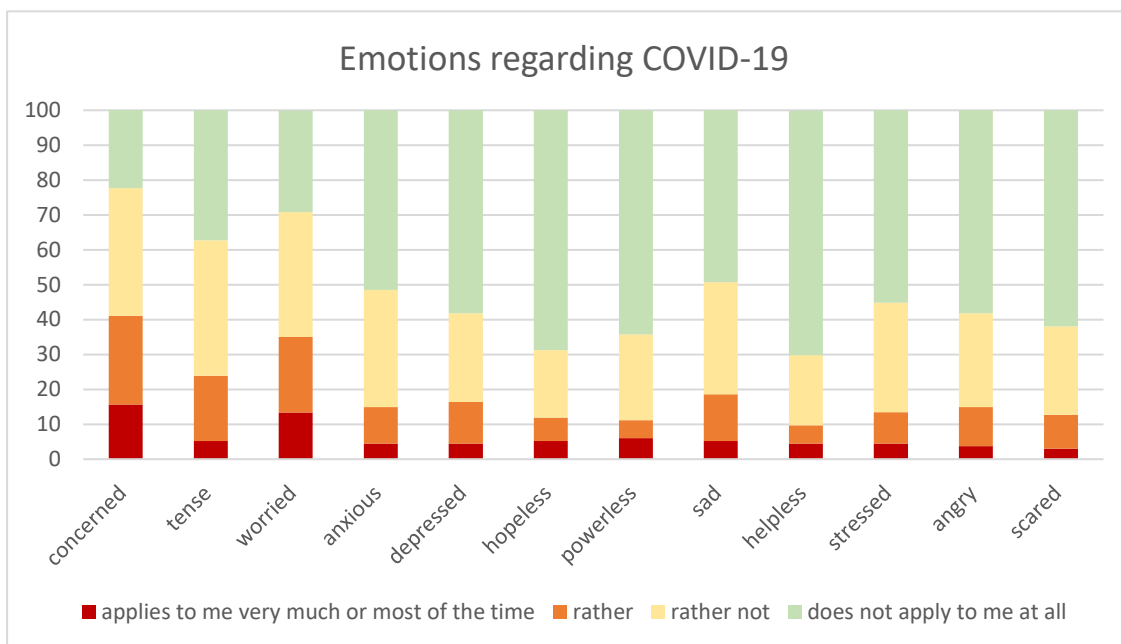
Those who consider themselves to be in the risk group ($M=52,3$, $SD=16,46$) have significantly lower well-being compared to those who do not ($M=61,24$, $SD=24,46$), with $t(132)=-2,487$, $p<0.5$.

We do not see any differences with regard to civil status or between those who live with minor children in the same household compared to those who don't.

While differences are not statistically significant, younger participants have tendencies of higher well-being than older participants. We do not see any differences with regard to job experience.

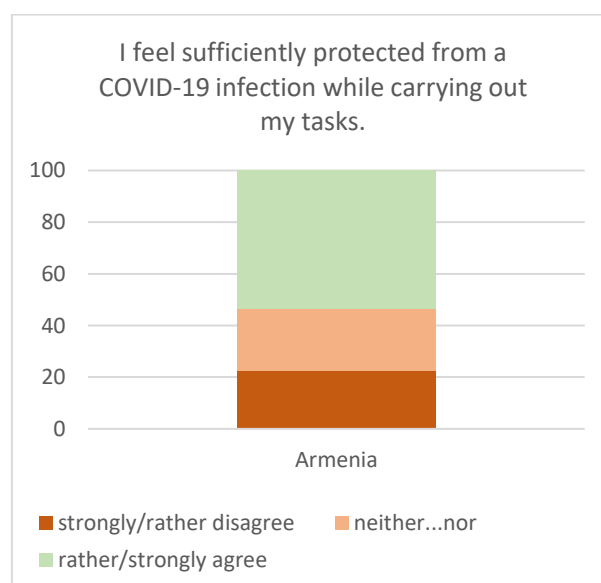
Negative Emotions during the COVID-19 pandemic

Thinking about the COVID-19 pandemic at this stage, around 40% feel concerned, up to 35% worried. Powerlessness, Hopelessness or helplessness applies to less than 10% of the sample. Between 10 and 20% of the sample feel rather or very much depressed, anxious, angry or sad with regard to the pandemic.



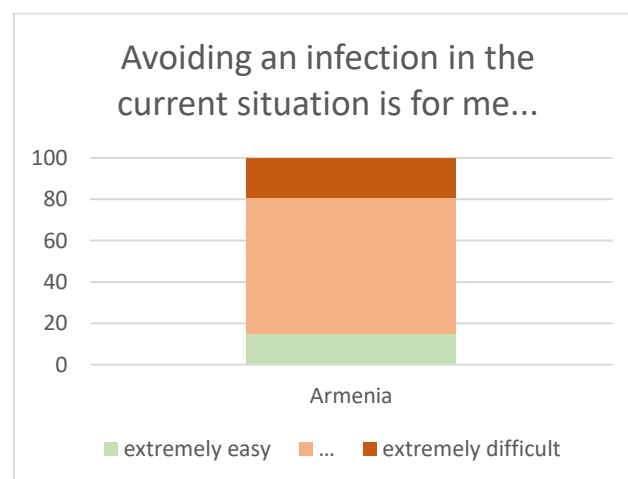
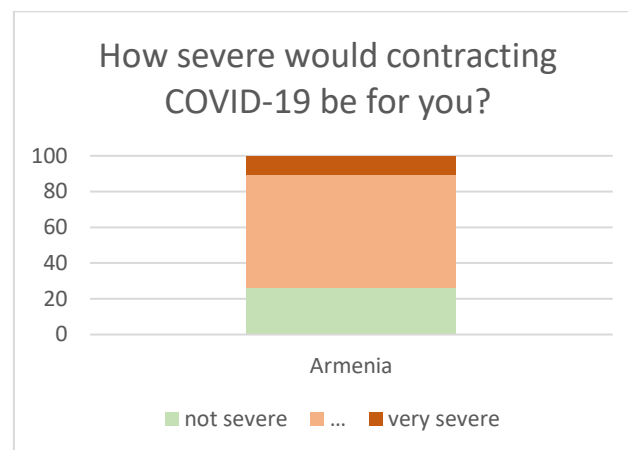
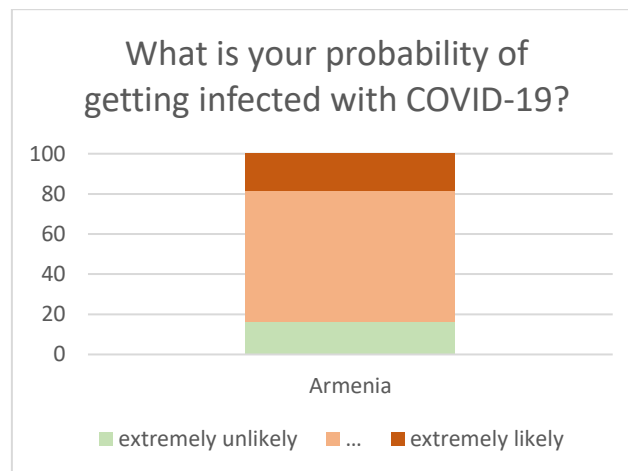
Protection

53,7 % feel sufficiently protected, 22,4% do not feel sufficiently protected.



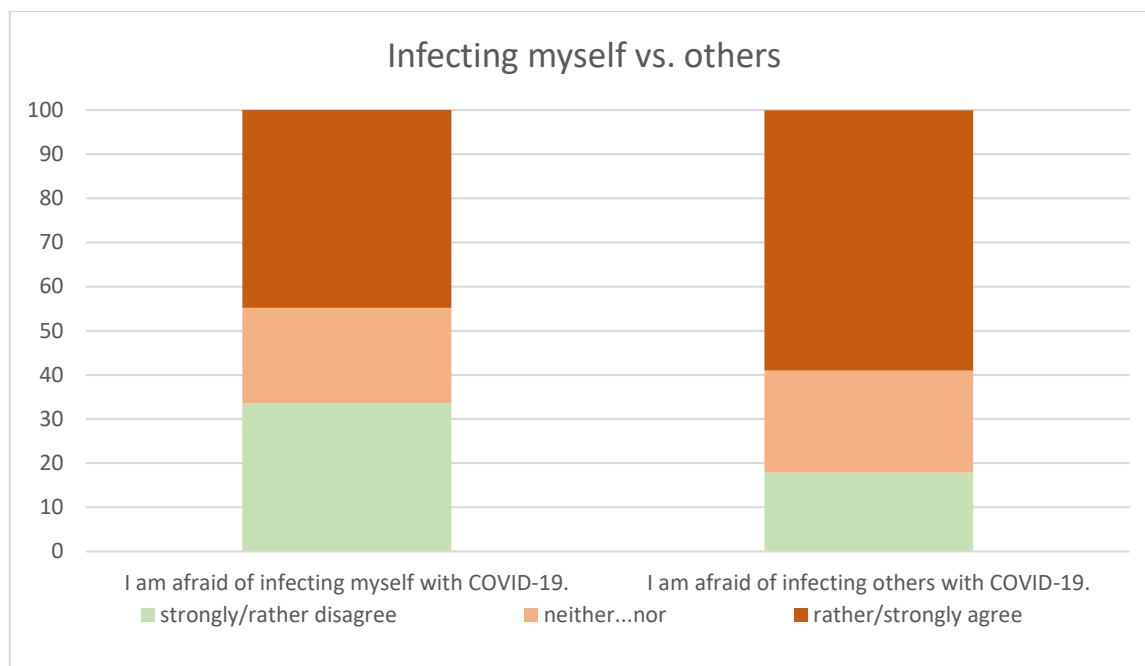
Individual risk perception

The following graphs represent the participant's perception of probability of infection, perceived severity of infection and difficulties to avoid an infection with COVID-19.



Infecting myself vs. others

Participants were more afraid of infecting others, e.g. close friends/relatives than themselves. 59% report being afraid of infecting others, while almost 45% report being afraid of infecting themselves.



Job commitment

3,7% of participants felt like quitting their jobs/voluntary work over the defined timespan. 91,1% did not feel like quitting their jobs/voluntary work. 5,2% were undecided.

Stigmatization

Overall, around 8,9% of participants felt excluded from friends and relatives, 13,4% felt like people from their private surroundings treated them with exaggerative caution. There are no differences in gender.

Influence on private commitments.

13,4% indicate that private commitments (e.g. childcare, nursing, partner relationship ...) are difficult to arrange because of their engagement in response activities during the COVID-19 pandemic. 70,1% do (rather) not experience such difficulties. There were no significant differences between men and women, volunteers perceive less difficulties with regard to private commitments.

Support measures

Examining support measures on a scale from 0 to 4, we see that in general, high instrumental support (e.g. by Personal Protective Equipment), informational support (e.g. by receiving transparent information on the progress of infections within an organisation/facility) and social support (colleagues/leadership) is experienced.

Support measures

	N	Minimum	Maximum	Mean	Standard deviation
E2_Instrumental	129	,00	4,00	3,3482	,81206
E3_Informational	134	,00	4,00	3,1741	,85909
E5_Social	134	,00	4,00	3,1617	,90735

Vaccination

14.9% of respondents do not plan to get vaccination, 28.4% are unsure. 7.6% of those who feel in the risk group do not plan to be vaccinated, 18.2% are not sure. 22.1% of those who do not see themselves in the risk group do not plan a vaccination event, 38.2% are not sure.

Qualitative results

In Armenia, three Focus Group Discussions and three in depth interviews were conducted between 31st of August and 26th of October 2021. The following table lists all activities conducted in Armenia to collect qualitative data.

Method	Target Group	Date	No. of participants
Focus Group	Red Cross Volunteers	31.08.2021	11
Focus Group	Red Cross Psychologists	01.09.2021	8
Focus Group	Nurses of care homes for older people	26.10.2021	12
Interview	physician/pulmonologist	01.09.2021	1
Interview	Infectious Hospital physician	02.09.2021	1
Interview	physician/rehabilitation specialist	31.08.2021	1

The discussions and Interviews were protocolled by the partners and translated into English. Protocols were further analyzed using content analysis.

Focus Group with Red Cross Volunteers

In the following we will describe the results along the main categories.

Learning and communication deficits versus opportunities for self education and self development

Most of the participants mentioned that the pandemic had a negative impact mainly on learning, as well as on communication. On the other hand, the volunteers pointed out the positive aspects of isolation during the pandemic, such as the opportunities for self-education and self-development, as well as the opportunity to volunteer and make new friends. Most of the participants volunteered for the ARCS during the days of the pandemic, which opened great prospects for discoveries for them.

“I have improved myself during the pandemic – both physically and mentally. It (pandemic) has motivated me a lot. My volunteering activities have started during the pandemic which had a very positive effect on my life – I have gained great experience, changed my attitude towards life, got acquainted with people from social layers which were unknown to me before”. (Volunteer, female)

“If it was not for Covid pandemic, I would not have become an ARCS volunteer. Some free time was spared (because of online education) and there were people who needed help, which was why I became a volunteer”. (Volunteer, male)

Challenges during volunteering: demand for PPE, lack of resources, lack of trust, exposure to extreme poverty, death and lack of information

During their volunteering, when they were mainly involved in awareness-raising and aid distribution processes, they faced many challenges. As such, the volunteers pointed out the demand of citizens for more than the required number of masks, the touching of politics by passers-by, people's skepticism about volunteering, people's general dissatisfaction, working conditions, lack of sun protection, lack of manpower, as a result of which female volunteers had to carry heavy items. In addition to these challenges, the volunteers also faced psychological challenges, facing aspects of life such as extreme poverty, death, when the distribution revealed the fact that a citizen was dead, the gravity of reporting a death. In addition, the lack of information about what awaits them, what working conditions they will work in was challenging.

“There were challenges during the awareness-raising campaigns. Sometimes people were demanding more facemasks than we could provide, and when we refused they were shouting at us” (Volunteer, female)

“People were often talking to us about politics, and we didn’t know how to behave – to leave, to stay and listen more or what else. We were saying that ARCS is a non-political organization, but it didn’t help much”. (Volunteer, female)

Best practice: team meetings, psychosocial trainings, motivation

The volunteers pointed out the importance of their awareness, organization of frequent team meetings, and psychological training, which contributed to a high level of training and motivation.

“During Covid pandemic, people were turning to the hotline of Ministry of Labor and Social Affairs or ARCS, I was not only involved in awareness-raising but also distribution. I was starting early in the morning, visited very vulnerable families either infected with Covid or not, and then returned to ARCS for a 1-hour rest and then left to participate in the awareness-raising campaign. I was returning home in the evening exhausted both physically and emotionally.” (Volunteer, female)

Focus Group with Psychologists

Adaptation to new working context

Most of the participants mentioned that the Covid pandemic was a challenge because they had to adapt to a new working style (online) and to extra workload, which to some sometimes felt inefficient.

“Sometimes I think that all these online things that we started to do during Covid, e.g. online therapies, online consultations, were fake and nothing can replace the face to face service we can provide”. (Psychologist, female).

However, they state that it had its positive side because in other circumstances they would not discover that many tasks can be accomplished online.

“During Covid I found out that there were wonderful trainings in the internet. I took a number of trainings and learned a lot of new and interesting things” (Psychologist, male)

One's own affectedness by the pandemic (more work and more isolation)

During the pandemic the psychologists faced difficulties, because not only did they have more work to do, but they themselves were experiencing the stress of the pandemic – isolation, lack of socialization, lack of opportunities to meet with friends etc. Many of the participants mentioned that the first period of the pandemic was the hardest – they were working on the hotline as well with almost no time for lunch or rest. Their personal time was very decreased and it was stressful.

“I was feeling as if my personal life was violated, because we had very little time left for self-care.” (Psychologist, female).

“During the first period I was very anxious – I was afraid that I could get infected and pass the virus to other people. Besides, I was thinking that if infected I couldn't work, I would have to stay at home. I was trying not to meet with anyone and my life became very dull”. (Psychologist, male)

Opportunities for self education and self development

However, Covid brought also opportunities for self-development (e.g. taking online courses), gaining new knowledge (e.g. working on socio-psychological hotline), improved their professional skills, and involvement in distribution of supplies in regions improved the knowledge of geography of Armenia.

“We learned to quickly respond to extreme situations, e.g. we were being informed about what we were going to do, how we were going to help on the same day”. (Psychologist, female)

It was suggested that involving social workers in the hotline services could decrease their burden and give opportunities to use their skills and knowledge in places where they could provide psychological support.

Focus Group with Nurses in Care homes

Main challenges: Exposition to Covid 19, fear of infection, lack of information, rapidly changing information, communication with beneficiaries (vaccination), high demand and low resources. 32% are at risk for depression.

The main stressors in nurses were related to infection risks, both to themselves as well as fear of infecting others. Furthermore seeing residents in care homes getting infected by relatives and dying from it was experienced as stressful. Additionally the unpredictability of infection routes increases uncertainty.

“I think, no matter how much I disinfect, no matter how much I wash my hands, I put on a hat, I am vaccinated, I am still afraid.”

These risks often results in fear in nursing staff but in some cases has also led to a decreased number of beneficiaries because nurses wearing masks induces fear. Rapidly changing information in the beginning and uncertainty about treatment procedures are perceived as challenging. Furthermore on one hand being the only link to isolated people builds trust, however in many cases having to convince beneficiaries and informing beneficiaries is perceived as challenging. This holds especially true for vaccination, which on hand leads to a feeling of being more accepted by beneficiaries as it reduces fear, on the other hand vaccine hesitancy in beneficiaries as well as relatives is an issue and in some cases also induces fear in staff.

Restricted freedom and limited infrastructure affects staff personally while also leading to higher demands from beneficiaries.

“Also, it affects our beneficiaries so much that they need us more and demands us to be near. Sometimes they complain that they are waiting for us, they know. They know when we will visit them and wait.”

Interview results with physicians

Challenges: being isolated from family and friends, unpredictable course of the illness, high infection risk, lack of resources and insecurity about effective measures, overload of patients and growing exhaustion

The main challenge for doctors was being isolated from families in the early months of the pandemic (often living in hotels) as they were concerned to carry the infection home. Furthermore the unpredictable course of the disease and infection routes were mentioned as well as high infection risks and having to overcome own fears and gain respect from patients. Especially at the beginning high uncertainty and lack of knowledge was challenging, also with regard to treatment sometimes having to treat patients with medication according to protocols that was perceived as harmful later. Lack of resources such as oxygen condensers and insufficient protection at the beginning were challenging. One doctor describes often having emotional outbursts and being tired.

“In the beginning there was only 2 oxygen condenser in our hospital and there were days when I was carrying that heavy device from ward to ward so that every patient could breathe oxygen for 5 minutes. Later of course new devices were bought and we had everything we needed, but this was how it was in the start.”

Later on in the pandemic the main challenge was not so much the uncertainty but difficulty of having to treat and manage a high amount of patients, and being overloaded as there was not enough doctoral staff and many specialists decided not to work with covid patients. During war times priority was given to soldiers, and there were not enough beds in hospitals.

On the positive side professional growth and better hygiene standards in hospitals are mentioned.

“I was a young specialist with not a very long medical experience. There were situations when there were >100 patients and I was the only doctor for them. During the early stages everybody who was tested positive was hospitalized. And during the shifts when I was the only one, the patients were turning to me about every question they had - from their room conditions to their health. I learned a lot – to understand their psychology, how to “sort” them, how to talk to them.”

Summary

In summary we can see moderate to high stress in most helpers, high fear of infection, high job commitment and feelings of concern and worry in the quantitative data. The qualitative data show that the pandemic leads to challenges like new working conditions, high risks of infection, isolation and high demands but on the other hand brings opportunities for learning and self-development. Differences between groups are rather high and have to be taken into account.

In the following we will have a look at the data in Georgia.

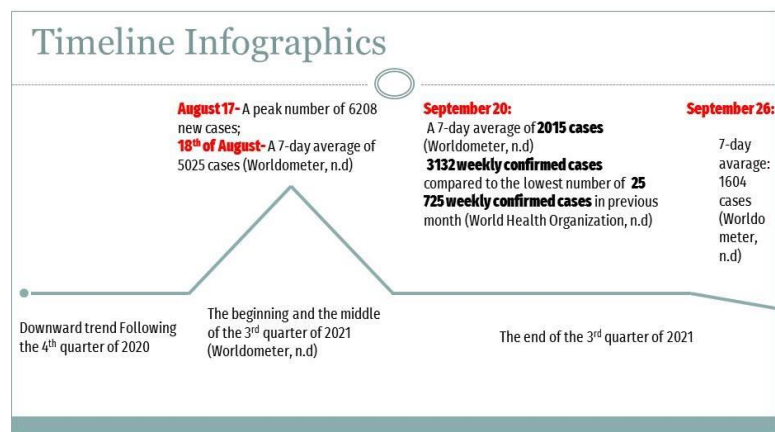
The status quo of helpers in Covid-19 in Georgia

According to the Georgian governmental portal “StopCov.ge”, Georgia has 598 396 confirmed cases and 8621 deaths as for September 21, 2021.

The first coronavirus case in Georgia was confirmed on the 26th of February 2020; Georgia was maintaining a low number of cases, until the middle of the 3rd quarter of 2020 (Worldometer, n.d) with 2864 weekly confirmed cases as of September 28 (World Health Organization, n.d), a 7-day average of 294 and 6192 total confirmed cases as of September 30 (Worldometer, n.d).

By the end of the year, as of December 31, 2020 there were 227 420 total confirmed cases (Worldometer, n.d).

After a relative downward trend following the 4th quarter of 2020, the epidemiological situation started to worsen again at the beginning of the 3rd quarter of 2021, with a peak number of 6208 new cases on August 17 and with a 7-day average of 5025 cases as of 18th of August. After this, there has been a decline in cases with a 7-day average of 2015 cases as of September 20, 2021 (Worldometer, n.d) and 3132 weekly confirmed cases as of September 20, 2021, compared to the lowest number of 25725 weekly confirmed cases in the previous month (World Health Organization, n.d).



Quantitative Results

Sample

A number of 210 Georgian responders took part in the survey. Of the participants, 36 (17.6%) are staff of the red cross, 46 (22.4%) volunteer of the red cross, 13 (6.3%) were nurses in a care home for older people, 29 (14.1%) were hospital staff, 48 (23.4%) hotline operators, 6 (2.9%) doctors, 13 (6.3%) ambulance workers and 14 (6.8%) worked in other professions. 16.39% of respondents have held a leadership/management position in the last 2 months prior to the survey, whereas 83.71% do not. 53.6% of respondents stated that they have less than 5 years of job experience, 22.1% have between 5 and 10 years of experience, whereas 24.3% had more than 10 years of experience.

Participants ranged from age 15 until an age of 71 years. The mean age is 37.74 years (SD=14.06). 15.2% of the participants are men and 84.8% are women. 50% were single, 38.9% married/domestic partnership, 2.9% widowed and 8.2% separated/divorced.

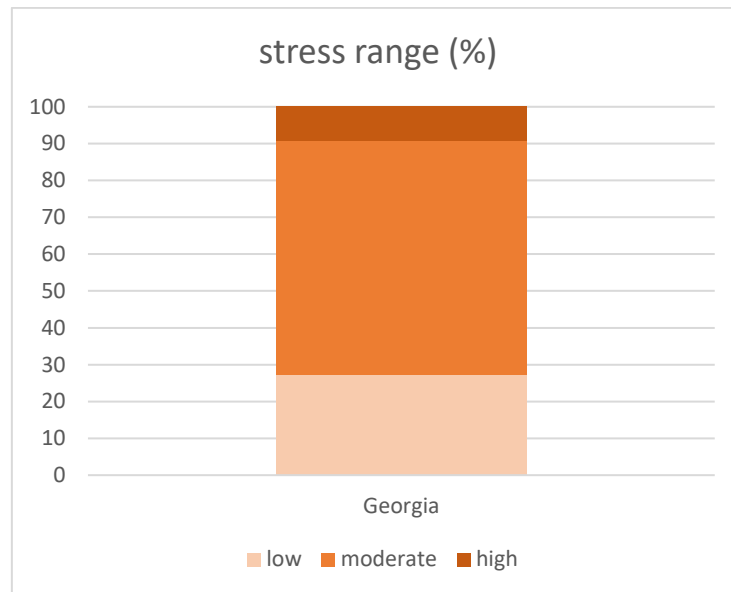
10.1% had daily contact with COVID-19 patients over the given timespan. 21.7% had contact several times per week, 3.9% once per week, 16.9% less than once per week, while 47.3% did not have any contact to COVID-19 patients. 26.8% see themselves as part of a risk group for a COVID-19 infection, while 73.2% do not. 57.8% of respondents said they had lived with people who were particularly vulnerable to COVID-19 in the past 2 months due to age or pre-existing medical condition, while 42.2% said they had not. 53.1% have been living with minor children in the same household, 46.9% have not.

Results

Stress perception (PSS-10)

Individual scores on the Perceived Stress Scale can range from 0 to 40 with higher scores indicating higher perceived stress. The mean value among all participants is $M = 17.32$ ($SD = 6.88$).

If we categorize stress levels into ranges of low stress, moderate stress and high stress as recommended by the Employee Assistance Program, State of New Hampshire, we see that overall 27.2% percent are in the low stress range, while 63.6% perceive moderate stress. 9.3% can be considered in the high stress range.



However, it should be stated that scientific evidence on cut-off values of the PSS Scale is low and that the PSS scale has a much higher benefit in comparing mean values of different subgroups in order to define potential risk groups.

While differences are not statistically significant we see a tendency for lower stress levels in men ($M=15.25$, $SD=8.56$) than women ($M=17.67$, $SD=6.52$).

While differences are not statistically significant we see a tendency for higher stress levels of nurses in care homes for older people than in the other occupation groups.

We furthermore see a tendency for lower stress levels in responders in leadership positions ($M=13.56$, $SD=4.43$) as compared to those who do not hold a leadership position ($M=15.55$, $SD=5.54$). However, the difference is not statistically significant.

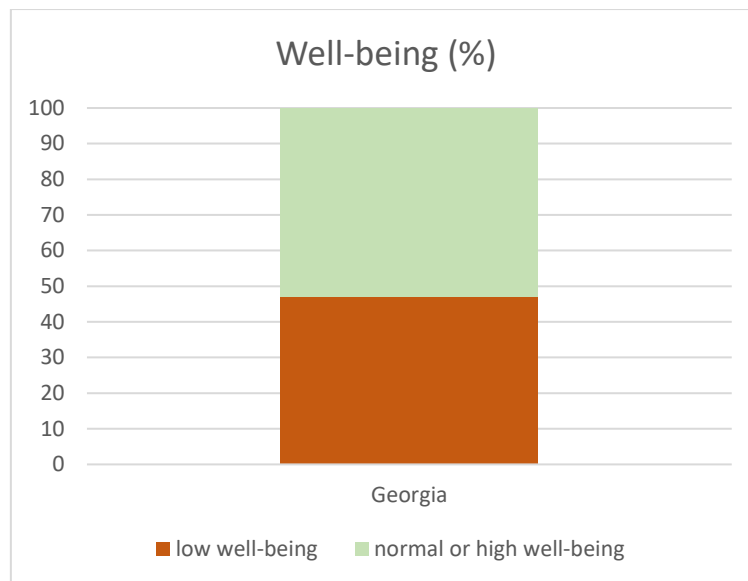
We do not see any differences or tendencies with regard to age or job experience. We do not see any differences with regard to civil status or between those who live with minor children in the same household compared to those who don't.

Well-being (WHO-5)

According to Topp et al. (2015) "the WHO-5 is a short questionnaire consisting of 5 simple and non-invasive questions, which tap into the subjective well-being of the respondents. The scale has adequate validity both as a screening tool for depression and as an outcome measure in clinical trials and has been applied successfully across a wide range of study fields."

On a scale from 0 to 100, people with a WHO-5 score of 50 or lower are considered at risk of depression (Topp et al, 2015). According to the European Quality of Life Survey, that is conducted every 4 years in the EU, 22% of the population were at risk of depression in 2016. In 2011 the percentage was 25% (Eurofound, 2017).

The mean value among all participants in our study is $M = 47.45$ ($SD = 23.4$). 47.1% score below the threshold indicating risk of depression in almost half of our sample.



We see a slightly higher well-being in men ($M=56,4$, $SD=30$) than women ($M=45,78$, $SD=21,68$). Considering that men have lower stress levels we tested for one-tailed significance, $t(171)=2,200$, $p=.029$.

While differences are not statistically significant we see a tendency for lower well-being in hospital staff than in the other occupation groups.

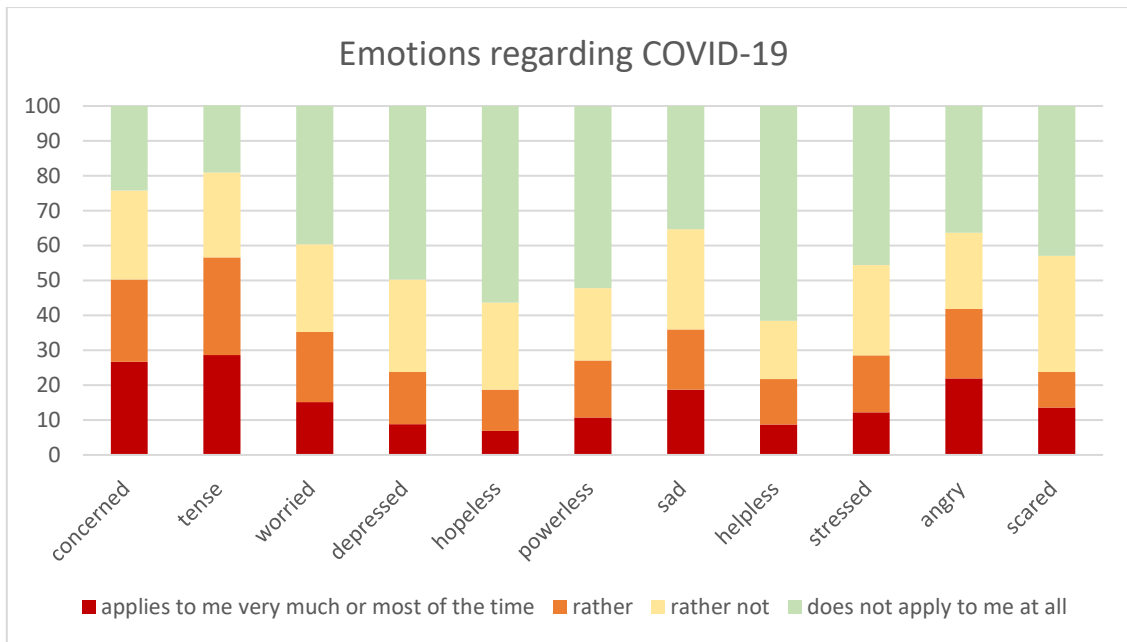
Those who consider themselves as part of the risk group ($M=39,23$, $SD=18,43$) have significantly lower well-being compared to those who do not ($M=50,07$, $SD=24,25$), with $t(171)=-2,658$, $p<0.5$.

We do not see any differences with regard to civil status or between those who live with minor children in the same household compared to those who don't.

Younger participants have tendencies of higher well-being than older participants. We do not see any differences with regard to job experience.

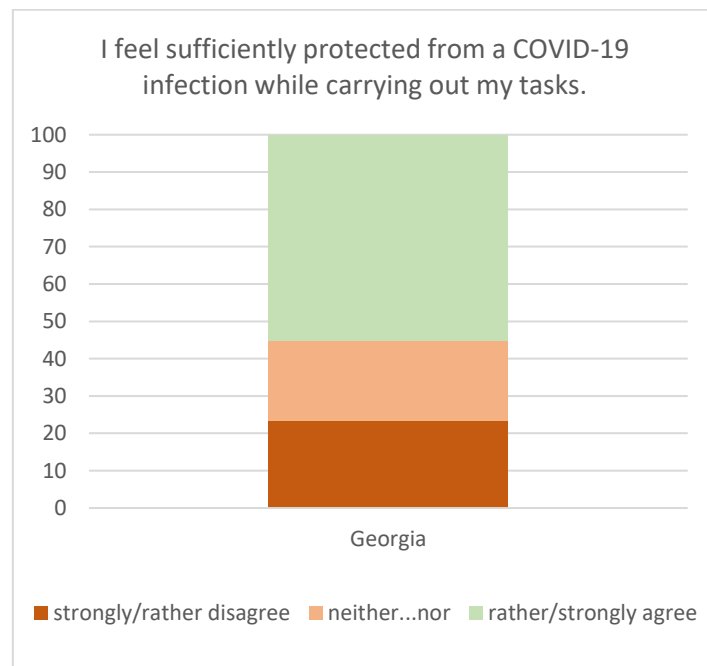
Negative Emotions during the COVID-19 pandemic

Thinking about the COVID-19 pandemic at this stage, around 50% feel concerned and tense, more than 40% angry and around 35% feel worried or sad. More than 20% of the sample feel rather or very much depressed, powerless and scared. Hopelessness and helplessness apply to only 20% of the sample.



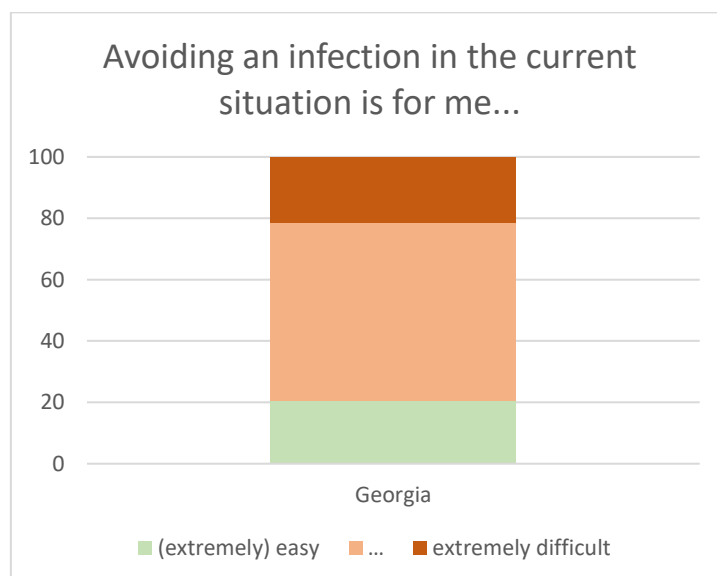
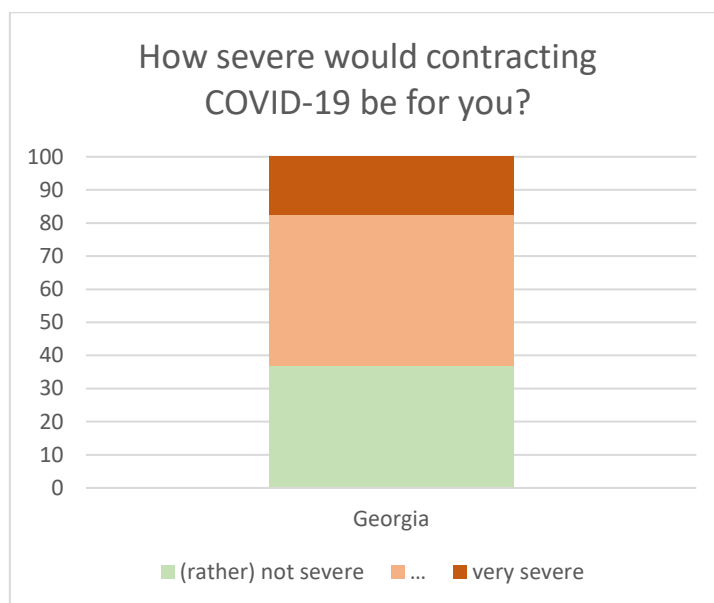
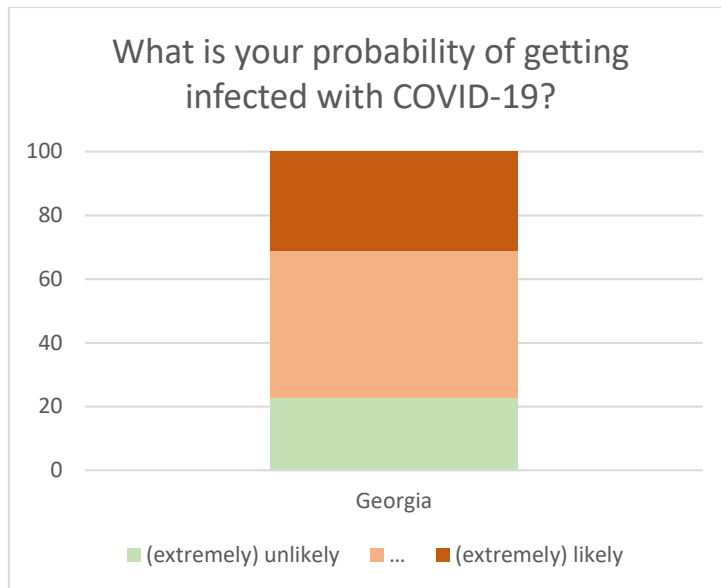
Protection

55,2% feel sufficiently protected, 23,5% do not feel sufficiently protected.



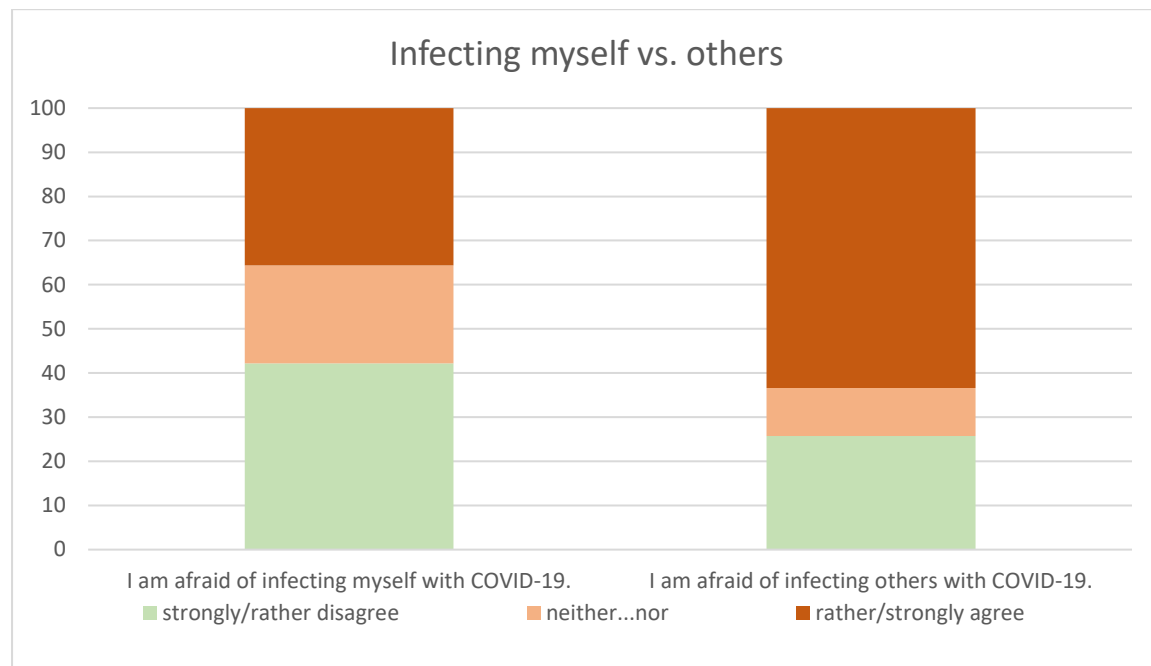
Individual risk perception

The following graphs represent the participant's perception of probability of infection, perceived severity of infection and difficulties to avoid an infection with COVID-19.



Infecting myself vs. others

Participants were more afraid of infecting others, e.g. close friends/relatives than themselves. 63,4% report being afraid of infecting others, while almost 35,6% report being afraid of infecting themselves.



Job commitment

12,7% of participants felt like quitting their jobs/voluntary work over the defined timespan. 74,6% did not feel like quitting their jobs/voluntary work. 12,7% were undecided.

Stigmatization

Overall, 5,6% of participants felt excluded from friends and relatives, 7,9% felt like people from their private surroundings treated them with exaggerative caution. There are no differences in gender.

Influence on private commitments.

22,5% indicate that private commitments (e.g. childcare, nursing, partner relationship ...) are difficult to arrange because of their engagement in response activities during the COVID-19 pandemic. 64% do (rather) not experience such difficulties. No significant differences could be found for men and women, volunteers perceive less difficulties with regard to private commitments.

Support measures

Examining support measures on a scale from 0 to 4, we see that in general, high instrumental support (e.g. by Personal Protective Equipment), informational support (e.g. by receiving transparent information on the progress of infections within an organisation/facility) and social support (colleagues/leadership) is experienced.

Support measures

	N	Minimum	Maximum	Mean	Standard deviation
E2_Instrumental	129	,00	4,00	3,3482	,81206
E3_Informational	134	,00	4,00	3,1741	,85909
E5_Social	134	,00	4,00	3,1617	,90735

Vaccination

1,9% of respondents do not plan to be vaccinated, 11% are unsure. 8.9% of those who see themselves in the risk group are not sure about getting vaccinated, 2.6% of those who do not see themselves in the risk group do not plan to be vaccinated, 11.8% are not sure.

Qualitative results

In Georgia, four focus group discussions were conducted in August 2021. The following table lists all activities conducted in Georgia to collect qualitative data.

Method	Target Group	Date	No. of participants
Focus Group	Red Cross Volunteers	06.08.2021	10
Focus Group	Hotline Operators	13.08.2021	10
Focus Group	Doctors	14.08.2021	9
Focus Group	Home Care Nurses	13.08.2021	7

The discussions were provided, protocolled and summarized by researchers from the Centre for advanced studies at Ilia State University.

Focus Group with Volunteers

Challenges: conflicts with beneficiaries, increased workload versus positive outcomes: gratitude of beneficiaries recognition of their work, self development

The difficulties named while acting as volunteers during a pandemic are dealing with conflict situations with beneficiaries and other people. This is related to the stressful environment caused by the pandemic. The difficulties highlighted by volunteers are the need for psychological assistance to the beneficiaries or other people, which required additional competence or energy. Particularly difficult for volunteers was increased workload, which meant increased work time, emotional difficulties, physical exertion and challenging external conditions. The positive experience of volunteers during the pandemic is related to the gratitude of the beneficiaries and the recognition of the importance of their work by friends. Also mentioned as a positive experience is volunteer's self-development, which is related to the deepening of knowledge about the virus and the ability to learn to manage stress.

Impact on Private life: Challenges: lack of free time versus positive outcome: self development

The negative aspect of changes in the personal life of volunteers in pandemic conditions is related to the stress of working as a volunteer, big workload and lack of free time. Work-related stress, big workload and lack of free time had negative impact on the personal lives of volunteers. The positive aspect of the changes in the personal life of volunteers is related to self-empowerment practices, as they have been able to see and use their full potential.

Dynamics according to waves: From fear to routine and competence in dealing with Covid 19

The first wave of the Covid-19 pandemic was described as frightening for the volunteers. That time was associated with worries about uncertainty concerning the virus and challenges in coping with Beneficiaries' aggression. The consequent waves of the Covid pandemic were described as relatively calm, in regards to public sentiments. At this time, more correct information was spread and aggression towards volunteers was reduced. During the late waves of the Covid pandemic, volunteers learned to cope with stress, as they had long and daily experience dealing with it.

Coping strategies: managing negative emotions, supporting each other, hope regarding vaccination, volunteering as coping strategy

Managing emotions and focusing only on positive events were the instant ways mentioned while being a volunteer in Covid Pandemic to deal with the challenges. Another way of dealing with these challenges while working as a volunteer in Covid Pandemic was helping each other both physically and emotionally during the work. As for the long-term strategies of coping with stress, volunteers mentioned having hope of a better future, namely, concentrating on the future positive effects of the vaccination process. Another long-term strategy of coping with stress was sharing experience among volunteers, which was also related to the usefulness of psychosocial training. The way to deal with the stress caused by Covid is also called working as The volunteering itself was mentioned as an activity against pandemic-related stress because as much as volunteering was associated with recognized importance of their work and appreciation by loved ones.

Pandemic - positive and negative process / outcome : helplessness versus appreciation of life and self development

The negative impact of the pandemic was the feeling of helplessness and injustice that volunteers developed due to acknowledgment of little opportunity to help the beneficiaries. The positive outcome of pandemic was appreciation of life by volunteers and the emergence of a sense of gratitude for what they have. The positive outcome of a pandemic is the development of various skills, including patience, teamwork, sociability, and problem-solving skills. Volunteers also mentioned pro-social outcome of a pandemic, namely, people learning to help each other.

Before the pandemic and now: increase in stress and lack of free time

Working as a volunteer before a pandemic was considered relatively easy and less stressful, while working as a volunteer during a pandemic was perceived as difficult and stressful. Prior to the pandemic, volunteers had more time for studying, spending time with friends and resting. Since the pandemic, that time was almost non-existent.

Vaccination: worries about misinformation

The Myths that vaccination causes death and infertility are perceived as obstacles to public vaccination, as well a conspiracy theory about "chip" implantation through vaccination. The vaccination process is hampered by the spread of misinformation about its effectiveness. Sabotage of vaccination by the clergy and insufficient information campaign have been cited as factors setting back the vaccination process. The vaccination process is assessed as satisfactory. Volunteers relate acceleration of vaccination pace to the introduction of "Pfizer BioNTech" vaccine in Georgia, as it has more trust among the population. The best way to improve the vaccination process is better advertising/promotion, authorities giving vaccination recommendations to people, increasing the number of vaccination points and, in the opinion of some volunteers - making vaccination mandatory.

Vision of future not possible, great hope in vaccination

In general, volunteers found it difficult to make predictions about the future because they perceive the condition to change rapidly and link the prospects to the rate of vaccination. The negative vision of future events was related to the negative attitude of people towards the Covid-19 vaccine and consequently, worsening of the epidemic situation. In this scenario, tightening the restrictions was perceived as a necessary measure by the volunteers. A positive vision of future developments included the acceleration of the vaccination rate, which, according to the volunteers, would lead to an improvement in the situation and the end of the pandemic.

Focus Group with hotline operators

Challenges: high workload, aggression of beneficiaries, versus learning and self development

During the pandemic, the workload of hotline operators of the Tbilisi City Hall Municipal Services Agency and the Georgian Red Cross Association has increased significantly. Despite the big workload, working during a pandemic was accompanied by the gain of new experiences: working on new projects, doing new types of work and changing status (having more important tasks) at work led to self-development of operators. Given the constraints imposed by the pandemic, the majority of citizens were subjected to severe economic problems, which contributed to their annoyance and aggression. Because of that, the hotline operators also had to incorporate therapeutic tasks. With the background of increased stress in the country, the Georgian Red Cross Association offered citizens remote psychological services via telephone. In order to deal with the increased workload, the Georgian Red Cross Association and the Tbilisi Municipal Services Development Agency joined forces to develop a coordinated work strategy that proved to be effective.

Best practice: active communication, remote work and staying close to family and friends

During the remote work, employees were involved in active communication with each other. This work tactic made the work process highly coordinated and harmonized. Accomplishing their duties during the pandemic had a positive meaning for hotline operators, as their performance actually helped the people affected by Covid-19. The remote working model proved to be productive for the informants; being close to loved ones has had a positive impact on their performance. Working from their private space did not have negative effect on the quality of the work, due to the job specifics.

Private life: less free time and less recreational activities, isolation and needs for remote contact

Remote work has created new forms of communication with family members and increased responsibilities. Those who lived with a young child had to make an extra effort to explain to the child the specifics of living in a new reality. To ensure their work performance, informants refrained from all recreational activities (going to the cinema, shopping, socializing with friends) that brought some stress relieving effect before the pandemic. Informants had to switch to the remote contact with those with family members who did not live in the same house. Physical interaction took place in exceptional cases, with a diligent compliance of regulations. Remote relationships with co-workers became tiring over time, as the opportunities for socialization were lost.

Coping strategies: physical activity, interaction with friends (no covid talk), creative activities

Stress levels increased with time. Employees came up with individual coping practices such as walking, talking to friends about topics not related to work, exercising, reading books, watching TV shows, caring for animals. Informants who lived with a young child spent non-working hours with their children and carried out activities such as drawing, sculpting, walking, dancing and singing. Over time, these activities have become a good way to unwind. Informants reported rare cases of outdoor activities with close friends. It was possible only under specific conditions, when regulations allowed gathering in the open space.

Dynamics according to waves: from chaos to order, becoming more competent in dealing with the pandemic

Workload and stress levels were not static during the pandemic period. Rather, they changed due to the restrictions and the spread of Covid-19. The most memorable so-called “wave” of Covid-19 was the first wave in the country. During this period, restrictions were imposed for the first time and the hotline operators had to deal with the mass confusion of the citizens.

The first wave and respective restrictions imposed in the country, such as the so-called curfew and stopping public transport have caused confusion among citizens. During this period, hotline operators received many calls asking questions beyond their competence. With time, the coordination within departments increased and citizens gained general information about Covid-19. After that, it became easier to redirect incoming calls to respective departments. Work management has become more efficient and stress levels of hotline operators stabilized. Informants also reported that any decision made by the Government Meeting or the Coordinating Council dramatically increased the number of incoming calls to the departments. After the first wave, informants developed an emotional and intellectual resource that made it easier to deal with each subsequent wave.

Life before and after the pandemic: discovering personal strength

While working during the pandemic, informants discovered new skills such as managerial skills, respect for their own and others' time, the ability to work in tight deadlines and make effective, head over heart decisions. Working in the face of changing stress has also highlighted for informants the need to take care for themselves. Informants developed strategies that helped them unwind.

Of the skills acquired during the pandemic, the most important to the informants were stress coping skills, as they contributed to the quality of both job performance and the maintenance of personal well-being.

Vaccination: problem of misinformation and great hopes in vaccines

Hotline operator's vision of future is closely linked to the vaccination process. For informants, a positive vision of future is futile unless people get vaccinated.

Informants believe that access to the vaccine is no longer a problem, as there are possibilities of both pre-registration and getting the vaccine directly, without registration. To the last point, operators feel it's important to increase the number of vaccination points where the vaccine can be obtained without prior registration.

Informants expressed concern about the fact that vaccination goes hand by hand with the increased spread of misinformation, which leads to the formation of anti-vaccination sentiments. Informants believe that it is important for the state to have an active information campaign to deal with this problem. Also, they think the mass media should be actively involved in encouraging the vaccination process. Spread of valid information could intensify the vaccination speed and contribute to creating a positive outlook on the future.

Focus Group with Doctors

Challenges: workload, lack of PPE and dealing with one's own stress

Doctors reported the increase in workload during the pandemic as one of the main factors that changed their work routines and reduced their free time. With the increase in the number of patients, the volume of their work has changed. In the case of some informants, working hours have doubled and it has also become common to answer patients' calls even from home, after working hours. Due to the pandemic, doctors had to adopt some new, specific work routines (e.g., online consultations). Informants reported attempts to participate in various trainings and events that provide information about Covid-19 help them in their professional development. Doctors from rural areas mentioned specific challenges like not having access to the necessary equipment. In addition, they expressed the lack of possibility to do a quick Covid test on site. Doctors mentioned they had to incorporate therapeutic tasks, to deal with Covid-19 patient's experience of stress and fear. In order to act "professionally", doctors feel the need to hide their personal stress and fear, so they can concentrate on helping patients.

Private life: lifestyle changes regarding types of contact and increase in importance of family life and hobbies

Informants talk a lot about lifestyle changes under pandemic conditions. Since their work schedule has changed, they had to adopt different forms of relationships with people close to them, have to follow specific rules and regulations always and everywhere etc. Doctors reported that their free time has decreased due to increased workload. Social relationships have also significantly decreased. Face-to-face communication has been replaced with new forms (online communication) over time. They say, it's becoming monotonous and tiring for them. At work and later at home, they have to devote time to professional activities and development. For example, one of the informants creates videos about Covid-19 and shares them with the public. When having free time, they mainly spend it with family members or are busy with their hobbies.

Dynamics according to waves: from stress and fear to experience/routine and concern of new variants

When speaking about the waves in the country during a pandemic, doctors mainly discussed two waves: the first and the fourth. In case of the first wave, informants highlighted the facts that everything was just beginning, they had little information, no guidelines were developed, and there was much stress, fear, and confusion. During the following waves, they received more information and learned the strategies of virus management.

In the case of the fourth wave, informants focused on transportation restrictions, which is a big issue for some of them and affects the working process. Also, informants expressed their concerns about the new covid-19 variant, associated with the fourth wave - it is spreading rapidly, requiring more attention and caution. When talking about the waves, they also actively raised the issue of vaccination and believe that the level of public awareness about vaccination during the fourth wave is much higher than in previous periods, and that's where they see the impact of their own involvement and evaluate it positively.

Coping strategies: mainly palliative strategies: taking the workload for granted not taking critical cases personally

During the pandemic, doctors have been experiencing a stressful work schedule and challenging tasks, namely, treating critical patients, working overtime (even from home) and providing psychological support to patients. Doctors have less free time to engage in the activities they want. Also, they have to reduce social relationships and this affects their mental state negatively. A way the doctors use to deal with stress is taking their workload for granted; consider it as their professional duty and to make themselves busy to the fullest, so that they do not have any time to think about the complexity of their situation. Another way to deal with challenges is recording and distributing informational videos. One more way informants use to cope with stress is not taking critical cases personally and create emotional distance. It has also been suggested that often they find it just impossible to deal with stress.

Pandemic - positive and negative process / outcome: helplessness and insecurity versus appreciation of life and personal strength

For doctors, a positive effect of a pandemic is learning to appreciate what we have. Informants also mentioned learning to find a way out of any difficult situation. The stress caused by the pandemic and the change in lifestyle have demonstrated the importance of social relationships and interactions. The negative consequences of a pandemic are feelings of helplessness, insecurity, and feelings of getting used to the current situation.

Before the pandemic and now: more stress, less free time and less social contacts

Under pandemic conditions, doctors' work became stressful due to changes in workload, schedule and tasks. That made performing daily activities more complicated, compared to the time before pandemic. The pandemic has changed the personal lives of doctors as they have less free time and fewer social interactions.

Vaccination: lack of knowledge, lost target groups, misinformation and problematic attitudes of religious leaders versus high hope with regard to vaccination

With regards to vaccination, doctors point out the lack of knowledge both among the physicians and population. One of the problems mentioned is the low rate of vaccination in locations populated by ethnic minorities. Doctors attribute this problem to the lack of information in the relevant language. The vaccination process is hampered by myths about consequent infertility, death, and getting “chip” implant. Another factor is the case of a local nurse who died after vaccination. The obstacles to the vaccination process are the shortcomings of the health care system, namely, insufficient rate of vaccination of doctors’ and shifting the vaccination points from hospitals to special buses. These were named as sources of confusion for citizens.

The vaccination process is hampered by the problematic presentation of the issue by religious authorities and little involvement of other public figures in awareness campaigns. Doctors assess the current tendency in vaccination process as positive. The reason that more people get vaccinated is the fear of the new Delta variant and the entry of the “Pfizer BioNTech” vaccine into the country.

Informants named several ways to better guide the vaccination process, namely, increasing awareness campaign, involving of public figures respected by different social groups and supporting the periphery regions, by adding vaccination points and providing necessary equipment.

Vision of future: hope for satisfactory vaccination rate, adapting new procedures in and between hospitals

The positive expectations of doctors about the epidemic condition are related to their perception of the current vaccination rate as “satisfactory”. It gives them hope of returning to the normal rhythm of life. Also, they expect that the vaccine will be modified over time so it can battle the new variants that will emerge in the future. The negative vision of future was related to the scenario where the stressful situation in the society could contribute to increase in cases of infection and tightening of regulations, subsequently. As a way to improve future prospects, doctors suggested changing the standards related to hospitalization procedures to ensure that patients are distributed among the hospitals adequately and fairly.

Focus Group with Homecare nurses

Challenges: high workload less time for patients, new tasks versus learning and being supported by RC

Due to the pandemic, home care nurses have to perform all the necessary procedures with each beneficiary in a reduced time (tightening of performance time). The reasons for that are the Covid-related regulations and the increase in the number of beneficiaries. Under existing regulations, home care nurses had to perform additional time-consuming activities, such as standing in line at a store.

Additionally, nurses have to learn and perform new tasks, such as working with personal protective equipment. Care is one of the issues that has been exacerbated during the pandemic, as nurses have to care for their patients beyond their work, contact them by phone, make up for deficiencies such as reduced social contact, reassure and provide information about Covid. Home care nurses point out that during the pandemic, the Red Cross helped them in all aspects of professional activity, which gave them great motivation and simplified their work under current conditions. Informants believe that it is their professional duty to face any challenge and not make patients / beneficiaries feel afraid by letting them notice their own worries.

Private life: fear of infecting others and more focus on family life

Nurses pointed out that the pandemic has affected social interactions and had considerable negative impact on their personal life. Informants' free time is mainly devoted to family and household chores. Due to the character of their work, nurses limit social activities, namely they avoid engaging in various social activities with relatives as much as possible, not to become a source of infection for the beneficiaries. The extent and perceived importance of care have changed not only at work, but also in personal lives of nurses. Informants feel they need to care more about their family and beloved ones.

Dynamics according to waves: no perception of waves but increasing fear

Generally, informants find it difficult to divide the pandemic experience into waves. They rather have a holistic view of the pandemic as of an ongoing process. The first wave was mostly associated with the “beginning” and lack of public information about what Covid-19 was. For nurses, the first phase of the pandemic was the most difficult as they had to get used to and adapt to the strict regulations (e.g. working with special outfits).

The fourth wave is considered as a dangerous one, because of high morbidity and mortality rates across the country. Informants reported increased sense of fear during this period due to the loosening of restrictions by the state.

Coping strategies: focus on self development, and regulation of stress

Informants believe that following regulations and being vaccinated are the solution that could pave the way for an end to the pandemic. In their free time nurses try to forget about the pandemic and its difficulties, spend time with family members or do hobbies.

Informants emphasized the experience and knowledge they have accumulated, especially from the Red Cross trainings helps them to deal effectively with the stressful environment created by the pandemic. Informants believe that they should be people who can be trusted by both their family members and beneficiaries. Therefore, they believe that they should not let stress and fear get the best of them and approach the current process with a professional attitude.

Positive and negative outcomes: negative and positive effects of reduction of social contact, self development

Informants recall more negative than positive things related to the pandemic.

Negative: They think that the reduction of social relations has had a negative impact on peoples’ lives. Another issue is that it became impossible to make long-term predictions in life, because one does not know how the processes will evolve.

Positive: People are getting accustomed to following rules and regulations. Informants think that banning crowds will have a positive effect in the future, as some rituals like “Qelekhi” (feeding guests after funeral) will be forgotten. Some informants also think that people have become more attentive and caring.

Furthermore, informants think that they became faster, more mobile and organized.

Vaccination: worries about misinformation and high hopes in vaccines

According to the informants, the vaccination process in the country is going better than it was in the beginning. However, some obstacles are perceived. Informants think that the process is hindered by widespread misinformation on social networks (myths, misinformation provided by authoritative public figures) and little awareness of citizens about the usefulness of vaccination. Informants think that these obstacles can be overcome by informing the public about why vaccination is necessary.

The reason of the positive tendency in the vaccination process (more people getting vaccine) is the availability of four different vaccines, including Pfizer BioNTech. Also, nurses believe that people feel more encouraged when someone close to them gets the vaccine. Informants believe that another factor of increased vaccination rate was the number of cases reported during the fourth wave that has frightened the population.

Vision of future: fear of 4th wave

Discussion members had divergent visions of future. Some of the informants suggested that the situation will stabilize for the autumn-winter period, as they expect the reintroduction of restrictions and increased

incentives for getting vaccinated. Some informants think that current regulations are not enough to detain the fourth wave. They are also skeptical about the population's readiness to follow the regulations.

Summary

In Georgia, we see slightly higher stress, fear of infection, much more concerns and worries than Armenia. Younger people do not seem to be more at risk of psychological distress than older people like this is the case in other samples. Depression risks are rather high (47%).

Qualitative data show high variance in groups regarding to their specific working context. In general, all participants experience challenges and at the same time focus on self-development. Family life gets more important, appreciation of life and view on personal strength increase.

Vaccines are the main source of hope whereas new variants and new waves cause fear.

Summary and Discussion

It has to be stated that samples are not representative; hence comparisons between countries are not really possible. Results indicate tendencies for risks in health care workers during the pandemic in Armenia and Georgia.

In total, our data supports findings from other international studies. We see moderate stress levels and high depression risks for health care workers in both countries compared to representative European samples. In regression models for the overall sample (including both countries), we see that around one third of variance of perceived stress can be explained by female gender and a higher feeling of stigmatization.

Stress perception could especially be buffered by combined instrumental and informational support, underlining the importance of support measures on all levels integrated into the overall response mechanisms (see e.g. Zace et al., 2021; Kreh et al., 2021).

Qualitative data reveals that for volunteer's high workload, scarce resources as well as confrontation with death and poverty or conflict situations with beneficiaries while doing awareness-raising and aid distribution tasks in both countries was especially challenging. Considering the risks that lie especially in these groups and tasks in crisis (see e.g. Thormar et al., 2018) the importance of MHPSS activities for those volunteers are of utmost importance. A special group to focus on are hotline operators. As we see in the Georgian sample, a main challenge for hotline operators in Georgia was to be confronted with fears and mass confusion at the beginning of the pandemic and hence having to fulfil many psychological tasks. It was reported that psychological trainings were perceived as helpful.

Psychologists pointed out the adaptation to new circumstances in providing psychological support as well as being overworked while providing usual support in addition to covering the hotline especially at the beginning of the pandemic.

An important factor that has to be taken into account is the Nagorno-Karabakh conflict in Armenia, stressing resources needed for psychological as well as medical support. Doctors report that during war times priority was given to soldiers, not leaving enough beds for covid-patients in hospitals. Infection risks (higher fear of infecting others than themselves as the quantitative data suggests) and scarce resources, unclear information at the beginning and unpredictable infection routes as well as having to inform patients and relatives while also providing psychological support to them underlines the many tasks and challenges that medical and nursing staff were confronted with.

The polarizing effect of discussions around vaccination is perceived as additionally stressful by all helpers. Specific information for specific (vulnerable) groups in the population are seen as one important way of meeting these effects.

Especially the first wave with more uncertainty and less resources was perceived as challenging in both countries. However, high mortality rates during the fourth wave were still perceived as very stressful by nurses, showing risks for chronic stress being involved in the pandemic response in the long-term.

After all, being separated from family or having new private responsibilities (e.g. childcare, caring for relatives) points out the importance that all workers are not only affected workwise but are severely affected in their private lives as well.

The focus groups reveal a high amount of stressors posing risks for chronic stress and to the mental health of helpers. MHPSS activities drawing on international literature and guidelines as described at the beginning of this report (e.g. Shanafelt, 2020, Zace et al., 2020) and adapting the Hobfoll principles (Hobfoll et al., 2007) for efficient psychosocial support adapted to the specific tasks and challenges of target groups is recommended.

Beside those risks helpers of all groups stated also sources of growth such as the possibility for self-development and gaining competencies, appreciation of life or pro-social humanitarian experiences. All in all we found an astonishing level of job commitment and many indicators of strong resilience and posttraumatic growth in all groups.

Conclusion & Next steps

We can conclude that health care workers face risks to mental health in both countries that are slightly different due to context and working conditions. We further conclude that adequate psychosocial support is needed on instrumental, informational, organisational and psychosocial level. In the next steps we will collect best practices and produce an online library with guidelines and tools and will – based on literature and results from IPP research – develop recommendations for MHPSS structures and activities in the current and future pandemics.

Sources

- Betsch, C., Wieler, L. H., Habersaat, K., & COSMO group (2020). Monitoring behavioural insights related to COVID-19. *Lancet (London, England)*, 395(10232), 1255–1256. [https://doi.org/10.1016/S0140-6736\(20\)30729-7](https://doi.org/10.1016/S0140-6736(20)30729-7)
- Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L. et al. (2020). Mental health care for medical staff in China during the COVID-19 outbreak. *The Lancet Psychiatry*, 7(4), e15-e16. [https://doi.org/10.1016/S2215-0366\(20\)30078-X](https://doi.org/10.1016/S2215-0366(20)30078-X)
- Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386-396.
- Digby, R., Winton-Brown, T., Finlayson, F., Dobson, H. & Bucknall, T. (2021). Hospital staff well-being during the first wave of COVID-19: Staff perspectives. *International Journal of Mental Health Nursing*, 30(2), 440–450. <https://doi.org/10.1111/inm.12804>
- Dunham, A. M., Rieder, T. N. & Humbyrd, C. J. (2020). A Bioethical Perspective for Navigating Moral Dilemmas Amidst the COVID-19 Pandemic. *The Journal of the American Academy of Orthopaedic Surgeons*, 28(11), 471–476. <https://doi.org/10.5435/JAAOS-D-20-00371>
- Dye, T. D., Alcantara, L., Siddiqi, S., Barbosu, M., Sharma, S., Panko, T. et al. (2020). Risk of COVID-19-related bullying, harassment and stigma among healthcare workers: an analytical cross-sectional global study. *BMJ Open*, 10(12). <https://doi.org/10.1136/bmjopen-2020-046620>
- Eurofound (2017), European Quality of Life Survey 2016: Quality of life, quality of public services, and quality of society, Publications Office of the European Union, Luxembourg.
- Greenberg, N., Docherty, M., Gnanapragasam, S. & Wessely, S. (2020). Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *BMJ (Clinical Research Ed.)*, 368, m1211. <https://doi.org/10.1136/bmj.m1211>
- Hawryluck, L., Gold, W. L., Robinson, S., Pogorski, S., Galea, S. & Styra, R. (2004). SARS control and psychological effects of quarantine, Toronto, Canada. *Emerging Infectious Diseases*, 10(7), 1206–1212. <https://doi.org/10.3201/eid1007.030703>
- Hobfoll, S. E., Watson, P., Bell, C. C., Bryant, R. A., Brymer, M. J., Friedman, M. J., Friedman, M., Gersons, B. P., de Jong, J. T., Layne, C. M., Maguen, S., Neria, Y., Norwood, A. E., Pynoos, R. S., Reissman, D., Ruzek, J. I., Shalev, A. Y., Solomon, Z., Steinberg, A. M., & Ursano, R. J. (2007). Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence. *Psychiatry*, 70(4), 283–369. <https://doi.org/10.1521/psyc.2007.70.4.283>
- Ives, J., Greenfield, S., Parry, J. M., Draper, H., Gratus, C., Petts, J. I., Scorell, T., & Wilson, S. (2009). Healthcare workers' attitudes to working during pandemic influenza: a qualitative study. *BMC public health*, 9(1), 1-13.
- Kreh, A., Brancaloni, R., Magalini, S.C., Chieffo, D.P.R., Flad, B., et al. (2021). Ethical and psychosocial considerations for hospital personnel in the Covid-19 crisis: Moral injury and resilience. *PLOS ONE* 16(4): e0249609. <https://doi.org/10.1371/journal.pone.0249609>
- Maunder, R. G., Leszcz, M., Savage, D., Adam, M. A., Peladeau, N., Romano, D. et al. (2008). Applying the Lessons of SARS to Pandemic Influenza. *Canadian Journal of Public Health*, 99(6), 486–488. <https://doi.org/10.1007/BF03403782>
- Mayring, P. (1991). Qualitative Inhaltsanalyse. In U. Flick, E. v. Kardoff, H. Keupp, L. v. Rosenstiel, & S. Wolff (Hrsg.), *Handbuch qualitative Forschung : Grundlagen, Konzepte, Methoden und Anwendungen* (S. 209-213). München: Beltz - Psychologie Verl. Union. <https://nbn-resolving.org/urn:nbn:de:0168-ssolar-37278>
- Pappa, S., Ntella, V., Giannakas, T., Giannakoulis, V. G., Papoutsis, E. & Katsaounou, P. (2020). Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A

- systematic review and meta-analysis. *Brain, Behavior, and Immunity*, 88, 901–907. <https://doi.org/10.1016/j.bbi.2020.05.026>
- Reynolds, D. L., Garay, J. R., Deamond, S. L., Moran, M. K., Gold, W. & Styra, R. (2008). Understanding, compliance and psychological impact of the SARS quarantine experience. *Epidemiology and Infection*, 136(7), 997–1007. <https://doi.org/10.1017/S0950268807009156>
- Robertson, E., Hershenfield, K., Grace, S. L. & Stewart, D. E. (2004). The psychosocial effects of being quarantined following exposure to SARS: a qualitative study of Toronto health care workers. *Canadian Journal of Psychiatry. Revue Canadienne De Psychiatrie*, 49(6), 403–407. <https://doi.org/10.1177/070674370404900612>
- Searle K., Gow, K. (2010) Do concerns about climate change lead to distress? *Int J of Cl Chan Strat and Man* 2(4), 362–379. <https://doi.org/10.1108/17568691011089891>
- Shanafelt, T., Ripp, J., Trockel, M. (2020) Understanding and Addressing Sources of Anxiety Among Health Care Professionals During the COVID-19 Pandemic, 2020 American Medical Association. All rights reserved. JAMA Published online April 7, 2020 E1, Downloaded From: <https://jamanetwork.com/> on 04/15/2020
- StopCov.ge. (n.d). Prevention of Coronavirus Spread in Georgia. Retrieved from: <https://stopcov.ge/en>
- Taylor, S., Landry, C. A., Rachor, G. S., Paluszek, M. M., & Asmundson, G. J.G. (2020). Fear and avoidance of healthcare workers: An important, under-recognized form of stigmatization during the COVID-19 pandemic. *Journal of Anxiety Disorders*, 75, 102289. <https://doi.org/10.1016/j.janxdis.2020.102289>
- Thormar, S. B., Sijbrandij, M., Gersons, B. P., Van de Schoot, R., Juen, B., Karlsson, T., & Olff, M. (2016). PTSD Symptom Trajectories in Disaster Volunteers: The Role of Self-Efficacy, Social Acknowledgement, and Tasks Carried Out. *Journal of traumatic stress*, 29(1), 17–25. <https://doi.org/10.1002/jts.22073>
- Topp, C. W., Østergaard, S. D., Søndergaard, S. et al. (2015) The WHO-5 Well-Being Index: A Systematic Review of the Literature. *Psychother Psychosom* 84(3), 167–176. <https://doi.org/10.1159/000376585>
- Williams, R. D., Brundage, J. A. & Williams, E. B. (2020). Moral Injury in Times of COVID-19. *Journal of Health Service Psychology*, 1–5. <https://doi.org/10.1007/s42843-020-00011-4>
- World Health Organization. (n.d) Armenia Coronavirus (COVID-19) statistics. Total and daily confirmed cases and deaths. Retrieved from: <https://covid19.who.int/region/euro/country/am>
- World Health Organization. (n.d). Georgia Coronavirus (COVID-19) statistics. Total and daily confirmed cases and deaths. Retrieved from: <https://covid19.who.int/region/euro/country/ge>
- Worldometer. (n.d). Armenia COVID: 254, 436 Cases and 5,161 Deaths Retrieved from: <https://covid19.who.int/region/euro/country/am>
- Worldometer. (n.d). Georgia COVID: 598,396 Cases and 8,621 Deaths. Retrieved from: <https://www.worldometers.info/coronavirus/country/georgia/>
- Wu, P., Fang, Y., Guan, Z., Fan, B., Kong, J., Yao, Z. et al. (2009). The psychological impact of the SARS epidemic on hospital employees in China: exposure, risk perception, and altruistic acceptance of risk. *Canadian Journal of Psychiatry. Revue Canadienne De Psychiatrie*, 54(5), 302–311. <https://doi.org/10.1177/070674370905400504>
- Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M. W., Gill, H., Phan, L. et al. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, 277, 55–64. <https://doi.org/10.1016/j.jad.2020.08.001>
- Yasin, S. M., Muzaini, K., Samsudin, E. Z., Selamat, M. I. & Ismail, Z. (2020). Are Our Healthcare Workers Well Protected during COVID-19? Learning from Current Experiences and Challenges. *Journal of Clinical and Health Sciences*, 5(2), 4. <https://doi.org/10.24191/jchs.v5i2.8967>

Zaçe, D., Hoxhaj, I., Orfino, A., Viteritti, A. M., Janiri, L., & Di Pietro, M. L. (2021). Interventions to address mental health issues in healthcare workers during infectious disease outbreaks: a systematic review. *Journal of psychiatric research*, 136, 319-333. <https://doi.org/10.1016/j.jpsychires.2021.02.019>