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### **Covid-19 – An Unexpected Journey**

Exploring Metaphorical Representations of Covid-19  
among the medical professionals

#### **Abstract**

Since December 2019 Covid-19 has spread throughout the world at a dangerously fast pace and soon become a global pandemic. The virus, which is often talked about metaphorically, is the most frequently discussed subject nowadays. Many linguists have investigated the metaphorical conceptualizations of the virus; nevertheless, no research is available on the conceptualization of Covid-19 among doctors. Hence, the present paper investigates the metaphorical conceptualization of Covid-19 among medical professionals. Furthermore, the paper compares the doctors' conceptualizations of the virus to those of laypeople (office workers) and offers a detailed elaboration on the differences in metaphor usage in two sample groups.

*Keywords:* Covid-19, conceptual metaphor, contextual influence, medical linguistics

#### **1 Introduction**

Metaphors in medicine have always been a topic of interest among linguists, however, the recent events have pushed the relevancy of the issue into the stratosphere. The Chinese government reported cases of severe pneumonia in Wuhan on December 31st, 2019, and from the moment that information reached the World Health Organization, the world has been turned upside down. The year 2020, as well as most of 2021, was defined by Covid-19, which forced countries across the world to declare restrictive measures, such as lockdowns, in order to stop the spread of the deadly virus. Thus far, coronavirus has taken the lives of approximately five million people. Undoubtedly, the virus has affected different spheres of life from everyday activities such as shopping and entertainment to professional affairs, especially in the medical area. Needless to say, Covid-19 has been one of the most discussed topics over the past two years among people with different professional backgrounds – politicians, CEOs and, of course, doctors. It comes as no surprise that Covid-19, being a new, yet to be understood deadly virus, is often talked about metaphorically.

According to the Metaphoric Structuring view, we understand abstract concepts through more concrete, experience-based concepts; therefore, the target domain of VIRUS can be understood through various source domains such as WAR (VIRUS IS AN ENEMY), NATURAL DISASTER (VIRUS IS A TSUNAMI), etc. (Lakoff & Johnson 1980). Conceptual Metaphor Theory (Lakoff & Johnson 1980) clearly demonstrates that metaphors do not serve simply as poetic devices restricted to literature, but they are an important tool of sense-making in both

everyday life and of specialist discourse such as medical practices, including concepts of illnesses (Bleakley 2017: 20–25). Although the medical language is soaked in metaphors, some scholars still argue against their use by medical professionals emphasizing that there is no place for ambiguity in scientific matters (Taylor & Dewsbury 2018; Sontag 1978). Yet, the majority of scientists agree that embracing the use of metaphors in medicine results in the positive development of medical culture as a whole, and especially helps to shape doctor-patient relationships (Bleakley 2017). For instance, Buchbinder (2015) claims that metaphorical thinking is the essence of medical reasoning and suggests that clinical difficulties that occur in everyday interactions of medical professionals can be managed, interpreted and explained only with the use of metaphors. Bleakley (2017), in his turn, argues that metaphor in medicine is a crucial tool of sense-making, as the doctor and the patient (or the caregivers of the patients) do not share the same scientific knowledge. All in all, while not all the scholars agree on the fact that metaphors have only positive effects on medicine, it cannot be denied that metaphors are an important part of medical culture.

As was demonstrated above, the virus, as well as any other target domain, can be understood through several source domains due to the fact that a single source is incapable of capturing various features of the target domain (Kövecses 2010: 13). Nevertheless, the VIRUS domain is peculiar in the sense that it is, in fact, a concrete domain, although not visible. In this sense, it resembles the target domain of, for example, SMELL.

In order to answer the question of what serves as a motivation for a speaker to choose one or the other metaphor to talk about the target concept, Kövecses (2015: 110–112) elaborates on the concepts of contextual influence and experiential focus. He explains that contextual influence, or the motivational force behind the metaphorical conceptualizations, is made up of two key components, namely local and global contexts. The global context incorporates the current physical environment, cultural and social setting, differential interests, concerns and differential memory, while the local context consists of knowledge about the topic of the discourse of the parties, the core units in the discourse along with the physical settings of the situation. The concept of experiential focus implies that different people may disregard certain aspects of the bodily functioning or they may be attuned to the certain aspects of their bodily functioning in regard to a metaphorical target domain (Kövecses 2010: 110–120). Thus, it is safe to assume that different cultural groups may conceptualize the same notion in different ways. Correspondingly, the source domains office workers use to talk about Covid-19 can be very different from the source domains that are used by doctors. Undoubtedly, the main contextual factor that may provoke the differences between the conceptualizations of doctors and office workers is that of the source and academic validity of their acquired knowledge of the topic.

Furthermore, it is important to mention that since each specific source domain emphasises certain entities of the target concepts while omitting others, each metaphorical conceptualization carries a value and raises discussions on whether every metaphor is equally good or ethical. The question of choosing the appropriate metaphors is especially crucial in a medical environment, where the metaphor used under no circumstances should put any additional burden and suffering on the patient or add harmful mystification to the disease (Semino et al. 2017: 64). The metaphors that have been shaping the image of medicine for centuries such as MEDICINE IS WAR and BODY IS A MACHINE have been criticized by scholars for not fitting the above-mentioned requirements (Warren 1991; Semino et al. 2017). Nevertheless,

while many scholars claim that these metaphors should “retire”, they are still widely used in different medical contexts.

With all the facts mentioned above, it can be clearly seen that most of the abstract concepts can be understood through various source domains depending on the contextual influence, and here belongs the concept of Covid-19. Furthermore, it can be said that people with different cultural and social backgrounds or prior knowledge on the topic may conceptualize the same concept differently (Sharifian 2008: 112–113). Likewise, doctors and laypeople may conceptualize Covid-19 in different ways. Apart from that, different metaphorical conceptualizations of Covid-19 carry values by highlighting certain features of the virus. Therefore, metaphors can be used as a tool of persuasion, political agitation and can be potentially harmful to the patients, their caregivers, doctors and society as a whole.

Hence, the present paper aims to investigate the metaphorical conceptualization of Covid-19 among medical professionals whose lives are, undoubtedly, tremendously affected by the pandemic. Furthermore, the paper aims to compare the doctors' conceptualizations of the virus to those of laypeople (office workers) in order to discover possible differences. It is important to emphasize that, while a significant body of literature on Covid-19 metaphors is already available, there is no research in this field that is closely related to medical professionals and focuses on differences between laypeople and doctors in the conceptualization of the virus. This makes the present paper novel and allows the study to provide useful insight into the field of metaphor research. The present introduction will therefore be followed by a discussion of previously conducted studies on Covid-19 metaphors after which a short critical overview from doctors' perspective of FIRE metaphors will be provided. Section 3 will introduce the methodology of the present research, while Section 4 will present the results of the study. Section 5 will thoroughly discuss the results, and finally, Section 6 will sum up the findings and conclude the research.

## **2 Previous research on Covid-19 metaphors**

### ***2.1 Conceptualizations of Covid-19***

There is no doubt that Covid-19 has influenced people's lives greatly in various spheres, so it comes as no surprise that the virus is the most frequently discussed subject in everyday conversations, professional and political discourse. Communication has been one of the main tools that are being used by politicians, doctors and other opinion leaders to handle the pandemic. While properly built messaging can encourage the behaviours needed to stop the spread of the virus, mixed messaging and misrepresentation of the Coronavirus can cause confusion, fear and undesirable reactions. As a result, communication about Covid-19 or, more precisely, the metaphorical conceptualization of the virus, has been a point of great interest among linguists for the past 2 years. The present section will therefore elaborate on previous linguistic studies on the topic of Covid-19 metaphors.

One of the very first linguistics papers on Covid-19 metaphors was presented to the academic world in July 2020 by David Craig, where he revisited the iconic book on health metaphors by Susan Sontag “AIDS and Its Metaphors” (Sontag 1989) and put it in the context of the Covid-19 pandemic. By theoretically discussing the harm that can be caused by Coronavirus discourse and the potential damage of WAR metaphors, the author arrived at the conclusion that “even as

the world appears to have spun backwards, language has the means to convey hope that it will one day spin forward again” (Craig 2020: 1032).

Further, empirical studies on the metaphorical representation of the virus started to emerge. The work of Gillis (2020) elaborated on the phenomenon of justification of aggressive legislative responses to the pandemic through MILITARY metaphors. In the paper, Gillis suggested that WAR metaphors used by governments can be effective in the emergency of pandemics to mobilize society to produce desired behaviours to stop the virus, yet, as previous works discussed, WAR metaphors should be used thoughtfully due to their potentially harmful effects (Gillis 2020). Another work written by Wicke and Bolognesi (2020) explored the conceptualization of pandemics on Twitter. After analyzing a significant corpus of tweets, the paper claimed that the WAR metaphor, with the most frequently used words such as “fighting”, “fight”, “battle”, and “combat”, is the most common frame used to talk about the Coronavirus (Wicke & Bolognesi 2020: 13). The paper additionally suggested that since the WAR frame is the most frequent compared to the other figurative frames used (STORM, TSUNAMI, MONSTER), the WAR metaphor can be considered as the most conventional one (Wicke & Bolognesi 2020: 18–20). It is important to mention, however, that the WAR frame is commonly applied to certain features of the pandemic, such as actions performed by medical professionals, but is not always used in connection with other aspects like family issues and social distancing (Wicke & Bolognesi 2020: 22).

A further paper presented an experiment conducted by Panzeri et al. (2021) with the aim to shed light on whether conceptualizing the COVID-19 pandemic as a WAR affects people’s reasoning about the pandemic. The results of the experiment showed that contrary to the expectations based on previous studies, framing Covid-19 issues through WAR metaphors does not produce aggressive responses among the participants (Panzeri, Paola & Domaneschi 2021: 17).

Last but not least, it is important to introduce the work of Semino (2021) “Not Soldiers but Fire-fighters – Metaphors and Covid-19”, where the author elaborated on various metaphors used for the pandemic (Semino 2021). The author started with the discussion of the WAR metaphor, as it is the most frequently used and, arguably, the most conventional metaphor of the virus (Semino 2021: 51–52). After discussing various advantages and disadvantages of the MILITARY metaphors when talking about Covid-19, the author concluded that this conceptualization should be used with caution (Semino 2021: 52). Most importantly, however, the paper provided an elaborative overview of alternative metaphors drawn from the crowd-sourced multilingual collection of metaphors #ReframeCovid, which includes more than 550 examples of metaphorical expressions. After carefully analyzing the metaphor collection and large corpus of news articles, the paper suggested that FIRE metaphors were the most appropriate for talking about different aspects of the Covid-19 pandemic, starting with features of the virus itself and finishing with actions of medical professionals. More precisely, FIRE metaphors succeed in:

- conveying danger and urgency;
- distinguishing between different phases of the pandemic;
- explaining how contagion happens and the role of individuals within that;
- explaining measures for reducing contagion;
- portraying the role of health workers;
- connecting the pandemic with health inequalities and other problems; and
- outlining post-pandemic futures (Semino 2021: 54).

After providing strong arguments for why the FIRE metaphors are particularly apt for conceptualizing Covid-19, the author emphasized the fact that a single source domain is not capable of covering all aspects of a target domain and, at the same time, cannot be suited for every audience (Semino 2021: 56). For instance, FIRE metaphors omit the asymptomatic transmission aspect of the virus and are not appropriate for the audiences that regularly face the threat of fire (Semino 2021: 56). Nevertheless, the author concluded that the FIRE source domain, being able to cater to crucial aspects of Covid-19, is particularly appropriate, especially compared to the source domain of WAR (Semino 2021: 56). The Discussion section, however, will provide a critical look at the FIRE metaphors once again from the perspective of doctors that were involved in the present research and kindly shared their opinions.

### 3 Methodology

The preceding sections have thoroughly covered the previous studies on the metaphorical conceptualization of Covid-19 and have identified potential problems and omissions in the literature. Indeed, the above-mentioned research did not focus on the conceptualizations of the virus by medical professionals, which would be crucial for building an appropriate communication about Covid-19. Thus, the present work aims to fill in this major gap in the available literature by closely working with doctors and laypeople in order to find how they conceptualize the virus. The present paper, therefore, is looking to answer the following two main research questions: “How do doctors conceptualize Covid-19?” and “What are the main differences in the conceptualizations of Covid-19 between doctors and laypeople?”. In compliance with the research question, the study hypothesizes that (H1) there are considerable differences between the metaphorical conceptualization of the virus between doctors and laypeople.

In order to obtain the data to answer the research questions, a one-item questionnaire was constructed in the form of a Word Document and was sent out to the participants by email with the instruction to fill it out and send it back in the same form. The questionnaire was sent out to 70 doctors and 70 laypeople (office workers of the analytics and marketing department); however, only 68 responses came back from each group. Thus, the final sample of the research contains 68 doctors and 68 laypeople. It is important to mention that all the respondents were Russian and, consequently, the questionnaire was conducted in the Russian language. The only question included in the questionnaire was stated in the following way: “Please compare Covid-19 to someone or something by completing the following sentence: Covid-19 is..., because...”. The metaphors were identified with the help of the Metaphor Identification Procedure (MIP). The four steps developed by the Pragglejaz group (2007) were followed in order to determine whether certain words were used metaphorically or not. Although MIP (Pragglejaz Group 2007) was used as the main method of the metaphor identification process, 2 cases required a deviation from the MIP, as the respondents included *like* in their explanations for their comparisons. As the MIP is not designed to identify similes as metaphorical, a related procedure called MIPVU (Steen et al. 2010) was used for the two exceptional cases. Hence, using the MIPVU for the deviant cases allowed us to identify those as metaphorical, as even though those responses contained the word *like* on the linguistic level, on the conceptual level they are still regarded as a metaphor (Steen et al. 2010: 94–95).

While the question made it possible to collect clear source domains for the virus together with the justifications of the participants’ choices, there are, undoubtedly, several limitations of

such a method. For instance, the method does not require detailed elaboration with further explanations of the conceptualization as the essay method does; thus, some answers could be unconscious and impulsive (Benczes & SÁGVÁRI 2018). Moreover, metaphors of the “A is B” format are uncommon in naturally-occurring discourse (Cameron 1999: 15). This could result in participants coming up with metaphorical utterances for the ideas that could have been equally well expressed by using literal language (Deignan 2005: 2). Thus, it could lead to the formation of creative metaphors (Deignan 2005: 110–111). Furthermore, another drawback of the data collection method used by the present paper is the fact that not every response received from the participants can be a priori considered a metaphor (Deignan 2005). In “A is B” statements, “B” can be a category label for categorizing Covid-19 and not a metaphorical source domain. However, using the MIP allows us to separate metaphors from non-metaphorical expressions; therefore, the validity of this disadvantage for the present research is minimal.

Nevertheless, it was important to make sure that the questionnaire is short and easy to fill out so that doctors would find time to answer the question even with their busy schedules. Therefore, the method used allowed us to acquire a maximum number of responses due to its simplicity.

As stated above, the total sample size of the present study is 136 participants (68 doctors and 68 office workers). In the earliest stage of data analysis, the responses were methodically checked through on whether the answers could be coded as a source domain for Covid-19. Luckily, all the responses received could be identified as a metaphor, most of them being a single word (noun) or a short phrase. However, some of the responses were rather ambiguous or unclear due to their unconventionality (“social catastrophe”, “lesson” “Russian Roulette”) and needed to be clarified over a phone call, which also allowed to collect opinions of the doctors on FIRE metaphors which were discussed by the previous section in detail. It should be noted that no problematic responses were spotted among the answers of laypeople since they tend to use more conventional metaphors, as the Results section will show. Once receiving the necessary clarifications from doctors, the responses were coded as source domains and further analyzed for differences between the two sample groups.

## 4 Results

After collecting the data and coding the responses into source domains, 29 different conceptual metaphors were identified. Several source domains, however, require a more detailed justification of why those should be interpreted metaphorically rather than considered as literal statements. For instance, the explanations of the respondents who stated that COVID-19 IS A CRISIS clearly show that the word *кризис* ‘crisis’ was not used in its basic sense of “резкое изменение в каком-либо положении, состоянии” ‘a sudden change in some kind of situation, state’ (Efreмова’s *Explanatory Dictionary* (EED) *кризис* ‘crisis’ <https://lexicography.online/explanatory/efremova/к/кризис>). The majority of the respondents rather relied on the secondary meaning that defines *кризис* ‘crisis’ as “разг. Затруднительное положение (обычно вызванное финансовыми неурядицами или сложностями душевного состояния)” ‘informal. Predicament (usually caused by financial or mental difficulties)’ (EED *кризис* ‘crisis’ <https://lexicography.online/explanatory/efremova/к/кризис>). Accordingly, the respondents claimed that COVID-19 IS A CRISIS, because “... we have to question who we really are” and “... I had to face myself and rediscover who I am”. Moreover, some doctors

referred to the *crisis* in the sense of “переломный момент в течение болезни, ведущий к улучшению или ухудшению состояния больного” ‘a turning point in the course of a disease leading to an improvement or deterioration in the patient's condition’ (EED *кризис* ‘crisis’ <https://lexicography.online/explanatory/efremova/к/кризис>). Moving further, those respondents who linked Covid-19 to *мистика* ‘mystery’ implied the secondary meaning of the word, which defines it as “перен. разг. Нечто непонятное, необъяснимое, загадочное” ‘figurative, informal. Something incomprehensible, inexplicable, mysterious’ (EED *мистика* ‘mystery’ <https://lexicography.online/explanatory/efremova/м/мистика>). More precisely, the respondents referred to the virus as *мистика* ‘mystery’ in the sense of a movie genre. This meaning of the word is borrowed from the English language, where the word *mystery* can be defined as “a story, film or play in which events take place that are not explained until the end, especially a crime such as murder” (*Macmillan Dictionary* (MD) *mystery* [https://www.macmillandictionary.com/dictionary/british/mystery\\_1#mystery\\_1\\_11](https://www.macmillandictionary.com/dictionary/british/mystery_1#mystery_1_11)). The meaning becomes evident from the respondents’ explanations that state that COVID-19 IS A MYSTERY because “we watch the situation uncover like a thriller series on the TV” and “we can’t wait to see who is to blame at the end”. In order to make the meaning of the MYSTERY source domain more evident, Table 1 includes its synonym (THRILLER) in brackets. In the answers that included SOCIAL CATASTROPHE, the respondents highlighted the fact that the Covid-19 situation is difficult for every person involved, regardless of whether the individual was exposed to the actual virus or not (e.g. “Covid-19 is a social catastrophe because everyone involved (even those individuals who are not exposed to the virus) has to go through difficult changes in their daily lives” and “Covid-19 is a social catastrophe, because all of us are experiencing great discomfort and have to change the ways we live”). From the detailed explanations provided by the respondents, it becomes evident that the answers rely on the secondary meaning of the word *катастрофа* ‘catastrophe’ that is “потрясение, влекущее за собой резкий перелом в личной или общественной жизни.

Социальная катастрофа.” ‘a shock that entails a sharp change in personal or social life.

Social catastrophe.’ (*Popular Russian Dictionary* (PRD) *катастрофа* ‘catastrophe’ <https://popular.academic.ru/1662/катастрофа>) rather than on the basic meaning that defines a *catastrophe* as “крупное неожиданное событие с трагическими последствиями” ‘a major unexpected event with tragic consequences’ (RPD *катастрофа* ‘catastrophe’ <https://popular.academic.ru/1662/катастрофа>). Thus, the responses are interpreted metaphorically and SOCIAL CATASTROPHE is included in Table 1 as a source domain. As for the source domain of PUNISHMENT (FROM GOD), it can be argued that those who believe in God can literally take Covid-19 as a punishment. Nevertheless, in their answers, the respondents typically referred to Covid-19 as a punishment from God in a somewhat ironic way. They highlighted the fact that due to the lack of scientific evidence for the origin of the virus, we find ourselves in a situation where we need to look for any other explanation. This can be equated with the times when science was not developed, and almost every phenomenon was explained by God(s) (e.g. “Covid-19 is a punishment from God because we are like Vikings that explained thunders by the rage of the Gods as they had no other explanations”, “Covid-19 is a punishment from God because it feels like we are back in ancient times when we couldn't explain and cure any illness”). At the same time, the PUNISHMENT FROM GOD source domain can be considered inherently metaphoric, since it is based on the metaphorization of GOD AS A STRICT FATHER; thus, COVID-19 IS A PUNISHMENT TOOL in the hands of a STRICT FATHER. Indeed, studies suggest that the parental metaphor for God highlights the idea of

authority and punishment (Dille 2004: 17–18). Considering the argumentation above, PUNISHMENT FROM GOD is the source domain for the virus; therefore, it is included in Table 1.

After the metaphors were thoroughly examined, several of them were classified under more general source domains for the sake of easier and clearer analysis. Nevertheless, the more concrete, subordinate-level metaphors are still included in the Table 1 with data analysis below. For instance, as can be seen in the table, such metaphors as COVID-19 IS A TURN, NEW STAGE, CROSSROAD and BUMPY ROAD were grouped under the source domain of JOURNEY, while under the source domain of WAR such metaphors as COVID-19 IS AN ENEMY, AGGRESSOR, SPY AND MISSILE IN THE CALM SKY can be found. Overall, 15 different source domains were distinguished. Undoubtedly, the grouping could be executed differently, for example, the COVID-19 IS A POLITICAL GAME metaphor could also be categorized under the GAME source domain. Furthermore, COVID-19 IS A POLITICAL GAME source domain is inherently metaphoric, since it is based on the metaphorization of politics as a game-like activity. However, respondents' short elaborations on why they have used one or the other metaphor were taken into consideration while grouping; thus, the classification decisions were based on the meaning the participants implied by the comparisons. Apart from that, one may argue that COVID-19 IS A NEW STAGE metaphor could be classified under the THEATRE PERFORMANCE source domain rather than under the JOURNEY source domain. However, it is important to once again emphasize that the research was conducted in the Russian language and during the translation process the word *stage* was chosen as the closest in meaning to the Russian word *эман*, which has a basic meaning of “промежуток времени, период, отмеченный каким-л. событием” ‘a period of time, a period characterized by some event’ (EED *эман* ‘stage’ <https://lexicography.online/explanatory/efremova/э/этан>) and a secondary meaning (which was intended by the participants based on their explanations) of “отдельная часть, отрезок какого-л. Пути” ‘a separate part, a segment of a journey’ (EED *эман* ‘stage’ <https://lexicography.online/explanatory/efremova/э/этан>). The Russian word, however, does not have meanings related to the theatre (EED *эман* ‘stage’ <https://lexicography.online/explanatory/efremova/э/этан>). Consequently, COVID-19 IS A NEW STAGE metaphor is classified under the source domain of JOURNEY.

The discussion section will provide a more detailed explanation of the meaning of certain conceptualizations. All in all, keeping subordinate-level metaphors in the final data set allows the present study to pay respect to the important details which can provide useful insights into differences in metaphorical conceptualizations in the two sample groups.



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	Total Count	Total Percent	Count (Doctors)	Count (Laypeople)	Percent (Doctors)	Percent (Laypeople)
JOURNEY	25	18.4%	22	3	16.2%	2.2%
TURN	9	6.6%	8	1	5.9%	0.7%
NEW STAGE	7	5.1%	5	2	3.7%	1.5%
CROSSROAD	7	5.1%	7	0	5.1%	0.0%
BUMPY ROAD	2	1.5%	2	0	1.5%	0.0%
WAR	24	17.6%	2	22	1.5%	16.2%
ENEMY	13	9.6%	0	13	0.0%	9.6%
WAR	4	2.9%	0	4	0.0%	2.9%
AGGRESSOR	3	2.2%	1	2	0.7%	1.5%
MISSILE IN THE CALM SKY	2	1.5%	0	2	0.0%	1.5%
SPY	2	1.5%	1	1	0.7%	0.7%
NATURAL DISASTER	17	12.5%	4	13	2.9%	9.6%
NATURAL DISASTER	11	8.1%	3	8	2.2%	5.9%
HURRICANE	3	2.2%	0	3	0.0%	2.2%
FIRE	2	1.5%	1	1	0.7%	0.7%
TSUNAMI	1	0.7%	0	1	0.0%	0.7%
PUZZLE	11	8.1%	11	0	8.1%	0.0%
PUZZLE TO BE SOLVED	6	4.4%	6	0	4.4%	0.0%
QUESTION TO BE ANSWERED	5	3.7%	5	0	3.7%	0.0%
CRISIS	10	7.4%	5	5	3.7%	3.7%
CRISIS	10	7.4%	5	5	3.7%	3.7%
LESSON	8	5.9%	5	3	3.7%	2.2%
LESSON	8	5.9%	5	3	3.7%	2.2%
CHALLENGE	7	5.1%	7	0	5.1%	0.0%
MARATHON	4	2.9%	4	0	2.9%	0.0%
CHALLENGE	3	2.2%	3	0	2.2%	0.0%
POLITICS	6	4.4%	1	5	0.7%	3.7%
POLITICAL GAME	6	4.4%	1	5	0.7%	3.7%
PUSH TO CHANGE	5	3.7%	5	0	3.7%	0.0%
PUSH TO CHANGE	5	3.7%	5	0	3.7%	0.0%
PUNISHMENT	4	2.9%	0	4	0.0%	2.9%
PUNISHMENT (FROM GOD)	4	2.9%	0	4	0.0%	2.9%
ANNOYANCE	4	2.9%	0	4	0.0%	2.9%
PAIN IN THE NECK	4	2.9%	0	4	0.0%	2.9%
FALSE ALARM	4	2.9%	0	4	0.0%	2.9%
FALSE ALARM	4	2.9%	0	4	0.0%	2.9%
PANDORA'S BOX	3	2.2%	2	1	1.5%	0.7%
PANDORA'S BOX	3	2.2%	2	1	1.5%	0.7%
GAME	2	1.5%	2	0	1.5%	0.0%
RUSSIAN ROULETTE	2	1.5%	2	0	1.5%	0.0%
MANIPULATOR	2	1.5%	0	2	0.0%	1.5%
MANIPULATOR	2	1.5%	0	2	0.0%	1.5%
MYSTERY	2	1.5%	0	2	0.0%	1.5%
MYSTERY (THRILLER)	2	1.5%	0	2	0.0%	1.5%
SOCIAL CATASTROPHE	2	1.5%	2	0	1.5%	0.0%
SOCIAL CATASTROPHE	2	1.5%	2	0	1.5%	0.0%
<b>Grand Total</b>	<b>136</b>	<b>100.0%</b>	<b>68</b>	<b>68</b>	<b>50.0%</b>	<b>50.0%</b>

*Table 1. Conceptualizations of Covid-19*

Table 1 presents the results of the research. The first column displays the metaphorical source domain, while the second and third columns, correspondingly, show the total number of tokens and percent of the occurrence of a particular conceptualization. The last four columns present the number of examples and percent of the occurrences of the metaphors found for two sample groups – doctors and laypeople. The data presented in Table 1 are organized from the most to the least common metaphors based on the occurrence of the metaphors in the total sample (doctors and laypeople together).

The first thing that becomes apparent when having a quick look at the table is the top 3 most commonly used metaphors: COVID-19 IS A JOURNEY (18.4 % of all the respondents used the JOURNEY metaphor), COVID-19 IS WAR (17,6%) and COVID-19 IS A NATURAL DISASTER (12.5%). On the one hand, it can be said that this finding is consistent with the claims of the previous research, as the COVID-19 IS WAR and COVID-19 IS A NATURAL DISASTER metaphors have been discussed and criticized by linguists, yet both of them are considered commonly used and rather conventional. On the other hand, the JOURNEY metaphor, being the most commonly used by the respondents in the present research, has not been discussed previously in the literature.

It is crucial to notice, however, that while the two most common conceptualizations for the total sample (doctors and laypeople together) established in the present research are COVID-19 IS A JOURNEY and COVID-19 IS WAR, the JOURNEY metaphor is almost exclusively used by doctors and the WAR metaphor is almost exclusively used by the office workers. It can be clearly seen that the JOURNEY metaphor, with the most common metaphor being COVID-19 IS A TURN, is the most popular conceptualization among doctors (16,5 % of the doctors used this metaphor), while only 2.2% of laypeople used the JOURNEY source domain.

Similarly, in the case of the COVID-19 IS WAR metaphor, 16,5 % of office workers used the WAR source domain to talk about Covid-19, making this conceptualization the most popular metaphor among the laypeople. Only 2 doctors conceptualized the virus as WAR. Interestingly, the most common subtype of the WAR metaphor is COVID-19 IS AN ENEMY, which supports the finding of the previous studies. The ENEMY metaphor, however, was used solely by the office workers, while the doctors that conceptualised Covid-19 through the WAR domain used the AGGRESSOR and SPY metaphors.

Moving further, the third most frequent conceptualization of Covid-19 was NATURAL DISASTER, and it was also mainly used by laypeople. Unexpectedly, only four doctors, compared to thirteen office workers, conceptualized the virus through this domain. The next most frequent metaphor, COVID-19 IS A PUZZLE, in turn, was used solely by doctors. 8,1% of doctors claimed that COVID-19 IS A PUZZLE TO BE SOLVED or A QUESTION TO BE ANSWERED.

Metaphors that follow the top four can be considered somewhat less conventional and less typical; nevertheless, they still play a huge role in identifying differences in conceptualizations of the virus between doctors and laypeople. For instance, while conceptualizations through such source domains as CRISIS, LESSON and PANDORA'S BOX were present in both sample groups, only laypeople used metaphors such as COVID-19 IS A FALSE ALARM, COVID-19 IS A MANIPULATOR, COVID-19 IS A PUNISHMENT FROM GOD, COVID-19 IS A MYSTERY and COVID-19 IS A PAIN IN THE NECK. Apart from that, COVID-19 IS A POLITICAL GAME was also almost solely used by the office workers, as only one doctor used the same conceptualization. At the same time, doctors had several interesting metaphors which were used uniquely by them, such as COVID-19 IS A CHALLENGE, COVID-19 IS A PUSH

TO CHANGE, COVID-19 IS A RUSSIAN ROULETTE and COVID-19 IS A SOCIAL CATASTROPHE.

Although the main differences between the conceptualizations of doctors and laypeople become evident from the presented data that support the hypothesis of the present research, it is important to further elaborate on the results in order to provide clear answers to the research questions.

## 5 Discussion

The aim of the present research, as was stated above, is to investigate the conceptualization of Covid-19 among doctors as well as compare it to the laypeople's conceptualization of the virus. The previous section has managed to show the results, yet certain aspects require more detailed elaborations.

To begin with, it is important to discuss the most frequently used metaphor among doctors; namely, COVID-19 IS A JOURNEY. Through this domain, doctors conceptualized the virus as a TURN, implying, mostly, that it is a turn in evolution or, sometimes, a turn in medical science. The TURN was also often described as “unexpected”. Similarly, when conceptualizing the virus as a NEW STAGE, doctors were thinking of an evolution, everyday life and medical science, saying that after Covid-19 many things will never go back to the way they were either in social life or in peoples' health. By conceptualizing Covid-19 as a CROSSROAD, doctors implied the choices every person has to make, such as isolating, getting vaccinated etc. Some doctors emphasized that the crossroads represent “crucial, life-saving choices” or even claimed that those have only one correct way. This metaphor manages to reflect the importance of individuals, which may produce desirable behaviours from people. Yet, some may understand this metaphor in an individualistic way and disregard the fact that their choices have a direct influence on others. Lastly, when talking about Covid-19 as a BUMPY ROAD, the doctors highlight the difficulties they face in their professional life. Overall, considering the explanations of the medical professionals, it can be said that the doctors prefer the JOURNEY metaphor as they view the pandemic as something which cannot be avoided and should be treated as a given. Their conceptualizations also suggest that the pandemic should be handled rationally by making the right choices by every individual. Apart from that, based on the extensive use of JOURNEY metaphors by doctors it can be hypothesized that they conceptualize their lives as doctors as a straight journey, while the diseases make tremendous changes in their career. Thus, COVID-19 IS A JOURNEY does not convey fear and danger but rather focuses on the differences and challenges it brings.

WAR metaphors, which seem to be almost fully rejected by doctors and most commonly used by laypeople, particularly highlight the danger of the virus, validate the need for strict measures and create a sense of common responsibility. While the WAR metaphor has certain advantages that could be beneficial in the pandemics, handling processes, doctors intuitively prefer calmer, more rational metaphors. Interestingly, even those two doctors who conceptualized Covid-19 through the WAR domain, used less conventional and less triggering metaphors with less salient and less central components of the WAR frame such as COVID-19 IS A SPY, implying that it silently got through international borders, and COVID-19 IS AN AGGRESSOR, implying that the virus starts conflict without a reason. Undoubtedly, COVID-19 IS A SPY metaphor usage is motivated by the cultural background of the respondents. When

you know the exact intention behind the two aforementioned metaphors, they could even be, arguably, put separately and not grouped under the WAR source domain.

At this point, it is important to refer to the work of Flusberg et al. (2018) in which they make several essential claims about WAR metaphors in public discourse. The researchers emphasize that WAR metaphors evoke a sense of fear, which, on the one hand, can be beneficial for motivating people to pay attention, to change their opinions and to recognise the danger of the disease (Flusberg et al. 2018: 6). At the same time, the researchers state that the fear caused by WAR metaphors can be harmful and de-motivating (Flusberg et al. 2018: 7). The present research clearly shows that doctors prefer different, fear-free ways to grab attention and promote desirable behaviour from laypeople. By using the peaceful JOURNEY metaphors, doctors manage to highlight the danger of the disease (COVID-19 IS A BUMPY ROAD) as well as foreground the importance of individual choices and behaviour (COVID-19 IS A CROSSROAD). The other metaphors used by doctors, such as COVID-19 IS A PUSH TO CHANGE and COVID-19 IS A LESSON, also target the change in public opinions and highlight the importance of behavioural changes during the pandemic. Based on doctors' metaphorization of the virus and their rejection of WAR metaphors, the present research tilts towards supporting the claim that war metaphors in medicine, especially in the description of the fast-spreading virus, can cause unnecessary panic and discourage people from taking prevention actions against the Covid-19. And although WAR metaphors seem to come naturally to laypeople (which can be supported by the present research based on the extensive use of WAR metaphors by the office workers), doctors lean towards more peaceful metaphors, which can come naturally based on their background knowledge and experience or be a conscious choice.

Based on the two most popular metaphors in the data set, it can be concluded that, as opposed to laypeople, doctors do not favour WAR metaphors, especially the more conventional ones such as COVID-19 IS AN ENEMY, which conveys the urge and the danger of the pandemic. On the contrary, doctors prefer the more rational and less violent metaphor of the JOURNEY, which puts the inevitability of the virus and the role of individual decisions in the foreground. From these two examples, it can be seen that doctors prefer more neutral, somewhat less conventional yet still powerful metaphors, while laypeople favour stronger, more aggressive, more explicit and more conventional metaphors for Covid-19.

The previous argumentation can be further supported with other examples from the data set; for instance, the NATURAL DISASTER source domain, which also promotes the danger and the urge of the virus, is preferred and is widely used by laypeople, while doctors are more cautious with its use. Medical professionals, in turn, prefer the PUZZLE TO BE SOLVED or QUESTION TO BE ANSWERED metaphors that highlight the importance of their work and the unpredictability of the virus. These metaphors also imply that the puzzle of Covid-19 is not solved yet; thus, people should be cautious and should be willing to accept certain restrictive measures that are imposed on them. Once again, even though the metaphors used by doctors are more neutral, they can still convey important messages regarding the virus without causing unnecessary panic among people.

The other metaphors that are favoured by doctors are COVID-19 IS A CHALLENGE and COVID-19 IS A MARATHON, the use of which helped them to highlight the obstacles they are facing in professional life, as well as the fact that everyone is facing difficulties and should "...strengthen up for the Covid-19 marathon". The LESSON metaphor, which is another popular conceptualization among doctors, carries a different meaning. By conceptualizing Covid-19 as a LESSON, doctors (5), as well as some laypeople (3), imply that the virus is

teaching us to appreciate those little things in everyday life which due to Covid-19 became unavailable. Seeing people's faces on the streets, breathing air without masks were the things mentioned among others.

The two other unconventional metaphors that some doctors use are COVID-19 IS A RUSSIAN ROULETTE and COVID-19 IS A SOCIAL CATASTROPHE. In the case of the RUSSIAN ROULETTE, doctors highlight the nature of the virus as, unfortunately, the outcome of getting it are unpredictable and can be deadly. This metaphor also suggests that every person who chooses to not get a vaccine or to be in crowded places with an unknown vaccination rate is pulling the trigger by himself or herself (e.g. "Covid-19 is a Russian roulette, because every person is playing it by attending crowded places and by not getting vaccinated."). The SOCIAL CATASTROPHE metaphor, in turn, views Covid as an event that highlights the weaknesses and vulnerabilities in the ways social life is organized.

Curiously, some laypeople conceptualized Covid-19 as a FALSE ALARM (4 respondents), referring to "The boy who cried wolf" story, and even as a MANIPULATOR (2 respondents). These respondents highlighted the fact that they do not believe in Covid-19 at all or, at least, do not consider it dangerous (e.g. "Covid-19 is a false alarm, because next time they will cry "wolf" we will not even care."). Apart from that, the aforementioned metaphors imply that the pandemic is manipulating people to the planet's advantage by making people "...stay at home and use less of the planet's resources" and even by "...manipulating the number of people on Earth to avoid overpopulation". The COVID-19 IS A POLITICAL GAME metaphor, also mostly used by office workers, carries a similar meaning and suggests that pandemic is nothing but a manipulation tool in the hands of politicians. The only doctor who conceptualized the virus in the same way highlighted that the pandemic situation is being used by governments; however, it is not created by them.

Finally, after the results were elaborated on in detail, clear answers to the research questions can be provided. The first research question aims to find out how doctors conceptualize Covid-19. The answer to this research question can be summed up in the following way:

- The most frequent conceptualization used by doctors is COVID-19 IS A JOURNEY, which highlights the inevitability of the virus and creates a sense of control over the life-saving decisions of every individual.
- The doctors almost entirely reject the WAR metaphors, which are the most conventional ones for representing Covid-19.
- Doctors prefer more neutral, more peaceful, rational and solution-oriented metaphors such as COVID-19 IS A JOURNEY, COVID-19 IS A PUZZLE TO BE SOLVED, COVID-19 IS A CHALLENGE and COVID-19 IS A PUSH TO CHANGE.
- The metaphors used by doctors highlight the role of individuals in the pandemic, which can produce desirable behaviours in society.
- Doctors tend to use metaphors that are least likely to cause panic and distress among people.
- As for conventionality, doctors use more unconventional metaphors for the virus across different source domains.

The second research question aims to uncover the main differences in the conceptualizations of Covid-19 between doctors and laypeople. The differences that were found by the present research include the following:

- Laypeople favour the COVID-19 IS WAR metaphor above all others, yet doctors almost fully reject it.
- Laypeople tend to conceptualize the virus focusing on its danger, threat and urge, while doctors conceptualize the virus in a more rational, solution-oriented way.
- At the same time, some laypeople doubt the danger of the virus and portray it as MANIPULATOR and FALSE ALARM, while doctors without specifically highlighting the danger of the virus always acknowledge its threat and promote cautious behaviours with their metaphors
- Laypeople tend to use more conventional metaphors, compared to doctors.

Although it is not the goal of the present research to find the reasons behind the conceptualizations of laypeople, it can be assumed, considering the previous research in the field, that their conceptualizations are highly influenced by the media, including political speeches. At the same time, however, it can be said that the WAR source domain comes naturally to be used in case of danger, especially in cultures such as Russian with a long history of wars. All in all, the hypothesis of the present research that there are considerable differences between the metaphorical conceptualization of the virus between doctors and laypeople was supported by the analyzed data and, therefore, can be accepted.

## 5.2 Criticism of the FIRE metaphor

As was discussed in detail in the methodology section, 68 doctors took part in the present study. While the answers to the questionnaires were received by email, 15 doctors were contacted by phone call to receive some further explanations and reasoning behind the metaphor they provided. During the conversations, current issues of Covid-19 pandemic including vaccination and representation of the virus were discussed. Seeing that the doctors were, indeed, concerned about the conceptualization of Covid-19 and were therefore interested in the present study, it was a great opportunity to ask their opinion on FIRE metaphors, which were considered the most apt for the Coronavirus, as discussed above (Semino 2021). During the discussion, some useful insights from the doctor's perspective were collected. The doctors' opinions and concerns were then analyzed within the linguistic framework, expanded with further thoughts and will be summed up in the present section. It is important to mention beforehand that the doctors involved in the research were Russian; thus, the conceptualizations and opinions could be culture-specific.

To begin with, the COVID IS FIRE metaphor was introduced to the doctors. Overall, doctors approved the metaphor, their most immediate reaction being the emphasis that the COVID-19 IS FIRE metaphor is more apt and more ethical than WAR metaphors, which, as the present research has shown, are almost entirely rejected by doctors. They mentioned that the COVID-19 IS FIRE metaphor effectively represents the contagion, urgency and danger of the disease, as well as successfully showing different stages of the pandemic.

Nevertheless, some doctors had several concerns about the aforementioned metaphor. One of the arguments against the COVID-19 IS FIRE metaphor was that fire does not always involve danger to human life. Indeed, in some cases fires cause harm to nature (forest fires) and property (vacant burning at night). In the case of Covid-19, doctors emphasize, the danger is present exclusively in relation to human life; thus, saving lives is the only priority during Covid-19. Therefore, the COVID-19 IS FIRE metaphor, while being able to convey the danger of the virus at first glance, does not necessarily focus on the threat to life. The response to the FIRE metaphor

from some people can therefore include distress about their business, job, etc. that, as doctors highlight, is not desirable during the global pandemic and can cause unwanted behaviours.

Apart from that, the doctors mentioned another crucial point – the FIRE metaphor omits the call for action for laypeople. For the most part, when serious fires are happening there are no expectation towards the laypeople. Undoubtedly, no one urges people to get buckets of water and help to stop the fire. Moreover, if we consider additional mappings through the FIRE frame, which will be discussed further in detail, doctors are conceptualized as firefighters; thus, FIRE metaphors assume that actions will be performed solely by them. In the case of Covid-19, however, every person has a direct influence on the course of the pandemic. By staying at home when experiencing any symptoms of the virus, getting vaccinated and persuading family members to get vaccinated, every person has a crucial role in stopping the spread of the virus. The FIRE metaphor, unfortunately, fails to emphasize the crucial role of a single person on the outcomes of the pandemic.

The next point of criticism regarding the COVID-19 IS FIRE metaphor had to do with the fact that fires tend to be rather localized problems, while pandemics are, undoubtedly, a global issue. By not highlighting the globality of the Covid-19 problem, the FIRE metaphors once again leave out the call for action – a call for unity to laypeople and doctors around the world. Needless to say, the sense of unity and responsibility would result in desirable behaviours which are crucial in putting an end to pandemics.

Moving further, the doctors were introduced with an additional mapping through the FIRE source domain; namely, DOCTORS ARE FIREFIGHTERS. As opposed to COVID-19 IS FIRE, the DOCTORS ARE FIREFIGHTERS mapping was not met positively, with doctors being somewhat confused and their immediate reaction being “it doesn't feel right”. The reason for such a reaction, on the one hand, can lie in fundamental differences between the two professions. While representatives of both professions are, without any doubts, heroes with the main goal to help people, doctors are providing highly qualified help and performing intellectual work which, during the pandemic, combines with physical labour. Firefighters, in turn, are mostly involved in hard physical work. Another tremendous difference lies in the prerequisites of the two professions; more precisely, to become a doctor, high education is required which can take up to 14 years in some countries, while firefighters are required to have a high school diploma alongside several qualification certificates. Although many firefighters are trained as paramedics, it is not always a requirement.

On the other hand, the doctors' confusion can be explained by specific conceptualizations of firefighters. For instance, at least in Russian culture, firefighters are not always associated with saving lives. Many people can at first link this profession to saving property and prevention actions that are usually performed at schools, office buildings etc, as this is what people experience more often. Therefore, it is important to keep in mind that different people can conceptualize firefighters in different ways.

When it comes to saving lives, doctors and firefighters still have crucial differences. Firefighters put their lives on the line to protect others by removing them from the fire (area), getting them to safety and providing first medical help. It is important to emphasize, however, that most of the time victims of fire require further medical attention which is provided by doctors. Thus, the danger to human life is not fully eliminated until a professional medical check is performed, which clearly shows that doctors and firefighters work closely together in protecting people and, in the case of fires, could not do it without each other. Consequently, by using the DOCTORS ARE FIREFIGHTERS metaphors in regard to the pandemic, one neglects the role

of doctors in saving people during fires, which is not fully appropriate. Furthermore, for doctors, as opposed to firefighters, saving lives can be a long process, especially during a pandemic. At the same time, most doctors have to constantly communicate with patients' families, which can be extremely challenging during the pandemic as visiting sick individuals is strictly prohibited.

Apart from that, while in the case of fire there is usually something or someone to blame, there is none to blame for Covid-19. As a result, families of Covid-19 patients, especially those who do not believe in Covid-19 being a deadly virus, blame doctors for not doing their job properly or start finding other explanations that lead to racism, nationalism etc. All in all, as most fires have a clear cause, the COVID-19 IS FIRE metaphor implies that there is someone or something to blame, which invites people to look for different biased explanations and, as a result, put additional pressure on doctors and cause undesirable behaviours.

The last and, presumably, the most important point why doctors reject the DOCTORS ARE FIREFIGHTERS metaphor use in regard to the pandemic is the fact that while firefighters are clearly aware of the fact that they will have to risk their lives and agree to it, doctors do not. Unfortunately, it is a known fact that firefighters put their lives at risk on a daily basis, yet it is the heroic path they have chosen with all its dangers. Nevertheless, most doctors were not ready to put their and their families' lives at risk every day without having an actual or moral choice to say no.

With all the facts mentioned above, it can be seen that while the COVID-19 IS FIRE metaphor is indeed apt for the pandemic despite the criticism, DOCTORS ARE FIREFIGHTERS is not the best way to talk about the medical professionals as it causes them discomfort and uneasiness. The work of Semino (2021) succeeds in investigating the strength of the COVID-19 IS FIRE metaphor in general discourse, while mentioning a few of its disadvantages from the perspective of the general audience. The DOCTORS ARE FIREFIGHTERS metaphor, however, is not discussed in detail. At the same time, Semino's (2021) investigation is based on #ReframeCovid collection and a large corpus of news articles in English; thus, the sample does not focus on including medical professionals but rather aims to include a large number of people with different backgrounds. On the contrary, the present work prioritizes the opinions of the medical professionals who have academic validity of the acquired knowledge of the Covid-19 topic. While only 15 doctors were asked to provide their opinions on the FIRE metaphors, none of them met the metaphor positively and, although this small sample is not sufficient to draw conclusions about Russian doctors' conceptualization in general, and further research with a larger sample is necessary, it was important to make this remark in the present research. The present paper addresses the issue of the DOCTORS ARE FIREFIGHTERS appropriateness as it aims to emphasize the importance of making sure that doctors feel comfortable with the metaphor which is advised to use to conceptualize their contributions to the pandemics. Without any doubt, it is crucial to take into consideration the opinions of those who are directly responsible for handling the pandemic.

## **6 Conclusions**

Since December 2019 Covid-19 has spread throughout the world at a dangerously fast pace and soon become a global pandemic. The virus, which is often talked about metaphorically, is the most frequently discussed subject nowadays. Many linguists have investigated the metaphorical conceptualizations of the virus, discovering that COVID-19 IS WAR can be considered one of the most widely used metaphors for the virus. Apart from that, researchers criticized the WAR



metaphors and suggested that COVID-19 IS FIRE is more apt for describing the pandemic (Semino 2021). Nevertheless, the available literature has not yet looked at the virus from the perspective of the doctors, which would be a crucial viewpoint to consider when communicating. Therefore, this novel research has aimed to find out how medical professionals conceptualize Covid-19 and, apart from that, to discover the main differences in conceptualizations of the virus between doctors and laypeople.

After providing criticism of the FIRE metaphors from the doctors' perspective, the paper introduced the research methodology and moved to the results. With regard to the first research question, the results revealed that doctors prefer more neutral, more rational metaphors for conceptualizing Covid-19, with the most popular metaphors being COVID-19 IS A JOURNEY, COVID-19 IS A PUZZLE TO BE SOLVED OR QUESTION TO BE ANSWERED and COVID-19 IS A CHALLENGE. The metaphors focus on emphasizing the role of individuals in the course of the pandemic and promotes solution-oriented approach to the virus, yet the metaphors do not downplay the hardships brought by Covid-19.

As for the second research question, the results suggest that there are several crucial differences in the conceptualization of Covid-19 between doctors and laypeople. Overall, the present research emphasizes the importance of doctors' opinions regarding the conceptualizations of medical matters. In regard to the pandemics, it is crucial to further explore metaphorical conceptualizations of Covid-19 among doctors in order to improve communication of the virus. Carefully investigating the metaphors among medical professionals will allow us to avoid the mistakes which were made in the representation of pandemics; thus, we will be prepared for the next unexpected turn in our lives.

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