Are There Doctors Who Don't Believe in the Vaccine: Interpretative Phenomenological Analysis

Sergei Korchevoi (sarakonor@yandex.ru)
https://orcid.org/0000-0003-1161-6778
Alexey Petraikin

Research Article

Keywords: qualitative research, phenomenology, vaccine hesitancy, rationality, COVID-19

Posted Date: December 28th, 2021

DOI: https://doi.org/10.21203/rs.3.rs-1195785/v1

Abstract

This research aims to shed some light on one of the facets of how the information flow including that in the media relates to one's real vaccine hesitancy. Specifically, we are interested in the possible input of medical experts' opinions on formation of people's attitude towards vaccine hesitancy. Phenomenology was chosen as the methodological and epistemological base for the study. The obtained description of the experience and attitudes of medical workers who feel vaccine hesitancy can contribute to further studies of challenges spawned not only by the current COVID-19 pandemic but can also provide hints in other situations of social turmoil.

Introduction

The situation with COVID-19 pandemic is still far from any successful resolution even though the world's most advanced scientific medical conglomerates and research institutes have been able to produce a variety of vaccines. The pandemic has made it clear that the solutions for such devastative phenomena cannot rest solely on scientific medical results; various dimensions of social interrelations should be taken into consideration. In particular, a somewhat unexpected effect occurred, i.e. countries are now facing 'vaccine hesitancy and "fake news" related to vaccination' (Kanozia & Arya, 2021: 1). This research aims to shed some light on one of the facets of how the information flow including that in the media relates to one's real vaccine hesitancy. Specifically, we are interested in the possible input of medical experts' opinions on formation of people's attitude towards vaccine hesitancy. 'Evidence shows that individuals turn to the Internet for vaccination advice, and suggests such sources can impact vaccination decisions' (Kata, 2012: 3778). Many of possible gaps in social processes afflicting vaccination have been listed in various research, e.g., lack of transparent information about the pandemic, short time span for launching the vaccination, etc. (Kanozia & Arya, 2021). However, if misinformation relies on some sort of scientifically verified appeals, it can have drastic consequences on people's vaccination intent (Loomba et al., 2021). As common wisdom tells us, doctor knows better.

Researchers have established the context for the current study (Korchevoi and Petraikin, 2021). In short, the study is concerned with the vaccination situation in Russia. Despite the fact that the Russian medicine came out with a more or less effective vaccine - Sputnik V, the rate of vaccination at the beginning of this study in July 2021 was about 12,58% (Gam Kovid Vak, 2021). The same source tells us that in December 2021 40,2% have been vaccinated with both components of the vaccine. This rate seems to be unsatisfactory even if we put aside the concerns regarding the reliability of the above estimation. Thus, in Russia we have a broad opposition toward vaccination.

Researchers also noted that from time to time, media produce click baits such as "Questionnaire has demonstrated doctors' distrust in anti-COVID vaccine" that seem to bare a scientific reliability (RBC, 2020). Unfortunately, a closer look does not allow us to understand neither the methodological apparatus nor the statistical significance of such questionnaires. A brief analysis of search terms in the Russian Internet has been conducted (Korchevoi and Petraikin, 2021). It has shown that though there is growing

number of web searches about doctors' "dissident" opinion, it is insignificant in its total value and unlikely to keenly affect people's decisions. Yet, the question still remains: are there doctors who don't believe in vaccine? And if there are, then what is their experience and attitude toward the pandemic and the vaccines?

The researchers suppose that given a multifaceted complexity of social issues raised during the pandemic, a qualitative approach should be adopted to disclose the attitudes of particular social strata. Thus, phenomenology was chosen as the methodological and epistemological base for further consideration.

Methodology And Sampling

Given the above context and to draw the area of the research formally, the research questions have been formed as the following:

- How is the COVID-19 pandemic perceived by doctors who feel vaccine hesitancy?
- How does doctors' lived experience influence their rationality and epistemological capacity?

Note that term "vaccine hesitancy" is not understood in this research as vaccine denial but as a position of cautiousness or hesitance in situations when a doctor has to form a recommendation for a patient to get a vaccine.

The data was collected by performing a series of semi-structured open-ended interviews with medical workers. An ethical approval by protocol 171 of Ethical committee of State Healthcare Institution of Moscow "Morozovskaya Children's City Clinical Hospital" was obtained on July 20, 2021. Every interviewee was given a consent form to sign. Interviewees were informed of their right to withdraw from the interview and about the process of audio recording.

For sampling purposes, researchers applied purposive sampling procedures. The researcher invited doctors with whom he is acquainted to participate. Also, the researcher used the snow-ball method based on a wider circle of relation. There were two criteria for the sample: first is the above vaccine hesitancy; second is personal experience of treatment of COVID-19 patients.

The interview template contains a set of open-ended questions. For example, such questions as "What is your perception of the severity of the current COVID-19 pandemic in the world (in Russia)?" or "Can you describe your attitude towards having already been vaccinated or getting a vaccine soon?" were asked.

The interviews were recorded and transcribed verbatim. Also, translations of the explications from the interviews into English were made by the authors. Anonymization of the data was made for to minimize the risk of possible harm for the participants.

Interpretative Phenomenological Approach (IPA) paradigm was chosen as the method for analysis of the collected data. IPA is rapidly growing and has already become a respectful qualitative approach in social

sciences (Smith and Eatough, 2018). The scope of research problems embraced by the IPA is wide: from experience of patients with brain injury (Dwyer et al., 2019) to perceptions of persons recovering from addiction (Rodriguez and Smith, 2014; Shinebourne and Smith, 2009). Thus, 'IPA is a suitable approach when one is trying to find out how individuals are perceiving the particular situations they are facing, how they are making sense of their personal and social world' (Smith and Osborn, 2003: 55).

A set of emergent themes was extracted from the data. The data was analyzed in a sequence: case by case. The procedure of verification was made by researchers through mutual analysis. The process of coding has been done in Russian and the results were presented in written English. This sequence helped to bracket some of the meanings that the researchers may have inserted in the process of translating the raw data. The themes were ordered chronologically. After that, clustering of themes has been done that 'involves a more analytical or theoretical ordering, as the researcher tries to make sense of the connections between themes which are emerging' (Smith and Osborn, 2003: 70). As a result, a list of superordinate themes and subthemes was formed.

During data analysis, the researchers kept as a focal point the need for 'the "bracketing" of researcher's personal experience from that of the research participants' "lived experiences"' (Alase, 2017: 10). However, some of the researchers' biases are impossible to exclude. Thus, we inform readers that one of the authors is a Doctor of Medicine working in radiology; the other has been involved in therapy of addicts for more than 10 years. The researchers have no doubts about the usefulness of vaccination and evaluate the risks of vaccination to be much less than the side effects of suffering from the COVID-19.

To reach data saturation (Fusch and Ness, 2015) 6 (six) interviews were performed. The table below outlines the characteristics the participants.

Pseudonym	Gender	Age	Marital status	Medical specialization	Duration of the interview
Doctor D.	Male	48	Marred	Radiologist	65 min.
Doctor I.	Female	55	Divorced	Family doctor	45 min.
Doctor V.	Female	26	Single	Paediatrician	35 min.
Doctor N.	Female	27	Single	Otolaryngologist	30 min.
Doctor K.	Male	25	Single	Otolaryngologist	30 min.
Doctor T.	Male	40	Marred	Surgeon	40 min.

Findings

The section is a narrative consisting of three superordinate themes and 11 subthemes. Those themes were formulated as results of applying the Phenomenological Interpretative analysis methodology. The researchers have leaned on criteria outlined by Nizza et al. (2021) paying special attention to the

meanings the participants put in their words and the convergence and divergence of themes. Suitable extracts from seven participant interviews have been inserted in the narrative. All the extracts below are translations made by the authors because initially the interviews have been fulfilled in Russian. The audited non-verbal utterances (such as laughter) and pauses (longer than 3 seconds) were bracketed. Using of ellipsis is standard. The prime objective of the translations was to preserve participant's meanings. Below we provide the structure of themes.

1. Pandemic and vaccination are not only medical problems any more.

1.1. Vaccination isn't solely a medical issue but a political, social, and psychological one.

1.2. There is administrative coercion applied to medical community
1.3. Availability of vaccines produced in other countries is a symbol of free will.
2. A doctor voluntarily narrows her epistemological horizon as a result of employment of a more meticulous analytical approach.

2.1. Official statistic, speakers, and administrative decision-making procedures cannot be trusted.

2.2. Rationality and logic have been lost in the current administrative decisions and the social policy concerning the pandemic.

2.3. There is a need for rational assessment of risks and side effects when vaccination is proposed to various social strata.

2.4. Verification of the information about the pandemic, COVID-19 mutations, side effects, and vaccine efficiency is made through personal professional communications.

2.5. Vaccine Sputnik V is not worse than others produced and recognized in other countries.

3. Professional ethic and personal emotions are often in conflict.

3.1. Doctors' perception of pandemic confirms that our life has changed irreversibly.

3.2. There is anxiety and tension spawned by possible risks for close friends and family members.

3.3. It is somewhat unfair to endow medical workers with the total responsibility for what is happening in society during the pandemic.

The first superordinate theme "Pandemic and vaccination are not only medical problems any more" involves social dimension in the participants' narrative. We can say that all of our interviewees express one or another aspect of this theme. It is important to note that many of them have raise moral or ethical issues connected with the situation of the pandemic. It is unlikely that the prompts used during the interviews have moved participants to observe that 'administrative units, all of them, and they are trying to find use of it for themselves but the virus is using them' (Doctor D, 2021).

The subtheme “Vaccination isn’t solely a medical issue but a political, social, and psychological one” is well supported. While four of our participants pointed to the moral issue of free will, e.g., ‘had there been a choice, that you could shoot a foreign one or something [pause] I think – yes [pause]I would give it a thought’ (Doctor N, 2021), the others concentrate on social problems, e.g. people resist vaccination ‘because the administrative resources will hold their frame’ (Doctor D.). Thus, ‘there’s an impression that there is some kind of marketing [pause] pressure, yes. Something else gets mixed in with the medicine, yes, yes’ (Doctor I, 2021).

Next subtheme “There is administrative coercion applied to medical community” was expressed unanimously by all participants. Their utterances were quite straightforward: ‘such are the instruction [pause] In professional activity [pause] uh in order to work and [pause] I would maybe not do it but they told me and I did’ (Doctor K, 2021). Orders from administrations could sound as ultimatum: ‘it all took place in a sort of an implied mandatory form. We either say good bye or we get vaccinated, like that.’ (Doctor V, 2021). Doctor T. almost repeats it verbatim: ‘I’ll put it this way: I would not have done it myself voluntarily. This is unambiguous, not voluntarily. But the management said: those unvaccinated can’t work.’ (Doctor T, 2021). Also, there is a problem with doctors who have medical conditions that make vaccination undesirable for them. For example, Doctor I. has arthritis; consequently, she is discriminated. ‘You know, I have medical exemption clear to anyone. And nevertheless, I am in the group discriminated by this criterion. I will not get the QR code. I have a medical exemption but here I am, already a second-rate quality person because of the QR code’ (Doctor I, 2021).

We put the subtheme “Availability of vaccines produced in other countries is a symbol of free will” under the above superordinate theme because of its ethical facet though the theme is connected to the issue of reliability of existing Russian vaccine which will be discussed below. All participants except for one expressed that availability of vaccines produced in other countries would widen peoples’ options to choose. ‘The sensation of freedom, of course. You can choose what you want’ (Doctor T, 2021). Yet, they were rather uncertain that it will influence the pandemic dynamic significantly. Such care about psychological well-being is unlikely to be deployed by the administration: ‘Well, of course with pink sunglasses on and diving into the world of pink ponies where everything is free, well [pause] maybe it would have softened. But we live in Russia, after all [laughter]’ (Doctor V, 2021).

The second superordinate theme “A doctor voluntarily narrows her epistemological horizon as a result of employment of a more meticulous analytical approach” seems to be the most important and yet unexpected finding. It highlights the epistemological status of our participants who experience difficulties holding their rationality: ‘When there are a lot of orientation cues, it means there are no orientation cues’ (Doctor D.).

The subtheme “Official statistic, speakers, and administrative decision-making procedures cannot be trusted” was expressed by all interviewed doctors in a very straight manner: ‘so [pause] ehm [pause] it’s not very clear to me this game with statistics and somewhere it’s exaggeration, in others it’s detraction and I don’t really understand for what all of that was done’ (Doctor V, 2021). Doctor T. says that ‘нам не

говорят правду' (Doctor T, 2021). Doctor D. puts it as total distrust to officials: 'we have already developed a, so to speak, idiosyncrasy. Just something like, everything that the hand of the management touches turns into, yes, garbage, into garbage' (Doctor D, 2021). Such distrust does not seem to be a mere opinion because of the existence of keen cases seen by participants. It is worth to insert a long explication from the experience of Doctor N. She says that the protocols of the second stage of Sputnik V trial could be somewhat compromised.

Yes, I was on duty for vaccines when I saw crowds of people, when this study took place, crowds of people being brought, give them shots and shots, their salaries were revoked [pause]. Well, this prompts some distrust towards all of this. When people are forced. When they come, they ask, teary eyed: please, give me a medical exemption. You understand, you sit there [pause] you were told [pause] the Health Ministry said not to give medical exemptions. Well, it wasn't very [pause] I was there how long? About four months that study lasted.

Doctor N (2021)

Also Doctor N's observations show that the sample in the above trial could be clusterized: 'they brought in crowds of immigrant workers who had no choice, all the butchers, all the communal services employee' (Doctor N, 2021)

Taking into account the above concerns about the reliability of information, the next subtheme "Rationality and logic have been lost in the current administrative decisions and social policy concerning the pandemic" looks almost as modus ponens. The appeal to the need of logic was verbalized in similar terms by all participants except for one. For example, one's thinking may follow as this: 'We were put in quarantine then, when there were three hundred sick. Now, when there are 50 – 10 thousand sick in Moscow [pause] we are wandering around and leading a regular life, in general' (Doctor N, 2021). Consequently, 'Of course, I understand that they want, like, mass vaccination so that nobody was sick. But it comes out illogical' (Doctor N, 2021). Similarly, the validness of official communiques is often a failure: 'Well [pause] well it just neutralizes everything. One argument destroys another argument' (Doctor D,2021).

Next subtheme is "There is a need for rational assessment of risks and side effects when vaccination is proposed to various social strata". The participants have demonstrated the most diverse spectrum of opinions here. Given the discrepancies in their opinions, we count this subtheme as an umbrella for participants' attempts to make sense in situations of communication with patients. Thus, such opinions about vaccination as 'to an eighteen-year-old I would advise to get sick' (Doctor I, 2021) and 'if it is a young guy, I tell him: yes, go for it and don't worry if you don't have any chronic diseases (Doctor K, 2021) are in one basket. What is in common among all those different approaches is a unanimous opinion that recommendation of vaccination should be more cautious considering the patient's health conditions: 'Well, of course I will say to get examined, well, at least get a blood analysis and a PCR, that are, well, at least a week old. I will advise an examination first' (Doctor I, 2021).

The subtheme “Verification of the information about the pandemic, COVID-19 mutations, side effects, and vaccine efficiency is made through personal professional communications” was the most unexpected finding. Only two among the participants stated clearly that they made themselves familiar with some research dedicated to Sputnik V published in peer-reviewed journals. Yet, all of our participants asserted that the most credibility is given to the evidences obtained from their close colleagues or the observed cases: ‘these are rather not even articles, but some [pause] conversations with the knowing people [pause]. Articles - there is one decent one, maybe a couple. The majority of it is stories from the experience of such knowing people’ (Doctor K, 2021) Often, the experience of the work in the field seems to be in contradiction with the so-called official medical practice: ‘When you ask the doctors, the ones that practice, they, too, are like: what is this?!’ (Doctor I, 2021). Finally, some statistically unverified information may begin to influence doctors’ opinion: ‘well [pause] as far as I've heard, let's say, if we're talking about pregnant women who have been infected with COVID during the 2-3 trimester [pause] they are different. Their children are born deaf’ (Doctor V, 2021). This statement appeared interesting to the researchers; therefore, a clarifying question was asked and the response fell into the subtheme: ‘It’s rather something personal, also, by smaller groups. With doctors. That is, they began to notice that the newborns of the mothers who have had COVID, they have a problem with hearing’ (Doctor V.).

The subtheme ‘Vaccine Sputnik V is not worse than others produced and recognized in other countries’ is connected to other superordinate themes because it was linked in interviews with the issue of vaccination policy. Yet, we put this subtheme in the thread connected with epistemological problems for two reasons. First, it is unlikely that this subtheme was prompted by the structure of interview questions. Second, the rationality of participants’ thinking demonstrated some interesting features. All but one participant asserted that Sputnik V is not worse than any other vaccines; they did not say that Sputnik V is more efficient than the others. The unfolded meaning of participants’ propositions was formed in line of comparisons of side effects: ‘everywhere there are the same problems with these vaccines’ (Doctor K, 2021). Another reason for the subtheme was that the doctors trust Russian scientific school in the area of virology: ‘I do believe in Russian science. And I don’t think it’s worse’ (Doctor V, 2021). We should note that the only doctor who avoided straight assessment of Sputnik V was a person who took part in vaccine tasting procedures and had personal experience and feelings that those procedures could be somewhat compromised.

The last superordinate theme “Professional ethic and personal emotions are often in conflict” highlights psychological problems and pitfalls experienced by the participants. All participants support the subtheme “Doctors’ perception of pandemic confirms that our life has changed irreversibly” unanimously: ‘The virus progresses, the virus is changing’ (Doctor D, 2021). In other words, as Doctor N quotes her colleague: ‘your life will not be the same [pause]’ (Doctor N, 2021).

The subtheme “There is anxiety and tension spawned by possible risks for close friends and family members” could be prompted by the interviewer’s questions. Yet, the difference in the degree of anxiety among the doctors regarding themselves and their families and friends should be attributed to their inner

milieu: ‘Myself, I am not afraid of getting sick. So. The main concern is the parents and the elderly [pause] eh [pause] For those I am concerned’ (Doctor K, 2021).

What was unexpected for the researchers is the last subtheme “It is somewhat unfair to endow medical workers with the total responsibility for what is happening in society during the pandemic”. Interviewees have raised this issue without any prompts from the interviewer: ‘what I am being injected with I don’t know, I don’t know the side effects, no insurance is provided, yes, for the period of this vaccination [pause] yes. And it turns out that it’s a bit dishonest option’ (Doctor I, 2021). This subtheme appeared in more than half of the interviews and was mostly at a rather unconscious level. For example, when such sentence as ‘I will definitely not talk anyone into it’ (Doctor D, 2021) and ‘I have my own small family here’ (Doctor D, 2021) occurred in the same context of recommendations for their patients, researchers suppose that this is a problem of cognizing the personal level of responsibility of the doctors. Thus, sometimes a doctor can try to employ a personal mode of communication with someone who asks for a vaccine recommendation: ‘I am cautious towards it. I respond: I got vaccinated and nothing has happened to me’ (doctor T, 2021).

We hope that the above description sheds some light on rationality of doctors who may experience vaccine hesitancy. Yet the very term “vaccine hesitancy” may mislead us. One may suppose that “vaccine hesitancy” is a kind of vaccine denial. Another approach is that it is rather a cautious assessment of problems related to vaccines without too much of excitement and enthusiasm. Further we’ll discuss briefly the implications of our findings.

Discussion

Primarily, the article aims to provide a rich description of experience of medical workers inclined towards vaccine hesitancy; thus, the following discussion will cover only some possible implications from the description of the above experience. Readers are entitled to draw their own conclusions using this description as an antecedent for an argument.

We can observe an unexpected outcome that follows from the above second subtheme, i.e., there is a knowledge gap between a practitioner and a researcher in the field of medicine. In other words, knowledge obtained in a lab is not transmitted easily and unequivocally into treatment protocols. ‘Well, for the start [pause] at a scientific conference we are being told everything, everything is scientifically justified. When you begin to implement a drug, you realize it’s crap, pardon me’ (Doctor I, 2021). Doctor N. says that people who work in labs ‘have not seen the medical life [pause] I think these, perhaps, are the ones who say “go vaccinate” [pause]’ (2021). Such a gap can be worth a further study in a context wider than just the COVID-19 pandemic.

However, we are questioning the rationality employed by the doctors whose epistemological attitude is keenly cautious. Does it slide into irrational conspiracy? One may find evidence that it does in our participants’ phrases. Doctor I. has said that the virus is “artificial”. Yet, when asked to clarify the term, she elaborated that the virus was not created. She said that rather a natural virus was somehow modified

in a lab and later infected the population by a researcher's mistake. Doctor D. thought that the virus is used to control people. He also clarified that it was not planned initially, but when it spread, bureaucracy took advantage of the occasion. We would not call the above opinions irrational. They seem to render attempts to make sense in the situation. Yet how can one explain the situation when a doctor voluntarily narrows her epistemological horizon by questioning almost any cognition related to COVID-19? Further we provide one possible epistemological view underpinning rationality of a person who sees all COVID-19 related arguments as "begging the question".

There is a "contextualist" approach to solve one daunting epistemological problem, i.e. sceptical argument (Neta, 2002). Simply put, the sceptical argument says that one may find herself in a very epistemologically unfriendly environment and, therefore, one may lack knowledge of very basic propositions. Contextualism claims that that 'the verb "to know" is context-sensitive in its semantics' (Neta, 2002: 665). In other words, a rational person has an obligation to increase the degree of reliability of obtained evidences should she suspect that she is a victim of a sceptical scenario. We should note that there are other epistemological solutions to the above problem, e.g. Wittgensteinian hinge epistemology (Pritchard, 2016). We are not proponents of contextualism nor are we in opposition to it; its pro and contra shall be left to epistemologists. Yet we find this approach to be illustrative for the problem of "hesitant" doctors. The participants in our study reasonably can define their environment as epistemically unfriendly because of the lack of reliable statistical data, distrust to official assertions, etc. Thus, the attitude of doubting various evidence related to the pandemic can be seen not only as rational attitude but even as an epistemological obligation. Also, consider the ethical and psychological costs linked to a possible failure of a practising doctor. While a lab researcher operates with big numbers and statistic, a practitioner faces death of an individual.

Finally, we would like to list two problems among presumably many others that constitute the above epistemological unfriendly environment. The first problem is the absence of a unified reliable database consisting of information about the COVID-19 pandemic. This source could include data on vaccines' efficacy, links to scientific publications, publications in the press, as well as the results of crowd-sourcing studies and other possible available information, including social networks. It is necessary that the information in such database is ranked by its reliability and by degrees of medical literacy of a particular source of information: from ordinary residents to experts. The second problem is the lack of COVID-19 experts with a broad area of expertise whose knowledge and skills can be reliable for an assessment of the COVID-19 problem and issues related to vaccination including their medical and non-medical facets.

Conclusion

The obtained description of the experience and attitudes of medical workers who feel vaccine hesitancy can contribute to further studies of challenges spawned not only by the current COVID-19 pandemic but can also provide hints in other situations of social turmoil. Often, we tend to think that science shall provide all the needed answers; yet there can be a gap between scientific results and their

implementations in practice. When many social layers are likely to be touched by the proposed implementations, more efforts should be directed towards the search of a proper equilibrium.

Concerning media rumours that sometimes render as clickbait headings, we conclude that one is able to find some terms linked to conspiracy theories during a conversation with a medical worker. Yet those terms do not define the epistemological attitude of the interlocutor. Thus, the credit for the appearance of the rumours rather belongs to the interpreter.

Declarations

Competing interests: The authors declare no competing interests.

References

Alase A., (2017) The Interpretative Phenomenological Analysis (IPA): A Guide to a Good Qualitative Research Approach. *International Journal of Education & Literacy Studies* Vol. 5 No. 2, pp. 9-19

Doctor D. (2021) Interviewed by: Korchevoi, S. 26-th of July.

Doctor I. (2021) Interviewed by: Korchevoi, S. 31-st of July.

Doctor K. (2021) Interviewed by: Korchevoi, S. 19-th of August.

Doctor N. (2021) Interviewed by: Korchevoi, S. 19-th of August.

Doctor T. (2021) Interviewed by: Korchevoi, S. 19-th of August.

Doctor V. (2021) Interviewed by: Korchevoi, S. 19-th of August.

Dwyer, A., Heary C., Ward M., and P. MacNeela (2019) Adding insult to brain injury: Young adults' experiences of residing in nursing homes following acquired brain injury. *Disability and Rehabilitation* 41 (1), pp. 33–43. doi:10.1080/09638288.2017.1370732.

Gam Kovid Vak (2021) Сколько привито от коронавируса в России на 7 июля [The number of the vaccinated in Russia by July 7, 2021] Available at https://gam-kovid-vak.ru/skolko-privito-ot-koronavirusa-v-rossii-na-7-iyulya/ (assessed 07/07/2021)

Fusch, P.I. & Ness, L.R. (2015) Are we there yet? Data saturation in qualitative research. *The Qualitative Report*. 20(9) pp.1408-1416. Available at: http://nsuworks.nova.edu/cgi/viewcontent.cgi?article=2281&context=tqr (Accessed: 19/07/2017)

Kanozia, R. & Arya, R. (2021): "Fake news", religion, and COVID-19 vaccine hesitancy in India, Pakistan, and Bangladesh, *Media Asia*, DOI: 10.1080/01296612.2021.1921963

Kata, A. (2012). Anti-vaccine activists, web 2.0, and the postmodern paradigm - an overview of tactics and tropes used online by the anti-vaccination movement. *Vaccine*, 30(25), pp. 3778-3789.

Korchevoi, S. and Petraikin, A. (2021). Are There Doctors Who Don't Believe in Vaccine: Context for Phenomenological Study. *Academia Letters*, Article 3412. https://doi.org/10.20935/AL3412.

Loomba, S., de Figueiredo, A., Piatek, S. J., de Graaf, K., & Larson, H. J. (2021). Measuring the impact of COVID-19 vaccine misinformation on vaccination intent in the UK and USA. *Nature Human Behaviour*, 5(3), pp. 337–348. https://doi.org/10.1038/s41562-021-01056-1

Neta R. (2002) S Knows That P *NOÛS* 36:4 pp. 663–681.

Nizza I.E., Farr J. & Smith J.A. (2021): Achieving excellence in interpretative phenomenological analysis (IPA): Four markers of high quality. *Qualitative Research in Psychology*, DOI: 10.1080/14780887.2020.1854404

Pritchard D. (2016) Epistemic Angst. *Philosophy and Phenomenological Research*, pp.1-24. Available at https://www.academia.edu/19840697/Epistemic_Angst (accessed 04/10/2021)

Rodriguez, L., & Smith, J.A. (2014) 'Finding your own place': An Interpretative Phenomenological Analysis of young men's experience of early recovery from addiction. *International Journal of Mental Health and Addiction.* Vol. 12(4), pp. 477–490.

RBC [Russian Business Consulting] (2020) Опрос продемонстрировал недоверие врачей к вакцине от коронавируса [Questionnaire has demonstrated doctors' distrust in anti-COVID vaccine] Available at: https://www.rbc.ru/society/14/08/2020/5f35d9579a79471d249e8374 (assessed 07/07/2021)

Shinebourne, P., & Smith, J.A. (2009), Alcohol and the self: An interpretative phenomenological analysis of the experience of addiction and its impact on the sense of self and identity. *Addiction Research and Theory.* Vol 17(2), pp. 152–167.

Smith J.A. and Eatough V. (2018) Looking Forward: Conceptual and Methodological Developments in Interpretative Phenomenological Analysis: Introduction to the Special Issue. *Qualitative Research in Psychology*. Special Issue, pp.1-3.

Smith, J. A., and Osborn, M, (2003) Interpretative Phenomenological Analysis. In: Smith J.A. (ed.) *Qualitative Psychology – a Practical Guide to Research Methods*. Sage Publications Ltd. London, Thousand Oaks, New Delhi.