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REVIEW PAPER

Ethical implications in the evaluation of complex contexts related to COVID-19

Implicancias éticas en la evaluación de contextos complejos relacionados al COVID-19

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ABSTRACT

Background: The pandemic caused by Sars-cov-2 has generated multiple sustained efforts for its identification, characteristics and mobility of the disease that to date has repercussions worldwide. Given this need, it is necessary to have updated information considering transparent research processes. Method: a critical review of the current literature on COVID-19 research. Conclusions: It is essential to have ethical procedures in the different phases of research that can go beyond personal interests and that guarantee the preservation of people's welfare in the reduction of possible damage to health globally, adequate procedures in the collection of information that is not built to the measure of the researchers, to avoid involuntary segregation of the participants and that this leads to a reduction of significant damage due to implicit biases that are generated by poor planning that pursues the scoop instead of social good.

Keywords: Ethical aspects; SARS-Cov 2; Research report; Evaluation Process Assessment.

RESUMEN

Introducción: La pandemia ocasionada por el Sars-cov-2 ha genero múltiples esfuerzos sostenidos para su identificación, características y movilidad de la enfermedad que hasta la fecha tiene repercusión a nivel mundial y ante esta necesidad es necesario contar con información de actualiza teniendo en cuento procesos claros de investigación. Método: revisión crítica del cuerpo actual de literatura sobre investigación en COVID-19. Conclusiones: Es imprescindible contar con procedimientos éticos en las diferentes fases de investigación que puedan ir más allá de los intereses personales y que garanticen la preservación del bienestar de las personas en la reducción de posibles daños en la salud de manera global, adecuados procedimientos en la recolección de información que no se encuentren construidos a la medida de los investigadores, para evitar una segregación involuntaria de los participantes y que esto conlleve en una reducción de daños significativos por sesgos implícitos que son generados por una mala planificación que persigue la primicia en lugar de un bien social.

Palabras clave: Conducta ética; SARS-Cov 2; Informe de investigación; Evaluación de procesos.

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BACKGROUND

In recent years, the growth and emergence of emerging diseases have generated a series of complications with enormous repercussions worldwide. A concrete example is the report of the three most recent major coronavirus epidemic outbreaks (Baric, 2008; Qiu et al., 2018); the first was caused by severe acute respiratory syndrome associated with coronavirus (SARS-Cov), which managed to spread through 26 countries between 2002 and 2003 generating painful public health emerging crises and significant impact on health, society and economy (Qiu et al., 2018; Reina & Reina, 2015). A decade later, the Middle East respiratory syndrome-associated coronavirus (MERS-CoV) was identified, affecting 27 countries in the Middle East, Europe, North Africa and Asia (Altmayer et al., 2021); finally, the current pandemic originated in Wuhan (China) in December 2019 by the acute respiratory syndrome (SARS-Cov 2) of the same pathogen family that to date reports more than 4 million cases in 210 countries and 300 thousand deaths worldwide (Arshad Ali et al., 2020; Greene et al., 2020). Given this situation, sustained efforts have been generated by various research groups and researchers to try to identify the clinical characteristics of infected patients, the genomic characterisation of the virus, and the challenges for global health governance (Wang et al., 2020); in addition to the need for studies aimed at mitigating the implications and social effects corresponding to a pandemic-related condition (e.g. social isolation) (Salazar & Abrahantes, 2018; Xiang et al., 2020).

In addition, the social effects corresponding to a disaster condition during this current pandemic have gradually led to a deterioration in mental health (MH), such as the appearance and increase of anxiety symptoms, depressive symptoms, and post-traumatic stress disorder, among others (Hossain et al., 2020). Previous studies on this type of situation have shown that survivors of these conditions suffer complications in their MH, such as fear, stress, depression, irritability, and substance use. These conditions are associated with adverse psychological effects that can be persistent and severe in some cases (Cullen et al., 2020; Hossain et al., 2020).

Therefore, an ethical basis is essential to ensure that such studies have as their primary objective the well-being of people, society and the ecosystem (The Belmont Report | HHS.gov, 1979) responding to the different needs and circumstances generated by the context of COVID-19. To ensure this premise since 1979 (Belmont Report), three basic principles of ethical research practice living beings have been established and governed to this day: respect, beneficence and justice (García & Contreras, 2016; Salazar & Abrahantes, 2018). These premises foster collaboration, cooperation and trust among scientists; and benefit the correct approach to objectives, the fulfilment of social responsibility and the minimisation of harm in research (Aristizábal Franco, 2012).

IN SEARCH OF SOCIAL BENEFIT

The global scenario under the pandemic scenario demands the production and dissemination of information on the disease and its social and economic implications (Baric, 2008). However, this activity may be affected by ethical problems linked to the

ideals of authors, processes and research results in developing knowledge (Aristizábal Franco, 2012). In this way, a study can be manipulated for particular benefits as a result of interests unrelated to the scientific endeavour damaging the neutrality of the researcher driven by other types of motivations related to personal recognition, obtaining economic benefits and substantive promotions, forgetting the general function which is to give answers to society (Aristizabal Franco, 2012; Kohrt et al., 2019). One way to mitigate them converges with the conformation of experienced work teams, which guarantee to some extent the progress and success of studies based on clear and normative policies that avoid exposing study subjects to physical and mental complications (Aristizábal Franco, 2012; Salazar & Abrahantes, 2018; Wang et al., 2020); and, avoiding as much as possible improvisation (e.g. little experience of most of its actors), which by their formative characteristics often lack clear lines of research and inefficient structuring of projects, which reinforce the usual practice of superfluous publications, often associated with the well-known Publish or Perish at the industrialised level (Holmes et al., 2020). However, there is an undeniable need for new evidence linked to new diseases, data collection from a multidisciplinary perspective and the urgency of gathering further information with social benefits (WMA - The World Medical Association - WMA Helsinki Declaration - Ethical Principles for Medical Research Involving Human Subjects, 2011).

FREEDOM AND RESPECT IN COMPLEX CONTEXTS

Another consideration to detail is what is stated in the Declaration of Helsinki (Ibeas et al., 2019), where it is stipulated that all research protocols must be evaluated by ethics committees, which will be responsible for overseeing the ethical principles and the determination of the possible value of the study considering the scientific validity, methodology, participant selection processes, the balance of foreseeable risks, the benefits of the work under analysis and ensuring the valuation of the participants in decision-making regarding their participation through essential aspects such as informed consent, confidentiality, autonomy and freedom of the participants in all research processes (Ticse et al., 2014). However, in Low- or Middle-Income countries, the early stages of the emergence and spread of the disease only began with the first phase of review of the research work by an ethics committee (Benito-Cóndor et al., 2016; Nosek et al., 2002), which, together with the urgency of knowledge, configures a risk that would make possible the contamination of the actual need for knowledge that benefits the participants involved and prioritises the individualised need of the researcher.

DATA COLLECTION AS A POSITIVE ACTION

The COVID-19 containment measures had social distancing as the central axis, given the need for data collection to answer the various research questions, leading to determining virtual means as the preferred data collection strategy through the use of online surveys (Aristizábal Franco, 2012). This methodology should have all the necessary ethical requirements to ensure that the study results do not consider a significant burden of biases, nor are they constructed to suit the researchers. In this sense, three essential differences can be identified in face-toface vs. virtual research: (a) The absence of a responsible or trained research staff, with whom the subjects of a study can contact to resolve their doubts and identify their rights as participants in real time (Trachsel et al., 2021); (b) the uncertainty about informed consent, a position that puts at risk the understanding of the study, the possible specific benefits and their consequences, as well as the explanation about the voluntariness and the absolute freedom of participation of the study subjects (Boileau et al., 2018; The Belmont Report | HHS.gov, 1979; Trachsel et al., 2021); and (c) the potential loss of anonymity and confidentiality, because target participants must register their interest in the research and must enter other data and personal information and in addition, it will be necessary to identify website security regulations regarding data encryption and firewalls (Espinosa, 2016; Nunan et al., 2018; Trachsel et al., 2021).

UNINTENTIONAL DISCRIMINATION

In contrast to all of the above, there still needs to be a convincing detailed distribution of the possible benefits of the target populations referred to in studies on the effects of social isolation in the face of the pandemic caused by COVID-19 (e.g. behavioural research). Possible risks to be taken into account would be linked to the segregation of participants, differences in the impact of these conditions on the general population, patients with psychiatric problems, the elderly, and chronic diseases, among other vulnerable groups that should be adapted to particular needs. In addition to some "holes" before the emergence of more evidence on COVID-19 and its variants, the mismanagement of communication with sensationalist perspectives on sensitive issues may incur an ethical fault in itself (Goyal et al., 2020; Reger et al., 2020; SPI-B, 2020).

REDUCING LATENT DAMAGE

Sustained efforts encourage researchers to attempt to approximate responses in the face of complex contexts such as the current pandemic. However, these benefits can be significantly reduced by a set of biases (e.g. selection and affinity) influenced by lack of control and non-planning (online surveys), which can be considered offensive or as an unwanted publication "spam" or an invitation for the development of a study without prior agreement (Nunan et al., 2018). The generation of an erroneous estimate in selecting participants would lead to wrong conclusions affecting the validity of future results (selection bias) (Aarons, 2017). In addition, risk factors linked to the participation of studies with this methodology should be considered, considering the balance in need for data collection and exposure to physical, emotional and/or social harm that can be generated in the participants and how to address the risks to which the participants were exposed: for example, the risk of suffering psychological damage as unfavourable or altered states in behaviour when associated with distressing events, when analysing various aspects of their life and environment or if the participants feel threatened or stressed as a result of the research (Aarons, 2017; Wright, 2005). Despite this, the usefulness of this input is well accepted due to its low cost and quick access to different target populations (adolescents, young adults,

working staff, and social isolation, among others) (Nunan et al., 2018; Wright, 2005). The generation of an erroneous estimate in selecting participants would lead to wrong conclusions affecting the validity of future results (selection bias) (Aarons, 2017). Added to this point, the affinity generated by the researcher in his network of contacts (e.g. social networks) configures a bias in itself due to the emotional charge associated with the responses influenced by the researcher and, consequently, the overestimation in the raw scores in the generation of new systematic errors.

CONCLUSION

The current pandemic includes a series of complications at different levels, including an impact on the economy, health and society in general. For this reason, effective and efficient responses must emerge through scientific research as a reliable means of information and communication. This activity must be fully compatible with ethical behaviour that pursues freedom and autonomy along with clear benefits for the participants and, above all, for the social good. It is necessary to avoid that scientific work can be influenced by ideals that go beyond the expected benefit and can promote unethical behaviours, massifying the information without generating a real contribution to the scientific community. Despite the need for updated knowledge, it is essential to consider different strategies for collecting and caring for data confidentiality. To a certain extent, behaviour research has preferred virtual data collection forms, but without adequate planning. It incurs a series of complications due to the generation of new biases in the results, a biased awareness of informed consent and voluntariness, added to a potential loss of participants, accumulating a chain of contamination of the studies that do not include in detail the implications of the study groups (according to their context) such as psychiatric patients, emotional problems, addictive behaviours and the general population, among other vulnerable groups that by their nature could hinder the processes of adaptation to restriction measures due to social distancing in the face of the current pandemic. Consequently, the possible benefits of the results could translate into potential harm due to the lack of double goodness, which implies doing something good and doing it well. It is necessary to consider regulatory processes and procedures in scientific activity and practice as a public good, which requires bringing to light these reciprocal factors and avoiding the ethical horrors committed in the past.

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G.J Meléndez-Torres: Conceptualization, Investigation, Writing - Review & Editing.

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CONFLICT OF INTERESTS

The authors declare that there were no conflicts of interest.

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REVIEW PROCESS

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DATA AVAILABILITY STATEMENT

Not applicable.

DISCLAIMER

The authors are responsible for all statements made in this article.

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