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Experience report

Data collection for quantitative online survey in the pandemic of COVID-19: experience report

Coleta de dados para pesquisa quantitativa online na pandemia da COVID-19: relato de experiência

Recopilación de datos para investigación cuantitativa en línea en la pandemia de COVID-19: relato de experiencia

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Abstract

Objective: to report the experience of researchers in conducting online data collection in a survey with a quantitative approach. **Method:** experience report on the data collection of the survey "Use of personal protective equipment by health professionals in the fight against COVID 19" that took place between August 2020 and March 2021 by means of a self-administered virtual questionnaire. **Results:** the research was disseminated through the creation of a website and social networks, the sending of a poster accompanied by a specific text with a clickable link through Whatsapp®, contacts by email and phone, in addition to the strategy of seeds. During data collection, complicating and facilitating factors were observed. As a social contribution, the course "Biosafety: Good Practices in the performance in front of COVID-19" was made available. **Conclusion:** online data collection provided a nationwide survey at low cost, but with little participation from the eligible population.
Descriptors: Data Collection; Online Systems; Surveys and Questionnaires; Pandemics; COVID-19

Resumo

Objetivo: relatar a experiência de pesquisadores na condução da coleta de dados online em uma pesquisa com abordagem quantitativa. **Método:** relato de experiência sobre a coleta de dados da pesquisa "Uso de equipamentos de proteção individual pelos profissionais de saúde no combate

à COVID 19" ocorrida entre agosto de 2020 e março de 2021 por meio de questionário autoaplicável virtual. **Resultados:** utilizou-se como estratégias de divulgação da pesquisa, a criação de site e redes sociais, o envio de cartaz acompanhado de texto específico com link clicável pelo *Whatsapp*®, contatos por *e-mail* e por telefone, além da estratégia de sementes. Durante a coleta de dados, observaram-se fatores dificultadores e facilitadores. Como contribuição social, foi disponibilizado o curso "Biossegurança: Boas Práticas na atuação frente à COVID-19". **Conclusão:** a coleta de dados online proporcionou a realização de uma pesquisa de abrangência nacional com baixo custo, mas com pouca participação perante a população elegível.
Descritores: Coleta de Dados; Sistemas On-Line; Inquéritos e Questionários; Pandemias; COVID-19

Resumen

Objetivo: relatar la experiencia de investigadores en la realización de la recopilación de datos en línea en una investigación con enfoque cuantitativo. **Método:** relato de experiencia sobre la recopilación de datos de la encuesta "Uso de equipos de protección personal por parte de los profesionales de la salud en la lucha contra el COVID 19" realizada entre agosto de 2020 y marzo de 2021 a través de un cuestionario virtual autoadministrado. **Resultados:** como estrategias para divulgar la investigación se utilizaron la creación de un sitio web y redes sociales, el envío de un cartel acompañado de un texto específico con un enlace clicable a través de *Whatsapp®*, los contactos por correo electrónico y por teléfono, además de la estrategia de semillas. Durante la recopilación de datos, se observaron factores que obstaculizan y facilitan. Como aporte social se puso a disposición el curso "Bioseguridad: Buenas Prácticas ante el COVID-19". **Conclusión:** la recopilación de datos en línea permitió realizar una encuesta a nivel nacional a bajo costo, pero con poca participación de la población elegible.
Descriptores: Recolección de Datos; Sistemas en Línea; Encuestas y Cuestionarios; Pandemias; COVID-19

Introduction

In December 2019, a new disease called COVID-19 was discovered in Wuhan, China, which has the SARS-CoV-2 coronavirus as its etiologic agent and is transmitted from person to person via respiratory droplets from an infected individual, whether symptomatic or not.[1-2] On March 11, 2020, the World Health Organization (WHO) characterizes COVID-19 as a pandemic.[3]

COVID-19 had numerous impacts on all sectors of society that had to adapt to the suspension of activities, the restriction of the movement of people, and the fear of infection.[4] Social isolation measures, which were implemented to reduce the spread of the virus,[2] ended up affecting education in higher education in its three axes of action: teaching, research and extension. Especially in the area of scientific research, in face of this context caused by the pandemic, there was the need for the National Research Ethics Commission (CONEP) to issue guidelines on procedures in the realization of this axis in a virtual environment to preserve the protection, safety and rights of participants.[5]

In a scoping review that evaluated the strategies for collecting data remotely, before the pandemic period, it was found that 83.5% of the studies evaluated occurred through digital means, and it can be stated that such a research mechanism is constantly expanding, including studies with a qualitative and mixed approach.[5] It is noteworthy that, since 2004, the Equator Network has made available to health researchers CHERRIES (the Checklist for Reporting Results of Internet E-Surveys), which is a recommendation guide for the scientific writing of surveys that used remote data collection.[6]

The surveys conducted in virtual environments, i.e., those that involve the use of the Internet, through e-mails and websites, for example, in the health field, are more economical and reduce barriers such as language and location, besides enabling the dissemination of information with greater ease and convenience to participants.[7] However, some barriers can also occur, such as limited access to technology and the lack of proximity of the participants to the researchers, which prevents the face-to-face approach in carrying out the invitation to participate in the study.[8-9]

The current pandemic scenario requires, when possible, conducting research in a non-face-to-face manner and thus, there is a need to qualify researchers in conducting data collection in a virtual environment. Moreover, given the benefits of conducting studies online, it is essential that researchers are familiar with data collection methods in this modality, as well as with its facilitating and hindering factors. Thus, this study aims to report the experience of researchers in conducting data collection online in a quantitative research approach.

Method

This is an experience report on the online data collection process of the survey entitled "Use of personal protective equipment by health professionals in the fight against COVID 19", with the short title: "P.P.E. COVID19 BRAZIL". This research aimed to evaluate the adherence and use of Personal Protective Equipment (PPE) by Primary Health Care (PHC) professionals and professionals linked to residency programs in health in the fight against the pandemic of COVID-19.

The setting for the study was the PHC units in the 26 Brazilian states and the Federal District, in addition to the primary, medium and high technological density health care services that offer residency programs throughout the Brazilian territory.

The following were invited to participate in the survey:

i) all professionals of PHC units in Brazil (dentist, nurse, physical therapist, speech therapist, nutritionist, pharmacist, social worker, psychologist, nursing assistant, nursing technician, physician, community agent, receptionist, administrative assistant, oral health technician and public health agent) since PHC professionals should be trained in the correct use of P.P.E. because as PHC professionals are the main entrance door to the Unified Health System (UHS), suspected cases seek care at this level of care. As PHC is the main entrance door to the Unified Health System (UHS), suspected cases seek care at this level of care.[10-11]

ii) all professionals linked to residency programs in the health area in Brazil (dental surgeon, nurse, physical therapist, speech therapist, nutritionist, pharmacist, social worker, psychologist, and physician). The invitation to professionals linked to Residency Programs in Health is justified because they also had to adapt to a new routine due to the context of COVID-19, since they are inserted in the various points of the Health Care Network, acting directly in the fight against the pandemic.[12-13]

Data began to be collected after the project was approved by the Committee for Ethics in Human Research of the Federal University of Juiz de Fora (CEP/UFJF) - opinion no. 4.363.912, and after the questionnaire was validated by experts.

For data collection, the free platform KoBoToolbox (https://www.kobotoolbox.org/) was used, and the first page presented the Free and Informed Consent Term (FICT), which contained information about the research according to the recommendation of the Brazilian ethical legislation. The participants only had access to the data collection questionnaire if they marked the option "I agree" in the online term with the possibility of downloading it, through a link made available to the participants on the same page.

The data collection questionnaire was self-administered and contained 86 questions regarding the characterization of the participant, the proper use of PPE and its use in the daily work routine, and the questions were directed to the professional class informed by the participant.

Data collection took place from August 2020 to March 2021, and the research team was composed of thirteen professors, three master's degree students, six undergraduate students linked to scientific initiation and twelve volunteer undergraduate students from UFJF and UFSJ.

Results

The authors' experience in conducting the online data collection stage of the P.P.E. COVID19 BRASIL survey will be presented in two topics: 1) Strategies for recruiting participants for the P.P.E. COVID19 BRASIL survey and 2) Hindering and facilitating factors in conducting the survey in a virtual environment.

Strategies for recruiting participants for the P.P.E. COVID19 survey BRAZIL

After approval by the Ethics Committee for Research with Human Beings, the research team used several strategies to invite PHC professionals and residents to participate in the P.P.E. COVID19 BRAZIL.

The site of the research P.P.E. COVID19 BRAZIL is hosted on the UFJF site (https://www.ufjf.br/epicovid19/) and presents the following information to readers: the research team, the objectives, the study design, ethical issues, information on funding, expected results and impacts, preliminary results, and telephone and email contacts. The "links" tab presents the hyperlinks of the disclosure materials that were broadcasted on the internet, television and radio.

Profiles were created on the social networks Instagram® (@epicovidufjf) and Facebook® (P.P.E COVID19 BRASIL), as illustrated in Figure 1. The researchers received mentoring from publicists to improve the engagement of the study's dissemination on these social networks. The content of the publications was generated by the undergraduate and master's students and reviewed by the research coordinator. Videos recorded by researchers, professors, and health professionals were also posted to stimulate the participation of the target audience. The periodicity of the publications was defined as once a week until the end of data collection.

Figure 1: Social networks of the survey "P.P.E. COVID19 BRAZIL.

WhatsApp® was also used to disseminate the survey, which is a free application to exchange messages between people and in groups. It is an application widely used by the Brazilian population. Two specific media were prepared for dissemination in the application, each one destined for a participant eligible for the study. The promotional poster shown in Figure 2 had information about the QR CODE survey to redirect to the survey page. For this dissemination, the snowball technique was used, in which each member of the research team disseminated the message to their respective contacts, who forwarded the message to new potential participants, and so on.[14] This strategy was used throughout the entire data collection period.

Figure 2: Posters for recruiting participants for the survey "P.P.E. COVID19 BRAZIL".

Emails were sent to state and municipal health secretariats, graduate programs, Multi-professional Residency Commissions (COREMU), class councils, scientific societies of the specialties, and unions of the professionals involved in the study for dissemination of the research. It is important to mention that an email account was created for the exclusive use of the research (pesquisa.epicovid19brasil@gmail.com) and all the emails had a standardized text. There was also a link and QR CODE available for access to the FICT and the questionnaire, in addition to the approval by the Ethics Committee.

In February and March, e-mails were resent to all contacts in order to strengthen the dissemination of the survey and ensure the participation of PHC professionals and

residents from all over the country. This time, a text explaining the survey was prepared, reduced and more focused on the relevance of the study, in order to reinforce the objectives of the dissemination material and the target audience of the questionnaires.

As the research had national coverage, the master's and undergraduate students made phone calls to the municipal health secretariats of the 5,568 Brazilian municipalities and to all hospitals that have a residency accredited by the Ministry of Education (MEC) during the months of August 2020 to February 2021. For this activity, the students were previously trained and had a standard text for the approach to the attendant. In this telephone contact, the research was disclosed and a contact email was requested to send the information to be forwarded to the eligible study participants.

The researchers also used a strategy called "seeds", adapted from the Respondent Driven Sampling (RDS) method.[15] The RDS methodology is based on a mathematical model that squares the participants according to social relationships, so that the participant himself recruits other individuals and receives a reward for doing so. The process begins with the recruitment of seeds, which are the first participants identified by the researchers, and from then on follows recruitment through numbered coupons that expand in waves. Wave one is formed by the individuals indicated by the seeds, wave two by the participants of wave one, and so on.[15]

In the P.P.E. COVID19 BRAZIL survey, the RDS methodology was not developed reliably, since the program used was inaccessible to the budget to carry out the study. The adapted strategy consisted in contacting health workers and residents through WhatsApp® so that they shared the poster advertising the study among their professional contacts, and thus a new "wave" was initiated to approach potential study participants who were not contacted by the previous strategies.[14] As a reward, the research team issued a research collaborator certificate.

It is important to mention that all professionals and residents, in the above strategies, were also invited to participate in the online course called "Biosafety: Good Practices in the performance in front of COVID-19", which had a workload of 15h and the issuance of a certificate on the care related to the use of P.P.E. Participation in the course was not linked to participation in the survey, so 69 people chose only to take the course.

In the final stage of the research, due to the low participation of professionals and residents in the population eligible for the study, a specific dissemination strategy was developed for Minas Gerais. A group of undergraduate nursing students from UFJF and Federal University of São João del-Rei (UFSJ) was recruited to intensify dissemination to the 14 health macro-regions of the state. These students were trained and received information about the research in order to make the necessary telephone contacts with the Health Regions and with the respective municipal health secretariats. The tactic in question enabled an increase in the participation of health professionals and residents after it was carried out.

The survey data collection was finished at 11:59 p.m. on March 31, 2021, and Table 1 shows the quantity of participants in the P.P.E. COVID19 survey BRAZIL.

Table 1- Number of participants in the P.P.E. COVID19 BRAZIL survey by geographic region, according to the categories of study participants. Brazil, 2021.

Geographical regions of Brazil	PHC Professionals	Residents
South region	58	33
Southeast region	316	159
North region	21	10
Northeast region	43	38
Midwest region	21	25
Total	456	265

It can be noticed that the number of participants was low in relation to the eligible professionals, that is, all PHC professionals and all professionals linked to residency programs in the health area in Brazil, which is associated with the complicating factors that will be described below.

Hindering and facilitating factors in conducting research in a virtual environment

The researchers' lack of proximity to the participants may have been a limiting factor in the data collection process, since there was no face-to-face approach when inviting them to participate in the study. Furthermore, there is the absence of representatives from each Brazilian state in the team of researchers who were responsible for disseminating the P.P.E. COVID19 BRAZIL. It is believed that this participation could have facilitated the dissemination of the research through WhatsApp®, e-mail, telephone and indication of seeds in the region where that researcher works.

It is also assumed that the difficulty of these professionals in participating in the study P.P.E. COVID19 BRASIL occurred due to several factors such as: the overload of attributions caused by COVID-19, the smaller contingent of professionals due to the high rate of retirement due to coronavirus infection, and finally the significant increase of surveys being conducted remotely along with recurrent electronic frauds in the instant messaging application WhatsApp®, which may have caused a questioning about the veracity of the research.

In addition, during the strategy of sending e-mails to the Health Secretariats, it was found that part of the secretariats' e-mail addresses seemed outdated, because automatic messages informed that the content had not reached the sender, or that the address did not exist. It is necessary to stress that, at the end of the e-mail, confirmation of its arrival to the sender was requested. Due to the above, the effective dissemination of the study in some municipalities was compromised. The possibility may also have occurred that the e-mail had reached the spam box and had not been read in time to participate in the research.

It was also verified during the strategy of calls to the Health Secretariats throughout the country, a situation similar to that of e-mails, since many presented their contact numbers invalid or unavailable. Another difficulty faced during the application of this same strategy was the reduced availability of some attendants to listen carefully after announcing that this was a scientific research. Because of this, the material announcing the study, which was sent by e-mail after the calls, may not have been properly forwarded to the interested parties, making it difficult for the researchers to contact the workers. In addition to these facts, the working hours of the secretaries restricted the number of daily calls, making this one of the slowest stages of data collection.

Among the facilitating factors of the P.P.E. COVID19 BRAZIL, the use of the KoBoToolbox platform stands out because, besides being free, it allows the exportation of data to the Microsoft Excel spreadsheet editor. Moreover, access to the WhatsApp® application contributed positively to the dissemination because of the seed strategy, which enabled the clarification of doubts and communication quickly and in real time, making the target audience comfortable to participate in the research in question. However, because this strategy was implemented only at the end of data collection, the number of professionals reached was not high. In addition, the use of Instagram® and Facebook® favored the approximation with the target audience.

Moreover, the fact that the study is linked to a group of the Center for Studies in Healthcare-Related Infections and Complications (NEICAS) of UFJF allowed a greater number of collaborators in the execution of data collection. In addition to this factor, weekly meetings were held throughout the data collection period, since through them it was possible to align the development of research dissemination actions. The participation of undergraduate volunteers in the group made it possible, at the end of this stage, to conclude telephone contacts with the Municipal Health Secretariats.

Discussion

The carrying out of research in virtual environments has been enhanced in the face of the pandemic scenario as an alternative for the maintenance of numerous scientific studies,[16] since it provides several opportunities, with scientific rigor, for data collection.[7] In this way, understanding how research is done in a digital environment becomes a methodological necessity for all researchers.[16]

From the ethical point of view, guidelines for conducting scientific studies in a virtual environment have recently been published. According to CONEP, researchers who propose to develop online research should know the tool used, as well as its privacy and data sharing risk policies.[5]

The researchers at P.P.E. COVID19 BRAZIL chose to use the free KoBoToolbox platform for data collection. It is a simple and intuitive tool that is being used recently by Brazilian researchers not only for data collection, but also in the tabulation stage.[17] The choice for its use was based on its potentialities: the absence of operational costs, the automatic tabulation in several formats[17] (Microsoft Excel export was chosen) and the support of renowned international institutions that recognize the platform as a safe tool for data collection.

In addition, for conducting research conducted in a virtual environment, it is suggested the creation of websites and social networks that bring information related to the research so that participants feel more comfortable and closer to the team,[6,8,18] as they must be informed to the best of their understanding about the nature, objectives, methods, rights, risks and benefits of the research.[19] Just as the P.P.E. COVID19 BRAZIL survey has a website, other e-survey surveys conducted in Brazil have also employed this recommendation.[20-22]

The use of social media can facilitate strategies for disseminating research information, retargeting messages, and broadening participant recruitment.[23-24]

Therefore, the use of applications like WhatsApp® provides an accessible and immediate communication channel between the researchers and eligible participants.[23] Social media platforms such as Facebook®, Instagram® and Twitter® are being frequently used in the pandemic period for participant recruitment.[20,22,25] Even other applications, which have interaction between participants through chat, have already been explored by researchers at the recruitment stage.[20] It is important to point out that health researchers,[20] as well as those in the P.P.E. COVID19 BRAZIL survey, have used engagement marketing strategies to leverage social media outreach.

The snowball technique has been frequently used in virtual environment research,[14,20,22] as well as sending e-mails to institutions related to the theme of the research containing the disclosure of the study.[22,25] Although the P.P.E. COVID19 BRAZIL research team employed various strategies to recruit eligible study participants, including telephone calls, by the end of the data collection period, 721 people had participated.

In e-survey type studies, the strategies defined for the dissemination of the survey will strongly influence the reach of eligible participants.[6] Therefore, the resending of e-mails and the intensification of telephone calls to the municipalities in the state of Minas Gerais in the last two months of data collection for the P.P.E. COVID19 survey is justified.

At the end of the data collection of e-survey studies, you get a random sample,[20] because you may not have reached all the eligible people.[21] The low number of participants in an online survey is a reality, but this type of survey should not be invalidated. It is important that the conclusions of the study are appropriate and useful to future readers. In addition, it is important that a careful description of the context in which the research was conducted and the way in which the questionnaire was administered is given.[6]

Furthermore, the lack of proximity of the researchers to the participants may have been a limiting factor in the data collection process, since there was no face-to-face approach in the invitation to participate in the study. Added to this factor, the absence of representatives from other states of the country as part of the research team may have hindered its dissemination. In the virtual health survey called "ConVid Adolescents - Behavior Survey", the researchers recruited 15 other researchers from different states of Brazil to start the snowball technique.[21]

Added to this is the difficulty of access to technology due to the generational factor.[8,24] Surveys in a virtual environment can restrict the sample to people who are more familiar with using Internet tools.[20] Thus, there is a need for more training of researchers and health professionals to conduct research using information technology.[8,24] Despite some limiting factors, online research is an important strategy, since it can be more cost-effective and faster than traditional surveys, which should be taken into consideration, especially in a context that limits physical proximity.[23]

In order to favor the reach of the research and consequently reduce the impact of limiting factors, the RDS that consists of a method to be used to contact hard-to-reach populations[14] was used in the research of the P.P.E. COVID19 BRAZIL in an adapted form, as well as in another Brazilian study conducted during the COVID-19 pandemic. In this research, the participants themselves were responsible for recruiting other individuals of the same category through their social networks, and for this, they received the research link and were oriented as to the disclosure of the information. [20]

Online surveys in health care are a promising method[21] because the digital environment facilitates the dissemination of results and consequently of knowledge.[23] Therefore, it is hoped that the information presented in this experience report will assist researchers in conducting data collection steps and studies conducted in a virtual environment.

Conclusion

Given the current pandemic scenario, there was a need to develop new data collection strategies for scientific research in order to maintain the safety of researchers and participants. Thus, this experience report describes the recruitment of participants in the P.P.E. COVID19 BRAZIL survey, the main challenges faced by the team, and the facilitating factors.

It is concluded that data collection in a virtual environment provided a survey that had national coverage at low cost. However, the workload of health professionals may have contributed to the low participation of PHC professionals and residents, even in the face of various strategies to disseminate the survey through social networks, e-mails and phone calls to responsible agencies.

It is hoped that this report of the experience of conducting an online data collection, as well as the challenges and facilitators of the research, can contribute to

further studies conducted online, and stimulate other researchers to develop new strategies for dissemination and data collection in a virtual environment.

References

1. Lai CC, Shih TP, Ko WC, Tang HJ, Hsueh PR. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and coronavirus disease-2019 (COVID-19): the epidemic and the challenges. Int J Antimicrob Agents. 2020;55(3):105924. doi: 10.1016/j.ijantimicag.2020.105924

2. Wang C, Horby PW, Hayden FG, F Gao GF. A novel coronavirus outbreak of global health concern. Lancet. 2020;395(10223):470-3. doi: 10.1016/S0140-6736(20)30185-9.

3. World Health Organization (WHO). Coronavirus disease 2019 (COVID-19): situation report - 104. Geneva (Switzerland): WHO; 2020.

4. Dias E. A educação, a pandemia e a sociedade do cansaço. Ensaio Aval Pol Públ Educ. 2021; 29(112):565-73. doi: 10.1590/S0104-40362021002901120001

5. Ministério da Educação (BR), Secretaria-Executiva do Conselho Nacional de Saúde, Comissão Nacional de Ética em Pesquisa. Orientações para procedimentos em pesquisas com qualquer etapa em ambiente virtual [Internet]. Brasília (DF): Ministério da Saúde; 2021 [acesso em 2022 mar 08]. Disponível em: http://conselho.saude.gov.br/images/Oficio_Circular_2_24fev2021.pdf

6. Eysenbach G. Improving the quality of Web surveys: the checklist for reporting results of Internet E-surveys (CHERRIES). J Med Internet Res. 2004;6(3):e34. Errata em: J Med Internet Res. 2012;14(1):e8. doi: 10.2196/jmir.2042

7. Fundação Oswaldo Cruz (Fiocruz), Comitê de Ética em Pesquisa (ENSP). Orientações sobre ética em pesquisa em ambientes virtuais [Internet]. Comitê de Ética em Pesquisa, Escola Nacional de Saúde Pública Sergio Arouca (ENSP/Fiocruz): Rio de Janeiro; 2020 [acesso em 2022 mar 08]. Disponível em: https://cep.ensp.fiocruz.br/sites/default/files/orientacoes_eticapesquisaambientevirtual.pdf

8. Calliyeris VE, Las Casas AL. A utilização do método de coleta de dados via internet na percepção dos executivos dos institutos de pesquisa de mercado atuantes no Brasil. Interações (Campo Grande). 2012;13(1):11-22. doi: 10.1590/S1518-70122012000100002

9. Couper MP. Review: web surveys: a review of issues and approaches. Public Opin Q. 2000;64(4):464-94. doi: 10.1086/318641

10. Ministério da Saúde (BR). Protocolo de manejo clínico do coronavírus (COVID-19) na Atenção Primária à Saúde [Internet]. Brasília (DF): Ministério da Saúde; 2020 [acesso em 2022 mar 08]. Disponível em: https://saude.rs.gov.br/upload/arquivos/202004/14140606-4-ms-protocolomanejo-aps-ver07abril.pdf

11. Nunciaroni AT, Cunha FTS, Vargas LA, Corrêa VAF. New Coronavirus: (re)thinking the care process in Primary Health and Nursing. Rev Bras Enferm. 2020;(73 Suppl 2):1-5. doi: 10.1590/0034-7167-2020-0256

12. Oliveira G, Moreira AP, Floriano LSM, Bordin D, Bobato GR, Cabral LPA. Impacto da pandemia da COVID-19 na formação de residentes em saúde. Braz J Dev. 2020;6(11):90068-83. doi: 10.34117/bjdv6n11-425

13. Maia JKO, Rebouças ERN, Costa AMT, Araújo Júnior AJL, Araújo TL. Residência Multiprofissional: contribuições durante a pandemia. Cadernos ESP [Internet]. 2020 [acesso em 2022 mar 08];14(1):128-32. Disponível em:

http://cadernos.esp.ce.gov.br/index.php/cadernos/article/view/365

14. Costa BRL. Bola de neve virtual: o uso das redes sociais virtuais no processo de coleta de dados de uma pesquisa científica. Rev Interdiscip Gest Soc [Internet]. 2018 [acesso em 2022 mar 08];7(1):16-37. Disponível em: https://periodicos.ufba.br/index.php/rigs/article/view/24649

15. Lima IMB, Coêlho HFC, Andrade JM. Uso do método Respondent Driven Sampling para avaliação do alcoolismo em mulheres. Saúde Debate. 2017;41(144):801-11. doi: 10.1590/0103-1104201711410

16. Deslandes S, Coutinho T. Pesquisa social em ambientes digitais em tempos de COVID-19: notas teórico-metodológicas. Cad Saúde Pública. 2020;36(11). doi: 10.1590/0102-311X00223120

17. Silva SS, Silva MR. Utilização do Kobotoolbox como ferramenta de otimização da coleta e tabulação de dados em pesquisas científicas. Geoambiente On-Line. 2020;(36):122-40. doi: 10.5216/revgeoamb.vi36.58264

18. Schmidt B, Palazzi A, Piccinini CA. Entrevistas online: potencialidades e desafios para coleta de dados no contexto da pandemia de COVID-19. Rev Fam Ciclos Vida Saúde Contexto Soc. 2020;8(4):960-6. doi: 10.18554/refacs.v8i4.4877

19. BRASIL. Ministério da Saúde. Conselho Nacional de Saúde. Resolução nº 510, de 07 de abril de 2016. Trata sobre as diretrizes e normas regulamentadoras de pesquisa em ciências humanas e sociais. Diário Oficial da União: seção 1, Brasília, DF, n. 98, p. 44-46, 24 maio 2016. Disponível em: http://conselho.saude.gov.br/resolucoes/2016/Reso510.pdf. Acesso em: 08 mar. 2022.

20. Sousa AFL, Queiroz AAFLN, Lima SVMA, Almeida PD, Oliveira LB, Chone JS, et al. Chemsex practice among men who have sex with men (MSM) during social isolation from COVID-19: multicentric online survey. Cad Saúde Pública. 2020;36(12):e00202420. doi: 10.1590/0102-311X00202420

21. Malta DC, Gomes CA, Barros MBA, Lima MG, Silva AG, Cardoso LSM, et al. The COVID-19 pandemic and changes in the lifestyles of Brazilian adolescents. Rev Bras Epidemiol. 2021;24: e210012. doi: 10.1590/1980-549720210012

22. Bousquat A, Giovanella L, Medina MG, Mendonça MHM, Facchini LA, Tasca R. Desafios da Atenção Básica no enfrentamento da pandemia da Covid-19 no SUS: relatório de pesquisa [Internet]. Rio de Janeiro: Rede de Pesquisa em APS Abrasco; 2020 [acesso em 2022 mar 08]. Disponível em: https://redeaps.org.br/wp-content/uploads/2020/08/Relato%CC%81rioDesafiosABCovid19SUS.pdf

23. Chen J, Wang Y. Social media use for health purposes: systematic review. J Med Internet Res. 2021;23(5):e17917. doi: 10.2196/17917

24. Araújo ETH, Almeida CAPL, Vaz JR, Magalhães EJL, Alcantara CHL, Lago EC. Utilização de redes sociais para coleta de dados em produções científicas na área da saúde: revisão integrativa da literatura. Aquichan. 2019;19(2):1-12. doi: 10.5294/aqui.2019.19.2.4

25. Ferguson KN, Coen SE, Tobin D, Martin G, Seabrook JA, Gilliland JA. The mental well-being and coping strategies of Canadian adolescents during the COVID-19 pandemic: a qualitative, cross-sectional study. CMAJ Open. 2021;9(4):E1013-20. doi: 10.9778/cmajo.20210042

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