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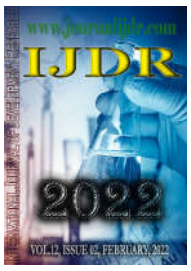

RESEARCH ARTICLE OPEN ACCESS

KNOWLEDGE AND PERCEPTIONS OF MEDICAL STUDENTS AT THE BEGINNING OF COVID-19 PANDEMIC IN TWO NATIONS WITH DIFFERENT HUMAN DEVELOPMENT INDICES

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ABSTRACT

Covid-19 pandemic affected medical students in all countries of the world. These are times of challenges and opportunities to increase medical knowledge and to practice preventive measures. There is a considerable number of situations that can cause psychological symptoms in medical students, including human development. The aim of this study is to compare medical knowledge, preventive measures, and psychological perceptions in Brazilian and Mozambican medical students. Electronic questionnaires were sent by social network, then descriptive statistics and data pairing were performed. Comparison of groups data showed that internet was the first font of information for most Brazilian students (internet: 59,3%, television: 11,1%) and television was the first font most declared by Mozambicans (television: 40,7%, internet: 33,3%) (p=0,033). Brazilian students performed better in the knowledge test (global average: 74,8% vs. 53,0%, p=0,001). Mozambican student adopted preventive measures with better adherence (do not touching oral, nasal, or ocular mucosa: 85,2 vs. 51,9, p: 0,014) but reported more use of self-medication (37,0% vs. 74,1%, p=0,048). Brazilian student presented more psychological effects, as being restless (77,8% vs. 33,3%, p=0,005), with worsening in the past 30 days (48,1% vs 22,2%, p=0,049) and partial inability in 10,6 vs. 3,9 days in the last 30 days (p=0,022). Human development index, internet access, and other issues are discussed as possible important factors for these differences.

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INTRODUCTION

Covid-19 pandemic surprised the world in the beginning of 2020. Since the first description in China, (HUANG *et al*., 2020), the disease has shown its spreading potential reaching pandemic numbers in 2020 February (WHO, 2020a). Some countries initially presented few cases, but there was a run for information and a lot of concern for everybody, including doctors (ELHADI *et al*., 2020, LINCANGO-NARANJO *et al*., 2021). Brazil is the largest South American country. In terms of the human development index (HDI), which is the index used by the United Nations to measure the progress of a country, it was 0.765 points in 2020, leaving it as medium HDI and in 84th place among 189 countries.

Mozambique is a country located in Southeastern Africa whose HDI is low (0,456) (WHO, 2020b). In 2020 April, Brazil had confirmed 62,932 cases (298 cases per million inhabitants) and Mozambique 76 cases (2,5 cases per million inhabitants) (WORLDOMETERS, 2020). This difference could be explained by the circulation of citizens around the world, by numbers of tests applied or by the health system response, at that time. Although Covid-19 has brought more initial effects in Europe and Asia than in Africa or South America, there was a great concern about this disease around the world (WHO, 2020b). Besides underlying medical conditions associated with Higher Risk for Severe COVID-19, the pandemic progression and impact has been correlated with HDI (KHALATBARI-SOLTANI *et al*., 2020). In

addition to the health and economic impacts, the covid-19 pandemic has resulted in schools shut across the world. In this scenario, medical education was highly impacted. The traditional structure of medical education has been disrupted. It was necessary to accelerate the development of an online learning environment, comprising distance education (LINCANGO-NARANJO *et al*., 2021). At the same time, there were serious implications on the medical students' academic trajectories and their psychological conditions.The medical literature has described high levels of anxiety in young people (QIU *et al*., 2020), fear of the disease (XIANG *et al*., 2020), impact on studies, feelings, and attitude (BROOKS *et al*., 2020). It has also been reported some lack of knowledge in previous pandemics scenarios (MORTELMANS *et al*., 2009; SAUSER *et al*., 2010, HSU *et al*., 2011). As stated by the World Health Organization, the COVID-19 outbreak and response has been accompanied by a massive infodemic: an overabundance of information – some accurate and some not – that makes it hard for people, including medical students, to find trustworthy sources and reliable guidance when they need it (PAHO, 2020). The aim of this study was to assess Covid-19 medical knowledge, preventive measures, and psychological reactions of medical students in the first months of Covid-19 pandemic, in Brazil and Mozambique.

METHODOLOGY

An observational, cross-sectional study was conducted using an electronic questionnaire (Appendix I) via *Google Forms,* elaborated to collect information about a) medical knowledge about Covid-19 at the moment of the survey (JIANG *et al*., 2020); b) preventive measures for SARS-COV-2 infection (BRASIL, 2020; CROWLING, AIELLO, 2020); c) and pandemic-related perceptions through an electronic adaptation of the K-10 instrument translated to Portuguese (KESSLER *et al*., 2002, PEREIRA *et al*., 2019). The questionnaire link was sent via medical students' social networks - Facebook, WhatsApp, and Instagram. There were included just the responses from medical students. The repeated or incomplete responses were excluded. The data were collected from 2020, Mar 23rd to 2020, Apr 11th. The responses were from Brazilian (n=336), Mozambican (n=27), and Portuguese students (n=1). For comparison purposes, we decided to pair 27 Mozambican students' responses to 27 Brazilian students' responses, considering sex, phase of medical course, and age. Statistical analysis comprised: descriptive statistics using frequency and means tests; paring of data by sex, course phase, and age by qui square, Students t and Wilcoxon test; comparison between groups using qui square and Student's t tests. Data were analyzed by IBM SPSS Statistics program, 26 version. Results were considered significative if the confidence interval was higher than 95% ($p<0.05$).

RESULTS

Series description (before data pairing): There were 369 valid responses. Majority of them (336) were Brazilian students (91.1%), 27 (7.3%) were Mozambican students and 1(0.3%) was a Portuguese student. Five students (1.3%) didn't inform their country. Majority of Brazilian students (n=293, 87.2%) are from universities in the Paraná State, South of Brazil, with 128 (43.7%) from public institutions and 165 (56.3%) from private medical schools. Median age of the sample was 21.92 ± 3.59, distributed between 17 and 43 years old. Female gender was the majority, with 251 responses (68.0%). There was majority of students (61.5%) in the two first years of the course (basic cycle), with the following distribution: 89 (24.1%) in the first, 138 (37.4%) in the second, (13.6%) in the third, 47 (12.7%) in the fourth, 30 (8.1%) in the fifth and 15 (4.1%) do sixth year of undergraduate medical course.

Global knowledge average was 72.7%. Student's acquired medical knowledge of a new disease, adoption of preventive measures and psychological perceptions are described in tables 1, 2 and 3. Taken all together, medical students' feelings in the past 30 days were: as habitual (37.7%), a little more frequent (33.6%), such more frequent (16.0%), much more frequent (5.2%), a little less frequent (4.3%), such less frequent (1.9%), much less frequent (1,4%), not answered (0,8%). In the past 30 days, there was a report of 3,2 days in total incapacity and 6,9 days in partial incapacity for habitual activities. Majority of the sample (79,4%) didn't visit a medical service in the 30 days before to this survey.

Data Pairing: Male/female ratio was equal (14/13, absolute numbers) for both groups (p=1,000, qui square test). Mean age was 25,6 for Mozambique students and 24,4 for Brazil students (p=0,670, Student's t). Phase of course, assessed by year or cycle (basic, clinical or internship), was very similarly distributed (p=0,927, qui²; Wilcoxon value= 3,5). Modify to:

- First font of information: internet was the first font of information for most Brazilian students (internet: 59,3%, television: 11,1%) and television was the first font most declared by Mozambicans (television: 40,7%, internet: 33,3%) (p=0,033, qui²).
- Medical knowledge: Brazilian students had more correct answers in identifying radiologic findings (63,0% vs. 18,5%, p=0,001, qui²), risk group (96,3% vs. 74,1%, p=0,022, qui²), no specific treatment (81,5% vs. 48,1%, p=0,010, qui²) and recommended preventive measures (81,5% vs. 44,4%, p=0,005, qui²). Global knowledge average was higher in Brazilian students (74,8% vs. 53,0%, p=0,001, qui²).
- Use of preventive measures: Mozambican students declared that touched self-eye, nose, or mouth less often than Brazilian (85,2% vs. 51,9%, p=0,014, qui²), had more temperature measures (40,7% vs. 14,8%, p=0,003, qui²), and used more immunity improvement auto medication or vitamin (74,1% vs. 37,0%, p=0,048, qui²).
- Psychological reactions: Brazilian students reported to be more restless than Mozambicans (77,8% vs. 33,3%, p=0,005, qui²) and that all feelings together worsened in the past 30 days (48,1% vs. 22,2%, p=0,049, qui²). Days average in partial inability were also different, Brazilians reported 10,6 days, and Mozambicans reported 3,9 days (p=0,022, Student's t test).

The difference between two countries reached significative correlation in a two tailed Pearson correlation test of 0,697, p<0,001 (Figure 1).

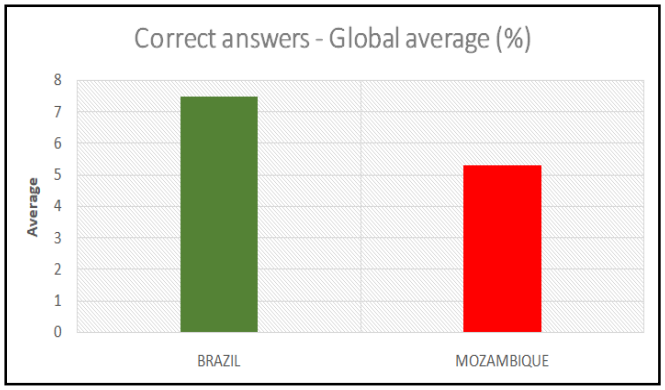

Figure 1. Comparison of averages in medical knowledge about Covid-19 between two countries

DISCUSSION

Before comparison, the global sample (n=369) showed a good level of medical knowledge about Covidacquired in the first weeks of pandemic, with 72,7% of correct answers. These results are consistent with other studies (SOLTAN, ZOGHBY, SALAMA, 2020; ELHADI *et al*., 2020a; LICANGO-NARANJO *et al*., 2021) that described fast acknowledgement by medical students in the pandemic scenario. There was good adherence to most preventive measures, except in the declared use of personal preventive devices and self-temperature measuring.

Table 1. Questions about knowledge on Covid-19 at the beginning of pandemic

Question	Answers	n (%)
First knowledge about Covid19	Internet	238 (64.5)
	Television	97 (26.3)
	Newspaper	16 (4.2)
	Colleagues' speech	5 (1.4)
	Professor speech	5 (1.4)
	Scientific journal	5 (1.4)
	Others	3 (0.8)
Local of the very first cases	Wuhan, China	359 (97.3)
	Others	10 (2.7)
Initial human virus transmission	Rodent ingestion	338 (91.6)
	Others	31 (9.4)
First case series published	41 cases, food exposure in local market	273 (74.0)
	Others	96 (26.0)
First symptoms	Fever, cough, and dyspnea	357 (96.7)
	Others	11 (3.3)
Radiological findings	CT-scan frosted glass standard	171 (46.3)
	X-ray pneumonic standard	184 (49.9)
	Others	14 (3,8)
Etiologic diagnosis	Real time PCR or viral genetics	91 (50.4)
	Real time PCR or antibodies	186 (24.7)
	Hemogram and elevated C-reactive protein	35 (9.5)
	Others	57 (15.4)
Risk group	Older men	345 (93.5)
	Others	24 (6.5)
Main complications	All items below	93 (25.2)
	Respiratory distress syndrome	265 (71.8)
	Myocardial injury	4 (1.1)
	Shock	4 (1.1)
	Renal failure	3 (0.8)
Effective treatment	No effective treatment disponible	271 (73.4)
	Chloroquine	77 (20.9)
	Others	21 (5.7)
Preventive measures	Handwash	364 (98.6)
	Social distancing	361 (97.8)
	Self-secretion directing	341 (92.4)
	Masks and glasses	331 (89.7)
	High doses of D-vitamin	79 (21.4)
Right answers (%)		72.7

CT-scan: computerized tomography. PCR: polymerase chain reaction.

Table 2. Adoption of preventive measures and health care

Daily preventive measures	Not answered n (%)	Never n (%)	Few times n (%)	Sometimes n (%)	Many times n (%)
Handwash	0	0	10 (2.7)	119 (32.3)	240 (65.0)
Masks	1 (0.3)	262 (71.0)	72 (19.5)	19 (5.1)	15 (4.1)
Self-secretion directing	2 (0.5)	5 (1.4)	38 (10.3)	110 (29.8)	214 (58.0)
Shake hands greeting	0	183 (49.6)	119 (32.3)	45 (12.2)	22 (6.0)
Visit to older people	0	283 (76.7)	71 (19.2)	15 (4.1)	0
Go out home	1 (0.3)	183 (49.6)	142 (38.5)	24 (6.5)	19 (5.1)
Touch eyes, nose, and mouth	1 (0.3)	42 (11.4)	142 (38.5)	126 (34.1)	58 (15.7)
Self-health concerns	Not answered n (%)	Never n (%)	Rarely n (%)	Eventually n (%)	Daily or more n (%)
Measure temperature	1 (0.3)	0	321 (87.0)	33 (8.9)	14 (3.8)
Vitamin intake	0	0	267	47	55
Analgesics or anti-thermal agents' intake	0	0	313	48	8
Antimicrobial agents' intake	0	0	347	17	5
Go to crowded places	1	0	346	18	5
Travel	3	0	354	9	3
Go to hospital or emergency room	0	0	346	16	7

Table 3. Perceptions in the past 30 days (K-10 questionnaire)

Perceptions	Not answered n (%)	Never n (%)	Few times n (%)	Part of time n (%)	Most of time n (%)	All the time n (%)
Tired out	2 (0.5)	131 (35.5)	148 (40.1)	49 (13.3)	27 (7.3)	12 (3.3)
Nervous	2 (0.5)	39 (10.6)	133 (36.1)	118 (32.0)	64 (17.3)	13 (3.5)
So nervous that nothing could calm you down	0	224 (60.7)	85 (23.0)	36 (9.8)	15 (4.1)	9 (2.4)
Hopeless	1 (0.3)	180 (48.8)	114 (30.9)	42 (11.4)	23 (6.2)	9 (2.4)
Restless or fidgety	1(0.3)	64 (17.3)	121 (32.8)	109 (29.5)	55 (14.9)	19 (5.2)
So restless that nothing you could not sit still	0	190 (51.5)	76(20.6)	61 (16.5)	31 (8.4)	11 (3.0)
Depressed	4 (1,1)	116 (31.4)	133 (36.0)	79 (21.4)	24 (6.5)	13 (3.5)
So depressed that nothing could cheer you up	3 (0.8)	244 (66.1)	63 (17.1)	34 (9.2)	15 (4.1)	10 (2.7)
Everything was an effort…	1(0,27)	181(49,05)	106(28,73)	48(13,01)	18(4,88)	15(4,07)
…worthless	2(0,54)	223(60,43)	77(20,87)	37(10,03)	7(4,61)	13(3,52)
How much did the pandemic influence all these feelings?	17 (4.6)	116 (31.4)	111 (30.1)	74 (20.1)	44 (11.9)	7 (1.9)

Table 4. Comparison data between groups

Data Comparison		Brazil	Mozambique	p	test
First font of information (%)	Internet	59,3	33,3	0,033	qui²
	Television	11,1	40,7		
	Others	29,6	26,0		
edical knowledge about Covid19	Radiologic findings	63,0	18,5	0,000	qui²
(Correct answers, %)	Risk group for Covid19	96,3	74,1	0,022	qui²
	Absence of specific treatment	81,5	48,1	0,010	qui²
	Recommendedpreventive measures	81,5	44,4	0,005	qui²
Use of preventive measures (%)	Reduction of touch self-eye, nose, or mouth	51,9	85,2	0,014	qui²
	More temperature measures	14,8	40,7	0,003	qui²
	More immunity improvement by auto medication or vitamins	37,0	74,1	0,048	qui²
Psychological reactions	Restless feeling (%)	77,8	33,3	0,005	qui²
	Feelings worsened in the past 30 days (%)	48,1	22,2	0,049	qui²
	Days average in partial inability (n)	10,6	3,9	0,022	t

qui²= qui square test, t= Student's t test. Source: authors.

Several studies on preventive behavior in pandemics had shown a slight discrepancy between knowledge and practice (HSU *et al*., 2011; SOLTAN, ZOGHBY, SALAMA, 2020; ELHADI *et al*., 2020a). Most psychological effects described were exhaustion, nervousness, restlessness, and depression, with 49,6% declaring that these feelings worsened in the past 30 days, leading to about one week of partial disability. These findings are lower than Halperin *et al*. (2021) report, which described over 60% of psychological disturbances in medical students in the pandemic in a larger sample from the United States of America. A study conducted in Kuwait showed 36,7% of severe anxiety and 66,6% of moderate to severe depression in this population (ALSAIRAFI *et al*., 2021). This lack can be partially explained by geopolitical, sample size, survey type and methodological differences. In association with a civil war, pandemic had higher negative effects in Libyan medical students with anxiety in 64,5% and depression in 88% (ELHADI *et al*., 2020b). Reconsidering professional choice (GUPTA, ANUPAMA, RAMAKRISHNA, 2021) and suicidal ideation (ELHADI *et al*., 2020b) were present in some reports. Medical students are evolved with so many tasks and issues about their courses and with patient care in advanced phases, but they are not isolated from society: suffering and solidarity are compounds of their mental status (EGNEW *et al.,* 2018). Most Brazilian students used the Internet as the first information font for the Covid-19, and it was different from most Mozambicans, which had this first notice by television. Brazilians also had better average medical knowledge at the survey time. These findings, taken together, lead to a reflection about iniquality of information access. This study showed a 50% higher use of the internet for Brazilian medical students, the same difference is observed in the human development index (HDI) of both countries (WHO, 2020b) and in the use of the internet by the general population (PRC, 2016) for both countries. Qureshi (2021) reviewed this specific point, observing that Covid-19 pandemic highlighted the disparities of information access around the world based on the following chain: socioeconomic inequities – HDI – economic growth – digital startups – digital divide and poverty – health inequities. Technological, individual, domestic, institutional, and community barriers cause many difficulties in online learning.

Personal devices and velocity of data sharing are few, simple examples of this impairment. Economic changes caused by the pandemic had worsened the digital divide, heightening disparities in medical education, often in favor of those with greater access to resources (BATICULON *et al*., 2021), and this could explain how Brazilians had acquired the medical knowledge faster than Mozambicans. Other explanation would be related to the greater incidence of Covid-19 cases in Brazil, as compared to Mozambique, in the pandemic beginning, suggesting an arousal for the imminent problem (WORLDOMETERS, 2020). Although Mozambicans medical students had lower average of right responses in medical knowledge, they reported more self-care concerning than Brazilians, in some topics as touching self-eyes, nose and mouth and taking self-temperature.

students imputed unfavorable attitudes and preventive measures to device and training deficits. This finding could explain in part the relative lower adherence of Brazilian students. Another possible explanation would be the great occurrence of fake news, related to political, social, and religious interests, that caused confusion even in people with higher levels of scholarity (BARCELOS *et al*., 2021). Mozambicans, however, declared more use of self-medication (SM) (74,1%) than Brazilians (37,0%). SM is a global practice associated with disease masking, adverse effects, drug interaction, and antimicrobial resistance; it was described in 58% of students in a Pakistan University, with higher prevalence in medical students (64,9%) (SALEEM *et al*., 2021). Brazilians declared more psychological reactions and partially paused regular activities more days than Mozambicans. Rodrigues *et al*. (2020) reviewed 43 articles with this specific issue, observing that the uncertain is the leading cause of psychological symptoms in medical students from many countries. In Brazil, there are various reports of high prevalence of psychological disturbances in pandemic (SILVA *et al*., 2020; MESSIANO *et al*., 2021; MENDES *et al*., 2021). Economic issues and use of psychotropic drugs were associated to higher levels of stress and anxiety; other causes as remote learning activities, risk of contamination and latening of the graduation were also reported (MESSIANO *et al*., 2021). Lack of dietary care and physical activity are associated to psychological symptoms (MENDES *et al*., 2021). It's important to remember that mental health is a pre pandemic important issue for medical students (EGNEW *et al*, 2018), so previous mental illness tend to get worse in a global crisis (RODRIGUES *et al*., 2020). Exposure to internet information, fake news and real time rising numbers of disease and death are some factors for mental health problems (GARFIN, SILVER, HOLMAN, 2020; BARCELOS *et al*., 2021). There are some reports suggesting that stress management strategies, as physical activity, balanced diet, coping strategies, structured mentoring programs and specialized mental health professionals, are essential to preserve or improve medical students' mental status (MENDES *et al*, 2021; MESSIANO *et al*., 2021). This study has limitations, as convenience sample, the use of electronic and self-applied questionnaire and self-informed data. Data pairing reduced the sample size, but it was done with the intention to moderate the power of one group over other. Nevertheless, these data can contribute with medical schools' policies for medical student's benefit (XIANG *et al*., 2020).

CONCLUSION

In this study, conducted in the first weeks of Covid-19 pandemic, most Brazilian medical students reported to be informed of the pandemic by internet, and performed better in medical knowledge in comparison with Mozambican pairs. Mozambican medical students had television as first information fount, had better adherence to preventive measures, higher use of self-medication and less psychological reactions to pandemic, as compared with Brazilians. Human development issues, internet access, media exposure, fake news, previous mental health status, and uncertainty may have a role in these findings and medical schools must be careful on these issues.

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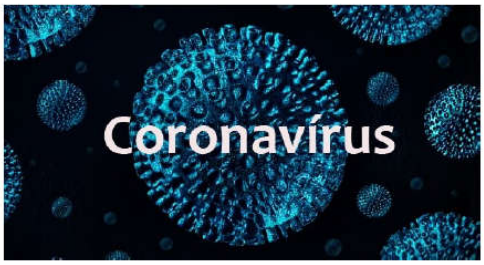
APPENDIX I – E-QUESTIONNAIRE

Percepção dos estudantes de Medicina sobre a pandemia de COVID-19.

Olá. Somos um grupo de estudantes da UNICENTRO-PR. Pedimos sua colaboração para responder esse questionário. Nosso objetivo é coletar informações sobre conhecimento e comportamento dos estudantes de Medicina neste período de pandemia pelo Covid-19. Caso receba esse questionário mais de uma vez, não responda de novo, apenas ignore. Só vai tomar alguns minutos e essa informação será valiosa para nossos estudos. Só responda se você for estudante de Medicina.

Liga Acadêmica de Clínica Médica - DEMED - UNICENTRO-PR
*Obrigatório

1. Endereço de e-mail *



2. IDADE

3. SEXO

Marcar apenas uma oval.

- ◯ Masculino
- ◯ Feminino

4. ESCOLA MÉDICA

5. ANO EM CURSO

Marcar apenas uma oval.

- ◯ 1º
- ◯ 2º
- ◯ 3º
- ◯ 4º
- ◯ 5º
- ◯ 6º

6. Como você ficou sabendo pela primeira vez sobre COVID-19

Marcar apenas uma oval.

- ◯ Internet
- ◯ Professor comentou em sala
- ◯ Colegas contaram
- ◯ TV
- ◯ Rádio
- ◯ Jornal
- ◯ Publicação científica
- ◯ Outro

7. A COVID-19 (Coronavirus disease 2019) foi primeiramente descrita em que local?

Marcar apenas uma oval.

- ◯ Xangai, China
- ◯ Bergamo, Itália
- ◯ Fukushima, Japão
- ◯ Seul, Coréia do Sul
- ◯ Wuhan, China

8. Destas, qual a mais provável origem deste virus?

Marcar apenas uma oval.

- ◯ Mordedura de caninos domésticos
- ◯ Picadura de insetos silvestres
- ◯ Mordedura de roedores domésticos
- ◯ Ingesta de felinos domésticos
- ◯ Ingesta de roedores silvestres

9. Na descrição inicial, quantos casos foram apresentados e qual a principal relação epidemiológica deles?

Marcar apenas uma oval.

- ◯ 69 casos, metade deles esteve em restaurantes exóticos
- ◯ 72 casos, um terço deles criava animais silvestres em casa
- ◯ 58 casos, metade deles havia ingerido carne canina os últimos 30 dias
- ◯ 36 casos, dois terços deles esteve na mata nas últimas duas semanas
- ◯ 41 casos, dois terços deles foi exposto a alimentos do mercado local

10. Os conjunto de sintomas mais frequentemente encontrado nos primeiros indivíduos internados foi:

Marcar apenas uma oval.

- ◯ Tosse com escarro abundante, dor torácica e vômitos
- ◯ Febre, tosse e dispneia
- ◯ Coriza, cefaleia e mialgias
- ◯ Hemoptise, diarreia e mialgias
- ◯ Irritação meníngea, febre e vômitos

11. O achado de imagem que predomina na COVID-19 é:

Marcar apenas uma oval.

- ◯ Pneumonia bilateral ao exame radiológico do tórax
- ◯ Sinais de disfunção miocárdica no ecocardiograma
- ◯ Opacidades bilaterais em vidro fosco na tomografia de tórax
- ◯ Líquido livre em cavidade abdominal na ecografia
- ◯ Derrame pleural e pericárdico profuso na ressonância de tórax

12. O diagnóstico etiológico pode ser feito por:

Marcar apenas uma oval.

- ◯ PCR em tempo real ou sequenciamento gênico
- ◯ Sequenciamento genômico ou detecção de anticorpos específicos
- ◯ Dosagem da angiotensina sérica ou detecção de anticorpos específicos
- ◯ Hemograma mostrando linfocitose ou elevação da PCR sérica
- ◯ PCR em tempo real ou detecção de anticorpos específicos

13. Estão sob maior risco de complicações e morte pela COVID-19:

Marcar apenas uma oval.

- ◯ Homens idosos
- ◯ Mulheres na menacme
- ◯ Crianças pré-escolares
- ◯ Estudantes universitários
- ◯ Nenhum dos acima

14. As principais complicações com potencial mortalidade nestes casos são:

Marcar apenas uma oval.

- ◯ Síndrome do distress respiratório agudo
- ◯ Insuficiência renal aguda
- ◯ Comprometimento miocárdico
- ◯ Choque
- ◯ Todos acima

15. Até o momento, qual tratamento foi comprovadamente eficaz contra o vírus da COVID-19?

Marcar apenas uma oval.

- ◯ Ritonavir
- ◯ Remdesivir
- ◯ Cloroquina
- ◯ Baricitinb
- ◯ Nenhum dos acima

16. Sobre as medidas de proteção abaixo, você recomendaria, exceto:

Marcar apenas uma oval.

- ◯ Lavar as mãos
- ◯ Máscaras e óculos de proteção
- ◯ Direcionamento de secreções
- ◯ Isolamento social
- ◯ Altas doses de vitamina C e Zinco

17. Descreva com que frequência você executa as atividades abaixo:

Marcar apenas uma oval por linha.

	Nunca	Poucas vezes ao dia	Algumas vezes ao dia	Muitas vezes ao dia
Higienizar as mãos com sabão ou álcool	◯	◯	◯	◯
Usar máscara ou outro equipamento de proteção individual (EPI)	◯	◯	◯	◯
Direcionar a tosse ou espirro para local apropriado	◯	◯	◯	◯
Cumprimentar com beijo, abraço ou aperto de mão	◯	◯	◯	◯
Visitar pais, tios, avós com 60 anos ou mais	◯	◯	◯	◯
Sair de casa	◯	◯	◯	◯
Tocar olhos, boca e nariz	◯	◯	◯	◯

18. Com que frequência você tem executado as atividades abaixo

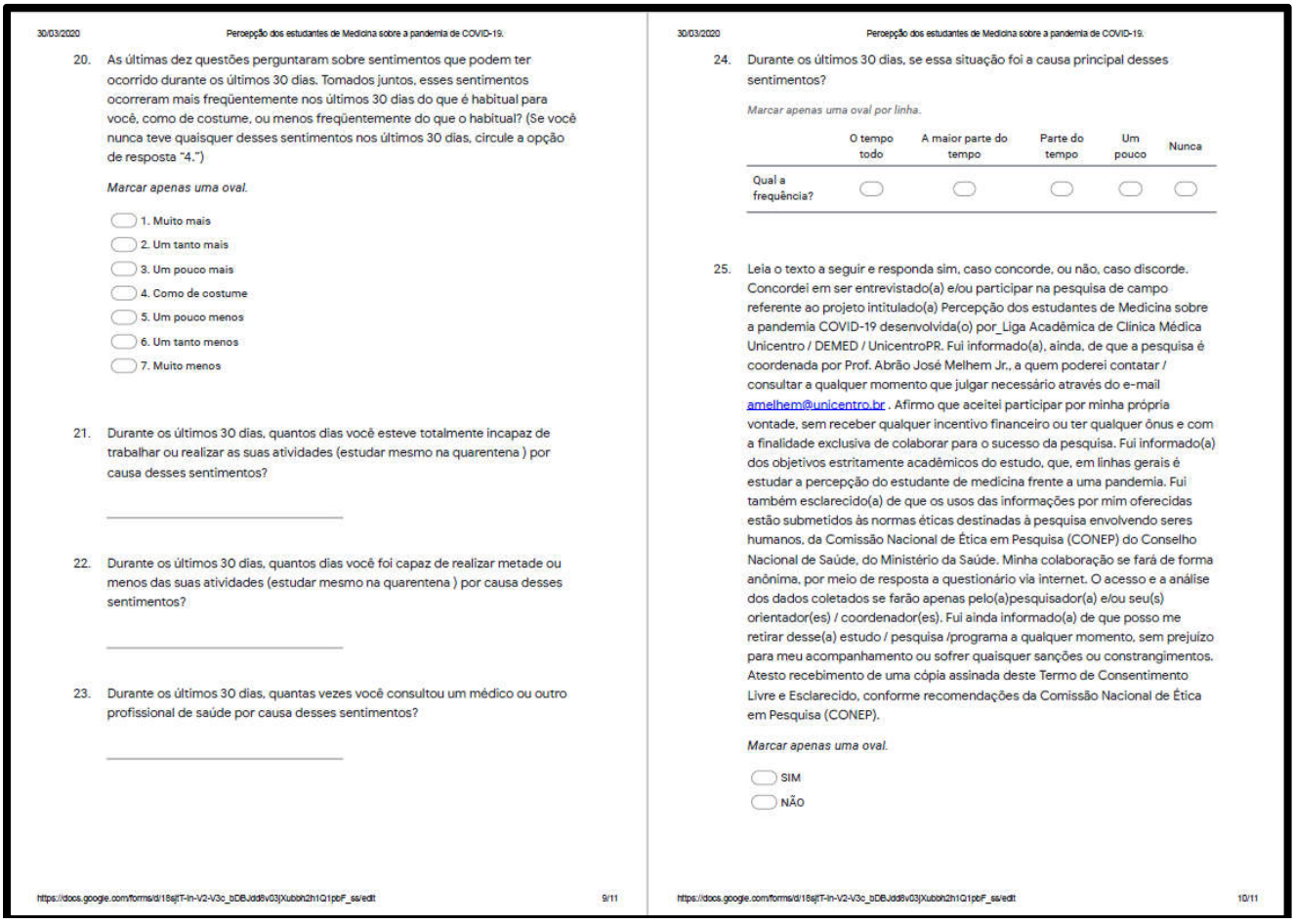
Marcar apenas uma oval por linha.

	Quase nunca	Raramente	Eventualmente	Diariamente	Mais que uma vez ao dia
Medir a temperatura	◯	◯	◯	◯	◯
Uso de medicação ou vitaminas com a intenção de aumentar a imnidade	◯	◯	◯	◯	◯
Uso de medicação para melhorar sintomas	◯	◯	◯	◯	◯
Uso de antibióticos ou antivirais	◯	◯	◯	◯	◯
Sair de casa	◯	◯	◯	◯	◯
Ir a locais com aglomeração	◯	◯	◯	◯	◯
Viagens	◯	◯	◯	◯	◯
Ida ao hospital ou pronto atendimento	◯	◯	◯	◯	◯

19. Durante os últimos 30 dias, com que frequência você se sentiu...

Marcar apenas uma oval por linha.

	O tempo todo	A maior parte do tempo	Parte do tempo	Um pouco	Nunca
exausto (a) sem um bom motivo?	◯	◯	◯	◯	◯
nervoso (a)?	◯	◯	◯	◯	◯
tão nervoso (a) que nada podia acalmá-lo (a)?	◯	◯	◯	◯	◯
sem esperança?	◯	◯	◯	◯	◯
inquieto (a) ou agitado (a)?	◯	◯	◯	◯	◯
tão inquieto (a) que você não conseguia ficar parado (a)?	◯	◯	◯	◯	◯
deprimido (a)?	◯	◯	◯	◯	◯
tão deprimido (a) que nada conseguia animá-lo (a)?	◯	◯	◯	◯	◯
que tudo era um esforço...?	◯	◯	◯	◯	◯
...sem valor?	◯	◯	◯	◯	◯



30/03/2020 Percepção dos estudantes de Medicina sobre a pandemia de COVID-19.

20. As últimas dez questões perguntaram sobre sentimentos que podem ter ocorrido durante os últimos 30 dias. Tomados juntos, esses sentimentos ocorreram mais freqüentemente nos últimos 30 dias do que é habitual para você, como de costume, ou menos freqüentemente do que o habitual? (Se você nunca teve quaisquer desses sentimentos nos últimos 30 dias, circule a opção de resposta "4.")

Marcar apenas uma oval.

- 1. Muito mais
- 2. Um tanto mais
- 3. Um pouco mais
- 4. Como de costume
- 5. Um pouco menos
- 6. Um tanto menos
- 7. Muito menos

21. Durante os últimos 30 dias, quantos dias você esteve totalmente incapaz de trabalhar ou realizar as suas atividades (estudar mesmo na quarentena) por causa desses sentimentos?

22. Durante os últimos 30 dias, quantos dias você foi capaz de realizar metade ou menos das suas atividades (estudar mesmo na quarentena) por causa desses sentimentos?

23. Durante os últimos 30 dias, quantas vezes você consultou um médico ou outro profissional de saúde por causa desses sentimentos?

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30/03/2020 Percepção dos estudantes de Medicina sobre a pandemia de COVID-19.

24. Durante os últimos 30 dias, se essa situação foi a causa principal desses sentimentos?

Marcar apenas uma oval por linha.

	O tempo todo	A maior parte do tempo	Parte do tempo	Um pouco	Nunca
Qual a frequência?	◯	◯	◯	◯	◯

25. Leia o texto a seguir e responda sim, caso concorde, ou não, caso discorde. Concordei em ser entrevistado(a) e/ou participar na pesquisa de campo referente ao projeto intitulado(a) Percepção dos estudantes de Medicina sobre a pandemia COVID-19 desenvolvida(o) por_Liga Acadêmica de Clínica Médica Unicentro / DEMED / UnicentroPR. Fui informado(a), ainda, de que a pesquisa é coordenada por Prof. Abrão José Melhem Jr., a quem poderei contatar / consultar a qualquer momento que julgar necessário através do e-mail amelhem@unicentro.br . Afirmo que aceitei participar por minha própria vontade, sem receber qualquer incentivo financeiro ou ter qualquer ônus e com a finalidade exclusiva de colaborar para o sucesso da pesquisa. Fui informado(a) dos objetivos estritamente acadêmicos do estudo, que, em linhas gerais é estudar a percepção do estudante de medicina frente a uma pandemia. Fui também esclarecido(a) de que os usos das informações por mim oferecidas estão submetidos às normas éticas destinadas à pesquisa envolvendo seres humanos, da Comissão Nacional de Ética em Pesquisa (CONEP) do Conselho Nacional de Saúde, do Ministério da Saúde. Minha colaboração se fará de forma anônima, por meio de resposta a questionário via internet. O acesso e a análise dos dados coletados se farão apenas pelo(a)pesquisador(a) e/ou seu(s) orientador(es) / coordenador(es). Fui ainda informado(a) de que posso me retirar desse(a) estudo / pesquisa /programa a qualquer momento, sem prejuízo para meu acompanhamento ou sofrer quaisquer sanções ou constrangimentos. Atesto recebimento de uma cópia assinada deste Termo de Consentimento Livre e Esclarecido, conforme recomendações da Comissão Nacional de Ética em Pesquisa (CONEP).

Marcar apenas uma oval.

- SIM
- NÃO

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