

**Facing the COVID-19 pandemic - From health to the law**

**Enfrentando a pandemia COVID-19 - Da saúde à lei**

**Frente a la pandemia de COVID-19: de la salud a la ley**

Received: 11/20/2020 | Reviewed: 11/30/2020 | Accept: 12/01/2020 | Published: 12/04/2020

**Alexandre Castilho Pelloso**

ORCID: <https://orcid.org/0000-0002-0413-4239>

Pontifícia Universidade Católica do Paraná, Brasil

E-mail: alexandrepcp902@gmail.com

**André Agostinho Picoli**

ORCID: <https://orcid.org/0000-0002-4395-5128>

Centro Universitário Ingá, Brasil

E-mail: andreagostinhooo@gmail.com

**Fernando Castilho Pelloso**

ORCID: <https://orcid.org/0000-0001-6233-3968>

Universidade Federal do Paraná, Brasil

E-mail: fercaspell@gmail.com

**Lander dos Santos**

ORCID: <https://orcid.org/0000-0001-7734-2189>

Universidade Estadual de Maringá, Brasil

E-mail: lander\_ds@hotmail.com

**Mariá Romanio**

ORCID: <https://orcid.org/0000-0002-0224-0783>

Universidade Estadual de Maringá, Brasil

E-mail: romanio.maria@gmail.com

**Daiane Pereira Camacho**

ORCID: <https://orcid.org/0000-0002-1329-0495>

Centro Universitário Ingá, Brasil

E-mail: biomedicina@uninga.edu.br

**Fábio Jorge Saab**

ORCID: <https://orcid.org/0000-0002-8550-0236>

Centro Universitário Ingá, Brasil

E-mail: fabiojorgesaab@ig.com.br

**Sandra Marisa Pelloso**

ORCID: <https://orcid.org/0000-0001-8455-6839>

Universidade Estadual de Maringá, Brasil

E-mail: [smpelloso@gmail.com](mailto:smpelloso@gmail.com)

**Karina Maria Salvatore Freitas**

ORCID: <https://orcid.org/0000-0001-9145-6334>

Centro Universitário Ingá, Brasil

E-mail: [kmsf@uol.com.br](mailto:kmsf@uol.com.br)

**Maria Dalva de Barros Carvalho**

ORCID: <https://orcid.org/0000-0002-1377-3331>

Universidade Estadual de Maringá, Brasil

E-mail: [mdbcarvalho@gmail.com](mailto:mdbcarvalho@gmail.com)

### **Abstract**

This study analyzed the knowledge of medical and law students about the restrictive measures adopted during the COVID-19 pandemic and the implications in the fundamental rights of the individuals. A google forms questionnaire was prepared and sent by WhatsApp to medical students and law students. The survey included questions about social isolation and if it violates or not the citizens' and humans' rights. Descriptive statistics were performed, and comparisons between medical and law students were made with chi-square and independent t-tests. A higher percentage of medical students were taken precautionary measures than law students. Internet and TV are the most used to stay up to date. Most medical and law students believed that the restrictive measure of social isolation violates the rights guaranteed to citizens. However, the majority of them believed that the citizens' rights to life and health should prevail over the citizens' right to come and go.

**Keywords:** COVID-19; Pandemic; Social isolation; Human rights.

### **Resumo**

Este estudo analisou o conhecimento de estudantes de medicina e direito sobre as medidas restritivas adotadas durante a pandemia COVID-19 e as implicações nos direitos fundamentais das pessoas. Um questionário do google forms foi preparado e enviado pelo WhatsApp para estudantes de medicina e estudantes de direito. A pesquisa incluiu perguntas sobre o isolamento social e se viola ou não os direitos humanos e dos cidadãos. Estatísticas descritivas foram realizadas e as comparações entre estudantes de medicina e direito foram

feitas com testes qui-quadrado e t independentes. Uma porcentagem maior de estudantes de medicina tomou medidas de precaução do que estudantes de direito. Internet e TV são as mais utilizadas para se manter atualizado. A maioria dos estudantes de medicina e direito acredita que a medida restritiva de isolamento social viola os direitos garantidos aos cidadãos. No entanto, a maioria deles acredita que os direitos dos cidadãos à vida e à saúde devem prevalecer sobre o direito dos cidadãos de ir e vir.

**Palavras-chave:** COVID-19; Pandemia; Isolamento social; Direitos humanos.

## Resumen

Este estudio analizó el conocimiento de los estudiantes de medicina y derecho sobre las medidas restrictivas adoptadas durante la pandemia COVID-19 y las implicaciones en los derechos fundamentales de las personas. Se preparó un cuestionario de formularios de google y se envió por WhatsApp a estudiantes de medicina y derecho. La encuesta incluyó preguntas sobre el aislamiento social y si viola o no los derechos de los ciudadanos y los humanos. Se realizó estadística descriptiva y se realizaron comparaciones entre estudiantes de medicina y derecho con chi-cuadrado y pruebas t independientes. Se tomaron medidas de precaución en un porcentaje mayor de estudiantes de medicina que de estudiantes de derecho. Internet y la televisión son los más utilizados para estar al día. La mayoría de los estudiantes de medicina y derecho creían que la medida restrictiva de aislamiento social viola los derechos garantizados a los ciudadanos. Sin embargo, la mayoría de ellos creía que los derechos de los ciudadanos a la vida y la salud deberían prevalecer sobre el derecho de los ciudadanos a ir y venir.

**Palabras-clave:** COVID-19; Pandemia; Aislamiento social; Derechos humanos.

## 1. Introduction

Since December 2019, a pandemic of coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has spread rapidly from Wuhan, Hubei Province, China, to the world (Wu, Leung, & Leung, 2020). As of August 23, 2020, the novel coronavirus has been responsible for 23,025,622 infections and 800,420 deaths worldwide, and Brazil accounts for 3,532,330 cases and 113,358 deaths (World Health Organization, 2020).

Due to the severity of the COVID-19 and the high levels of coronavirus spread, the WHO called for governments around the world to take urgent and aggressive precautionary

measures trying to prevent an even worse outbreak of the COVID-19 pandemic (Wu et al., 2020).

Mitigation measures and strict social strategies were implemented to reduce the morbidity and mortality from acute infections of COVID-19, according to the level of contamination in each country or region. Social distancing or isolation, stay-at-home orders, quarantines, lockdowns and curfews were recommended or imposed to the populations; business offices, shopping malls, schools, universities, industries and non-essential services were closed while the pandemic outbreak lasts (Peloso, Ferruzzi, et al., 2020; Wilder-Smith & Freedman, 2020).

International human rights laws assure every individual the right to a high standard of health and force the governments to take measures to prevent threats to public health and to offer medical care to everyone who needs it (Human Rights Watch, 2020). The human rights law also recognizes that, in the context of serious public health problems and emergencies menacing the life of the population, restrictions on some of these rights can be justified if they have a legal basis, are stringently necessary and based on scientific evidence; besides, it cannot be arbitrary nor discriminatory and respectful of human dignity (Human Rights Watch, 2020).

However, some interventions that are effective for public health can have adverse consequences for civil liberties and economic status (Lemon, Hamburg, Sparling, Choffnes, & Mack, 2007). There are several ethical and human rights concerns associated with the behavioral interventions that are being used during the COVID-19 pandemic, that confounds the population and divides people from what is necessary in these difficult times and their civil and human rights established by the law. The social consequences of such interventions are undeniable and need to be discussed and minimized.

The widespread dissemination of the COVID-19 pandemic rises to the level of a public health threat that justifies the restrictions on certain rights, such as those that result from the imposition of quarantine or isolation that limits the freedom of movement (Human Rights Watch, 2020). Other questions that the COVID-19 pandemic has raised are constitutional ones, including the interplay between municipal, state and federal governments in responding to the pandemic issues, the health and economic crisis and which measures need to be taken to contain the virus spread and a bigger outbreak.

With these issues and questions in mind, this study aimed to analyze the knowledge of medical and law students about the restrictive measures adopted during the COVID-19 pandemic and the implications in the fundamental rights of the individuals.

## 2. Material and Methods

This study was approved by the Ethics Research Committee of the Ingá University Center Uningá (protocol n. 4.060.622). This was a cross-sectional study with survey research design (Pereira et al., 2018).

Sample size calculation was performed with a confidence interval of 95% and a margin of error of 5%, considering the number of medical and law students in Maringá (approximately 1,200), for conducting a questionnaire/survey, resulting in need of at least 292 students/answers.

The sample comprised medical and law students, with a minimum of 16 years of age, randomly selected from private and public universities of Maringá, Paraná, Brazil.

A structured questionnaire was developed and tested on a pilot population before use in this study. The pilot study was undertaken with 30 medical and law students previously and randomly selected to verify the clarity and reliability of the questions and answers. The participants of this pilot study were not included in the total sample.

The questionnaire was prepared using the google forms and sent by WhatsApp Messenger App to medical students and law students. The sample was a non-probabilistic and snowball method, where the students sent the questionnaire to their colleagues that can be included in sample characteristics.

Before starting to answer the questionnaire, the informed consent was described, and the subjects were informed about the aims of the study. The anonymity of the participants was ensured. If the individual agreed to participate, the questionnaire was accessed. The instrument had two sections: the first asked about sociodemographic, health and academic information. The second section of the questionnaire was about the precautionary measures to avoid contamination, social isolation and its relationship with the violation of human and citizens' rights (Table 1).

**Table 1** - Questionnaire.

Q1. How old are you? _____ years.
Q2. Sex: ( ) Male ( ) Female ( ) I prefer not to say
Q3. What is your family income? ( ) Up to BRL 5,000 ( ) From BRL 5,000 to BRL 10,000 ( ) From BRL 10,000 to BRL 15,000 ( ) More than BRL 15,000
Q4. Your university is: ( ) Private ( ) Public

Q5. What is your undergraduate course? ( ) Medicine ( ) Law
Q6. Are you at risk group for COVID-19? ( ) Yes ( ) No
Q7. If so, what is your risk group? ( ) 60 years old or more ( ) Cardiovascular diseases ( ) Diabetes ( ) Other comorbidity
Q8. What individual protection measures are you taking as a precaution? ( ) Washing my hands frequently ( ) Wearing a mask ( ) Covering my nose and mouth when I cough or sneeze ( ) Maintaining a safe distance of at least 2 meters from other people ( ) Avoiding sharing personal items ( ) Avoiding touching my face, eyes, nose or mouth
Q9. How are you facing the restrictive measure of social isolation? ( ) I am in total social isolation ( ) I am going out only when extremely necessary ( ) I am going out to do other activities ( ) I do not respect the social isolation
Q10. Do you agree with the way that social isolation is being recommended? ( ) Yes ( ) No ( ) Partially
Q11. On a scale from 0 to 10, where 0 is of no importance and 10 is of utmost importance, how much do you believe that social isolation is important for the prevention infection by coronavirus? ( ) 0 ( ) 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( ) 6 ( ) 7 ( ) 8 ( ) 9 ( ) 10
Q12. On a scale of 0 to 10, where 0 means no influence and 10 is a lot of influence, how much do coronavirus and social isolation influence your health? ( ) 0 ( ) 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( ) 6 ( ) 7 ( ) 8 ( ) 9 ( ) 10
Q13. How are you keeping up to date during social isolation? ( ) TV ( ) Internet ( ) Radio ( ) Newspapers ( ) Friends ( ) Others
Q14. Do you understand that the power to decide about the essential services and activities should be responsibility of: ( ) The federal government ( ) The state government ( ) The municipal/local government ( ) All of the above
Q15. Do you believe that the flexibility and the gradual return to normal activities, the number of COVID-19 cases will increase? ( ) Yes ( ) No
Q16. Do you believe that the restrictive measure of social isolation violates the rights guaranteed to citizens? ( ) Yes ( ) No
Q17. In your opinion, about the curfew, sometimes instituted during the pandemic, what should prevail? ( ) Citizens' rights to life and health ( ) Individual citizens' rights to come and go (freedom of movement)

Source: Authors.

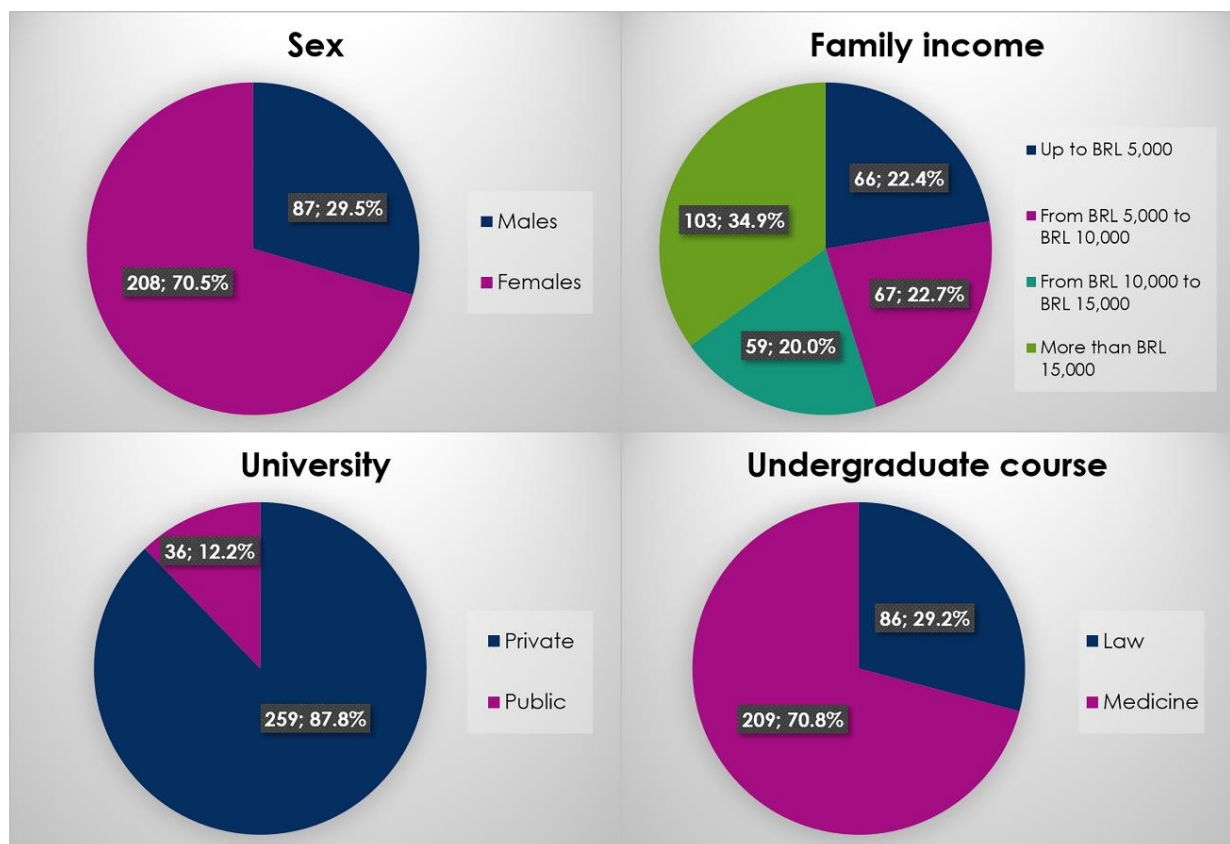
The answers were obtained and tabulated in Excel, and descriptive statistics were performed with percentages, means and standard deviations of the responses. The answers

were compared between medical and law students with chi-square and independent t-tests. Multiple regression analyses were used to verify the influence of some variables on the responses to the questionnaire. The importance and the influence of social isolation were evaluated with a numerical rating scale from 0 to 10 (Johnson, 2005). Statistical analysis was performed with Statistica software (version 12, Statsoft, Tulsa, USA), and the results were considered significant for  $P < 0.05$ .

### 3. Results

Two hundred ninety-five students answered the questionnaire (70.5% females, 29.5% males, with a mean age of 21.84 years, SD 4.41). The sample characteristics are described in Figure 1. Forty-one students (13.9%) were at risk group for COVID-19; 7 has cardiovascular diseases, 1 had diabetes and 33 reported to have other comorbidities.

Figure 1 - Sample characteristics.



Source: Authors.



**Table 2 - Comparison between medical and law students.**

Questions/Answers	Medical students	Law students	p-value
	n=209	n=86	
	n (%) or mean (SD)	n (%) or mean (SD)	
Age (years)	21.71 (4.23)	22.14 (4.80)	0.450 <sup>T</sup>
<b>Sex</b>			X <sup>2</sup> =1.70
Males	57 (27.3%)	30 (34.9%)	DF=1
Females	152 (72.7%)	56 (65.1%)	0.193 <sup>C</sup>
<b>Family income</b>			
Up to BRL 5,000	32 (15.3%)	34 (39.5%)	X <sup>2</sup> =34.88 DF=3 <b>0.000</b> * <sup>C</sup>
From BRL 5,000 to BRL 10,000	40 (19.1%)	27 (31.4%)	
From BRL 10,000 to BRL 15,000	49 (23.4%)	10 (11.6%)	
More than BRL 15,000	88 (42.1%)	15 (17.4%)	
<b>University</b>			X <sup>2</sup> =
Private	186 (89%)	73 (84.9%)	DF=1
Public	23 (11%)	13 (15.1%)	0.327 <sup>C</sup>
<b>Facing social isolation</b>			
Total social isolation	12 (5.7%)	5 (5.8%)	X <sup>2</sup> =10;46 DF=3 <b>0.015</b> * <sup>C</sup>
Going out when extremely necessary	149 (71.4%)	47 (54.7%)	
Going out to other activities	45 (21.5%)	29 (33.7%)	
Do not respect social isolation	3 (1.4%)	5 (5.8%)	
<b>Agree with social isolation</b>			
Yes	37 (17.7%)	17 (19.7%)	X <sup>2</sup> =0.46
No	56 (26.8%)	20 (23.3%)	DF=2
Partially	116 (55.5%)	49 (57%)	0.794 <sup>C</sup>
<b>Importance of social isolation</b>	8.94 (1.64)	8.99 (1.59)	0.808 <sup>T</sup>
<b>Influence of coronavirus and social isolation on health</b>	7.81 (2.19)	7.93 (2.41)	0.674 <sup>T</sup>
<b>Decision about essential services is responsibility of:</b>			
Federal government	8 (3.8%)	8 (9.3%)	X <sup>2</sup> =9.74 DF=3 <b>0.021</b> * <sup>C</sup>
State government	18 (8.6%)	12 (14%)	
Local government	36 (17.2%)	21 (24.4%)	
All of them	147 (70.4%)	45 (52.3%)	
<b>Flexibility will increase COVID-19 cases</b>			X <sup>2</sup> =1.53
Yes	190 (90.9%)	74 (86%)	DF=1
No	19 (9.1%)	12 (14%)	0.216 <sup>C</sup>
<b>Restrictive measure of social isolation violates the citizens' rights</b>			X <sup>2</sup> =0.04
Yes	126 (60.3%)	53 (61.6%)	DF=1
No	83 (39.7%)	33 (38.4%)	0.830 <sup>C</sup>
<b>What should prevail on the curfew?</b>			X <sup>2</sup> =2.88
Citizens' rights to life and health	163 (78%)	59 (68.6%)	DF=1
Citizens' rights to come and go	46 (22%)	27 (31.4%)	0.089 <sup>C</sup>

\* Statistically significant at p<0.05

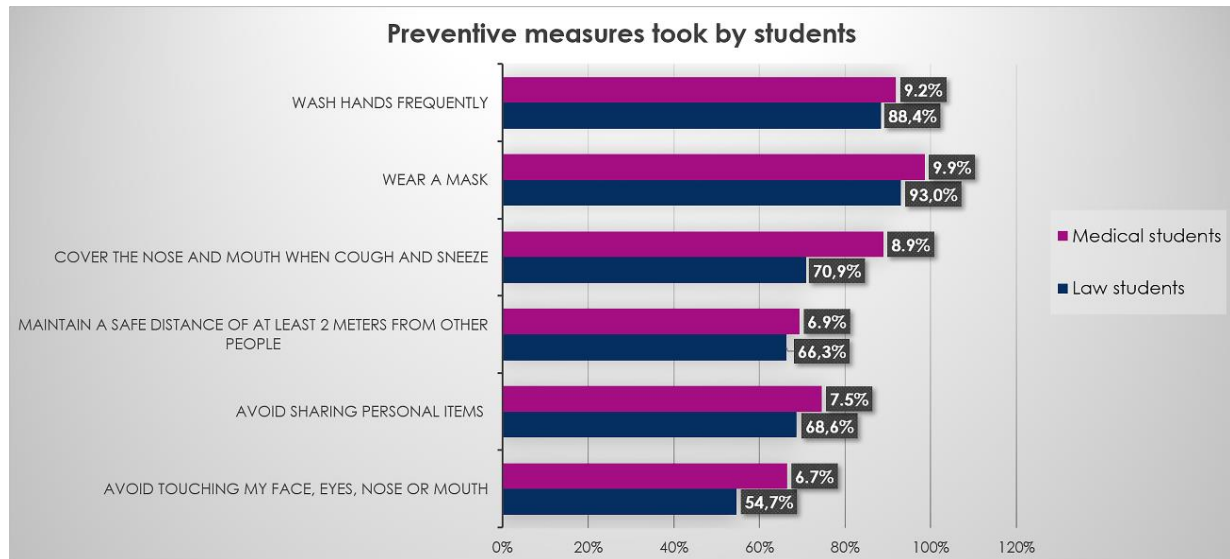
<sup>C</sup> chi-square test; <sup>T</sup> independent t-test

Source: Authors.



Medical students were 70.8% and law students, 29.2% of the respondents (Fig. 1), with similar age, sex distribution and type of university (Table 2). Medical students presented significantly greater family income than law students (Table 2).

**Figure 2 - Preventive measures took by medical and law students.**



Source: Authors.

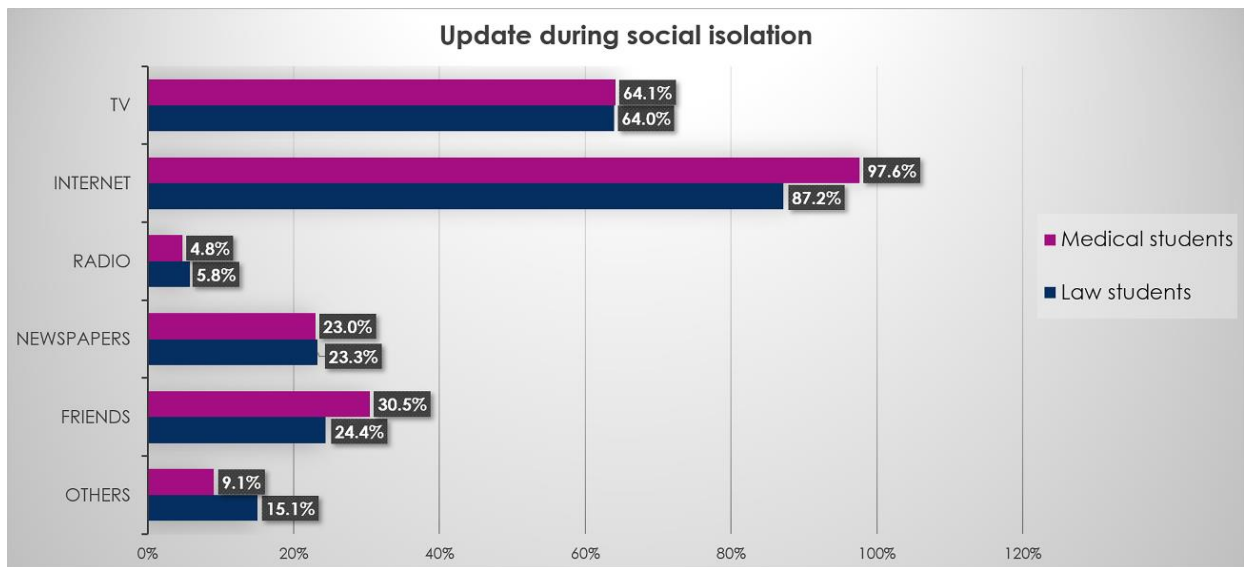
Regarding the protection measures taken as a precaution by the students, wearing a mask was the most cited (96.9%), followed by washing hands frequently (90.8%); 83.5% of the students were covering the nose and mouth when cough or sneeze; 72.9% were avoiding sharing personal items; 68.5% were maintaining a safe distance of at least 2 meters from other people; and 63% reported that were avoiding touching the face, eyes, nose or mouth. A higher percentage of medical students were taken the precautionary measures than law students (Fig. 2).

Regarding the restrictive measure of social isolation, 66.4% of the students were going out only when extremely necessary, 25.1% were leaving home to do other activities, 5.8% reported to be in total social isolation, and 2.7% did not respect the social isolation. Significantly more medical students were going out only when extremely necessary and more law students were going out to do other activities and did not respect social isolation (Table 2).

Most students (55.9%) partially agree with the social isolation, 25.8% did not agree and only 18.3% agree. The level of importance of social isolation was scored as 8.95 (SD 1.62) and the level of influence of the coronavirus and the social isolation on the health of the

individuals was 7.84 (SD 2.26). There were no statistically significant differences between medical and law students about the agreement or not and the importance of social isolation, and about the influence of coronavirus and social isolation on health (Table 2).

**Figure 3** - Update during social isolation used by medical and law students.



Source: Authors.

The students kept updated during social isolation, mainly on the internet (94.6%) and TV (64.1%). Other ways they were using to be updated were friends (30.8%), newspapers (23.1%), radio (5.1%) and others (9.2%). Medical students used more the internet and friends to keep updated than law students during social isolation (Fig. 3).

According to most of the students' opinions (65.1%), all the federal, state and municipal governments should be responsible for deciding about the essential services and activities. There were significant differences between the responses of medical and law students about this government responsibility; more medical students believed that all governments were responsible for the decisions about essential services, and law students were more divided about which government should be responsible (Table 2).

The great majority of the students (89.4%) believed that, with the flexibility and the gradual return to normal activities, the number of COVID-19 infected cases would increase, and most participants (60.7%) believed that the restrictive measure of social isolation violates the rights guaranteed to citizens. According to most of the students (75.3%), about the curfew sometimes instituted during the pandemic, the citizens' rights to life and health should prevail. However, 24.7% believe that individual citizens' rights to come and go (freedom of

movement) should overcome. More medical students (78%) considered that the rights to life and health should prevail than law students (68.6%), and more law students (31.4%) believed that the rights to come and go should prevail than medical students (22%), but this difference was not statistically significant (Table 2).

Multiple regression analyses indicated that none of the variables age, sex, family income, type of university or undergraduate course influenced the responses of the questionnaire.

#### **4. Discussion**

This is one of the few studies that assess the knowledge and position of medical and law students regarding the restrictive measures adopted during the COVID-19 pandemic and the implications for individual's fundamental rights.

Most students that participated in the survey were females, following the tendency of the literature that shows that women are more willing to participate in surveys and questionnaires (Cotrin, Bahls, et al., 2020; Cotrin, Peloso, et al., 2020; Peloso, Pini, et al., 2020; Qiu et al., 2020). Medical students were the majority of the respondents, but this was already expected since the city of Maringá, where the survey was applied, presents more medical than law students. Medical students presented more family income than law students; this result was also expected since medical universities are more expensive in Brazil than law schools. However, this did not influence the results, verified by multiple regression analyses.

Medical students seem to respect more the social distancing and isolation recommended or imposed to the population by authorities since more medical students are going out only when extremely necessary. More law students are going out to other activities or do not respect the social isolation measure than medical students (Table 2). It is comprehensible that medical students respect more the social isolation measure, maybe probably because they present more knowledge about the risk of contamination and the threat that the COVID-19 pandemic brings to the population, and that measures of distancing and stay-at-home orders will help to avoid further spread of the virus (Gao et al., 2020; Khasawneh et al., 2020). Furthermore, a slightly higher percentage of medical students were taking preventive measures of hygiene and behavior as a precaution than law students (Fig. 2).

Most students agree partially with social isolation, and the level of importance of social isolation was almost 9 on a 0-to-10 point scale. The influence of coronavirus and social

isolation on students' health received a mean score of 7.84. This indicates that both medical and law students consider important the measure of social isolation, even not entirely agree with it.

The term 'lockdown' has become frequent in these pandemic times, and it is controversial because it opposes to the citizens' right to come and go. Lockdown can be defined as the stricter version of social isolation, a rule temporarily imposed by the government and mandatory for citizens during the COVID-19 pandemic. In some Brazilian states and municipalities, citizens who fail to comply with it are subjected to a fine. In this context, some questions arise about the obligation of the citizens to fulfill and adhere to social isolation and their right to come and go.

The famous 'right to come and go', or 'freedom of movement', is guaranteed by the Federal Constitution to every Brazilian and foreign citizen in the country, inserted precisely in the Chapter of Individual Freedoms and Rights (Brasil, 1988).

Medical and law students disagreed about the government's responsibility to decide on essential services and activities. Medical students believed that all governments were responsible (federal, state and municipal), while law students were more divided over which government should be responsible. In the opinion of most students (65.1%), it would be responsibility to the federal, state and municipal governments to decide on essential services and activities. There were significant differences between the responses of medical and law students about this governmental responsibility; more medical students believed that all governments were responsible for making decisions about essential services, and law students were more divided about which government should be responsible (Table 2).

The Federal Law No. 13,979 of 2020 establishes measures to prevent COVID-19 in Brazil and includes the fact that the law only comes into force during the Public Health Emergency of International Concern (PHEIC) formally declared by the WHO and provides that the right to dignity, human rights and the fundamental freedom of people must be respected, although in practice, as already mentioned, these rights must not stand out from the rights to life and health.

Despite of being a Federal Law, the Supreme Federal Court decided that all governments (federal, state and municipal) can also establish measures to deal with this pandemic situation in Brazil, although some measures can be determined only by federal government. This determination by the Brazilian government has been following the models adopted in countries such as Italy, Germany and the United States of America (USA). In the American country, the development of the prevention measures of the disease is decentralized

in such a way that the municipal and state health departments are responsible for most of the restrictive measures and the federal government is only concerned with imposing a quarantine on interstate and international borders.

During the pandemic, some local governments have decreed the lockdown and intervene, limiting the circulation of people, including closing public and private roads and places. This legal conflict can be solved by reflection and common sense, where “weight” is determined for each value involved in the matter, and the principle presenting the greatest weight should prevail.

Giving the severity and wide scope of the COVID-19 pandemic, the social interest must prevail, i.e., the collective right to health. This is why some governments used the lockdown as an instrument of mandatory social isolation, to avoid further contamination by coronavirus, ensuring the right to health to the population.

The majority of the respondents' believed the flexibility and the gradual return to normal activities would increase the COVID-19 infected cases.

Most medical and law students (60.3% and 61.5%, respectively) believed that the restrictive measure of social isolation violates the rights guaranteed to citizens. However, 75.3% of them believed that the citizens' rights to life and health should prevail over the citizens' right to come and go. This knowledge and attitude of medical and law students about the restrictive measures and citizens' rights are in line with a decision by the Paraná court of justice. This court, when judging demand involving the lockdown decreed by the municipality of Maringá in opposition to the civil right to come and go, decided that the collective right prevails, granting the municipality the right to enact mandatory social isolation. The justification used was that the measure was not inconsistent compared to the situation at the moment. The pandemic the world is experiencing is of unprecedented proportions and has been notoriously burdening the health system, whether public or private. In the absence of effective treatment for COVID-19 and with few hospital beds available, social isolation is actually the most effective measure in this scenario. It was considered that in times of the COVID-19 pandemic, the social interests prevail at the expense of the individual rights, without losing the sense of proportionality, as the sacrifice of a right is only justified if it is reasonable and relative to the foundation of the one that prevails.

A limitation of this study was the use of a non-probabilistic snowball sample. Despite this limitation that does not allow inferences or population generalizations, the technique of data collection through the online questionnaire allowed to reach an expressive number of

students and to have a quick view of the problem, in the face of so many doubts and uncertainties.

## 5. Conclusion

The majority of medical and law students are respecting and partially agree with social isolation and also believe that the restrictive measure of social isolation violates the rights guaranteed to citizens. However, the majority of them believed that the citizens' rights to life and health should prevail over the citizens' right to come and go. Further research should be performed after the pandemic, to compare with these results and also to identify the influence of the pandemic on the results obtained. Thus, these new researches can present different results, and may even reveal that, among many other aspects, fear and insecurity of a disease with unknown signs and symptoms can determine the final result.

## References

Brasil. (1988). *Constituição (1988). Constituição da República Federativa do Brasil*. Brasília, DF: Senado Federal: Centro Gráfico.

Cotrin, P., Bahls, A. C., da Silva, D. O., Girão, V. M. P., Pinzan-Vercelino, C. R. M., de Oliveira, R. C. G., Freitas, K. M. S. (2020). The Use of Facemasks During the COVID-19 Pandemic by the Brazilian Population. *Journal of Multidisciplinary Healthcare*, 13, 1169-1178. doi:10.2147/JMDH.S281524

Cotrin, P., Peloso, R. M., Oliveira, R. C., Oliveira, R. C. G., Pini, N. I. P., Valarelli, F. P., & Freitas, K. M. S. (2020). Impact of coronavirus pandemic in appointments and anxiety/concerns of patients regarding orthodontic treatment. *Orthodontics and Craniofacial Research*. doi:10.1111/ocr.12395

Gao, Z., Ying, S., Liu, J., Zhang, H., Li, J., & Ma, C. (2020). A cross-sectional study: Comparing the attitude and knowledge of medical and non-medical students toward 2019 novel coronavirus. *Journal of Infection and Public Health*. doi:10.1016/j.jiph.2020.06.031

Human Rights Watch. (2020, March 19, 2020). Human Rights Dimensions of COVID-19 Response. Retrieved from <https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response>

Johnson, C. (2005). Measuring Pain. Visual Analog Scale Versus Numeric Pain Scale: What is the Difference? *Journal of Chiropractic Medicine*, 4(1), 43-44. doi:10.1016/S0899-3467(07)60112-8

Khasawneh, A. I., Humeidan, A. A., Alsulaiman, J. W., Bloukh, S., Ramadan, M., Al-Shatanawi, T. N., Kheirallah, K. A. (2020). Medical Students and COVID-19: Knowledge, Attitudes, and Precautionary Measures. A Descriptive Study From Jordan. *Frontiers in Public Health*, 8, 253. doi:10.3389/fpubh.2020.00253

Lemon, S. M., Hamburg, M. A., Sparling, P. F., Choffnes, E. R., & Mack, A. (2007). *Ethical and Legal Considerations in Mitigating Pandemic Disease*. Washington, D.C.: The National Academies Press.

Peloso, R. M., Ferruzzi, F., Mori, A. A., Camacho, D. P., Franzin, L., Margioto Teston, A. P., & Freitas, K. M. S. (2020). Notes from the Field: Concerns of Health-Related Higher Education Students in Brazil Pertaining to Distance Learning During the Coronavirus Pandemic. *Evaluation and the Health Professions*, 163278720939302. doi:10.1177/0163278720939302

Peloso, R. M., Pini, N. I. P., Sundfeld Neto, D., Mori, A. A., Oliveira, R. C. G., Valarelli, F. P., & Freitas, K. M. S. (2020). How does the quarantine resulting from COVID-19 impact dental appointments and patient anxiety levels? *Brazilian Oral Research*, 34, e84. doi:10.1590/1807-3107bor-2020.vol34.0084

Pereira, A. S. et al. (2018). Metodologia da pesquisa científica. [eBook]. Santa Maria. Ed. UAB / NTE / UFSM.

Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and



policy recommendations. *General Psychiatry*, 33(2), e100213. doi:10.1136/gpsych-2020-100213

Wilder-Smith, A., & Freedman, D. O. (2020). Isolation, quarantine, social distancing and community containment: pivotal role for old-style public health measures in the novel coronavirus (2019-nCoV) outbreak. *Journal of Travel Medicine*, 27(2). doi:10.1093/jtm/taaa020

World Health Organization. (2020). Coronavirus Disease (COVID-19) Dashboard. Retrieved from <https://covid19.who.int/>

Wu, J. T., Leung, K., & Leung, G. M. (2020). Nowcasting and forecasting the potential domestic and international spread of the 2019-nCoV outbreak originating in Wuhan, China: a modelling study. *Lancet*, 395(10225), 689-697. doi:10.1016/S0140-6736(20)30260-9

#### **Percentage of contribution of each author in the manuscript**

Alexandre Castilho Pelloso – 10%

André Agostinho Picoli – 10%

Fernando Castilho Pelloso – 10%

Lander dos Santos – 10%

Mariá Romanio – 10%

Daiane Pereira Camacho – 10%

Fábio Jorge Saab – 10%

Sandra Marisa Pelloso – 10%

Karina Maria Salvatore Freitas – 10%

Maria Dalva de Barros Carvalho – 10%