

Socioeconomic Impact of COVID-19 on Medical Doctors in Cameroon

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Abstract. *Background:* Crises, be it health or insecurity, almost always have behavioural, social and economic, repercussions. We conducted a descriptive study on the socio-economic impact of the Covid-19 crisis on Cameroonian doctors through an electronic survey.

Methodology: This was a cross-sectional study conducted from May to June 2020 through an online survey using Google Forms. Data on socio-demographic characteristics, the activities practiced, the consumption of narcotics, inter-professional relationships and income losses were recorded. Included were all medical personnel residing on Cameroonian territory.

Results: In all, there were 253 participants, 56.5% of whom were women. The ten regions of the country were represented. Up to 93.3% of respondents acknowledged having increased their social activities. During this pandemic, 5.5% of respondents admitted to having increased their alcohol consumption, 1.2% admitted to having consumed psychotropic drugs and 2% felt that there was an increase in tensions in the workplace during confinement. In addition, 220 participants declared that the rhythm of their professional activities decreased and 29.6% of the participants estimated a loss of income of 50% to 75%.

Conclusion: This crisis has led to a considerable drop in the professional activities and income of Cameroonian doctors. The management of a health crisis should also integrate the social and financial management of health personnel.

Keywords: COVID-19, socio-economic impact, doctors, Cameroon

Background

In response to the COVID-19 pandemic, many companies closed in Asia, Europe and The Americas (Ministère du plan et du développement, 2020). This has had significant repercussions on production chains and supply of raw materials, but also on global demands (Ministère du plan et du développement, 2020). On the other hand, commodity prices suffered a drastic drop due to the fall in global demand. In Africa, there was an economic recession the resulted from the drop in global demand, the breakdown of production and supply chains, and from the drop in the price of raw materials (Ministère du plan et du développement, 2020; Ananfack Nguefack et al., 2020). Shocks in the market of raw materials, as is the case with the COVID-19 pandemic, strongly affect developing countries both socially and economically.

In Cameroon, the first case of COVID-19 reported on March 6, 2020 was imported from Europe[†]. In their response strategy, the Cameroonian authorities have put in place safety and health protocols aimed at the early detection of potential patients and their adequate care[‡]. These measures if maintained in the “post-COVID-19” period will keep a relatively higher

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[†] <https://maroc-diplomatique.net/coronavirus-un-premier-cas-confirme-au-cameroun/>

[‡] <https://www.cameroon-tribune.cm/article.html/30834/fr.html/coronavirus-la-riposte-bien-prepares>

level of health security in the country. However, these same measures are associated with increased expenditures, compounding an already weakened economy with negative repercussions on the society both collectively and at individual levels (Ananfack Nguefack et al., 2020)[§]. Health personnel who are at the frontline of the fight against this pandemic are also experiencing repercussions. To assess the socio-economic impact of COVID-19 on medical doctors in Cameroon, we conducted a month-long electronic survey via Google forms among doctors practicing in Cameroon.

Patients and Methods

Study Design / Participants

This was a cross-sectional study conducted using an online survey designed on Google Forms. Included, were all medical doctors of both sexes residing in Cameroon at the time of the survey. Sampling was consecutive. The link (French version: <https://forms.gle/RxY1WVzX8gTz6C6N8>; English version: <https://forms.gle/9GCxemxnrBHov3me9>) was shared in WhatsApp groups of specialists' physicians, general practitioners, residents and specializing interns. We made use of close-ended questions and questions with a Likert scale. The questionnaire was anonymous and had a total of 55 questions related to socio-demographic data (age, gender, place of residence, marital status, and place of practice), appointment cancellation rate, estimated loss of income, the practice of social activities, the change in behavior concerning colleagues and family and the expectations of remuneration.

To improve the participation rate, the messages were sent for the first time when the survey was launched on May 2, 2020, then a reminder message was sent halfway through and at three weeks. The data was collected over a period of one month from May 2 to June 1, 2020.

Statistical Analysis

Statistical analysis was performed using the Statistical Package for Social Sciences (SPSS) version 20.0 software. All data were expressed as proportions and frequencies. A p-value < 0.05 was considered statistically significant.

Results

Sociodemographic Characteristics

We had a total of 253 participants. Of these, 56.5% were women. Participants were relatively young; the majority was between 23-30 years (43.9%). The ten regions of the country were represented, the Center was the most represented with 155 (61.3%) participants; the least represented were the North West and East regions with 1 (0.4%) participant from each. The majority of participants were general practitioners 37.2%, followed by specialist doctors 26.9%. Participants lived (91.7%) and practiced (84.6%) primarily in urban areas. One hundred and eighty-three (72.3%) respondents worked in an institution with a COVID-19 treatment unit.

Social And Economic Impact

The COVID-19 pandemic has led to a change in the social habits of participants. Up to 93.3% of respondents admitted to having increased their social activities, 1.6% watched a lot more films and documentaries, 0.4% listened a lot more to music, 1.2% practiced meditation and 85.7 % had increased at least two of these social activities (Table 1).

[§] <https://www.euro.who.int/fr/health-topics/noncommunicable-diseases/mental-health/data-and-resources/mental-health-and-covid-19>

Table 1: Practice of social activities during the COVID-19 pandemic

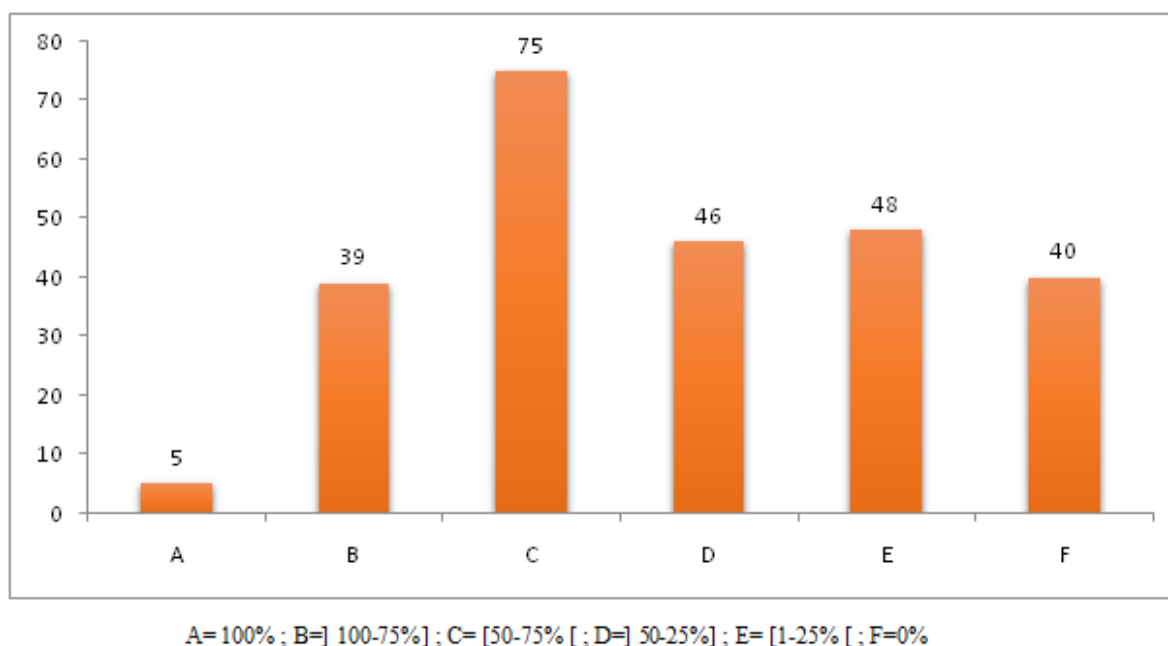
At least two of these activities	85.7%
Viewing of films and documentaries	1.6%
Sports	1.2%
Follow logs	1.2%
Meditation	1.2%
General book reading	1.2%
Read a holy book (Bible, Koran)	0.8%
Listen to music	0.4%

During this pandemic, 5.5% of respondents admitted to having increased their alcohol consumption, 1.2% admitted to having consumed psychotropic drugs (Table 2).

Table 2: Increase in substance use during the pandemic

Other drug	0.4%
Alcohol, tobacco, psychotropic	0.4%
Psychotropic	1.2%
Alcohol	5.5%
No substances	92.5%

In our series, 2% felt that there was an increase in tensions in the professional environment during confinement, 4% noted a decrease in team spirit, and 11.1% noticed a spacing out of relationships with colleagues. Contrarily, 11.1% rather experienced tightening of ties with colleagues in their professional environment. At their households, 5.1% felt that there was a spacing of ties whereas, 22.5% felt the opposite. In addition, 220 (87%) participants said the pace of their professional activities decreased during the pandemic. Close to 30% of participants estimated a loss in income of 50% to 75%, however 1.9% claimed to have lost 100% of their income (Figure 1).

**Figure 1: Proportion of loss in terms of income**

Also, 90% of participants wanted to be paid or see their monthly salary increased after this COVID-19 pandemic (Figure 2).

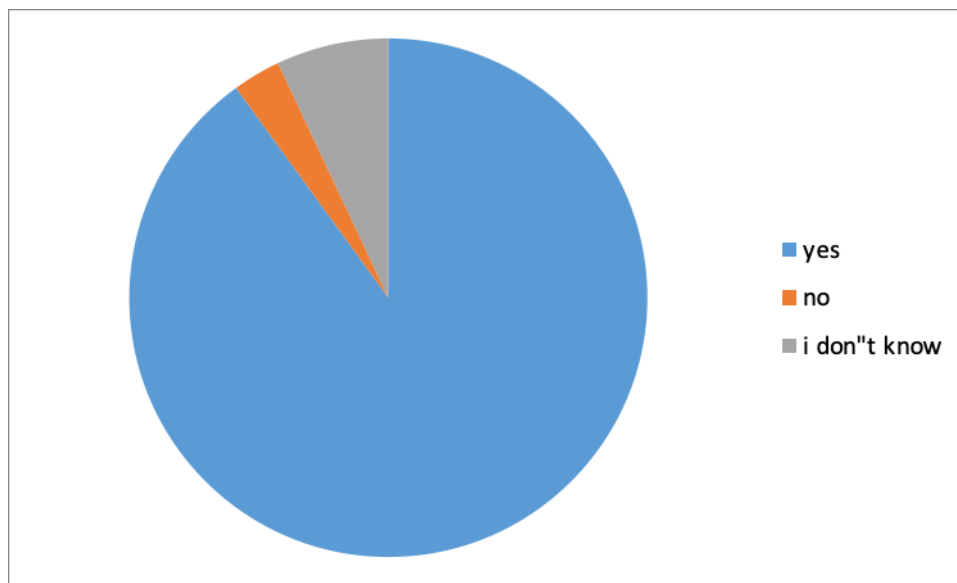


Figure 2: Would you like to get paid or have your monthly salary increased after this COVID-19

Discussion

According to Wood *et al.*, life habits strongly depend on context; they are usually automatic responses to a given context. Thus, by modifying context it could be possible to get rid of and give way to new habits (Wood, Tam, & Guerrero Witt, 2005; Sheth, 2020). In the case of the Covid-19 crisis, the modification of the context imposed the adoption and implementation of new habits against people's will (Wood, Tam, & Guerrero Witt, 2005). In our series, the significant reduction in professional activities (87%) is similar to that observed in a multinational electronic survey on the provision of cardiology services in Africa during the COVID-19 pandemic where the authors highlighted that 78% of practitioners had seen their professional activities decrease (Nganou-Gnindjio *et al.*, 2020). Also, in France, a study on the socio-economic and psychological impact of the COVID-19 epidemic on radiologists working in private practice and in public hospitals showed that 86.3% of practitioners had seen their professional activities drop (Florin *et al.*, 2020). In reality, the healthcare activities of doctors in Africa have been significantly reduced during this period of COVID-19 (Nganou-Gnindjio *et al.*, 2020). The reduction is probably secondary to the fact that, on one hand, hospitals generally operated on minimum service and only managed emergency cases to reduce exposure to the virus (Florin *et al.*, 2020). On the other hand, this reduction in intra-hospital activities could be due to the fact that patients limited their hospital visits, fearing the dreaded virus for some and heightened socio-cultural beliefs for others. They were afraid of being declared COVID-19 positive and then being quarantined and in the event of death, being buried immediately without receiving the honours and cultural rites from their relatives. Indeed, the way the dead are mourned in Africa cultures is different from that in Western countries (Temgoua *et al.*, n.d.; Ekore & Lanre-Abass, 2016).

However, this decrease in the pace of work led to a change in the daily habits of the participants who therefore had more free time than usual. Ninety-three percent (93.3%) of our respondents acknowledged having increased their social activities such as listening to music, reading, cooking, meditation, sports. This could also be explained by the fact that some individuals have found that eating better or exercising more on a daily basis does not require

so much effort and can have good effects on well-being. On the other hand, we found an increase in the consumption of alcohol and psychotropic drugs. These results are compatible with those of the Canadian Center on Substance Use and Addiction (CCSA), which in a survey showed that 21% of Canadians aged 18 to 34 years claimed to have increased their alcohol consumption since the COVID-19 pandemic^{**}. In Switzerland, during an electronic survey on the use of recreational drugs during the COVID-19 period, respondents had most often used legal psychoactive substances, alcohol and tobacco, as well as cannabis-based products, such as marijuana (Schori & De Simone, 2020). In our series, roughly a third of our participants felt they had lost 50% to 75% of their income. In reality, the global economic repercussion of the pandemic is seriously impacting not only health systems, but also health care workers. In France, 70% of liberal doctors have lost more than 30% of their remuneration^{††}. However, in certain countries such as France, the authorities support doctors with subsidies. In the study by Marie Florin et al. among the radiologists who practiced privately, 83.4% had received financial assistance from the government.

Conclusion

The Covid-19 pandemic has caused socio-economic upheavals around the world, especially among health-caregivers. This serious health crisis has led to a considerable drop in the activities of Cameroonian doctors. These drop-in activities have impacted their social attitudes and above all considerably reduced their income. These data make it possible to understand the degree of impact that a health crisis can have on medical personnel both globally and in the Cameroonian context. Support measures for this sector of activity, front-liner in the fight against the COVID-19 pandemic, would make it possible to better handle similar health crises in future, if any.

Declarations

Ethics Approval and Consent to Participate

The questionnaire was online and anonymous; thus, we have only included those who freely responded to the questionnaire.

Availability of Data and Material

The datasets used and/or analyzed during the current study available from the corresponding author on reasonable request.

Competing Interests

The authors declare no conflicts of interest with regard to this article.

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Authors Contribution

ANEG and EAK conceived the study. ANEG and NNTW collected and entered the data. EAK, DNT, ANEG, NNTW, MMCR and NNFM drafted the manuscript. All authors proofread

^{**}<https://www.jeunesseansdroguecanada.org/support-yourself-and-your-family-through-the-challenges-of-covid-19/substance-use-and-covid-19/>

^{††}<https://www.lequotidiendumedecin.fr/actus-medicales/covid-19-sept-medecins-liberaux-sur-dix-enregistrent-une-perde-de-remuneration-de-plus-de-30>

and corrected the manuscript. All authors agreed with the final manuscript to be submitted for publication.

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