

Knowledge, Risk Perceptions and Preventive Measures towards COVID-19 outbreak among Health Care Professionals – An Online Based Survey



Submitted By: Surbhi
Chaturvedi
[MBA HM – 23]
(850)

INTRODUCTION

- India is bravely fighting the deadly COVID-19 pandemic. It is caused by 2019-nCoV virus. The International Committee on Taxonomy of Viruses (ICTV) which was later coined a new name as syndrome coronavirus 2 (SARS-CoV-2).
- Both (SARS-CoV) severe acute respiratory syndrome-coronavirus and the (MERS-CoV) Middle East respiratory syndrome-coronavirus have already been found to cause diseases in humans.
- MERS-CoV was found to have Arabian camels to human transmission, whereas SARS-CoV spread from civet cats to humans. The origin of SARS-CoV-2 have been traced to occur in bats.
- Then the virus start spreading outside Hubei and ultimately to the whole world through human transmission. Community spread has also occurred in many countries.

- After 3 months of first case in China, the World Health Organization (WHO) on 11 March 2020 announced novel coronavirus as pandemic.
- With this severe method of person to person transmission, healthcare professionals are amongst the most vulnerable to be exposed to the virus
- The extreme infectious nature of SARS-CoV-2 virus is an additional threat on our health system other than the load of prolonged working hours, it also takes toll on physical and mental weakness .
- So, an online based survey was conducted to study and assess the awareness, risk perceptions and various preventive measures among our health care professionals.



- To assess the knowledge of COVID-19 among Health Care Professionals.
- To gain insights into the Risk perceptions of COVID-19 among Health Care Professionals.
- To determine the preventive measures towards COVID-19 outbreak among Health Care Professionals.



Study design: Descriptive Cross-sectional study

Study Population : Health care Professionals

Duration of Study : 5th March to 5th June 2020.

Mode of Data collection : Primary Data

A self-administered questionnaire was constructed based on the guidelines published by WHO Survey Tool and Guidance for COVID-19 and the latest interim information for healthcare workers (HCW) advocated by the CDC and updated on March 7, 2020

It is divided into 4 components :

Socio-demographic

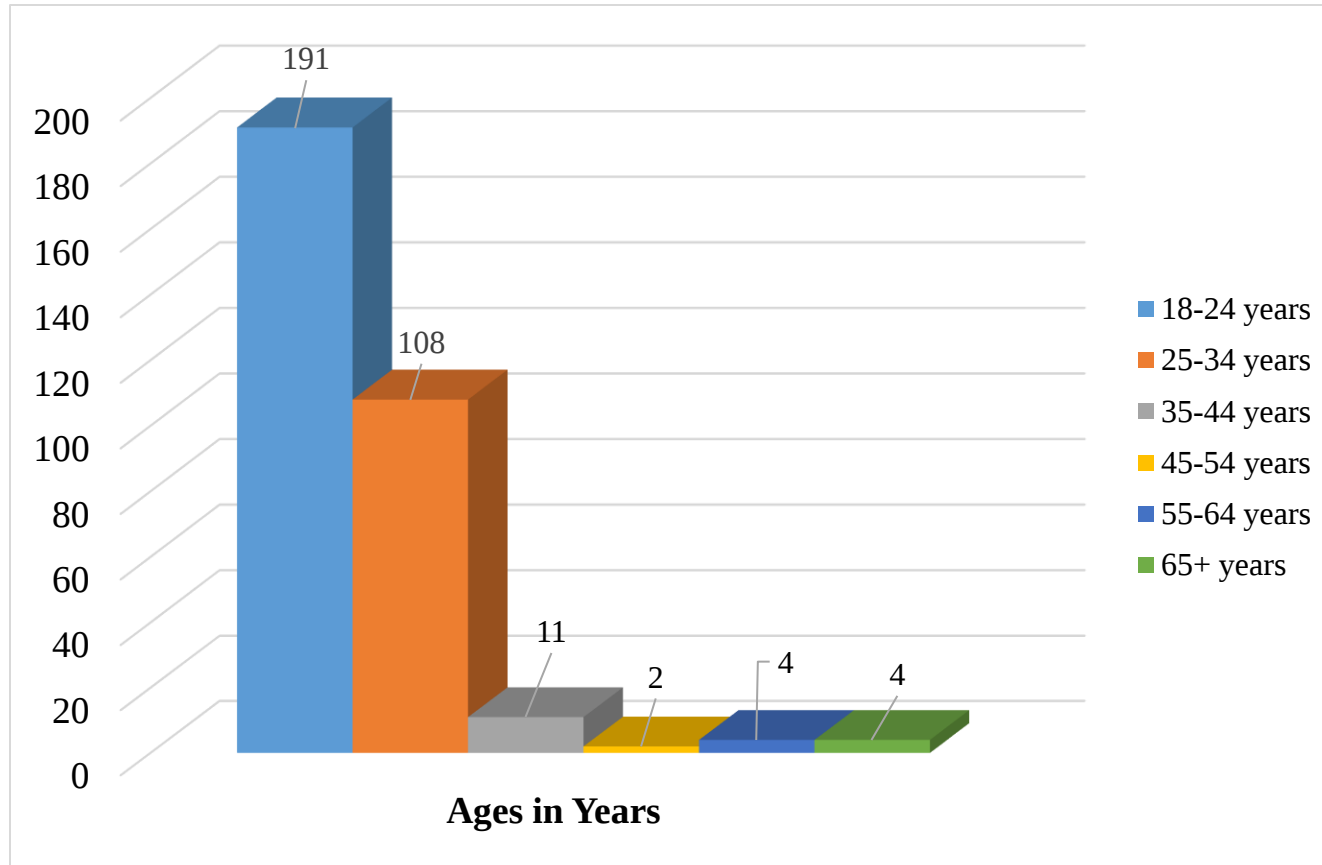
Knowledge

Risk perceptions

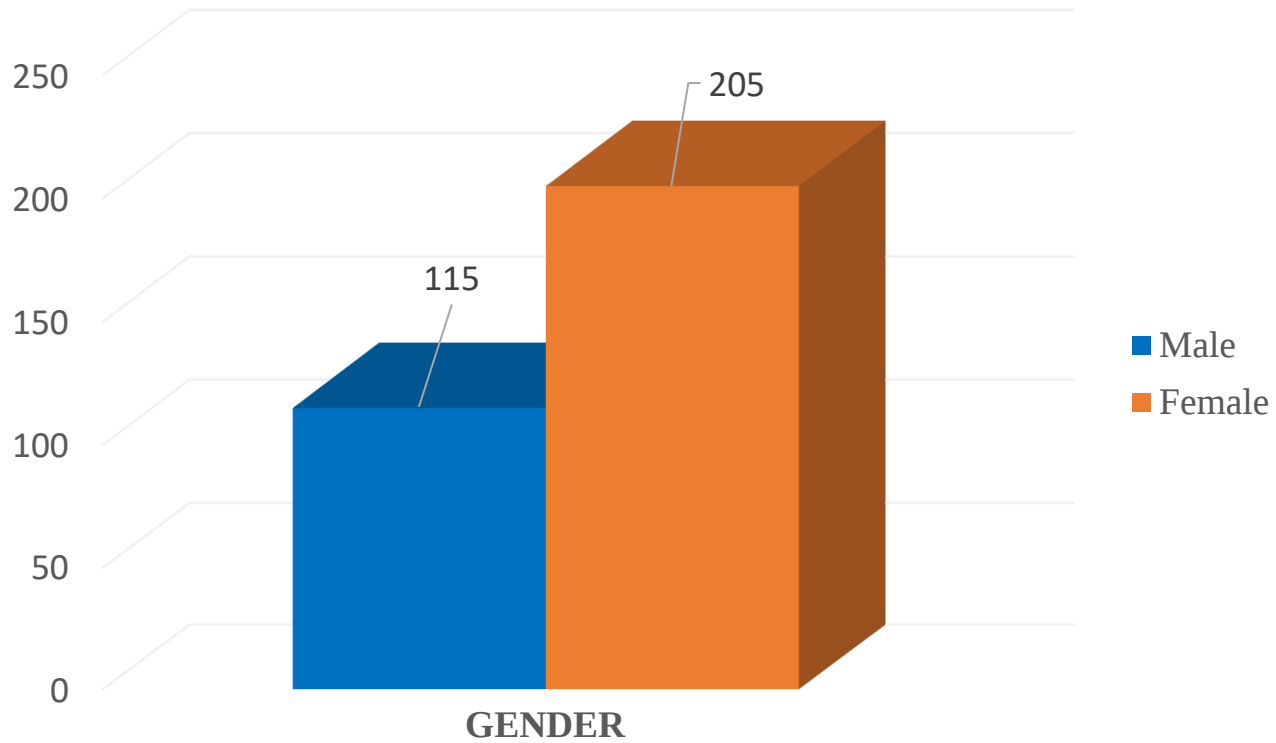
Preventive Measures

Socio-Demographic Data

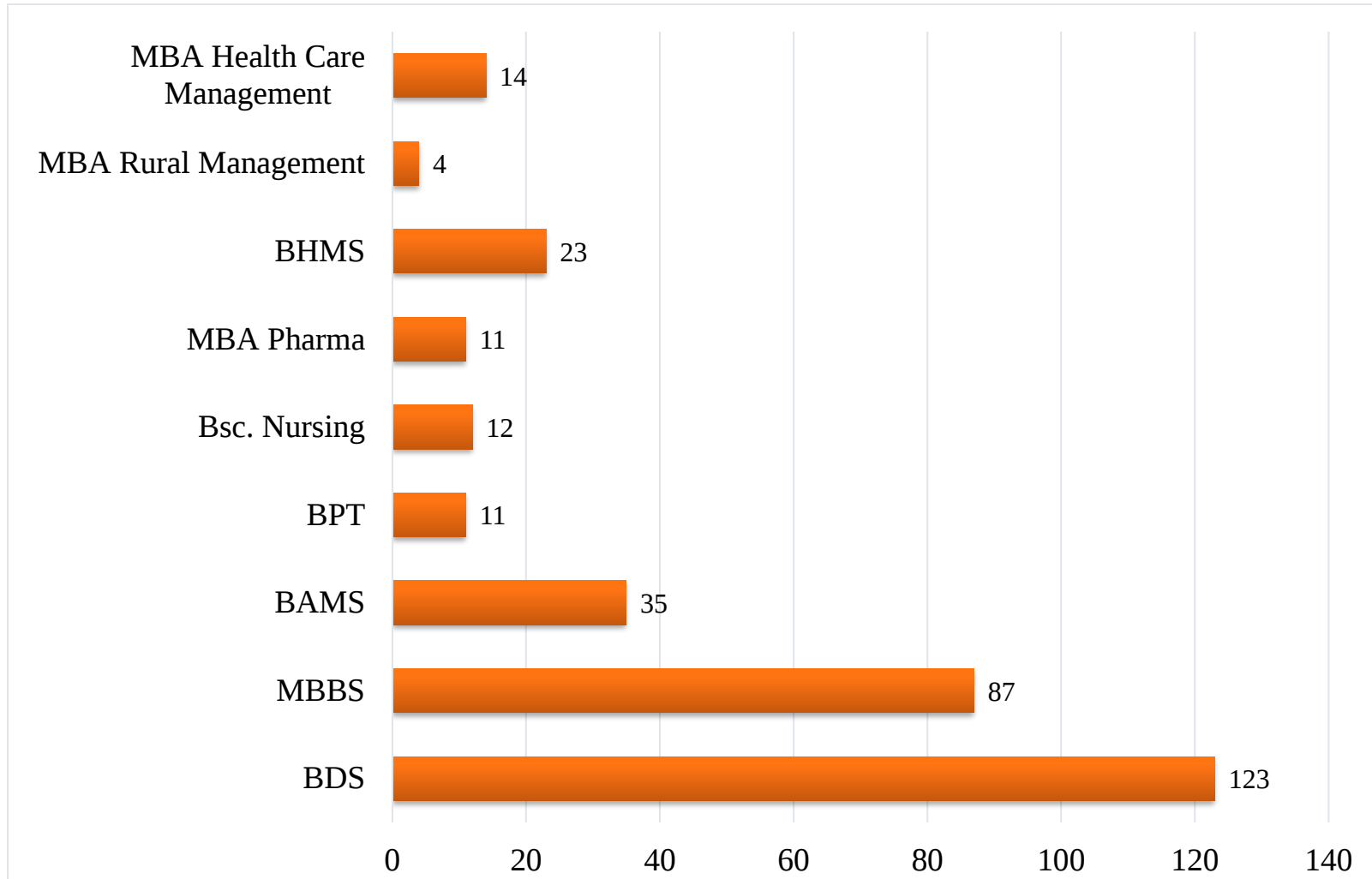
- Age Distribution of Health Care professionals



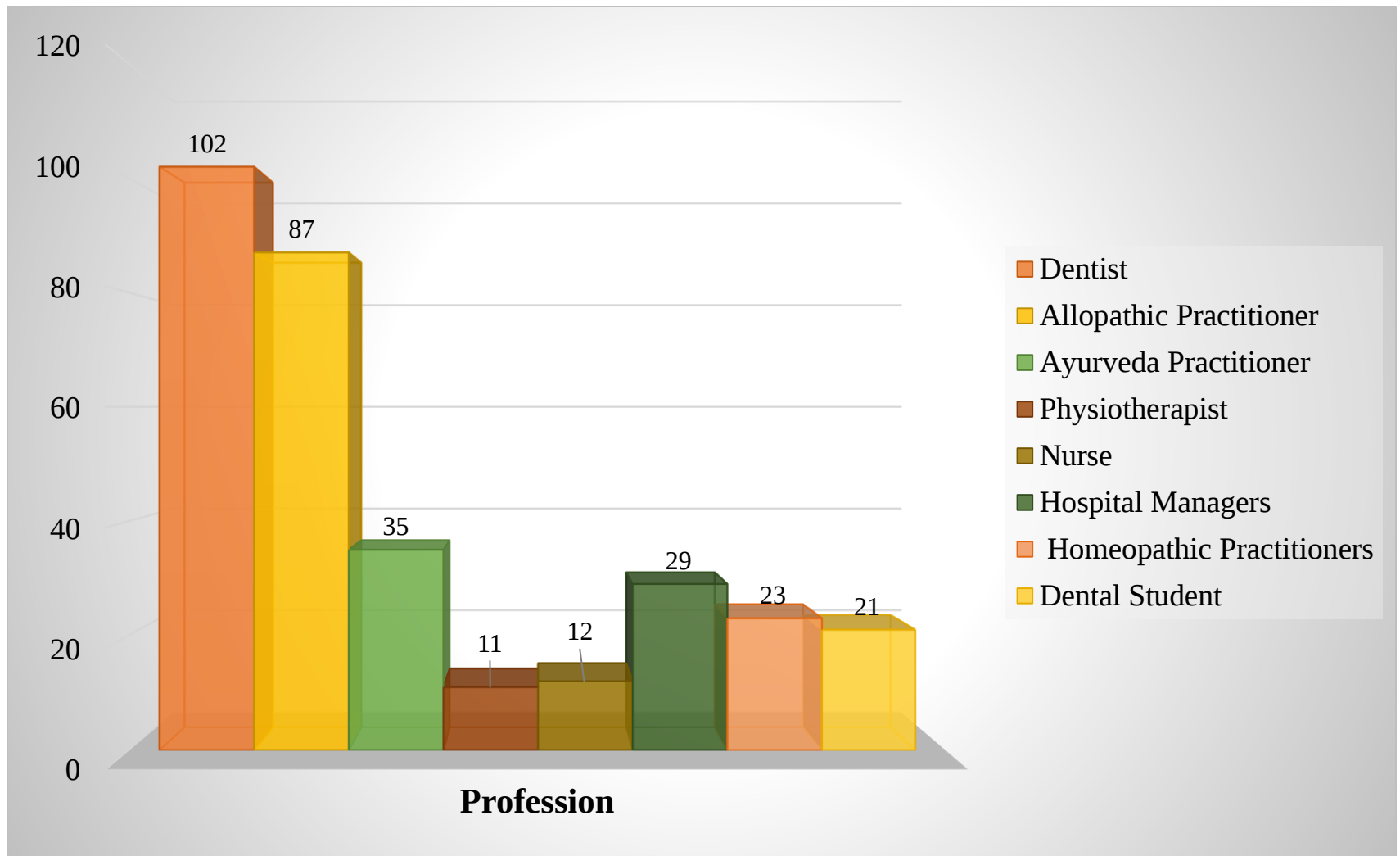
- **Gender Distribution of Health Care professionals**



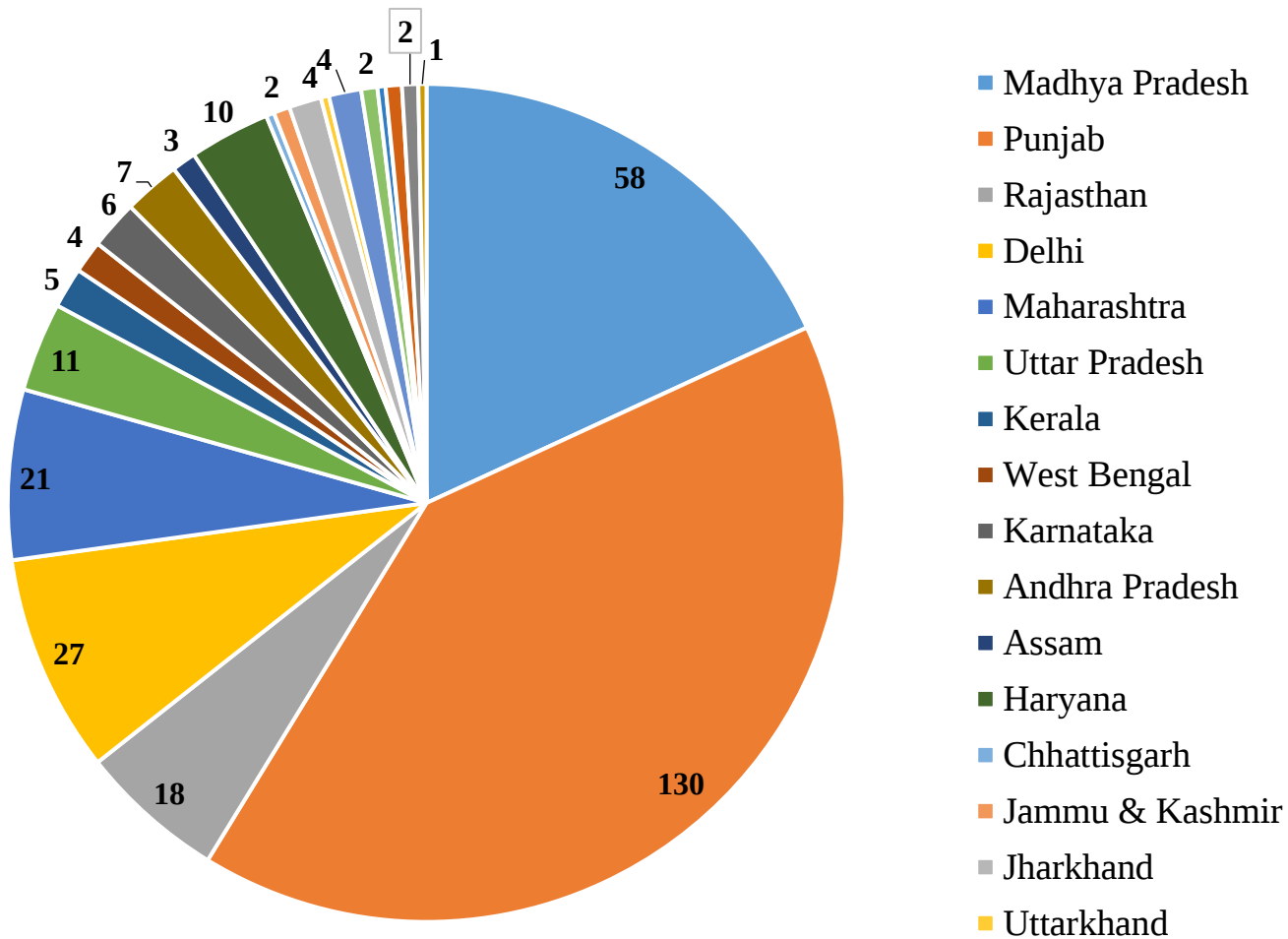
- Distribution of Health Care professionals in Relation to Educational Qualifications



- **Distribution of Health Care professionals in Relation to Profession**

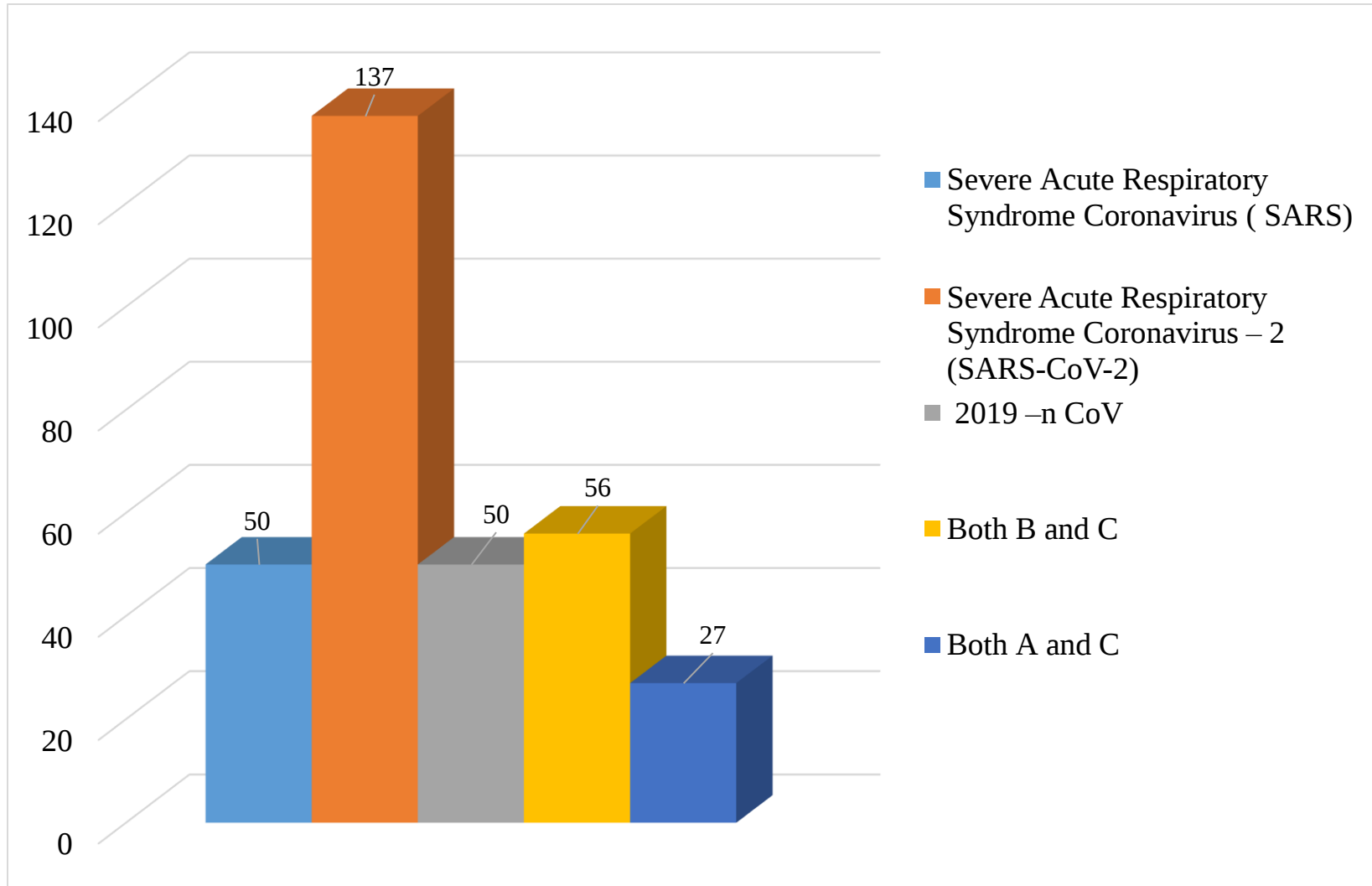


- **Distribution of Health Care professionals in Relation to States/ Union Territories Residing in**

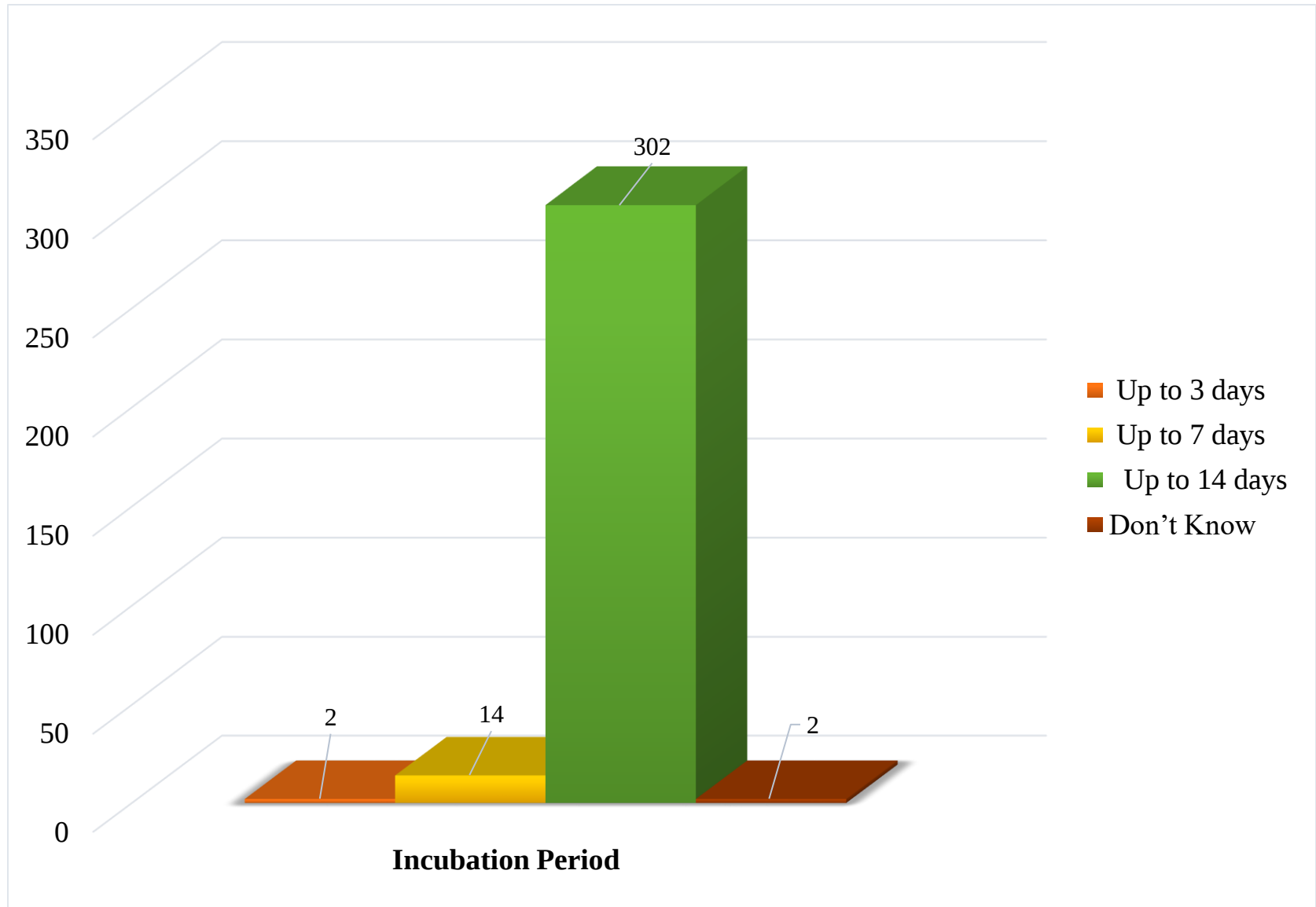


Knowledge

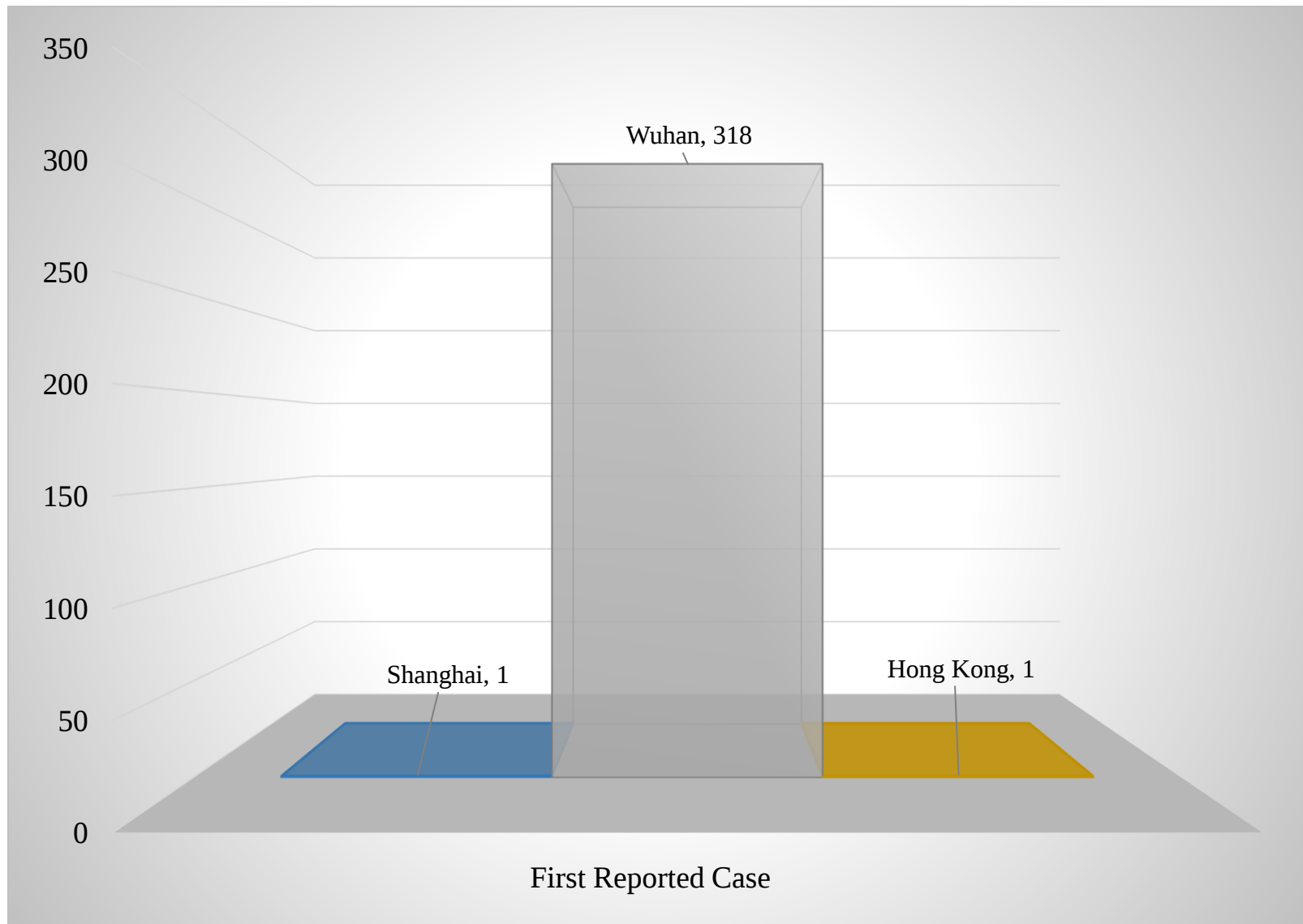
- **The Virus causing COVID-19 infection is called:**



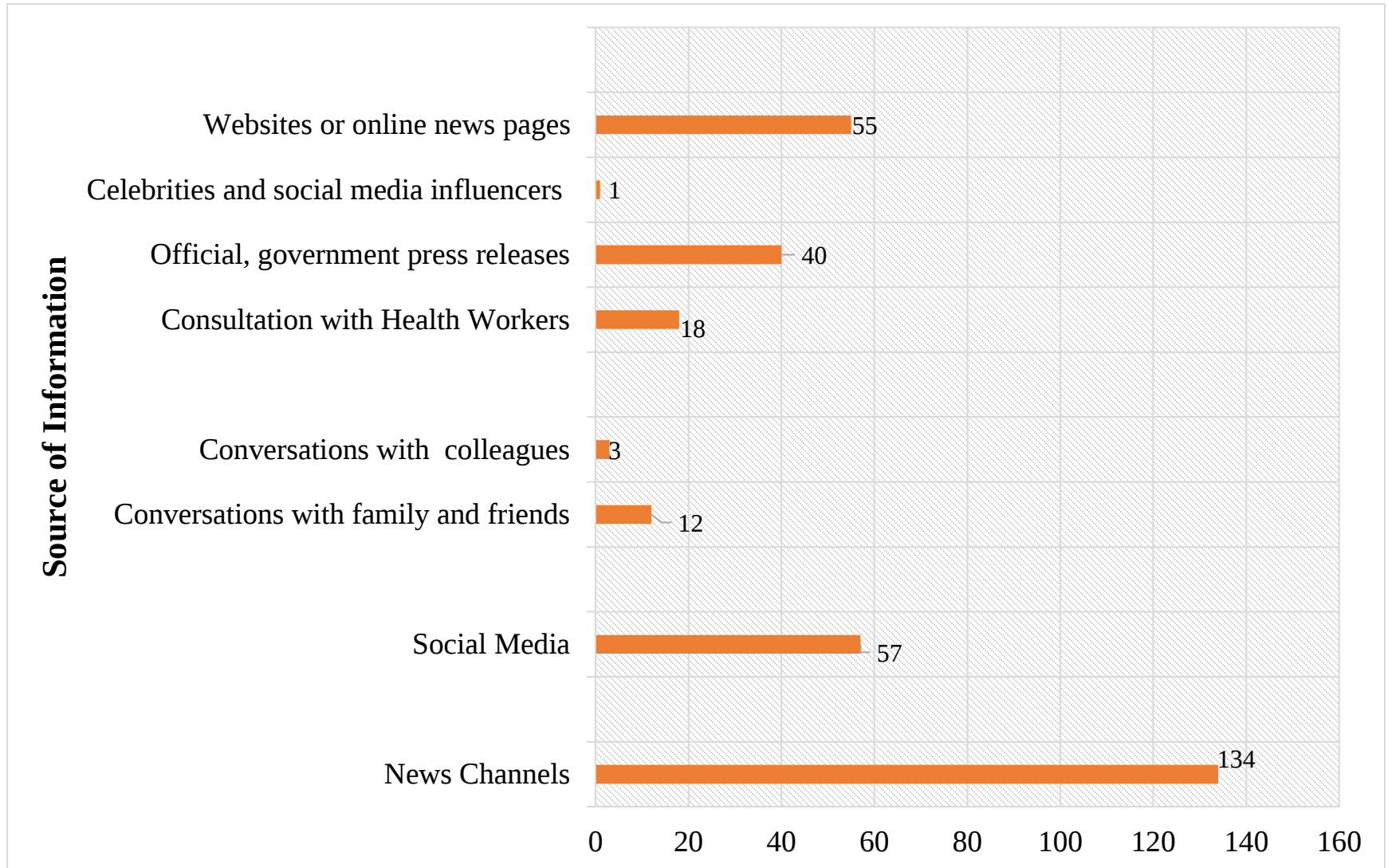
- **What is the maximum incubation period of the novel coronavirus ?**



- **First reports of cases were reported from which city of China ?**

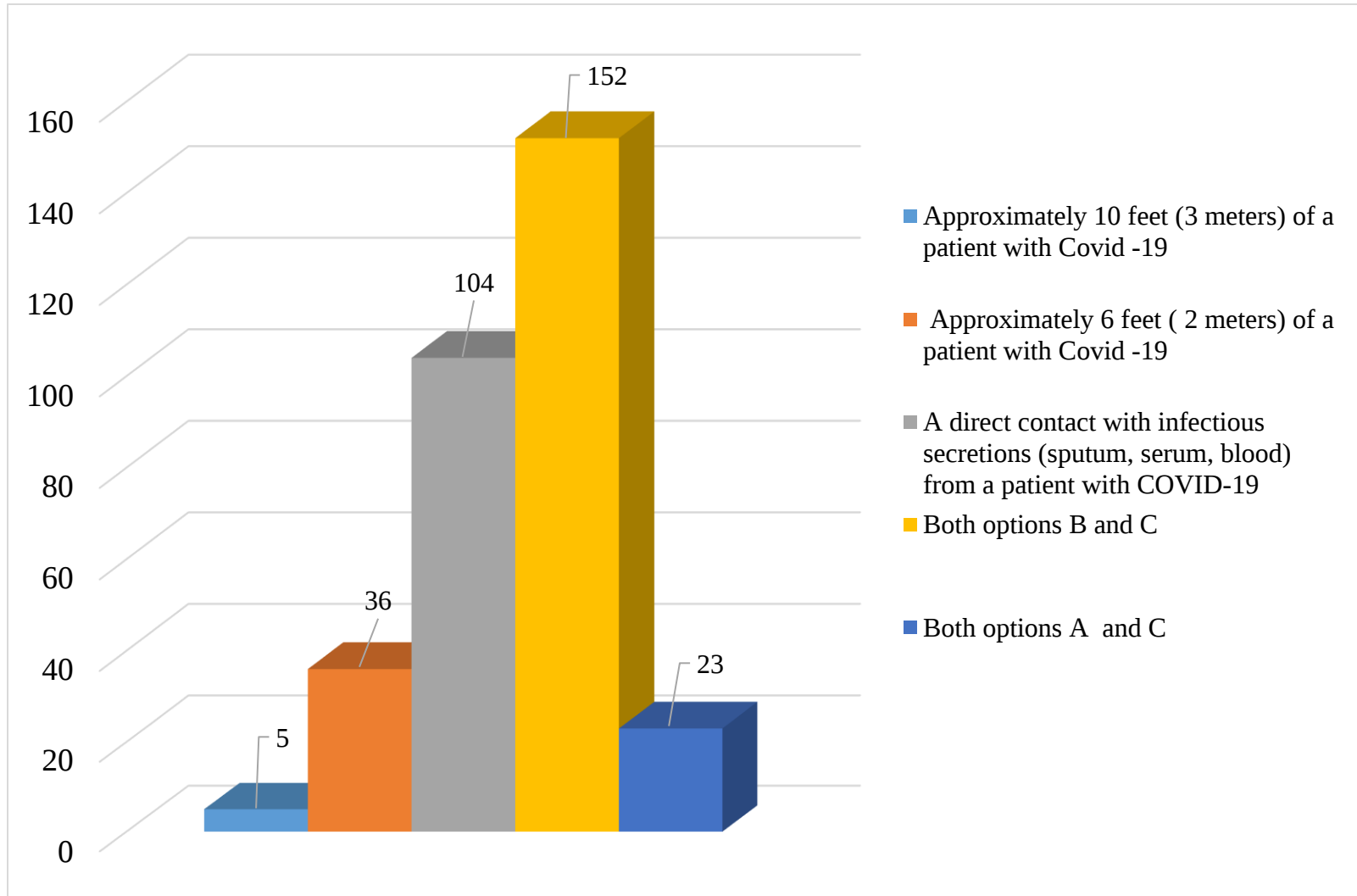


- **How often do you use the following sources of information to stay informed about the novel corona virus ?**

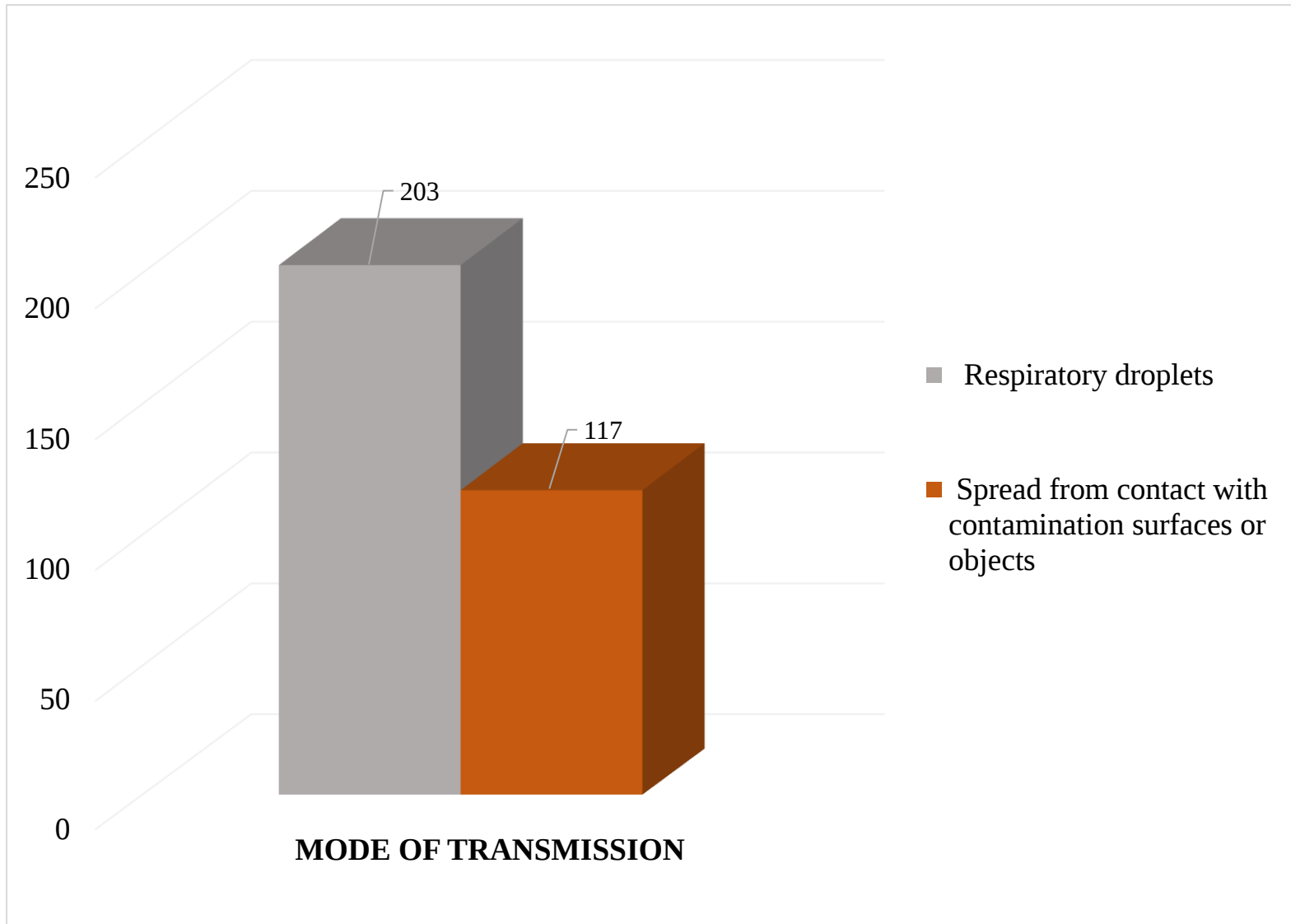


Risk Perceptions

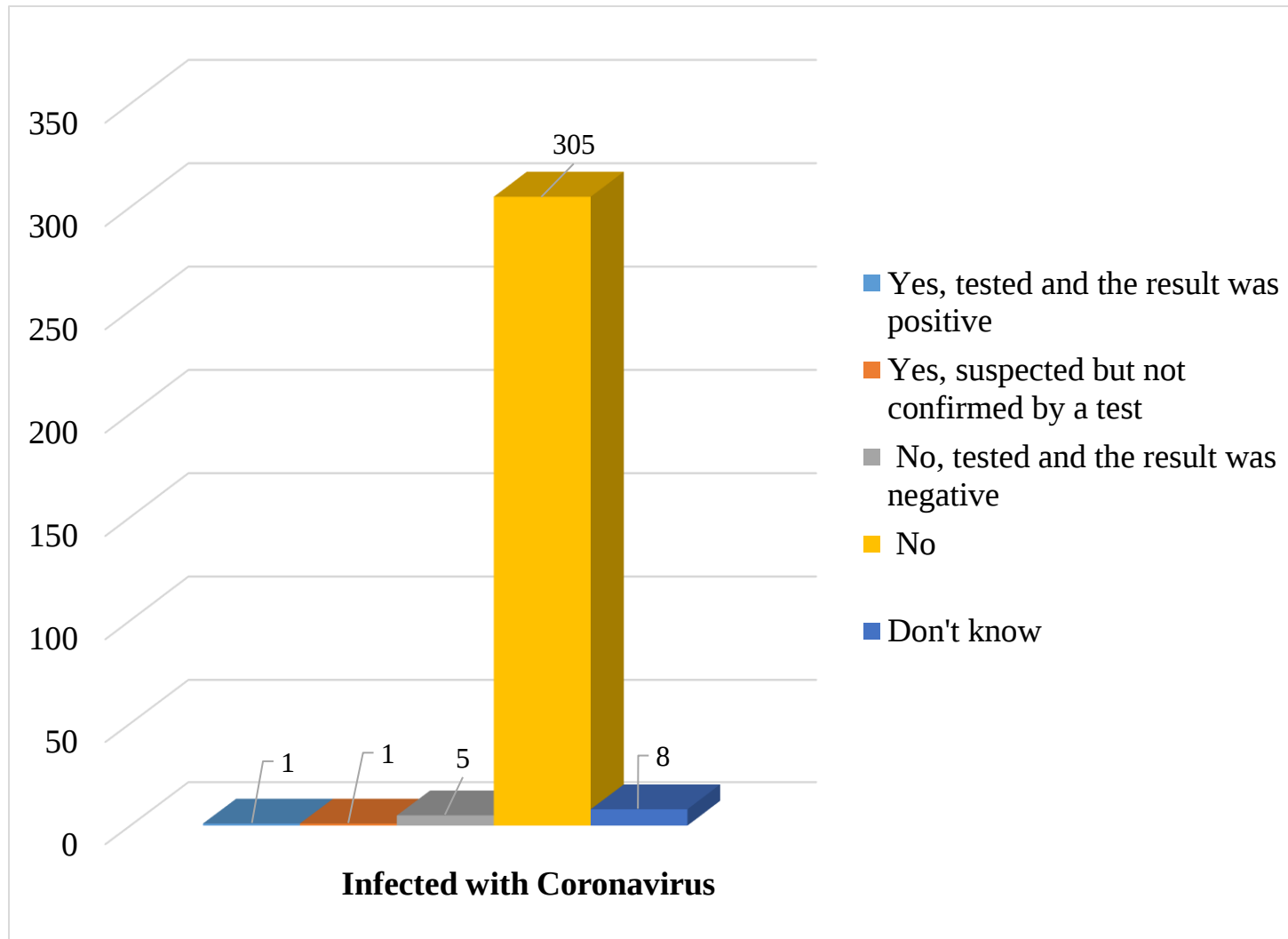
- Which of the following is considered as close contact ?



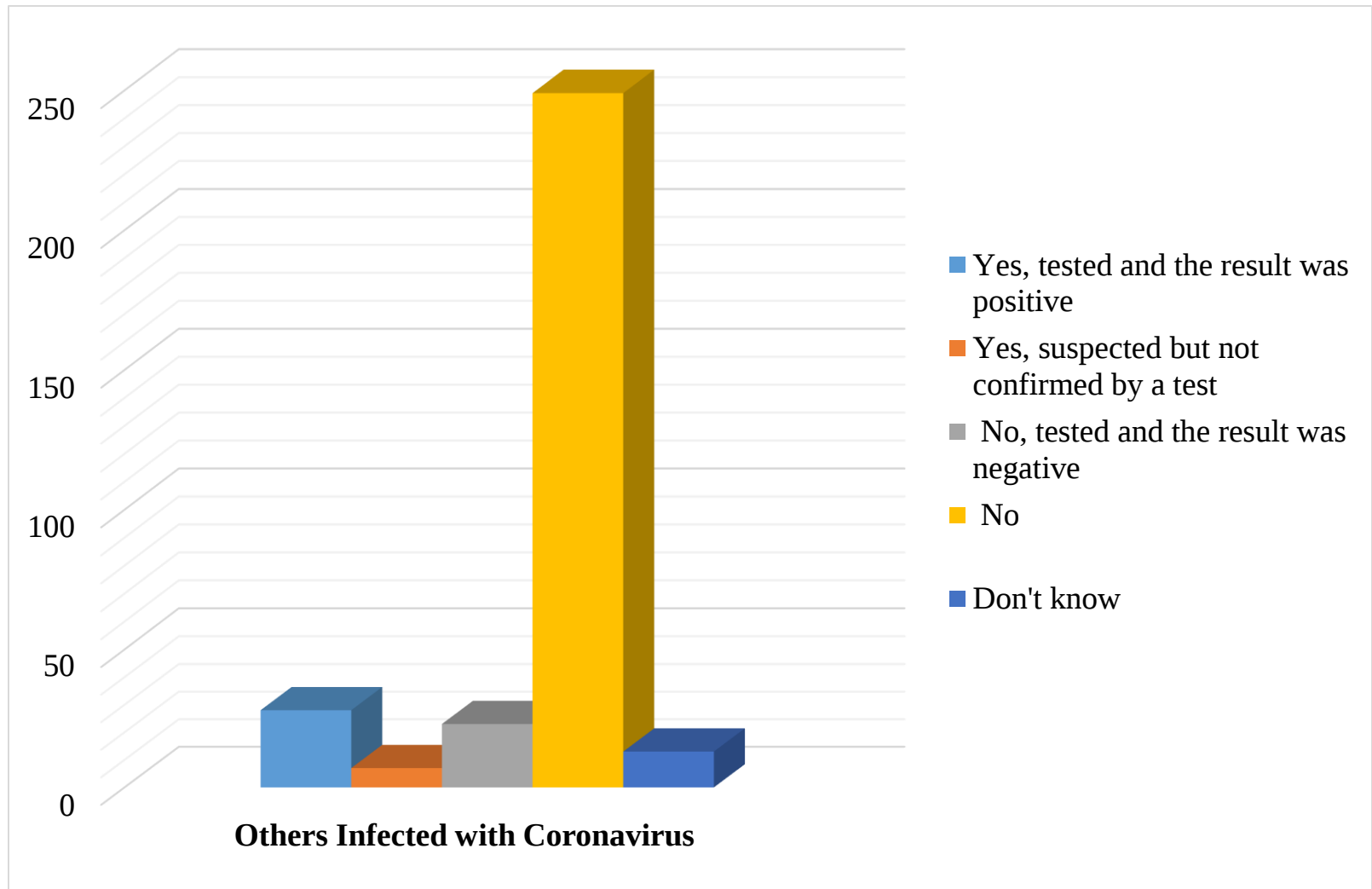
- **The Main Mode of transmission of virus from individual to individual is through**



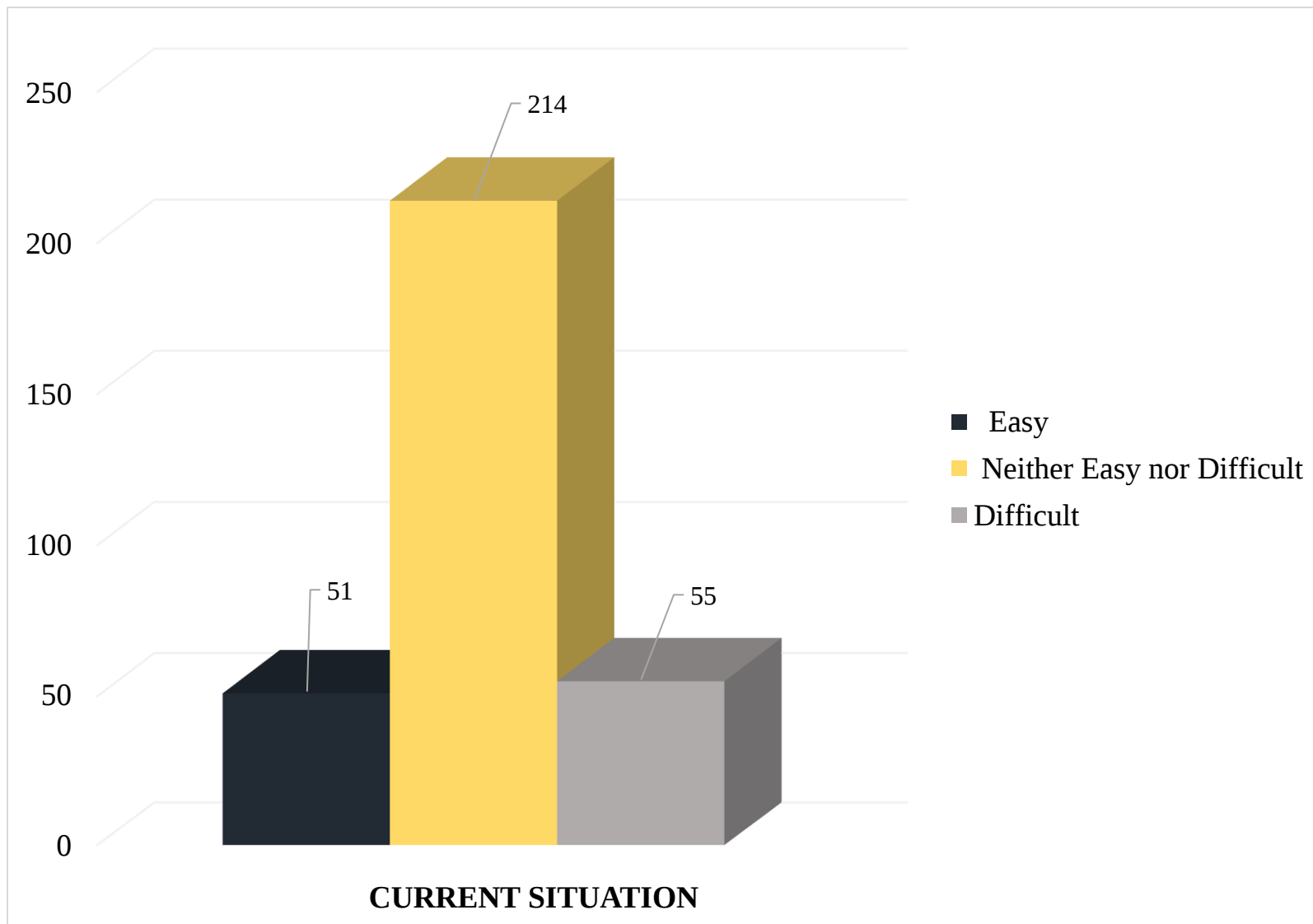
- **Are you, or have you been, infected with the novel corona virus?**



- **Do you know people in your nearby social circle who are or have been infected with novel corona virus?**

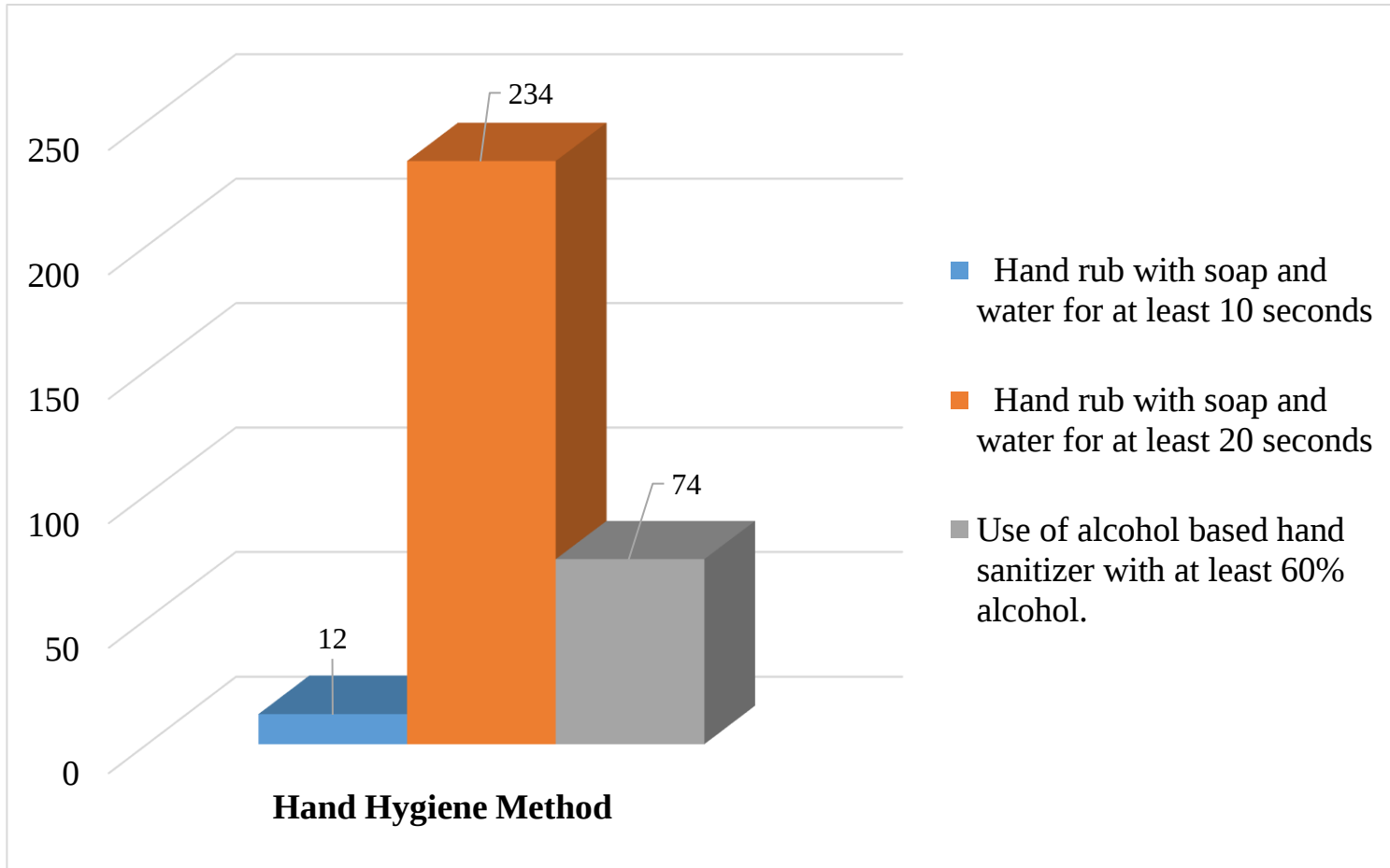


- **For me avoiding an infection with the novel coronavirus in the current situation is....**

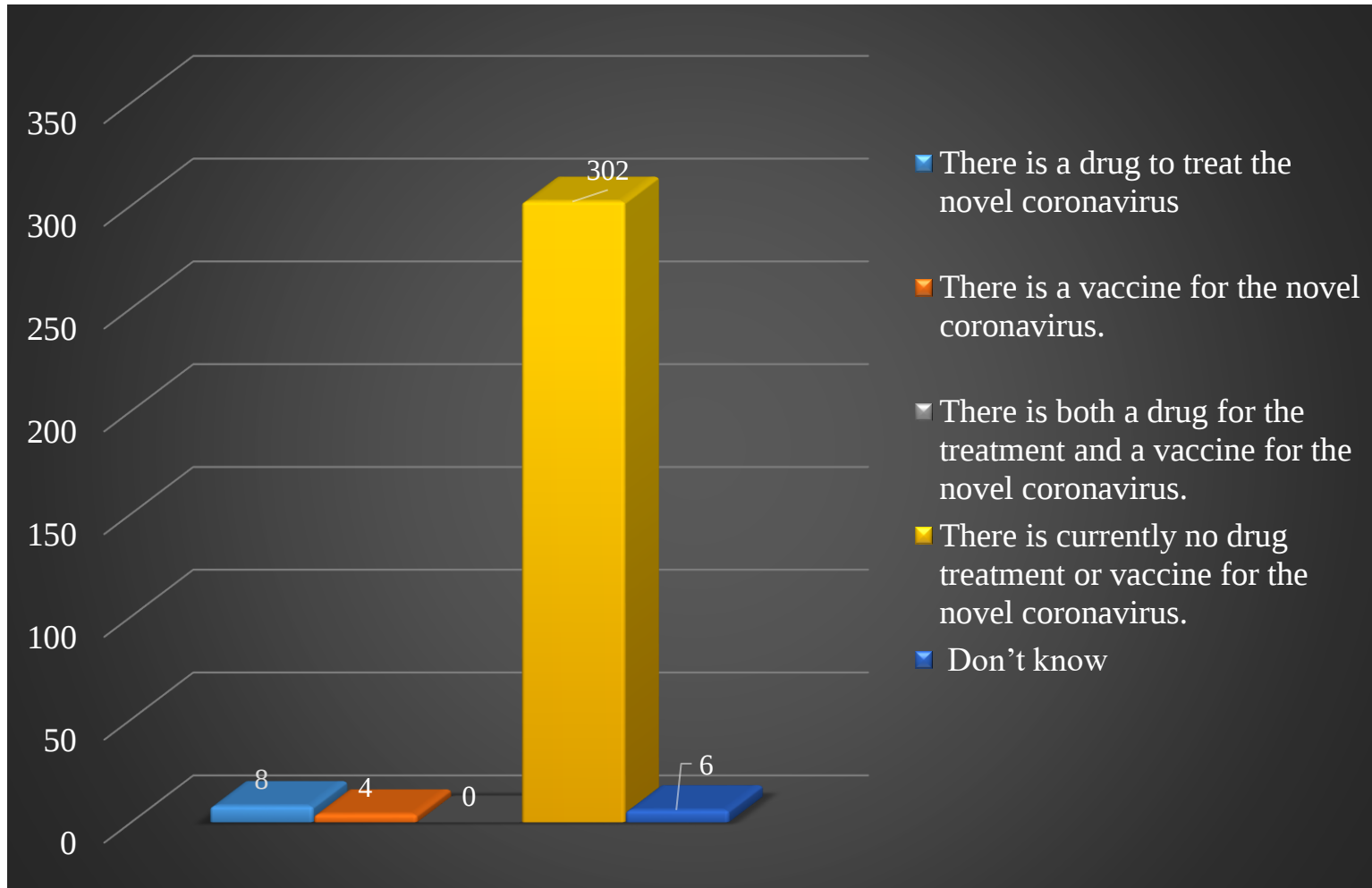


Preventive Measures

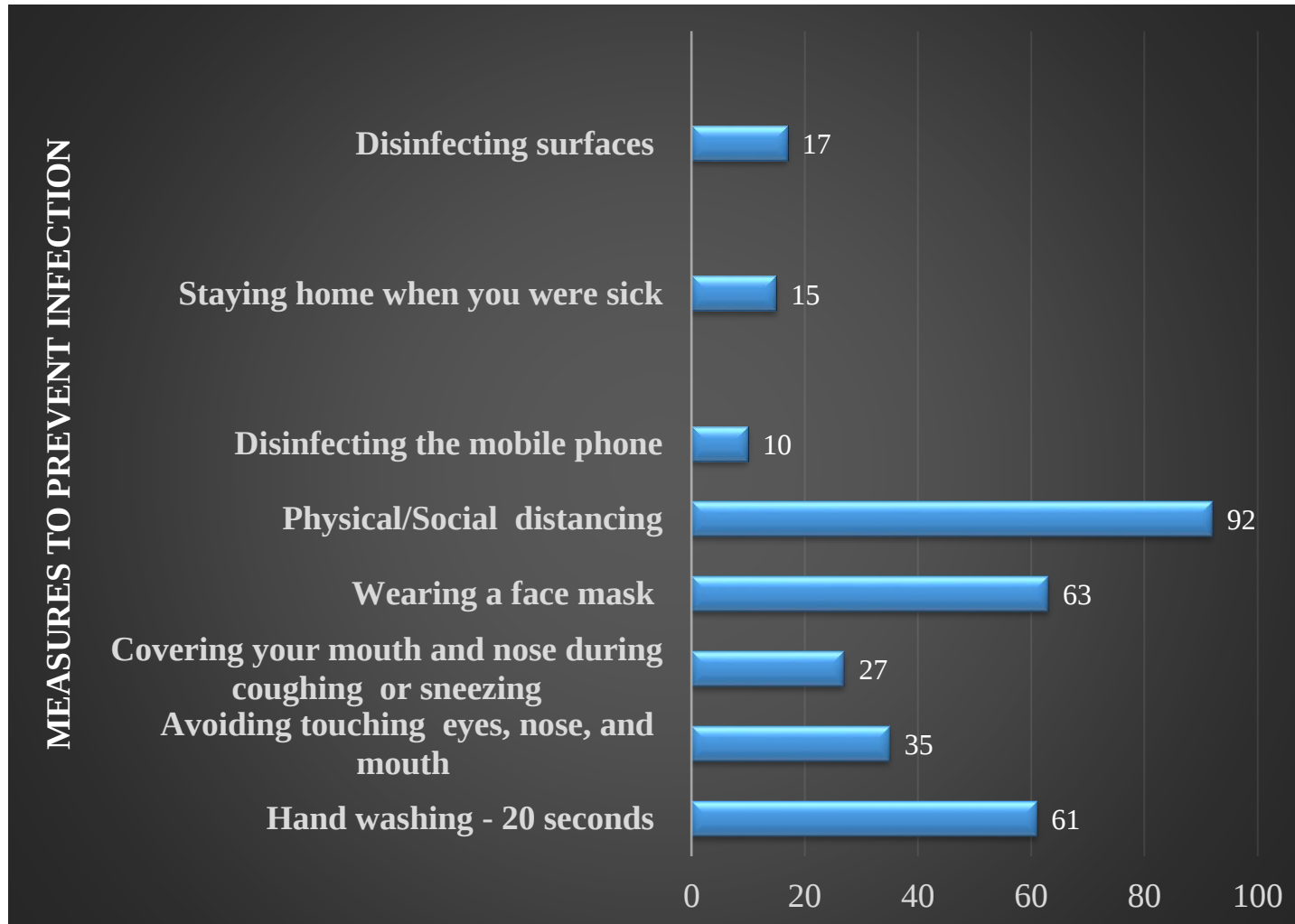
- Preferred method of hand hygiene for soiled hands is



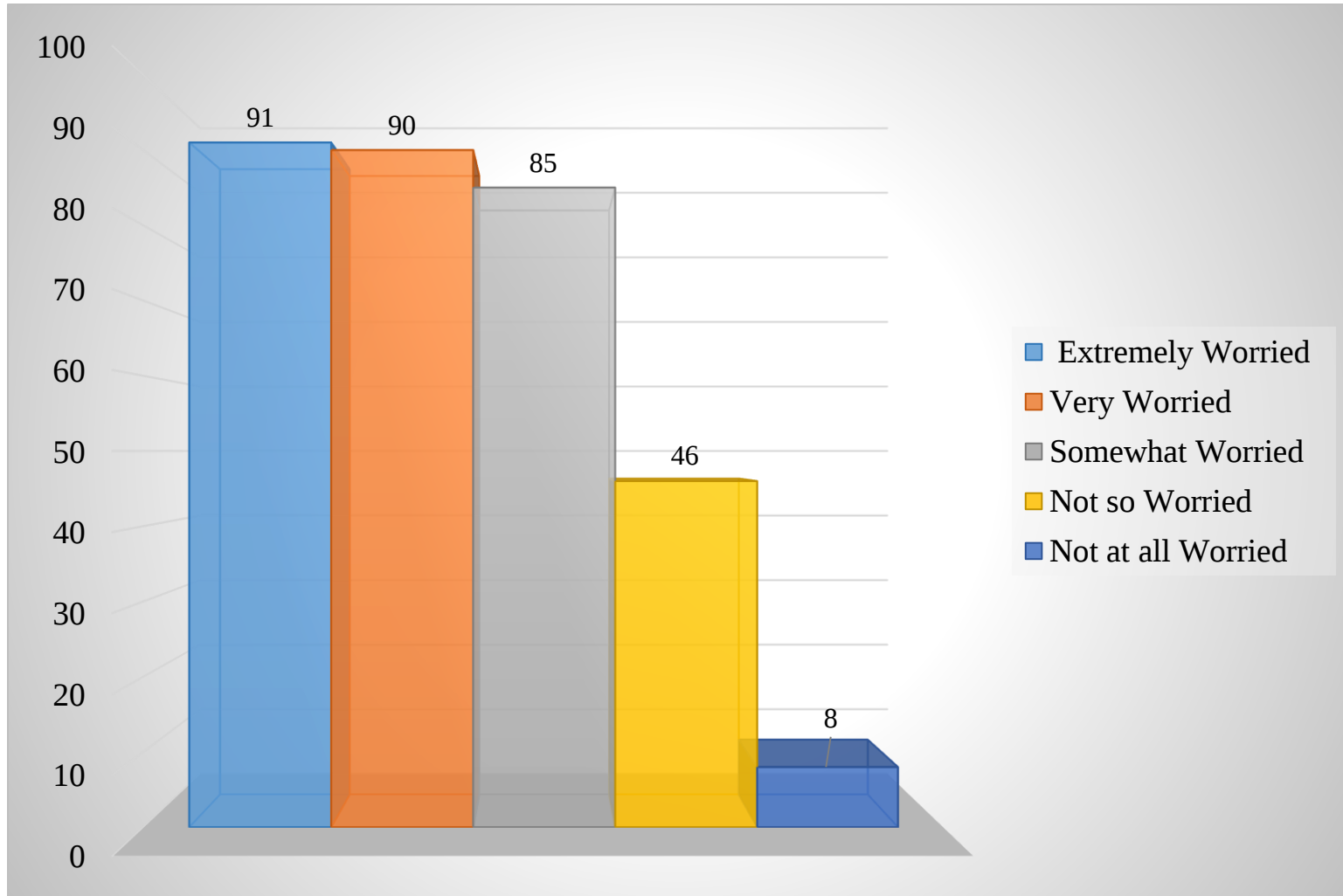
- Which answer is correct according to you?



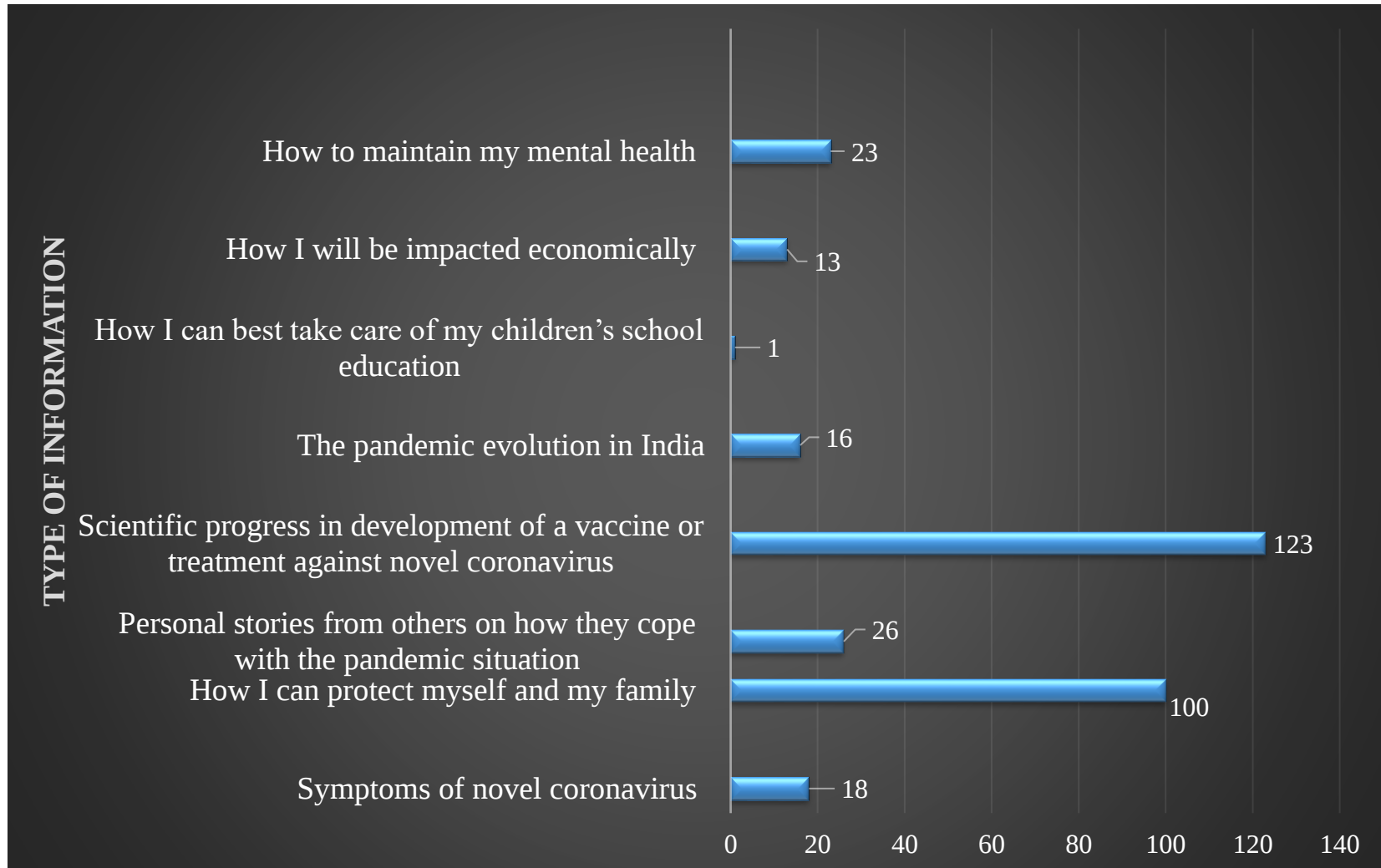
- Which of the following steps have you taken to avoid infection from novel corona virus?



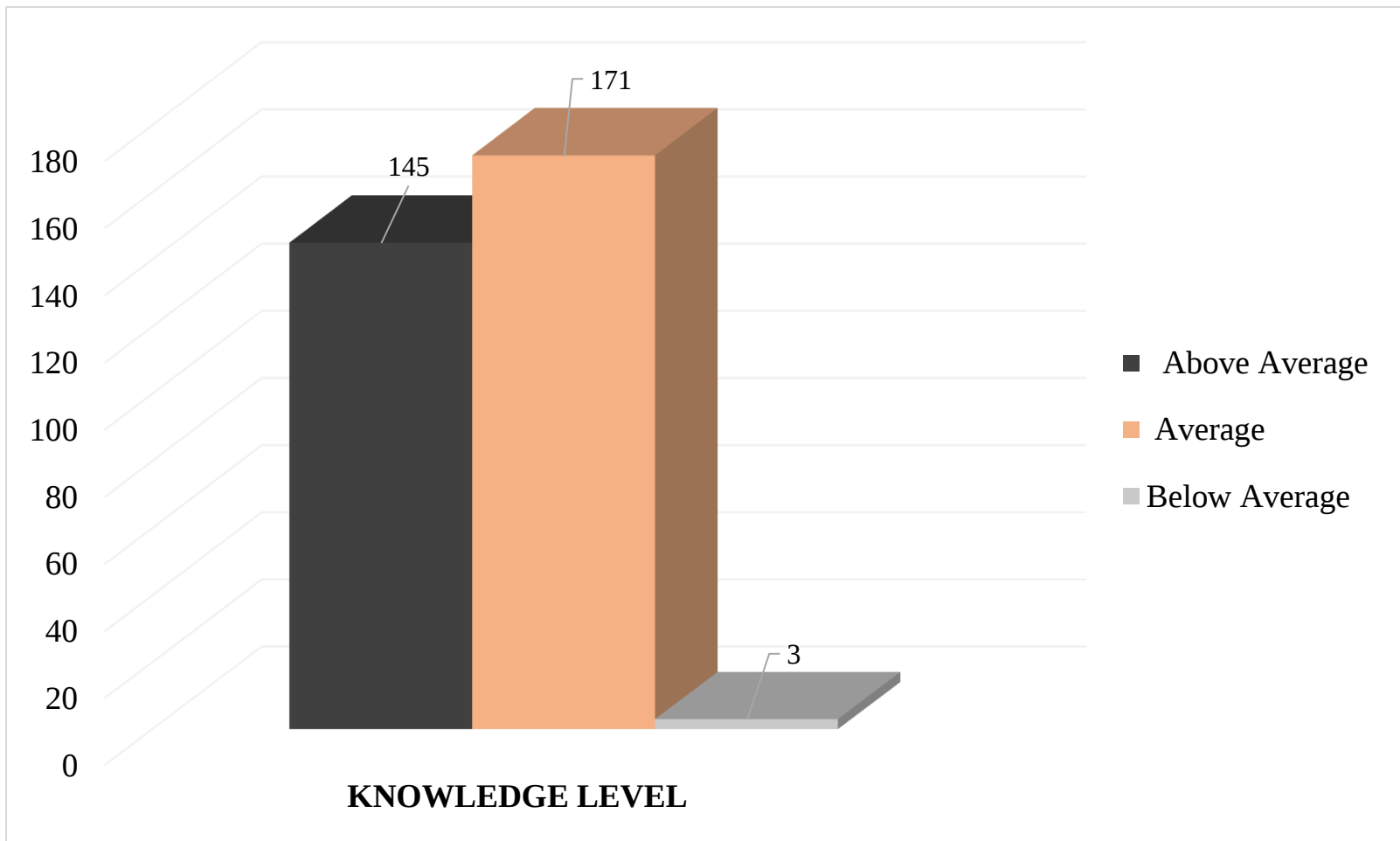
- **How worried are you about the impact of coronavirus on you personally?**



- **The type of information I need the most and connects to...**



- **How are you going to rate your knowledge level on how to prevent spread of the novel corona virus?**





A total of 343 health care professionals answered the survey. Among them 23 participants had incomplete responses which were not considered for final analysis. Thus 320 health care professionals responses were assessed for the final outcome of the online survey.



DISCUSSION

Present Study

In the present study most of the respondents clearly defined a close contact.

Comparative Studies

In Modi et al. Cureus study in Mumbai Metropolitan Region where less than half of the responders were aware of defining a "close contact."



DISCUSSION

- In our survey, majority of the respondents stated that Physical/Social Distancing as the measure to prevent infection of COVID 19 which is also the most recommended method by WHO.
- However, only few respondents reported to be familiar with the fact the virus causing COVID -19 was earlier called as 2019 –n CoV and was later termed as Syndrome Coronavirus 2 (SARS-CoV-2).
- This suggests less awareness regarding the knowledge of COVID 19.

Conclusion

A magnifying glass with a black handle and a silver rim is positioned over the word 'Conclusion'. The lens is centered over the letters 'clu', making them appear larger and more prominent than the rest of the word. The background is a plain, light gray.

Our study shows that although our health care professionals are taking adequate preventive measures but they are worried about Coronavirus spread and its implications on our health care infrastructure. Their knowledge about COVID 19 is average and this hints at implementing regular training and interventional programs on various infection control guidelines and practices regarding COVID-19 across all healthcare professions. Periodic webinars , online interactive sessions , E-posters , online campaigns on various Social Media platforms can be a very efficient and safe tool to create more awareness towards COVID-19.

Suggestions

- The findings of our study hints at implementing regular training and interventional programs on various infection control guidelines and practices regarding COVID-19 across all healthcare professions. Periodic webinars , online interactive sessions , E posters , online campaigns on various Social Media platforms can be a very efficient and safe tool to create more awareness towards COVID-19.

References

- Modi P D, Nair G, Uppe A, et al. (April 02, 2020) COVID-19 Awareness Among Healthcare Students and Professionals in Mumbai Metropolitan Region: A Questionnaire-Based Survey. Cureus 12(4): e7514. DOI 10.7759/cureus.7514
- Cascella M, Rajnik M, Cuomo A, Dulebohn SC, Di Napoli R: Features, Evaluation and Treatment Coronavirus (COVID-19). StatPearls Publishing, Treasure Island, FL; 2020.
- WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. (2020). Accessed: May 19, 2020:
<https://www.who.int/dg/speeches/detail/who-directorgeneral--opening-remarks-at-the-media-briefing-on-covid-19---11-....>

- Langade D, Modi PD, Sidhwa YF, et al.: Burnout syndrome among medical practitioners across India: a questionnaire-based survey. Cureus. 2016, 8(9):e771. Accessed: May 14, 2020: 10.7759/cureus.771
- Information for healthcare professionals. (2020).Accessed: May15,2020:<https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html>
- Modi PD, Kumar P, Solanki R, Modi J, Chandramani S, Gill N: Hand hygiene practices among Indian medical undergraduates: a questionnaire-based survey. Cureus. 2017, 9:e1463.Accessed: March 25, 2020: 10.7759/cureus.1463

- Lu H, Stratton CW, Tang YW. Outbreak of pneumonia of unknown etiology in Wuhan, China: The mystery and the miracle. *J Med Virol* 2020; 92 : 401-2.
- Survey tool and guidance: behavioural insights on COVID-19, 17 April 2020. Accessed on May 18 2020

