



Processo Seletivo 2020 – 2º Semestre  
Prova Específica: **Investigação Biomédica**

Data: **TEXTO** Número de Inscrição:

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**GABARITO DA PROVA INVESTIGAÇÃO BIOMÉDICA**

**1. What is the role of using cell phone apps in combating covid-19?**

In the toolkit of strategies to stop the spread of SARS-CoV-2, more countries are reaching for smartphone apps. When phones with such an app are close together, they exchange information — in some cases creating a log of who a phone's owner has been near. These 'contacts' will be alerted if they have been close to an infected person.

**02. What other strategies should countries adopt to control covid-19?**

Such apps can complement a country's overall COVID-19 control strategies — including testing, contact tracing, isolation and social distancing — but they cannot serve as a replacement for them, or the thousands of contact-tracing teams they require.

**03. List the main problems related to the ethical aspects of the use of these mobile applications by governments?**

Governments are excitedly pointing out the benefits, but are saying less about the risks. One serious concern is accuracy. Apps that link to official validated tests are more likely to give accurate results. An alert based on self-diagnosis that turns out to be wrong — a false positive — could, of course, be corrected, but if incorrect information has been sent to a large group of contacts, it will have caused unnecessary alarm, and could have wrongly sent people into isolation for weeks. An equally important concern is privacy. As pointed out before, it is becoming easier to identify individuals from anonymised data sets. Researchers have shown that it is possible to re-identify individuals even when anonymised and aggregated data sets are incomplete. Researchers are also raising concerns about the decision that some countries have taken to store data centrally. Nearly 300 researchers signed an open letter reminding governments that data stored on individual phones are more secure, and that data stored centrally are more susceptible to hacking, which is important when considering that citizens are being asked to give up their personal data.

**04. Describe the main experiences of South Korea and Singapore using these apps?**

COVID-19 apps have, to some extent, been inspired by the experiences of South Korea and Singapore. South Korea, in particular, is regarded as a model because it avoided severe lockdowns. Some 3 months after the outbreak spread to the country, only a handful of new cases are being reported daily and 244 deaths have been recorded in total. But the foundation for South Korea's COVID-19 response is a comprehensive testing strategy, backed by a nationwide network of contact-tracers who interview infected people and trace their contacts. The strategy includes the use of phone alerts, but not the type of phone app



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being developed elsewhere. It is based on a degree of surveillance that people in many other countries would find hard to accept. When a person tests positive for COVID-19, a text alert is sent to everyone living nearby and the government is also permitted to access confidential records, such as credit-card transactions.

Much attention has also been paid to Singapore's app, which now has more than one million users — roughly one-fifth of the population. But it still means that in any encounter between two randomly chosen people, there is only a 4% chance that both will have the app. This points to one of the deepest flaws in digital contact-tracing plans anywhere: the fact that only a fraction of any population is likely to have the app at all and such efforts will miss out anyone who, for any reason, doesn't have a smartphone.



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**Questões**

01. What is the role of using cell phone apps in combating covid-19?
  
02. What other strategies should countries adopt to control covid-19?
  
03. List the main problems related to the ethical aspects of the use of these mobile applications by governments?
  
04. Describe the main experiences of South Korea and Singapore using these apps?



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