

Usefulness of Aarogya Setu App to Fight with Covid19

Madhavi Narayane¹, Ninad Nagrale², Swapnil Patond³

¹Clinical Instructor–Medical Surgical Nursing, Datta Meghe College of Nursing, Wanadongri, Nagpur, Maharashtra, India-441110 M: 7843023048, ²Associate Professor Dept. of Forensic Medicine Datta Meghe Medical College, Datta Meghe Institute of Medical Sciences- Nagpur-441110, ³Associate Professor Dept. of Forensic Medicine Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences- Wardha

Abstract

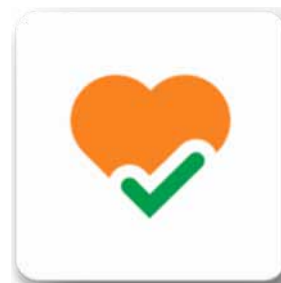
Like most other countries in the world, India has been battling the Covid-19 pandemic for the past few months. To limit the spread of this virus, Prime Minister Narendra Modi called for a complete nationwide lockdown from March 25th and April 14th. However, due to the rising number of cases, this lockdown was extended until the first week of June and we have now moved towards Unlocking. While addressing the nation to inform billions of Indians about this extension, the Prime Minister also asked every citizen to download and use a mobile-based application, named Arogya Setu app. Social distancing has become the new norm for most Indians today, amidst this pandemic. At such a time, people need to stay updated regarding containment zones, virus hotspots and more related information. This Arogya Setu app is a government initiative to ensure the utmost safety for its citizens from this deadly virus. In essence, this application connects Indian health services to its people at this unpredictable time. Through contact tracing, the app can notify a user of any hotspot or 'high-risk' areas near his or her residence. It can assist a person to adopt adequate measures to avoid infection.

Keywords: Arogya Setu, Lockdown, Covid-19.

Introduction

COVID-19, a pandemic disease as declared by WHO has marked its presence all over the world. As a result many people unaware of the COVID-19 patients were coming in contact with each other and as a result the disease was spreading. So, in order to help people and in ensuring the safety of all citizen in India, a mobile phone application AAROGYA SETU has been developed. Aarogya Setu, a mobile phone application developed by the National Informatics Centre (NIC) under the Ministry of Electronics and Information Technology in India has

been made mandatory to download by all people and use it so in a way to fight against novel COVID19.



Aarogya Setu App Logo

In order to control and restricting the spread of COVID-19, government of India has adopted the strategy of contact tracing using the Arogya Setu app. Aarogya Setu in Sanskrit means “bridge to health” which was launched on 2nd April 2020. Since then it has been made mandatory to download on every device. Aarogya Setu helps in tracing the contact by using the Bluetooth and GPS coordinates of the user to track its location as well the location of the other users so as to helping to know

Corresponding Author:

Ms. Madhavi Narayane,

Clinical Instructor–Medical Surgical Nursing, Datta Meghe College of Nursing, Wanadongri, Nagpur, Maharashtra, India 441110

Mob.: 7843023048

e-mail: madhavinarayane22@gmail.com

whether the other user have come in touch with any of the COVID-19 patients and making the user aware of the area or person having COVID-19¹.

Working of Aarogya Setu app: Aarogya Setu app is available for both android and iphone users. It can be downloaded directly from the play store or app store. To understand the working of this app, we need to register it after the downloading of app is done on mobile devices.

When registering on the app, users name, sex, age, profession and the countries (if visited any in the last 30 days) are collected. These collected data is then stored on the server which is run by the Government of India. A unique ID is allocated to every user which is used for the identification of users in case of app related transactions. This digital Id is then used to upload or update any other information.



Also, while registering on the app the users location details are tracked and collected from the device and is stored on the server. One of the most important necessity of this app to function properly is that the user must keep the location and Bluetooth features always ON.

After uploading all the details for the registration of app, it starts its functioning when the other registered user come at a distance less than 10 meters i.e within Bluetooth range of each other. After these, the apps, irrespective of the devices on which is installed will exchange the unique Id(digital Id) and will record the GPS location at which the contact took place.

This information which will be collected at this point is stored locally on the device. If any of those registered users tests positive for COVID-19, the information will stored on the server from their mobile device.

As per the policy of Aarogya Setu app, it keep on

continuously collecting data of the users location and stores it on the device. The data usually consist of all the places visited at 15-minutes intervals.

Everytime the user conducts his assessment on the app, on the basis of tick-marking the symptoms, the user is marked as Yellow, Orange or Green depending on the result of self-assessment. Green means the person is safe¹.

“According to the information technology ministry, despite fears over privacy, Aarogya Setu app has been downloaded 100 million times.”

Aarogya Setu app consist of four section:

1. **Your Status section:** These section in the app tells the user status and the risk of getting infected by COVID-19.
2. **The Self Assess section:** These section is used to tick

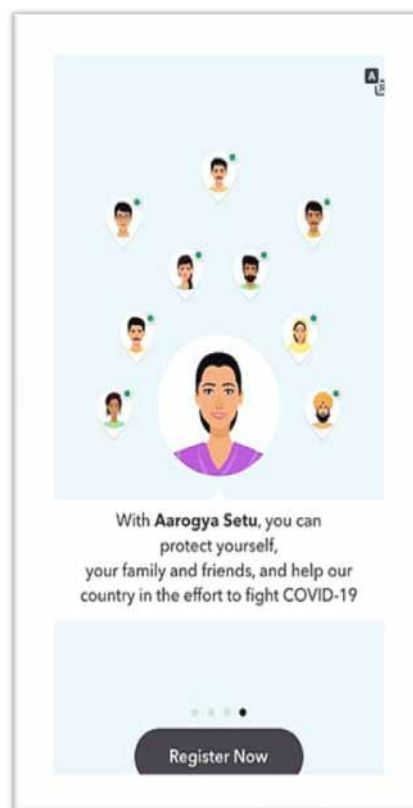
marking the self assessment question regarding the covid-19 symptoms. It is used to do self assessment of user and know the probability of the infection if any.

3. **The COVID Updates section:** It is used to provide updates and notification regarding the COVID-19 cases locally as well as internationally.
4. **The E-pass section:** These section is not yet live and will be functioning soon².

Procedure to download the Aarogya Setu App:

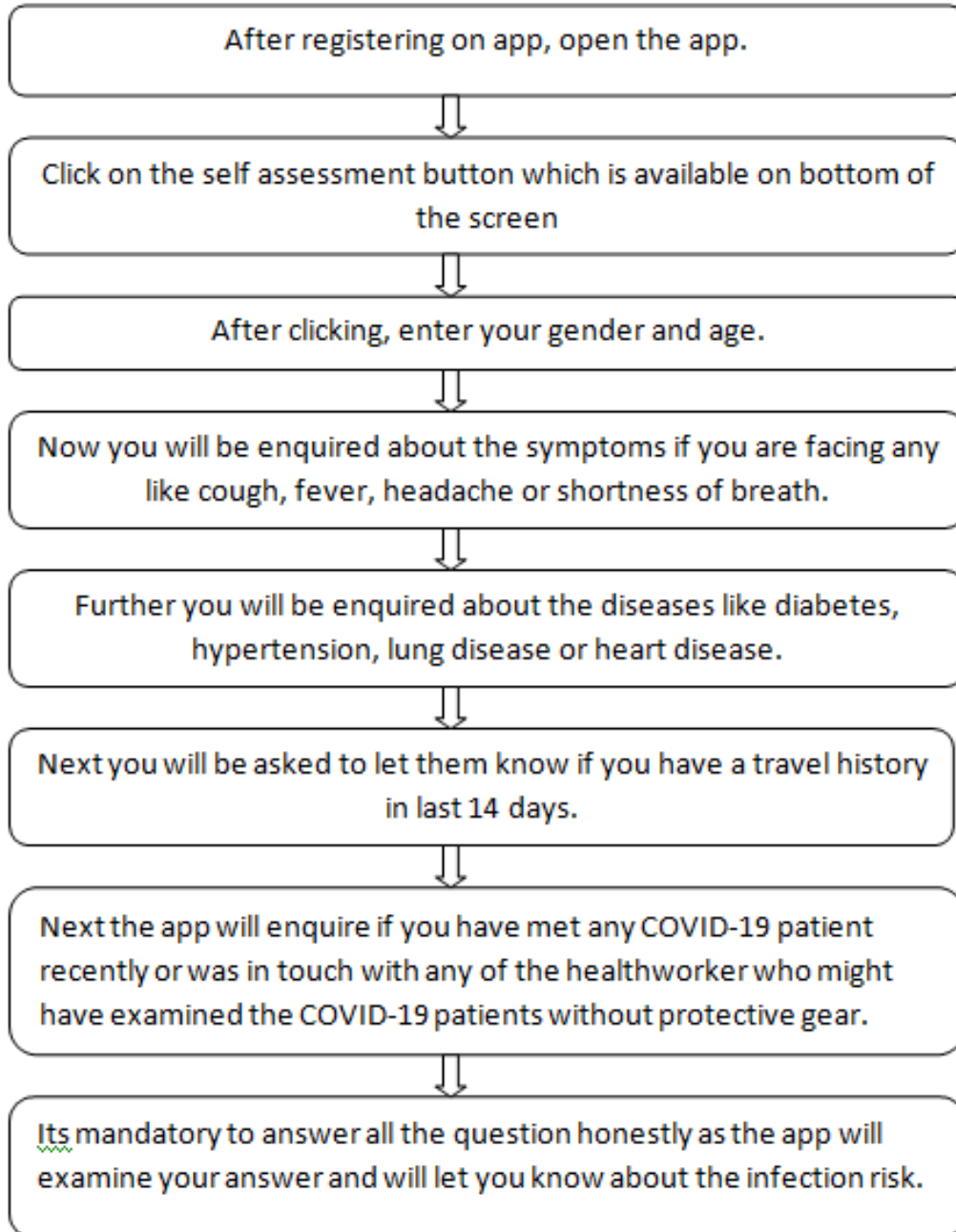
India is taking all the measures to fight against these global pandemic. As a measure to stop spread of this virus, an app called Aarogya Setu has been developed. This app can be downloaded in your mobile devices in following way:

1. For android user download the app from Google Play Store and for apple iphone user download it from Apple app store.
2. Language selection (available in 11 languages).
3. From the settings tab of the device, switch on the location and Bluetooth.
4. From the Phone settings, set location sharing as "Always". Location should be always On to track the area live.
5. A pop will asked to register than click on Register.
6. After registering, click on "I agree" button.
7. Now user will be asked to enter the mobile number.
8. After entering the mobile number, user will receive the OTP. Enter the OTP and click on verify.
9. Now the registration is done and user can access the app. Do the self assessment and check the status of getting infected on regular basis.



Using Aarogya Setu App to find out if you have any COVID-19 symptoms: COVID-19 a global pandemic has haunted the whole world very badly. India, a developing nation is taking all the measures to fight against these disease. It has provided so many guidelines and advisories has been set up so as to be successful in winning against these deadly disease. The most important thing is to stop spreadness of this virus for which certain guidelines have been issued by Ministry of Health & Family Welfare. Also, spread of this virus can be stopped by visiting the nearest testing centre if in case any symptoms is observed⁵.

Below is the step by step procedure to use the app in your mobile device and do the self assessment:



Benefits of using Arogya Setu App:



The Arogya Setu app is available in around 11 languages i.e English, Telugu, Hindi, Kannada, Tamil, Malayalam, Punjabi, Oriya, Bengali, Marathi and Gujarati. It is expected to be available in other Indian languages soon. The benefits of using Arogya Setu App are described below:-

1. The app is used to determine the risk based on the user location as it works on Bluetooth based technology.
2. It is also determine the risk of infection based on the users location as the location is always need to kept ON while using this app.
3. It helps the user keep informed if he/she has come in contact with any of the COVID-19 patients within 6 feet of distance.
4. Several measures is recommended by these app to users such as Social distancing, Self Assessment Test, do's and don'ts.
5. It also provides users with all the precautionary

measures to be taken and the need of maintaining social distancing in these pandemic.

6. In case of the user having symptoms of COVID-19 or is at a higher risk, these app will advice him to go to the nearby testing center and to make a call to toll free number 1075 immediately.
7. A chatbot is also there in the app itself which will provide answers to all the questions regarding Coronavirus disease.
8. It can also help in providing epass for travelling.
9. For each state of India, users can find the helpline number through this app.

Is it mandatory to download the app?: On 5th May 2020, it has been mandatory by centre for all the private and government employees to download these app on there smartphones . Prime Minister Narendra Modi had also urges all the people living in containment zone to download it as well as to all the working employees and has been mandatory.

As the cases in Delhi is rising day by day, Delhi has made it compulsory to download it and the person if found any without this app in his device can be even jailed for 6 months.

Zomato and swiggy has also made it mandatory for there staff to download it³.

Reception of the Arogya Setu app: As it has been made mandatory for Government and private sector employees to download it. But these initiative has been questioned by some:

- How does it track contact and help in tracing. Also, is my mobile data safe.
- In an interview to The Indian Express newspaper, BN Srikrishna, a former supreme court jude was quotted as saying “utterly illegal” against the app.
- MIT Technology Review’s that there are around 25 contact tracing app around the world and there is concerned about its functionality.
- Ethical hacker Robert Baptise of French was quotted as saying regarding the app that “Forcing people to install an app doesn’t make a success story. It just means that repression works”³.

Privacy Concerns regarding Arogya Setu app: No doubt the government has rubbishes all the privacy

concerned and has said that it has been made by keeping privacy rule in mind . Still many concern has been raised over the safety of using users data which include gender, location details etc as the data is stored in cloud. SFLC a Delhi based software company has raised an issue regarding collection of sensitive information and storing on cloud and has highlighted the clause 2 (a) of the Privacy Policy and wrote, “This clause enables the Government to share personal information uploaded to the cloud with “such other necessary and relevant persons” in order to “carry out necessary medical and administrative interventions”. This is problematic as the clause is broadly worded allowing the data to be shared with practically anyone that the Government wants.”⁴

Ethical Clearance: Taken from institutional ethics committee.

Source of Funding: Self.

Conflict of Interest: Nil.

References

1. Mukul P. Explained: Fighting Covid-19 with phones. <https://indianexpress.com/> 2020.
2. Aarogya Setu App: World’s First Mobile App to reach 50 Million Users in 13 Days. <https://news.jagatgururampalji.org/download-aarogya-setu-app/2020>
3. Biswas S. Coronavirus: How Covid-19 is ravaging India’s newsrooms. <https://www.bbc.com/news/world-asia-india-52464029> 2020
4. Ahuja A. Fight Against COVID-19: Aarogya Setu App Now Accessible To People Without Smartphones. <https://swachhindia.ndtv.com/fight-against-covid-19-aarogya-setu-app-now-accessible-to-people-without-smartphones-44984/>