TRACEABILITY BY SMART DEVICES, CELLULAR CHANNELS AND SOCIAL NETWORK TOPOGRAPHY MAY HELP TO COUP COVID-19 TRANSMOGRIFY

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Abstract

Epidemic diseases contiguously propagate between propitious substances, along with sub-rosa characteristics specifically contiguousness and replication speed may expound ferocity of epidemic diseases such as COVID-19. Most likely, due to high contiguous velocity; in very short time COVID-19 may have become global pandemic disease and key menace to manhood. Deterrence of propagation may help in devastate virus transmogrify using instantaneous traceability of individualized health activities and trackability of public footprints using smart devices, radiography, and social networks.

Coronavirus COVID-19; first uncovered in Wuhan, China by December 2019 and in very short period it became biggest threat to mankind and emulated as a global pandemic by infecting several countries and territories, and 1 international conveyance cruise ship harbored in Yokohama, Japan [7,8]. Till February 10, 2020; COVID-19 has infected 43,099 humans and left 1,018 dead by this global pandemic [11]. Many countries have lockdown, air travel have been abandoned and sealing of national borders have been enforced in effort to isolate public and geographical areas from the contagiousness of coronavirus eruption. Scientific community and World Health Organization has published precautionary measures for the possible prevention of COVID-19 infection contagiousness [11]. In an effort to break the chain of COVID-19 infection and detection of infected persons; several safety measures have been enforced globally; various territories has deployed handheld and fixed thermal scanners in public transitioning areas such as airports, railway stations and malls; by aiming to detect feverishness and individualized body temperature rise pattern to screen and conclude the presence of COVID-19 infection. Scientific community is assiduous to evaluate grueling properties and characteristics of COVID-19 whilst propagation and replication gimmick of the infection is still not much known as ref. by [8]. It may be essential to construe virus propagation to torpedo infection transmogrify. Some early symptoms of COVID-19 infection may follow by flue, increased body temperature, sore throat resulting in voice change, arrhythmic heart rate, shortness of breathing, body aches, dullness, and physical inactivity [6,10]. But most of the infected people initially remains veiled and realized, reported, or screened on later stages till then public and surroundings may have already been affected by suspected virus carrying person, obscure propagating and multiplication of COVID-19 infection may instigate due to said reasons [8]. Beside rapid proliferation of COVID-19 infection; analogously, instantaneous surveillance and traceability of public is indispensable to monitor and analyze physical activities, individualized health, conditioned-stimulus and tracking by geographic information system GIS to depict and understand social propagation model of COVID-19 [2,8]. Precision technologies and techniques has remarkable and proven contribution for mankind, these smart technologies have changed everyday life; high-speed communications and advancements has emerged world in digital era. Regardless of various technologies, recent statistics are showing existence of 9.42 billion mobile connections globally, which are 121% of 7.75 billion existing population of world and presence of unique mobile connections are 5.17 billion which is 66.7% of world population, majority of users have smart phones and similar gadgets. Radiography, smart phones and smart watches such as Samsung, Apple, 3M, FitOn and Garmin which are mostly equipped with precision body sensors and have unique features to support healthy life by routinely tracking health activities such as body temperature, heart rate, oxygen saturation, respiratory health, physical activities, facial expression and voice recognition [4,5,12-15]. Along with health tracking facilities, to support physical activities and to help in medical emergency; smart devices retain location tracking capabilities in collaborating with various service providers and popular social networks. With strong privacy features, these smart devices and radio signals may help in COVID-19 infection traceability, detection, smart isolation and may alert to an established centralized pandemic surveillance center for the traceability and detection of new and unidentified infected individuals or specific infested community by collecting individualized health data such as abnormal temperature, unrhythmic heart rates, abnormal oxygen saturation, respiratory distress, atypical voice pitch and unconscious facial recognition [2,8,12-15]. Additionally, social network models plausible on real life social structures, activities, relations and comprises on everyday life activities for the wellbeing and socialization of mankind [3]. Social network connectivity propagating and multiplication model may prove to be a superlative model to understand and discover COVID-19 infection propagation pattern and may help in deterrence of COVID-19 infection proliferate by tracing societal footprints. Using smart phones, public may also feed conditioned-stimulus data either on existing social networks or using modified and specified COVID-19 social network applications [9]. Location tracking services may help to detect GIS based footprints and traceability in collaborating with individualized health activities for the existence of infected persons, specific infected location, and community. Such services may provision calculation of infection patterns, spread rate and beckoning of infectious areas to help in smart isolation, public protection, helping patients and to support health authorities for medical assistances which may lead the establishment of COVID-19 analytics. Furthermore, applications of radio frequency identification RFID, Bluetooth and Wi-Fi technology may help in automatic alerting, social distancing, and proximity crowd analysis; automatic segregation, detection, and isolation of healthy, infected, and cured persons even in crowds [1,16,17]. Based on such instantaneous monitoring, data collection using IoT and applications of big data, deep machine learning and data mining may help to depict and predict COVID-19 infection propagation prototype, its obstruction and characterization for the elimination of COVID-19.

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