Towards a framework for the transformation to smart and resilient cities on the road to recovery from (Covid-19) Dr. Narmin Mohamed Sayed Ahmed matar

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Abstract:

Cities are facing many pressures due to the spread of Corona virus (COVID-19). As a result, cities are focusing on stopping the spread of the virus (COVID-19) and maintaining urban health. So cities have become a double-edged weapon. First, cities are a large part of the problem because cities intensify the spread and transmission of infectious diseases by increasing human contact. Second, Cities can play a central role in mitigating epidemics and their effects by activating effective smart data and information management systems to Confrontation challenges in all fields. With the rapid spread of the virus, the growing number of deaths and the emergence of cases that can't be followed within the cities' boundaries, Which may be far away from the hotbeds of the known outbreak in most countries of the world. This required cities to adopt a flexible smart framework to confront current and future epidemics. This framework focuses on achieving flexibility and continuity, and this requires new levels of urban digital integration. In this context, the importance of smart cities has emerged, and it has become necessary to transform into cities whose structure and management are based on advanced and sustainable technological solutions to improve the citizens' lives and preserve their health.

The research was based on the construction of a comprehensive theoretical framework through the study of theoretical concepts about epidemics, The devlopment of epidemics spreadation in cities and its connection to the urbanization process, The theoretical literature of the concept of smart cities, Its dimensions and requirements. And identifying the weaknesses of current cities in facing the emerging challenges during the spread of (COVID-19). Moreover, identifying the smart and technical capabilities that can support the current cities to face this epidemic and the upcoming epidemics. By reviewing and analyzing a set of global and regional experiences. In an attempt to devise a framework to build effective and resilient smart cities to manage crises associated with the epidemics spreadation, infectious diseases and maintain urban health includes the overall results of the search and recommendations.

Keywords:

English Epidemics, Smart cities, Resilience, Digital transformation..