



Using Big Data to alleviate epidemics

The World Health Organization,

Emphasizing the importance of the collection and analysis of Big Data in the alleviation of epidemics,

Fully aware that Big Data is of huge help in stopping the spread of epidemics,

Alarmed by the fast and deadly spread of epidemics in the past,

Bearing in mind that Big Data is defined as extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behavior and interactions,

Raising awareness to the fact that mobile phone data is a type of data which is generated by the vast majority of citizens and especially in LEDCs one of the only reliable sources of health-related data,

Recalling Article 12 of the human rights declaration,

Expecting states to ensure that existing data privacy rights are followed and newly created in cases where these privacy rights do not exist yet,

Recognizing the issues of who should be responsible for holding the Big Data and who should collect or analyze them,

1. *Calls upon* local governments to:
 - a. Collect the data needed for a prevention of future spread of epidemics through either a government body or an external organization,
 - i. Where needed data is defined as:
 - (a) Position and time of mobile phone usage,
 - (b) Hospital records,
 - (c) Travel data,
 - (d) Search history, although limited to certain keywords relating to the epidemic,
 - b. Ensure that the collected data is secure and gets anonymized as far as possible, although no names of any individuals shall be collected, no matter the circumstances in order to protect the privacy and anonymity of the people, with the possibility of the names to be encoded in order to give further detail without revealing the identity of the individual,
 - c. Make sure that only the above mentioned data gets collected;
2. *Requests* that search history should be combined with location to provide statistics on a recent increase in searches relating to a disease with full knowledge of the location of these searches;
3. *Emphasizes* the data to be kept at a national level before collaborating on an international scale in case of occurrence of an epidemic. The threshold will be defined as follows:
 - a. If the number of people infected reaches a certain number of individuals or a percentage to be established,

- b. If the epidemic is spreading at an uncontrollable rate, i.e. an additional 1833 people infected by the Zika virus in Brazil per week,
 - c. If the WHO decides that the data should be shared internationally, no other factors need to be met with final judgement reserved to the WHO;
4. *Calls for* the member states that if an international epidemic were to occur the involved countries would share the data needed to stop any further spread;
5. *Urges* to begin the funding of big data infrastructure by the essential amount in countries that cannot afford such by themselves with/under the following conditions:
 - a. The UN will be allowed to inspect whether the funds are used appropriately,
 - b. The affected country will invest into such infrastructure themselves by a percentage of their GDP in the future,
 - c. The affected countries will have to pay back the full real amount lent to them over a time of 15 years, which can be adapted for special cases,
 - i. Special cases: circumstances recognized by the WHO where the country is unable to repay the debt in the specified time period,
 - d. It is preferable for countries to volunteer to contribute in the funding. If there are no volunteers willing to contribute, or the total voluntary provisions are insufficient, it will be mandatory for every country that has signed this resolution to contribute a certain percentage of the cost according to each country's Gross Domestic Product;
6. *Further recommends* an "emergency group" with the following attribute and conditions:
 - a. If a country doesn't want UN funding or do their own Big Data gathering and processing and refrains from pooling Big Data, then these countries have the choice to request help from the emergency group,
 - b. Any country that accepted the help of the "emergency group" has to accept the above mentioned UN funding with the conditions attached;
7. *Encourages* authorities and telecommunication companies to cooperate on the issue of making mobile phone data available and calls for the creation of tax incentives for telecommunication companies cooperating with authorities on this issue;
8. *Further invites* to the creation and ratification of a treaty dealing with the consequences from violating privacy rights by the United Nation's General Assembly;
9. *Strongly encourages* the creation of an independent organization, the United Nations Audit and Monitoring of Big Data (UNAMB), which would ensure that:
 - a. Governments do not violate privacy rights by taking the following steps:
 - i. If a violation of privacy rights occurs, the UNAMB has the responsibility to report these violations to the International Court of Justice, where a panel board of the International Court of Justice is giving suggestions on possible consequences,
 - ii. Countries having ratified the above mentioned treaty could then be subject to these consequences agreed upon by the International Court of Justice,
 - b. No data is given out to unauthorized countries, places or individuals.