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SURVEILLANCE SYSTEM ENHANCEMENTS FOR MASS GATHERINGS, A SYSTEMATIC REVIEW PROTOCOL

AFFILIATION

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BACKGROUND

Mass gatherings attract millions of travelers worldwide, and the influx of vast numbers of people to specific locations will eventually increase the public health threats in that places. Therefore, a robust surveillance system is needed to enable early detection of and response to Public health threats. The previous surveillance system enhancements for mass gatherings have left a positive legacy for future public health surveillance planning.

OBJECTIVE

The main objective of our review is to summarize the surveillance system enhancements in preparedness for mass gatherings.

SYSTEMATIC REVIEW REGISTRATION

This review is registered in the International prospective register of systematic reviews PROSPERO. The registration number is CRD42022374133.

METHODOLOGY Following PRISMA Guidelines.

Search databases

We will search 5 different databases using both free text and mesh terms.

Articles selection

English articles that were published in 2012 onwards and describing the enhancements of surveillance systems for mass gatherings will be included.

Data extraction

The articles will be managed using Rayyan platform, the data will be extracted and cross-checked using excel sheet.

Quality assessment

The quality of the reports of included articles will be assessed using STROBE checklist

Results synthesis

RESULTS SYNTHESIS

Tables and narratives will be used to summarize the extracted data about the previous surveillance enhancements for mass gatherings.

Four main tables are as follows:

Table 1: Characteristics of included studies: it will include: (article Identification number, author (last name), Year of publication, Type of mass gathering (sport, religious,.. etc), host country, date of the event (year), Surveillance approach used)

Table 2: surveillance system enhancements : (Enhancement type (new system or enhanced the pre-existing system), descriptive summary, challenges, Recommendations).

Table 3: Data Sources for the surveillance systems during mass gatherings.

Table 4: Monitored diseases and conditions during mass gatherings.

DISCUSSION

To the best of our knowledge, this systematic review will be the first to summarize the surveillance system enhancements for mass gatherings.

The enhancements can take place either by implementing a new system or improving the pre-existing systems in one of the following aspects (but not limited to them):

LISTING PRIORITY DISEASES AND CONDITIONS TO BE MONITORED

DEFINING THE DATA SOURCES FOR SURVEILLANCE SYSTEM

CHOOSING THE MOST APPROPRIATE SURVEILLANCE APPROACHES

CONCLUSION

This review will inform future public health surveillance planning for mass gatherings.