

## Supplementary File

### Search strategies

Database: Global Health database (ovid), 4 March 2019

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- 1 ((vulnerab\* or disadvant\* or low income or at risk\* or marginal\* or key) adj6 (population\* or group\* or people\* or communit\*)).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (32565)
  - 2 exp infectious diseases/ (48098)
  - 3 exp ebolavirus/ (3701)
  - 4 exp crimean-congo haemorrhagic fever virus/ (1409)
  - 5 exp marburgvirus/ (651)
  - 6 exp lassa virus/ (702)
  - 7 exp rift valley fever virus/ (1577)
  - 8 exp measles virus/ (7768)
  - 9 exp influenza/ (28512)
  - 10 exp drug resistance/ (97089)
  - 11 (infectious diseas\* or ebola\* or measles or influenza\* or flu).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (119288)
  - 12 ((marburg or lassa or rift valley or congo) adj4 (virus\* or fever)).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (4260)
  - 13 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 (210937)
  - 14 1 and 13 (2299)
  - 15 ((vulnerab\* or rapid or barefoot or participat\* or context\* or qualit\* or quantit\*) adj6 (assess\* or approach\* or analys\* or evaluat\*)).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (61363)
  - 16 (vulnerab\* adj6 measur\*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (293)
  - 17 toolkit\*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (585)
  - 18 mixed method\*.mp. (3802)
  - 19 15 or 16 or 17 or 18 (64836)
  - 20 14 and 19 (120)
  - 21 (one health or human\* environment\* or human\* plant\* or zoonotic\* disease\* or zoonos\* or vector\* born\* or one medicin or bio social\* or biosocial\*).mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes] (126786)
  - 22 14 and 21 (257)
  - 23 22 not 20 (236)

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Database: Medline, 1 April 2019

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- 1 Vulnerable Populations/ (9196)
- 2 ((vulnerab\* or disadvant\* or low income or at risk\* or marginal\* or key) adj5 (population\* or group\* or people\* or communit\*)).ti,ab,kf,kw. (73757)
- 3 1 or 2 (80138)
- 4 ((vulnerab\* or rapid or barefoot or participat\* or context\* or qualit\* or quantit\*) adj6 (assessment\* or approach\* or analy\* or evaluat\* or measur\* or tool\*)).ti,ab,kw,kf. (404666)
- 5 mixed method\*.ti,ab,kf,kw. (16584)
- 6 4 or 5 (416134)
- 7 3 and 6 (5320)
- 8 exp Communicable Diseases/ (33526)
- 9 hemorrhagic fevers, viral/ or hemorrhagic fever, crimean/ or hemorrhagic fever, ebola/ or lassa fever/ or marburg virus disease/ or rift valley fever/ (8588)
- 10 Measles/ (13090)
- 11 Influenza, Human/ (46095)
- 12 (infectious diseas\* or ebola\* or measles or influenza\* or flu).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (250987)
- 13 ((marburg or lassa or rift valley or congo) adj4 (virus\* or fever)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (5286)
- 14 8 or 9 or 10 or 11 or 12 or 13 (277516)
- 15 exp anti-bacterial agents/ or exp antifungal agents/ or exp antiparasitic agents/ or exp antiviral agents/ (1241843)
- 16 (antibiotic\* or anti biotic\* or antimicrob\* or anti microb\* or antibacterial\* or anti bacterial\* or antifungal\* or anti fungal\* or antiparasit\* or anti parasit\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (680643)
- 17 15 or 16 (1494415)
- 18 drug resistance/ (45425)
- 19 resistan\*.mp. (1030696)
- 20 ((suboptimal\* or 'sub optimal\*') adj4 ('use' or utilization\* or utilisation\* or usage or prescription\* or prescrib\* or administrat\*)).ti,ab,kw,kf. (1456)
- 21 overuse.ti,ab,kw,kf. (9645)
- 22 18 or 19 or 20 or 21 (1040537)
- 23 17 and 22 (283378)
- 24 exp drug resistance, microbial/ or exp drug resistance, multiple/ (165500)

- 25 (amr or antimicrobial resistance\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (19481)
- 26 23 or 24 or 25 (315780)
- 27 disasters/ or exp disaster planning/ or exp emergencies/ or exp natural disasters/ (76941)
- 28 exp Climate Change/ (15831)
- 29 (disaster\* or outbreak\* or crisis or crises or natural hazard\* or emergency or emergencies or climate change or pandemic\* or endemic\*).ti,ab,kf,kw. (506063)
- 30 (storm or storms or flood\* or drought\* or earthquake\* or wildfire\* or avalanche\* or tornado\* or cyclon\* or hurrican\*).ti,ab,kf,kw. (57428)
- 31 27 or 28 or 29 or 30 (579969)
- 32 (one health or human\* environment\* or human\* plant\* or zoonotic\* disease\* or zoonos\* or vector born\* or one medicin\* or bio social\* or biosocial\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (33611)
- 33 One Health/ (141)
- 34 Zoonoses/ (15656)
- 35 32 or 33 or 34 (33611)
- 36 7 and 14 (114)
- 37 7 and 26 (22)
- 38 7 and 31 (645)
- 39 36 or 37 or 38 (720)
- 40 limit 39 to yr="1978 - 2019" (720)
- 41 35 and 40 (24)
- 42 40 not 41 (696)

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Database: Global index Medicus (WHO), 8 April 2019

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vulnerab\*

AND assess\* OR approach\* OR analy\* OR evaluat\* OR measur\* OR tool\*

AND disaster\* OR emergency OR emergencies OR outbreak\* OR crises OR crisis OR "natural hazard\*" OR "climate change" OR pandemic\* OR endemic\*

OR infectious disease\* OR communicable disease\* OR transmiss\*

OR AMR OR anti\*microbial resist\* OR anti\*biotic restist\* OR anti\*biotic stew\* OR anti\*fungal resist\* OR anti\*parasit\* restist\* OR anti\*viral resist\*

OR "drug\* resistan\*" AND (microbial\* OR bacteria\* OR multiple OR antibiotic\* OR fungal\* OR viral\*)

OR one health OR human\*environment OR human\*plant OR zoonotic disease\* OR zoonos\* or vector\*born\*

or one medicin\* or bio\*social\* or biosocial\*

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Database: AJOL (African Journal online), 3 April 2019

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vulnerability assessment\* or approach\* or analy\* or evaluat\* or measur\* or tool\*

Database: Epistemonikos, 11 April 2019

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Full query: (title:(vulnerab\*) OR abstract:(vulnerab\*)) AND (title:(population\* OR group\* OR people\* OR communit\*) OR abstract:(population\* OR group\* OR people\* OR communit\*)) AND (title:(vulnerab\* OR qualit\* OR quantit\* OR participat\* OR barefoot\*) OR abstract:(vulnerab\* OR qualit\* OR quantit\* OR participat\* OR barefoot\*)) AND (title:(assessment\* OR approach\* OR analy\* OR evaluat\* OR measur\* OR tool\*) OR abstract:(assessment\* OR approach\* OR analy\* OR evaluat\* OR measur\* OR tool\*)) AND (title:("climate change" OR disaster\* OR outbreak\* OR disease outbreak\* OR infectious diseas\* OR communicable diseas\* OR ebola\* OR "marburg virus" OR lassa\* OR "rift valley fever" OR "crimean congo hemorrhagic fever" OR "crimean congo haemorrhagic fever" OR antibiotic resist\* OR antimicrobial resist\* OR crisis OR crises OR "natural hazard" OR "natural hazards" OR emergency OR emergencies OR pandemic\* OR endemic\*) OR abstract:("climate change" OR disaster\* OR outbreak\* OR disease outbreak\* OR infectious diseas\* OR communicable diseas\* OR ebola\* OR "marburg virus" OR lassa\* OR "rift valley fever" OR "crimean congo hemorrhagic fever" OR "crimean congo haemorrhagic fever" OR antibiotic resist\* OR antimicrobial resist\* OR crisis OR crises OR "natural hazard" OR "natural hazards" OR emergency OR emergencies OR pandemic\* OR endemic\*))

1) (title:(vulnerab\*) OR abstract:(vulnerab\*))

2) AND (title:(population\* OR group\* OR people\* OR communit\*) OR abstract:(population\* OR group\* OR people\* OR communit\*))

3) AND (title:(vulnerab\* OR qualit\* OR quantit\* OR participat\* OR barefoot\*) OR abstract:(vulnerab\* OR qualit\* OR quantit\* OR participat\* OR barefoot\*))

4) AND (title:(assessment\* OR approach\* OR analy\* OR evaluat\* OR measur\* OR tool\*) OR abstract:(assessment\* OR approach\* OR analy\* OR evaluat\* OR measur\* OR tool\*))

5) AND (title:("climate change" OR disaster\* OR outbreak\* OR disease outbreak\* OR infectious diseas\* OR communicable diseas\* OR ebola\* OR "marburg virus" OR lassa\* OR "rift valley fever" OR "crimean congo hemorrhagic fever" OR "crimean congo haemorrhagic fever" OR antibiotic resist\* OR antimicrobial resist\* OR crisis OR crises OR "natural hazard" OR "natural hazards" OR emergency OR emergencies OR pandemic\* OR endemic\*) OR abstract:("climate change" OR disaster\* OR outbreak\* OR disease outbreak\* OR infectious diseas\* OR communicable diseas\* OR ebola\* OR "marburg virus" OR lassa\* OR "rift valley fever" OR "crimean congo hemorrhagic fever" OR "crimean congo haemorrhagic fever" OR antibiotic resist\* OR antimicrobial resist\* OR crisis OR crises OR "natural hazard" OR "natural hazards" OR emergency OR emergencies OR pandemic\* OR endemic\*))

Full query: (title:(title:(vulnerable groups) OR abstract:(vulnerable groups)) AND (title:(("climate change" OR disaster\* OR outbreak\* OR disease outbreak\* OR infectious diseases\* OR antibiotic resistan\* OR antimicrobial resistan\* OR crisis OR crises OR "natural hazard" OR "natural hazards" OR pandemic\* OR endemic\*) OR abstract:(("climate change" OR disaster\* OR outbreak\* OR disease outbreak\* OR infectious diseases\* OR antibiotic resistan\* OR antimicrobial resistan\* OR crisis OR crises OR "natural hazard" OR "natural hazards" OR emergency OR emergencies OR pandemic\* OR endemic\*)))) OR abstract:(title:(vulnerable groups) OR abstract:(vulnerable groups)) AND (title:(("climate change" OR disaster\* OR outbreak\* OR disease outbreak\* OR infectious diseases\* OR antibiotic resistan\* OR antimicrobial resistan\* OR crisis OR crises OR "natural hazard" OR "natural hazards" OR pandemic\* OR endemic\*) OR abstract:(("climate change" OR disaster\* OR outbreak\* OR disease outbreak\* OR infectious diseases\* OR antibiotic resistan\* OR antimicrobial resistan\* OR crisis OR crises OR "natural hazard" OR "natural hazards" OR emergency OR emergencies OR pandemic\* OR endemic\*))))))

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