

Characterizing contacts of human population with wildlife and risk factors at the human/wildlife interface in Cambodia

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Background

- In South-East Asia, the trade and consumption of wild animals is a common practice (agricultural and socio-cultural practices)
- Repeated contacts between human and wildlife favor viral spillover events leading to the (re)-emergence of zoonotic viruses (Ebola, SARS-CoV-1, and probably SARS-CoV-2)
- Necessary to improve our knowledge of these critical interfaces to mitigate cross-species transmission and emergence of pathogens
- Preliminary pilot study to characterize contacts of human population with wildlife and risk factors at the human/wildlife interface in Cambodia

Materials & Methods

- ZooCoV project: "Towards an integrated surveillance of potential zoonotic Betacoronaviruses in the wild animal value chains of Cambodia"
- Between August 2020 and March 2021
- 4 sessions of interviews in selected villages in **Stung Treng** and **Mondulkiri** Provinces
- Individual structured questionnaires:** socio-demographic data, potential wildlife-related risk practices information (consumption, sale, hunting, professional activities)
- Logistic multivariate analysis to assess the association between wildlife exposure and socio-demographic data, practices and frequency of exposure



Result 1: Socio-demographic characteristics

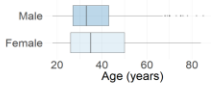
Inclusions

N=901

Stung Treng
N=311

Mondulkiri
N=590

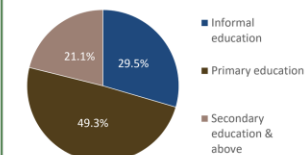
Age distribution per gender



HOUSEHOLD MONTHLY INCOME

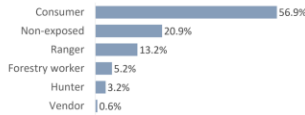


EDUCATION LEVEL

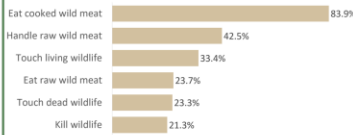


Result 2: Practices and exposure

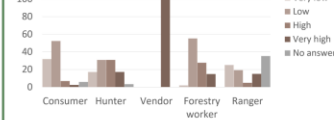
CATEGORIES OF EXPOSITION



CONTACTS DECLARED BY EXPOSED PARTICIPANTS



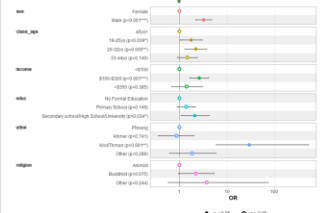
FREQUENCY OF EXPOSURE (%)



WILD ANIMALS DECLARED BY CONSUMERS AND FORESTRY WORKERS



Result 3: Association with wildlife exposure



Conclusions and perspectives

- First characterization of exposure to wildlife of a rural population in 2 Provinces in Cambodia
- In-depth analysis of each practice per category of exposure
- Relate all these results to serological results (exposure to different coronaviruses)
- Virological analyses of wildlife samples are on-going

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