

Opinion of Chinese medicine practitioners towards wildlife usage in Chinese medicine

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BACKGROUND

- Human harvest and consumption are threatening the existence of many wild animals and may increase the risk of infectious disease such as zoonoses.
- In traditional Chinese medicine (TCM), wild animal products have been prescribed in China for a long history and consumed by the public as medicinal ingredients.
- We undertook these surveys to understand the awareness and preference of medical professionals of utilizing wild animal products in TCM and their perceptions toward the protection of endangered animals.

METHODS

- Data collection in Mainland China: We launched the survey from 7th August - 18th September 2019 in alliance with a major medical e-platform, Chunyu Doctors. A proportional quota sampling strategy was used to enrol equal numbers of Chinese medicine doctors and western medicine doctors according to the Chinese city tier system, doctor's medicine practice years and geographical location.
- Data collection in Hong Kong: we launched a paper-based survey among registered Chinese medicine practitioners. The survey were distributed at local Chinese medicine conferences on 22nd September 2019 and 29th September 2019.

RESULTS

• Mainland China

(a) 1736 Chinese licensed doctors in Western medicine (n = 1002) and TCM (n = 734) responded the survey.

(b) Awareness

- 88.4% were aware of the medicinal use of wildlife ingredients in Chinese patent medicine and raw herbal decoctions.
- TCM practitioners had a higher awareness than WM doctors of the fact that wild animal products were contained in Chinese patent medicine (78.7% vs 72.8%; $P = 0.004$) and in raw herb decoctions (77.9% vs 50.6%; $P < 0.001$)

(c) Prescribing behavior

- 75.6% of the TCM doctors had prescribed medicine containing wild animal ingredients in the past either in Chinese patent medicine (53.1%) or Chinese medicine decoction (42.8%), while only 24.4% had never prescribed such medicine in practice (Figure 1).
- 60% of the doctors claimed that the pursuit of better clinical efficacy is the key factor driving their prescription behavior, and 45.7% of the prescriptions were made under patient's request.

(d) Attitude

- 73.2% of the surveyed doctors believed that the pharmaceutical actions of wild animal ingredients were significant or somewhat effective.
- 88.7% of doctors believed its clinical efficacy exaggerated.
- 45.0% of the TCM practitioners had knowledge about the regulations regarding the medical use of endangered animals. 93% of surveyed doctors in mainland China agreed that government should enact stricter policy to manage the use of wildlife products in Chinese medicine (Figure 2).

• Hong Kong SAR

(a) 305 qualified respondents.

(b) Awareness, prescribing behavior and attitude

- 90.1% agreed that endangered animal species should be protected, although 49.6% believed this may affect the efficacy of their practice.
- More than 80% agreed that sustainable alternatives should be extensively used.
- Large proportion believed that the lack of environmental law enforcement (55.8%) and insufficient biodiversity conservation education (39.1%) to the public were the major reasons causing continuously use of endangered animals in Chinese medicine.

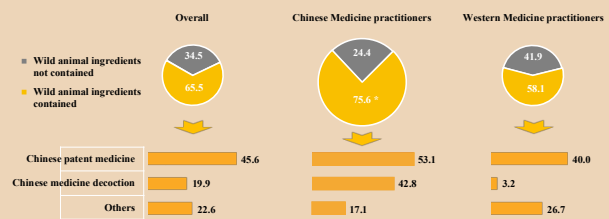


Figure 1. Types of medicines that contain wild animal ingredients (%)



Figure 2. Knowledge about regulations regarding the medical use of endangered animals (%) and Respondents who agreed government should introduce stricter measures to control the use of wild animals in medicine (%)

CONCLUSION

- Medical professionals of both TCM and WM expressed their concerns on the extinction of endangered species due to medical exploitation, and their willingness to help change the status quo by choosing to use substitutes and guide their patients out of wild animal products use.
- Removing wild animal products from Chinese medicine is highly supported by the medical community in China, and it is time to act.