

What are TCM doctors' attitudes towards replacing animal-origin medicinal materials with plant-origin alternatives?

- Global Ecology and Conservation, Volume 34, 2022

Tom P. Moorhouse ^{a,*}, Neil C. D'Cruze ^{a,b}, Evan Sun ^b, Angie Elwin ^b, David W. Macdonald ^a

^a Wildlife Conservation Research Unit, Department of Zoology, University of Oxford, UK;

^b World Animal Protection, 222 Grays Inn Road, London WC1X 8HB, UK

INTRODUCTION

- The global trade in wildlife affects ~24% of terrestrial vertebrates, and demand for traditional Chinese medicinal materials, is a high profile driver. Among key hopes for reducing the impacts of “TCM” on wildlife are strategies to redirect demand onto plant-origin alternative medicines. Studies demonstrate substantial support such alternatives among regular consumers of TCM, but it remains unknown whether TCM doctors would be willing to prescribe these to their patients.
- We conducted online questionnaires with 1000 doctors in the People's Republic of China (PRC) about their attitudes towards the use of animal-origin medicinal materials in TCM practice.

METHODS

- This online survey was conducted online with 1000 doctors who are registered with Chunyu Yisheng Doctor, the largest online provider of healthcare in the PRC.
- We asked four principal questions: (1) To what extent medical professionals in the PRC felt animal-origin medicinal materials could be replaced with plant-origin alternatives; (2) Whether plant-origin alternatives for specific animal-origin medicinal materials were deemed effective and acceptable by the practitioners; (3) What considerations might influence doctors' decisions concerning whether to prescribe plant-origin alternatives, and; (4) To what degree doctors' attitudes were influenced by patients' attitudes.

RESULTS

We found substantial support for the substitution of plant-origin TCM medicinal materials:

- 86.4% of respondents stated that they were “willing” or “very willing” to do so.
- 66.8% of responses were in favour of prescribing plant-origin preparations if the animal-origin original was unavailable
- 54.7% in favour even if the original animal-origin preparation was available.
- Respondents were approximately twice as likely to select a higher probability of prescribing plant-origin alternatives when shown information stating that 92% of frequent TCM users would be likely or very likely to buy plant-origin TCM preparations.
- TCM doctors' principal concerns regarding plant-origin alternatives were the medicines' effectiveness, safety and financial cost to patients;
- Those who made a comparison indicated that they believed plant-origin medicines to be as effective, safer and less expensive (therefore more attractive) to patients than animal-origin medicines.

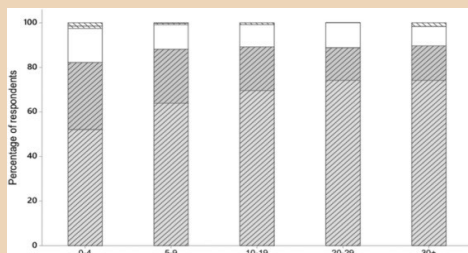


Fig. 1. The effect of respondents' years of practise (x-axis) on their stated willingness to substitute plant-origin medicines for animal-origin medicines. Shaded, hatched bars from low to high represent “Very willing”, “willing”. Unshaded, open bars represent “unsure”. Unshaded, hatched bars represent “unwilling” and “very unwilling”, from low to high.

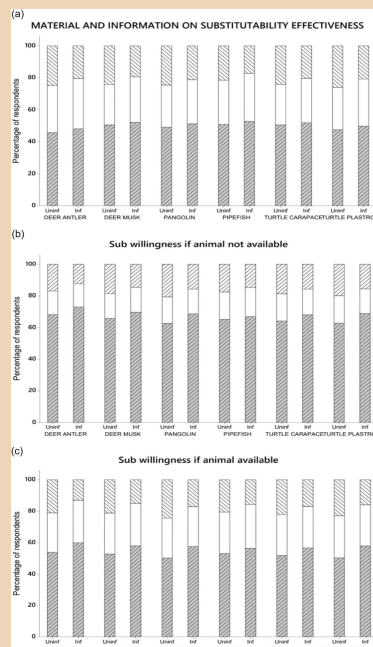


Fig. 2.

- Responses to the question of whether specific plant-origin alternatives are as effective as the original, animal-origin medicine – for respondents shown treatment information (“Inf”) and control respondents who were not (“Uninf”). Shaded, hatched bars represent “yes”. Unshaded, unhatched bars represent “unsure” and unshaded, hatched bars represent “no”. Responses are shown collated across categories of animal-part for illustrative purposes.
- Responses to the proposition that respondents would be willing to prescribe specific plant-origin alternatives in place of the original animal-origin preparation, if the original medicine were unavailable – for respondents shown treatment information (“Inf”) and control respondents who were not (“Uninf”). Shaded, hatched bars represent “yes”. Unshaded, unhatched bars represent “unsure” and unshaded, hatched bars represent “no”. Responses are shown collated across categories of animal-part for illustrative purposes.
- Responses to the proposition that respondents would be willing to prescribe specific plant-origin alternatives in place of the original animal-origin preparation, even if the original medicine were available – for respondents shown treatment information (“Inf”) and control respondents who were not (“Uninf”). Shaded, hatched bars represent “yes”. Unshaded, unhatched bars represent “unsure” and unshaded, hatched bars represent “no”. Responses are shown collated across categories of animal-part for illustrative purposes.

CONCLUSION

We conclude that Chinese medical professionals who incorporate TCM into their daily practise would be likely to support initiatives to replace certain animal-origin medicinal materials with plant-origin alternatives.