

# WeChat-based health communication interventions enhance knowledge, protective attitudes and behavior intentions towards canine rabies in Shandong, China

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## Abstract

**Introduction:** In order to provide refined effects analysis of health communication intervention, this study aims to measure and compare the impact on the knowledge and protective attitudes and behavior intentions(KAP) towards canine rabies of interventions that use the local TV net(V1) and WeChat platform (V2) delivering a short video, and cartoon pamphlet(P). **Materials and Methods:** The study used a between-subject design involving repeated measures of rabies-related KAP. 800 randomly selected villagers were randomly allocated into four intervention groups (V1, V2, P and V2+P) and one control. The content of video and pamphlet covered topics about rabies prevention, route of transmission, and so on. The pamphlet was given door to door once immediately after the pretest. One day after the pretest, the same video was posted one time through WeChat platform, and was broadcasted via local TV net two times each day in consecutive fifteen days. A validated questionnaire was used to capture demographic and KAP information. Ordinary Least Squares regression was used to contrast the effects of interventions. **Results:** Our results indicate that overall V2 outperforms V1 but underperforms P at improving KAP scores. Our results suggest that a combined intervention of V2 and P can result in higher scores than any of the two in isolation. The impact on the knowledge, protective attitudes and behavior intentions scores is revealed in a decreasing sequence. **Conclusion:** This study demonstrated that health communication modes based on V1, V2, P and a combination of the two are all effective to improve rabies-related KAP in the short term. These findings provide a scientific basis for the implementation of health communication intervention toward rabies and further studies are needed to investigate the long term and other social media message elements benefits of these interventions on the reduction of rabies incidence in humans.

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Figure-2-Trial profile.docx available at <https://authorea.com/users/472119/articles/563179-wechat-based-health-communication-interventions-enhance-knowledge-protective-attitudes-and-behavior-intentions-towards-canine-rabies-in-shandong-china>

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