

Worldwide, irrational use of medicine is a major problem.

Medicines are often used incorrectly: around 50% of medicines are prescribed, dispensed or sold inappropriately, while 50% of patients fail to take their medicines appropriately.¹ Inappropriate or excessive antibiotic use results in antibiotic resistance, which is more commonly observed in countries with high rates of antibiotic prescription.

Antibiotic resistance in children

Upper respiratory infections (URIs) are very common in children, but are usually viral and self-limiting. Nevertheless, prescribing antibiotics for a child's URIs is highly prevalent in community and primary care settings.²

A cross-sectional study in 10 provinces in rural Western China showed that antibiotics accounted for over half of all prescriptions, predominantly provided for URIs. One-fourth of those receiving antibiotics were children under ten years old.³

Similarly, a study of children admitted to hospital with pneumonia in rural China found that over 40% of the antibiotics prescribed were unnecessary.⁴

Improving the knowledge, attitude and behaviour of healthcare providers and consumers can reduce the irrational use of antibiotics.

Study aims

To reduce the irrational use of antibiotics among children with URIs in rural western China. The study has 3 phases:

Phase 1: understand the current situation of antibiotics use among children in rural Guangxi from the perspectives of policy makers, providers and parents/caregivers. This focuses on measuring the extent of irrational use of antibiotics and exploring the factors which may influence the irrational use of antibiotics among children with URIs.

Phase 2: design a multi-dimensional intervention to reduce the irrational use of antibiotics among children by health providers in township hospitals and parents/caregivers in rural Guangxi.

Phase 3: implement and evaluate a full clustered Randomised Controlled Trial in township hospitals in rural Guangxi.

Phase 1 is complete and phases 2 and 3 are currently underway.

Potential scale up of research findings:

Global Health Research and Development (GHRD), China, will



work with the Guangxi Health Bureau and Shandong University to scale up the service delivery model at healthcare facilities where appropriate.

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