

Antibiotics are meant to help...Aren't they?

Slowing the development and spread of infections resistant to antibiotics is an urgent public health and patient safety need. Whilst clinicians are encouraged to use antibiotics wisely, unnecessary use remains high. To develop ways to support reduced antibiotic prescribing by dentists for adults with acute conditions during urgent NHS dental appointments, the APTITUDE programme of research was undertaken. APTITUDE stands for **Antibiotic Prescribing: Towards a reduction during Urgent Dentistry in England**.

The first stage of APTITUDE was to understand what factors are associated with treatment decisions, including whether to prescribe antibiotics. The study in NHS high-street practices and out-of-hours dental clinics involved observing and/or audio recording urgent dental appointments, and a selection of cases were followed-up through interviews with the dentists, patients and dental nurses. A list of 31 factors were identified which influenced dentist's decision making and which might be amenable to modification in order to tackle unnecessary antibiotic prescribing. The existing UK Dental Antimicrobial Stewardship Toolkit (<https://www.gov.uk/guidance/dental-antimicrobial-stewardship-toolkit>) already covers many of these factors, such as patient-facing leaflets and posters to help manage patient expectations and on-line guidance and education to address clinicians' knowledge. New tools to dovetail with the existing toolkit are being developed through the application of behavioural science to areas identified by the APTITUDE research as gaps in the existing toolkit.

Beliefs about antibiotics and their risks was the only factor identified as influencing dentists, patients and dental nurses during urgent dental appointments. Story-based interventions are particularly good at engaging audiences in order to change their beliefs. A story-based intervention aimed at changing beliefs about antibiotics by personalising their risks has been produced. Tales from the Dentist's Chair: Quick Fix Frank is a series of dramatic video monologues. Each monologue is a few minutes long and together they build towards a dramatic conclusion. The scripts were developed through theatre workshops involving people with experience of receiving urgent dental care, dental team members and service/policy managers. This resource is currently being evaluated and you are invited to take part in that process by following this web link:

<https://leeds.onlinesurveys.ac.uk/online-evaluation>.



Additional resources to address other factors identified during the study are currently in development, including a 'Step-by-step Guide to your Urgent Appointment'. If you would like to get involved with evaluating them or taking part in other research, please do contact me: wendy.thompson15@nhs.net

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