

Title: Antibiotic Recognition Strategies and Current Trends of Antibiotic Use among Community Members in Matlab, Bangladesh

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Introduction:

- Recent evidence suggests that identification of oral antibiotic by healthcare providers, medicine suppliers and communities is challenging
 - same generic group with different appearance
 - similar with group of antibiotics
- The study explored strategies about antibiotic recognition, socio-cultural impacts of standardizing oral antibiotics and investigated current trend of antibiotic use at community level

Methods and Materials:

- A pragmatic qualitative approach was adopted to collect data
- Semi-structured in-depth interviews and focus group discussions with antibiotic sellers, users, and dispensers
- Thematic analysis was facilitated using ATLAS.ti

Overview of study participants (Timeline: Sept 2021 to Aug 2022)

Types of Interview	Interviewed	Number of Participants	Type of Participants (M:F)	Age limit (Years)	Audio length (Min. – Max.)
In-depth Interviews	32	32	31:1	23-48	48-90 Minutes
Focus Group Discussions	18	145	7:11	20-63	69-143 Minutes

Results and Discussion

- ❖ Analysis revealed Large sized tablets, capsules containing two colors, dosages duration, strength, and prices were associated indicators to identify antibiotics
- ❖ Stating ‘ANTIBIOTIC’ with redline on antibiotic strips and packing were recommended ways of antibiotic recognition
- ❖ Increased trend of inappropriate antibiotic use caused financial barriers, limited health-care facilities. Inability to identify antibiotics appearances
- ❖ Antibiotic recognition strategies like "using a symbol or a QR-code” to improve identification were appreciated by consumers and sellers
- ❖ Suggested for better identification of antibiotics, combination of QR-code, symbol & RED marking on packaging can be considered
- ❖ Effective promotional message in lay terms at the community will reduce misuse/abuse of antibiotics and inversely encourage responsible use of antibiotics

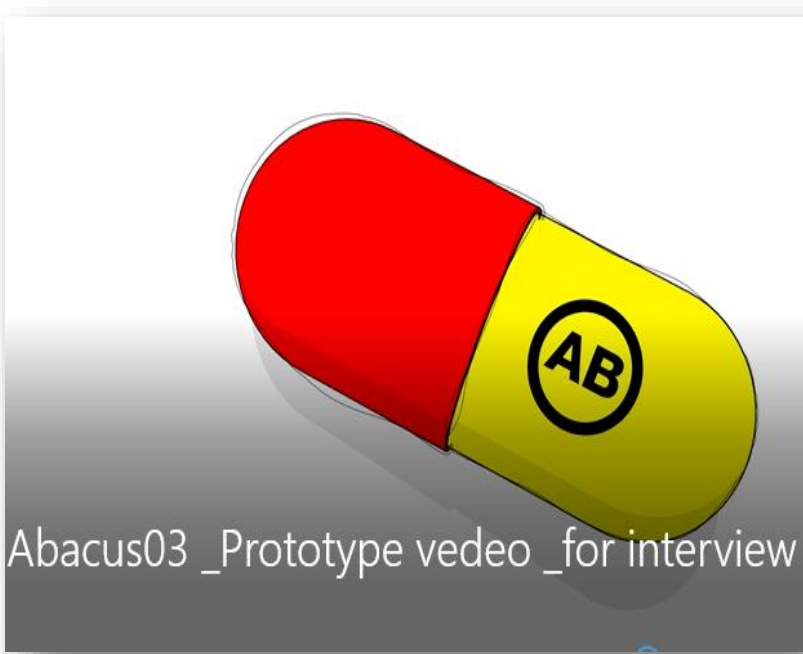
Recommendation



Antibiotic use circle in study area

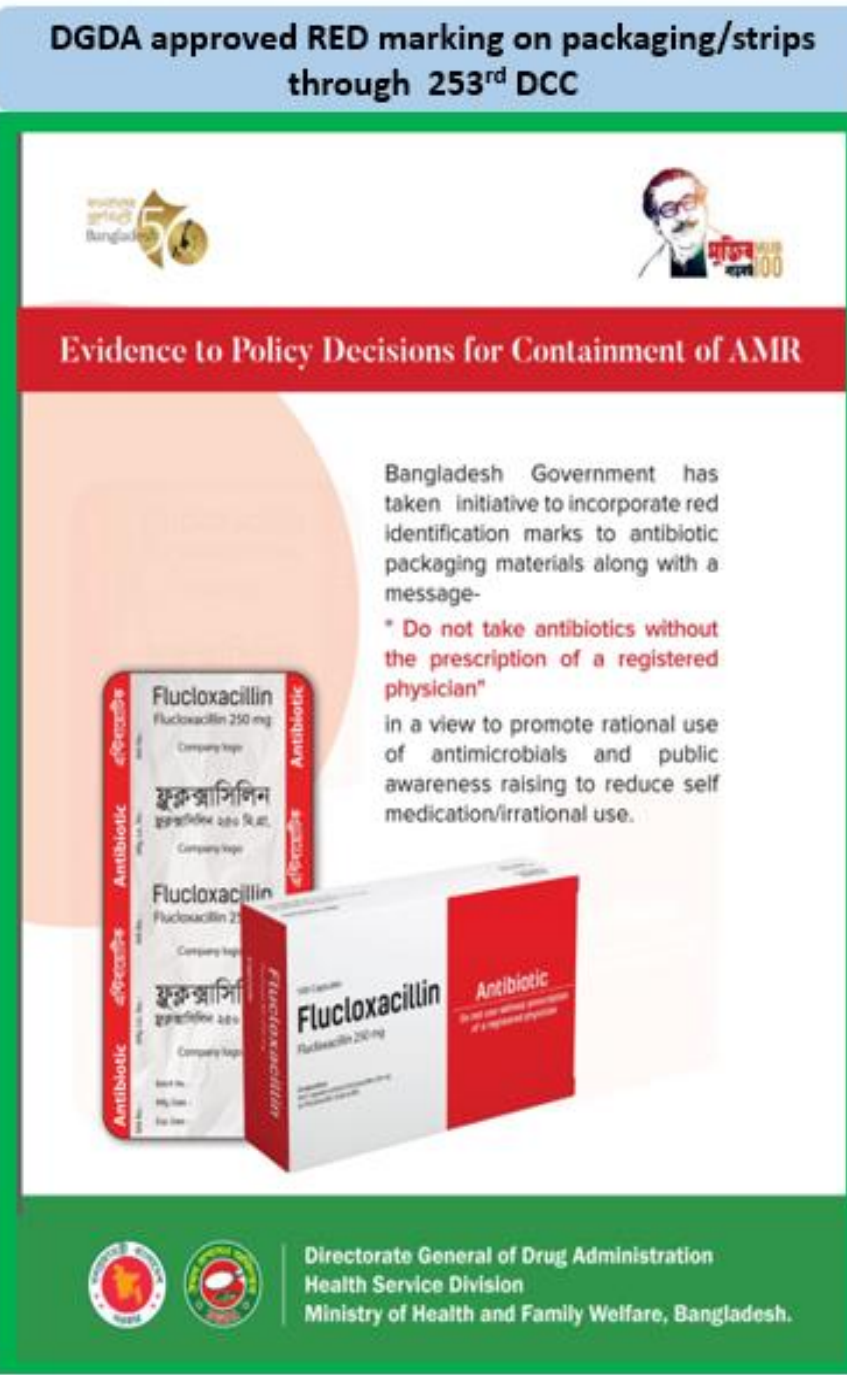


Proposed systems using AB symbol and QR code



Bangladesh Government New Strategy

- Bangladesh Government initiative of using RED marking on antibiotic packaging to tackle inappropriate antibiotic use



Conclusion

- Different approaches were proposed by participants to improve antibiotic identification
- Future research should explore feasibility of implementation
- Focused campaign should be emphasized involving rural population to create awareness on this identification process and responsible use of antibiotics

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