

Mapping Health Systems to Understand Health Phenomena – and why Publishing this Work Matters

A singular medical incident can alert health officials to an emerging, if not widespread, but possibly undetected public health concern.

Our issue contains a remarkable case of a ruptured hepatic abscess in a 3-year-old, which turned out to be Methicillin-resistant *Staphylococcus aureus* (MRSA) by authors Torrico and Tarnate.¹ The concern is that the infection is community-acquired, and the patient was immunocompetent. This sounds the alarm for the occurrence of antimicrobial resistance (AMR) in the communities and calls for a response from health authorities to investigate, analyze, and propose solutions for such a sentinel event.

We need to support these efforts and, in this issue, we publish such work from our investigators. Antimicrobial resistance is an urgent global health concern.² The impact is magnified in low to middle-income countries where health risks are high, and health infrastructure is weak.³ Thus, it is imperative that determinants of AMR are scrutinized to allow crafting of focused strategies to combat the problem.

The article by Dela Cruz and Hernandez on the prevalence and practices of antibiotic misuse among adult residents of Rodriguez, Rizal, contributes to this analysis.⁴ The paper reveals a disturbing prevalence of self-medication and identifies barriers to accessing proper health education and care. This is a global problem, and the paper from Brazil relates the observation of community pharmacists of antibiotic misuse to the rise of antimicrobial resistance.⁵⁻⁹

Dela Cruz and Hernandez recommend stricter antibiotic regulation, and this falls squarely into the scope of concern of another article in this issue, the “Research Needs in Philippine Pharmaceutical Sciences: A Qualitative Perspective from Regulatory and Clinical Research Sectors of the Pharmaceutical Industry” by Pena and co-authors.¹⁰ Interestingly, while drug registration and clinical trials were the focus of the paper, it may be a desired expansion of the regulatory reach of the industry to temper the use of antibiotics as it is being dispensed to end users.¹¹ Antimicrobial stewardship involves ethical promotion of use and equitable access to appropriate treatment, and these concerns require the responsible participation of the pharmaceutical industry.

Health challenges are complex. The analysis of these challenges requires surveillance of literature for sentinel events, use of community-based research to investigate phenomena, and system mapping to identify relevant sectors to improve strategy and to involve relevant stakeholders.

We support this type of scholarship, which seeks to expand the focus from isolated clinical interventions towards placing a spotlight on relevant work that will lead to impactful reform of broad health ecosystems.

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