



The Global Point Prevalence Survey as a Tool to Support Antimicrobial Stewardship: Results of a 3-year Longitudinal Survey on Antimicrobial Prescribing in 10 Hospitals in the Philippines

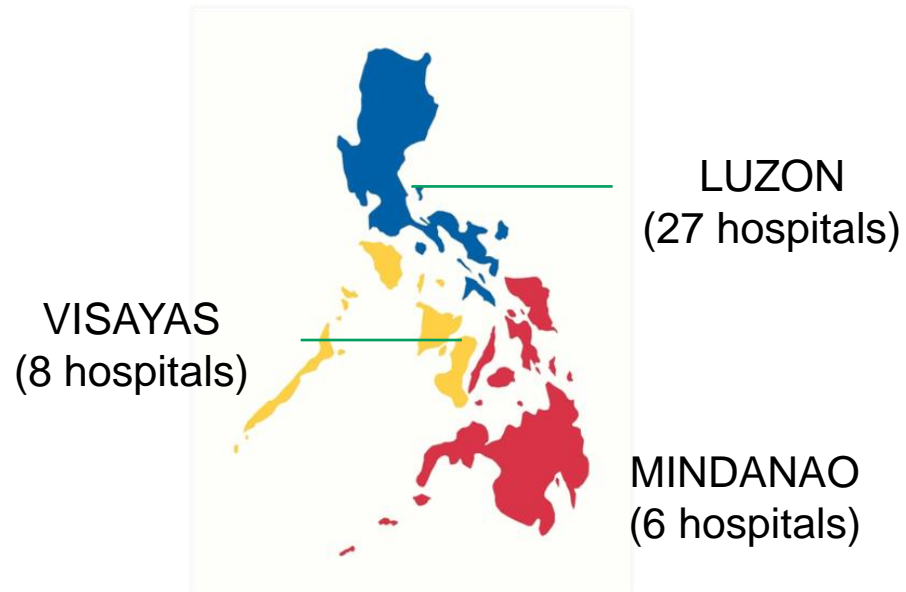
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Background & objective

- PPS is an important tool in monitoring antimicrobial stewardship program in hospitals
- Surveillance and training started in 2017
- Coordination with DOH, PSMID, PIDSP, Global-PPS

Objective: to assess trends in antimicrobial prescribing quality and quantity in hospitals in the Philippines, using repeated point prevalence surveys

POINT PREVALENCE SURVEY - PHILIPPINES SITES



41 hospitals in the network - 10 participated in all 3 years

Methods

- Data were collected once yearly in 2017, 2018 and 2019, between September and December, using the **Global-PPS*** protocol (<https://www.global-pps.com/>).
- Inclusion: All admitted patients at 8 a.m. on the day of the PPS were included
- Antimicrobial use prevalence and antibiotic quality indicators were assessed
- Longitudinal analyses were performed for a subset of **10 hospitals** that participated in three years of data collection

*The Global-PPS is coordinated by the University of Antwerp and supported by bioMérieux. The funder has no role in study design, data collection, data analysis, data interpretation, or writing the report. Data are strictly confidential and stored anonymous at the coordinating centre of the University of Antwerp.

Results (1)

Table 1. Antimicrobial use prevalence rates by activity in 10 hospitals in The Philippines

	2017			2018			2019			p-value*
	Admitted patients (n)	AMU prevalence (%)	95%CI	Admitted patients (n)	AMU prevalence (%)	95%CI	Admitted patients (n)	AMU prevalence (%)	95%CI	
Intensive care patients	264	65.2%	59.4-70.9	282	68.1%	62.6-73.5	307	69.7%	64.6-74.8	0.249
Medical patients	2143	56.2%	54.1-58.3	2269	54.5%	52.5-56.6	2456	57.5%	55.5-59.4	0.351
Surgical patients	909	62.7%	59.6-65.9	800	57.1%	53.7-60.6	732	54.5%	50.9-58.1	0.001
TOTAL	3316	58.7%	57.0-60.4	3351	56.3%	54.6-58.0	3495	57.9%	56.3-59.6	0.537

AMU = antimicrobial use; *assessed using the chi-squared test for trend. A p-value of 0.05 is considered significant.

Results (2)

Table 2. Quality indicators for antibiotic (J01) prescribing in 10 hospitals in The Philippines

	2017		2018		2019		p-value**
	prescriptions (n)	%	prescriptions (n)	%	prescriptions (n)	%	
Reason in notes	1929	73.5%	1940	78.3%	1912	73.4%	0.930
Guideline compliance*	1735	73.0%	1855	83.9%	2046	83.8%	<0.001
Stop/review date documented	582	22.2%	1017	41.1%	1241	47.6%	<0.001

* assessed on prescriptions with a documented diagnosis for which guidelines were available; **assessed using the chi-squared test for trend. A p-value of 0.05 is considered significant.

Conclusion

- Improving trends could be observed in the quality and quantity of antimicrobial prescribing in participating hospitals.
- PPS can provide evidence on the impact of antimicrobial stewardship in hospitals, which can be used for policy development, staff education and behavior change interventions.
- The PPS is now being expanded to include more hospitals in the Philippines.

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