

E0646: Antimicrobial prescribing in five primary healthcare centers in Northern Syria: a Global-PPS based period prevalence survey

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The civil war in Syria decimated the existing healthcare system and severely limited the availability of qualified medical professionals and adequate medical supplies. Fourteen years on, the war has ended but its effects continue to be felt across the country. Antimicrobial resistance remains a poorly understood but rapidly emerging challenge in this context.

Objectives



MONITOR

antimicrobial prescribing patterns



ESTIMATE

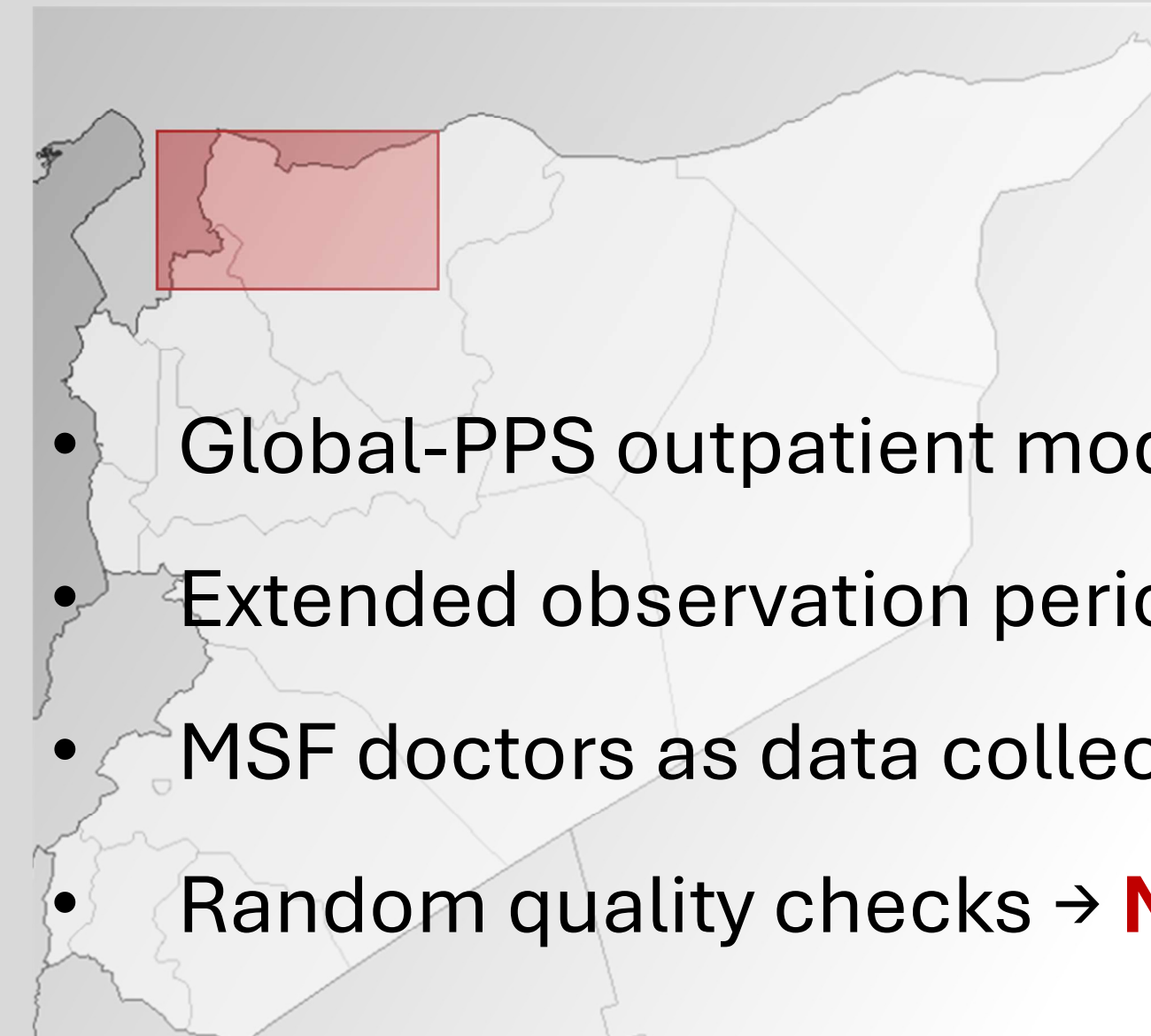
prevalence of antimicrobial use



INFORM

antimicrobial stewardship efforts

Methods



- Global-PPS outpatient module* → **Adapted for conflict settings**
- Extended observation period → **Larger sample, greater accuracy**
- MSF doctors as data collectors → **Clinical guideline[†] adherence**
- Random quality checks → **Minimize data entry errors**

Results

Overall **prevalence** of antimicrobial prescriptions was **21.2%** (95%CI:19.6-22.7%)

Figure 1: Antimicrobial prescription prevalence per facility with 95% confidence intervals (N=690)

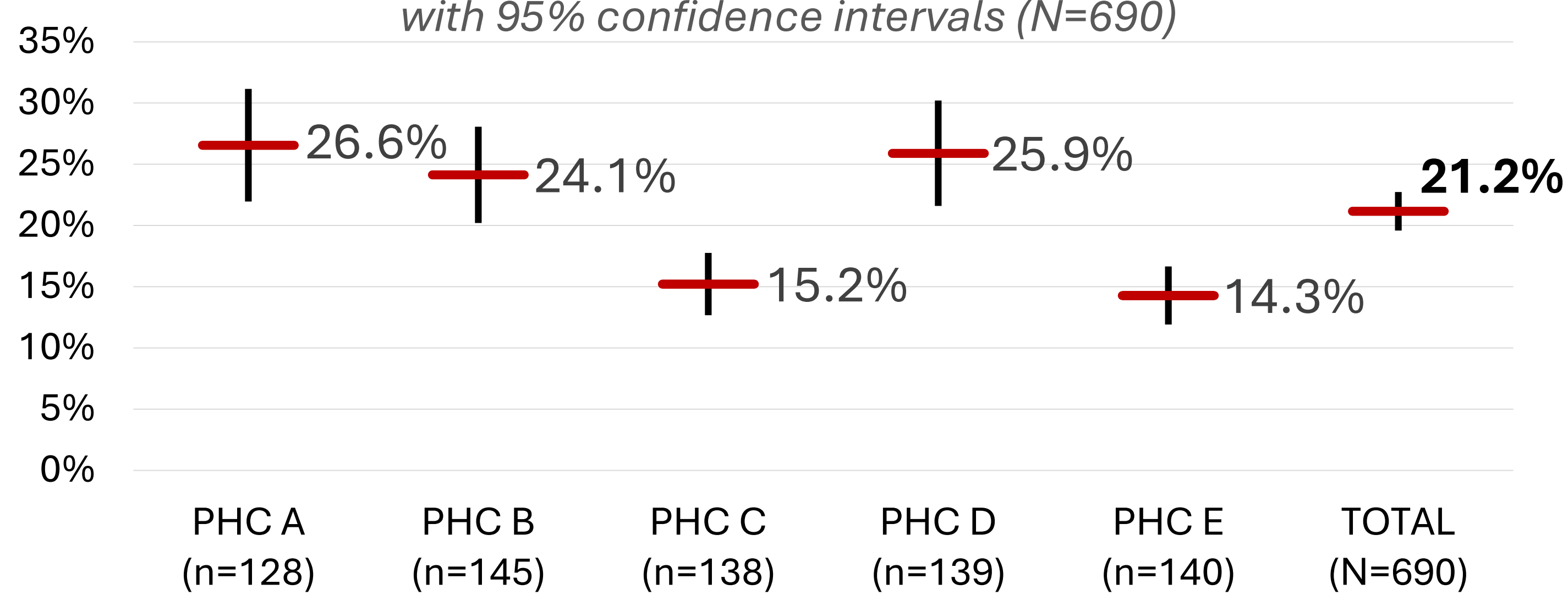


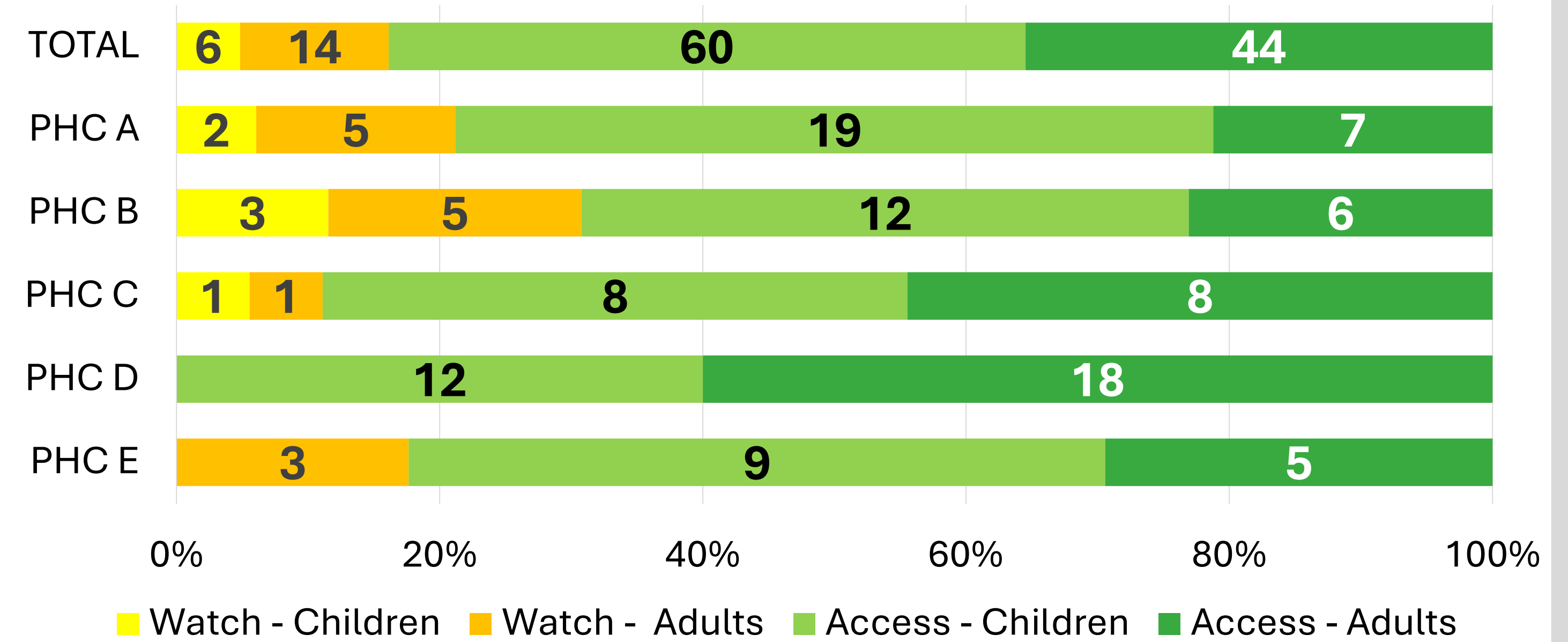
Table 1: AWARe classification of antimicrobials prescribed by age & diagnosis

Age	Diagnosis	Access n(%)	Watch n(%)	Reserve n(%)	Others n(%)
Children (n=76)	RTI	51 (93)	4 (7)	-	-
	UTI	9 (82)	2 (18)	-	-
	GII	4 (100)	-	-	-
	Others	5 (83)	-	-	-
Adults (n=70)	RTI	33 (85)	5 (13)	-	1 (3)
	UTI	11 (55)	9 (45)	-	-
	GII	3 (100)	-	-	-
	Others	7 (88)	1 (13)	-	1 (17)
TOTAL (N=146)	All	123 (84)	21 (14)	0 (0)	2 (1)

RTI: Respiratory tract infections; UTI: urinary tract infections; GII: Gastrointestinal infections

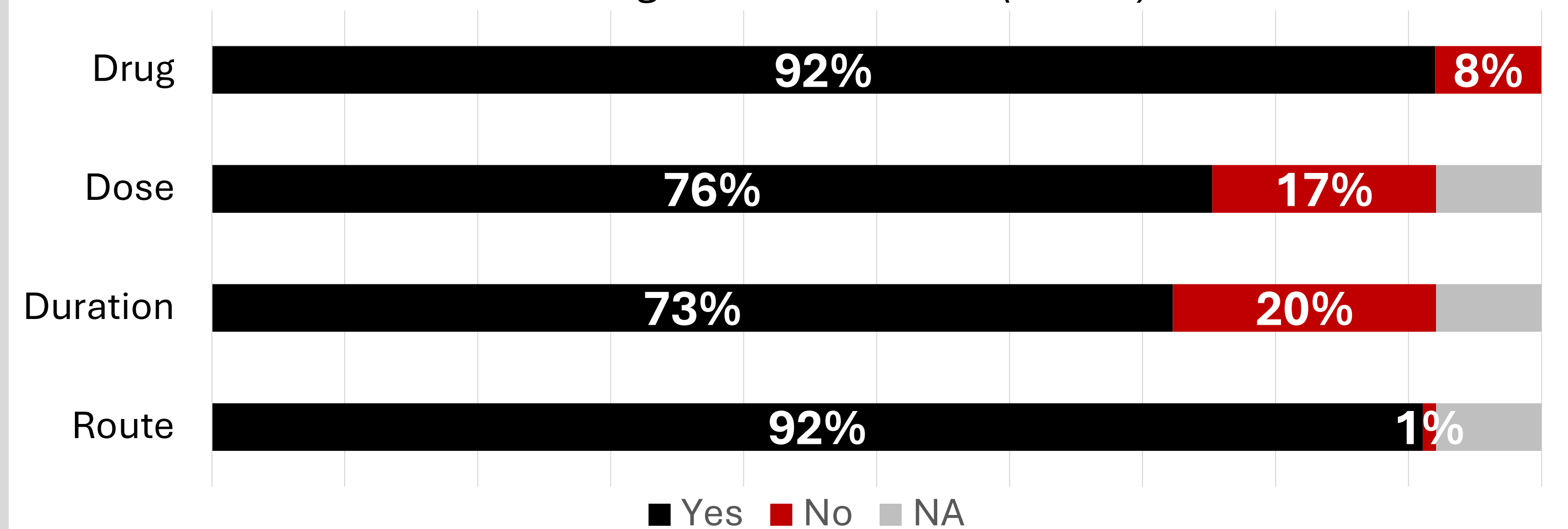
75% of **WATCH** antimicrobials were prescribed in 2 of 5 PHCs.

Figure 2: AWARe classification of antimicrobials prescribed for respiratory and urinary tract infection by facility and age group



Standard MSF clinical guidelines[†] existed for **89.7%** of consultations that received antimicrobial prescriptions.

Figure 3: Adherence to MSF clinical guidelines for prescriptions where standard guidelines existed (n=132)



Conclusions

The results highlight limitations in antibiotic prescribing practices and demonstrate variability across the surveyed facilities. An adapted action plan for antimicrobial stewardship activities should therefore be developed and tailored according to observations made in each PHC. Efforts should focus on reducing Watch antibiotic use and improving the adherence prescribed antibiotics to standard posology protocols and recommendations.

The Global-PPS tool provided a rapid and feasible methodology allowing for detailed assessment of outpatient antimicrobial prescribing in a post-conflict setting with limited resources and restricted access. Periodic surveys followed by targeted feedback, training, and supervision can improve overall quality of care.

*The Global Point Prevalence Survey of Antimicrobial Consumption. (2025). Global-PPS outpatient protocol. Available at <https://www.global-pps.com/project/outpatient-module/>
[†]Médecins Sans Frontières. (2025). Clinical guidelines - Diagnosis and treatment manual. Available at [medicalguidelines.msf.org](https://www.msf.org/clinical-guidelines)

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