

Factors affecting compliance to Infection Prevention and Control Standards Precautions among healthcare workers in Songwe Tanzania

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Only 22.5% (90/400) of HCWs had high compliance (above 80%) to IPCSPs. The lowest IPCSPs compliance was on proper handling of spills, taking shower after extensive splashing and do not re-use disposable masks, 8%, 28.5% and 34% respectively. IPC training or seminar in the previous one year (ARR=2.97 [1.87-4.72] p<0.001), working experiences (ARR=2.08 [1.22-3.54] p=0.007), and experiences to needle stick injury (ARR=0.62 [0.40-0.95] p=0.028), were identified as predictors of HCWs compliance to IPCSPs

BACKGROUND

- Compliance to IPC in Tanzania is 31% to 57%
- IPC compliance is poor regardless of existence of guidelines, standards and SOPs
- Poor compliance magnifies HAIs, AMR threats and cause additional cost to government, patients and families and eventually death
- HAIs burden is 7% and 15% in developed and LMICs respectively with 10% Mortality
- Study aimed to determine factors associated with poor compliance to IPCSPs among HCWs

METHODS

- **Study design:** Facility based cross-sectional study
- **Study population:** 400 HCWs from all districts of Songwe Region
- **Sampling technique:** Simple random
- **Tool:** Compliance with Standard Precautions Scale (CSPS) consisted 20 questions on IPCSPs
- **Procedure:** Observation
- Variables scored 1 for compliance and 0 for non compliance. Desired high compliance to IPC practices by National guidelines for SBM R for Quality improvement is 80%
 - High compliance: score of 16 and above
 - Low compliance: less than 16
- **Data analysis:**
 - Frequencies, proportion and chi square done
 - Modified Poisson regression performed
 - P-value < 0.05 considered as statistically significant difference

RESULTS

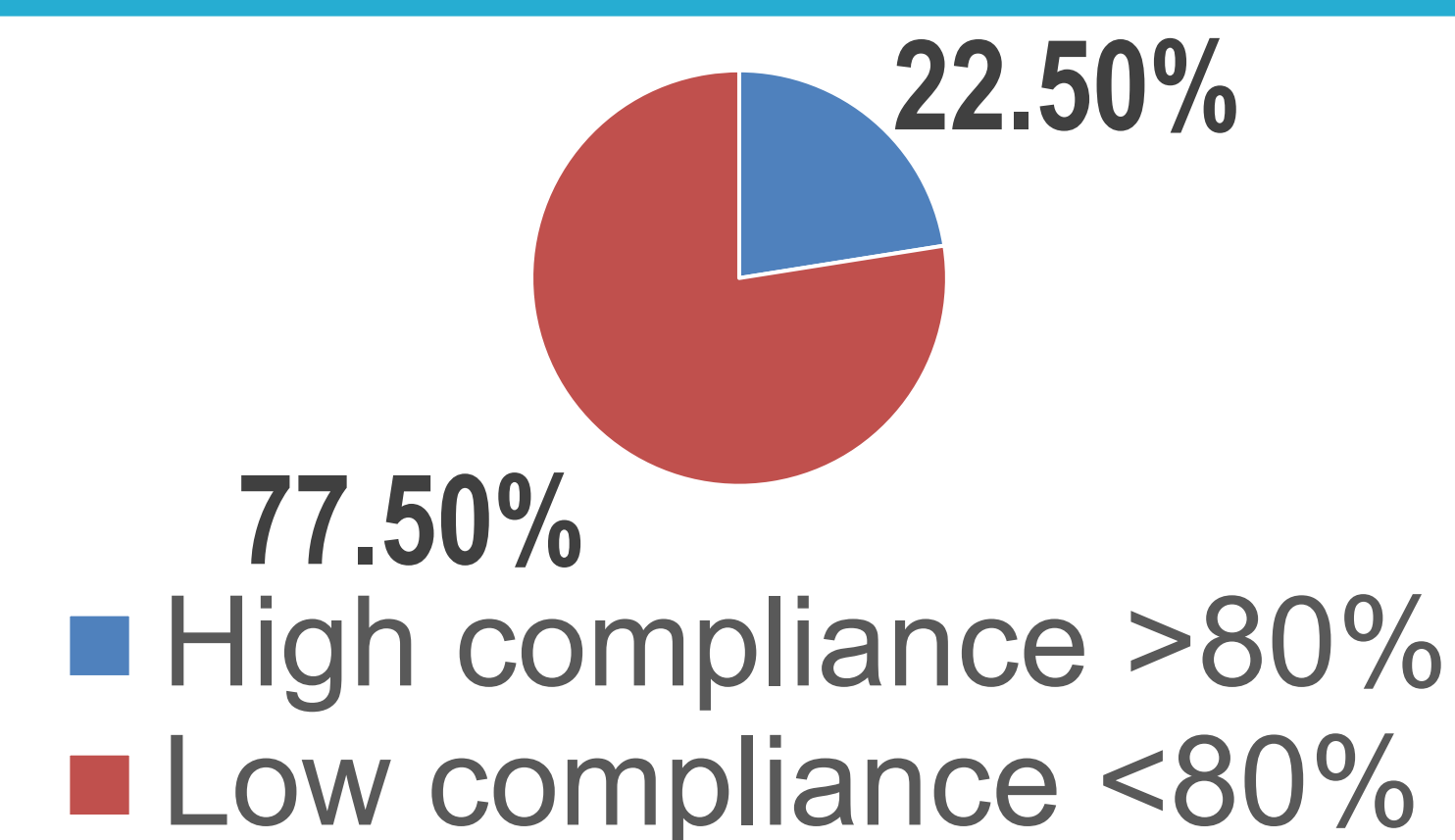


Figure: Compliance to IPC SPs among HCW (N=400) in SONGWE Region Jan to March, 2021

Table: Compliance to IPC standard precautions of HCWs (N=400) in Songwe region from January to March, 2021

Variable	Bivariate		Multivariate	
	CPR (95%CI)	P Value	APR (95%CI)	P Value
Profession				
Nurses	Ref		Ref	
Clinicians	0.53(0.32-0.90)	0.018	0.61(0.37-0.99)	0.049
Medical attendants	0.80(0.50-1.27)	0.34	0.87(0.55-1.38)	0.561
Other professions	1(0.58-1.73)	1	0.84(0.51-1.40)	0.509
Facility level				
Hospital	Ref		Ref	
Health center	1.71 (1.12-2.61)	0.013	1.86 (1.23-2.80)	0.003
Dispensary	0.92 (0.51-1.49)	0.726	1.23 (0.73-2.04)	0.43
Years of Work experience				
less than 6	Ref		Ref	
6 to 10	1.23 (0.80-1.91)	0.35	1.29 (0.85-1.95)	0.24
11 to 15	2.42 (1.43-4.11)	0.001	2.08 (1.22-3.54)	0.007
16 and above	1.32 (0.75-2.30)	0.35	1.32 (0.80-2.18)	0.279
IPC training in previous 1 year				
None	Ref		Ref	
Once	2.30 (1.57-3.37)	<0.001	1.88(1.26-2.82)	0.002
two and above	3.77 (2.38-5.98)	<0.001	2.97 (1.87-4.72)	<0.001
Needle stick injury				
No	Ref		Ref	
Yes	0.58(0.39-0.86)	0.007	0.62(0.40-0.95)	0.028
IPC Supportive supervision				
Never get any SS	Ref		Ref	
Annually	2.61(1.54-4.92)	<0.001	2.09(1.25-3.50)	0.005
Quarterly	1.26(0.81-1.97)	0.3	1.13(0.74-1.72)	0.581
Monthly	2.15(1.29-3.59)	0.03	1.74(1.05-2.87)	0.029

CONCLUSIONS

- HCWs compliance to IPCSPs in Songwe region is low
- Nursing cadre, IPC trainings, working years, IPC Supportive supervision, lack of needle stick exposure history were associated with high compliance
- Hence, capacity building initiatives, mentorship and supportive supervision should be regularly emphasized to all HCWs at all Health Facilities.

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MORE INFORMATION / REFERENCES

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