

HOSPITAL PHARMACISTS ENGAGEMENT IN PHARMACOVIGILANCE PRACTICES DURING COVID-19 IN THE NORTH MACEDONIA

B. LAZAROVA¹, M. KOVACEVA², M. SIMONOVSKA CRCAREKA², A. KAPEDANOVSKA NESTOROVSKA⁴, Z. NAUMOVSKA⁴

¹Clinical Hospital 2000 Stip, North Macedonia

²Pharmaceutical Chamber of Macedonia 1000 Skopje, North Macedonia

³Institute of pharmaceutical technology, Faculty of pharmacy, Ss. Cyril & Methodius University, Majka Tereza 47, 1000 Skopje, North Macedonia

⁴Institute of pharmaceutical chemistry, Faculty of pharmacy, Ss. Cyril & Methodius University, Majka Tereza 47, 1000 Skopje, North Macedonia

Corresponding author: zose@ff.ukim.edu.mk

Introduction

Good pharmacovigilance (PV) practice is associated with better patient care, increased safety in medication use and better public health via continuous benefit/risk assessment of drugs. Pharmacists are acknowledged as safety leaders worldwide, since they have high impact of patients' safety and it was confirmed during COVID-19 pandemic. In the RN Macedonia hospital pharmacists (HPs) were recognized as key factor for implementation of good pharmacovigilance (PV) practices and since 2017 they are engaged in PV working group in Macedonian Regulatory Agency (MAMED) actively working on rising the awareness, and improvement of reporting on national level.

Aim of the study

This study aimed to evaluate the attitudes and engagement of hospital pharmacists in the RN Macedonia in order to implement good PV practices during COVID-19 pandemic in hospitals that were overloaded with patients.

Materials and methods

Interventional, questionnaire based research was performed among hospital pharmacists in RN Macedonia during July 2022. Obtained data were computed and consequently evaluated using statistical software STATGRAPHICS Centurion XVI evaluation (StatPoint technologies Inc., USA).

Results and discussion

The survey was completed by 35 (representing almost 50%) HPs of whom 96% were females. The average age was 45.4±12.9 years, more than 40% have over 20 years practical experience and almost 70% of the respondents are working in public hospitals. (Table 1 and Table 2)

Over 50% of the respondents have been working in hospitals with 101-250 beds, and 32% in hospitals with over 250 beds that were transformed in COVID centers during the pandemic (Picture 1).

The obtained results confirmed that 83% of the respondents have reported an adverse events (AEs) in their everyday practice to the National regulatory Agency (MALMED).

During the pandemic only 13% strongly agreed, 39.1% agreed, that were informed for AEs from the COVID-19 treatment in their hospitals, whereas 34.1% strongly agreed, and 13% agreed that they report this to the Agency. (Picture 2 and Picture 3)

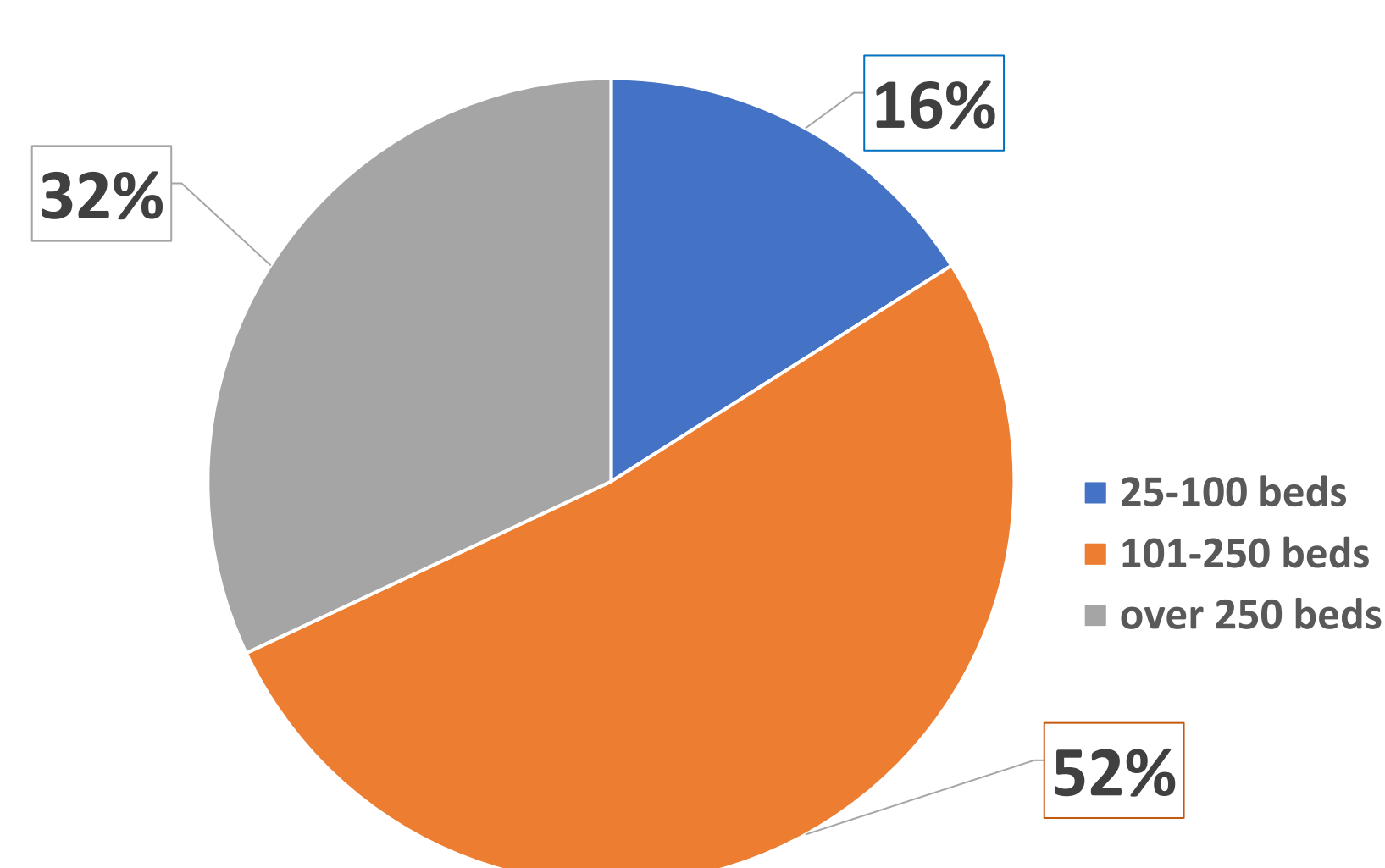
Also, only 17.4% of HPs strongly agreed that have reported off-label use of drugs in treatment of hospitalized COVID-19 patients, and same percentage strongly agreed that were asked for advice for the procedure of adverse event reporting to the Agency from other HCPs. (Picture 4 and Picture 5)

Tab. 1 Working experience as hospital pharmacist

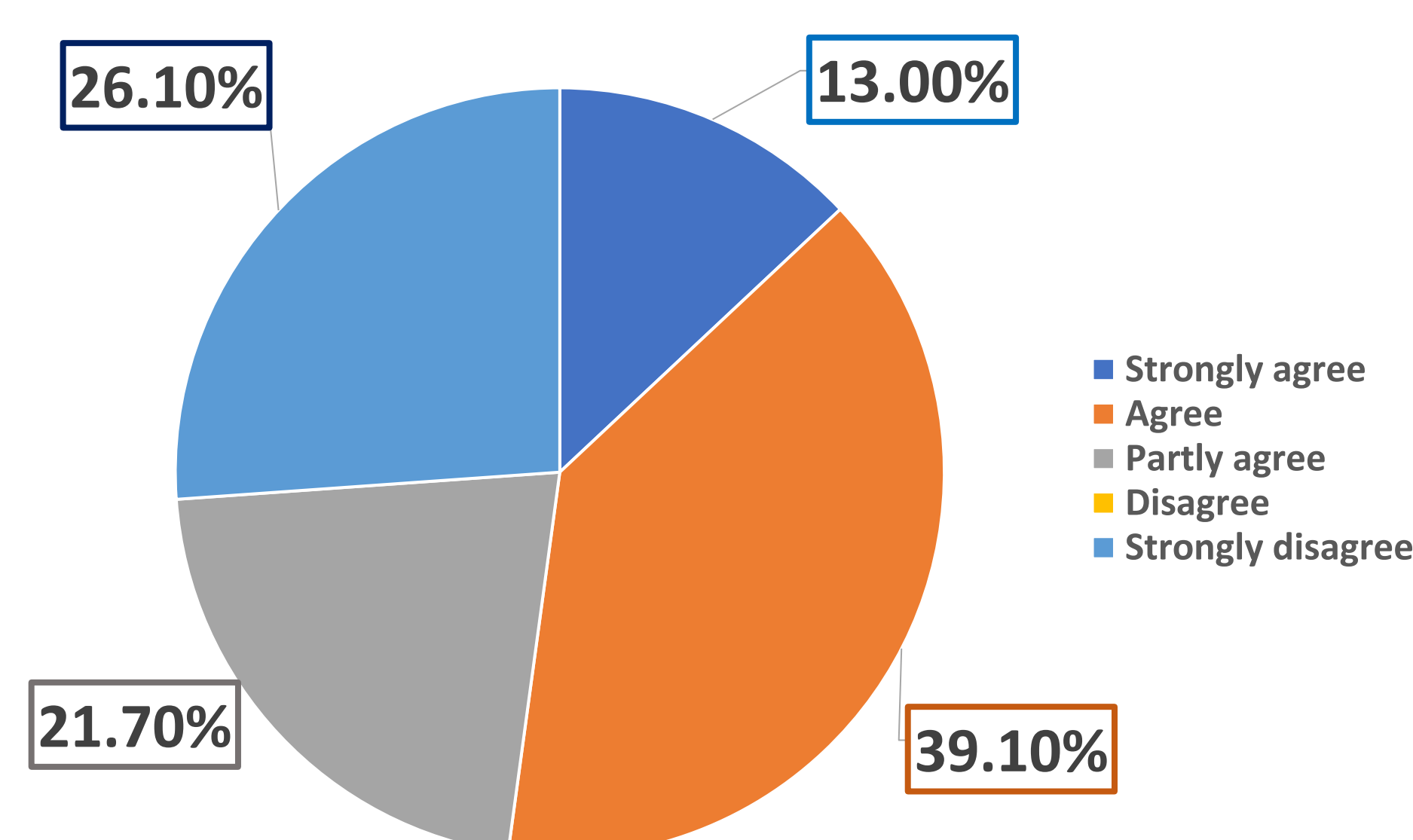
Working experience as hospital pharmacist	N(%)
>20 years	15 (42,8%)
11-20 years	5 (14,2%)
6-10 years	4 (11,4%)
up to 5 years	10 (28,6%)

Tab. 2 Working place of hospital pharmacist

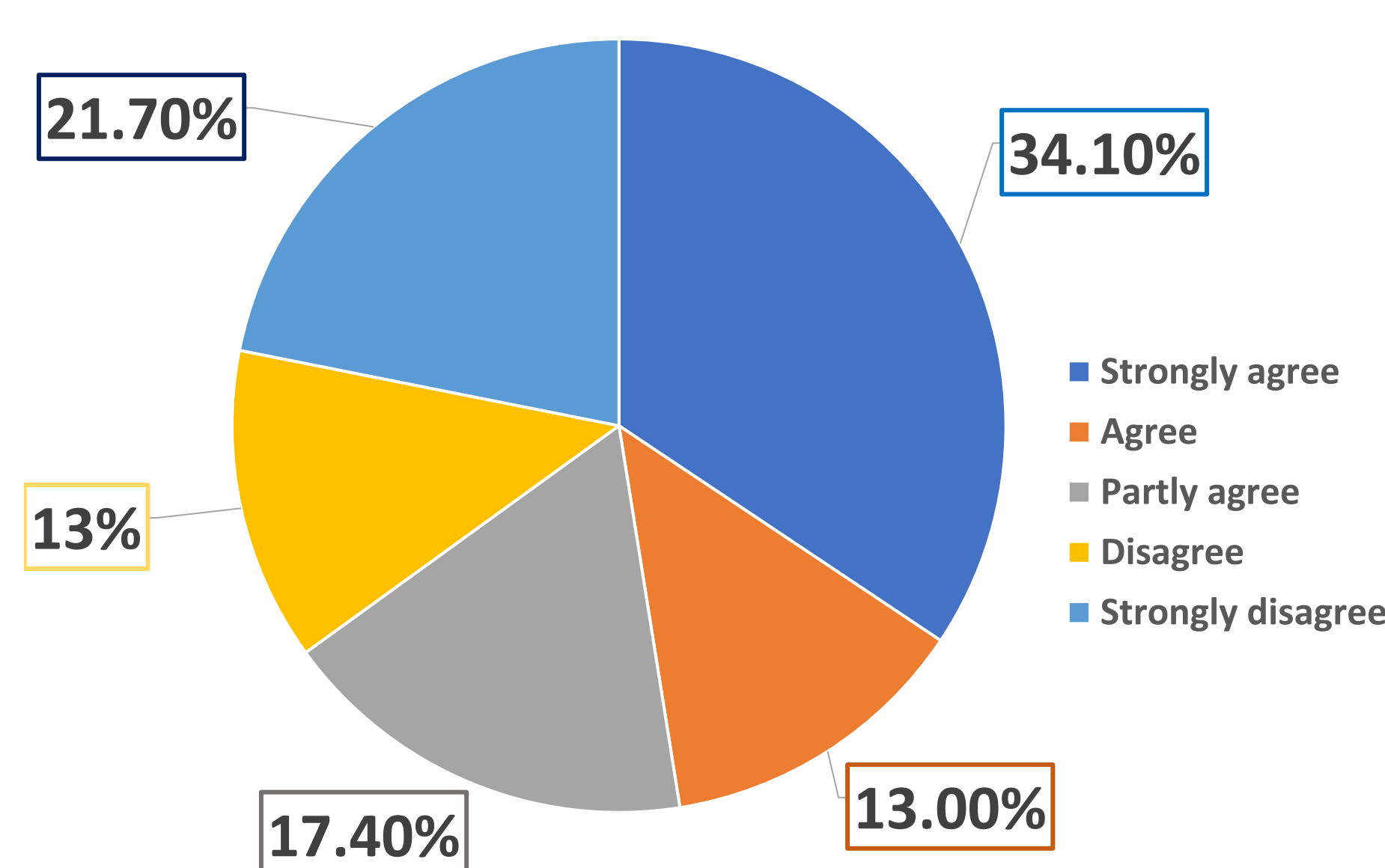
Working place of hospital pharmacist	N(%)
General public hospital	24 (68,6%)
Private hospital	11 (31,4%)



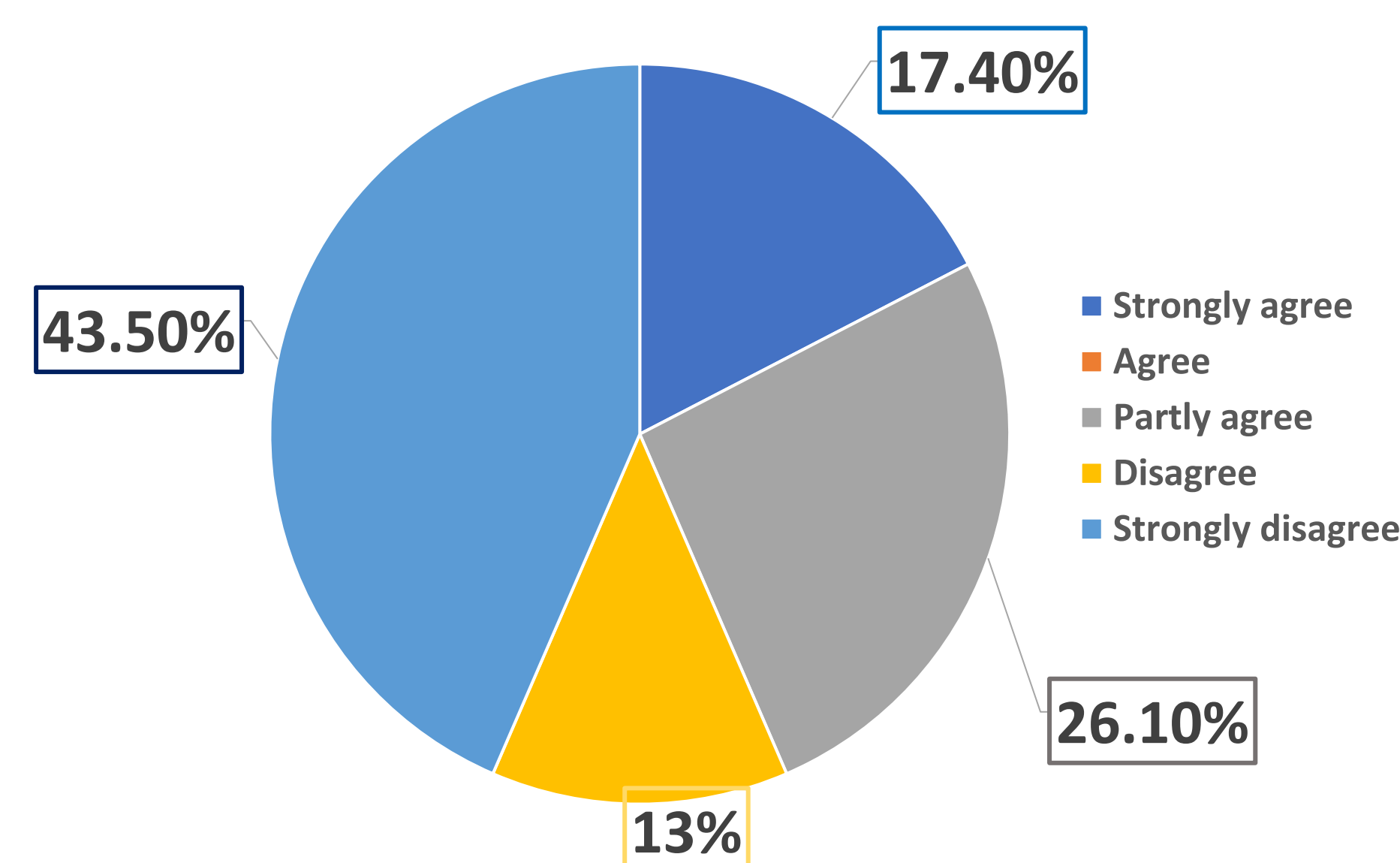
Pic. 1 Number of hospital beds in the facility



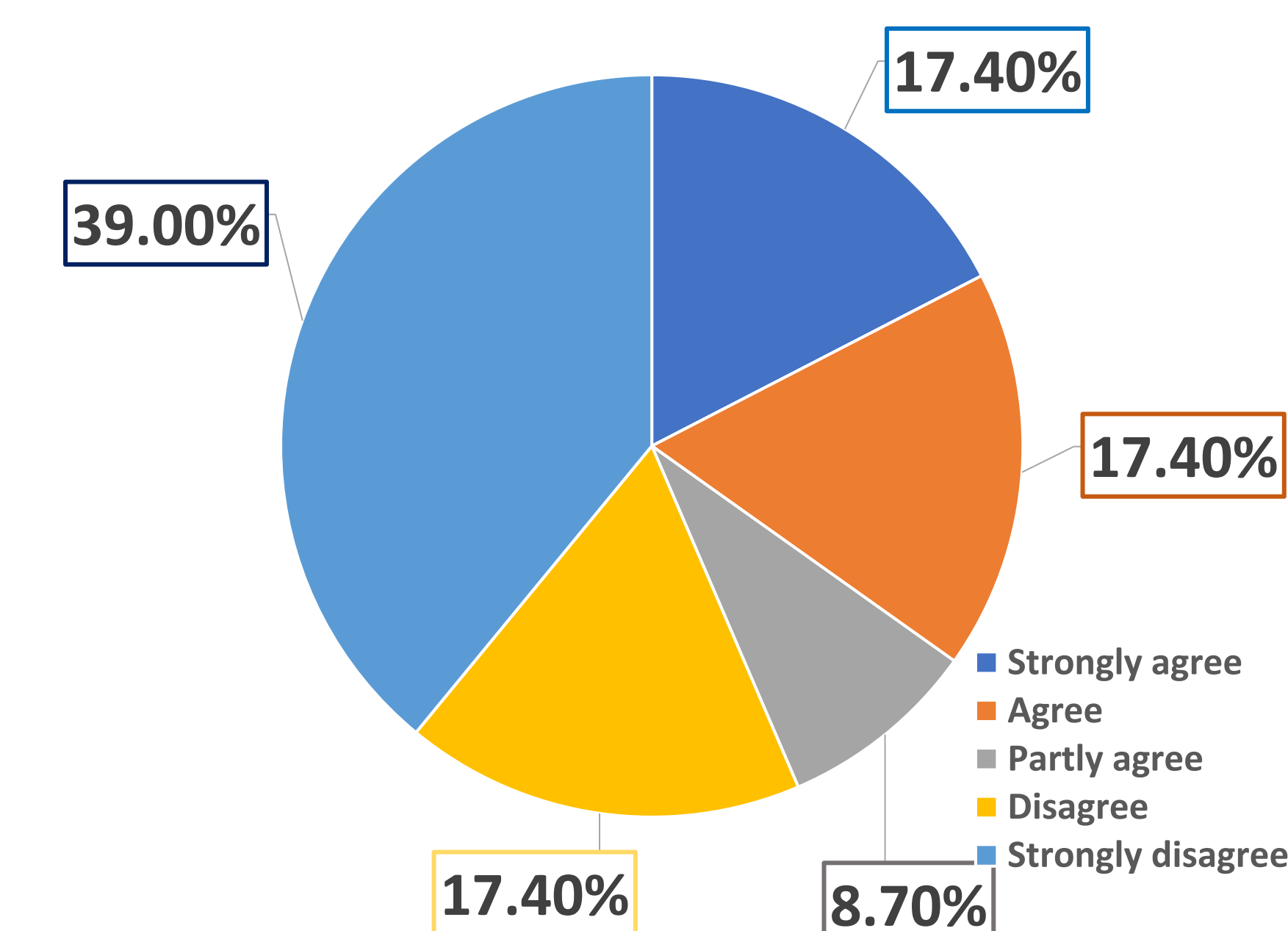
Pic. 2 HP was informed for occurrence of AE in the hospital following COVID-19 treatment



Picture 3 HP reported AE related to COVID-19 treatment to MALMED



Picture 3. HP reported each off-label use of drugs related to treatment of COVID-19 patients to MALMED



Pic. 5 HP was asked for advice from other HCP for the procedure of AE reporting to MALMED from drugs used in treatment of COVID-19 patients

Conclusion

- Although HPs are nationally recognized as main stakeholders in the improvement of good PV practices, their role is still not recognized by other HCPs and they were not fully engaged during COVID-19 in AEs recognition and reporting.
- Implementation of applicable strategy for PV education, alongside with establishment of contemporary software infrastructure could be a successful approach for improvement of AEs reporting leading to better medicines safety, patient safety and improved public health.



No ATC code

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