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KNOWLEDGE, ATTITUDE, AND OCCUPATIONAL SAFETY PRACTICES AMONG SECURITY GUARDS

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ABSTRACT
Security personnel may encounter physical hazards, fatigue, conflict, and emergencies during surveillance and access-control duties. Evidence describing their occupational safety and health (OSH) knowledge, attitudes, and practices in university settings remains limited. Objective: To describe the characteristics and self-reported OSH knowledge, attitudes, and practices of security guards at the Faculty of Medicine of University X in 2025. This descriptive cross-sectional study used total sampling of 40 active security guards. Structured-questionnaire responses collected in March–April 2025 were analysed using frequencies and percentages. The available study report did not document an independent instrument validation or reliability analysis. Twenty-three participants (57.5%) were aged 21–30 years, 33 (82.5%) were men, and 33 (82.5%) had 1–5 years of service. All 40 participants (100%) were classified in the good category for OSH knowledge, attitudes, and practices under the original scoring system. The study identified uniformly favourable self-reported OSH classifications in this single workplace. Interpretation is limited by incomplete evidence of instrument validity and reliability, ambiguous classification thresholds, and the lack of direct observation of safety behaviour.

Keywords: attitude; knowledge; occupational safety and health; practice; security guards

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INTRODUCTION

Occupational safety and health (OSH) seeks to prevent work-related injuries and illnesses through hazard identification, risk control, training, and safe working systems. Security guards routinely monitor access, patrol facilities, and respond to unexpected incidents. These duties can expose workers to fatigue, environmental hazards, and interpersonal conflict. Recent occupational research has used knowledge, attitude, and practice (KAP) questionnaires to describe safety awareness among working populations (Abu Bakar et al., 2024).

In Indonesia, workplace safety is addressed through sector-specific policies, including Ministry of Health Regulation No. 48 of 2016 concerning office workplace OSH standards and Police Regulation No. 4 of 2020 concerning community security arrangements. These regulations provide institutional context rather than direct evidence that a particular security unit complies with all applicable requirements. OSH knowledge refers to recognition of hazards, preventive measures, and workplace procedures. Attitudes describe beliefs and evaluations concerning safety, whereas practices refer to reported actions. These are related but distinct domains. Research on workplace interventions indicates that changes in knowledge or attitudes cannot automatically be equated with

verified improvements in injury outcomes (Sundstrup et al., 2025). Site-specific descriptive evidence is therefore useful, provided that the measurement method and its limitations are transparent. This study aimed to describe age, sex, length of service, and the distributions of OSH knowledge, attitudes, and practices among security guards at the Faculty of Medicine of University X in 2025. The study was descriptive and did not test associations or causal hypotheses.

METHOD

Study design and setting

This was a descriptive cross-sectional survey conducted at the Faculty of Medicine, University X. The broader research period was February–April 2025, while questionnaire collection was reported for March–April 2025.

Population and sampling

The target population was all active security guards assigned to the faculty. Total sampling was applied, producing a study sample of 40 guards who met the inclusion criteria and agreed to participate. The study excluded personnel no longer actively assigned to the faculty and workers outside the security-guard role.

Measurements and analysis

Primary data were collected using a structured self-report questionnaire assessing demographic characteristics (age, sex, and length of service) and occupational safety and health domains: knowledge (21 items), attitude (8 items), and practice (26 items). The underlying report gives thresholds of 11, 5, and 14 for knowledge, attitude, and practice, respectively, but uses overlapping inclusive inequalities at these thresholds. Thus, assignment of scores equal to the thresholds is ambiguous. The present analysis retains the categories reported in the source rather than retrospectively applying an unverified classification rule. The available materials do not report item validity coefficients, content-validity assessment, or reliability statistics such as Cronbach's alpha; psychometric adequacy cannot therefore be confirmed.

The data were summarized using frequencies and percentages based on 40 respondents. The underlying report mentions SPSS but does not verify a software version. No inferential tests or effect estimates were available. The research obtained ethical clearance from the Institute for Research and Community Service, Universitas Kristen Indonesia (LPPM-UKI), No. 990/UKI.LPPM/PPM.00.00/ET.2025, dated 3 February 2025. The source manuscript indicates that participants agreed to take part; whether consent was written or verbal, and how it was documented, could not be verified from the supplied files.

RESULT

Data for all 40 participants were included in the reported descriptive summaries. Table 1 provides the age, sex, and length-of-service distributions. Participants aged 21–30 years numbered 23 (57.5%), followed by 11 (27.5%) aged 31–40 years, four (10.0%) aged 41–50 years, and two (5.0%) aged 51–60 years. Thus, 34 respondents (85.0%) were aged 21–40 years. Thirty-three participants (82.5%) were male and seven (17.5%) were female. Thirty-three (82.5%) had 1–5 years of service, and seven (17.5%) had 6–10 years of service. These figures describe this workforce only; respondent-level cross-tabulations were not supplied.

All participants were assigned the good category in each OSH domain, with none categorized as poor (Table 2). These data reflect self-reported questionnaire classifications, not independently observed compliance. The three domains consisted of 21 knowledge items, 8 attitude items, and 26 practice items. The available report provides only the final binary categories, not item-level results or original numeric scores. All 40 participants (100.0%) were classified as having good knowledge.

The same pattern applied to attitudes and practices: 40 respondents (100.0%) were assigned the good category for each domain. No respondent was assigned the poor category. Because the categorization cut-offs and their boundary notation could not be fully verified, these findings must be read as reported classifications rather than independently validated scores.

Table 1.
Sociodemographic characteristics of security guards (n = 40)

Characteristic	f	%
Age: 21–30 years	23	57.5
Age: 31–40 years	11	27.5
Age: 41–50 years	4	10.0
Age: 51–60 years	2	5.0
Sex: Male	33	82.5
Sex: Female	7	17.5
Length of service: 1–5 years	33	82.5
Length of service: 6–10 years	7	17.5

Table 2.
Occupational safety and health classifications (n = 40)

Domain	Good, f (%)	Poor, f (%)
Knowledge	40 (100.0)	0 (0.0)
Attitude	40 (100.0)	0 (0.0)
Practice	40 (100.0)	0 (0.0)

No between-participant variation was reported in the final good/poor classifications. Item responses, scale-score distributions, confidence intervals, and occupational incident data were not available. The uniformly positive categories cannot establish an absence of hazards or demonstrate the effectiveness of safety controls.

DISCUSSION

Participant characteristics

Most respondents were aged 21–30 years and had 1–5 years of service. This demographic profile is limited to the studied faculty and cannot be generalized to all security guards. Recent review evidence has emphasized the need to examine young workers' workplace conditions rather than assume that age alone predicts safety outcomes (Sundstrup et al., 2025). Men represented 82.5% of participants. The study did not evaluate whether safety responses differed by sex, age, or service duration. Any interpretation of demographic effects would require respondent-level data and appropriate analyses.

OSH knowledge

All 40 respondents were categorized as having good OSH knowledge. A comparable KAP-based occupational survey has assessed knowledge alongside safety attitudes and self-reported practices (Abu Bakar et al., 2024). However, because item-level distributions and validation evidence were unavailable in the present study, it is unclear whether the uniform classification reflects strong knowledge, a permissive cut-off, response patterns, or limited discriminatory capacity. The result should therefore be interpreted only as the proportion assigned to the good category under the reported instrument. Verification would require a scoring codebook, individual item responses, and evidence of content validity, construct validity where applicable, and reliability.

OSH attitudes

All participants were categorized as having good safety attitudes. Nevertheless, favourable attitudes are not the same as behaviour observed under routine or emergency conditions. Evidence from reviews of workplace interventions also cautions against inferring improved safety outcomes from attitude-related measures alone (Sundstrup et al., 2025). No association between attitudes and observed safety behaviour was tested here.

OSH practices
All 40 participants were assigned the good practice category. Because practice was measured through questionnaire responses, this result cannot independently confirm compliance with each safety procedure or the absence of work-related incidents. Structured observation, training records, and incident reports could strengthen future assessments.

Implications and Limitations
The findings provide a preliminary description for the studied institution. Practical follow-up may include documented refresher training, routine hazard assessment, feedback on reporting procedures, and direct assessment of job-specific safety performance. These actions are proposed improvements, not interventions tested in the present study. Limitations include the small single-faculty sample, cross-sectional self-report measurement, absence of variation in binary outcome categories, unavailable item-level data, and incomplete documentation of the scoring boundaries and instrument validity and reliability. Social-desirability and recall bias cannot be ruled out. Therefore, the findings should not be used to claim causal effects, general population prevalence, or verified accident prevention.

CONCLUSION
Among 40 security guards at the Faculty of Medicine of University X, 57.5% were aged 21–30 years, 82.5% were men, and 82.5% had served for 1–5 years. All participants received good knowledge, attitude, and practice classifications under the original questionnaire approach. These classifications are descriptive and remain subject to uncertainty about instrument validity, reliability, and category cut-offs. Further research should report item-level scores, validate its measurement instrument, and include direct observations of safety practices.

DECLARATIONS
Acknowledgment: The researchers acknowledge the participation of the security guards in this study.

Conflicts of Interest: No signed conflict-of-interest declarations were available in the supporting documents reviewed. Accordingly, the presence or absence of competing interests cannot be verified from the available record.

Ethical Approval: Ethical clearance was granted by the Institute for Research and Community Service, Universitas Kristen Indonesia (LPPM-UKI), No. 990/UKI.LPPM/PPM.00.00/ET.2025, on 3 February 2025, for the study entitled “Knowledge, Attitude, and Occupational Safety Practices Among Security Guards.” The study description indicates that respondents agreed to participate, but the mode and documentation of informed consent were not established in the files reviewed.

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Data Availability Statement: Aggregate findings are reported in Tables 1 and 2. Individual responses, scoring documentation, and instrument validation records were not supplied for verification. Availability of participant-level data has not been established.

Author Contributions: The ethical-clearance document lists Vidi Posdo A. Simarmata as principal investigator and Scouthen Alexander Oridek Jensenem and Wiradi Suryanegara as research members. Specific CRediT roles and each author’s approval of the final manuscript were not documented in the available materials.

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