

INTRODUCTION

There exist various definitions of risk since there is no agreed definition in literature.¹⁻³ In common daily language, risk refers to circumstances in which it is uncertain, although possible, that some adverse event happens. In technical terminology, risk as an unwanted event is categorised as whether the risk is defined as either the cause, the probability, the statistical expectation value or the fact that a decision is made under conditions of known probabilities.⁴

AIMS

To evaluate the perception of risk in pharmacy amongst undergraduate pharmacy students.

METHOD

- A 30-minute presentation about risk in pharmaceutical processes was given to undergraduate pharmacy students attending an annual live-in organised by the Malta Pharmaceutical Students Association.
- Before the presentation was delivered, students were asked to describe their perception of the term 'risk in pharmacy'.
- They were also provided with a documentation sheet listing various pharmaceutical scenarios and were asked to rate the level of their perceived risk in each case on a 5-point Likert scale, ranging from 1 'Most risky' to 5 'Not risky at all'.
- After the presentation, students were asked whether their perception of the impact of risk in different pharmaceutical processes changed after having been exposed to the subject.

RESULTS

- 54 students following different pharmacy course years participated in the workshop.
- Dispensing the wrong drug because prescription is illegible (n=46) was the scenario associated with most risk as perceived by the students (Figure 1).
- There were no statistically significant differences between responses of pharmacy students in different course years ($p > 0.050$).
- Answers, from the open-ended question seeking students' perception of risk, include the probability of failure in any pharmaceutical operation, the responsibility of the decision-making process, the consequences patients face if pharmacists dispense the wrong drug, the occurrence of adverse drug reactions, the dangers associated with the incorrect storage of medicines and the consequences of medicines inaccessibility.
- Knowledge after the presentation increased with regards to the understanding of risk in pharmacy and perception of the impact of risk in different pharmaceutical processes ($p = 0.000$). The interest to read more about risk in pharmacy also increased ($p = 0.000$).

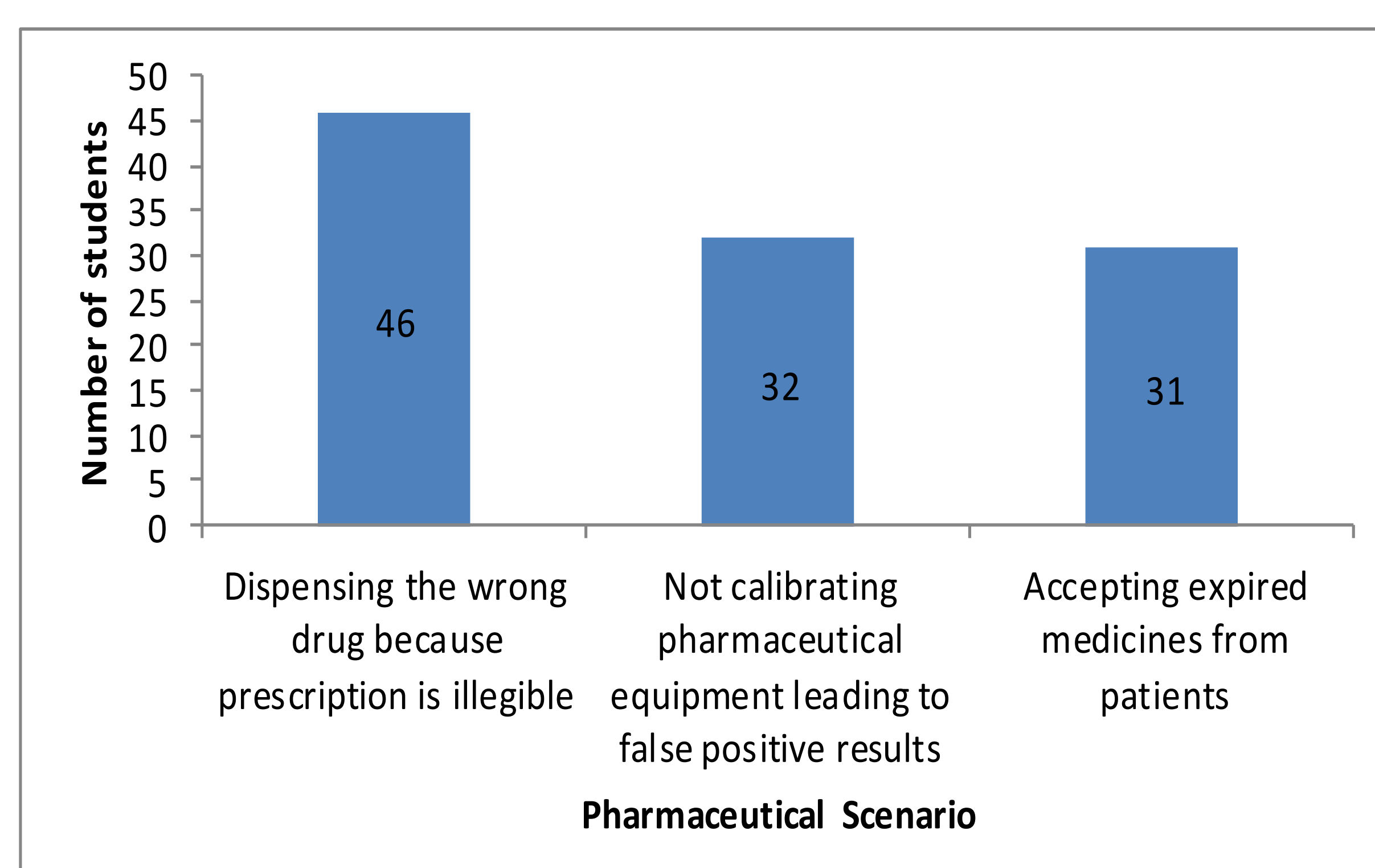


Figure 1: Scenarios associated with risk as perceived by undergraduate pharmacy students (N=54)

CONCLUSION

Inferences derived from this study show a positive measurable outcome on students' understanding of risk in various pharmaceutical processes following this workshop.

References

1. Aven T and Renn O. On risk defined as an event where the outcome is uncertain. *Journal of Risk Research* 2009;12(1):1-11.
2. Aven T, Renn O, Rosa EA. On the ontological status of the concept of risk. *Safety Science* 2011;49:1074-9.
3. Aven T. The risk concept—historical and recent development trends. *Reliability Engineering and System Safety* 2012;99:33-44.
4. Hansson SO. Philosophical Perspectives on Risk. *Techné: Research in Philosophy and Technology* 2004;8(1):10-35.