

# THE USE OF INTERNATIONAL NONPROPRIETARY NAMES (INN) TO FACILITATE LEARNING PHARMACOLOGY

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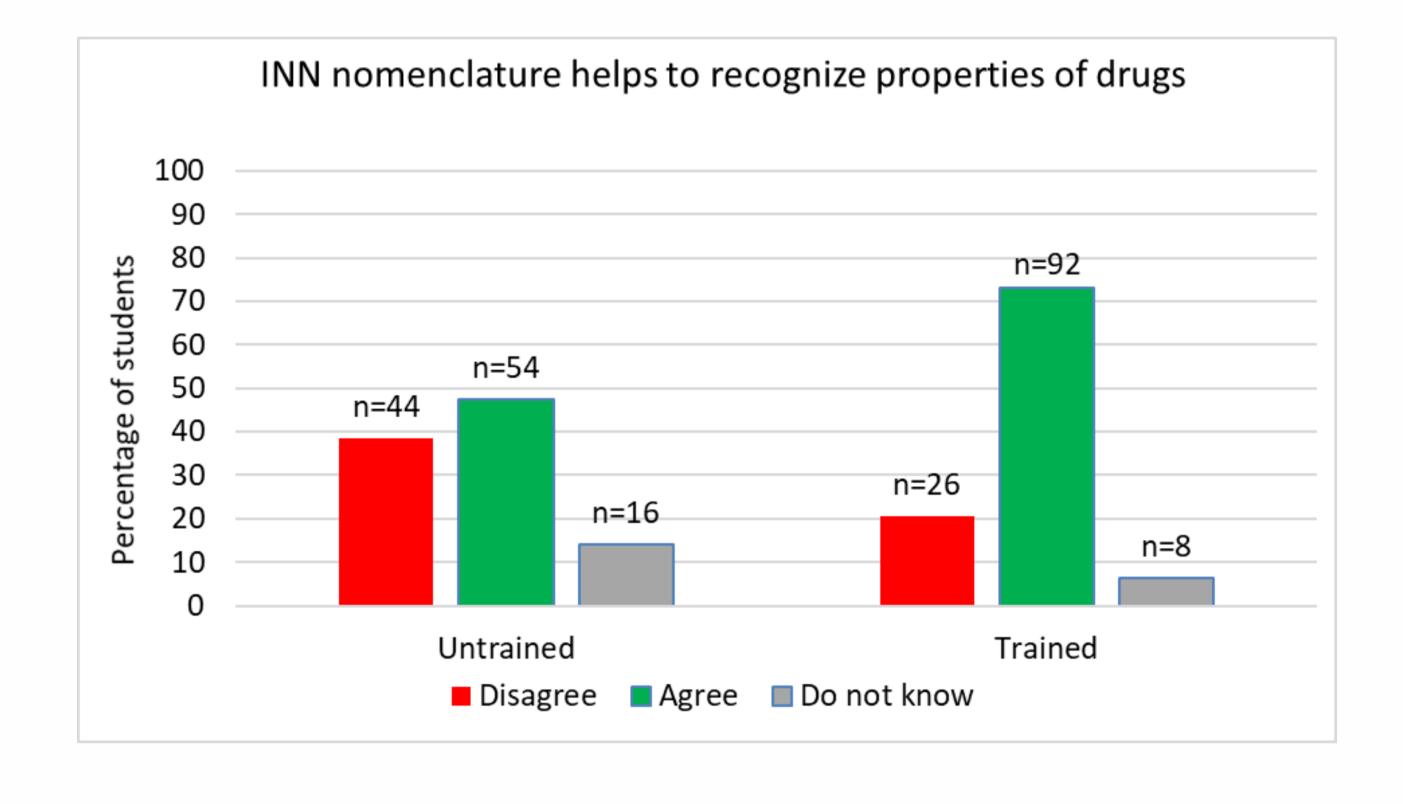
## INTRODUCTION

INN are widely used in pharmacology teaching to help students recognize the mechanism of action of drugs or the therapeutic group to which they belong. However, many students are not aware of the INN nomenclature system<sup>1</sup>.

## METHOD

Four groups of students were selected: two were second year Dentistry students enrolled in *Pharmacology* and two groups of Pharmacy students (year four and year five) enrolled in *Pharmacology and Clinical Pharmacy* or *Pharmaceutical biotechnology,* respectively. Year 5 Pharmacy students and one of the Dentistry groups were given at least one formal lecture on INN nomenclature and INN stems at the beginning of the academic year (trained); whereas the other two groups did not receive it (untrained). At the end of the semester, all students were asked to fill a short anonymous questionnaire and 240 did so.

**Figure 1.** Graph showing percentajes of trained and untrained students on WHO's INN programme in their perception of how INN nomenclatura helps them to recognize pharmacological properties of drugs.



## AIM/S

The aim of this work was to explain to students the system of INN nomenclature, so that they would have a better understanding on the meaning of drug names and hence, whenever possible substituting rote learning by meaningful learning

## RESULTS

More students untrained in the use of INN nomenclature reported having difficulty learning and retaining drug names (89% untrained vs. 55% trained;  $\chi^2$  test, p<0.001). Receiving INN training helps students to recognise the pharmacological properties of certain drugs (Fig 1) (73% trained vs. 47% untrained;  $\chi^2$  test, p<0.001). Similar percentages of students realized that INN stems helped them to better study and understand pharmacology (85% trained vs. 79% untrained;  $\chi^2$  test, p=0.28).

### CONCLUSION

Student understanding of the INN nomenclature system helps them to learn and retain drug names and allows them to recognize the pharmaceutical properties of certain drugs. It also helps students to learn pharmacology in a more meaningful and solid manner

#### REFERENCES

1. Chui WK, et al. (2017) Naming of medicines: survey about International Nonproprietary Names (INN). WHO Drug Information Vol. 31, No. 4, 2017

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