

# Virtual 2020

**EUROPEAN ASSOCIATION OF FACULTIES OF PHARMACY** 

### INTRODUCTION

Studies have revealed that knowledge plants, especially medicinal about plants, has decreased over the years. In order to simplify the learning process, it is necessary to create an accessible herb garden on the rooftop of Tallinn Health Care College with labelled plants.

Herbs are popular among Estonian people for treating minor ailments and therefore it is important for an assistant pharmacist to be able to recognise medicinal plants, know their potential and possible side effects.

## AIM/S

- The aim of the research is to create a novel educational and interactive tool for the rooftop garden of Tallinn Health Care College to increase awareness on medicinal plants and their effect on the human body.
- The aim of the rooftop garden is to provide scientific and accurate information about medicinal plants and other species similar to them in Estonian to make information readily available for people not fluent in English language.

The authors would like to acknowledge Tallinn Health Care College management for enabling the project to come to life.

# **INTERACTIVE ROOFTOP GARDEN FOR LEARNING MEDICINAL PLANTS**

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### METHOD

The research is based on scientific data of 60 plants, that is entered into the Plantsmap database. Each plant entry is linked to a QR code. The following plant data was added: Latin and Estonian plant names, synonyms, taxonomic units, botanical information and information on the active ingredients in the plant and its usage.

All plants were labelled with common and scientific names and also QR-codes.







### RESULTS

Rooftop garden at Tallinn Health Care College is a popular place for students to relax. The interactive learning environment encourages students to learn about plants individually and at suitable times.

The database can be reviewed by a specialist and updated regularly by adding new information

and pictures of plants. The learning tool is accessible to all visitors with a mobile application for scanning QR-codes.





#### CONCLUSION

The existence of a rooftop garden in the college allows students to explore the plants independently. QR-code plant labels facilitate access to evidence-based information. As a result, students become more aware of the plants and their use, the learning process is flexible and interactive. The database enables access to plant information from anywhere, making it possible to learn about plants even without visiting the rooftop garden.

#### REFERENCES

Batista de Oliveira Abreu, D., Santoro, F. R., Paulino de Albuquerque, U., Ladio, A. H., Muniz de Medeiros, P. (2015). Medicinal plant knowledge in a context of cultural pluralism: A case study in Northeastern Brazil. Journal of Ethnoprarmacology, 175, 124-130. DOI: <u>http://dx.doi.org/10.1016/j.jep.2015.09.019</u> Bussmann, R.W., Paniagua-Zambrana, N.Y., Wood, N. et al. Knowledge Loss and Change Between 2002 and 2017—a Revisit of Plant Use of the Maasai of Sekenani Valley, Maasai Mara, Kenya. Econ Bot 72, 207–216 (2018). https://doi.org/10.1007/s12231-018-

Vandebroek I, Balick MJ (2012) Globalization and Loss of Plant Knowledge: Challenging the Paradigm. PLOS ONE 7(5): e37643. https://doi.org/10.1371/journal.pone.0037643

