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**POSTER ABSTRACT****Therapeutic impact of an intervention associating pharmacist counseling and the use of a mobile health application for type 2 diabetes patients**

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**Background and objectives:** Diabetes represents a real public health problem, due to its constantly increasing prevalence and many complications. Prevalence of type 2 diabetes is high in Belgium (estimated at over 8%, 1 patient out of 3 being unaware of their diagnosis). Management based on a change of lifestyle and the adoption of health-promoting behaviors, complemented if necessary by drug treatment, prevents complications, improves the patient's quality of life, and reduces mortality. It is essential to implement multidisciplinary patient support, in which the pharmacist can participate through pharmaceutical care, but also through the implementation of educational sessions promoting the involvement of the diabetic patient in the management of his or her health. Research suggests that the use of mobile technologies combined with health coaching can help patients with their daily life and disease management. This study, a collaboration between ULiège, Multipharma and Comunicare, aims at exploring the benefits of the use of mobile technologies combined with health coaching by the community pharmacist for type 2 diabetes patients. The intervention aimed to reinforce the patient's willingness to actively participate in the management of their disease and to adopt favorable health behaviors, in order to increase their level of therapeutic adherence.

**Intervention and methods:** This interventional study combined educational intervention and coaching sessions by the community pharmacist with the daily use of a mobile health application provided by Comunicare. This was a quantitative study established over a period of six months with three data collection periods (before, during and after the intervention). Primary outcomes (HbA1c and MARS-5 score), related to the level of medication adherence, and secondary outcomes (HDL cholesterol, LDL cholesterol, systolic and diastolic blood pressure, BMI and waist circumference), considered as cardiovascular risk factors, were analyzed.

**Results:** The baseline sample consisted of 66 patients, 50 of whom completed the study. Statistical analyses did not show an improvement in the level of medication adherence. However, significant results were observed for systolic blood pressure and waist circumference (both improving). All the other outcomes, including HbA1c, changed positively or stabilized between the beginning and end of the study.

**Conclusion:** This study showed that counseling by the community pharmacist, combined with the use of a mobile health application, can achieve the therapeutic intent of physician-initiated

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therapy and have a positive impact on the management of the type 2 diabetic patients as well as on outcomes considered as cardiovascular risk factors.