Poster

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ACCUMBO

Using Mobile Health Technology to Increase Knowledge About Hypertensive Patients Requests and Health Behaviors – P2058

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Authors' Disclosure Information

- MC has organized professional meetings and lectured for Lilly, Novo Nordisk, Sanofi, Roche, Novartis and AstraZeneca and is Chief Medical Officer and a minority shareholder in Accumbo AB, Kalmar, Sweden.
- GD has served on advisory boards and/or lectured for Novartis and Novo Nordisk.



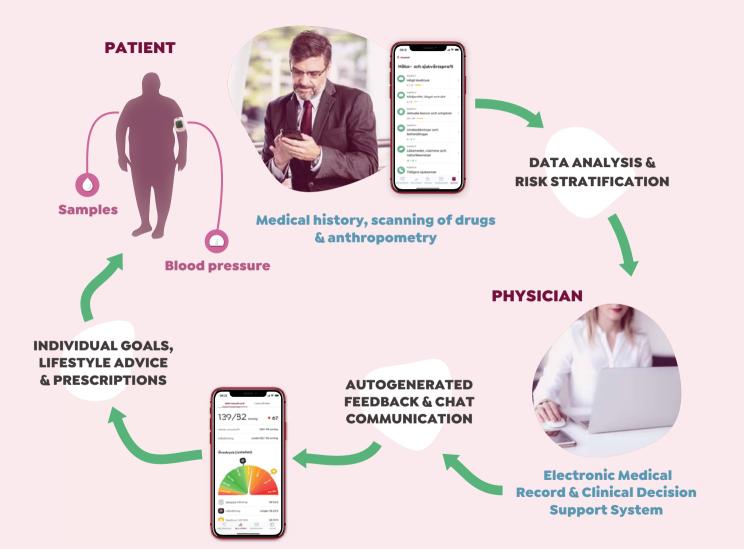
Introduction

In Sweden, only a minority of patients with hypertension reach their blood pressure target. It is difficult for the patient to influence, be involved and take responsibility in their treatment.

The use of virtual health intervention and the use of home blood pressure monitoring (HBPM) has been shown to improve empowerment, compliance and blood pressure control.

Accumbo is the first Swedish digital healthcare provider for patients with hypertension. The company provides remote care, using telehealth technologies for patient monitoring, communication and healthcare management.





Aims

The aim of the present study was to use our smartphone application for hypertension treatment to investigate the patients perception of how hypertension affected their lives, whether they had received lifestyle advice from their physician and their use of health apps and dietary supplements.

The study was approved by the Regional Ethics Committee of Linköping, Sweden.



Methods

- The target group was patients (132 males and 153 females, mean age 58 years) with self-reported diagnosis of primary hypertension without diabetes or major cardiovascular complications living in Stockholm, Sweden. They were prescribed at least one antihypertensive drug. Mean blood pressure was 135/87 mmHg at inclusion.
- When a patient had been included in the study, a smartphone application (Accumbo AB, Kalmar, Sweden) was downloaded to the Iphone of the patient. HBPM were measured with a Bluetooth connected oscillometric BP monitor (Truly Instrument Limited, Hong Kong).
- A questionnaire with 140 different health and treatment- related questions was filled in electronically by the patient.

Results

- 71 % (190 out of 267) of the patients responded that they had never recieved information from their doctor regarding the aetiology of their disease.
- Only 37 % (103 out of 277) responded that **individual health advice** had been given.
- 87 % (247 out of 284) of patients were aware that hypertension could lead to stroke, kidney disease, heart disease or dementia.
- 43 % (121 out of 280) patients had taken dietary supplements, or vitamins the month before the study.



- When asked "How is your health in general"? 54 % (154 out of 285) responded good or very good health.
- 46 % (128 out of 281) of patients answered that having an elevated blood pressure affected their daily activities.
- Most patients, 79 % (222 out of 282) wanted to lose weight, 21% (58 out of 282) were satisfied with their current weight and only 1 patient (0.4 %) wanted to gain weight.
- 40 % (110 out of 278) stated that they received little or very little daily exercise and 68 % (190 out of 279) wanted to increase their daily physical activity if possible.
- 57 % (156 out of 276) patients used lifestyle or health app in their smartphone.



Summary of Conclusions

- Despite the extensive knowledge of the importance of treating and thus preventing complications of hypertension, in the current study, few hypertensive patients had received individual lifestyle advice although the majority of patients had a desire for weight loss and increased physical activity. The use of alternative therapies such as dietary supplements and health and lifestyle apps were very common.
- Traditional healthcare should increase the use of digital questionnaires in order to obtain increased information regarding lifestyle factors for better targeted treatment.

