

Online Appendix 1. Education protocol followed during the intervention (AADE 7 Self-Care Behaviors)

Education protocol	Messages content	Expected outcome
Healthy Eating	<p>Messages included information about</p> <ul style="list-style-type: none"> • Counting carbohydrates • Reading food labels • Serving measurement • Developing eating plan • Controlling blood sugar fluctuation 	<p>Diabetic patients needed to know foods that affect blood glucose level. Patients should know how to eat regular meals, think about portion size, and how to make food decisions to help manage diabetes to avoid other health problems.</p>
Being Active	<p>Messages included information about</p> <ul style="list-style-type: none"> • Performing sports you like • Warming-up exercises for 5 or 10 minutes. • Monitoring blood sugar levels before and after exercise. • Exercising different activity 	<p>Diabetic patients will know that being active is an important part of being healthy. Physical activity helps to</p> <ul style="list-style-type: none"> • Lowers blood Sugar • Lose weight • Improve blood pressure • Burn calories, • Lower cholesterol. • Strengthen muscles and bones. • Lower stress and anxiety • Improve mood
Monitoring	<p>Messages included information about</p> <ul style="list-style-type: none"> • Self-monitoring blood glucose level using: <ul style="list-style-type: none"> ○ Lancet ○ Test strips ○ Glucometer ○ Log book • Healthcare providers should regularly monitoring: <ul style="list-style-type: none"> ○ Heart rate and blood pressure ○ Kidney function ○ Eye ○ Foot (foot exams and sensory testing) 	<p>Patients learned how to</p> <ul style="list-style-type: none"> • Monitor blood glucose level to avoid complication i.e. eyes, kidneys, Heart and feet. • Monitor eating habits • Monitor medication intake.
Medications	<p>Messages included information about</p> <ul style="list-style-type: none"> • Importance of medication compliance • Drug-drug interaction • How to preserve insulin • How to inject insulin 	<p>It is important that diabetic patients inform their health care provider about all of medications they are taking such as OTC, dietary supplements, vitamins and herbs to avoid any drug-drug interaction and to seek advises about their medications.</p>
Problem Solving	<p>Messages included information about</p> <ul style="list-style-type: none"> • Diabetes management doesn't mean you need to be perfect • Planning your day • Learning from your mistakes • Discussing your problems with your diabetes educator or doctor 	<p>Patients should know that unpredictable events happen no matter how well they prepare, which could send blood glucose levels in the wrong direction. They need to learn how to solve problems when they happen and to think through how to stop them from happening again. However, their condition could change over time, requiring changes, as previous solutions were no longer working.</p>
Reducing Risks	<p>Messages included information about</p> <ul style="list-style-type: none"> • Smoking cessation • Visiting diabetes specialist regularly • Visiting dentist regularly • Checking feet regularly 	<p>Patients will learn that taking control of diabetes would help prevent complications that could come with it.</p>
Healthy Coping	<p>Messages included information about</p> <ul style="list-style-type: none"> • Seeking support • Moving your body • Thinking positive 	<p>It is important to educate diabetic patients on how to find healthier ways to cope with diabetes and avoid habits such as smoking, overeating, drinking alcohol, or being less active. Stress can increase patients' blood sugar levels, make them feel more negative and lead to bad choices.</p>

Online appendix 2. Schematic representation of mobile phone communication between patients, researcher (licensed pharmacist), and research investigator.

