

Supplement

Table1. Examples of messages

Control Group	Intervention Group (besides <i>social media messages</i>)
<p><i>Social media messages</i></p> <p>Severe atherosclerosis of the coronary artery results in an insufficient supply of blood to the coronary artery, leading to myocardial ischemia and hypoxia.</p> <p>People who are anxious in mental activity and engage less in physical work are susceptible to coronary heart disease.</p> <p>Smoking can increase the risk of coronary atherosclerosis and stroke.</p>	<p><i>Personalized reminder</i></p> <p>-For patients with diabetes</p> <p>-It is recommended that you check your blood glucose regularly.</p> <p>-Did your blood glucose meet the requirements today?</p> <p><i>Medication reminder</i></p> <p>-Aspirin helps to prevent plaque formation. Please taking aspirin once per day.</p> <p>-Did you take your antiplatelet drugs today?</p> <p><i>For patients with hypertension</i></p> <p>-Your blood pressure is a little high today; please continue to monitor it.</p> <p><i>Interactive responses (crawling the keywords)</i></p> <p>-Asked by users: What can people with coronary heart disease eat?</p> <p>-Auto-response: Eat: food with low salt and fat.</p>

	<p>-Asked by users: How to deal with a stomach-ache after taking medicine</p> <p>-Auto-response: Stomach-ache: If there is an emergency, please go to the hospital for immediate treatment/first aid.</p>
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Table 2 Characteristics of randomized controlled trials with intervention to improve patients' lifestyle among patients with coronary heart disease

Study	Desig n	Duratio n	Population	Primary endpoint & Secondary endpoint	Experimental group vs Control group
Karla et al 2018 ¹	RCT	3month s	163 patients with CHD	Drug adherence (MMAS-8 score) &Blood pressure and cholesterol levels	Intervention group Basic APP:alarm Advanced APP:record and snooze the pause Control group -usual medical care
Salvi et al, 2018 ²	RCT	24 months	118 patients with MI	Education level about heart-related health improve more in the intervention groups(p=0.01). Exercise habits improved without	Intervention group -the mobile station: a wearable sensor capable with app -the patient station: feedback and educational information -the professional station: monitor patients and generates alerts

				statistical significance.	Control group
					-receiving standard rehabilitation
Bravo-Escobar et al, 2018 ³	RCT	2 months	28 patients with stable CHD at Moderate cardiovascular risk	Exercise time. & quality of life score	Intervention group
					-hospital exercise once a week
					-exercised at home following a program monitored with a remote electrocardiographic device
					Control group
					-hospital exercise 3 times a week
					-encourage to do exercise at home
Clara et al, 2016 ⁴	RCT	6 months	710 patients with CHD	LDLC & Systolic blood pressure, body mass index (BMI), physical activity, and smoking status.	Intervention group
					-TM providing lifestyle advice ,motivational reminders, and support to change lifestyle behaviors.(four times a week)
					-usual medical care
					Control group

					-usual medical care
Linda et al, 2015 ⁵	RCT	30 days	90 patients with CHD	There was no significant difference in the improvement as a function of the different treatment groups (F (2,6.24) =0.45, p=0.64).	<p>TM Reminders+ TM Education group</p> <p>-two-way reminders messages on drug</p> <p>-one-way health messages</p> <p>TM Education group</p> <p>-one-way health messages</p> <p>Control group</p> <p>-Usual care/No TM</p>
Leila et al, 2015 ⁶	RCT	6 months	123 patients with CHD	The intervention group reported significantly greater medication adherence score (mean difference: 0.58, 95% CI 0.19-0.97; P=.004).	<p>Intervention group</p> <p>-24 week text message program and access to website</p> <p>-Standard CR services</p> <p>-3-month phone call</p> <p>Control group</p> <p>-Standard CR services</p> <p>-3-month phone call</p>

Vernooij et al, 2012 ⁷	RCT	12 months	330 patients with atherosclerosis.	A relative change of -12% (-22% to -3%) in Framingham heart risk score for the intervention group compared with the usual care group	<p>Intervention group</p> <ul style="list-style-type: none"> -Personalized website -Nurse reminder <p>Usual care group</p> <ul style="list-style-type: none"> -Usual care by doctor
Blasco et al, 2012 ⁸	RCT	12 months	203 patients with ACS	Telemonitoring group experience improvement in cardiovascular risk factors profile than control patients (RR 1.4;95% CI 1.1-1.7)	<p>Telemonitoring group</p> <ul style="list-style-type: none"> -health data website -health recommendation messages -lifestyle counseling -usual-care treatment <p>Control group</p> <ul style="list-style-type: none"> -lifestyle counseling -usual-care treatment
Reid et al, 2012 ⁹	RCT	6 months	223 patients after PCI without	Emotional (p<0.038) and physical (p<0.031) dimensions of	<p>Intervention group</p> <ul style="list-style-type: none"> -6-month online tutorials -feedback email

enrolling in	heart disease	Control group
cardiac	health-related quality of	-physical activity guidance from doctors
rehabilitatio	life were higher	and book
n.		
	in CardioFit group.	

RCT=randomized controlled trial

TM=text messages

CR=cardiac rehabilitation

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