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# Comparision and analysis of top 10 exercise android Apps in mainland China

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#### Abstract

Medical guidelines highly recommend physical activity and aerobic exercise in the prevention of primary and secondary cardiovascular disease. The use of exercise-promoting application software may improve clinical outcomes for cardiovascular disease (CVD) patients. The study aimed to compare and analyze the functions of the top 10 exercise Android Apps which had more than 1,000,000 downloads from the main four Android App stores in mainland China. The results showed that most of these popular apps had pedometer, exercise plan preset, user data presentation, user encouragement and community sharing functions while a few of them had exercise video clips or animation support and wearable devices. Given these data, the conclusion is that these popular apps fulfill some of the functions recommended by medical guidelines, however, lack of some functions such as pre-exercise risk assessment, the exercise intensity recording, specific instructions by professionals, and monitoring functions for CVD patients.

# Keywords:

Exercise; Android; App; Health; CVD

# Introduction

It is recommended that CVD patients engage in 3 to 4, 40 minute sessions per week of moderate-to-vigorous physical activity<sup>1</sup>. However, most patients do not satisfy these recommendations. It is proposed that the use of exercise apps by CVD patients may improve adherence to an exercise schedule, but it is unclear whether popular apps have the appropriate functions to support the CVD patient in fulfilling recommended physical activity guidelines.

### **Materials and Methods**

The top 10 exercise apps were selected from Android App stores, which include Tencent, 360, Baidu, and 91 in China, all of which had more than 1000,000 downloads in the main Android App stores (by the time 19<sup>th</sup> Dec 2014). The data were stored and analyzed using Excel software.

## Results

The general information of the top 10 android Apps is shown in Table 1. The main funtions of these apps are illustrated in Figue 1. Most of the top 10 apps have pedometer, exercise plan preset by users, user data presentation, user encouragement functions while a few of them had exercise video clip or anination support and wearable devices.

#### Conclusion

The top 10 Android Apps have some functions that can be used to assist CVD patients in meeting recommended physical activity guidelines, however, there is still a need to develop some special functions for patients with CVD.

Table 1- General Information on the top 10 Android Apps

App		Size	Downloads ( 10,000 )			
Names	Ver	(Mb)	Tencen	t 360	Baidu	91
Sythealth	3.6.2	9.68	253	331	4280	>50
Gudong	5.2.0	17.81	114	269	320	>100
LedongV	3.3	18.81	95	178	241	>50
DailyYoga	6.0	6.96	66	427	283	>50
Pacer	2.5.1	5.84	162	39	33	>5
NikeRuning	1.5.1	33.84	25	78	86	>10
YidongGPS	2.4.0	7.05	21	23	473	>5
YueDong	2.1.0	9.28	49	69	659	>10
FitnessBook	2.2.7	13.32	49	424	86	>10
Push Ups	3.161	5.40	16	115	67	>10

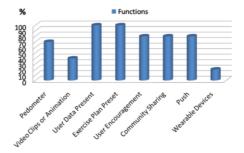


Figure 1-The main functions of the top 10 android apps

#### References

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