A Study on the Construction and Preliminary Evaluation of a Self-Help Online Intervention Model Among Newly

Diagnosed People Living With HIV/AIDS

Lannan Peng^{1*}, Xinya Tu^{1*}, Zhenyu Ma², Li Niu³, Dan Luo^{1#}

*These authors have contributed equally to the authorship

Corresponding author

¹ Xiangya School of Public Health, Central South University, Changsha, China; ² School of Basic Medical Science, Jiujiang University, Jiujiang, China; ³ School of public health, Guangxi Medical University, Nanning, China

INTRODUCTION & OBJECTIVES

Previous studies confirm significant psychological stress among individuals newly diagnosed with HIV.

This study developed a mobile mini-program to provide psychological support for these individuals, with plans to integrate AI for personalized stress reduction.

METHODOLOGY The main content and functional framework Construction of Self-Help Localization of WHO's "Self-Help Stress Reduction Program" Online Intervention Model Enhanced stress reduction module for newly diagnosed PLWHA

Preliminary evaluation study of Self-Help Online Intervention Model

RESULTS



Figure 1 Character image localization

1. The basic functional components of the Self-Help Stress Reduction Online Intervention Model comprised frontend and backend modules.

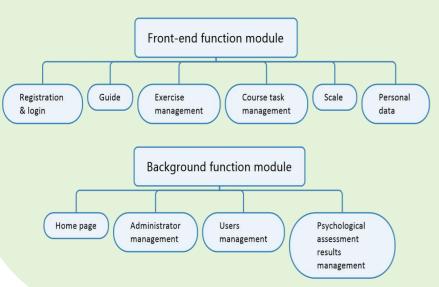


Figure 2 Basic function module

2. The final development of the enhanced stress reduction intervention module was based on knowledge education and skills training.



Figure 3 Task management page



Figure 4 Intensive intervention module

Variable	Intervention	Scores	t	P
Total	Pre	31.09 ± 0.64	5.53	< 0.001
	Post	24.91 ± 1.31		
loss of control	Pre	17.73 ± 0.78	4.71	0.026
	Post	13.36 ± 1.11		
tension	Pre	13.36 ± 0.72	2.39	0.047
	Post	11.55 ± 0.56		

Table 1 Comparison of perceived stress scores

Variable	Intervention	Scores	t	P
PHQ-9	Pre	20.64 ± 3.61	6.500	< 0.001
	Post	10.36 ± 5.92		
GAD-7	Pre	16.09 ± 2.95	4.907	0.001
	Post	7.82 ± 3.79		

Table 2 Comparison of depression and anxiety scores

3. The intervention showed high usability and significantly reduced perceived stress. Experts validated its feasibility and relevance, with potential benefits for depression and anxiety.

CONCLUSION & POLICY RECOMMENDATION

This study developed a mobile Self-Help Stress Reduction program for newly diagnosed PLWHA, effectively reducing perceived stress. Future AI integration aims to enhance support through intelligent chat services, using NLP, speech recognition, and sentiment analysis to address stigma and improve user experience.

