

# Application of WeChat Public Account for Lifestyle Management of Polycystic Ovary Syndrome

Sir,

Polycystic ovary syndrome (PCOS) is the most common endocrine and metabolic disorder, ranging from 5% to 10% among reproductive-aged women, and is characterised by chronic anovulation, hyperandrogenaemia, and insulin resistance.<sup>1</sup> Women with PCOS are commonly overweight or obese and obesity may exacerbate metabolic and reproductive abnormalities in women with PCOS. A 5-10% reduction of weight can benefit overweight women with PCOS.<sup>2</sup> Lifestyle management is the first-line treatment for most women with PCOS.<sup>2</sup> In China, WeChat has become the most widely used social media platform.<sup>3</sup> The new model of obtaining health information through WeChat public account has been recognised, and the huge potential of WeChat in health intervention needs to be developed.<sup>4,5</sup> A previous study has attempted to evaluate the effectiveness of WeChat public account as an intervention for weight loss and it proved to be effective for males.<sup>4</sup>

We conducted a cross-sectional study to investigate the efficacy of online education through WeChat public account on the lifestyle interventions of women with PCOS and data was from the voluntarily enrolled users of the WeChat public account, "Fan says women's health", during the period from January 2020 to July 2020. The data were collected after ethical permission was obtained.

All participants completed a questionnaire, including age, WeChat activeness, physical exercise, dietary habits, self-reported symptoms, and medical history. A diagnosis of PCOS was based on the Rotterdam European Society for Human Reproduction and Embryology (ESHRE) criteria. A total of 179 women were included in this study, including 79 women with PCOS and 100 control women. We found that women who followed the WeChat public account seemed to maintain a healthier lifestyle in both dietary and physical activity assessments. These significant differences did not attenuate after adjusting for age and educational level.

The purpose of reporting this study is to explore a new management model to help women with PCOS, maintain healthy lifestyle habits, and lose weight, thereby improving their metabolic and reproductive outcomes. Lifestyle management through WeChat or other mobile apps may become the future direction. Due to the popularity of the app, it is possible to record daily diet or exercise through the app. And the app can also provide timely feedback based on the collected data of diet and exercise to achieve good

interaction, thereby, improving efficiency. With the diversification of human-computer interaction, the future of online education can be more than just text, such as animation, comics, or video.

## COMPETING INTEREST:

The authors declared no competing interest.

## AUTHORS' CONTRIBUTION:

FZ, FQ: Contributed to the study design, data analysis, and drafting the manuscript.

JZ: Contributed to writing and supervision of the manuscript.

All the authors have approved the final version of the manuscript to be published.

## REFERENCES

1. Li R, Zhang Q, Yang D, Li S, Lu S, Wu X, et al. Prevalence of polycystic ovary syndrome in women in China: A large community-based study. *Hum Reprod* 2013; **28**:2562-9. doi: 10.1093/humrep/det262
2. Balen AH, Morley LC, Misso M, Franks S, Legro RS, Wijeyaratne CN, et al. The management of anovulatory infertility in women with polycystic ovary syndrome: An analysis of the evidence to support the development of global WHO guidance. *Hum Reprod Update* 2016; **22**(6):687-708. doi: 10.1093/humupd/dmw025.
3. Zhang X, Wen D, Liang J, Lei J. How the public uses social media wechat to obtain health information in china: A survey study. *BMC Med Inform Decis Mak* 2017; **17**( Suppl 2):66. doi: 10.1186/s12911-017-0470-0.
4. He C, Wu S, Zhao Y, Li Z, Zhang Y, Le J, et al. Social media-promoted weight loss among an occupational population: Cohort study using a wechat mobile phone app-based campaign. *J Med Internet Res* 2017; **19**(10):e357. doi: 10.2196/jmir.7861.
5. Sun M, Yang L, Chen W, Luo H, Zheng K, Zhang Y, et al. Current status of official WeChat accounts for public health education. *J Public Health (Oxf)* 2021; **43**(3):618-24. doi: 10.1093/pubmed/fdz163.

Fang-Fang Zhang<sup>1</sup>, Fan Qu<sup>1</sup> and Jue Zhou<sup>2</sup>

<sup>1</sup>Women's Hospital, School of Medicine, Zhejiang University, Hangzhou, China

<sup>2</sup>School of Food Science and Biotechnology, Zhejiang Gongshang University, Hangzhou, China

Correspondence to: Dr. Jue Zhou, School of Food Science and Biotechnology, Zhejiang Gongshang University, Hangzhou, China  
E-mail: juezhou@zjgsu.edu.cn

Received: August 01, 2022; Revised: October 11, 2022;

Accepted: November 07, 2022

DOI: <https://doi.org/10.29271/jcpsp.2023.06.715>

.....