Seizing Opportunities for Further Advancements — Address at the 35th Anniversary Symposium of BES

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The year 2023 marks the 35th anniversary of the establishment of *Biomedical and Environmental Sciences* (*BES*) by the Chinese Center for Disease Control and Prevention (China CDC). This milestone provides an opportunity to review past achievements and envisage future advancements.

Thirty-Five-Year Progress and Achievements

In 1988, Professor Chunming Chen, the founding Director General of the Chinese Academy of Preventive Medicine (CAPM, renamed the China CDC in 2002), established the international journal *BES* to publish research results from Chinese scientists in English. Initially, Professor Chen, along with the renowned toxicologist Professor Frederick Coulston of Albany Medical College in the United States, jointly served as the editors-in-chief, propelling the growth and development of this pioneering journal, while the editorial team is composed exclusively of professionals from the China CDC, and the editorial office was located at the China CDC.

Over the past 35 years, *BES* has undergone three major developmental stages categorized by several publication periods: an initial stage as a quarterly journal from 1988 to 2004, a transition stage to a bimonthly publication from 2005 to 2012, and finally evolution into a monthly publication starting in 2013.

BES has become an influential English-language academic journal in preventive medicine and public health in China. Its many noteworthy achievements include being listed in the "Top 100 Scientific and Technological Journals" by the National Radio and Television Administration in 2013 and 2017 and receiving the "First Outstanding Journal Award" from the National Health Commission. Since 2013, BES has consistently been selected in the list of the "Highest International Impact Academic Journal of China" by the China Scientometrics and Bibliometrics Research Center, China Academic Journals (CD Edition) Electronic Publishing House, and Tsinghua University Library. Additionally, BES won the nomination prize for the "Third China Publishing Government Award" in 2013 and was awarded the "Excellence Action Plan for Chinese Sci-Tech Journals" from the China Association for Science and Technology (CAST) in 2019.

In terms of international impact, *BES* achieved an impact factor exceeding 1 for the first time in 2010 (1.063), subsequently surpassing 2 in 2016 (2.204), and obtaining 3.5 in 2022. It ranks in the top 25%–50% (Q2) among all SCI-indexed journals in public health and environmental science.

Advancing Disciplinary Development

Since its inception, *BES* has consistently focused on disseminating publications regarding issues arising from biological, nutritional, environmental, ecological, and physical and chemical factors, contributing to the development of preventive medicine in China. One of its most notable contributions is the scientific understanding of obesity in the Chinese population.

In 1997, the World Health Organization (WHO) recommended body mass index (BMI) cut-off points for determining overweight (BMI of 25–29.9) and obesity (BMI > 30) in adults. A WHO expert consultation addressed the debate about the interpretation of recommended BMI cut-off points for determining overweight and obesity in Asian populations, and considered whether it was necessary to establish BMI cut-off points for specific population groups. They reviewed scientific evidence indicating that distinct associations among BMI, percentage of body fat, and health risks in Asian populations compared to European populations. The consultation concluded that people in Asia at high risk for type 2 diabetes and cardiovascular diseases have a BMI less than the existing WHO cut-off point for overweight (≥ 25 kg/m²). However, the available data do not necessarily indicate a clear BMI cut-off point for overweight or obesity in all Asians. Among different Asian

populations, the observed cut-off points for risk vary from 22 kg/m 2 to 25 kg/m 2 , and those for high risk vary from 26 kg/m 2 to 31 kg/m 2 . Therefore, no attempt was made to redefine the cut-off points separately for each population. The consultants also agreed that the WHO BMI cut-off points should be retained as international classifications. The consultation identified further potential public health action points (23.0, 27.5, 32.5, and 37.5 kg/m 2) along the BMI continuum and proposed methods by which countries could make decisions regarding the definitions of increased risk for their populations.

In 1999, the Working Group on Obesity in China (WGOC), comprising experts in nutrition, epidemiology, kinesiology, endocrinology, and cardiovascular diseases, was established under the leadership of Professor Chunming Chen. Using data from a large epidemiological cross-sectional survey covering approximately 240,000 individuals from 21 provinces and four cohorts with a total of over 70,000 participants, the WGOC systematically analyzed the relationship between morbidity and mortality risks among overweight, obesity, and related chronic diseases (hypertension, diabetes, coronary heart disease, and stroke). This marked the first attempt to establish appropriate BMI and waist circumference cut-off points for defining overweight, obesity, and central obesity in Chinese adults. In 2002, Professor Beifan Zhou, on behalf of WGOC, published an article in BES entitled "Predictive values of body mass index and waist circumference for risk factors of certain related diseases in Chinese adults--study on optimal cut-off points of body mass index and waist circumference in Chinese adults" (Biomed Environ Sci. 15(1): 83-96). And in 2004, the English version of the "Guidelines for Prevention and Control of Overweight and Obesity in Chinese Adults", originally released by the former Ministry of Health, was published in BES (Biomed Environ Sci. 2004; 17 Suppl: 1-36). The research results on BMI cut-off points for Chinese adults (BMI 24–27.9 for overweight, BMI ≥ 28 for obesity) have since been widely recognized internationally as the criteria for determining overweight and obesity in Chinese adults. These standards have been adopted by the national health system, and are widely applied across various domains, particularly in large-scale epidemiological surveys, national physical fitness monitoring, national basic public health service projects, scientific research, and the screening of high-risk populations.

Since 2002, *BES* has published 62 research articles on overweight and obesity among the Chinese population. Therefore, it has not only become a pivotal platform for showcasing research results related to obesity in the Chinese population on a global stage, but also has promoted the disciplinary development of obesity prevention and control consistently and systematically in the Chinese population.

Future Endeavors Propelling BES Forward

Scholarly journals serve as crucial platforms for exchanging, disseminating, and advancing academic knowledge, and foster theoretical innovation and technological advancement. To strike a balance between academic heritage and innovation while rigorously upholding quality, it is not only essential to strive for higher impact factors, but also to shoulder the responsibility of enhancing the global reach and influence of Chinese public health and related disciplines. Fully recognizing that *BES* has embarked on a new stage of development, establishing new developmental objectives is imperative. Central to these objectives is the emphasis on attracting high-quality manuscripts, broadening readership base, promoting academic disciplinary development, and amplifying international influence. Our overall ambition was to position the *BES* as a globally influential and authoritative journal in public health, contributing significantly to the academic development of this global profession. The *BES* editorial office is further committed to providing robust support to authors, editors, and readers.

Reflecting on the *BES*'s 35-year journey, we are truly gratified by our past achievements and sincerely appreciate the support and contributions from our colleagues, readers, and international peers. We eagerly anticipate future progress and advancements in *BES* with confidence.

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