Guest editorial

Dear contributors, readers and friends, in order to promote the application of the grey system theory in the medical field, as well as share its latest achievements in the fields of medicine and health, the top-level journal of the grey system theory, called *Grey Systems: Theory and Application (GS)*, by the Emerald Publishing Group reserves the issue 9.2 in 2019 to publish a special issue of "Grey system analysis in the fields of medicine and health." This special issue aims to foster the dissemination of high-quality research in the fields of medicine and health. Furthermore, it provides an opportunity to exchange newly researched knowledge, ideas and experiences on the main branches of the grey system theory, such as grey relational analysis (GRA), grey prediction models, grey cluster, grey evaluation, etc.

This special issue features nine papers, which are original submissions of GS. We confirmed that these nine papers were conducted using the double-blinded review process. The reviewers' comments indicated that the manuscripts are of high quality. In this issue, four out of nine papers are related to GRA ("Analysis of patients' attitudes towards medical service prices in different regions based on grey relational theory," "Cognition differences and improvement countermeasures of non-technical medical services based on grey correlation analysis," "The investigation and analysis of the current situation of medical service price cognition of China with grey relational analysis theory," "Applying GRA to analyze influencing factors of patients' financial burden: a case study of hospitals with PPP model in China"). These papers apply GRA in health care policy, hospital management and the satisfaction of patients. Another two papers are related to the application of epidemiology, which are "Grey relation between main meteorological factors and mortality" and "Using grey relational analysis to analyze influential factor of hand, foot and mouth disease in Shenzhen." As for the widely applications of GRA, it is not only used in analyzing the influential factor of infectious diseases but also in examining the effect factors of noninfectious chronic diseases such as "Superior grey relational analysis on blood lipids and hematological parameters." In addition, there are two papers allocated to present the achievements of the grey system when applied to hospital management. The "Application of grey prediction model to the prediction of medical consumables consumption" paper is focused on the applications of grey prediction models in hospital management. "Application of grey entropy weight cluster in clinical department sorting" is related to the grey cluster and the grey evaluation, and it produces a grey cluster model to perform the classification of clinical departments. Finally, there are further two papers: "Analysis of novel FAGM(1.1. t^{α}) model to forecast health expenditure of China" and "Grey system analysis in the field of medicine and health." We totally agree with the reviewers' comments that the papers are of high quality and they dedicate the real-life applications to the grev system theory.

We appreciate the authors and reviewers for their time, patience and expertise. Everyone is welcome to submit manuscripts related to medicine and health to the *GS* and contribute to the development of the research in grey systems. Anyone's suggestions and comments for the improvement of the journal are greeted.

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