

EDITORIAL



Summing Up Again

The editorial, "The Journal Publishing: Never Ending Saga", in the February 2014 issue of *Osong Public Health and Research Perspectives* (PHRP) has brought up quite a resonance from the journal editors, and needs provide them with more updated details.

As mentioned in the editorial in the January 2014 issue of PHRP, this journal has been unique since its birth in every aspect. After 15 years' preparation, Korea Centers for Disease Control and Prevention (KCDC) relocated to Osong Technopolis, in the vicinity of Cheongiu, the heartland of the Republic of Korea in December 2010 [1]. The small town was planned to serve as a center of the biomedical industry and six governmental agencies in Korea: Korean National Institute of Health, Korea Food and Drug Administration, Korea National Institute of Food and Drug Safety Evaluation, Korea Human Resource Development Institute for Health and Welfare, Korea Health Industry Development Institute, and KCDC. The planned technopolis has just merged and become the western part of Cheongju, a large city with a population of 1 million since July 1, 2014. KCDC had prepared PHRP since 2007 and 3 years' laborious preparation produced the first fruit in December 2010 in Osong.

The PHRP started with a biannual journal in 2011, expanded to quarterly in 2012, and became a fully-fledged bimonthly in 2013. PHRP is currently indexed in Scopus, PubMed, Science Direct, EMBASE, Google Scholar, WHO HINARI, CrossMark, FundRef, ORCID, and CrossRef. A total of 148 manuscripts have been published, including the August 2014 issue. The managing editor has read 5710 references and corrected 140 manuscripts before the peer review process. We have included a unique feature for readers of biomedical journals by including at least one mathematical model paper in each issue, including human immunodeficiency virus, malaria, *Vibrio vulnificus* infection, pandemic

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influenza, nosocomial outbreaks, and food-and-mouth disease outbreaks [2-8]. If you are searching for disease or health-related research papers with populationbased data in Korea, PHRP is the right journal for you. PHRP has also taken international papers since its first issue. The websites of the journal (www.kcdc-phrp. org, www.kcdc-phrp.com) has received hits from >80 countries around the world. The mobile website was launched in July 2014. If you access our homepage by a smart phone or a tablet PC, you are automatically connected to our mobile website. The printed issues carry QR codes, through which you can directly access our website if you have a smart phone. In a nutshell, PHRP has gained a reputation of the fastest-growing biomedical journal in the world with a mobile phone/tablet PC-friendly interface.

In the current issue of PHRP, the first mathematical modeling approach to study the dynamics of adolescent gambling is listed [9]. The authors assume that adolescents are introduced to gambling by a peer, gambling activities increase when people around them gamble a lot, and more gambling opportunities are provided. By treating excessive gambling as a socially transmitted disease, the environmental peer contagion is expressed as the mass action terms used in epidemiological models. The model consists of three classes: no problem gambling, at-risk gambling, and problem gambling. In order to specify the rates at which individuals move from one class to another, the reasons underlying transitions are discussed. The model seeks to examine the dynamics of the system through stability analysis and a basic reproductive number. The model has been applied to the data from Winters et al [10], with all parameters approximated. Using these parameter values, sensitivity analysis is applied to a threshold condition, and numerical simulations are explored. The authors focus on prevention and control strategies in the discussion session.

This study aimed to examine the dynamics of gambling among adolescents aged 16–24 years, how prevalence rates of at-risk gambling and problem gambling change as adolescents enter young adulthood, and prevention and control strategies. The authors have created a simple epidemiological model using ordinary nonlinear differential equations, and a threshold

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condition that spreads gambling is identified through stability analysis. The authors have estimated all model parameters using a longitudinal prevalence study by Winters, Stinchfield, and Botzet [10] to run numerical simulations, and parameters to which the system is most sensitive are isolated using sensitivity analysis. The results of this study are that problem gambling is present in an endemic state among adolescents, with a steady prevalence rate of 4-5%; the prevalence rate of problem gambling in young adults aged 18-24 years is lower than that in those aged 16-18 years; and at-risk gambling among young adults has increased. The parameters to which the system is most sensitive correspond to primary prevention. The authors have concluded that the prevention and control strategies should involve school education. The authors' conclusion is significant in the sense of public health. Among three categories, at-risk gambling is increasing and early intervention or prevention should be applied in the school system. This study provides a mathematical model to measure the effect of early exposure to gambling, and we expect to see a cohort study to back up this study with real data in the future.

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