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Factors Associated with Access to Healthcare for Infertility Problems under Taiwan's National Health Insurance Program ●·····61···························

Background

Infertility is a disease of the reproductive system defined by the failure to achieve pregnancy after 12 months or more of regular unprotected sexual intercourse based on clinical definition (Zegers-Hochschild et al., 2009). It was often viewed as a private matter before, however, this view has been changed over the past two decades and it has become a worldwide issue in terms of its impact on women's physical and mental health, raising prevalence, and expensive treatment cost. Evidences have suggested that wide-range impact of infertility on individuals, couples, and families. The inability to have a desire child might result in clinical depression, stigmatized, isolated, reduced job performance, marital conflict and violence, and life satisfaction (Domar, Zuttermeister, & Friedman, 1993; Downey et al., 1989; Link & Darling, 1986; Vayena, Rowe, & Griffin, 2002).

Reproductive health is a priority health issue globally. According to the Millennium Development Goal, the target will provide universal access to reproductive health by 2015. Among the reproductive health indicators, infertility is a critical component but has been neglected due to the lack of consistent definitions and common tools to diagnose, manage or report infertile individuals and couples. Although using different definitions, monitoring prevalence of infertility has been an increasingly important task among public health efforts in the global health community. The World Health Organization (WHO) applied a consistent algorithm to demographic and reproductive surveys to estimate the infertility prevalence by county and regions (Mascarenhas, Flaxman, Boerma, Vanderpoel, & Stevens, 2012). In addition to the survey method, the seeking care behavior for infertility problems revealed the demand for childbearing. So far, the research regarding infertility prevalence or treatment mainly used survey data in Middle East, China, Western Europe, United States or some developing countries, there is no study

using insurance claims data to investigate the number of women who seek help from the healthcare system, in particularly, under an universal insurance coverage program like Taiwan.

Treatment of infertility is a healthcare issue that receives much attention among developed countries. In Taiwan, the crude birth rate declined from 16.55 to 8.99 from 1990 to 2014 (Ministry of Interior). A significant decline in the fertility rate and the rising prevalence of infertility are two major reasons for immediate attention. Infertility may inflict upon women's physical and psychological state of health; it may cause adverse effects on their families' harmony and wellbeing. For couples who desire offspring but fail to bear them, many problems may ensue, including depression, feelings of stigma and isolation, reduced job performance, marital conflicts, family violence, and decreased life satisfaction (Domar et al., 1993; Downey et al., 1989; Link & Darling, 1986; Vayena et al., 2002). Furthermore, among infertile couples, women had lower scores in several quality of life or health-related quality of life domains (Chachamovich et al., 2010).

Some nations provide coverage for the treatment of infertility problems. In the United States, by 1995, thirteen states had required insurers to cover infertility treatment, and thus reduced expenditure on assisted reproductive technologies for people with health insurance (Ziebe & Devroey, 2008). In Europe, the countries of Sweden, Denmark, Belgium, France, Greece, and Slovenia have complete public coverage for infertility treatment (Ziebe & Devroey, 2008). On the other hand, Taiwan's National Health Insurance (NHI) program covers some treatments for infertility except assisted reproductive technologies.

The fertility rate in Taiwan has greatly decreased over the past decade and is now the lowest in the world. In 2013, Taiwan only had around 199,113 newborns and the government recognizes the gravity of the low fertility rate. In an effort to alleviate this problem, the government is seeking effective ways to promote childbearing among women to successfully bear children. Since there is lack of