



## Research Article

## Case Management for Medical Aid Beneficiaries in Korea: Findings from Case-control Study



Hee-Sun Shin, PhD, \* Jin-Joo Oh, PhD \*

Department of Nursing, Dankook University, Chungnam, South Korea

## ARTICLE INFO

## Article history:

Received 15 May 2013

Received in revised form

24 March 2014

Accepted 23 June 2014

## Keywords:

case management  
health expenditures  
medicaid  
quality of life

## SUMMARY

**Purpose:** This study was to evaluate effects of case management provided for 7 months for medical aid in Korea.

**Methods:** This study was a retrospective comparative study using secondary data analysis.

Data from two pre-existing survey were reanalyzed. The data were collected through door to-door interviews using the structured questionnaire. For the medical service use, claims data from the Korea National Health Insurance Corporation was used. Subjects were 73 in the intervention group and 118 in the control group.

**Results:** There was no significant change in the intervention group in self-care ability ( $p = .296$ ), medication adherence ( $p = .194$ ) or quality of life ( $p = .903$ ) compared to those of the control group. For hospital visiting days, it appeared to decrease in the intervention group ( $p = .038$ ) but with no significant difference from that of the control group ( $p = .157$ ). Neither were there significant differences in medical expenditures ( $p = .605$ ).

**Conclusion:** Although the effect of case management in this study appeared extremely limited, the short intervention period and characteristics of the medical aid beneficiaries and the limit of controlling only the demand side were discussed as factors to be considered. Nurses have been carrying out professional roles in case management in Korea. However more efforts are needed to develop case management as an area for nursing specialization.

Copyright © 2014, Korean Society of Nursing Science. Published by Elsevier. All rights reserved.

## Introduction

The medical aid program in Korea was introduced in 1977 as a form of public assistance to guarantee the minimum standard of living of low-income households and to provide assistance to these families with free medical services. However, the continuous burden on the program with 24.1% annual increase in medical aid expenditures between 1996 and 2005 (Shin et al., 2010) has become a major threat to the sustainability of the medical aid system. The total expenditure on 1,830,000 beneficiaries as of July 2007 (approximately 3.9% of the total population) amounting to a total of 4 trillion Won in 1 year shows well the seriousness of the issue (Kim et al., 2007). The rapid increase in the cost of medical aid system in Korea can be explained by several factors such as the increased number of beneficiaries, and broadened scope of beneficiaries. However, patients' overuse of free medical services has

been deemed the most important factor for the rise in cost (Ministry of Health, Welfare and Family Affairs [MHWFA], 2007). Under the medical aid program, medical services are given free unlike the health insurance system, and free service can make beneficiaries unconscious of the cost, finally leading to medical service overuse (Shin, Shin, Hwang, & Rho, 2006). Moreover, a fee-for-service (FFS) payment system in Korea which has been adopted since the beginning of health insurance system, has also been criticized as a major factor for physicians' misleading patients to visiting the clinic and getting unnecessary treatments (Shin, 2011). The effect is the excessive overuse in medical service by its beneficiaries, which has burdened the medical aid budget. Worse for patients, the overuse of medical treatments and medications can be a risky factor that worsens the health and quality of life (QoL) of beneficiaries (Lee, Kim, Choi, & Kang, 2003). Given this situation, the Korean government initiated new strategies as a pilot project, namely the US case management system in 2003 (MHWFA, 2011).

Case management has been adopted in developed countries since the late 1960s to promote people's QoL and to restrict rising medical cost at the same time. Its basic ideology is to coordinate

\* Correspondence to: Jin-Joo Oh, PhD, Department of Nursing, Dankook University, 119, Dandae-ro, Dongnam-gu, Cheonan-si, Chungnam, 330-714, South Korea.  
E-mail address: [jinjoo@dankook.ac.kr](mailto:jinjoo@dankook.ac.kr)

diverse services and deliver appropriate services to people so as to meet the diverse needs of the people (Case Management Society of America, 2007).

Case management has been proven effective especially for chronic disease management. Necessity of management at the national level has been emphasized for chronic disease because of the high social cost. Various programs for effective control of chronic disease has been developed and adapted across many countries including the United States, Australia, Brazil, Japan, and South Africa (Kersbergen, 1999; Powell, 2000). Several programs try to show that integrated provision of health and medical treatment service is needed for maximizing efficiency of chronic disease control. In particular, disease management in England is focused on using resources more effectively (Kersbergen, 1999). Case management can be seen as one type of the various forms of disease control programs. Medical cost for chronic diseases in the US is also high. In particular, people who have five diseases or more use up two thirds of all Medicare expense, while those who have four diseases or more use up 80% (Wolff, Starfield, & Anderson, 2002). Hence, the US has been developing diverse disease management programs under the command of CMS (Center for Medicare and Medicaid Services). The US case management in the health service field has been revitalized as the health medical environment changed. From the 1970s as new payment systems such as diagnosis-related group and prospective payment system were introduced (Powell, 2000), case management has become a method that saves medical costs (Kersbergen, 1999).

Based on the success of the pilot program in 28 regions in 2003, Case management program in Korea had been expanded nationwide from 2006 (Oh, Choi, & Yu, 2008) and the total number of case managers in 2010 was 539 (MHWFA, 2011). In the beginning, both nurses and social workers were qualified as case managers but now only nurses with at least 2 years of clinical experience are being employed.

Although the specific goals have changed, the overall goals of case management remain the same, which are improving the self-care capability and QoL of the beneficiaries, and reducing health care expenditures by providing health care education, counseling, and adequate referral to available community resources (MHWFA, 2011). The government publishes a service guide every year and all services are performed based on this guide. And, the Korean government selects service targets—medical service overusers—every year to make the work process efficient by reducing the caseload of managers. The criteria for selection have been changed several times including the size of the medical expenses of the previous year, days of prescribed medications, number of institutions used, days of benefit and so on in 2007 and 2008 (Im, Yu, Lee, Jeon, & Lim, 2011). However, this policy still has not resolved the excessive annual caseload of case managers. The government has authorized case managers to select service targets based on their own judgment among people on the overuser list from government.

It was recognized that nurses tried their best as case managers to make the project successful after the services started (Oh et al., 2008). However, the service was criticized because the effect of service was monitored only by focusing on the medical expenditure. To make matters worse, most of evaluation studies for case management were without any control group (Rhee, 2006; Shin et al., 2006), or even if control group was set, they compared only post-service result without testing the homogeneity between the control group and the intervention group (Lee, Lee, & Kang, 2004; Lim, 2010; Oh, Choi, & Ji, 2009; Shin, Shin, & Hwang, 2007; Shin et al., 2008).

Accordingly, the preliminary data were collected on a somewhat large scale from December 12, 2007 to January 25, 2008 (Shin et al.,

2008) in order to meet the demand of in-depth evaluation. Subsequently, another study was done during September 2–25, 2008, which used the same samples and research variables as those of the previous study (Oh et al., 2009). Originally the focus of the second of the study was to examine the effect of new time copayment which started in July 2007. However, from those two consecutive surveys, samples for this prospective in-depth study could be obtained by confirming those beneficiaries who had been included as new targets of the case management. In both studies (Shin et al., 2008; Oh et al., 2009), QoL and medical cost variables were included in accordance with the original purpose of the service, and the other two variables, self-care ability and medication adherence, were based on the PRECEDE model (Downie, Tannahill, & Tannahill, 1996). In that model, health behavior is regarded as an influential variable to QoL, and three factors including predisposing, enabling, and reinforcing were categorized as influencing factors to health behavior. In this study, health behavior was replaced by medical adherence as the influential variable to QoL because duplication or abuse of medication appeared as critical health behavior threatening the health of beneficiaries (Kim et al., 2007). Those three factors, predisposing, enabling, and reinforcing were conceptualized into a tool of self-care ability.

The objective of this study was to analyze the effect of case management of medical aid in Korea over a 7-month period from January 26, 2008 to August 31, 2009.

#### Definition

##### *Case management of medical aid*

The target of case management was listed primarily based on the size of the previous year's medical expenses, days of prescribed medications, number of institutions they used and so on even though the exact criteria for each parameter has been changed (Kim et al., 2007; MHWFA, 2011). From the list of overusers issued by the government, the actual subjects of case management were selected by medical care managers: the case managers were empowered to select targets based on their own judgment, and this is to resolve excessive case load to case managers. Control group consisted of medical care recipients who were not adopted as case management subjects. In providing case management, counseling, education and referral to community resources were provided to induce rational utilization of medical service and improve QoL focusing on the assessed need of each individual. Methods for case management include letter, leaflet mailing, telephone, home visit, call and so on.

##### *Medical service use*

Variables for medical service use included hospital visiting days and medical expenditures per capita. The hospital visiting days means the sum of the number of days for outpatient clinic visit, medication days and inpatient days. The medical expenditures are sum of the cost for inpatient services, outpatient services and medication. Those were calculated from the claims data for the first half of the year 2007 and the second half of the year 2008, which was published by the Korea National Health Insurance Corporation.

#### Methods

##### *Study design*

This is a retrospective comparative study using secondary data analysis. For the medical service use, claims data submitted from medical institutions to the Korea National Health Insurance Corporation was used.

# دانلود مقاله



<http://daneshyari.com/article/2645532>



- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات