

論文内容要旨

Efficacy of a Disease Management Program Focused on Acquisition of Self-management Skills in Patients with Chronic Viral Hepatitis in China

(中国における慢性ウイルス性肝炎患者のセルフマネジメント技術の獲得に焦点を当てた疾病管理プログラムの有効性)

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Introduction

The higher incidence rate of hepatocellular carcinoma due to chronic hepatitis B (HBV) or hepatitis C (HCV) infection causes morbidity and mortality in China. Antiviral therapy is recommended for treatment and prevention of liver cirrhosis and hepatocellular carcinoma to patients with hepatitis B and hepatitis C. However, the treatment compliance including regular follow-up, adherence to medication, and lifestyle changes were affecting the outcome of antiviral therapy. In China, patients with chronic hepatitis are likely not to have enough information regarding antiviral therapy, and the existence of counseling related to lifestyle changes. Moreover, the hepatitis B and C patients can easily suffer from financial burden and side effects such as depression tendency by long-term treatment, social isolation or discrimination and stigma affect patients' quality of life (QOL) and their outcome of treatment. Therefore, it is necessary to develop a self-management education program for patients with hepatitis B and C in China, which could manage all the above factors.

Objectives

1. To figure out the incidence of hepatitis B and C in China regarding socio-economic factors by using existing national data; 2. To develop a self-management education program for hepatitis B and hepatitis C and evaluate the efficacy of the program.

Outline of this Research

This study consisted of two studies; one was a cross-sectional study to figure out the incidence of hepatitis B and C in China regarding socio-economic factors, and another one was the intervention study in which we have evaluated the effectiveness of the disease management program.

Study 1: Analysis of the incidence of hepatitis B and hepatitis C and relationship with socio-economic factors in China

In this study, the researcher used the national database of the incidence rate of hepatitis B and hepatitis C in 31 provinces in China, divided into a high incidence group and a low incidence group based on the median value of the incidence. After comparing the socio-economic factors between high incidence group and low incidence group of HBV, significant differences were observed among the incidence of hepatitis B ($p < 0.01$), the incidence of hepatitis C ($p = 0.02$) and outpatient expenditure per capita ($p = 0.03$). In case of HCV, significant changes were observed among incidence rate of hepatitis B ($p = 0.01$), incidence rate of hepatitis C ($p < 0.01$), urban income ($p = 0.04$), rural income ($p = 0.01$) and rural spending ($p = 0.02$). The analysis of the correlation between hepatitis incidence and socioeconomic factors also revealed that the incidence of hepatitis B was positively correlated with the incidence of hepatitis C ($r = 0.526$, $p < 0.01$), had negative correlation with the outpatient expenses ($r = -0.46$, $p < 0.01$), prenatal examination rate ($r = -0.547$, $p <$

0.01) and the rate of hospital delivery in rural area ($r = -0.422$, $p < 0.01$). The incidence rate of hepatitis C had negative correlation with the urban income ($r = -0.450$, $p < 0.05$), rural income ($r = -0.499$, $p < 0.05$), rural spending ($r = -0.443$, $p < 0.05$), and rate of hospital delivery in rural area ($r = -0.379$, $p < 0.05$).

According to this study results, the researcher found that the incidence of hepatitis was closely related to the local economic development. The better economy reflects the lower the likelihood of the incidence of hepatitis. For areas with a high incidence of hepatitis B and C, the residents' health awareness level and the ability of disease managers were limited, which affects the prediction and control ability of infectious diseases.

Study 2: Developed a self-management education program based on the requirement of hepatitis B and hepatitis C patients and evaluated the efficacy of the program

Based on the community requirement, previous studies and guideline of hepatitis, the researcher developed the self-management education program and evaluated the efficacy of the program.

In this intervention study, 60 hepatitis B and C patients in one hospital were enrolled and randomly divided into two groups; one for intervention and one for control. Evaluation endpoints were QOL, CES-D (depression), GSES (self-efficacy), behavior changes, and cognition of illness. Though there was no statistically significant difference between the two groups at baseline, the QOL, GSES in the intervention group were significantly improved compared to the control group at 6 months after discharge ($p < 0.001$, $p = 0.001$, respectively). In the perceived cognition of illness, there were significant differences in perceived severity ($p < 0.036$), perceived benefit ($p < 0.001$) and perceived barriers ($p < 0.001$) between two groups. There were significant differences in behavior change in alcohol avoidance ($p < 0.001$), dietary habit ($p < 0.034$) and stress management ($p < 0.037$). The agreement rate of patients in this study was 82.2%, and the completion rate of intervention group was 100%.

One of the factors of the self-management education effectiveness was the establishment of a partnership between the subjects and the nurse. In addition, knowledge on risk factors related to aggravation, guidance on improvements of lifestyle habits by nurses in a timely manner, the subject's self-efficacy is improved, and self-management behavior is raised to a habit.

The conclusion was that the researcher-developed educational program provided by a nurse who was trained by self-management expert was found to be highly effective. Even though an effective antiviral treatment has been introduced, still many hepatitis patients suffer from social stigma, and are not willing to take the benefit. It is important for nurses to acquire this skill and implement the program to hepatitis patients not only in hospital but also continuously in community health in the future.