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Quality of Life, Health Behavior, and Health Service Needs of Prisoners with Chronic Illness in Province Southern Region†

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Abstract

Prison inmates are statistically more likely to suffer from chronic diseases that affect health and quality of life. Therefore, this descriptive research was to study the quality of life, health behaviors, and health services needs of prisoners with chronic illness in the southern provinces. The 276 samples were prisoners, simple random sampling from 5 prisons. The instrument included three questionnaires regarding the quality of life, health behaviors, and health service needs. Descriptive statistics analyzed data. The results showed that most of the samples were male, 72.8 %, average age of 45.67 (SD = 11.92), in the prisons, 6.44 (SD = 4.23), and 88.8 % had relatives visiting. The chronic illness was hypertension, diabetes, atherosclerosis, asthma, and heart disease. The poor quality of life (Mean = 58.81, SD =11.03) is consistent with the prisoner quality of life study, in which the staff prioritized the quality of life of minority inmates. The health behaviors were poor (Mean 2.91, SD = 0.41); these may be due to the Department of Corrections having to promote healthy behaviors and treat inmates by the minimum requirements of the nation or The Mandela rules. Finally, the demand for health services needs was high (Mean = 3.62, SD = 0.52) due to the imbalance between what is needed and what is provided by the state, and lifestyle patterns have changed, which has restrictions on activities and limited communication with outside society. Thus, health personnel in prisons should promote and focus on the health behaviors of prisoners with chronic illnesses and provide health services related to their health and needs.

Keywords: Quality of life, Health behaviors, Health service needs, Prisoners with chronic illness

Introduction

Non-communicable diseases (NCDs) are the world's leading cause of health problems. NCDs cause 41 million deaths each year, accounting for 71 % of global mortality, with 15 million deaths from NCDs between 30 and 69 years old, accounting for more than 85 % of early deaths (World Health Organization, 2019). In Thailand, chronic disorders such as hypertension, diabetes, and stroke have increased by 2, 1, and 0.5 %, respectively (Department of Disease Control, 2020). There is an 8 % increase in people with chronic illnesses; this includes prisoners. The statistics of prisoners with chronic diseases in 2016-2019 were 7,910, 9,201, 11,839, and 10,441, respectively (Department of Corrections, 2020).

Chronic diseases have physical, psychological, and social impacts. Such organs usually impact the complications of chronic illness as blurred vision, leg pain, body pain, chest pain, burnout, etc. These affect prisoners' minds facing mental distress, such as stress, anxiety, fear, uncertainty, and depression caused by illness and loss of role and relationships in society (Wasutada et al., 2018). Moreover, it also impacts the country's economic conditions due to higher medical costs of drugs and technology. It is forecast to reach about 500 million baht, an average of 3,128 baht per person (Department of Disease Control, 2020).

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The healthcare of prisoners with chronic illnesses focuses on the treatment to achieve continuity and efficient care (Khajornwattanakul, 2020). The prisoners will have a medical facility by a nurse at the primary care unit in prison by minimum Standards, or The Mandela rules, following nursing dimensions: 1) promoting health by educating and modifying eating habits, 2) disease prevention in conjunction with prison volunteers, and screening for chronic diseases and their complications annually, 3) maintain health and preliminary diagnostic before referring to the doctor, and 4) rehabilitation to reduce the severity and complications. It is also operating under the Pansuk correctional program, doing good for the nation, religion, and kings by providing prisoners with equal treatment rights outside the prison to treat prisoners inside prisons with chronic illnesses; there are both drug treatments and behavioral modification treatments (Khajornwattanakul, 2020).

Quality of life of prisoners related to overcrowded conditions and difference from the general public (MacDonald, 2018; Fazel & Baillargeon, 2011) in prisons for long periods results having weight gain and an increase in BMI and mental well-being (Crewe et al., 2011). There is also a trim level of awareness and understanding of health and illness (Suriart et al., 2014). Improving the quality of life in prisoners, especially the elderly convicted in prison, to live happier is improving the quality of religious life by allowing elderly prisoners to relax from their suffering and living a life with the hope of returning to life outside the prison in a valuable way and not committing re-offending (Jitsawang and Jitsawang, 2016). The demand arises from an imbalance, cravings for essential health responses correlated with changing health conditions (Crewe et al., 2011; Suriart et al., 2014). In chronic disease prisoners, there is a high level of health service needs, which can be caused by living in prison. Lifestyle patterns will change, thereby causing demand for health services both psychologically. Prisoners also want health education, whether physical activity or dietary intake (MacDonald, 2018; Suriart et al., 2014).

However, quality of life is the ultimate aim of every human being who wants to make their life the most valuable for those who lack freedom. Quality of life studies have been conducted on elderly and female prisoners. Still, there have been no studies among prisoners with chronic illness, including the health behaviors and health service needs of this group of prisoners. The researcher was a community GP nurse and a practitioner of the Department of Corrections (2021). It is responsible for health care among prisoners and is therefore interested in studying the quality of life. Obtaining basic information on managing chronic problems in prisoners; will lead to the correct and appropriate approach to health care for prisoners with chronic illnesses.

Research framework

This study was conducted based on a review of the quality of life and Pender's health promotion model. Quality of life is the ultimate aim of every human being who wants to make their lives as valuable as possible by being balanced physically, psychologically, mentally, and socially, even in a state of illness (Laoatiman, 2020). Prisoners also need quality of life within the prison context and are restricted in their freedom to perform activities (Alzúa, Rodriguez, & Villa, 2010). Health behaviors are caused by an essential experience that is a feature of the individual and the health outcomes, including health responsibility behaviors, interpersonal relationships, physical activity, nutrition, and stress management (Pender et al., 2006). As a result, prisoners have multi-faceted health service needs relating to health behaviors and reaching their quality of life (Alzúa et al., 2010).

Methodology

This study is descriptive research to study the quality of life, health behaviors, and the need for health services of prisoners with chronic illnesses in the southern regions. The population is prisoners in 28 federal and provincial prisons and 690 people diagnosed with chronic illness. Samples from 5 prisons random samplings with inclusion criteria are as follows: 1) chronic illness such as diabetes, hypertension, and lipid disease, asthma, heart disease, 2) treatment in prison facilities for at least one year, and 3) willing to obtain research. The sample size used Taro Yamane's calculation formula, setting a confidence level of 95 % (Suriart et al., 2014), a sample of 254 people preventing the data from completing another

10 % (Jirawatkul, 2014), totaling 276 people from Songkhla Central Prison 128 (320), Songkhla Provincial Prison 16 (40), Phuket Provincial Prison 32 (40), Phang Nga Provincial Prison 40 (100), Surat Thani Central Prison 60 (150).

The research instruments

The research instruments include 1) Personal data questionnaires, including general personal and health information. 2) World Health Organization Quality of Life Brief-Thai (WHOQOL-BREF-THAI) comprises four dimensions: Physical, psychological, social relationships, and environment. There are 26 items, with 130 scores, 26 - 60 (poor), 61 - 95 (mild), and 96 - 130 (good). 3) Health behavioral questionnaires (Mahathamnuchock, 2015) included four items consisting of 5 areas: Health responsibilities, interpersonal relationships, exercise, nutrition, and stress management. The question has 4 levels: 4 = regularly, 3 = often, 2 = sometimes, and 1 = never. The result was translated into 4 levels: 1.00 - 1.75 (improve), 1.76 - 2.50 (fair), 2.51 - 3.25 (good), and 3.26 - 4.00 (very good). And 4) Health service needs questionnaires adapted from Suriart et al. (2014). It covers five health service needs: physical, psychological, social, spiritual, and systematic healthcare needs. The answer is high = 4, moderate = 3, low = 2, and lowest = 1. The results are based on the scores of 3.00 - 4.00 (high), 2.00 - 3.00 (moderate), and 1.00 - 2.00 (low). These three instruments were tried out with 30 non-sample prisoners, using Cronbach's coefficient alpha equally 0.71, 0.76, and 0.75, respectively.

Ethical consideration

This research was conducted through the Human Research Ethics Review of Walailak University, the WUEC-21-004-01 certification document dated January 12, 2021. The researchers took into account respect for human dignity, respected the privacy and confidentiality of the participating samples, and gave them the independence to make decisions, free from coercion or graciousness. The researchers maintained confidentiality without identifying names, surnames, or information individuals could locate. If the sample voluntarily participates in the research, they will sign the informed consent form.

Data collection

1) The researcher wrote permission to collect data from the five prison commanders.

2) Prepared five research assistants, professional nurses who work in the primary care unit of prisons, to clarify details about the purpose and to train the procedures of collecting data.

3) The research assistants explained the research objectives and protection of rights to the samples before signing the informed consent and collecting data by taking the questionnaires themselves.

Data analysis

It was conducted using descriptive statistics such as frequency, percentage, mean, and standard deviation.

Results and discussion

Of the total 276 samples, there was 72.8 % male, with an average of 45.67 years (SD = 11.92), and 44 % with marital status and a primary education level of 47.5 %. The most pre-prison occupations were 42.3 % employees, the average number of years in prison was 6.4 years (SD = 4.23), and the average number of close friends in prison was 3.27 years (SD = 3.11). Most of them had relatives visiting 88.8 %, and chronic high blood pressure illness the most at 69.9 %, as shown in **Table 1**.

Table 2 shows the total quality of life (Mean = 58.81, SD = 11.06), and all dimensions were poor. Overall health behaviors (Mean = 2.91, SD = 0.41) and all aspects were good. The overall health service need and aspects were high (Mean = 3.53, SD = 0.45).

Table 1 Personal information (n = 276).

Personal information	Frequency	Percent
Gender		
Male	201	72.83
Female	75	27.17
Age (Mean = 45.67, SD = 11.92, Min - Max 20 - 81 years)		
Less than 30 years	28	10.15
31 - 40 years	73	26.45
41 - 50 years	75	27.17
51 - 60 years	74	26.81
Over 60 years	26	9.42
Marital status		
Married	124	44.92
Single	94	34.06
Widow/Divorced	58	21.02
Education level		
Not studying	21	7.61
Primary	134	48.55
Secondary/Vocational education	93	33.70
Diploma/High vocational	13	4.71
Higher education	15	5.43
Former occupation before going to prison		
Employee	117	42.39
Gardening	83	30.08
Private business	66	23.91
Government	6	2.17
Housewife	4	1.45
Chronic diseases (more than one disease identified)		
Hypertension	193	53.77
Diabetes	70	19.50
Fatty diseases	50	13.92
Asthma	28	7.80
Heart disease	18	5.01
Prison years Min - Max = 1 - 21 years (Mean = 6.44, SD = 4.23)		
Number of close friends in prison Min - Max = 0-20 (Mean = 3.27, SD = 3.11)		

Table 2 Quality of life, health behavior, and health service needs of prisoners with chronic illnesses.

Variable	Min	Max	Mean	SD	Interpretation
Total quality of life	**35**	**94**	**58.81**	**11.06**	**Poor**
- Physical dimension	6	21	12.81	2.51	Poor
- Psychological dimension	6	23	14.50	3.24	Poor
- Social dimension	2	12	7.57	2.10	Poor
- Environmental dimension	6	29	16.97	4.19	Poor
Total health behavior	**1.74**	**3.89**	**2.91**	**0.41**	**Good**
- Health responsibility	1.63	4.00	2.84	0.51	Good
- Interpersonal relationships	1.70	4.00	2.99	0.52	Good
- Physical activity	1.00	4.00	2.87	0.65	Good
- Nutrition	1.83	4.00	2.90	0.48	Good
- Stress management	2.00	4.00	2.99	0.51	Good
Total health service need	**2.09**	**4.17**	**3.53**	**0.45**	**High**
- Physical	1.67	4.67	3.40	0.47	High
- Psychological	1.00	4.00	3.67	0.56	High
- Social	1.00	4.00	3.62	0.51	High
- Spiritual	1.00	4.00	3.40	0.61	High
- Health service system	2.14	4.00	3.62	0.52	High

Discussion

Most of the prisoners were male, 72.8 %, and trouble getting caught 82.2 % for drug offenses (Department of Corrections, 2021). Chronic illnesses of prisoners include hypertension, diabetes, blood lipid disease, asthma, and heart disease. The quality of life in prisons is a relevant component of the effective punishment prisoners face while doing time (Alzúa et al., 2010). The study found that the prisoners' overall quality of life in all aspects was poor, which is consistent with the prisoner quality of life in Australia, in which officials placed little emphasis on the quality of life of prisoners (Crewe et al., 2011) together with the condition of society and the prison environment because of a life without freedom. When considering overall health behaviors, each dimension was suitable. The Department of Corrections may cause these personal health behaviors to promote activities and treat prisoners by the Minimum Nation Standard or The Mandela Rules (Thailand Institute of Justice, 2016). This means that, in principle, individuals should face the same rights in prisons (i.e., health, education, human and civil rights) as individuals outside them, except for free circulation (Alzúa et al., 2010). It is a standardized operating practice regarding the treatment of detainees in detention facilities by prisoners' healthcare guidelines. It mentions the provision of medical and health services, which should be equal standards provided by the state to external citizens (Institute for Justice of Thailand, 2016). This study shows that overall health service needs were very high for all physical, psychological, social, spiritual, and healthcare services because communication is limited with outside society. The study of the health services needs of prisoners with metabolic disorders also had a high level of individual health service needs (Suriart et al., 2014) because prisoners had demands arising from an imbalance of what they needed and what the state provided (Crewe et al., 2011). The study by Rungreangkulkij, Silarat, & Kotnara (2021) revealed that the prisoners have positive attitudes toward health services. They think they are receiving the same standard of care as the general population.

However, they are concerned about getting infectious diseases and access to emergency care. There is limited dental care. The female prisoners have more trouble accessing health care than male prisoners. Therefore, solving the inequality of care for prisoners includes increasing the collaboration with the community hospitals, using telehealth, adding female health providers, and developing inmate health volunteers among the prisoners (Rungreangkulkij et al., 2021). Prisoners have changed lifestyle pattern that was limited to activities and restrictions on communication with external society (Suriart et al., 2014). They can contact relatives by writing a letter or telephone (Department of Corrections, 2020). These are caused by prisoners' high level of health service needs and poor quality of life.

Conclusions

The findings indicated that prisoners with chronic illnesses had poor quality of life. Although the health behaviors were at a reasonable level by the prison's management, they did not meet the health service needs of prisoners. Therefore, health workers in prisons should develop health activities conducive to the health of prisoners with chronic illnesses and increase the collaboration with the community hospitals, using telehealth, and developing inmate health volunteers among the prisoners.

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