

RESEARCH COMMUNICATION

Financial Burden of Gynecologic-Cancer Survivors Associated with Attendance in a Surveillance Program at a Tertiary Care Hospital in Thailand

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Abstract

All gynecologic cancer survivors require a surveillance program for the detection of recurrence and complications after the complete treatment. However, this type of surveillance program might be leading to an unseen burden for the patients. To identify this burden, 200 gynecologic cancer survivors who resided outside of Chiang Mai province were interviewed between November 2010 and February 2011. The mean age of the surveyed patients was 52 years old and most of them were diagnosed with cervical cancer. The mean travelling time was 3.6 hours with a range of one to nine hours and the mean waiting time at the hospital was 5.3 hours. Nearly one-third of the patients required overnight accommodation in Chiang Mai. The mean total cost was 643 baht (60-3,000 baht) and the mean hospital cost was 172 baht. About 44% of the surveyed patients wanted follow up at the local provincial hospital near their abode due to their own convenience. However, more than half of the surveyed patients still wanted to follow up at the tertiary care hospital because of their trust in the medical team. In conclusion, the surveillance program revealed a burden to cancer survivors, especially for the patients who lived a long distance away from the tertiary care hospital province.

Keywords: Gynecologic-cancer survivors - surveillance program - burden - Chiang Mai, Thailand

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Introduction

Gynecologic cancer survivors require a surveillance program for the detection of recurrence and complications from the treatment (Barnhill et al., 1992). In addition, the program expressed the vulnerable data about the survival rate in each cancer. In Chiang Mai University Hospital, the tertiary care hospital in northern Thailand, the surveillance program consisted of history taking, physical and pelvic examination, and other investigations such as tumor marker, chest X-ray and other imaging. The interval time of the surveillance program after the definite treatment is every three months in the first year; every four months in the second year; every six months in the third to fifth year; and once a year after five years.

There are over 700 patients per year attending the surveillance program who were treated at our institute and most of them came from the northern part of Thailand. Over 100 cases of the cancer survivors were scheduled to be examined in one day and with a limited number of physicians resulting in many patients incurring a lengthy waiting time. The study about their burden was still limited especially in a developing country. This study was conducted to survey the burden of gynecologic-cancer survivors who attend the surveillance program at the

tertiary care hospital by using our institute as a reference site. The result would collect essential data to develop a network of a surveillance program ably instituted among local provincial hospitals. This could decrease the financial and physical burdens of the cancer survivors because the patients could attend the follow up program at the local provincial hospital thereby submitting the data to the physicians at our institute via the internet system.

Materials and Methods

The survey project was proposed to the Research Ethics Committee for approval. After the project was approved, an interviewer was trained to understand the questionnaire and the survey method. The data was collected by using questionnaires in paper format. The questions were about the demographic data; the expense included the cost of transportation from their home to the hospital and the payment in the hospital; the length of waiting time as well as the transportation time; and the demand of follow up at their local provincial hospital. The patients answered the questions through a personal interview. The sample group was 200 random patients who attended a surveillance program at our institute and lived in other provinces. They were interviewed while

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waiting to see the gynecologic oncology physicians. The interviewer recorded in the questionnaire form. Later on, all collected data was transferred to the SPSS for MS-Windows application (version 17.0) for statistical analysis. The descriptive data of all surveyed patients were presented as means with range and discrete data were reported as number and percentages.

Results

The survey was completed between November 2010 and February 2011. The characteristic of these patients was shown in Table 1. The mean age was 52 years old with an age range of 21 to 78 years old. Sixty-three percent of the surveyed patients were diagnosed with cervical cancer followed by ovarian cancer, endometrial cancer and vulva cancer. Sixty-six percent of them revealed primary school as their highest education and 40 percent of the sample group was agriculturalists. About one-third of the studied patients resided in Chiang Rai province located north of Chiang Mai province at a distance about 180 kilometers or three hours by bus. Furthermore, about 80 percent of the group lived in the suburbs and nearly one-third of them needed to stay overnight to attend the surveillance program at Chiang Mai University Hospital. The travel time from the patients' domiciles to the hospital varied from 1 hour to over 7 hours, with a mean of 3.6 hours. Nearly half of the surveyed patients required two to three hours travel

Table 1. Demographic Data for the Surveillance Patients (N=200)

Characteristics	Number	Percentage
Mean age (range)	52	(21-78)
Disease		
Cervical cancer	126	63.0
Ovarian cancer	29	14.5
Endometrial cancer	32	16.0
Vulva cancer	3	1.5
Other	10	
Address		
Lumphoon	52	26.0
Chiang Rai	61	30.5
Nan	20	10.0
Phayao	28	14.0
Phrae	11	5.5
Other	28	14.0
Education		
Min. bachelor degree	13	6.5
Diploma degree	2	1.0
High school	12	6.0
Secondary school	18	9.0
Primary education	132	66.0
Not attending school	23	11.5
Occupation		
Agriculture	82	41.0
General Contractor	34	17.0
Housewife	31	15.5
Trade	30	15.0
Other	23	11.5
Accommodation		
In the city	42	21.0
Suburb	158	79.0
Overnight stay		
1 night	45	22.5
2 nights	9	4.5
3 nights	1	0.5
The mean number of follow up (range)	14	(1-75)
Mean hospital cost (range):	Baht 172	(50-1,100)

time and five percent of them took more than seven hours to travel. The mean waiting time at the hospital was 5.3 hours, with a range from 2 to 8 hours.

Although most of the patients were financially covered for the treatment cost under the national health security program, the social security program or government reimbursement, they still incurred expense at the hospital for their food, drink and miscellany. The mean hospital cost was 172 baht with a range from 50-1,000 baht. The mean summation of the travelling cost, the living cost and the accommodation fee was 643 baht within a range of 60-3,000 baht.

Regarding the demand to attend the follow up program at the local provincial hospital, 44 percent of the surveyed patients wanted to follow up at the local provincial hospital for two main reasons; their convenience and they trusted the local provincial hospital medical team. However, the remaining group would like to continue follow up at Chiang Mai University Hospital because they would like to be examined by the gynecologic oncologists and they believed that their medical history in Chiang Mai University Hospital was all encompassing.

Discussion

The surveillance program is essential to all cancer survival patients. The benefits of this program are to identify accurate survival data and to determine an early detection of either the recurrence or the complication from the definite treatment (Johnson et al., 2010, Morris et al., 2000). Furthermore, continued visits during the surveillance program can also reduce patients' anxiety and provide an opportunity to treat other medical problems, if detected (Naumann and Shingleton, 1996). However, considering the distance of patient's domicile, they needed to travel to the tertiary care hospital. This study interviewed 200 cancer survival patients who stayed outside Chiang Mai province and found problems that burden these patients. The first problem was the travelling which was a major time requirement. Nearly one-third of the patients had to stay overnight in Chiang Mai. The second point was the high cost to attend the surveillance program. Since most of the patients were from the agricultural sector which has low income, the total cost would be a financial burden for them.

A solution to reduce the burden of the patients could be the development of a hospital network. If the local provincial hospitals adopt the surveillance program with a similar efficacy as the tertiary care hospital, this will decrease the patients' burden. The present study displayed that 44 percent of the studied patients wanted to follow up at their local provincial hospital. Nevertheless, the reason that the majority of the patients still require to maintain continuity at our hospital was the confidence of the surveillance service. Thus, if we develop the network program, and improve the ability to detect both the recurrence and complication of cancer treatment at a local provincial hospital, the patients will trust the service and make the decision to attend the follow up program at their local hospital. The network can be completed by using the internet system to send and receive records of

patients and consultation.

In conclusion, the surveillance programs revealed the financial burden to the cancer survival patients, especially for the patients who lived outside the tertiary care hospital province. The network surveillance program needs to increase efficiency to reduce this burden. However, in general gynecologists should be trained to follow up the patients for this network program to reassure that the cancer survivors will be examined by skillful gynecologists at their local provincial hospitals.

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