

DIRECT COST INPATIENT TREATMENT OF OVARIAN CANCER HOSPITAL ON EDUCATION IN SOUTH JAKARTA

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Abstract

Ovarian cancer is the cause of death from all gynecological cancers. Nearly 70% of epithelial ovarian cancer are not diagnosed until the advanced stages. High mortality due to this disease are asymptomatic. Assessment of ovarian cancer treatment costs largely unknown and not yet widely applied. Thus it has done research on the magnitude of the average cost of treatment based on treatment classes, the average cost of medical expenses per patient/ day action, and total costs of treatment of patients with ovarian cancer in inpatient teaching hospital in South Jakarta. By using analytic descriptive retrospective method. Data were obtained from medical records to see the condition of clinic patients and a memorandum of payment ovarian cancer patients who are hospitalized in the period January 2008 - August 2009. The 50 patients with ovarian cancer showed that, the age of ovarian cancer patients are generally found at the age of 45-64 years (58%) with duration of patient care on average 1-9 days. Class treatment room that has been chosen is a class III (52%). The average cost of treatment based on the largest class in the class I care for Rp.12.520.069 / patient / day (30%). Total cost of treatment for all patients is equal Rp. 911 880 070, -. which consists of the room, physician fees, drug costs and expenses of medical action. The average cost is the biggest cost of medical action of Rp. 1,424,325 / patient / day and drug costs Rp. 423 626, - / patient / day. The average cost of treatment per patient / day amounting to Rp. 2.026.602, -. The high cost of treatment and the existence of price differences in the treatment of patients with ovarian cancer can be caused by different patient conditions and already at an advanced stage.

Key words : direct cost, ovarian cancer, average cost

Introduction

Ovarian cancer is the cause of a death from all gynecological cancers. the high mortality is due to this disease is initially asymptomatic and only cause complaints if the metastasis has occurred, so that 60%-70% of patient present at an advanced stage, so the disease is also called the “ a silent killer”. The incidence of this disease in Indonesia is not yet known with the certainty because if the recording and a reporting of the disease in our country are poor. Preview at Hospital found to be approximately 50 patients each year based on medical record data in 2007/2008. Ovarian cancer is closely associated with the woman who has low fertility. Epidemiological studies claimed several important risk factors as a cause of ovarian cancer are women, giving a birth the first time at the age above 35 years

and women who have the family history of ovarian cancer, breast cancer or colon cancer. Women with a history of a first pregnancy occurred at an age below 25 years, the use of the contraceptive pill and a breast feeding will reduce as much as 30-60% of ovarian cancer. Environmental factors such as the use of talc, a galactosose consumption and the sterilization did not have any impact on the development of this disease. ^(3,7)

The cost analysis is broader than the cost of the quest (a cost finding). Search costs in this limited sense only in a trouble to find the cost of health the care unit. Search trouble cost is basically done by using a system known as the allocation of costs. In simple terms the allocation of costs presently's an attempt to transfer the indirect costs of an s service to the direct costs of other units. The cost analysis is the process of re-arrange the data information contained in financial statements to gain the proposed cost of sanatorium services, with other words the cost analysis is the distribution of unit costs of a conservation, operation units, and other public services unit to the care, an emergency room, or the central sanatorium profit from services handed to cases. ^(6,8,12)

Method

The research conducted is a descriptive study using secondary data from a retrospective view of medical records ovarian cancer patients and bill payment ovarian cancer patients who underwent inpatient at the General Hospital Center, South Jakarta period January 2008 – August 2009. The number of patients within the time span of patients selected according to the inclusion criteria.

Results

Table.1

The Distribution of patients with ovarian cancer who underwent hospitalization by age group

NO	Age (Years)	Number of Patients (person)	Percent (%)
1	15 – 24	5	10
2	25 - 44	14	28
3	45 – 64	29	58
4	≥65	2	4
Total		50	100

The percentages of ovarian cancer patients in different age groups showed that the largest proportion was 45-64 years old, accounting for 58%, and the youngest age group ≥65 years accounted for 4%. These results supported the study epidemiology that states that an important risk factor as a cause of ovarian cancer is women who first gave birth at the age above 35 years and who have a family history of ovarian cancer, breast or colon, whereas women with a history of first pregnancy occurred at age under 25 years, the use of

the contraceptive pill and breastfeeding will reduce as much as 30-60% of ovarian cancer. Delayed patient come to an early examination of the symptoms experienced at first due to this disease are asymptomatic and only cause complaints if metastasis has occurred, so that 60%-70% of patients present at an advanced stage at stage III and IV.^(3,5,7)

Table.2
The distribution of day care on the number of patients with ovarian cancer

NO	Leght of stay (Days)	Number of People (Persons)	Percentage (%)
1	1 – 9	31	62
2	10 - 19	16	32
3	20 – 29	3	6
Total		50	100

The percentage of long-day care of the number of patients with ovarian cancer who underwent hospitalization was the biggest percentage was 1-9 days to 62% and the smallest percentage was 20-29 days at 6%. This is probably the patient during treatment in a condition that requires intensive treatment and the stage of disease suffered by patients is a state of advanced stage, while in the care of 1-9 days, this may be due to undergoing surgery and recovery and therapy or chemotherapy in a row until otherwise recovered.^(13,15)

Table.3
Percentage of total class treatments of ovarian cancer inpatients

NO	Classroom	NO Number of Patient (people)	Percentage (%)
1	VIP	4	8
2	I	10	20
3	II	10	20
4	III	26	52
Total		50	100

The percentage of classes based on the number of treatment rooms for ovarian cancer patients who underwent inpatient hospital in South Jakarta in the period January 2008-August 2009, showed that the largest percentage of class III (52%). This is because the economic crisis that hit Indonesia so that the patient chooses treatment is class III-class service with a difference that is not too far away to the other class (the only difference being the treatment room facilities), it is clear that in the service class III may have a health condition enough room rental costs affordable for people with middle to lower, so that may ovarian cancer patients choose to grade III.^(1,11,13)

Table.4
Average inpatient ward of class of ovarian cancer inpatients

Class room	Number of patients	Leight of stay (Days)	Average Leight of stay (Days)
VIP	4	29	7
I	10	115	11
II	10	90	9
III	26	236	9
Total	50	470	9

Average inpatient care for the class, showing that the average hospitalization is the largest in class I for 11 days. This is because, in the health care class, I might have a health condition that is good enough to rent a room at an affordable cost for people in the medium, so that many ovarian cancer patients choose the class I. On inpatient services in hospitals, there is a variety of classes that the tariff treatment tailored to classes of treatments available in hospitals that care classes affect the cost incurred by the patient's hospitalization.

Table.5
The cost of medical action based on the age of inpatients with ovarian cancer

NO	Age (Years)	Number of Patients	Average Cost Per-person medical action Per-Day (Rp)	Percentage (%)
1	15-24	5	173.592	34
2	25-44	14	119.043	23
3	45-64	29	201.658	40
4	≥65	2	16.752	3
Total		50	511.045	100

The cost of medical action based on the age of ovarian cancer patients who underwent inpatient hospital teaching in Jakarta in the period January 2008-August 2009, showed that the average cost of medical action is the largest age group above 45-64 years, with the cost of Rp. 201.658/day. The average of the largest medical action is above the age group of 45-64 years, each for a cost of Rp. 201.658/day. With increasing age, the patients receiving medical action types will be more complex because the function of working power organs will decrease, so that intensive care is needed to overcome them.^(5,6,15)

Table.6
The cost of medical action based long day care inpatients with ovarian cancer

NO	Lenght of stay (day)	Number of Patients	The average cost of treating/ patient/Day	Percentage (%)
1	1-9	31	166.581	34
2	10-19	16	274.180	55
3	20-29	3	56.962	11
Total		50	497.723	100

The cost of medical treatment, based on the long days of inpatient treatment, showed that the cost of medical treatment measures the average per person, which is the largest in the long days 10-19 days, at a cost of Rp.274.180/day and a cost of rp.274.180/ a day. This may be due to the patient during treatment in a condition that requires intensive treatment and a stage of disease suffered by patients in a state of advanced stage. Long-day treatment resulting in increased medical action should be given, which in turn will affect the high cost of patients.^(1,10)

Table.7
Total Medical Costs by age of ovarian cancer inpatients

NO	Age (Years)	Number of Patients	Average Cost of treating Per-Per-Day/Patient (Rp)	Percentage (%)
1	15-24	5	1.512.227	15
2	25-44	14	2.693.620	26.6
3	45-64	29	5.528.547	54.7
4	≥65	2	372.027	3.7
Total		50	10.106.421	100

The cost of treatment based on age of ovarian cancer patients showed that the average cost of treatment is the largest age group above 45-64 years, with the cost of Rp. 5.528.547/day/patient. In view of the cost of treatment, over 45 years, of the 29 patients, an average of the highest treatment of Rp. 5.528.547/day, when compared with other age groups, because with age, the patient who received the type of treatment will be more complex organs the function of organs power will decrease, it would require more intensive treatment to overcome it.^(16,17)

Table.8
Total treatment costs based long day care inpatients with ovarian cancer

NO	Leight of stay (day)	Number of Patients	The average cost of treating/ patient/Day	Percentage (%)
1	1-9	31	1.774.057	59
2	10-19	16	827.429	29
3	20-29	3	392.203	13
Total		50	2.993.689	100

The cost of treatment based on the long days showed that the average medical cost per person is the highest in the old days, at a cost of Rp. 1.774.057/day. The study found that long day care the most is 1-9 days with an average treatment cost of Rp. 1.774.057/day/patient. This may be due to the patient during treatment in a condition that requires intensive treatment and a stage of disease suffered by patients in a state of advanced stage. Long days of treatment have resulted in increased therapy given doctors increased costs for doctors, which will ultimately affect the high cost of total treatment of patients.^(16,18)

Table.9
Average treatment cost per day based on the class room treatment of ovarian cancer

Class	Number of Patients	Average Medical Costs/patient/day (Rp)	Percentage (%)
VIP	4	8,578,125	21
I	10	12,520,069	30
II	10	11,653,012	28
III	26	8,818,375	21
Total	50	41,569,581	100

The average medical cost per day based on the class room treatment of ovarian cancer patients who underwent inpatient, ie, the average cost of class I of Rp.12.520.069/patient/day. The results obtained by processing research that show most bird classes are selected by ovarian cancer patients is class I with a percentage of 30%. It is clear that in the health care class I might have a health condition, it is good enough to rent a room at an affordable cost for people with medium health, so that many patients with ovarian cancer are in the class I choose. On inpatient services in hospitals, there is a variety of classes so that the treatment room tariff classes are tailored to the kinds of treatments available in hospitals, which care classes affect the cost incurred by the patient's hospitalization. This fact is in accordance with the average number of patients in class I and II are the same the biggest cost in the first year this is due to the results of calculations which show that the class of treatment effect on the high cost of treatment ovarian cancer who underwent ambulatory inpatient Hospital.^(1,2,18)

Conclusion

1. Age of ovarian cancer patient hospitalized in the Hospital Jakarta which many are in patients aged 45-64 years with a percentage of 58% with a total cost of RP. 5.528.547/patient/day (54.7%).
2. The class treatment room that has been chosen is a class III (52%) with average cost of Rp. 1.424.325/ a patient/ the day. The average drug cost of Rp. 423 626/ a patient / a day and the cost of treatment / a patient rate Rp. 2.026.602,-.
3. Total cost of treatment for all patients is equal Rp. 939. 189 070, -. which consists of the room, physician fees, drug costs and expenses of medical action
4. High cost of treatment and the presence of price differences in a cancer the therapy attribute to differences and the level of the patient's condition.

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