

COST ANALYSIS OF PATIENTS WITH SQUAMOUS CELL CERVICAL CANCER STAGE IIB-IIIB WITH PACLITAXEL CISPLATIN CHEMOTHERAPY FROM THE SOCIETAL PERSPECTIVE

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ABSTRACT

The high prevalence of cervical cancer patients and the variety of necessary expenses needed causing financial hardship to both the patient and hospital. Furthermore, the disparity between the INA-CBGs rates and the costs of treatment incurred by hospitals and the limited information regarding the costs of cervical cancer undergoing cisplatin paclitaxel chemotherapy as viewed from a societal perspective were the reasons to conduct this research. The aim of this study was to determine the cost of squamous cell cervical cancer patients at stage IIB-IIIB who received cisplatin paclitaxel chemotherapy from a social perspective. So in this study the difference in costs is used to calculate costs from a hospital perspective. This research was an observational study with a prospective incidence approach and consecutive sampling as the sampling method. This research was conducted from January to June 2017 at Sanglah General Hospital, Denpasar. Cost data from a societal perspective for six chemotherapy series were obtained from the Claim Guarantee Installation, Fund Mobility Section, interviews and filling in the logbook by patients and then calculated using the micro-costing method. The results of this study obtained five patients who met the inclusion criteria. From the perspective of BPJS Kesehatan, the average cost of cervical cancer with paclitaxel cisplatin chemotherapy was IDR 24.703.470,00. From a hospital perspective, the average cost of cervical cancer with paclitaxel cisplatin chemotherapy was IDR 6.619.204,00., and from the perspective of patients and their families, the average burden of costs for cervical cancer with paclitaxel cisplatin chemotherapy was IDR 9.149.300,00. Cost analysis on five squamous cell cervical cancer patients with stage IIB-IIIB with six series of paclitaxel cisplatin chemotherapy viewed from the perspective of BPJS Kesehatan, hospital was IDR 24,703,470.00, IDR 6,619,204.00, and IDR 9,149,300.00, respectively.

Keywords: Cervical Cancer; Chemotherapy; Cost Analysis; Paclitaxel Cisplatin; Societal Perspective

INTRODUCTION

Cervical cancer was the fourth most common cancer experienced by women in the world and is the second most common cancer that occurs in developing countries^[1]. New cases of cervical cancer at Sanglah General Hospital (now Prof. dr. IG.N.G.Ngoerah General Hospital) in 2015 totaled 200 patients and in 2016 it increased to 289 patients. The high incidence of cervical cancer is a concern for the authors, especially at Sanglah Hospital, so this research was conducted at Sanglah Hospital.

Cervical cancer created a large economic burden for patients, society and the health system^[2,3]. The high direct cost was influenced by various cost components^[4]. On average, the largest component of direct medical costs during cervical cancer care, namely medical action and pharmaceuticals^[5]. Patients who came at an advanced stage tend to receive more intensive therapy, resulting in higher costs^[6]. The main therapy currently available to treat cervical cancer was chemotherapy^[7], one of which was paclitaxel cisplatin combination chemotherapy^[8]. Chemotherapy was also cannot be separated from the side effects that have an impact on increasing the cost of treating cervical cancer^[9]. Cervical cancer was classified as a chronic disease, so it requires continuous medical treatment for a long time such as chemotherapy. This has the potential to cause excessive medical care spending^[10].

Medical costs were paid directly by the government, in this case Social Security Administration Agency, called the BPJS (Badan Penyelenggara Jaminan Sosial) Kesehatan through the Indonesia National Health Insurance, called JKN (Jaminan Kesehatan Nasional) program using the Indonesia Case Base Groups (INA-CBGs) payment pattern^[11]. So that these costs did not burden the patient, however it could be a problem for the hospital because the costs of treating

cervical cancer was generally higher than the INA-CBGs rates^[5]. The average direct cost due to cervical cancer hospitalization at Dr. Moewardi regional public hospital was not in accordance with the INA-CBGs tariff^[5]. Thus, there is a need for information regarding the direct medical costs of cervical cancer patients from the perspective of BPJS Kesehatan and the perspective of hospitals, called Sanglah General Hospital.

A comprehensive review of costs data was through a societal perspective^[12]. Costs was reviewed based on a societal perspective, including the BPJS Kesehatan perspective, hospital perspective, patient perspective and costs due to lost productivity^[4]. The burden of costs borne by patients, namely direct non-medical costs and indirect costs, which were estimated to be 60% of the total estimated costs. Direct non-medical costs and indirect costs were more varied compared to direct medical costs^[13]. Indirect costs incurred by patients came from lost productivity because patients could not work due to illness and treatment^[14]. Direct non-medical costs and indirect costs caused economic consequences for patients so that those costs still need to be taken into account^[13].

Based on this background, it is necessary to conduct research on the cost of cervical cancer with a societal perspective in terms of health, hospitals and patients and their families so that this research is carried out, entitled "Cost of Illness of Squamous Cell Cervical Cancer Patients Stage IIB-IIIB with Paclitaxel Cisplatin Chemotherapy at Sanglah General Hospital in Denpasar from a Societal Perspective, with the aim of knowing how much the cost burden of cervical cancer patients with paclitaxel cisplatin chemotherapy is viewed from the perspective of BPJS Health, hospitals and patients and their families.

METHODS

This study was an observational method which was carried out from January to June 2017 after the research was declared ethically feasible by issuing an Ethical Clearance Number: 1008/UN.14.2/KEP/2017 (Appendix 1) and having obtained a research permit with the number: LB.02.01/IXIV.2.2.1/13947/2017. This study used a total sample with a purposive sampling method, meaning that all samples (patients) who met the inclusion criteria for study were from January to June 2017. Observations were made before and after chemotherapy series I-VI with an interval of 21 days between series. The analysis of the cost conducted in this study was used a societal perspective with a prospective incidence approach. Cost data in this study included cost data from the perspective of BPJS Kesehatan, hospitals, and patients and their families. Cost data collection from the perspective of patients and their families was carried out prospectively with a certain period of time. Data collection was carried out a week after the patient has undergone chemotherapy. This might lead to the possibility of recall bias because the patient might not remember with certainty the amount of expenses incurred during the past week. So in this study, researchers also conducted interviews with the patient's family. According to Tunas et al. (2016), research must be conducted with a recall period of less than 1 week, so that more accurate conclusions are obtained^[15].

The sampling method used was consecutive sampling. The inclusion criteria in this study included new patients with a diagnosis of stage IIB-IIIB squamous cell cervical cancer, patients who were able to perform the entire six series of chemotherapy, patients who only received the paclitaxel cisplatin chemotherapy regimen, and patients who were BPJS Kesehatan participants. The

exclusion criteria for this study were patients whose progress could not be followed for certain reasons. Before determining which patients would be sampled, the researcher provided an explanation regarding the research through informed consent. If the patient agreed to participate in the study, the patient and guardian were asked to sign an informed consent form.

The cost calculation method used in this study was micro-costing, where the total cost was obtained by adding up each component of the costs required for the service. Cost data for INA-CBGs and non-INA-CBGs were obtained from the Claim Guarantee Installation at Sanglah General Hospital while patients were undergoing chemotherapy and control at the Obstetric and Gynecology Polyclinic at Sanglah General Hospital. Data on hospital costs were obtained from the Fund Mobility Section of Sanglah General Hospital, then all hospital cost data was accumulated while the patient was undergoing chemotherapy so that it became the total hospital cost. Data on direct non-medical costs and indirect costs were obtained from interviews with patients and their families and logbooks filled in by patients or their families to record all daily expenses while undergoing chemotherapy at the hospital.

Calculation of cost data from the perspective of BPJS Kesehatan was obtained by adding up the cost data of INA-CBGs and non-INA-CBGs. The INA-CBGs tariff was the amount of claim payments by BPJS Kesehatan to Advanced Referral Health Facility for a service package based on a grouping of diagnoses and procedures. The non-INA-CBGs tariff was a tariff outside the INA-CBGs package for several service items, such as chemotherapy drugs with a claim process that is carried out separately from the INA-CBGs tariff. The total hospital cost is the sum of all costs while the patient is undergoing chemotherapy at the

hospital. Furthermore, based on the total costs of the hospital, the hospital makes a claim to BPJS Kesehatan. BPJS Kesehatan uses payments based on INA-CBGs rates, where these rates are often different from the total hospital costs. Therefore, with the difference in claim rates between hospitals and BPJS Health. If the difference is negative, it will cause the hospital to bear the burden of these costs. Consequently, the cost analysis from the perspective of the hospital carried out in this study used the difference in claim rates, because this difference is actually a cost burden for the hospital. Hence, the cost calculation from the hospital perspective is obtained by adding up the difference between the total hospital costs and the costs from the BPJS Kesehatan perspective. Meanwhile, the cost calculation from the patient's perspective was to add up each cost component which was grouped into direct medical costs, non-direct medical costs, and indirect costs borne by the patients and their families.

RESULTS

1. Patient Characteristics

This study in cervical cancer patients was carried out for six months, from January to June 2017, five patients who met the requirements as participants in this study were obtained. Table 1 showed the characteristics of the patients who participated in the study.

Based on the table 1, it can be seen that from 5 patients, more patients aged less than 55 years, who were married at the age of less than 20 years were diagnosed with stage IIIB cervical cancer. Three of the patients who participated in the study were diagnosed with stage IIIB cervical cancer, and two of them were diagnosed with stage IIB. Four of the participants in this study came from Bali and one of them came from outside of Bali, namely Banyuwangi.

2. Cost of Cervical Cancer Patients with Paclitaxel Cisplatin Chemotherapy Viewed from the Perspective of BPJS Kesehatan

Based on table 2, it can be seen that the average cost from the perspective of BPJS Kesehatan in cervical cancer patients with paclitaxel cisplatin chemotherapy is IDR 24.703.470,00 with the highest total cost being IDR 25.909.600,00 and the lowest total cost being IDR 20.849.350,00.

3. Cost of Cervical Cancer Patients with Paclitaxel Cisplatin Chemotherapy From a Hospital Perspective

Based on table 3, it can be seen that the average difference in costs that is borne by the hospital for cervical cancer patients with cisplatin paclitaxel chemotherapy is IDR 6.619.204,00. The lowest cost difference is IDR 4.706.585,00 while the highest cost difference is IDR 7.936.392,00.

4. Cost of Cervical Cancer Patients with Cisplatin Paclitaxel Chemotherapy From the Perspective of Patients and Their Families

Based on table 4, it can be seen that the average cost from the perspective of patients with paclitaxel cisplatin chemotherapy is IDR 9.149.300,00 with the lowest cost being IDR 1.479.000,00 and the highest cost being IDR 16.276.500,00.

DISCUSSION

1. Patient Characteristics

Based on table 1, only 5 patients were obtained. In this study only five patients were found. This could happen because we applied the inclusion criteria for cervical cancer patients who were very specific, namely the squamous cell type, advanced stage, namely IIB-IIIB and who underwent six chemotherapy series.

Table 1. Characteristics of cervical cancer patients under paclitaxel cisplatin chemotherapy

Characteristics of patients (n=5)		Number of patients	Percentage
Stadium	IIB	2	40%
	IIIB	3	60%
Age at Married	15-20	4	80%
	> 20	1	20%
Age at Diagnosis	35-45	2	40%
	46-55	2	40%
	56-65	1	20%
Parity	2	3	60%
	3	1	20%
	5	1	20%
Education	SD	3	60%
	SMP	2	40%
Place of origin	Bali		
	Tabanan	1	20%
	Bangli	2	40%
	Jembrana	1	20%
	Outside of Bali		
Banyuwangi	1	20%	
Occupation	Housewife	1	20%
	Farmer	2	40%
	Entrepreneur	2	40%
Membership Type of BPJS Kesehatan	PBI	1	20%
	Non PBI	4	80%
Treatment Class of BPJS Kesehatan	1	1	20%
	2	0	0%
	3	4	80%

*n: number of samples; PBI: Contribution Assistance Recipients; non-PBI: non Contribution Assistance Recipients

Most cervical cancer patients cannot undergo chemotherapy for up to six series, but the purpose of setting very specific inclusion criteria is to provide more accurate cost analysis, only in the cases of chemotherapy for stage IIB-IIIB cervical cancer in squamous cell types that receive paclitaxel cisplatin as a chemotherapeutic agent for six series compared to not specific criteria of patients. Although the results may still not be representative of the majority of the population, however, in term of clinical setting, small differences in clinical outcomes can be statistically significant when large sample sizes are obtained. On the other hand, a large clinical outcome difference may not be statistically significant if the number of subjects is too small^[16]. There was one more cervical cancer patients who participated in the study were diagnosed at stage IIIB compared to stage IIB. This was

in line with the research by Dahiya et al. (2016), which stated that patients only accessed health services when they were at an advanced stage, of which 53.73% of patients were in stage IIIB, 40% were in stage IIB and the remaining 6.27% were in stages IIIA and IVA^[17]. It could be said that patients who seek treatment at Sanglah General Hospital were already at an advanced stage (IIB-IIIB). This was because in the early stages it was still possible not to cause symptoms^[18]. The large number of cervical cancer patients who seek treatment at advanced stages makes it important to carry out early detection with the Visual Acetic Acid Inspection method which was an examination to prevent cervical cancer that was quite efficient and effective because could be carried out by health workers such as nurses, midwives, and general practitioners and at low cost^[19].

One of the risk factors for cervical cancer was age at marriage. In this study, patients who were married in the age range of 15-20 years were more than patients who were married in the age range > 20 years. First sexual intercourse at an early age was associated with an increased risk of cervical cancer^[20]. The cervix experiences an increase in the hormone estrogen during adolescence which would facilitate vaginal acidification and cause metaplasia. Metaplastic transformation induced by estrogen and coupled with the presence of Human Papiloma Virus (HPV) would enhance cell transformation resulting in neoplastic changes^[21].

Based on table 1, it was known that the study participants came from Bali and outside Bali. Based on the Regulation of the Minister of Health of the Republic of Indonesia Number 52 of 2016 concerning Standard Health Service Tariffs in the Implementation of the Health Insurance Program, it stated that the administration of chemotherapy drugs was carried out at level III Health Facilities, one of which is Sanglah General Hospital. This caused cervical cancer patients to be referred from level II health facilities to level III health facilities to receive advanced level of care, such as chemotherapy at Sanglah General Hospital, which not only received referrals from Bali, but also areas outside Bali.

In this study, all cervical cancer patients were BPJS Kesehatan participants. Based on BPJS Kesehatan membership, patients were divided into two groups, namely Contribution Assistance Recipients or Penerima Bantuan Iuran (PBI) and non-Contribution Assistance Recipients or non Penerima Bantuan Iuran (non PBI). Patients who were in the PBI group received accommodation in the form of class III inpatient services. Patients in the non-PBI group received accommodation benefits in the form of inpatient services in accordance with contributions paid by BPJS Kesehatan participants^[22]. Based on

table 1, it could be seen that one patient received accommodation in the form of a class I treatment room and four patients received class III treatment room accommodation.

2. Cost of Cervical Cancer Patients with Paclitaxel Cisplatin Chemotherapy Viewed from the Perspective of BPJS Kesehatan

The difference in total costs from the perspective of BPJS Kesehatan for each patient was caused by several factors. One of the influencing factors was the difference in the number of treatment episodes. Patients with few episodes of hospitalization would have reduced rates for INA-CBGs. In addition, the difference in total costs from the perspective of BPJS Kesehatan was also influenced by the difference in non-INA-CBGs rates. Cervical cancer patients undergoing chemotherapy with the use of more and more drugs would increase the rate of non INA-CBGs. In this study, statistical analysis was not carried out on the factors that influenced the difference in the costs of INA-CBGs and non-INA-CBGs costs, but the relationship between factors, such as the number of episodes, types of episodes, class of treatment and dosage, on the costs of INA-CBGs and non-INA-CBGs were analyzed descriptively based on the data obtained.

One component that determines the total cost of cervical cancer patients was the cost of INA-CBGs. Based on table 2, it was known that the highest cost of INA-CBGs in cervical cancer patients with paclitaxel cisplatin chemotherapy was IDR 15.797.200,00, namely in patients with PCIS05 due to patients undergoing chemotherapy series I in class I treatment rooms. The cost of INA-CBGs in PCIS01 patient was also classified as high because patient underwent outpatient episodes more than other patients because the patient needed to carry out repeat laboratory tests and re-control.

Table 2. Cost of cervical cancer patients with paclitaxel cisplatin chemotherapy from the perspective of BPJS Kesehatan

Patient (n=5)	Costs from the Perspective of BPJS Kesehatan		Total Costs* (Rp)
	INA-CBGs (Rp)	Non-INA-CBGs (Rp)	
PCIS01	15.697.600,00	10.192.000,00	25.889.600,00
PCIS02	14.936.600,00	10.363.000,00	25.299.600,00
PCIS03	13.795.100,00	12.114.500,00	25.909.600,00
PCIS04	11.892.600,00	8.956.750,00	20.849.350,00
PCIS05	15.797.200,00	9.772.000,00	25.569.200,00
Average cost/patient	14.423.820,00	10.279.650,00	24.703.470,00

*n: number of samples, IDR: Indonesia Rupiah, *Total costs= total costs from the perspective of BPJS Kesehatan (Cost of INA-CBGs + non INA-CBGs)

In contrast, the lowest INA-CBGs cost was IDR 11.892.600,00., which was for PCIS04 patient who had a small number of visits to Sanglah General Hospital. Based on the results of interview with the PCIS04 patient, the small number of visits was due to the considerable distance to Sanglah General Hospital, so the patient chose to carry out control and laboratory tests at the Tabanan Regional General Hospital.

Based on table 4 it is known that, besides the cost of INA-CBGs, there were other components that determine the total cost from the perspective of BPJS Kesehatan, namely non-INA-CBGs costs which consisted of chemotherapy drugs. The highest non-INA-CBGs cost for patients was IDR 12.114.500,00., namely for PCIS03 patient because the patient required higher drug doses than other patients. The lowest cost was IDR 8.956.750,00., namely for PCIS04 patient because the patient required the lowest dose of chemotherapy drugs compared to other patients. The dose of paclitaxel and cisplatin was 135 mg/m² for paclitaxel and 50 mg/m² for cisplatin^[23]. The limitation of this study was that the authors did not collect data on the patient's weight and height so that body surface area and dose calculations could not be calculated accurately. According to Pan et al. (2016), recording body weight was important to do so that there were no drug dosing errors. Administration of weight-based dosing would increase knowledge

about the safety, efficacy, and administration of economically oriented drugs and assist in finding research opportunities in clinical practice^[24]. Thus, in this study it is suggested to collect data on the patient's weight and height in future studies, so that the dose of each patient can be calculated more accurately and in the end the effect of the drug doses in chemotherapy versus non-INA-CBGs costs can be determined more precisely.

3. Cost of Cervical Cancer Patients with Paclitaxel Cisplatin Chemotherapy From a Hospital Perspective

Differences in cost differences between patients were due to variations in inpatient classes, number of treatment episodes and doses of chemotherapy drugs received by patients. This is in line with the research of Wintariani, et al. (2017) which stated that the factor that significantly influenced the real cost difference with the INA-CBGs rates in cervical cancer patients who received inpatient chemotherapy was the class of care^[25]. In this study, PCIS05 patient underwent chemotherapy in class I inpatient room with the lowest cost difference. This was because the rates for INA-CBGs in class I inpatients are higher than those in class II and class III.

In general, it could be seen that the difference between hospital fees and costs from the perspective of BPJS Kesehatan in this study, showed a negative difference.

Table 3. Cost of cervical cancer patients with paclitaxel cisplatin chemotherapy from the hospital perspective

Patient (n=5)	Total Hospital Cost (IDR)	Total Costs from the Perspective of BPJS Kesehatan (IDR)	Cost Differences* (IDR)
PCIS01	31.916.314,00	25.889.600,00	(-) 6.026.714,00
PCIS02	32.096.552,00	25.299.600,00	(-) 6.796.952,00
PCIS03	33.845.992,00	25.909.600,00	(-) 7.936.392,00
PCIS04	28.478.728,00	20.849.350,00	(-) 7.629.378,00
PCIS05	30.275.785,00	25.569.200,00	(-) 4.706.585,00
Average Costs from The Perspective of Hospital (Rp) / patient			6.619.204,00

*n: number of samples, IDR: Indonesia Rupiah, *Cost Differences = Costs from the perspective of BPJS Kesehatan – Total Hospital Cost

The negative difference means that the costs for the hospital are greater than the costs from the perspective of BPJS Kesehatan, so that the difference becomes a burden for the hospital. Another study conducted by Oktaviani, et al. (2012) regarding the analysis of cervical cancer treatment costs at Dr. Moewardi regional public hospital also showed the same results, where the cost of cervical cancer treatment was generally higher than the INA-CBGs package rates^[5]. However, in Budiarto and Sugiharto's (2013) study regarding the costs of INA-CBGs claims and the real costs of catastrophic diseases, including cancer, the results showed different, where the costs of INA-CBGs were greater than the real costs based on hospital rates so that the hospital did not lose money^[26]. This showed that it is necessary to reassess the use of resources, especially in One Day Care (ODC) chemotherapy so that it can be managed properly. more efficient but still prioritizing patient safety. Based on the Regulation of the Minister of Health of the Republic of Indonesia No. 27 of 2014 states that efficiency that can be carried out by hospitals is not only from the use of medical preparations and procedures, but also from the planning and procurement of goods and services.

Based on interviews with the Head of Outpatient Coder Claim Guarantee Installation at Sanglah General Hospital, information was obtained that in the implementation of INA-CBGs, a negative

difference might not directly indicate a loss to the hospital. This was in line with the Minister of Health of the Republic of Indonesia Number 27 of 2014 concerning Technical Guidelines for the INA-CBGs System indicating that negative discrepancies can be overcome by implementing cross subsidies, where positive discrepancies in one case or group of cases can be used to cover negative discrepancies in other cases so that hospital services remain prioritizing service quality and patient safety. This cross-subsidy has been implemented at Sanglah General Hospital, so that the hospital as a whole did not suffer losses.

4. Cost of Cervical Cancer Patients with Cisplatin Paclitaxel Chemotherapy From the Perspective of Patients and Their Families

Costs from the perspective of patients in this study, consisted of direct medical costs, direct non-medical costs, and indirect costs. Based on table 4, it could be seen that the greatest costs was indirect costs and the lowest was direct medical costs. The amount of indirect costs was due to the loss of patient income and patient caregivers or families while the patient is undergoing treatment at Sanglah General Hospital. Cervical cancer patients who were participants in the study were BPJS Kesehatan participants. This lead direct medical costs in the form of health services at Sanglah General Hospital to be paid by BPJS Kesehatan.

Table 4. Cost of cervical cancer patients with paclitaxel cisplatin chemotherapy from the perspective of patients and their families

Cost Category	Average Cost (IDR) (n=5)	Minimum Cost (IDR) (n=5)	Maximum Cost (IDR) (n=5)
Direct medical cost	262.500,00	50.000,00	505.000,00
Direct non-medical cost	4.318.800,00	1.429.000,00	8.989.500,00
Indirect cost	4.568.000,00	0,00	8.300.000,00
Total Cost / patient	9.149.300,00	1.479.000,00	16.267.500,00

*n: number of samples; IDR: Indonesia Rupiah

However, based on the results of interviews with cervical cancer patients who were participants in the study, information was obtained that patients incurred a number of costs that were classified as direct medical costs. Components of direct medical costs incurred by cervical cancer patients with paclitaxel cisplatin chemotherapy who were research participants included BPJS fees, medicines, such as Durol®, Mylanta® and herbal medicine (soursop leaves).

In this study, from the results of interviews and logbook compilation, it was found that cervical cancer patients who received paclitaxel cisplatin chemotherapy incurred out-of-pocket non-medical costs. Components of direct non-medical costs incurred by patients included costs for transportation, parking, food and drink, communication, administration, prayers, toilet equipment, laundry, lodging, and costs for buying sanitary napkins. In this study, the highest cost category incurred by cervical cancer patients with paclitaxel cisplatin.

chemotherapy was transportation costs followed by lodging costs.

Cervical cancer raised indirect costs, called productivity lost due to disease. In patients undergoing chemotherapy, indirect costs were caused when the patient was unable to work (loss of productivity) to receive therapy^[27]. The highest indirect cost of cervical cancer patients with paclitaxel cisplatin chemotherapy was IDR 8.300.000,00 because the patient was an employee and worked at outside Bali so that the patient lost productivity while the patient was undergoing treatment at Sanglah General Hospital. In addition, the

caregiver of that patient also lose productivity because as an entrepreneur, so the caregiver could not earn income because had to accompany the patient during chemotherapy. While the lowest cost was IDR 0.00 because the patient was a housewife who had no income and the patient caregiver worked as a civil servant so that the caregiver did not lose productivity while the patient was undergoing treatment at Sanglah General Hospital.

The impact of the results of this study is that it can provide valuable information to patients, hospitals and to payers or insurers about costs related to cervical cancer undergoing chemotherapy for up to 6 cycles, so that later it can be used as a basis for calculating unit costs.

CONCLUSION

Stage IIB-IIIB squamous cell cervical cancer at Sanglah General Hospital Denpasar creates a large burden of costs from a societal perspective, including the BPJS Health perspective with an average of IDR 24.703.47,00 per patient, the hospital perspective with an average of IDR 6.619.204,00 per patient, and the perspective of the patients and their families with an average of IDR 9.149.300,00 per patient.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest in this research.

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