



# ISPO 17th WORLD CONGRESS

Kobe Convention Center  
Kobe, Hyogo, Japan

5 – 8 Oct 2019

BASICS TO BIONICS

## ABSTRACT BOOK



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#### 4.3.8.b

### Costing System Analysis to Meet Budgetary Needs for Disabilities Orthotic Prosthetic Services

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#### BACKGROUND

The national basic health research 2013 revealed a disability rate of 11%, i.e. an increase injury 7.5 to 8.2%. Since 2014, the patients in lab clinic Jakarta I Health Polytechnic have increased. Around 100 patients are in waiting list, while others must carry out routine checks. The services performed because of getting aid from donors. Cost of Orthotic Prosthetic Services (OP) need for continuity services. Research review in low-income countries indicates OP policies have not considered demographic and socio-economic factors.

#### AIM

This study aims to develop costing system analysis of Orthotic Prosthetic Services. It will obtain product determination, and production flow; costing formula and average costs; correlation between costing with budgeting and dominant variables.

#### METHOD

The study was conducted in two steps. Firstly, it was done in Jakarta I Health Polytechnic i.e. focus group discussion to faculty members, followed by content analysis to determine product and flow of production ; document reviewed of one year (2015) cost transaction, identified cost centers of support service units and cost center of service units, developed template costing instruments, continued with costing analysis used double distribution method. Secondly, it held in Surakarta Health Polytechnic. The purposive sampling to 42 respondents of faculty members was interviewed by using questioners that has been tested for validity. Multivariate analysis was conducted to find the most dominant variable for budgeting.

Table 1. The costing formula and unit cost OP according to grouping product (in Indonesian Rupiah, 1 USD = IDR 13,000)

No.	Production unit	Q	Formula Unit Cost					
			Formula 2 Total cost		Formula 2 Total cost - investment cost		Formula 3 Total cost investment) - (salary and	
			Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost
1	OGATAS	144	948.717.692	6.588.317	748.620.856	5.198.756	619.173.084	4.299.813
2	PAGATAS	36	942.092.944	26.169.248	741.933.700	20.609.269	612.485.928	17.013.498
3	OGAWAH	144	942.094.725	6.542.324	741.935.481	5.152.330	612.487.709	4.253.387
4	PAGAWAH	48	942.094.725	19.626.973	741.935.481	15.456.989	612.487.709	12.760.161
5	SPITIK	48	942.094.725	19.626.973	741.935.481	15.456.989	612.487.709	12.760.161
Average OP cost				15.710.767		12.374.867		10.217.404

#### RESULTS

The study produces costing system analysis of OP that consist of laboratory clinic as production unit, orthotic prosthetic devices as output product, grouping product based on limb area: OGATAS (orthotic of upper body motion), OGAWAH (orthotic of lower body motion), PAGATAS (prosthetic of upper body movements), PAGAWAH (prosthetic of lower body movements), SPITIK (Spinal orthotic), and flow of production will be structured by the grouping product. There are 3 costing formula and average cost as shown in table 1. The most fabricated product is orthotic with lowest cost IDR 4,253,387; average cost grouping product IDR 10,217,404. Multivariate analysis formula 3 indicated there was a significant relation between costing system analysis and budgeting (BHP or consumable  $p = 0.038$ ), average cost  $p = 0.020$ , orthotic cost  $p = 0.006$ ). The dominant variables associated with budgeting is average cost ( $p = 0.020$ ).

#### DISCUSSION AND CONCLUSION

The number of limb defects in Indonesia increase. This is related to Indonesia's geographic that prone to natural disaster. Costing system analysis for disabilities orthotic prosthetic services formulate the guidance and instrument costing template. The cost of consumables and orthotic need more attention. With some data adjustments, this costing system could be used by OP study program to calculate and propose budgetary need for laboratory clinic (formula 3). It also can be used for private clinic (formula 1 or 2).

#### REFERENCES

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#### ACKNOWLEDGEMENTS

I would like to thank the Ministry of Research and Technology's and Ministry of Health which has funded this research.