

## ABSTRACT

### **Capacity Planning Development Based on Analysis of Demand and Supply Balance in Neonatal Care Unit of Dr. Haryoto Hospital in Lumajang**

Neonatal mortality rate in Indonesia was still high, estimated 157.000 neonatal dead in each year. Patient death of LBWI (Low Birth Weight Infants) increased 3.79% from 2009 to 2011 in neonatal care unit of Dr. Haryoto Hospital in Lumajang. Number of patients (Demand) every year was increase. While the facilities, infrastructure and facilities (Supply) was not increased. The research aims to develop a capacity planning based on analysis of demand and supply in neonatal care unit of Dr. Haryoto Hospital in Lumajang.

This research is an observational study with cross sectional design. Population and sample was taken from all health workers in neonatal care unit. Dr. Haryoto Hospital in Lumajang consist of 2 pediatricians and 24 nurses. These results indicate that, 1) Number of patients (Demand) in 2012 decreased compared to 2011, but from 2009 the trend is increased, 2) Forecasting demand in 2013 until 2017 continued to increase, 3) Training of nurses on average 1 time in 4 years, quantity of nurses are not appropriate with the number of bed and patient, 4) Neonatal care is not matching to the standard, the room temperature is not accordance with the standard, equipment of medical does not conform to health department standards in RS type B, 5) Demand is greater than the supply, 6) Focus group discussions provide recommendations and preparation of additional capacity and improved neonatal reference standard (de Bottleneck), 7) Provide recommendations capacity planning preparation; expand the neonatal care, increase the number of nurses, increase the number of bed patient, complete the equipment, making the procedure permanent. It is expected that the preparation of capacity planning based on demand and supply will decrease mortality neonatal care unit of Dr. haryoto hospital in lumajang.

**Keywords:** Capacity Planning, Comformity of Demand and Supply, Neonatal Care Unit