## **CHAPTER 8**

## CONCLUSION AND RECOMMENDATIONS

Based on the study, findings, conclusion and recommendations will be made to improve the health service in the catheter unit. The conclusion of the study will be presented in the section 8.1, and recommendations will be presented in the section 8.2.

## 8.1 Conclusion

From the study, it was revealed that variable cost consists of 56% of the total cost while fixed cost consists of 44% of the total cost. Further, it was found that the number of patients who visited the catheter unit in the year 2003 has been exceeded the break-even point. Even though, the government offered the subsidy \$ 480,548.50 to the catheter unit, it could be recommended from the earning made by the catheter unit from the three functions.

According to the results obtained for WTP for each function, the group of people whose income exceeds \$1,500 are willing to pay \$375 for diagnosis, \$850 for balloon, and \$1,600 for pacemaker. At these prices, it was found that the revenue earn from these three functions exceed the cost by amount of \$145,680.80. Therefore, from this income group, the catheter unit earns surplus. However, when examining the WTP by the other groups, it was found that the break-even point has been exceeded the equivalent number of patients. Accordingly, the catheter unit could not cover its cost from these income groups. Hence, catheter unit incurred loss from the people whose income below \$1,500.

In examining the revenue and cost for each function, it could be found that in the case of diagnosis function, all income groups are willing to pay more than the costs. Regarding the balloon operation, the catheter unit earn surplus from people whose income exceed \$1,500 which could be sufficient to cover 23.5% of loss incurring from poor patients. When concerning the pacemaker operation, all income groups are willing to pay less than the costs.

Based on the result obtained from the survey findings, catheter unit incurred net revenue amounting of \$11,855.52 from the diagnosis, and its incurred net loss from balloon and pacemaker amounting of \$5,095.68 and \$117,216.62 respectively. Catheter unit maximizes its net revenue from diagnosis, balloon and pacemaker at the current price, but beneficial for patients increase when prices decreases for all functions. In the year 2003, uninsured diagnosis patients leaved a difference which can cover the difference in cost for 95 poor patients, for balloon operation, uninsured patients can cover the difference in cost for 2 poor patients.

Economic benefit for patients and government can be estimated using sensitivity analysis for 5, 10, 15 and 20 years, number of years saved is multiplied by GDP per capita to estimate economic benefit for patients. Economic benefit will be \$4,480 for 5 years, \$8,960 for ten years, \$13,440 for 15 years, and \$17,920 for 20 years. Economic benefit for government from each patient was estimated of \$1,636 for five years, \$3,295 for ten years, \$4,955 for 15 years, and \$6,614 for 20 years.

## 8.2 Recommendations

1. According to the findings from WTP for people whose income more than \$1,500. It could be revealed that decrease in price of diagnosis to \$375, and balloon to \$850 is beneficial for patients. This benefit is more than the loss for the government from each patient. Therefore, it can be calculated that the benefit for each patient from decreasing the price of diagnosis \$100.75 whereas the loss of government is \$51.96 from each patient. Regarding balloon, decreasing in price leads benefit of \$131.25 for each patient while the loss for the government is \$92.66. When considering the benefits from decreasing the price of pacemaker, it was found that the benefit for each patient is \$380.45 while the loss for the government is \$397. For this result, it could be seen that the loss incurring from decreasing the price exceed the benefit, and therefore, it is not recommended to reduce the price of pacemaker operation. However, concerning diagnosis and balloon operation, it was found that decreasing price leads the benefit for each patient greater than the loss incurred by the government. Therefore, it can be

- recommended that decreasing the price for diagnosis and balloon operation to maximize the benefits for patients.
- 2. From the findings, it could be found that the revenue earned from rich people can be used to cover the part of the cost incurred for poor patients' treatments. Therefore, it can be recommended to introduce a price discrimination system in such a way that rich people pay the full cost while subsidizing the poor by granting health insurance policy to the poor people. So that the government can recover the cost of the health insurance granted for poor people with the surplus earned from the rich people.
- 3. From the result, it could be found that there is an economic benefit for patients and for the government to take necessary steps to expand the capacity and improve the facilities of the catheter unit.
- 4. Extend the service by establishing a new catheter unit in Gaza strip.
- 5. Prepare a survey to take into consideration WTP for all price system. This information will be necessary for any possible adjustment for the price system.
- 6. Conduct a more accurate study and analysis of costs in a hospital rather than the study and analysis of individuals departments.