Applying the concept of willingness to pay in the anesthetic management

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Willingness to pay (WTP) means the maximum amount of medical cost a patient is willing to pay to gain benefit or prevent any risk in medical care. This implies efficacy measuring the product of medical service by means of monetary units. Its initial application in healthcare was shown by Acton [1] in his analysis of cost-benefit from a differential amount of payments made to build mobile coronary care units to prevent the risk of death from heart attack. Tang et al [2] reported cost-effectiveness, cost-benefit and efficacy of medical cost in regards to the use of ondansetron for the prophylactic antiemetic for the ambulatory anesthetic patients.

Postoperative nausea and vomiting (PONV) as well as postoperative pain are common complaints of patients underwent general anesthesia. In order to prevent such postoperative complications, patients must pay a certain amount of medical charge. Several reports on cost-benefit analysis for PONV prevention measured the value of benefit a patient gained from such prophylactic medical service, because benefit cannot be estimated directly in economic value [3-6]. This may indicate not only the economic efficiency but also the monetary value of the optimal clinical outcome, reflecting the decision made by a patient on investing certain medical resource.

WTP may vary, depending on age, income, level of education, severity of disease, possibility of cure as well as healthcare service and culture. Previous studies on WTP for prevention of PONV demonstrated a broad range of medical cost from 17 US dollars to 68 euro [3,5,7]. This means the capital value of which the patients underwent surgery at that time might have thought reasonable for PONV prevention. Because it is quite inadequate to directly apply the analyses done in other countries, the study by Chung et al [8] is valuable in Korea although it seems outdated. The results showed the mean value of WTP for PONV prevention is 30,000 won, and the value of WTP is affected by the patient’s age, income, and the history of PONV. In this study, there are two considerations. First, there would be the difference in the degree of distress experienced from PONV between patients and anesthesiologists. Also, there would be a large difference between the ones who experienced PONV and others who didn’t. Unlike the postoperative pain, how much does a patient who does not have experience of PONV undergoing elective surgery think seriously of suffering from PONV? Second, how well does a patient understand the possibility of occurring PONV after general anesthesia? Compared to the mean value of 30,000 won for PONV prevention, 90% of patients who have the history of PONV were willing to pay more than 30,000 won. This result suggests those patients who had the history of PONV considered far more seriously for the importance of PONV prevention and were willing to pay more than the ones who didn’t. Thus, it would have been better if the study focused on the difference between the patients with the PONV history and the ones without the history.

It would be ridiculous to judge the value of healthcare service only based on the cost-benefit analysis. However, it cannot be denied that the control over decision-making on medical care is changing gradually from healthcare provider to either a patient or medical insurance management organization. Therefore, it is absolutely necessary to study the cost-benefit on medical service, especially where are greater degree of patient’s right to make a decision. In Korea, where only limited resource is controlled under the national healthcare insurance, medical service cannot satisfy the demand of high quality of medical service that patients want. Particularly, when patients poorly understand economic value of benefit for new medications,
new treatment modality, or new medical devices along with rapidly developing medicine and medical science, there would be greater gap. Furthermore, lack of study on cost-benefit analysis leads to failure to demonstrate patients WTP medical cost for patients’ own benefit in Korea. In order to settle such issues, further study on WTP related not only to PONV or postoperative pain but also to the benefit of appropriate anesthetic management including anesthetics, anesthetic technique, or monitoring device, is required; thus, patients’ will for better medical service can be reflected in clinical setting.

REFERENCES

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