

Anaesthesia has been cited as one of the medical practices that escalate the cost of expenditure on healthcare. In view of this, spinal anaesthesia has been proposed as a method that can lower surgical costs. However, medics in Kenya are not yet to fully embrace spinal anaesthesia. The reasons for the low usage rates of the spinal anaesthesia are not well known. This study compared the cost-effectiveness of spinal anaesthesia and general anaesthesia. It also sought to establish the factors that explain the low utilization rates of spinal anaesthesia among medics in Kenya. A survey approach was adopted in this study. The population for this study was drawn from three randomly chosen hospitals within Nakuru Municipality. Patients operated for Benign Prostatic Hyperplasia (BPH) within the period 1<sup>st</sup> January 2003 and 31<sup>st</sup> December 2006 in the three hospitals formed the sampling frame for this study. Seventy three such patients were identified and formed the study sample. The data for this study was collected by way of document analysis. A coding scheme was developed to gather secondary data. A focus group discussion was conducted to a sample of surgeons, anaesthetists and hospital administrators/proprietors in order to collect their perceptions on spinal and general anaesthesia. An anaesthetic complication index was then developed. This is an ordinal scale that measures the degree of post operative complications after surgery. It has three levels beginning with three for the absence of any complication, two for one complication and one for multiple complications. The higher the score the less the post operative complications a patient has. The research instruments for this study were pre-tested on a few patients and medical staff in Naivasha Sub-District Hospital. These research tools were used to gather data by the researcher with the help of two trained research assistants. Data was coded and analyzed using the statistical software package SPSS Version 13. Student's t tests were used to compare data on the cost effectiveness of spinal anaesthesia and general anaesthesia. Finally, a ratio of the net costs to the net health outcomes of both spinal and general anaesthesia was calculated. Patients in this study had an average of 71.19 years. The average cost of anaesthetic drugs for general anaesthesia was Kshs. 2206.30, while that for spinal anaesthesia was Kshs. 1548.60. The differences in these costs were statistically significant ( $t = 3.87$ ,  $df = 71$ ;  $p = 0.000$ ). Patients operated under spinal anaesthesia had a mean of 2.47 on the anaesthesia complication index, while those operated under general anaesthesia had a lower mean of 2.03. The lower complication index score obtained in general anaesthesia implies that patients had relatively more post operative complications. The differences in the complication index were statistically significant at 95% confidence level ( $t = 2.40$ ,  $df = 69$ ;  $p = 0.019$ ). The incremental cost effectiveness of this study was calculated as -1494. Adopting spinal anaesthesia in the treatment of BPH results in a reduction in costs and aversion of anaesthetic complications. Medics in Nakuru have favourable knowledge, skills and attitudes towards spinal anaesthesia. Factors that explain this are the least costs, aversion of complications and the ease of performing spinal anaesthesia. However, their usage of this technique was very low. Lack of spinal kits and the tradition of using general anaesthesia explain this low usage rates. Availing spinal kits and sensitizing medics on benefits of spinal anaesthesia might help in the uptake of spinal anaesthesia where indicated.