

This is a sociological study of factors that influence the functional status of biomedical equipment in selected hospitals in Nairobi. It compares Kenyatta National Hospital, Nairobi Hospital and Mater Misericordiae either as users or in maintenance in each of the three hospitals.

A sample of 128 user respondents was drawn through stratified proportional random sampling. 20 maintenance respondents, 7 key informants and 81 types of biomedical equipment were selected purposively. Questionnaires, interviews and observation methods were used to collect data. Proportions, mean and overall scores were used to summarise data which were later presented in tables to ease comparison.

A comparison of the three hospitals indicated that functional status of biomedical equipment was highest in the Nairobi Hospital, while it was average in Mater Hospital and Kenyatta Hospital. Although there was a general shortage of middle and highly skilled maintenance personnel for biomedical equipment, the shortage was acute in Mater Hospital and to a lesser extent in Nairobi Hospital. As a result, the private hospitals were reported to rely almost entirely on sub-contracting of costly private maintenance services. On the contrary, Kenyatta Hospital relied mainly on her own maintenance personnel. Unlike Kenyatta Hospital and Mater Hospital, biomedical equipment in Nairobi Hospital were given preventive maintenance services. The latter hospital also had well-kept maintenance records which were consulted whenever equipment or maintenance facilities were being purchased. Though Kenyatta Hospital had good records, they were rarely referred to. Mater Hospital had no consistent maintenance records. When the level of participation of the maintenance department in the decision making for equipment maintenance was assessed, Nairobi Hospital scored highest, followed by Kenyatta Hospital. Mater Hospital had the lowest score. Consequently it was not surprising when the functional status of equipment was found to be highest in Nairobi hospital, followed by Mater Hospital. It was lowest in Kenyatta Hospital.

With this scenario in mind, the study recommends decentralisation of the current complex bureaucratic decision-making procedures in order to hasten purchasing of equipment and maintenance facilities in Kenyatta and Mater Hospitals. An increase in the financial allocation for maintenance of biomedical equipment and improved collaboration between maintenance personnel, the administration and equipment users would ensure better maintenance of equipment at Kenyatta Hospital.

At the national level, government health policies should be re-evaluated to ensure that technological capacity building meets the technical and manpower requirements of the medical technology imported into the country.