

MEDICAL DEVICES MANAGEMENT DEVELOPMENT AT INSTITUTE FOR MOTHER AND CHILD

St. Gatcan^{1,*}, P. Stratulat¹, C. Pislaru¹, V. Sontea²

¹ *Institute for Mother and Child, Chisinau, Moldova*

² *Technical University of Moldova, Chisinau, Moldova*

*E-mail: gatcanstefan@yahoo.com

The maintenance, verification and medical devices management have become priority in health policy in many countries, many studies proving that by means of coherent policies in this field it can improve the cost / efficiency ratio of use the advanced medical technology, growth the patient safety and, not least, growth the quality of medical act.

The Medical Devices Management (MDM) includes all actions necessary to ensure an effective use of the medical devices; the planning, maintenance, and replacement of the medical devices in the environment where community of services, confidentiality, reliability are essential.

In Republic of Moldova the Medical Devices Management started in 2008 through the moldovan-swiss projects Modernization of the Perinatal System and Regionalization of Paediatric Emergency Services and Intensive Therapy. The Medical Engineering and Metrology Department was founded for ensuring the optimal conditions for the provision of effective, safe and qualitative medical devices, in order to guarantee quality of medical services, complex organization of measures and daily activities on maintenance and current repair of medical devices at the Institute of Mother and Child. In this department 9 persons of which 4 bioengineers activate.

The local norms at the level of medical institution were developed and implemented: steering and functioning regulation of the organizational structure; datasheet at staff from the organizational structure; maintenance sheet of the medical device; annual plan for the maintenance of medical devices; service sheet; maintenance report etc.

The analysis of expenses for the maintenance of medical devices of the Institute of Mother and Child, for a period of 4 years, demonstrates that total expenditure twice decreased in 2013 against 2010. The analysis of efficiency of the preventive maintenance demonstrates that the subject to preventive maintenance medical devices are subject to failure 2 times less than the not subject to maintenance devices.

The analysis of the stationary time of the damaged medical device indicates that 16% of damaged devices were repaired in less than one hour, 82% of the devices were repaired in a time period of 1-5 hours and 2% in the 5-24 hour and only 3 devices in a period up to one month.

During the conduct of various trainings and training for users, the number of failures due to user errors and abuse decreased significantly, amounting to only 31 cases and 13 cases in one year.

In the Institute of Mother and Child, a survey was carried out on the necessity and effectiveness of Medical Technology Management on the quality of services provided by the institution and 166 persons participated (heads of departments, doctors, superior nurses, nurses).

The result of the assessment of survey on the need to implement the Medical Technology Management (166 persons) - 65.7% of interviewed answered very necessary and 34.3% - necessary.

The implementation of Medical Devices Management according with European and national norms provides for medical institutions providing of high quality services, ensuring patient and user safety, maintaining a high level of performance and safety of medical devices in use, employment of use actions and service in the norms recommended by manufacturers of medical devices in a device suitable maintenance strategy and the optimization of financial resources and cost efficiency of the medical act.