Introduction: The prescriptions of radiation protection standards ensure the protection of users and medical personnel. The compliance of those standards are not easy in developing countries (sub-Saharan Africa) because of difficulties linked to insufficient resources causing organizational problems. Integrating this parameter ensures more effectiveness to application of the standards.

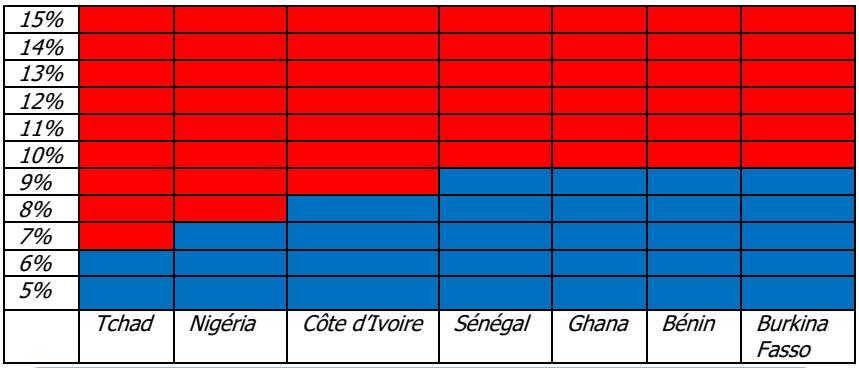
The examination of some risks related to the technological development of medical devices allows to see more conditions of effectiveness of the applicable standards.

I-Risks associated with technological innovations in nuclear medicine

With the technological development, medical devices are more and more sophisticated and this generates a specific need for training for practitioners. The radiation protection system should then guarantee the effectiveness of adequate training specifically in developing countries where the risk of error due to under-training is more.

The financial and human resources (university specialists) to cover the need for continuing education are insufficient and the legal framework does not define the profiles and curricula for being practitioners in medical imaging.

Dépenses de santé/PIB (2012)



To ensure continuous training, civil organizations (civil electrical engineering organizations) can intervene for a better mastery of the manipulation of medical devices and the texts recommend the training methods.

This organization should have access to the report of errors or incidents sent to the designers of medical devices in order to be able to integrate them into the training programs.

II- Conditions for an evaluation of medical devices in developing countries

The marking system for medical devices ensures upstream control.

Quality control ensures their performance, which could be more sustainable with the involvement of electrical engineering specialists.

Conclusion: The integration of factors specific to developing countries (Africa) helps to refine radiation protection standards. involve specialized civil society organizations facilitates their application.

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