

To assess the Knowledge, attitude & practices of bio-medical waste management among medical and housekeeping staff.

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Batch 2014-2016**

Background

- According to Biomedical Waste (Management and Handling) Rules, 1998 of India “Any waste which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities pertaining there to or in the production or testing of biologicals.
- The waste produced in the course of healthcare activities carries a higher potential for infection and injury than any other type of waste.
- Inadequate and inappropriate knowledge of handling of healthcare waste may have serious health consequences and a significant impact on the environment as well. It is estimated that annually about 0.33 million tons of hospital waste is generated in India and the waste generation rate ranges from 0.5 to 2.0 kg per bed per day.

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- Though legal provisions [Biomedical Waste (management and handling) Rules 1998] (2) exist to mitigate the impact of hazardous and infectious hospital waste on the community, still these provisions are yet to be fully implemented.
 - The absence of proper waste management, still these provisions are yet to be fully implemented. The absence of proper waste management, lack of awareness about the health hazards from biomedical wastes, insufficient financial and human resources and poor control of waste disposal are the most critical problems connected with healthcare waste.



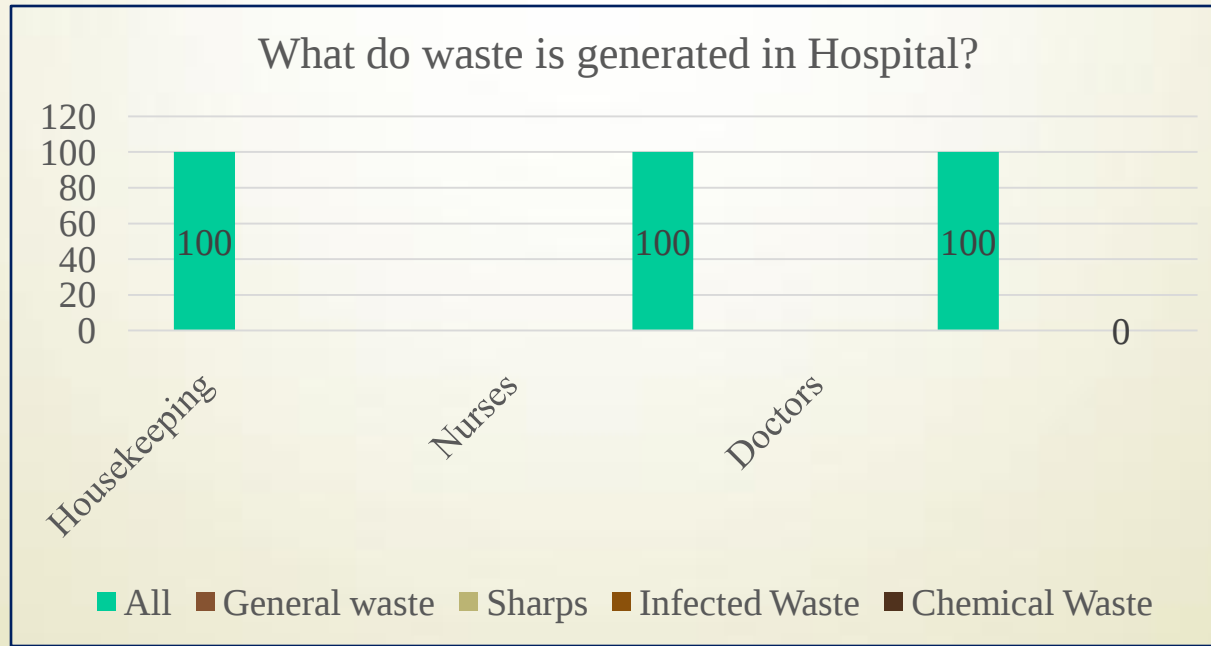
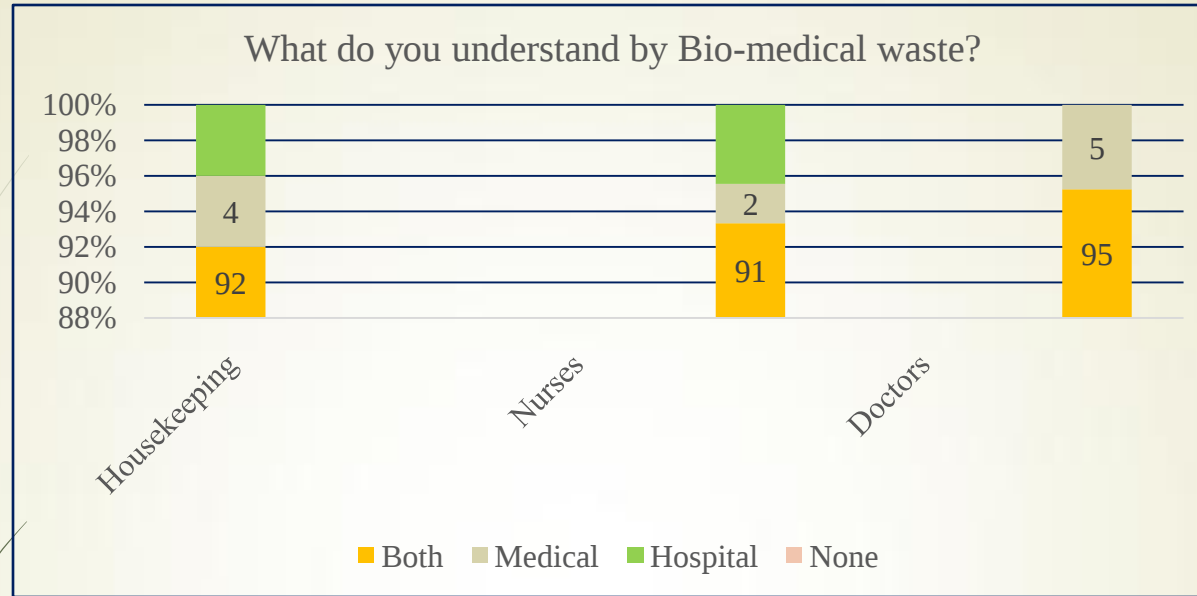
Research Objectives

- To assess the knowledge, Attitude and Practices of Bio-medical waste management among medical and housekeeping staff.
 - To identify the existing lacunae and problems in management of Bio-medical waste.
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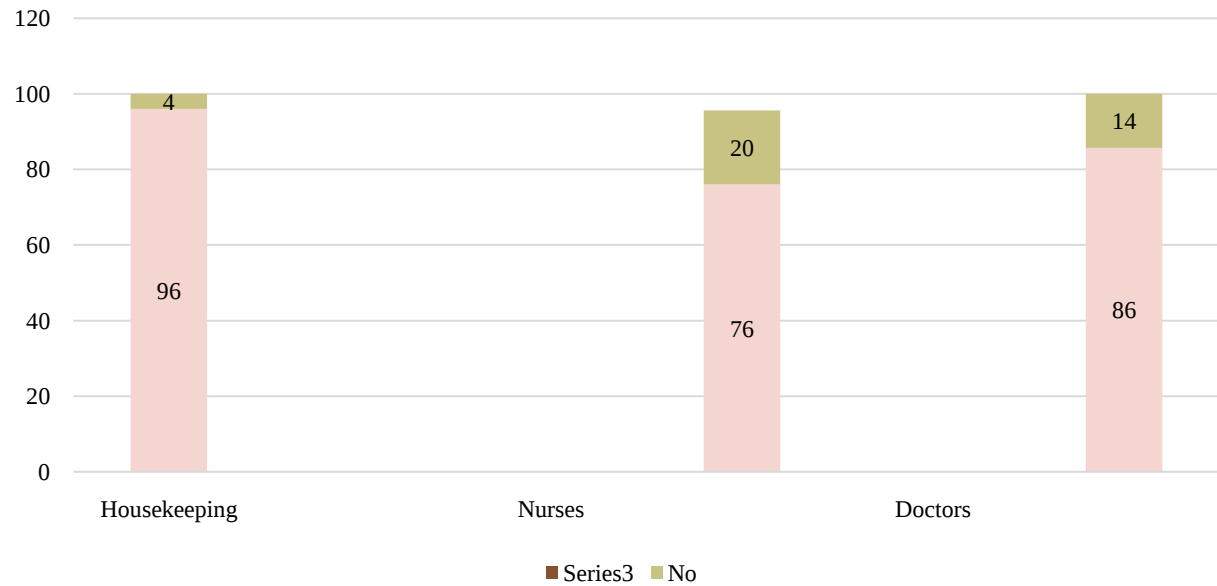
Methodology

- Type of study – Descriptive (Analytical)
- Location of study – Aster Medcity, Kochi.
- Sample - 21 Staff members from doctors, 46 nursing staff and 25 housekeeping staff.
- Selection Process – Non-Purposive convenience sampling.
- Data (information) to be collected – Doctors, Nursing Staff & Housekeeping Staff.
- Data Collection tools – Interview and Questionnaire.

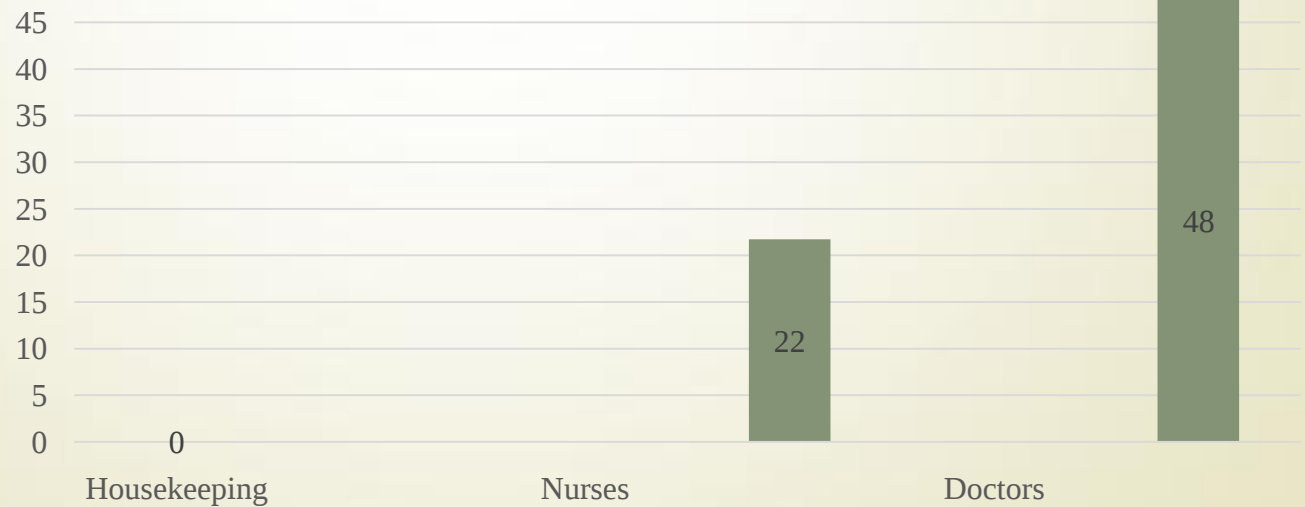
Data Interpretation



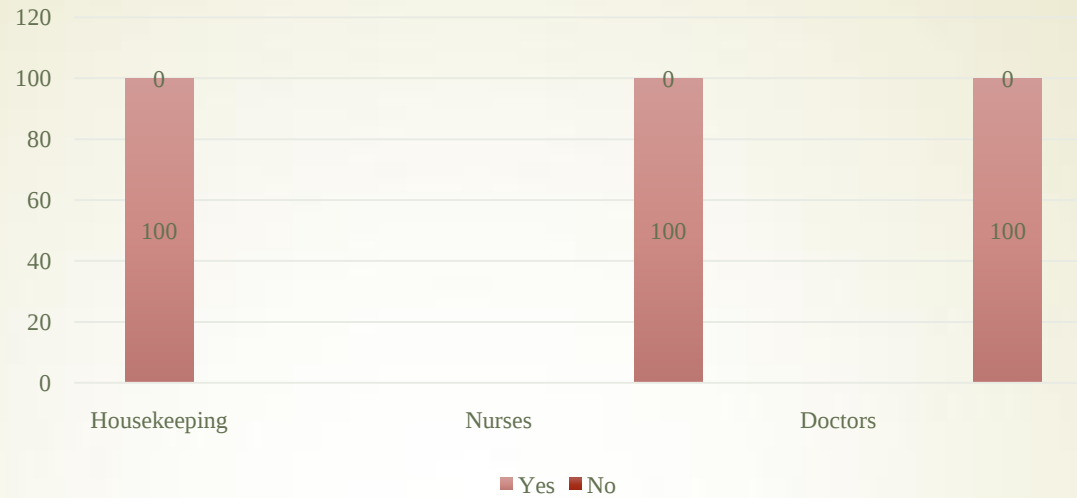
Are you aware of any legislation applicable to Bio-medical waste?



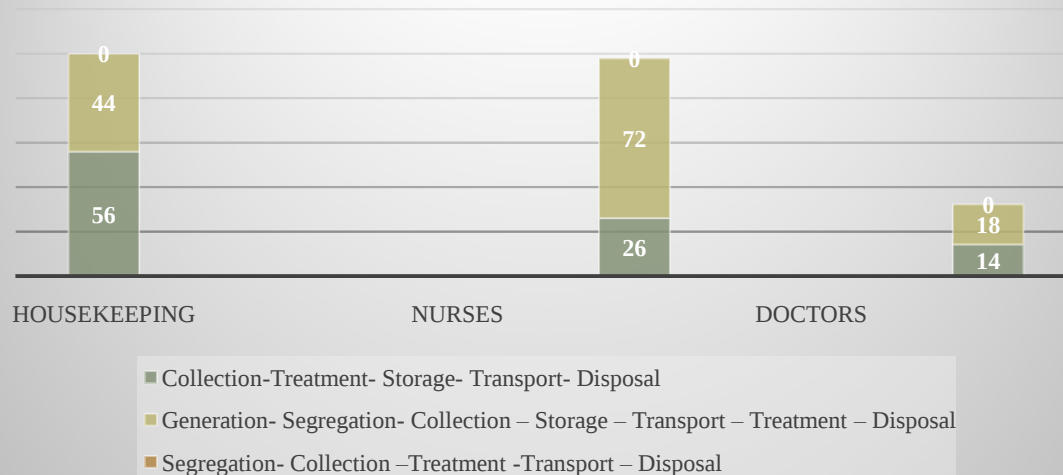
If yes, then write the name of act applicable ?



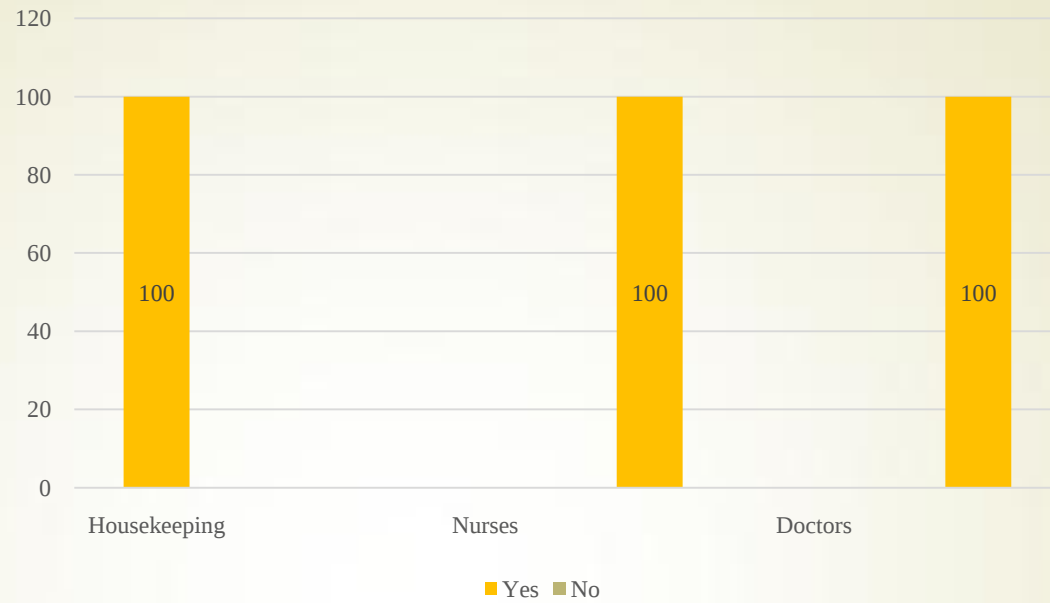
Do your hospital has any waste management plan?



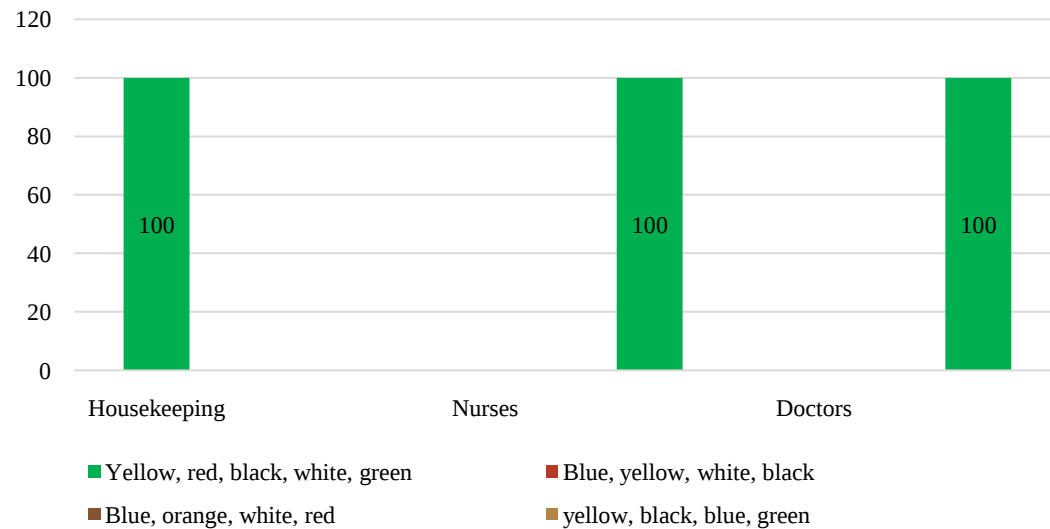
Find out the correct sequence of waste management Program?



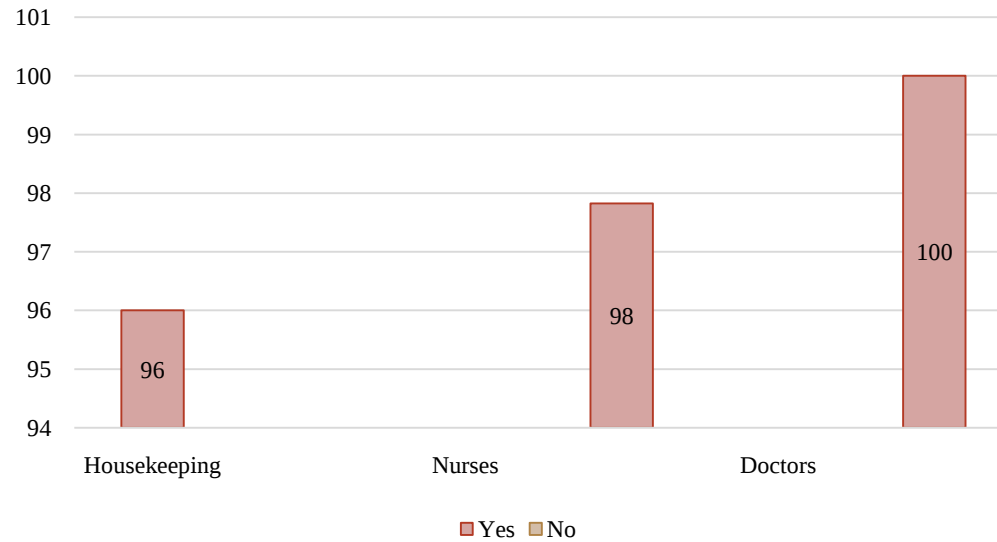
Do you color code the waste?



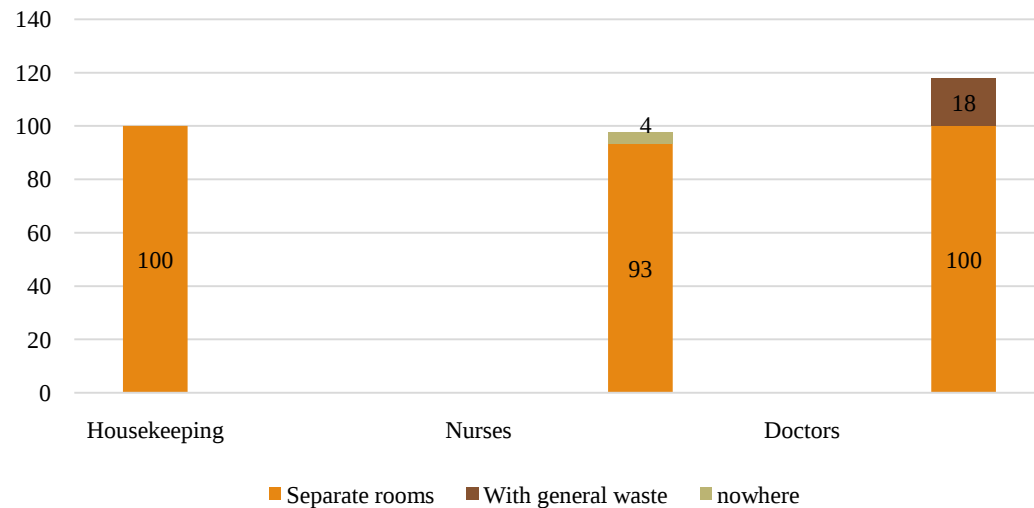
Color Codes used are ?



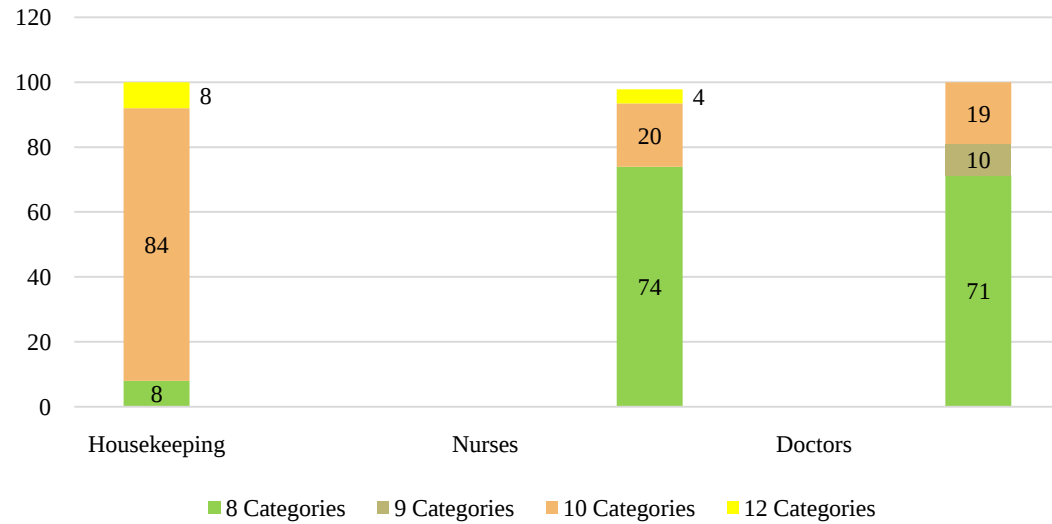
Does infectious waste bag labeled with bio-hazard symbol?



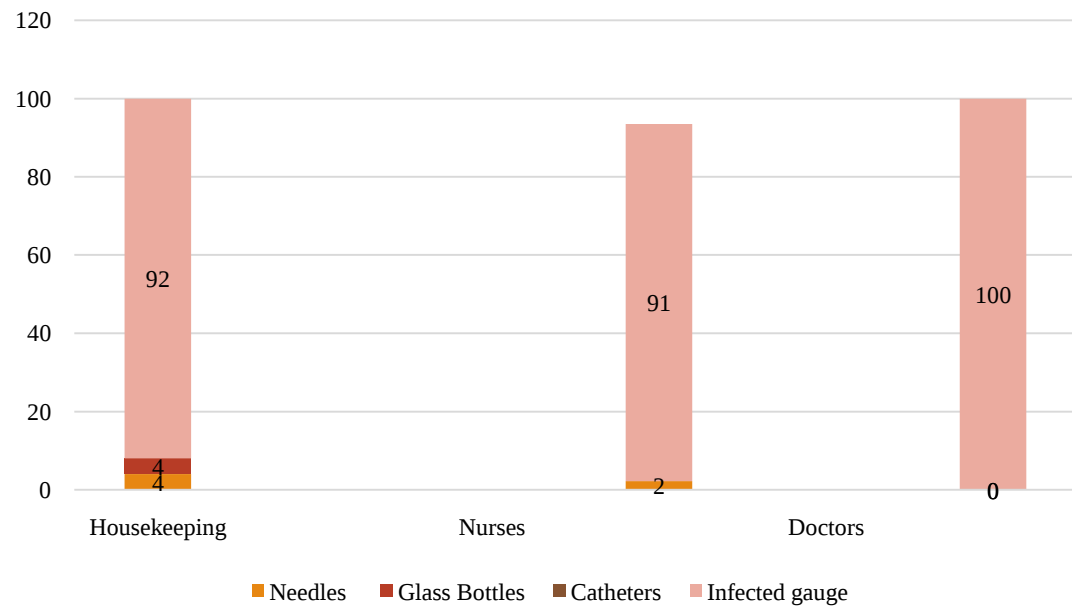
Where do you store bio-medical waste?



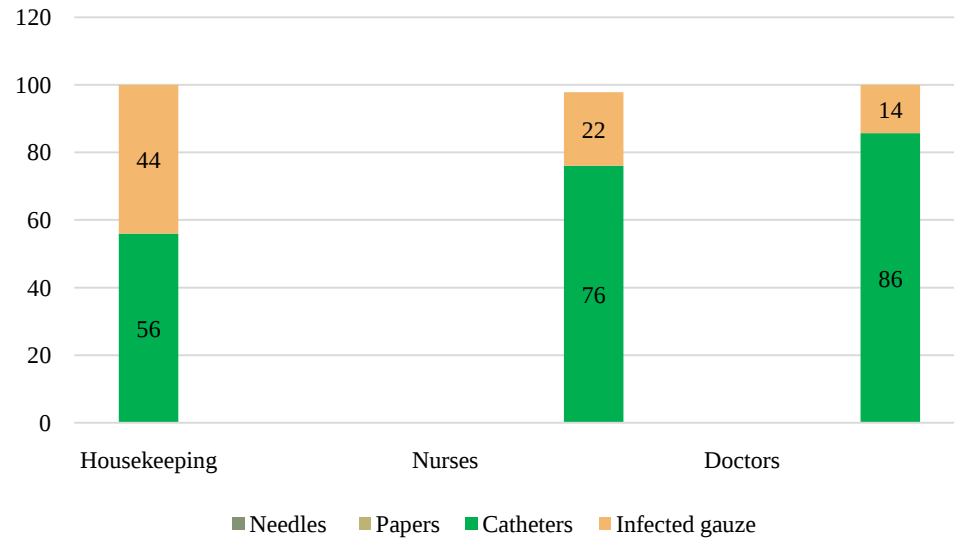
Categories of Bio-medical waste?



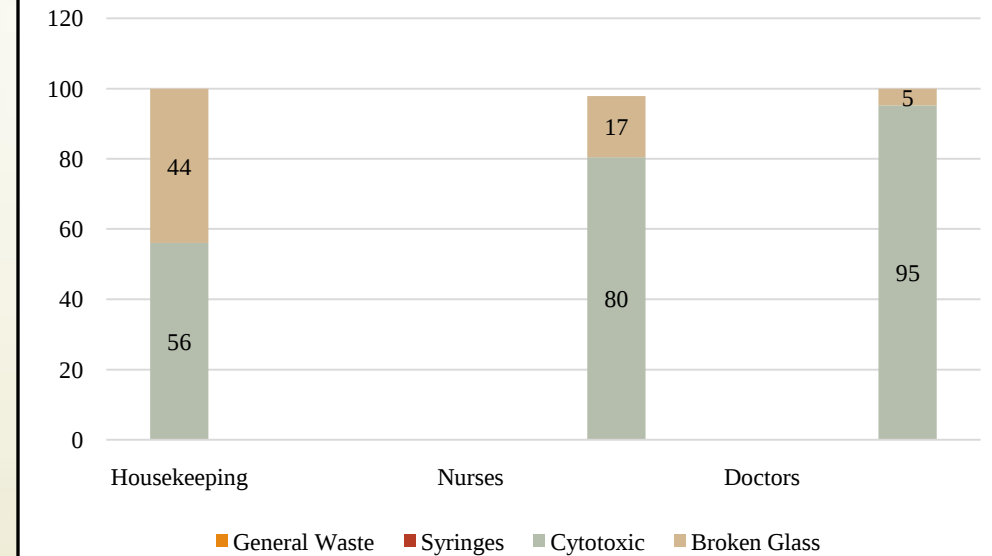
Yellow bag is to discard?



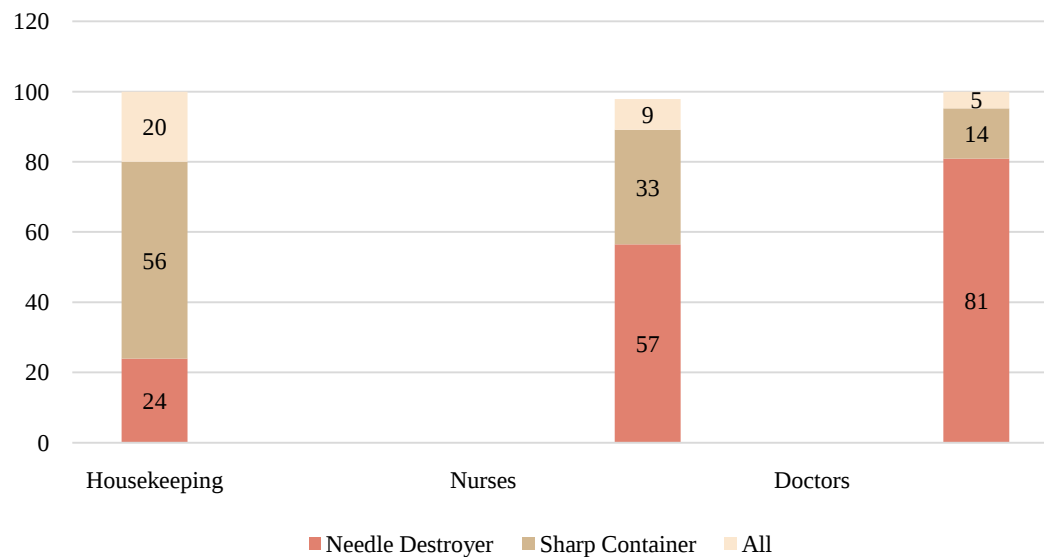
Red bag is to discard?



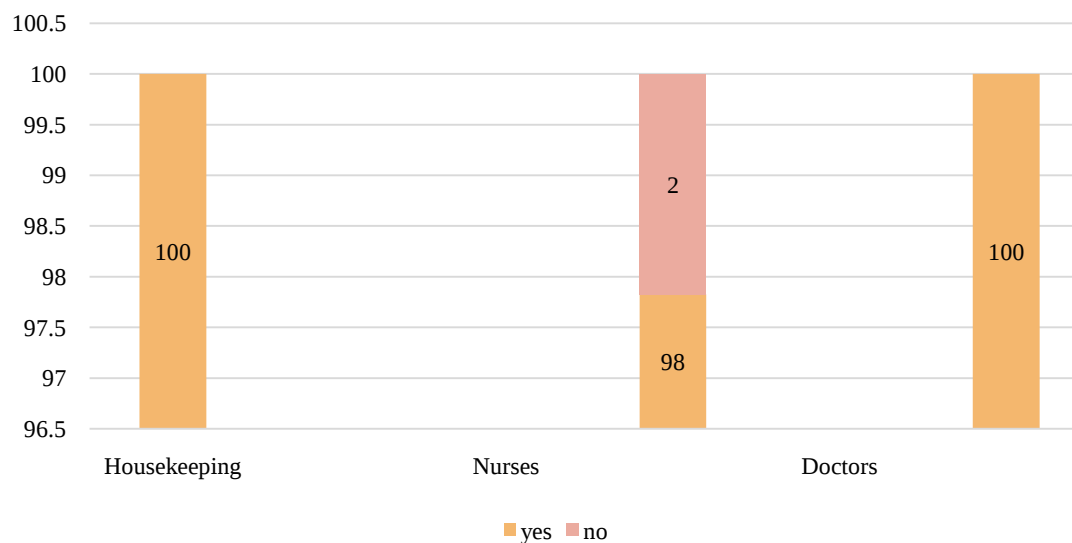
Black bag is to discard?



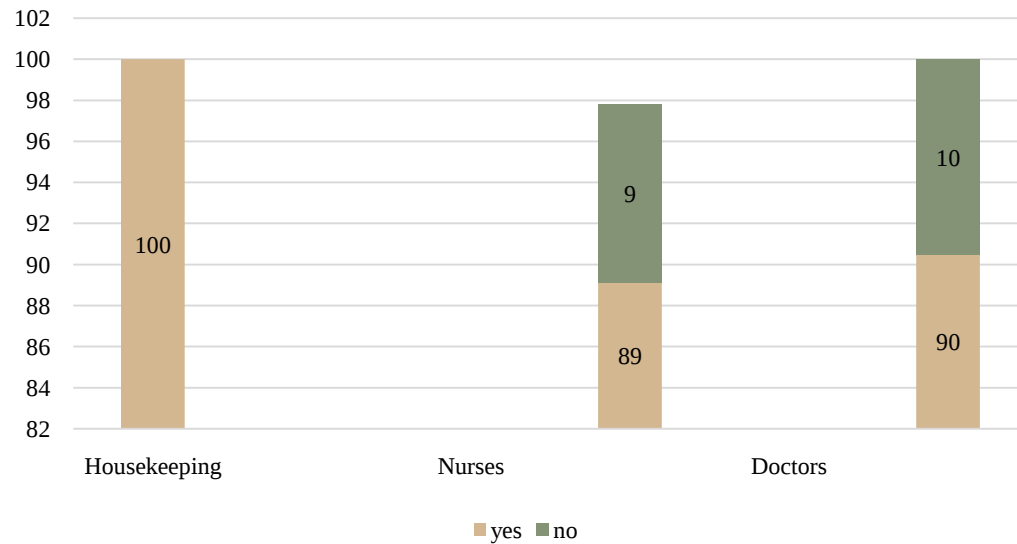
Equipment used for destroying needles and syringes?



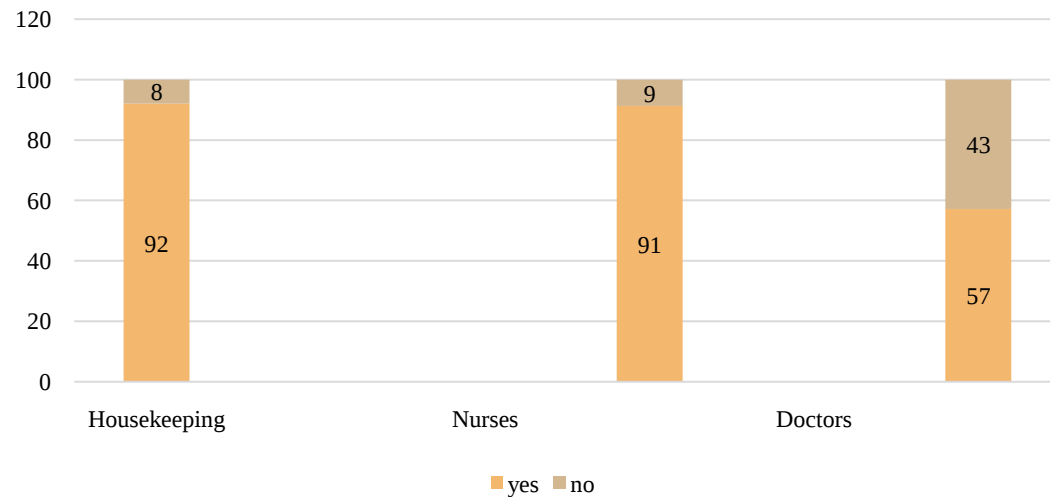
Do our hospital maintain register for waste disposal?



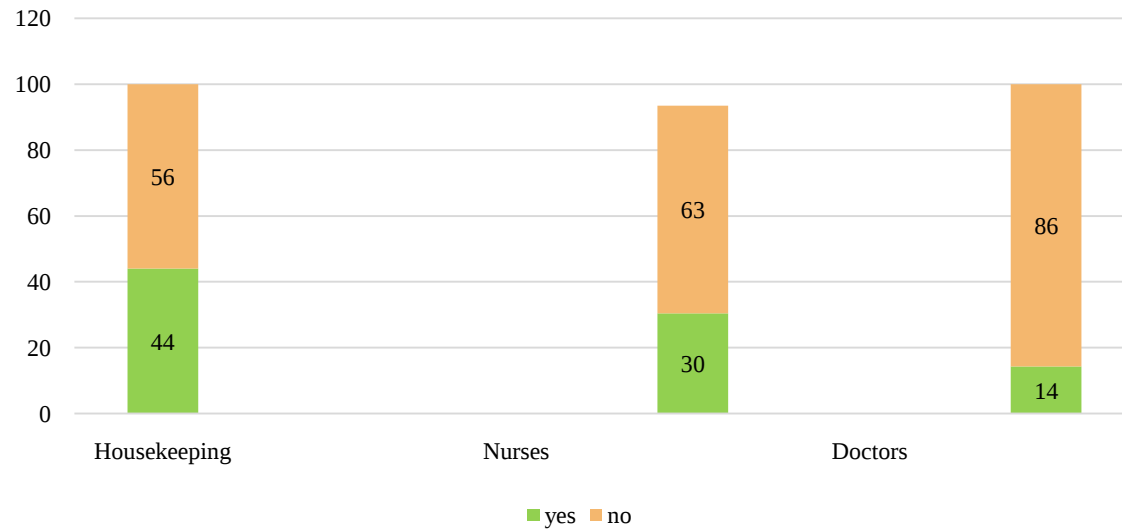
Have you undergone any training program on hospital waste management?



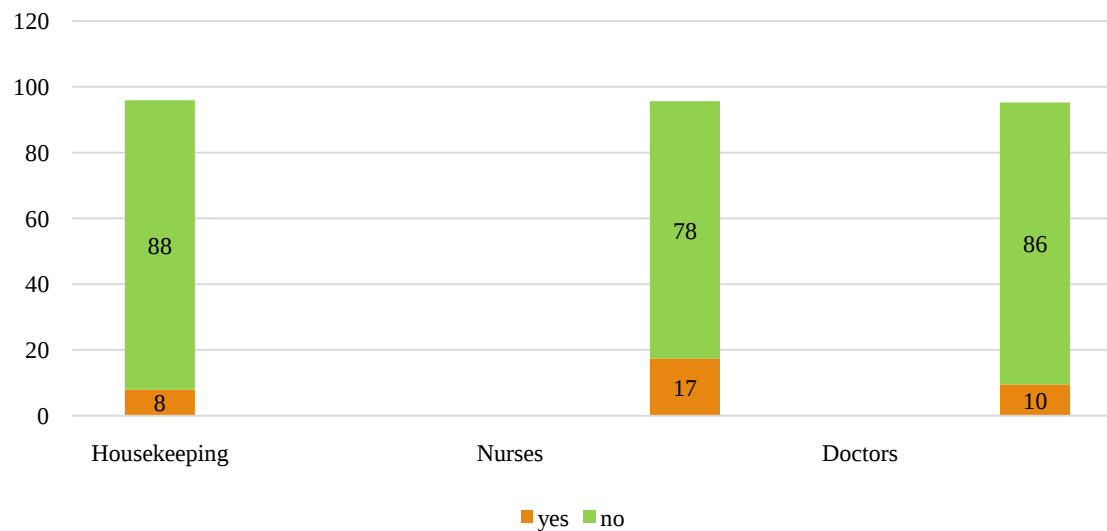
Would you like to attend a program on hospital waste management?



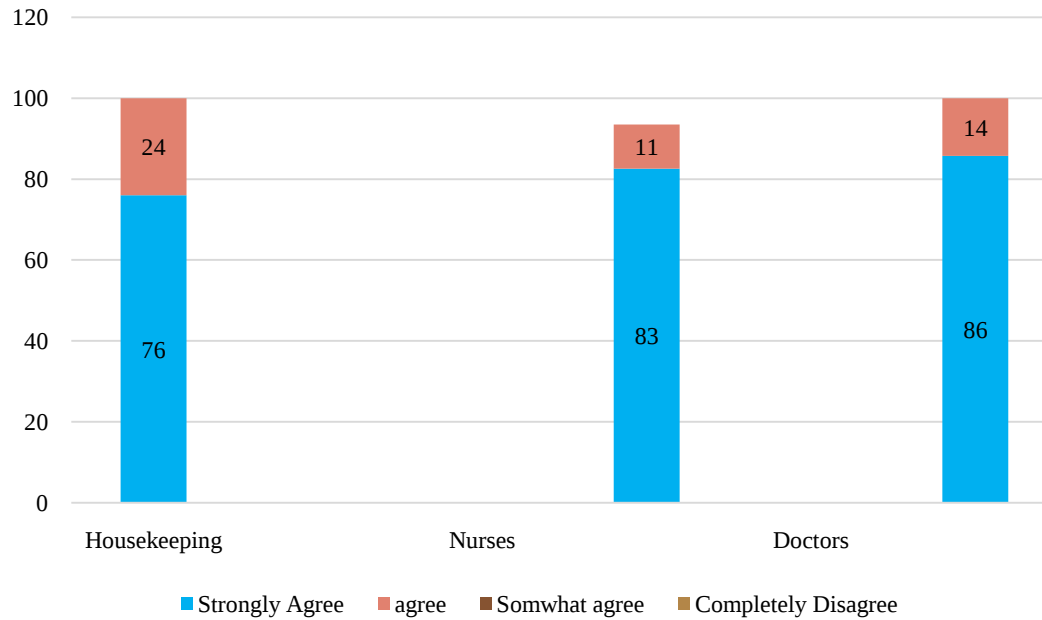
Safe management of health care waste is not an issue to all?



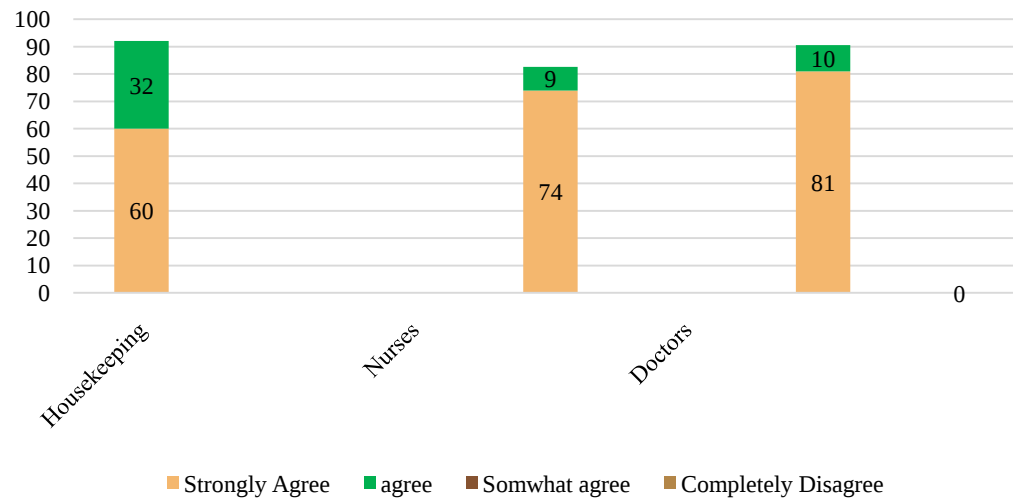
Safe management of healthcare waste is an extra burden on work?



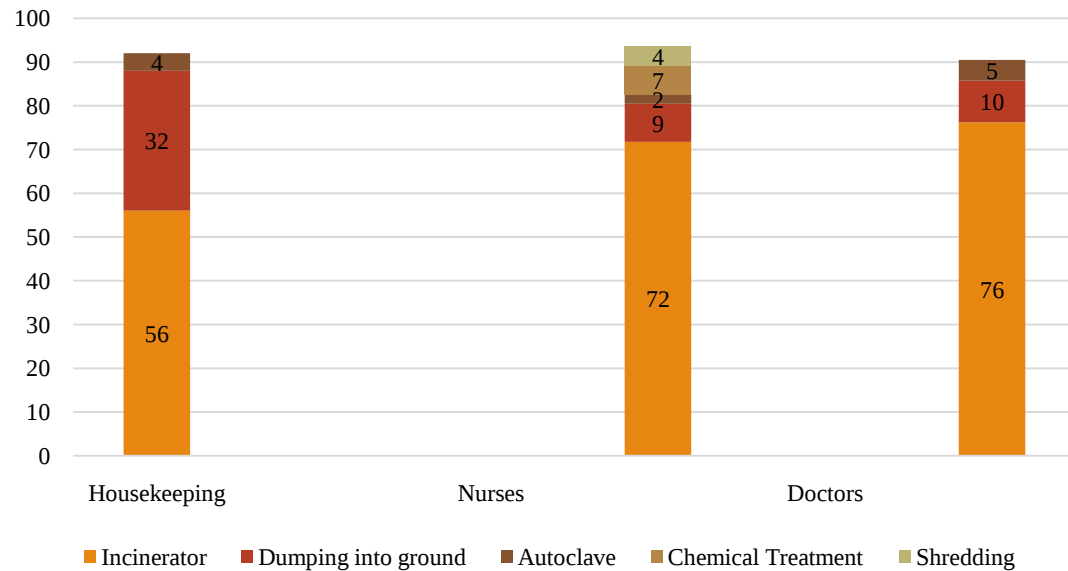
Occupational safety of waste handlers is must?



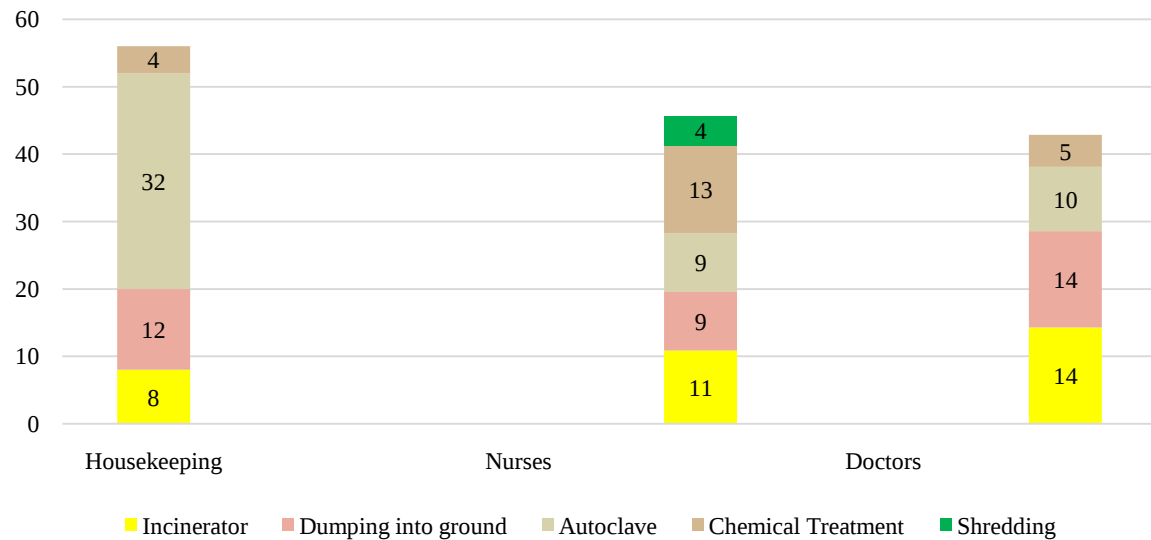
Help immunization prevents transmission of Hospital Acquired Infections?



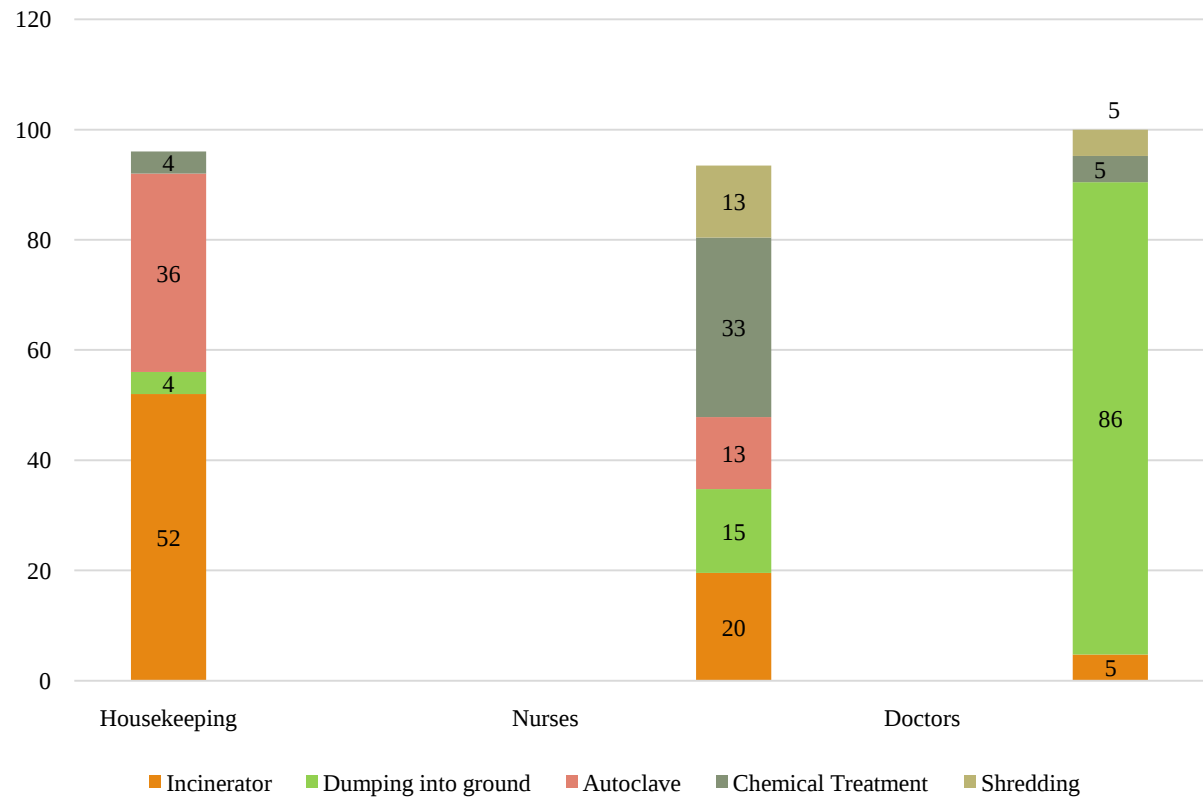
Yellow bag Waste will be disposed by?



Red bag Waste will be disposed by ?



Black Bag Waste will be disposed by



Survey interpretation -

- Regarding the current practices of bio-medical waste management that 92.7% of staff got training for biomedical waste management but only 80% are interested in attending the training sessions again.
- 97.33% of the staff is aware about the risks associated with bio-medical waste.
- As far as the plan for BMW is concerned 100% staff are aware about it; but only 44.6% of the staff knows about the proper segregation of the bio-medical waste.
- In general about 86% staff is aware about the legislature associated with BMW but only 23.3% of the environment pollution law.
- Only 51% of the staff were aware about the different categories of waste.
- The best part is that more than 97.66% staff of the staff is aware about the storage of the biomedical waste but only 35.4% are aware about the end treatment of the waste.
- According to 68.33% of the staff safe management is not issue at all and 81.66% of the staff thinks safety of waste handlers is a must.

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- When asked that is handling the waste an extra burden to work only 11.6% felt so and rest consider it as daily routine practice that should be followed.
 - 100% of the staff is aware about the registers and color codes maintained for the daily biomedical waste entry and disposal.
 - 54% staff is aware about the equipment used for destroying needles after use.
 - 100% of staff are aware about the biohazard symbol labelled on bags. On the other hand about 86% knows about the discarding of the waste in color coded bags.
 - Regarding the categories only 69.4% gave right answer that means the whole staff are not aware about different categories of BMW management.
 - Only 71.7% of the staff believe that by immunization they can be protected against the bio-medical hazard.

RECOMMENDATIONS

- High visibility could be achieved through hoardings near the biomedical waste disposable bins.
- There should be proper display of posters regarding the right way of disposing, storing and transporting the biomedical waste.
- A regular audit should be done on how feedback calls are answered and recorded.
- Training of housekeeping staff should be specially emphasized as they carry the biomedical waste.
- Strict implementation of biomedical waste management rules is the need of the hour.

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- It should be made compulsory for healthcare facilities to get their healthcare personnel trained from accredited training centres, These training sessions should not become merely a one-day activity but should be a continuous process depending upon the patient input in different healthcare facilities.
 - It should be ensured that the injuries happening to the healthcare personnel are reported to the person in charge of biomedical waste management or to the biomedical waste management committee, and they report it in the prescribed format to the pollution control board.



Conclusion

- ❑ Concluding from the results, the importance of training regarding biomedical waste management cannot be overemphasized; lack of proper and complete knowledge about biomedical waste management impacts practices of appropriate waste disposal.

References

- ▶ Patil Ad, Shekdar AV. Healthcare waste management in India. J Environ Manage. 2001;63:211-[PubMed]
- ▶ Ministry of Environment and forest notification on the Bio-Medical Waste (Management and Handling) Rules. 1998
- ▶ Plianbangchang PH. W.H.O. Publication; “A Report on Alternative Treatment and Non-Burn Disposal Practices”; Safe Management of Bio-medical Sharps Waste in India.
- ▶ Pandit NB, Mehta HK, Kartha GO, Choudhary SK. Management of bio-medical waste: Awareness and practices in a district of Gujarat. Indian J Public Health. 2005;49:245-7[PubMed]

**“SOMEONE’S SITTING IN
THE SHADE TODAY
BECAUSE SOMEONE
PLANTED A TREE A LONG
TIME AGO”**

Warren Buffet