

**A STUDY ON BIO-MEDICAL
WASTE MANAGEMENT
PROCESS IN A DISTRICT
HOSPITAL, FATEHGARH SAHIB,
PUNJAB**

Submitted by – SAGRIKA SINGH

Roll no. – 0485

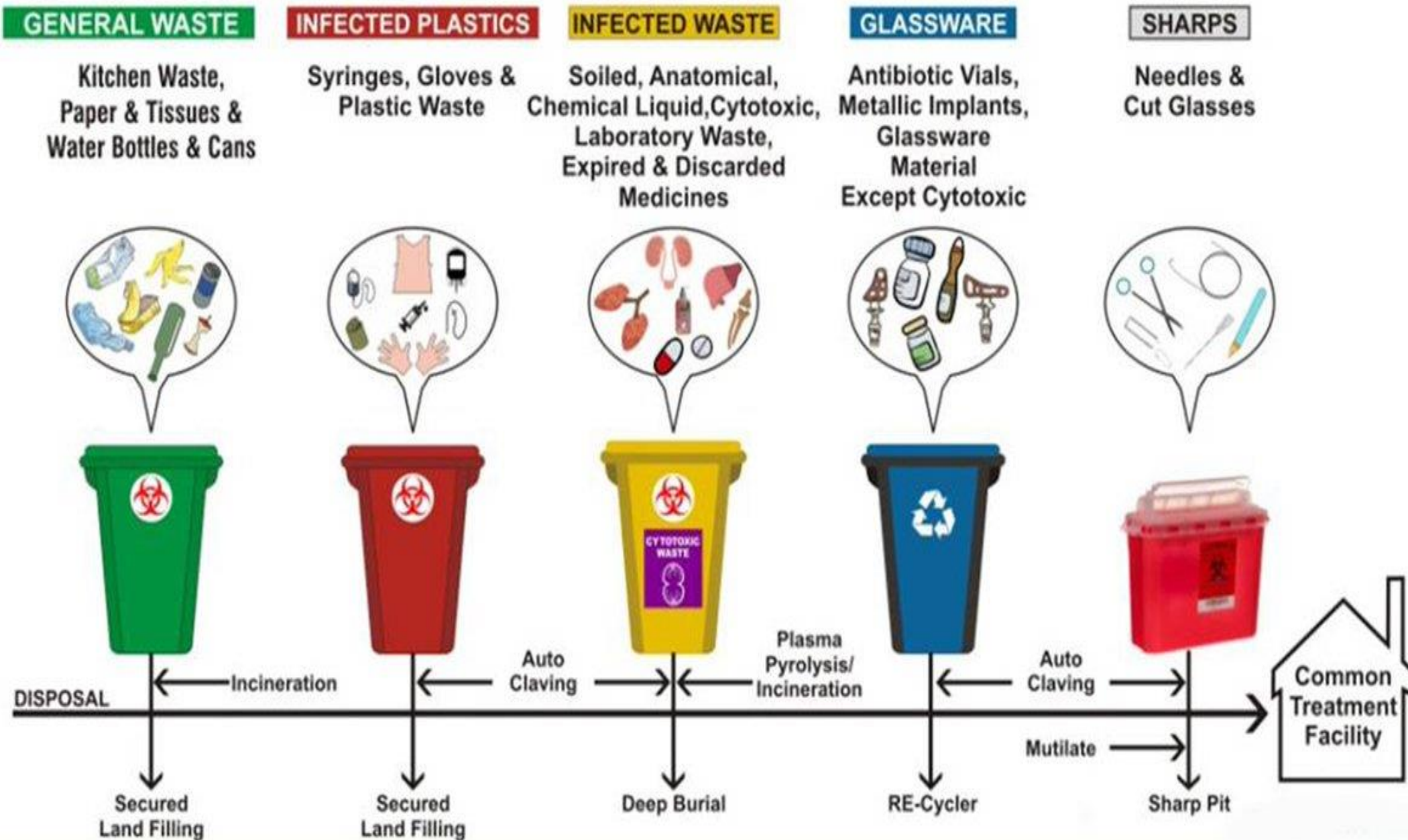
Batch 21(2016-18)

INTRODUCTION

- According to WHO Bio-medical waste is define as the waste generated during the diagnosis ,testing, treatment, research or production of biological products for humans or animals.



SEGREGATION OF HOSPITAL BIO-MEDICAL WASTE



RATIONALE

- ❖ A major issue related to current bio-medical waste management in many hospitals is that the implementation of bio-waste regulation is unsatisfactory as some hospitals are disposing off waste in a haphazard, improper and indiscriminate manner.
- ❖ Lack of segregation practices, results in mixing of hospital wastes with general waste making the whole waste stream hazardous. Inappropriate segregation ultimately results in an incorrect method of waste disposal.

OBJECTIVES:

To assess the level of knowledge and practice of the staff about the bio-medical waste management system

To know about the practices followed by the hospital regarding the handling of the bio-medical waste

METHODOLOGY

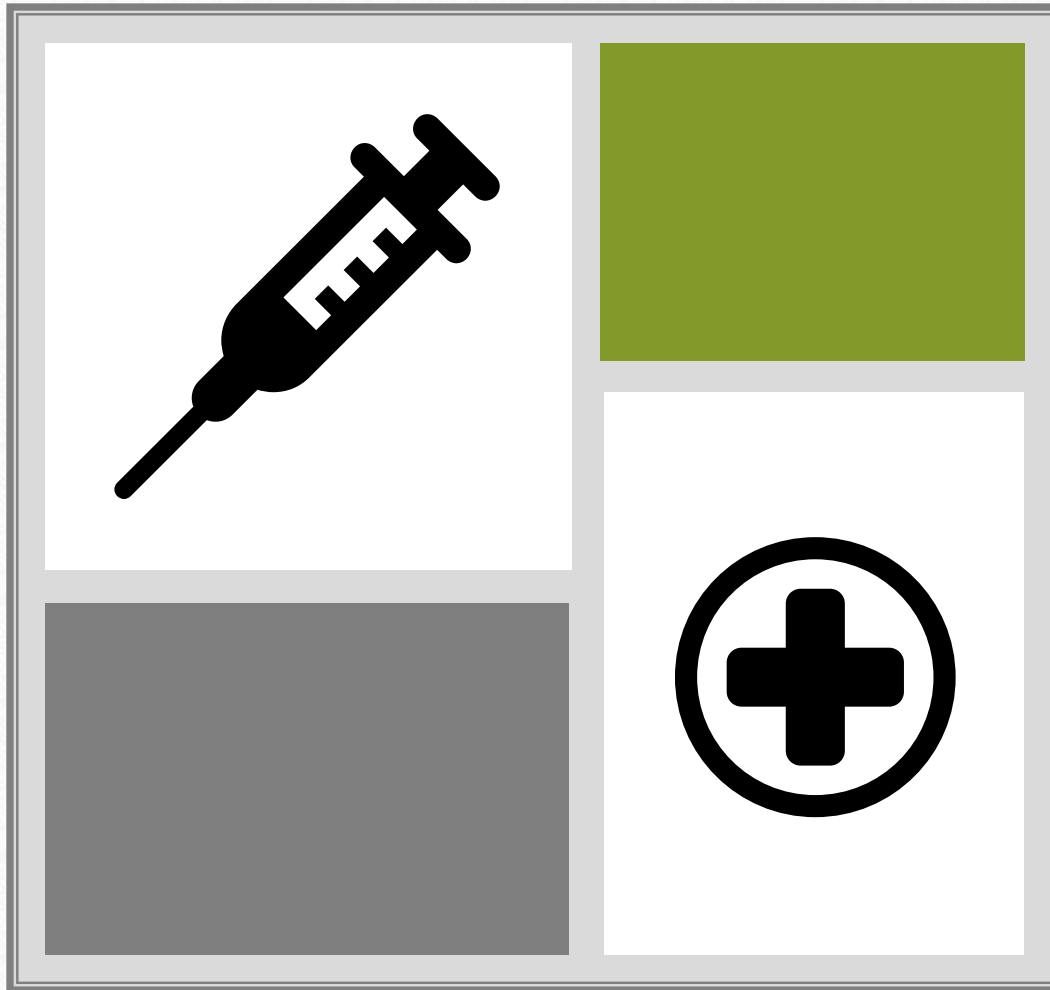
- **Study design:** A cross-sectional approach was conducted for the study.
- **Study Area:** - District hospital, Fatehgarh Sahib
- **Study duration:** - 3 months
- **Study Population:** - nurses and sanitation staff
- **Data collection**
 - Primary data: questionnaire, feedback, review of various activities.
 - Secondary data: Hospital BMW record register



ANALYSIS

- ❑ Knowledge & Practice of staff
- ❑ Process flow



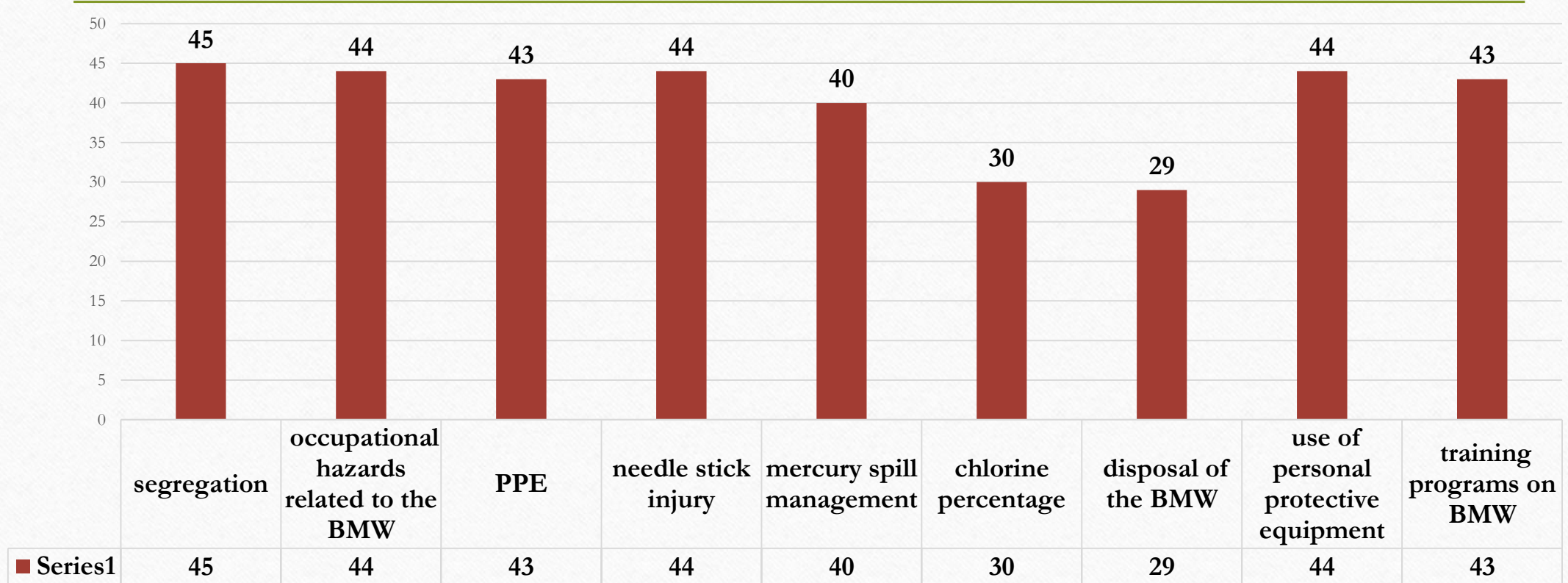


(A) Knowledge & Practice Assessment of staff

- Nursing Staff
- Housekeeping Staff

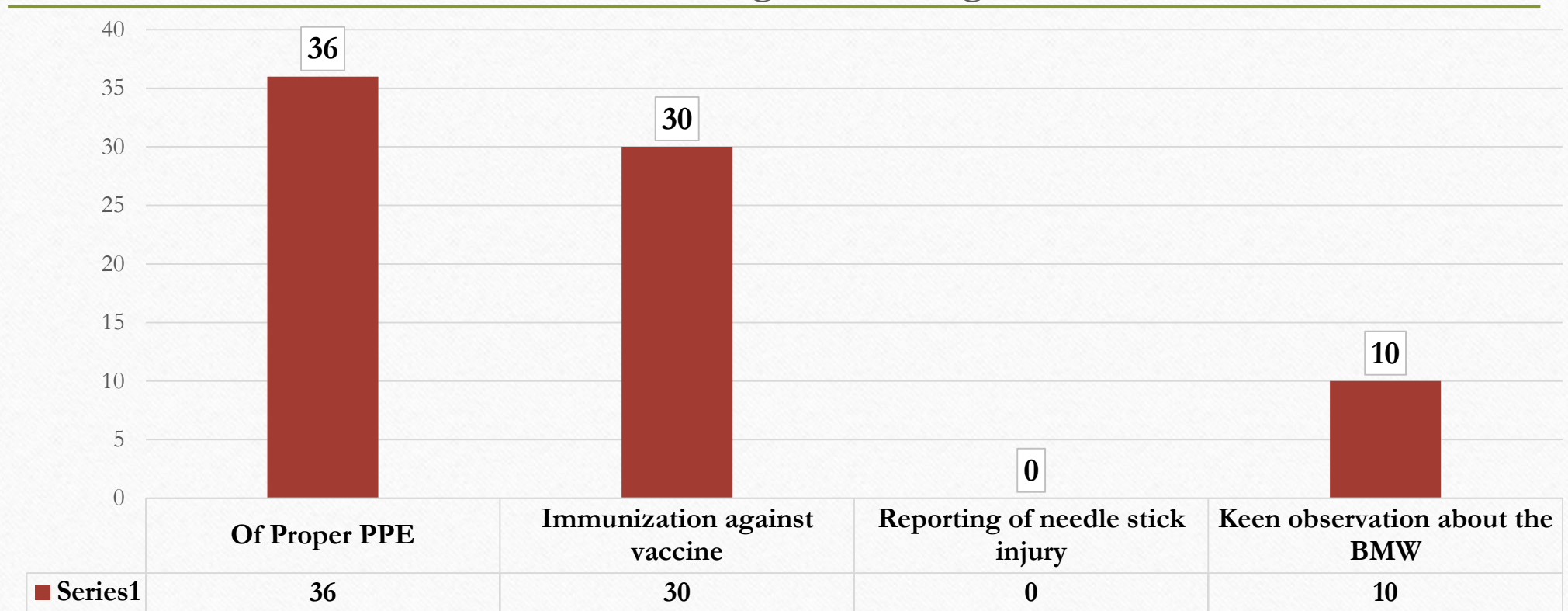
Nursing Staff(n=45)

Knowledge of Nursing staff about BMW Management

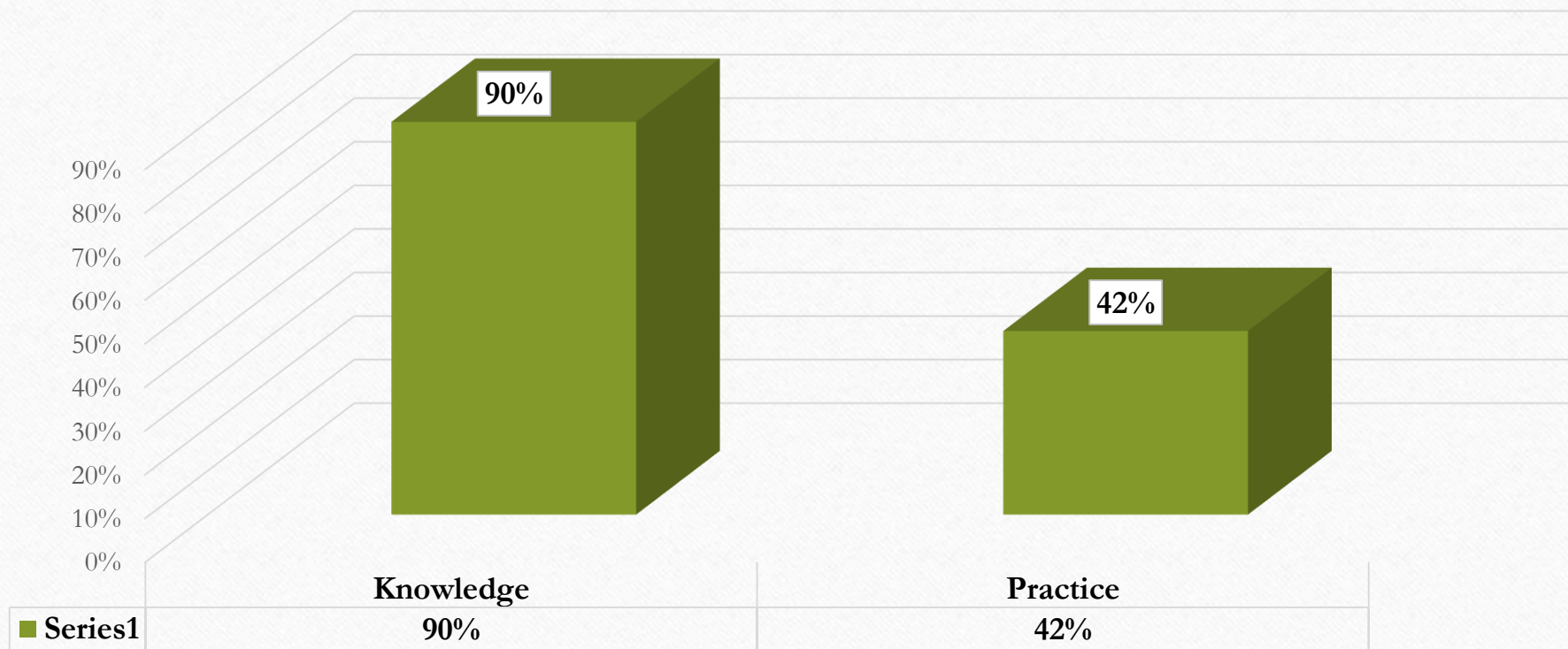


Nursing Staff:

Practice among the nursing staff

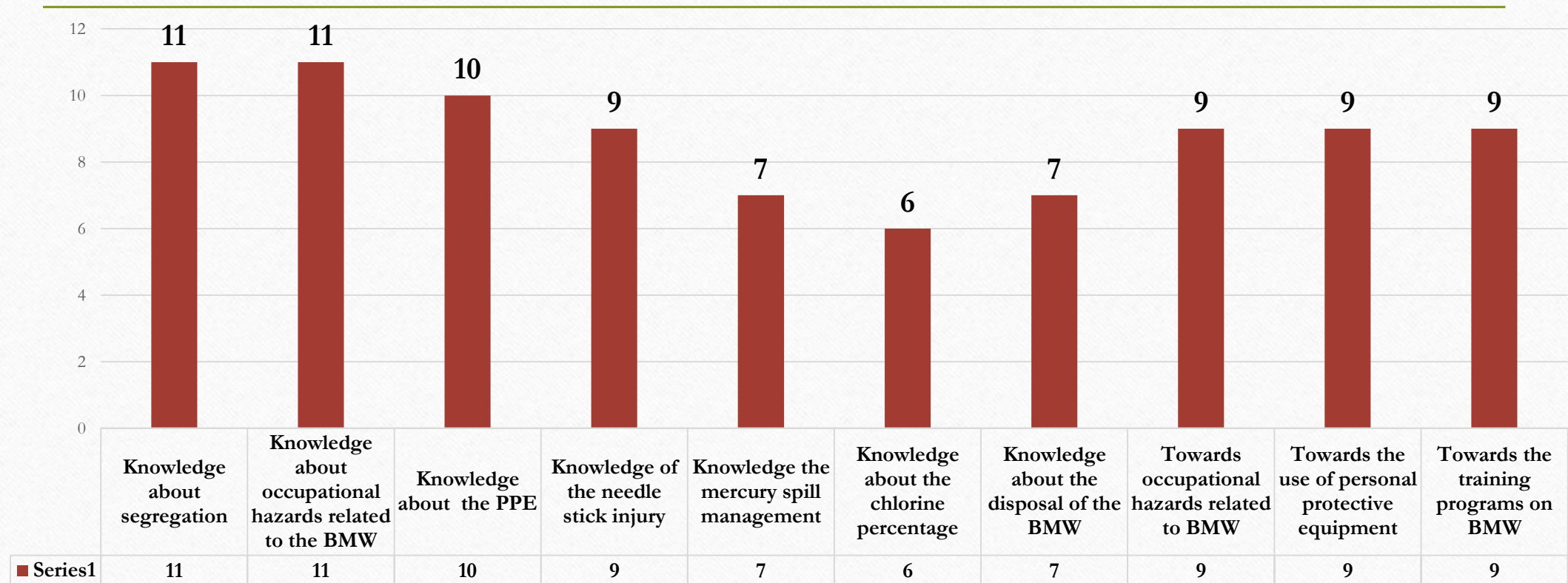


Overall % of Knowledge & Practice of Nursing Staff



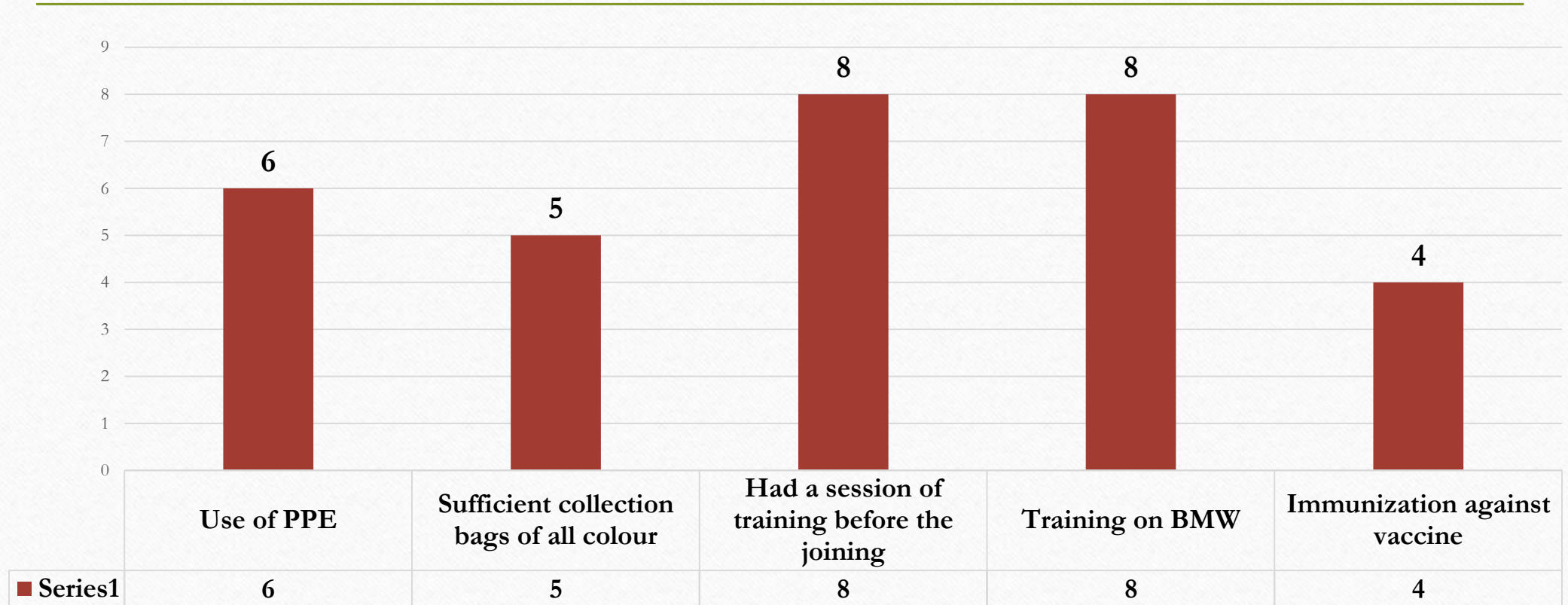
Housekeeping Staff(n=11)

Knowledge of Housekeeping Staff about BMW Management

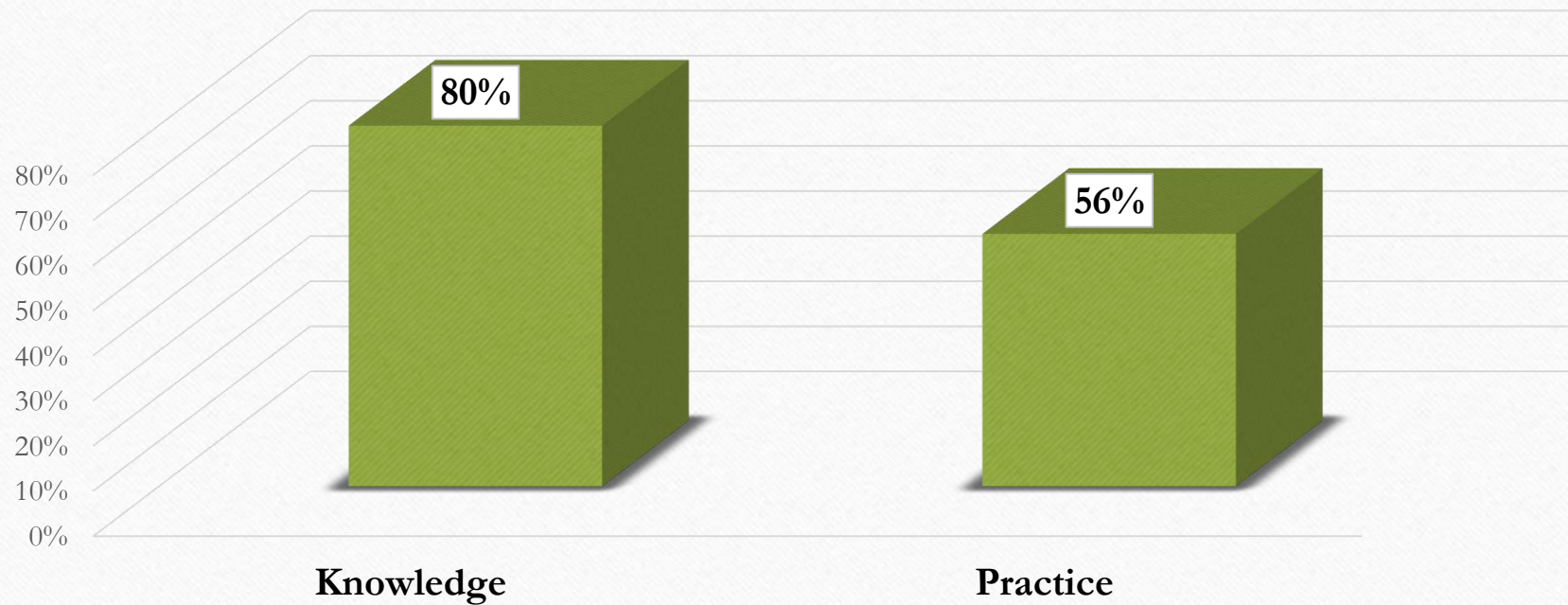


Housekeeping Staff:

Practice of Housekeeping Staff about BMW Management



Overall % of Knowledge & Practice of Housekeeping Staff





(B) Process Flow

☐ Hospital Overview

☐ Process Flow

BMW TERMINAL IN THE HOSPITAL

Terminal 1:- blood bank, Emergency(ground floor)

Terminal 2:- OPD, injection room ,ARB, dressing room, dental room, dermatology room(ground floor)

Terminal 3:- laboratory, dialysis, micro labs (first floor)

Terminal 4:- wards, OT,(first floor and second floor)

Terminal 5:- labour room, NBSU, Post-partum unit(ground floor)

Terminal 6:- nasha-mukti Kendra, T.B center (outside the hospital)

Process Flow

Segregation at the site of the production of the waste



Collection at 2-3pm daily from all the departments by the housekeeping staff



Storage- outside the operational areas of the hospital



Transportation by RAINBOW ENVIRONMENTAL PVT. LTD.



Disposal in MOHALI

SEGREGATION



COLLECTION



STORAGE



TRANSPORTATION



RECOMMENDATIONS

- There are no lags in the process flow for biomedical waste management process; to make it more compliant with the rules, the housekeeping staff should be wearing PPEs, which was lacking in the observations.
- Since, the analysis shows a lower percentage in practices for both the housekeeping and nursing staff, the hospital can formulate a team for auditing compliances, which would be responsible for entire supervision of all practices under BMW Management.
- It was observed from the questionnaire results that the staff were not happy with the training process, that takes place in Mohali, because of which they were unable to attend these similar sessions.

THANK YOU