



An assessment of knowledge, perspective and attitude of radiography students towards their clinical postings in radiology department: A questionnaire based study

Boora Navreet¹, Virmani Nitish², Khan Arshad Alam³, Yadav Kripanand⁴, Dahiya Mohit⁵, Sharma BB⁶

¹ Assistant Professor, College of Paramedical Sciences, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India

² Assistant Professor, Faculty of Allied Health Sciences, SGT University, Gurugram, Haryana, India

³ Lecturer, Faculty of Allied Health, SGT University, Gurugram, Haryana, India

⁴ Assistant Professor, College of Allied Health, Maharishi Markandeshwar University, Mullana, Ambala, Haryana, India

⁵ Assistant Professor, College of Allied Health, Sharda University, Noida, Uttar Pradesh, India

⁶ Professor & HOD, Faculty of Medicine & Health Sciences, SGT University, Gurugram, Haryana, India

Abstract

Purpose: To assess the attitude of radiography students towards their clinical posting in radiology department of a hospital or medical institution.

Methodology: A prospective study was conducted through objective type questionnaire. Inclusion criteria of this study was pursuing B.Sc & M.Sc in Radio-Imaging Technology and were posted in the radiology department of the hospital.

Result: This study contains a total 48 students, from which M.Sc. RIT, B.Sc. RIT II year and III year and II-year students of diploma were added. Result shows that 36 (75%) students out of 48 were satisfied with their clinical posting while 12 (25%) students were not satisfied. 37(77%) Students out of 48 were satisfied with the behavior of radiologists during posting while 11 (33%) students were not satisfied during their clinical posting. 43 (90%) students out of 48 were satisfied with the behavior of radiographers during posting while 5 (10%) students were not satisfied. 23(48%) students found that clinical posting is helpful to learn the practical aspect of each procedure, 22 (46%) students were found that clinical posting is not much helpful to learn the practical procedure and rest 3 (6%) students were not found that clinical posting is helpful. 23 (48%) students out of 48 thinks that only sometimes they have proper protection from radiation while 13 (27%) students have always proper protection from radiation and 12 (25%) students were found that they have never properly protect from the radiation during the examination. 38 (79%) students out of 48 were found radiographers are helpful and they explain the procedure before the exam while 10 (21%) students were found vice-verse. 38 (79%) students out of 48 shows that they were informed how to use the equipment while 10 (21%) students were not informed. 10 (21%) students out of 48 shows that radiographers come to supervise while 37 (77%) students found that sometimes radiographers come to supervise and according to rest of 1 (3%) student radiographers never come to supervise. 38 (79%) students were satisfied from the radiographers and teaching staff while 10 (21%) students were not satisfied. 24 (50%) students out of 48 choose good as their answer to describe the attitude of radiographers, 14 (29%) choose very good, 7 (14%) choose excellent and 3 (7%) students not satisfied with the attitude of radiographers towards them. 34 (71%) students out of 48 thinks that sufficient staff is available in the department for the procedures while rest of 14 (29%) students' response is vice-verse. 28 (58%) students out of 48 feel confident to doing procedures from the first day to throughout their course-programme but 20 (42%) students were not confident to do so. 37 (77%) students out of 48 were satisfied with the modalities are available in department but 11 (33%) students were not satisfied. 39 (81%) students out of 48 were satisfied with the information received by radiographers about radiation hazard while 9 (19%) students were not satisfied. 31 (64%) students out of 48 satisfied from the information provided by the radiographers on radiation protection devices while 17 (36%) students are not satisfied.

Conclusion: Third year B.Sc students were found satisfied with their clinical postings as compared to second year degree and diploma students. Students satisfaction level is the important tool to measure their interest in the particular course programme.

Keywords: clinical posting, students, radiographer, radiography

Introduction

Paramedical staff plays an important role in the health care system out of which one is a medical or radio imaging department. To become a radio technologist many certificates, diplomas, degrees, and doctoral programmes available. In the first-year theory, classes were arranged where they get knowledge about the department, equipment, their controls, and

physics behind working principles of various equipment's used in medical imaging ^[1]. After that to provide the hands-on training for practical knowledge from the second year onwards students were posted in clinical set up in the hospital where they learn how to handle the equipment and perform various procedures under the supervision of hospital staff or clinical instructor ^[2]. This type

of practical training is important to improve their working skills to build the confidence to handle the equipment in a proper way in acceptance limits so that patient is also safe and benefit from the procedure and they own self also able to provide standard care to patients which include interaction with the patient, history taking, explanation of the procedure to the patient, patient preparation, proper instructions to the patient, Safe handling of equipment, consent form filling, performing of procedure safely without repeating and so on [3]. But it is possible that students may face problems in the clinical settings or they are not satisfied with the facilities available to them due to which their attitude may get changed towards clinical posting [4]. So to find out such problems is important to perform a survey of students and their interest in clinical posting to find out the problems if any, later on, solve them too. For the successful completion of course to students with theoretical as well as clinical knowledge, the curriculum is designed in such a way so that students can learn the things as well as they have opportunity to apply them practically. So that after completion of course they are able to provide quality services for the public. As in radio imaging department, we need to deal with the use of radiation for the imaging as well as for treatment purposes, which is ionizing radiation x-ray mainly and if the dose exceeds for the normal range it may cause harmful effects. It is important to ensure that the person who is dealing with radiation have proper knowledge about equipment physics, handling, and safe limits [5].

In a clinical period following things commonly affects the interest and attitude of students towards clinical postings [6]

1. Attitude of the person supervising them, his behavior which is needed to be polite and friendly.
2. Person who explains them about the procedure, clinical importance, and handling.
3. Knowledge of person who demonstrates.
4. Availability of clinical equipment.
5. Availability of patients.

This study is performed to know the student’s attitude towards their clinical posting and to find out the key factors which affect their interest

Aim

The aim of the study is to compare the knowledge, perspective and attitude of the different level of radiography students during their clinical posting and course work.

Materials and Methods

In this study, students were supervised and observed for month during their weekly clinical posting in the different location of the radiology department like X-ray, CT-Computed Tomography, MRI-Magnetic Resonance Imaging, DEXA-Dual Energy X-Ray Absorption, USG- Ultrasonography, Mammography, and DSA-Digital Subtraction Angiography. Data were collected from the students of Master of Science Radio-Imaging Technology (M.Sc R.I.T), Bachelor of Science in Radio-Imaging Technology (B.Sc. RIT) II & III year and Diploma in Radio-Imaging Technology (DRIT) II-year students. Multiple Choice or objective type questionnaire were designed that contain 15 questions and suggestion column. The

questionnaire form was filled by total 48 students. Questionnaire was filled by the students in proper manner like they were well informed the purpose of the study, your role is voluntary. Right to say no, and Questionnaires did not contain any personal information like name, registration number *et al.* i.e the privacy of students’ were taken under consideration.

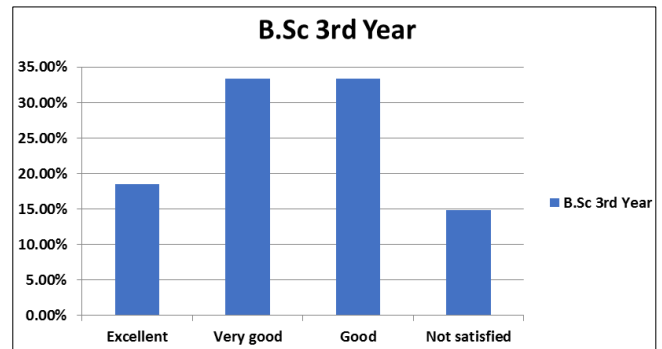


Fig 1: B. sc. (RIT) IIIrd year

According to the figure 1 which shows the data analysis of B.Sc. RIT III year 18.52% students comes in excellent category. 33.33% students come in very good category. 33.33% students come in good category and 14.82% students come in not satisfied category.

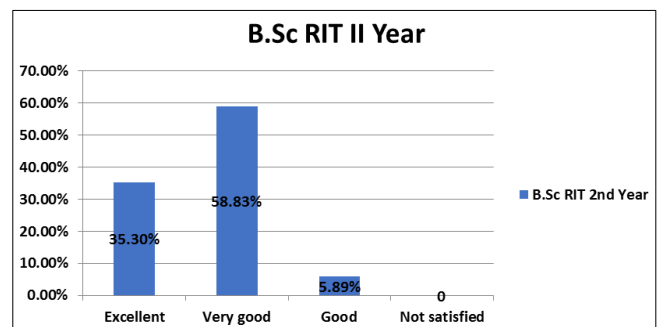


Fig 2: B.sc (RIT) IIInd year

According to the figure 2 which shows the data analysis of B.Sc. RIT 2nd year 35.30% students comes in excellent category. 58.83% students comes in very good category. 05.89% students comes in good category and 00.00 % students comes in not satisfied category.

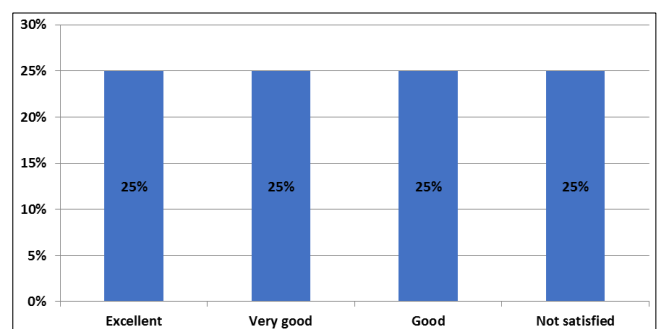


Fig 3: M.SC (RIT)

According to the figure 3 which shows the data analysis of M.Sc. RIT 25% students comes in excellent category. 25% students comes in very good category. 25% students comes in good category and 25% students comes in not satisfied category.

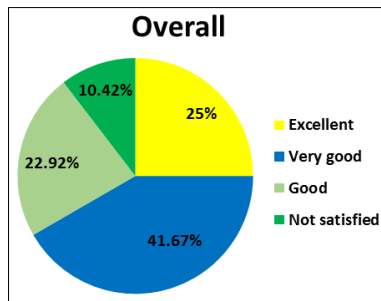


Fig 4

According to the figure 4 which shows the data analysis of overall 48 students 25% students are in excellent category. 41.67% students are in very good category. 22.92% students are in good category and 10.42% students comes in not satisfied category.

Table 1: showing overall result

Overall	Yes	No
Are you satisfied with your clinical posting	36	12
Are you satisfied with behavior of radiologists during posting	37	11
Are you satisfied with behavior of radiographers during posting	43	5
Do radiographer explain you about the {x-ray } procedures before the exam	38	10
Are you informed by staff about use of equipments	38	10
Do you think that all your queries are sorted by radiographer or your teaching staff	38	10
Is sufficient staff available for the procedures	34	14
Are you feeling confident in doing procedure [first Day to today]	28	20
Are you satisfied with the modalities available to you	37	11
Are you satisfied with the information received by radiographers about radiation hazard	39	9
Are you satisfied with the information provided by radiographers on radiation protection devices	31	17

Discussion & Conclusion

In this study, some information about the attitude and perspective of undergraduate and postgraduate radiography students towards their clinical posting was obtained during one week in November 2017 at SGT Hospital, Gurugram, Haryana. Better clinical posting can play significant role in providing competent and skilled radiographers in future who can provide good facilities and care to patient. The results of the present study show that (number) out of 48 students (25%) are satisfied with their clinical postings. 41.67% students are not fully satisfied with their clinical postings. 22.92% students are neither satisfied nor dissatisfied with their clinical postings and 10.42% students completely not satisfied in respect to clinical posting.

Result shows that maximum numbers of third year students are satisfied with their clinical postings as compared to second year degree and diploma students. Reason behind this is that third year students have gathered more theoretical knowledge and clinical experience, they get more clinical exposure as compared to

second year students and first year students have no clinical training is done because their theoretical classes were in process at the time of data collection for research.

Contributors

All authors contributed to the conception or design of the work, the acquisition, analysis, or interpretation of the data. All authors were involved in drafting and commenting on the paper and have approved the final version.

Funding

This study did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of Interest

The author has no conflict of interest.

Disclosure

The author did not receive any type of commercial support in forms of either compensation or financial support for this study.

Ethical approval- Not applicable because of questionnaire based study.

Informed consent was obtained from all participants.

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