

DEVELOPMENT OF PROFESSIONAL AND PERSONAL QUALITIES OF RADIOLOGIC TECHNOLOGISTS

Ma. Rosela Almodovar, Jenna Arlegui, and Isabel Zuniga

ABSTRACT

Radiologic technologists, who perform imaging examinations, are responsible for precisely situating patients and for assuring that a quality demonstrative image is created. For the images to be deciphered accurately by a radiologist, the imaging examination must be appropriately performed. Certain qualities can make their commitments less difficult to perform and can help in satisfying their patients. There are two qualities that can perceive the lead of a medicinal services authority-- professional and personal qualities. This study focuses on the development of the professional and personal qualities of radiologic technologists. The respondents of the study were 30 registered radiologic technologists in two selected private hospitals in Region IV-A. A descriptive correlative design was employed in this study. Descriptive design was applied to describe the professional and personal qualities of radiologic technologists and to examine the relationship between those variables. Frequency distribution, weighted mean, and Pearson product correlation were used to statistically test the gathered data. Results showed that the measurement profile was not connected with the individual attributes of a person. There were couple of attributes between the personal and professional qualities which were related with each other.

INTRODUCTION

In the hospital system, the Radiology department plays a major role in patient satisfaction. As a healthcare provider, one needs to understand the importance of quality and delivery of service. Patients have expectations from their past healthcare experiences that extend beyond good medical treatment, and the level to which those expectations are met often determines whether they will stay or seek for another healthcare provider.

Merriam-Webster (2010) dictionary defines professionalism as "the conduct, aims, or qualities that characterize or mark a profession or a professional person," and it defines a profession as "a calling requiring specialized knowledge and often long and intensive academic preparation."

The abundance of information and involvement in upgrading the nature of a healthcare worker has collected comprehensively over numerous decades. Regardless of this abundance of experience, the issue that is as often as possible confronted by approach creators at national level, in both high-and-low-waged nations, is to know which quality procedures – supplemented by and coordinated with existent key activities – would have the best effect on the results conveyed by their well-being frameworks. As medicinal science and innovation have progressed at a quick pace, the human services conveyance framework has allowed in its capacity to give reliably high quality care to all (Trueland, 2013).

There are two qualities that can recognize the conduct of a healthcare specialist--professional and personal qualities. All of the qualities that were given, whether it falls under professional or personal, are important because it will identify how the healthcare workers or specialists do their best on their jobs.

Over the years, the expert part of the radiologist has been advanced because of the expanding inclusion in the clinical

administration of a patient. Radiologists have consequently been progressively charged by new obligations and liabilities, presenting them to higher dangers of lawful cases made against them. Misbehavior claims in radiology are regularly identified with unseemly therapeutic care or to the poor doctor quiet relationship. Disregarding the professional qualities radiologic technologists must have, they will still experience bad conduct issues. The most widely recognized reason for medicinal negligence suits against radiologists was mistake in analysis (primarily inability to conclude rather than postpone), followed by procedural complexities, and trailed by lacking correspondence with either persistent or alluding doctor. The most widely recognized confusion in radiologic exams is the vascular damage amid angiography and other interventional strategies (Baker, 2013).

In every healthcare department, issues are inevitable. Patient Safety Authority (2009) categorized the administration of wrong drugs and unauthorized drugs as one of the issues often faced by health worker. It was the most commonly reported medication error, followed by wrong-dose errors. Contrast agents and radiopharmaceutical products were cited in almost a quarter of all medication error reports. Strategies to address these issues include conducting organizational examinations of the pharmaceutical use forms in radiology areas to reveal dangers that could lead to harmful errors (U.S Pharmacopeia, 2005).

Health issues are at the forefront problem of the present-day. Medicine and research are continuously being advanced. The problems, as well as the solutions, have been identified. In a larger scale, these solutions entail lifestyle changes. People can do their part to reverse the rising financial, physical, and emotional costs of healthcare by taking charge of their personal health instead of depending on the care community to deal with health problems after they have developed (Staplehurst, 2009).

Mistakes can injure patients and land physicians in legal and professional trouble. However, studying these mistakes and learning how to prevent, monitor, and respond to them have changed the standards of care. By attempting to wipe out normal medicinal mistakes, doctors can ensure patients, shield themselves from claims, and help bring down the cost of their expert risk protection premiums (Bialek, 2012).

Radiologic technologists play a key role in the larger healthcare picture and make a critical impact at every turn. In a study, 50 patients who had been hospitalized were asked to describe their experience of the radiologic technologist's services. Some secrets of satisfaction were identified: recognition of individual qualities and needs, reassuring presence, provision of information, demonstration of professional knowledge and skill, assistance with pain, and amount of time spent (Brown, 2009).

If the patient experienced these qualities, then the patient is satisfied to what the radiology department services do. Radiology practices must meet those expectations to attract and retain patients.

As Radiologic Technology students, the researchers would like to become aware of the qualities that might affect their professional performance in the future and be able to cope with their future work challenges. The study motivated the researchers to determine the development of professional and personal qualities of radiologic technologists, an issue which the researchers considered significant as Radiologic Technology students.

METHODOLOGY

This chapter provides information on the methods and design used in this study. This chapter includes the research design, research locale, participants of the study, data collection tools, data gathering procedure, and data analysis.

Research Design

A descriptive correlative design was used in this study. Descriptive design was used to describe the professional and personal qualities of radiologic technologists, and to examine the relationship between those variables. The variables used in the study were age, gender, clinical experience, and performance of the radiologic technologists.

According to Lomax and Li (2015), descriptive research describes the phenomena being studied. Data are gathered, and descriptive statistics are used to analyze such data. It typically describes what appears to be happening and what the important variables seem to be. The purpose of correlational research was to determine the relationship between two or more variables. Data were gathered from multiple variables and correlational statistical techniques were then applied to the data.

For this study, descriptive survey research was used to describe the professional and personal qualities of the Radiologic technologist.

Research Locale

The researcher conducted their study in two selected private hospitals in Region IV-A. Hospital X is a modern 122-bed tertiary hospital that continuously delivers the quality healthcare services in Laguna. Hospital Y is recognized as a center of excellence- the highest level of quality accreditation by the Philippine Health Insurance Corporation (PhilHealth). It is one of only four hospitals to achieve this feat in region IV. It is a 220 bed capacity medical center.

Respondents of the Study

The researcher conducted their study in two selected private hospitals in Region IV-A. 30 selected Radiologic technologist were the

respondents of the study. The researchers chose them because they are more equipped to offer personal care, they tend to stay on the cutting edge of technology more easily than public hospitals, and they often have upscale amenities that make the patients more comfortable. The researchers wanted to know if those advantages can affect the professional and personal qualities of Radiologic technologists.

Research Instrument

The researchers used self-made questionnaire as the major data gathering tool. The questionnaire made by the researchers was a check list form. The participants were asked to put a check mark on the blank/ box which correspond their answer. The research tool was composed of three parts that requires answer regarding the development of professional and personal qualities of radiologic technologists. Part one covered information which affected the participants' professional and personal qualities, such as age, gender, and clinical experience. Part two was all about the self- assessment on personal qualities. There were twenty-five (25) positive statements grouped according to good communicator/communication (items 1-5), adaptability (items 6-10), problem solver (items 11-15), compassion (items 16-20), and accuracy (items 21-25). Part three was all about the professional qualities of a Radiologic technologist. The 25 items were grouped according to knowledge (items 1-5), critical thinking (items 6-10), practical skills (items 11-15), temperament (items 16-20), and physical stamina (items 21-25).

In the questionnaire, 4-point Likert scale was used to determine if the participant always or never do the action expressed in the statement. The response options were always (4), sometimes (3), rarely (2), and never (1).

As referred to by McLeod (2008), Likert scale is a four or five (or seven) point scale which is utilized to enable the person to express the amount they generally or never with a specific statement.

To establish the validity of the instruments used in this study, the assistance of the research adviser was asked. The draft was presented to the adviser for general comments. In addition to this, the draft was presented to three research professors for expert judgment. The suggestions and comments regarding the questionnaire were used to improve the tool.

Data Gathering Procedure

A permission letter was sought first from the dean to undergo the study. The letter of permission was sent to the respective hospital directors through the Chief Nurses for the approval of the survey. The researchers also asked the permission and cooperation of the Radiologic Technologist. The date of the administration of the survey was determined. The instruments were personally distributed by the researchers to the respondents. The questionnaires were explained to the respondents following basic ethical rules on research. An informed consent was given to the respondents prior to data gathering to ensure voluntary participation of the respondents.

Ethical Consideration

Essential standards controlling moral contemplations for research incorporate respondents being completely educated about the points, techniques, and advantages of the exploration, conceding to agree and deliberately to take an interest in the examination.

Confidentiality, with regards to the information, was maintained as well as the anonymity of respondent. Respondents were informed that they were free to exclude themselves anytime while answering the questionnaire if some of the questions violated their sense of privacy.

Data Analysis

The data obtained were treated using the following statistics:

1. Frequency distribution and percentage were used to describe the demographic profile of radiologic technologist;
2. Weighted mean was applied to determine the self-assessment of radiologic technologists regarding their professional and personal qualities; and
3. Pearson product moment correlation was utilized in measuring the relationship between the professional and personal qualities of radiologic technologists and their profile.

CONCLUSIONS

Maintaining a good-natured attitude while dealing with patients and adapting to different patient situations are the most challenging responsibilities of a radiologic technologist.

The researchers conclude that the professional and personal qualities of a radiologic technologist were the most important factors. A radiologic technologist must have the ability to relate with their patients and depend the care that they will provide with the patient's situation. "RT Image" suggests that radiologic technologists treat their patients as if they were members of their own families. Radiologic technologist must have good organizational skills and should be responsible and dependable. Those interested in radiology must be able to work professionally with others but are independent enough to function alone. They have to maintain professional conduct even after long, tiring shifts. Radiologic technologists must be able to communicate confidently with other medical workers in the same department, radiologists, referring doctors, and their patients. A radiologic technologist may be called upon any time to discuss the imaging process with patients and help them understand how the diagnostic techniques work.

There was no significant relationship between the demographic profile of the radiologic technologists and their professional and personal qualities, thus, accepting null hypothesis.

RECOMMENDATION

Given the data, findings, and analysis, the researchers listed the following recommendations for further verification of the research findings:

It is recommended to all Radiologic Technology students to enhance their personal and professional qualities while in school. In addition, future researchers may use the provided information about the personal and professional qualities of a Radiologic Technologist. Future researchers can use this study to improve their personality and to balance their attitude to be a good radiologic technologist someday. This research can improve the quality of medical services that radiologic technologists provide in present time.

REFERENCES

Lapornik, B., Wondra, A. & Prosek, M. (2005). Comparison of extracts prepared from plant by- products using different solvents and extraction time. Retrieved August 2017 from <http://www.sciencedirect.com/science/article/pii/S0260877404005345>.

Latha, PG., Abraham, TK. & Pannikar, KR. (1995). Antimicrobial properties of *Ixora coccinea* L" Retrieved July 2017 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3331242/pdf/ASL-14-286.pdf>.

Llewellyn, B.D. (2013). "H & E Eosin stain" Retrieved August 2017 from <http://stainsfile.info/StainsFile/stain/hematoxylin/h-and-e-eo.htm>.

Martin, C., Prescott, A., Mackay, S., Bartlett, J. & Vrijlant, E. (2005). Control of Anthocyanin biosynthesis in flowers of *Antirrhinum majus*. Retrieved date from

<http://onlinelibrary.wiley.com/doi/10.1111/j.1365-313X.1991.00037.x/pdf>.

Matsumoto, T. & Masao, N. (2008). Some Factors Affecting the Anthocyanin Formation by *Populus* Cells in Suspension Culture. Retrieved December 2017 from https://www.jstage.jst.go.jp/article/bbb1961/37/3/37_3_561/_article.

McGavin, M.D. (2014). Factors affecting visibility of a target tissue in histologic sections. Retrieved December 2017 from <https://www.ncbi.nlm.nih.gov/pubmed/24395975>.

Medical Health Guide (2011). Santan Herbal Medicine (*Ixora*). Retrieved August 2017 from <http://www.medicalhealthguide.com/herb/ixora.htm>.

Mohammed, S., Latheef. N., & Ganeshan, S. (2014). Evaluation of Anxiolytic Activity of *Ixora coccinea* Linn. Ethanolic Extract in Swiss Albino Mice. Retrieved August 2017 from <https://www.omicsonline.org/evaluation-of-anxiolytic-activity-of-ixora-coccinea-linn-ethanolic-extract-in-swiss-albino-mice-2161-1459-4-146.php?aid=22027>.

Obouayeba. (2015). Phytochemical Analysis, Purification and Identification of *Hibiscus* Anthocyanins. Retrieved August 2017 from https://www.jpcbs.info/2015_3_2_5_Obouayeba.pdf.

Onslow, M.W. (2015). The Anthocyanin Pigments of Plants. Retrieved August 2017 from <https://archive.org/details/anthocyaninpigme00onsl>.

Patil, N., Mumbai, & Matunga. (2014, December). Extraction and stability and separation of anthocyanins of *Ixora coccinea* Linn. Retrieved July 2017 from <http://innovareacademics.in/journals/index.php/ijpps/article/view/4395/8446>.

Ramamoorthy, A., & Ravi, S., & Jedd, N., Thangavelu, R., & Janardhana, S. (2016). Natural Alternative for Chemicals used in Histopathology Lab-A Literature Review. US National Library of Medicine National Institute of Health. Retrieved November 2017 from Doi:107860/JCDR/2016/23420 88660.

Sahira, B. K. (2014). General Techniques Involved in Phytochemical Analysis. Retrieved August 2017 from <https://www.arcjournals.org/pdfs/ijarcs/v2-i4/5.pdf>.

Sears, D. (2009). Blood Cell Identification by Staining and Morphology. Retrieved August 2017 from <https://biosci.mcdb.ucsb.edu/immunology/Cells-Organ/blood-cell-morphology.htm>.

Stuart, G. U. (2016). Santan: *Ixora coccinea* Linn. Jungle Flame. Retrieved 2017 from <http://www.stuartxchange.org/Santan.html>.

Tatsuzawa, F., & Hosokawa, M. (2016). Flower Colors and their Anthocyanins in Saintpaulia Cultivars (Gesneriaceae). Retrieved December 2017 from https://www.jstage.jst.go.jp/article/hortj/85/1/85_MI-084/_html.

Tennakoon, K., & Wakasi. (2015). Efficiency enhancement of cocktail dye of *Ixora coccinea* and *Tradescantia spathacea* in DSSC. *Journal of Biophysics*. Retrieved December 2017 from Academic OneFile. DOI:<http://dx.doi.org/10.1155/2015/582091>.

Toussirot, M. et al. (2014). Dyeing properties, coloring compounds and antioxidant activity of *Hubera nitidissima* (Dunal) Chaowasku (Annonaceae). Retrieved December 2017 from <http://www.sciencedirect.com/science/pii/S0143720813004543>

Uddin, M. M. N., Amin, R., Basak A. & Shariar, M. (2014). Pharmacological Investigation on flowers of *ixora coccinea*. Retrieved December 2017 from https://www.researchgate.net/publication/260855724_Pharmacological_Investigations_on_Flowers_of_Ixora_coccinea.

U. S Government Publishing Office. (2013). 29 CFR 1910-Occupational Safety and Health Standards. Retrieved July 2017 from <https://www.gpo.gov/fdsys/granule/CFR-2013-title29-vol5/CFR-2013-title-vol5-part1910>.

Vankar, P.S. & Srivastava. (2010). Evaluation of Anthocyanin Content in Red and Blue Flowers. Retrieved August 2017 from https://www.researchgate.net/publication/234002735_Evaluation_of_Anthocyanin_Content_in_Red_and_Blue_Flowers.

Welch, C., Wu, Q., & Simon, J. (2008). Recent Advances in Anthocyanin Analysis and Characterization. Retrieved August

2017 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2783603>.

Zhang, Y. et al. (2016). The anthocyanins component and the influence factors of contents in red flesh apple 'Hong-Xun No.1" Retrieved November 2017 from http://www.pubhort.org/ejhs/81_5_3.pdf.