

# HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS

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## ENDORSEMENT

This thesis entitled “**HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS**” was prepared by **Gee Harren A. Back, Gizelle Jane A. Dengsa, Loveren E. Edano, Justin Carlo C. Macusi, Kristina Claire G. Santiago, Trisha Nicole D. Sopranes, and Lovely Joy A. Valdez** in fulfillment of the requirements for the Research subject has been examined and is recommended for acceptance and approval for Final Defense.

  
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**THE RESEARCHERS**

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## ABSTRACT

This study investigates the role of radiologic technologists in health promotion and disease prevention at Lorma Medical Center and Ilocos Training and Regional Medical Center, focusing on their activities in patient education, radiation safety, health campaigns, professional growth, early detection, and advocacy to public health. Data were collected through structured questionnaires to evaluate the consistency and effectiveness of these activities. The results show that while radiologic technologists excel in patient education and radiation safety, there are opportunities for improvement in health campaigns and lifestyle education. Overall, the findings underscore their significant contribution to public health and suggest that enhancing professional development and community outreach could further optimize their impact on health outcomes. In conclusion, radiologic technologists are essential in enhancing patient outcomes and reducing chronic disease risk through health promotion activities, and it is crucial to support their involvement and strategically enhance their practices to achieve better public health outcomes.

**Keywords:** *disease prevention, health campaign, health promotion, lifestyle education, radiologic technologists*

## CHAPTER I

### The Problem

#### Background of the Study

In today's healthcare landscape, health promotion and disease prevention are gaining recognition as essential elements that enhance traditional patient care. This shift highlights the importance of proactive health management, prioritizing the prevention of illnesses rather than just their treatment. Radiologic technologists, who have long been known for their skills in diagnostic imaging, are adapting to meet the changing demands of healthcare. Their roles are expanding beyond just performing imaging procedures, radiologic technologists are now crucial players in health promotion and disease prevention. This evolution underscores the need for a significant change in their professional responsibilities, reflecting a broader commitment to improving patient outcomes and overall community health.

Health promotion is fundamentally the process of enabling individuals and communities to take control over their health, leading to improved overall well-being. This proactive approach involves empowering people with the knowledge and resources necessary to make informed health decisions and prevent illnesses (Gurney & Lee, 2022). Effective health promotion strategies encompass a wide range of activities, including education about healthy lifestyles, access to healthcare resources, and initiatives aimed at fostering supportive environments that encourage healthy behaviors.

Disease prevention, on the other hand, refers to specific actions taken to reduce the risk of acquiring diseases. This includes a variety of strategies such as regular health screenings, vaccinations, and early detection efforts that help identify health issues before they progress (Roberts, 2020). Additionally, education plays a vital role in disease prevention by informing individuals about risk factors, symptoms, and the importance of early intervention. By equipping

people with the necessary information, they can make better choices that enhance their health outcomes (Williams, 2023).

Health promotion and disease prevention are essential pillars of healthcare that aim to improve the quality of life by reducing risks and minimizing the prevalence of preventable diseases. Radiologic technologists, as vital members of the healthcare team, contribute significantly to these efforts through early detection, patient education, and promoting healthier lifestyles. Their role is critical in mitigating the effects of Noncommunicable diseases (NCDs), also known as chronic diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioral factors. The main types of NCDs are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes, which are leading causes of mortality globally (Risk staffing, 2024).

Globally, the contribution of radiologic technologists in disease prevention extends beyond just diagnostic imaging. They are increasingly involved in telemedicine and digital health services, which have been growing in importance, especially in areas with limited access to healthcare. Additionally, technological advancements in radiology, such as AI-powered imaging tools, have further enhanced their ability to detect early signs of disease, leading to more effective preventive measures and improved patient care (Bhandari, 2024).

According to the World Health Organization (2024), NCDs account for 71% of global deaths, with low- and middle-income countries experiencing the highest burden (WHO, 2024). The disparities in access to healthcare and health resources in various regions, including Sub-Saharan Africa and South Asia, highlight the need for more accessible health promotion and disease prevention programs. In high-income countries like the United States, lifestyle-related

diseases such as diabetes and cardiovascular conditions dominate, reinforcing the importance of continuous health promotion strategies to address these preventable conditions (Reid, 2024).

In the Philippines, radiologic technologists can support public health campaigns by participating in mobile clinics and outreach programs in underserved areas. These initiatives are essential in addressing health disparities, particularly in rural regions where healthcare facilities and personnel are limited. Radiologic technologists also play a crucial role in educating patients about the significance of early detection in preventing severe disease outcomes. By engaging in community-based health education efforts and continuing professional development, they contribute to building healthier communities, which is a cornerstone of public health promotion (Jaminola et al., 2023). Health promotion and disease prevention efforts are often hampered by socioeconomic inequalities, inadequate healthcare infrastructure, and a lack of widespread health literacy. The Department of Health (DOH) has focused on key areas such as immunization, mental health, reproductive health, and environmental health to combat these issues. However, as noted in the DOH's 2022 policy review, logistical challenges and resource limitations have hindered the reach of these initiatives, particularly to marginalized communities (Jaminola et al., 2022).

Furthermore, morbidity and mortality rates in the country, particularly from cardiovascular diseases and cancer, underscore the need for effective health promotion interventions. According to the Philippine Statistics Authority, ischemic heart disease was responsible for 18.4% of deaths in 2022, with neoplasms and cerebrovascular diseases also ranking highly, highlighting the importance of early detection and prevention (Lucero-Prisno III et al., 2023).

Locally, City of San Fernando, La Union faces unique challenges in promoting health and preventing disease. Despite intensified health campaigns and disease surveillance activities, limitations in healthcare manpower and funding have hindered comprehensive efforts. The

Provincial Government of La Union's 2021 Annual Accomplishment Report highlighted the need for enhanced community engagement and capacity-building to address persistent health disparities (Provincial Government of La Union, 2021). Local initiatives, such as vaccination drives and health fairs, have made strides in promoting preventive healthcare practices, but much work remains to ensure equitable access to these services for all residents (USAID, 2024). These efforts align with the WHO's Global NCD Action Plan, which advocates for reducing risk factors such as smoking, unhealthy diets, and physical inactivity on a global scale.

Radiologic technologists in the City of San Fernando, La Union exemplify the integration of their roles in diagnostic imaging and public health. They are responsible for performing diagnostic imaging procedures, such as X-rays, CT scans, and MRIs, which are essential for early detection and treatment of various health conditions. In Lorma Medical Center, a leading healthcare provider in the area, demonstrates how RTs contribute to community health initiatives, including patient education on preventive screenings and public awareness campaigns on the benefits of early detection. These localized efforts align with the broader goals of modern healthcare systems, which emphasize holistic and patient-centered care (Hardy & Harvey, 2020).

Radiologic technologists (RTs) are highly trained healthcare professionals specializing in the use of diagnostic imaging equipment, such as X-rays, magnetic resonance imaging (MRI), computed tomography (CT) scans, and mammography (Ye & Huang, 2021). These advanced technologies play a crucial role in the early diagnosis of diseases, thereby significantly enhancing patient care outcomes (Seeram, 2019). While the primary function of an RT has traditionally been to produce high-quality diagnostic images, the profession has evolved to encompass a broader range of responsibilities, including patient care, radiation protection, and active participation in public health initiatives.

Radiologic technologist plays an important role in cancer screening which is a key component of disease prevention by providing imaging techniques such as mammograms for breast cancer detection and low-dose CT scans for lung cancer screening. According to Petersen et al. (2021), RTs provide reliable imaging, which is necessary for early diagnosis and hence improves patient outcomes. For example, RTs in mammography educate patients on the significance of regular screenings, which have been found to significantly reduce breast cancer mortality.

In addition to screening, radiologic technologists are actively involved in radiation safety protocols. By adhering to the "As Low As Reasonably Achievable" (ALARA) principle, RTs minimize patient's and healthcare workers exposure to ionizing radiation during diagnostic and therapeutic procedures. This effort aligns with global priorities for reducing unnecessary radiation exposure, as emphasized in a study by Johnson and Meisinger (2022), which highlighted the critical role of RTs in implementing safety standards to prevent radiation-induced conditions.

Furthermore, radiologic technologists engage in patient education for lifestyle modifications as part of disease prevention strategies. For example, RTs involved in lung cancer screenings often provide resources on smoking cessation, encouraging patients to reduce their risk of developing or worsening lung disease (American Society of Radiologic Technologists, 2022)

Radiologic technologists play a vital role in the prevention of diseases through early detection via diagnostic imaging. Their involvement in screening programs allows for timely intervention, which can significantly improve patient outcomes. They are also uniquely positioned to educate patients on the importance of routine health checks and adopting healthy lifestyles, as their work often involves direct interaction with individuals during imaging procedures. Radiologic technologists can offer guidance on maintaining a healthy weight, avoiding smoking, and managing stress, all of which are factors that can influence the outcomes of diseases detected

through imaging. Through participation in public health initiatives such as screening programs for breast cancer or tuberculosis, radiologic technologists help prevent the progression of diseases and reduce healthcare costs in the long run (USAID, 2024).

Moreover, radiologic technologists play a fundamental role in health promotion and disease prevention through early disease detection, patient education, and participation in public health initiatives. While challenges persist in both global and local contexts, such as limited resources and disparities in healthcare access, the efforts of radiologic technologists remain essential in reducing the burden of preventable diseases. By continuing to engage in health education, screening programs, and embracing technological advancements, radiologic technologists will continue to be crucial in building healthier communities and advancing public health outcomes. Their contribution to early detection, preventive measures, and public health education highlights the critical role they play in improving global and local health standards.

The Republic Act No. 7431, known as the Radiologic Technology Act of 1992, underscores the essential role of radiologic technologists in health promotion and disease prevention. In section 2, the Statement of Policy highlights the importance of protecting the public from radiation hazards and ensuring safe diagnosis, treatment, and research through the use of radiation-based equipment. This act emphasizes their critical responsibilities in performing diagnostic and therapeutic procedures, safeguarding public health by minimizing radiation risks, promoting early disease detection, educating patients on preventive measures, and implementing safety protocols (RA 7431 of 1992).

The CHED Memorandum Order No. 7, Series of 2018, emphasizes the importance of radiologic technologists in health promotion and disease prevention through education, training, and professional practice. It mandates the Bachelor of Science in Radiologic Technology curriculum to include components on health promotion and disease prevention, emphasizing

patient education, radiation safety, and collaboration with other healthcare professionals. The order emphasizes proactive community health and patient advocacy (CHED,2018).

This study emphasizes the essential role of radiologic technologists in health promotion and disease prevention, illustrating how their contributions go beyond conventional imaging practices. The purpose of this study is to explore how radiologic technologists contribute to early disease detection, patient education, and participation in community health initiatives aimed at preventing preventable diseases. By examining their evolving responsibilities beyond traditional diagnostic imaging, this study aims to underscore the importance of integrating health promotion and disease prevention into the daily practices of radiologic technologists through their involvement in screenings, health campaigns, & patient education and to provide valuable insights into the contributions of radiologic technologists to public health and identify areas for improvement in their practices. The study's findings highlight the essential role of radiologic technologists in health promotion and disease prevention. For radiologic technologists, it emphasizes patient education and early detection of non-communicable diseases (NCDs). Hospitals can integrate these findings to improve patient care. Training programs and colleges can update their curricular to prepare future radiologic technologists effectively. Policymakers can use the insights to develop health regulations. The community benefits from increased awareness and healthier lifestyle choices. Future researchers can build on this foundation to develop effective health promotion strategies. This multifaceted impact enhances healthcare services and promotes healthier communities.

## **Theoretical/Conceptual Framework**

This study is anchored to the Health Belief Model (HBM), supported by the Theory of Planned Behavior (TPB) and Ecological Systems Theory. The HBM, developed by Irwin Rosenstock in 1966, focuses on individuals' perceptions of health risks and the benefits of preventive actions, identifying key constructs such as perceived susceptibility, severity, barriers, and benefits. In the context of radiologic technology, the HBM emphasizes the importance of educating both patients and healthcare providers about the risks associated with radiation exposure and the advantages of implementing safety measures (Champion et al, 2020).

Complementing this, the TPB, formulated by Icek Ajzen in 1991, posits that technologists' intentions to engage in behaviors like radiation safety are influenced by their attitudes, subjective norms, and perceived behavioral control. This theory highlights how external factors, such as workplace dynamics and social pressures, can shape these intentions (Downing et al, 2022).

Lastly, the Ecological Systems Theory, proposed by Urie Bronfenbrenner in 1979, provides a broader perspective by examining how various environmental systems from immediate workplace interactions to national health regulations interact to influence individual behaviors. This theory underscores the importance of understanding the multiple levels of influence that affect radiologic technologists' practices and their role in public health initiatives (Morris, 2021).

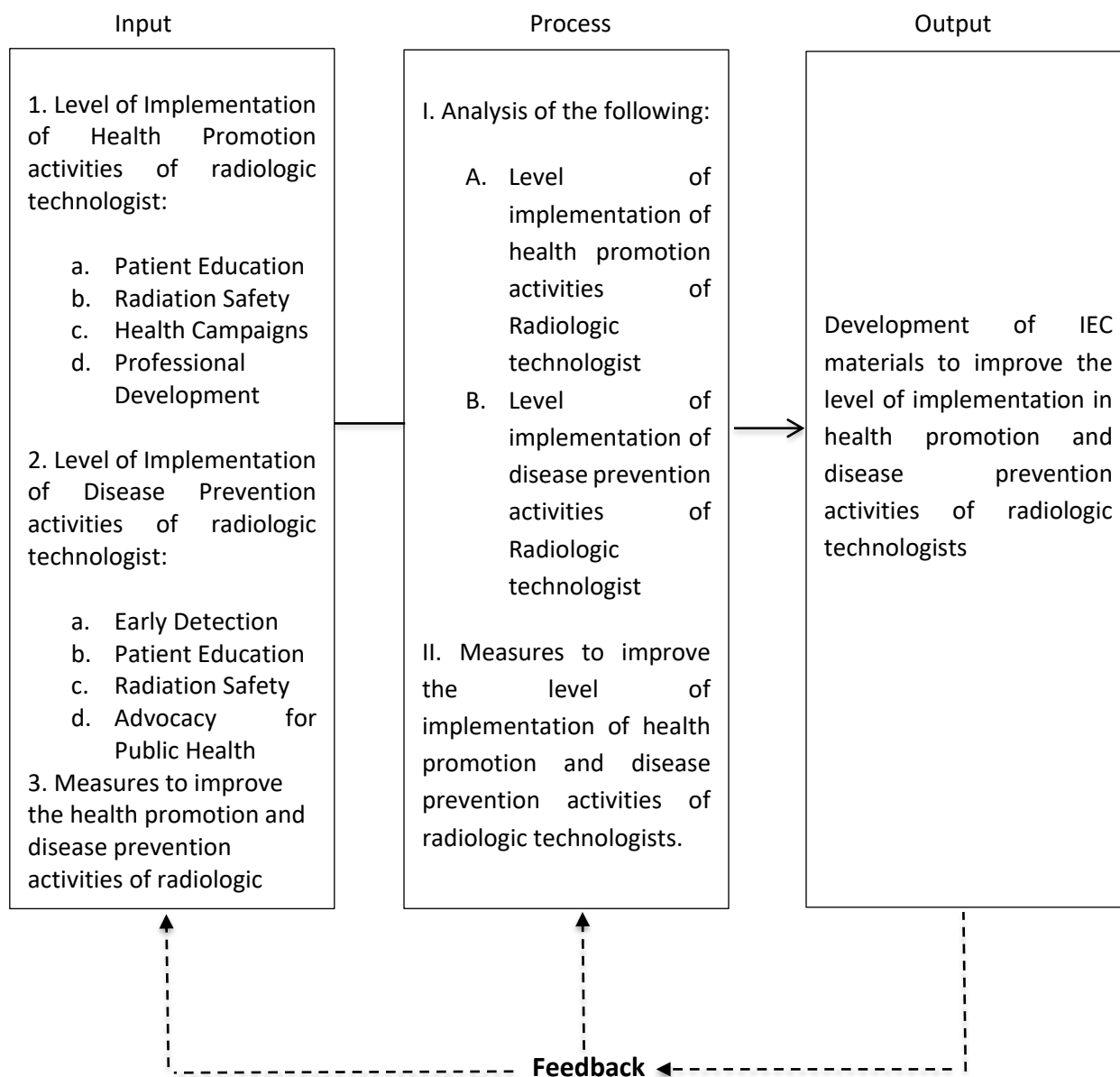
Together, these theories create a comprehensive framework for exploring how radiologic technologists can effectively promote radiation safety and integrate their efforts into multidisciplinary public health strategies, ultimately enhancing health outcomes for patients and communities and guiding how RTs can effectively contribute to health promotion and radiation safety initiatives.

The research paradigm provides a structured framework that outlines the flow of the study, connecting its input, process, and output to achieve a clear understanding of the health promotion and disease prevention activities of radiologic technologists.

The input focuses on assessing the health promotion and disease prevention activities of radiologic technologists. Specifically, the health promotion activities include radiation safety, patient education, health campaigns and professional development. For disease prevention activities it encompasses early detection, radiation safety, patient education and advocacy for public health. These areas are critical in evaluating the role of radiologic technologists in enhancing patient care and safety.

The process involves data collection and analysis. This step ensures that the collected information is systematically analyzed to address the research objectives effectively. The output of the study is the development of measures aimed at improving the health promotion and disease prevention activities of radiologic technologists. These recommendations are expected to enhance the technologists' contribution to patient care and safety in their professional practice.

The research paradigm not only delineates a logical flow from input to output but also underscores the interconnectedness of various factors that shape radiologic technologist' contributions to public health. By systematically addressing these elements, the study aims to provide evidence-based recommendations for enhancing the role of radiologic technologists in fostering healthier communities through preventive care and health promotion.



**Figure 1. Research Paradigm of the Study**

### Statement of the Problem

This study investigated the health promotion and disease prevention activities of Radiologic Technologist. Specifically, this research study sought to answer the following questions:

1. What is the level of implementation of health promotion activities of radiologic technologists?
  - a) patient education;
  - b) radiation safety;
  - c) health campaigns; and
  - d) professional development?
2. What is the level of implementation of disease prevention activities of radiologic technologists?
  - A. early detection;
  - B. patient education;
  - C. radiation safety; and
  - D. advocacy for public health?
3. What measures can be recommended to improve the health promotion and disease prevention activities of the radiologic technologists?

## **CHAPTER II**

### **Methodology**

This chapter of the research process contains a comprehensive description of the research designs, population and locale, data gathering procedures, and the treatment of data.

#### **Research Design**

This study utilized a descriptive-quantitative method to investigate the health promotion and disease prevention activities of radiologic technologists. The descriptive-quantitative design allowed for the collection and analysis of numerical data to quantify the extent to which these activities were implemented and to identify trends and patterns (Lim et al., 2022).

A descriptive research design was followed to conduct the study. Descriptive studies collect information without altering the environment, nothing is manipulated. The descriptive research design was chosen because it is considered the best method for gathering information that demonstrates relationships and describes the world as it exists (International Journal of Home).

In this research study, a quantitative-descriptive method was used to examine the health promotion and disease prevention activities of radiologic technologists. The selected respondents answered questionnaires provided by the researchers, which were instrumental in conducting the study.

#### **Population and Locale**

This study was conducted at two tertiary hospitals in the City of San Fernando, La Union: Ilocos Training and Regional Medical Center and Lorma Medical Center. These hospitals were selected for their comprehensive radiology departments, advanced diagnostic imaging technologies, and established reputation for excellence in diagnostic imaging and patient care.

The presence of well-trained radiologic technologists and a supportive healthcare infrastructure made these institutions ideal for examining the health promotion and disease prevention activities of radiologic technologists. Limiting the geographic scope to City of San Fernando, La Union ensured logistical feasibility and encouraged a higher participation rate among respondents.

The researchers did a total enumeration of the 30 Radiologic Technologist from Ilocos Training and Regional Medical Center and 30 Radiologic Technologist from Lorma Medical Center. The study included all Radiologic Technologists who are currently employed at Ilocos Training and Regional Medical Center and Lorma Medical Center and provided informed consent. The exclusion was applied when a significant portion of information was missing from a respondent's response, and those who refused to participate were excluded from the analysis.

### **Data Gathering Tool**

This study utilized a structured questionnaire as the primary data-gathering tool to collect relevant information about the health promotion and disease prevention activities of radiologic technologist. The researchers partially based the questionnaire on online literature, such as Google searches, online files, and internet-published research related to the study being conducted.

The questionnaire consisted of two (2) parts. The first part covered the health promotion activities of radiologic technologists, including patient education (2 items), radiation safety (5 items), health campaigns (2 items), and professional development (4 items). The second part focused on disease prevention activities, incorporating early detection (3 items), patient education (3 items), radiation safety (3 items), and advocacy for public health (4 items). The response options followed a 5-point Likert scale, where 5 represented "Very High Implemented,"

4 represented "High Implemented," 3 represented "Moderately Implemented," 2 represented "Poorly Implemented," and 1 represented "Never Implemented."

The questionnaire underwent validity testing by three experts in the field of research and radiology. The researchers approached each expert face-to-face, requesting a review and validation of the structured questionnaire. The experts rated it as acceptable with a content validity value of 1, ultimately approving its use as a floating questionnaire for the study.

A pilot test was conducted with a small sample of 10 Radiologic Technologists in Bethany Inc. to identify ambiguous or unclear items. Feedback from this process was used to refine and improve the questionnaire. The reliability of the questionnaire was tested using Cronbach's Alpha to assess the internal consistency reliability of a set of items, and it was reliable with a result of 0.94.

### **Data Gathering Procedure**

The data collection process began with the submission of the research manuscript to the research panels and got approval from the dean of College of Radiologic Technology. The research manuscript was then submitted to the Research Institute of LORMA Colleges. It was then reviewed by the Research Ethics Committee (REC) of LORMA Colleges to ensure the questionnaire and manuscript met ethical standards. The researcher secured formal approval from the dean of the College of Radiologic Technology and the administrators of Ilocos Training and Regional Medical Center and Lorma Medical Center, the two selected hospitals in City of San Fernando, La Union. Approval was obtained, invitation letters were sent to respondents, informing them of the study's purpose and requesting their voluntary participation.

The researcher distributed the questionnaires in person with the assistance of the radiology department of each hospital, ensuring that each respondent received clear instructions

on completing the survey. The questionnaires were distributed at times convenient for the respondents, such as during breaks or after work shifts. Respondents were given adequate time, typically one week, to complete the questionnaires. Respondents in the study were informed about their involvement. They were asked to sign a written consent form, ensuring they had been adequately informed and voluntarily agreed to participate. Respondents were also made aware of their right to withdraw from the study at any time, even if they had initially agreed to participate. This right to withdraw without penalty or consequence was clearly explained in the consent form. Researchers ensured that respondents knew they could stop their participation at any point, and any data collected up to that stage was either discarded or retained only with their consent. There were no known risks associated with participation in the study. The potential benefits included contributing to knowledge that could improve a field of study, policy, or practice. Additionally, researchers informed respondents that despite their participation, they were not provided with any incentives or personal benefits unless explicitly offered.

The completed questionnaires were collected, and reviewed to ensure completeness and accuracy. The data provided by the respondents were kept with utmost care by the researchers, placed in plastic envelopes, and stored in a locked cabinet. Additionally, electronic data was stored in Google Drive, accessible only to the researchers, research adviser, and research facilitators. Furthermore, the data was treated with confidentiality and was not disclosed to any third party without explicit consent; only authorized personnel directly involved in the research had access to the data. Identifying information was not linked to respondents' responses in any reports or publications. The results of this study were utilized exclusively for research purposes. After completion and public disclosure, the researchers will permanently delete the raw data within two to five years.

#### **Treatment of Data**

The collected data were tabulated using Microsoft Excel and analyzed and interpreted using statistical tools. Weighted mean was used to determine the level of implementation of health promotion and disease prevention activities of radiologic technologists. According to Hurley and Tenny (2023), the mean, which is also known as the average, is the total sum of values in a sample divided by the number of values in your sample. The average or mean is calculated by adding up all the numbers and dividing them by the total number of values.

A questionnaire with a five-point Likert scale was utilized as the research tool of this study. The scoring range of the five-point Likert scale is presented in the table below:

**Table 1. Data Categorization**

<b>Descriptive Interpretation</b>	<b>Scale Value</b>	<b>Statistical Limit</b>
Very Highly Implemented	5	4.21-5.00
Highly Implemented	4	3.41-4.20
Moderately Implemented	3	2.61-3.40
Poorly Implemented	2	1.81-2.60
Never Implemented	1	1.00-1.80

## CHAPTER III

### Results and Discussion

This chapter presents the results derived from the statistical analysis of the gathered data, systematically detailing the Health Promotion and Disease Prevention Activities of Radiologic Technologists. The results were also discussed in connection with existing literature. The researchers highlighted the highest and lowest values in the findings.

#### **Level of Implementation of Health Promotion Activities of Radiologic Technologists**

The first problem addressed in the study concerns the level of implementation of health promotion activities of radiologic technologists in terms of patient education, radiation safety, health campaigns, and professional development.

#### ***Patient Education***

Patient education is essential for health promotion, enabling individuals to make informed health decisions and actively participate in their care through information provided by radiologic technologists on imaging procedures, and healthy lifestyles.

#### **Table 2. Level of Implementation of Radiologic Technologists in terms of Patient Education**

Table 2 shows the level of implementation of radiologic technologists in terms of patient education with a general weighted mean of 4.91, indicating a very high level of implementation.

<b>Indicators</b>	<b>Weighted Mean</b>	<b>DER</b>
Radiologic technologist explains the purpose and process of imaging procedures to help patients understand how these tests contribute to detection of diseases	4.92	Very Highly Implemented
Radiologic technologist informs patients about the imaging process, which helps reduce anxiety and promotes cooperation during the procedures	4.90	Very Highly Implemented
<b>GENERAL WEIGHTED MEAN</b>	<b>4.91</b>	<b>VERY HIGHLY IMPLEMENTED</b>

Based on the provided table, the highest weighted mean is 4.92 on the one indicator “Radiologic technologist explains the purpose and process of imaging procedures to help patients understand how these tests contribute to detection of diseases,” it shows that radiologic technologists place a strong emphasis on making sure patients comprehend the reasons for their imaging procedures. It emphasized the significance of patient understanding, particularly in relation to alleviating potential anxieties and enhancing the overall effectiveness of diagnostics. The indicator with the lowest weighted mean score of 4.90 “Radiologic technologist informs patients about the imaging process, which helps reduce anxiety and promotes cooperation during the procedures” still demonstrates a high level of implementation, indicating that while information is conveyed effectively, there is still potential to enhance the environment for encouraging greater patient cooperation.

The very highly implementation results indicates that radiologic technologists are effectively educating patients, which significantly benefits healthcare. Patients who are well-informed are more likely to adhere to instructions, which improves imaging quality and accurate diagnosis. Clear explanations reduce anxiety, enhancing patient comfort and satisfaction. Additionally, patients are more likely to stick to treatment and follow-up care plans when they recognize the importance of imaging. These results demonstrate the importance of patient education in enhancing healthcare effectiveness and improved outcomes

Based on the study of Ferenchick, Solomon, and Greene (2022), radiologic technologists play a pivotal role in patient education by clearly explaining the imaging procedures, which enhances patients’ understanding and leads to improved compliance with diagnostic recommendations. Their research emphasizes that when patients are well-informed about the nature and purpose of diagnostic imaging, they are more likely to participate actively in their healthcare. Similarly, El-Sayed, Khattab, and Youssef (2021) found that effective communication between radiologic

technologists and patients contributes significantly to the latter's awareness of disease detection, thereby promoting a sense of trust in medical imaging procedures.

According to Bamidele and Adebayo (2021), informing patients about the steps involved in imaging procedures significantly reduces their anxiety and enhances their cooperation. The study reported that when technologists communicate clearly with patients, there is a marked improvement in their comfort and willingness to undergo the procedure. Similarly, Chen, Wang, and Li (2020) emphasized that patient satisfaction is closely linked to the quality of communication provided by radiologic staff. Their findings show that understanding the imaging process allows patients to manage expectations and feel more at ease, resulting in smoother and more efficient procedures.

### ***Radiation Safety***

Radiation safety includes using lead shields and following exposure guidelines to protect patients from unnecessary radiation, emphasizing technologist's role in safe imaging practices and safeguarding patients' health.

#### **Table 3. Level of Implementation of Radiologic Technologists in terms of Radiation Safety**

Table 3 shows the level of implementation of radiologic technologists in terms of radiation safety with a general weighted mean of 4.34 indicating very highly implemented. This signifies that radiologic technologists consistently adhere to radiation protection practices, particularly in terms of radiation safety.

Based on the provided table, the highest weighted mean is 4.70 on the indicator "Radiologic technologists instruct patients the correct positioning techniques to minimize exposure and improve image quality, reducing the need for repeat scans," it shows that radiologic technologists help position the patient correctly to ensure safer, faster, and more accurate imaging.

<b>Indicators</b>	<b>Weighted Mean</b>	<b>DER</b>
Radiologic technologists instruct patients the correct positioning techniques to minimize exposure and improve image quality, reducing the need for repeat scans	4.70	Very Highly Implemented
Radiologic technologist uses dosimeters to monitor and record radiation levels for staff.	4.68	Very Highly Implemented
Radiologic technologist enforces strict radiation safety protocols to protect patients and staff during imaging procedures	4.55	Very Highly Implemented
Radiologic technologists ensure that lead shields and aprons are used during imaging procedures to protect patients from unnecessary radiation exposures	4.32	Very Highly Implemented
Radiologic technologists regularly calibrate and maintain imaging equipment to ensure it operates at the lowest possible radiation dose	3.47	Highly Implemented
<b>GENERAL WEIGHTED MEAN</b>	<b>4.34</b>	<b>VERY HIGHLY IMPLEMENTED</b>

The indicator with the lowest weighted mean score of 3.47 “Radiologic technologists regularly calibrate and maintain imaging equipment to ensure it operates at the lowest possible radiation dose” demonstrates the highly implementation, indicating that radiologic technologists help keep imaging equipment safe and effective by maintaining and adjusting it to limit radiation exposure to patient.

The overall result shows that radiologic technologists have a very highly implementation and adherence to radiation safety protocols, emphasizing a strong commitment to patient safety. However, regular maintenance can further reduce radiation exposure, so there is a need for improvement in ensuring that imaging equipment operates at optimal safety levels. Furthermore,

the results emphasize the necessity of strengthening radiation protection policies through ongoing training and institutional support to elevate standards, particularly in equipment handling and maintenance.

Bushong (2019) argued that radiation safety is a fundamental aspect of health promotion, stating that regular professional training ensures technologists uphold best practices, reducing risks associated with excessive radiation exposure. This supports the findings that strengthening institutional policies on training and maintenance can further enhance safety efforts.

The study conducted by McNulty et al. (2016) on the effectiveness of proper positioning in reducing radiation exposure. This demonstrated that small positioning errors could lead to increased radiation dose, requiring repeat scans and affecting image quality. This supports the finding that radiologic technologists prioritize correct patient positioning to minimize unnecessary exposure. Additionally, Zhang et al. (2020) highlighted the role of technologist training in optimizing radiation safety during procedures. Their study found that technologists who provided clear patient instructions significantly decreased radiation dose variability, which aligns with the highest-rated indicator showing high adherence to patient education strategies.

Dudhe et al. (2024) states that, because they are expected to practice radiation protection, radiologic technologists who do diagnostic radiology exams are educated to utilize as little ionizing radiation as is reasonably practicable, or ALARA. This entails selecting suitable exposure levels, using protective gear, and modifying scan techniques to guarantee that images are created with the fewest possible ionizations. Due to the necessity for specialist expertise and severe caution, these aspects are especially crucial for patients from special risk groups, such as pediatric or pregnant patients.

### **Health Campaigns**

Health campaigns are organized activities aimed at raising awareness and promoting healthy behaviors within communities. Radiologic technologists participate in these campaigns by collaborating with public health organizations, engaging in community outreach, and advocating for the importance of health and wellness initiatives.

**Table 4. Level of Implementation of Radiologic Technologists in terms of Health Campaigns**

Table 4 shows the level of implementation of radiologic technologists in terms of health campaigns with a general weighted mean of 3.97 indicating highly implemented.

Based on the provided table, the highest weighted mean is 4.02 on the indicator “Radiologic technologist joins community health fairs like medical missions to provide information about imaging services and the importance of preventive health measures,” shows that radiologic technologists participate actively in community health fairs like medical missions. This indicates that they actively interact with the public by promoting the value of preventive healthcare and providing information directly about imaging services. Their participation in these fairs enables them to build trust within communities, guiding individuals toward early detection and better health-seeking behaviors.

<b>Indicators</b>	<b>Weighted Mean</b>	<b>DER</b>
Radiologic technologist joins community health fairs like medical missions to provide information about imaging services and the importance of preventive health measures	4.02	Highly Implemented
Radiologic technologists use social media platforms to share information about health promotion and disease prevention activities	3.92	Highly Implemented
<b>GENERAL WEIGHTED MEAN</b>	<b>3.97</b>	<b>HIGHLY IMPLEMENTED</b>

The indicator with the lowest weighted mean score of 3.92 “Radiologic technologists use social media platforms to share information about health promotion and disease prevention activities” demonstrates highly level of implementation, while this indicates that radiologic technologists utilizes digital platforms, there may be opportunities to expand their engagement such as creating more interactive content, or consistently sharing up-to-date medical insights to reach a wider audience, making it a powerful tool for influencing health decisions beyond local community events.

The present study confirms that radiologic technologists demonstrate highly level of implementation in health campaigns overall. Their involvement aligns with studies highlighting the role of healthcare professionals in raising awareness and advocating preventive care. For instance, a study by Smith et al. (2020) emphasizes that community-based education significantly improves public understanding of medical imaging, while Johnson & Brown (2019) discuss how digital outreach enhances patient engagement in preventive health.

The strong participation in community health fairs suggests that radiologic technologists are effectively bridging the gap between diagnostic services and public health awareness. This could lead to greater patient trust, increased health literacy, and improved adherence to preventive screening protocols. These activities enhance radiologic technologists not just as imaging services but as advocates for public health awareness. However, their lower use of social media presents an opportunity to expand their digital presence, potentially reaching broader audiences, especially younger individuals who rely on online health information.

According to Uwizeye et al. (2021), radiologic technologists actively promote public health through community outreach programs in Rwanda, where medical imaging students and professionals organized events offering ultrasound services and educational discussions on radiologic procedures. These initiatives not only provided imaging services but also raised

awareness about early disease detection and preventive measures. This aligns with findings that radiologic technologists frequently participate in health fairs and medical missions to educate the public on the importance of diagnostic imaging in disease prevention.

Vijan et al. (2023) state that digital communication, such as social media, can enhance public awareness and health literacy, especially when opportunities for traditional face-to-face outreach are limited. This implies that while radiologic technologists are starting to incorporate social media into their public health strategies, there remains considerable scope for further development in this area to better support health promotion and disease prevention efforts.

### ***Professional Development***

Professional development involves ongoing education and training for radiologic technologists, ensuring they stay updated on advancements to enhance health promotion and deliver high-quality patient care.

#### **Table 5. Level of Implementation of Radiologic Technologists in terms of Professional Development**

Table 5 shows the level of implementation of radiologic technologists in terms of professional development with a general weighted mean of 4.30, indicating a very highly level of implementation.

Based on the provided table, the highest weighted mean is 4.67 on the one indicator “Radiologic technologist participates in continuing education and training sessions to stay updated on the latest advancements in radiologic technology and health promotion practices,” shows that radiologic technologists prioritize continuing education and training to stay updated on advancements in radiologic technology and health promotion. This strong commitment reflects their recognition of the rapid evolution of imaging techniques and the need for lifelong learning to maintain high standards of patient care. Studies such as Smith & Jones (2020)

<b>Indicators</b>	<b>Weighted Mean</b>	<b>DER</b>
Radiologic technologist participates in continuing education and training sessions to stay updated on the latest advancements in radiologic technology and health promotion practices.	4.67	Very Highly Implemented
Radiologic technologists share their expertise and knowledge with colleagues to improve overall health promotion efforts within them departments	4.62	Very Highly Implemented
Radiologic technologists participate in research studies to contribute to the advancement of radiologic technology and patient care, staying at the forefront of innovations in health promotion	3.97	Highly Implemented
Radiologic technologist engages in peer review sessions to receive constructive feedback and improve professional skills	3.95	Highly Implemented
<b>GENERAL WEIGHTED MEAN</b>	<b>4.30</b>	<b>VEY HIGHLY IMPLEMENTED</b>

emphasize that continuous professional development enhances diagnostic accuracy and patient outcomes, reinforcing the importance of ongoing education in healthcare.

The indicator with the lowest weighted mean score of 3.95 “Radiologic technologist engages in peer review sessions to receive constructive feedback and improve professional skills,” still described as “Highly Implemented,” this implies that it is not given as much attention as other professional development activities. According to research by Brown & Green (2019), structured peer review promotes clinical quality and collaborative learning, indicating that radiologic technologists could gain benefit from more regular and systematic peer evaluations.

The overall result shows that radiologic technologists have a very high level of implementation, indicating a strong commitment to professional development among radiologic technologists, which is critical for maintaining high standards in patient care and adapting to the

rapidly evolving field of healthcare. While participation in research and peer review is significant, enhancing these activities can significantly foster advancements in radiologic technology.

According to the American Society of Radiologic Technologists (2020), ongoing professional development is essential for technologists to maintain clinical excellence and keep pace with advancements in medical imaging technology and practices. Also, the American Society of Radiologic Technologists (ASRT) conducted a survey revealing that while 84.5% of educators acknowledge the importance of teaching Artificial Intelligence (AI), only 23.7% have integrated AI into their curricula, underscoring the need for enhanced training programs (ASRT, 2024). Furthermore, a study focusing on pediatric radiologic technologists found that continuous education and access to patient education materials significantly improved technologists' confidence in discussing radiation doses and risks with patients and caregivers (PubMed, 2022).

According to BMC Medical Education (2024), they found that a 360-degree evaluation of radiology technologists in Karachi highlighted discrepancies between self-assessment and peer evaluation, suggesting a need for a stronger peer review culture. Similarly, Beasley et al. (2020) noted that structured peer feedback enhances learning and performance, which could benefit clinical settings. The American Society of Radiologic Technologists (ASRT) supports peer review for continuous quality improvement and offers guidelines for its integration, though implementation remains inconsistent (ASRT 2024).

#### **Level of Implementation of Disease Prevention Activities of Radiologic Technologists**

The second problem addressed in the study concerns the level of implementation of disease prevention activities of radiologic technologists in terms of early detection, patient education, radiation safety, and advocacy for public health.

### **Early Detection**

Early disease detection enables timely intervention, with radiologic technologists essential for accurate screenings and diagnoses.

**Table 6. Level of Implementation of Radiologic Technologists in terms of Early Detection**

Table 6 shows the level of implementation of radiologic technologists in terms of early detection with a general weighted mean of 3.84 indicating it is highly implemented. This signifies that radiologic technologists consistently adhere to early detection.

Based on the provided table, the highest weighted mean is 4.27 on the one indicator “Radiologic Technologist utilizes advanced imaging techniques to detect diseases at an early stage,” it shows that the radiologic technologists use cutting-edge imaging tools to help catch diseases early, aiding in faster diagnosis and more effective care. As highlighted by Seeram (2019), correct positioning and technique optimization are essential not only for minimizing radiation exposure but also for improving image quality, which enhances diagnostic precision.

The indicator with the lowest weighted mean score of 3.48 “Radiologic technologist implements protocols of regular follow-up imaging to monitor the progression or resolution of

<b>Indicators</b>	<b>Weighted Mean</b>	<b>DER</b>
Radiologic Technologist utilizes advanced imaging techniques to detect diseases at an early stage.	4.27	Very Highly Implemented
Radiologic technologist assists in the interpretation of imaging results, helping to identify any abnormalities or early signs of disease that require further investigation	3.77	Highly Implemented
Radiologic technologist implements protocols for regular follow-up imaging to monitor the progression or resolution of detected conditions	3.48	Highly Implemented
<b>GENERAL WEIGHTED MEAN</b>	<b>3.84</b>	<b>HIGHLY IMPLEMENTED</b>

detected conditions” while this shows a relatively lower level of implementation, although still high implemented, it shows that follow-up imaging could be further optimized. The gap between detection and follow-up monitoring may affect the continuity of patient care and early intervention strategies.

The highly implementation of advanced imaging techniques signifies that radiologic technologists play a crucial role in disease prevention through early detection. However, the comparatively lower score in follow-up protocols indicates the need for strengthened patient monitoring, ensuring that detected conditions are continuously assessed. Addressing this gap through streamlined follow-up procedures, reinforced imaging protocols, and improved patient education could enhance long-term patient care and outcomes.

According to the International Atomic Energy Agency (2018), adherence to follow-up imaging protocols is crucial for assessing disease progression or treatment response and contributes significantly to comprehensive patient care. These findings align with lowest weighted indicator that radiologic technologists are integral to the healthcare team in supporting early detection and continuity of care through both initial diagnostics and structured follow-up imaging.

The study by Smith et al. (2020) emphasizes how innovations like low-dose computed tomography (LDCT) for lung cancer screening and high-resolution MRI for neurological disorders significantly improve early detection rates and patient prognoses. Similarly, research by Jones et al. (2019) highlights the necessity of consistent follow-up imaging, as delays in monitoring disease progression increase the risk of complications and reduce treatment effectiveness.

According to Cancelliere & Pereira (2019) improved imaging technology has greatly altered the career of radiology technologists. These include shift from analog imaging to digital, collaboration of artificial intelligence and machine learning to expand rate, quality and ease of diagnostic imaging

### ***Patient Education***

Patient education aims to increase awareness about health risks and preventive practices. By educating patients on the value of screenings, safe practices, and healthy lifestyles, radiologic technologists enable them to take charge of their own health maintenance.

**Table 7. Level of Implementation of Radiologic Technologists in terms of Patient Education**

Table 7 shows the level of implementation of radiologic technologists in terms of patient education with a general weighted mean of 3.80, indicating a very highly level of implementation, and focusing on their role in informing patients about imaging procedures, hygiene practices, and lifestyle changes for disease prevention.

Based on the provided table, the highest weighted mean is 4.27 on the one indicator “Radiologic technologist explains the importance of imaging procedures and encourages the patients to take the examination to help detect diseases early,” it shows that the radiologic technologists inform and encourage patients to participate in imaging exams that support early

<b>Indicators</b>	<b>Weighted Mean</b>	<b>DER</b>
Radiologic technologist explains the importance of imaging procedures and encourages the patients to take the examination to help detect diseases early	4.27	Very Highly Implemented
Radiologic technologist provides information on proper hygiene practices to prevent infections in healthcare settings such as hand hygiene, equipment sterilization, and infection control to maintain a safe and sanitary environment.	4.07	Highly Implemented
Radiologic technologist provides information on lifestyle changes that can prevent diseases, such as adopting a healthy diet and exercising regularly	3.07	Moderately Implemented
<b>GENERAL WEIGHTED MEAN</b>	<b>3.80</b>	<b>HIGHLY IMPLEMENTED</b>

diagnosis and preventive care. The indicator with the lowest weighted mean score of 3.07 “Radiologic technologist provides information on lifestyle changes that can prevent diseases, such as adopting a healthy diet and exercising regularly,” indicating that radiologic technologists still inform patients on healthy lifestyle choices to help prevent disease and promote long-term well-being, considering being aware of the importance of preventative health education, radiologic technologists may need to put additional focus in integrating it into everyday patient interactions.

The highly level of implementation of educating patients on the importance of imaging procedures demonstrates that radiologic technologists engage in a well-established practice that enhances early diagnosis and intervention, aligning with best practices in radiologic technology and improving patient outcomes through compliance with medical imaging protocols. However, the moderate emphasis on lifestyle change education indicates an area for improvement that could lead to a more comprehensive approach to patient care by integrating preventive strategies.

According to Zafar et al. (2024), effective communication by radiologic technologists is essential in patient-centered care, particularly in helping patients understand the preventive role of diagnostic imaging. Additionally, research published in the Canadian Association of Medical Radiation Technologists (2019) emphasizes that technologists support patients with limited health literacy by helping them understand imaging procedures, ultimately improving diagnostic outcomes.

According to the study of Vijan et al. (2023), who suggest that while radiologic technologists are not traditionally tasked with delivering lifestyle education, their direct contact with patients presents opportunities to reinforce preventive health messages. Similarly, the study of Jenkins et al. (2022) stated that radiologic technologists, particularly in pediatric settings, often

educate caregivers about the implications of radiation exposure and general wellness, reinforcing their growing involvement in broader aspects of health education.

### ***Radiation Safety***

Radiation safety minimizes exposure during imaging, with radiologic technologists ensuring protection through strict protocols, proper equipment handling, and ongoing training, safeguarding both patients and healthcare providers.

**Table 8. Level of Implementation of Radiologic Technologists in terms of Radiation Safety**

Table 8 shows the level of implementation of radiologic technologists in terms of radiation safety with a general weighted mean of 4.41 indicating it is very highly implemented. This signifies that radiologic technologists consistently adhere to radiation protection practices, particularly in terms of radiation safety.

Based on the provided table, the highest weighted mean is 4.77 on the one indicator “Radiologic technologists follow safety protocols and utilize protective equipment to protect both patients and themselves from excessive radiation,” it shows that the radiologic technologists

<b>Indicators</b>	<b>Weighted Mean</b>	<b>DER</b>
Radiologic technologists follow safety protocols and utilize protective equipment to protect both patients and themselves from excessive radiation	4.77	Very Highly Implemented
Radiologic technologist ensures that all radiologic procedures are conducted with the lowest possible radiation dose while maintaining image quality	4.65	Very Highly Implemented
Radiologic technologists participate in the maintenance and calibration of imaging equipment, ensuring it functions at peak performance to deliver precise diagnostic information, which is essential for effective disease prevention	3.80	Highly Implemented
<b>GENERAL WEIGHTED MEAN</b>	<b>4.41</b>	<b>VERY HIGHLY IMPLEMENTED</b>

safeguard health by strictly following radiation safety measures to minimize exposure risks for everyone involved. The indicator with the lowest weighted mean score of 3.80 “Radiologic technologists participate in the maintenance and calibration of imaging equipment, ensuring it functions at peak performance to deliver precise diagnostic information, which is essential for effective disease prevention” demonstrates lowest level of implementation, still indicates highly implementation. This illustrates how radiologic technologist support technical performance by regularly inspecting equipment to guarantee patient safety and diagnostic accuracy.

This present study shows that radiologic technologists demonstrate a strong commitment to radiation safety, with very high adherence to protective protocols that safeguard both patients and professionals. This preventive approach supports long-term health protection and regulatory compliance. However, a lower implementation score in equipment maintenance and calibration shows a potential gap that institutions should address. Improving routine calibration through additional training or evaluations could enhance imaging accuracy, reduce repeat scans, and further optimize patient outcomes.

It is also important to note that radiation technologists are also involved in overall safety in long with which the patient is exposed to radiation. It is strongly aligned with patient safety principles on the best practice on everything that is associated with radiation the practitioners ensure that they operate under policies that make out to give the patients the minimum amount of radiation that is necessary for imaging. This is an emphasis on safety, which also concerns the health of their colleagues and themselves as a result of the same disease. Moreover, these professionals update themselves with the latest developments in the imaging technology and methods and apply such update in their practice for improvement of diagnosis as well as the care of patients (Sayah Aldhafiri et al.).

According to the International Commission on Radiological Protection's (ICRP, 2021) guidelines, this finding is in line with the importance of protective measures like lead shielding, following ALARA's (As Low As Reasonably Achievable) principles, and wearing personal protective equipment to reduce needless radiation exposure for patients and medical personnel.

According to the World Health Organization (2016), keeping imaging equipment in top working order is essential for precise diagnosis and minimizing the need for repeat exams, which can result in higher radiation exposure. Radiologic technologists are important in detecting performance problems and organizing maintenance, even if medical physicists or service engineers may frequently undertake direct calibration. These results underscore that while daily radiation safety practices are well-integrated into radiologic technologists' routines, further emphasis on their participation in equipment quality assurance could enhance overall safety and diagnostic reliability.

Furthermore, this agrees with the article written by Burge (2024), who emphasized the critical role of radiologic technologists in maintaining radiation safety standards through consistent adherence to protocols and proper use of personal protective equipment. Burge also highlighted that the adherence to safety measures not only ensures compliance with regulatory requirements but also significantly reduces the risk of radiation-induced injuries to both patients and healthcare workers on top of that, this claim is supported by Shubayr (2024), with a study involving radiologic technologists in Saudi Arabia found that perceptions of severity, benefits, and self-efficacy significantly influence the consistent use of radiation protective equipment. This emphasizes the benefits of personal protective equipment and barriers can enhance safety practices.

### ***Advocacy for Public Health***

Advocacy for public health involves actively supporting policies, campaigns, and community initiatives that promote preventive healthcare. Radiologic technologists contribute by participating in awareness programs and collaborating with health organizations to enhance access to preventive services.

**Table 9. Level of Implementation of Radiologic Technologists in terms of Advocacy for Public Health**

Table 9 shows the level of implementation of radiologic technologists in terms of advocacy for public health with a general weighted mean of 3.87, indicating it is highly implemented.

Based on the provided table, the highest weighted mean is 4.17 on the indicator “Radiologic technologists advocate for policies that support preventive healthcare and ensure

<b>Indicators</b>	<b>Weighted Mean</b>	<b>DER</b>
Radiologic technologists advocate for policies that support preventive healthcare and ensure access to diagnostic imaging services, contributing to public health initiatives.	4.17	Highly Implemented
Radiologic technologist collaborates with public health organizations to develop and implement policies that promote preventive healthcare.	3.93	Highly Implemented
Radiologic technologist engages in community outreach programs to educate the public about the benefits of radiologic screenings and preventive care.	3.73	Highly Implemented
Radiologic technologists participate in public health campaigns to raise awareness about the importance of disease prevention and early detection.	3.65	Highly Implemented
<b>GENERAL WEIGHTED MEAN</b>	<b>3.87</b>	<b>HIGHLY IMPLEMENTED</b>

access to diagnostic imaging services, contributing to public health initiatives,” it shows that the radiologic technologists play a role beyond the clinic by advocating for policies that improve access to imaging and strengthen preventive healthcare at the community level. The indicator with the lowest weighted mean score of 3.65 “Radiologic technologists participate in public health campaigns to raise awareness about the importance of disease prevention and early detection,” indicating that Radiologic Technologists still support public health by helping educate communities on preventing disease and recognizing the importance of early diagnosis through imaging.

The result of this study shows that radiologic technologists are effective in shaping preventive healthcare policies but may need stronger engagement in campaign-based advocacy. Since imaging procedures are important in early disease detection, enhancing their role in public outreach programs could significantly increase public knowledge about radiologic screenings and their preventive value. Strengthening collaborative efforts with public health agencies can also increase awareness about the importance of timely diagnostic interventions.

Radiologic Technologists (2020) states that radiologic technologists are becoming more and more acknowledged as essential healthcare team members who may advance health equity by endorsing laws that provide access to imaging services for marginalized communities. According to the Dessert Alley Radiology, organizations like International Society of Radiology and Radiological Society of North America aim to bridge the gaps in healthcare access and ensure that diagnostic imaging is an integral part of public health strategies worldwide. Moreover, in the Philippines, the Commission on Higher Education (CHED), states in the CHED memorandum no. 006-01, that graduates of bachelor of science in radiologic technology are ensured that they are equipped with the knowledge and skills necessary to contribute to public health effectively.

A study by Snaith (2020), states that by participating in health promotion initiatives, such as community education and awareness campaigns, radiologic technologists can improve public awareness of the role that medical imaging plays in early disease diagnosis. According to these results, radiologic technologists are already actively involved in public health, particularly by advocating for policies, but they might be further empowered and included in larger community health programs.

According to Akpan et al. (2021), the use of radiography in public health for early detection of disease is continuously expanding to accommodate technological improvements. In contrary, Gallagher & Barret (2024), found that in a Scottish Major Trauma Hospital, radiographers have lack of awareness and understanding of government initiatives and professional body recommendations surrounding health promotion. Moreover, radiographers felt incapable to provide appropriate and impactful health promotion advice and reported lack of time as a barrier to contributing to such activities.

### **Recommended Information, Education, and Communication (IEC) Materials to Improve the Level of Implementation in Health Promotion and Disease Prevention Activities of Radiologic Technologists**

#### ***Rationale***

The healthcare landscape is increasingly recognizing the vital roles of health promotion and disease prevention in enhancing patient care. This proactive approach prioritizes preventing illnesses over merely treating them, and radiologic technologists are adapting to meet these evolving demands. Traditionally focused on diagnostic imaging, they are now integral to health promotion and disease prevention efforts, reflecting a commitment to improving patient outcomes and community health.

The study highlights how radiologic technologists facilitate early disease detection through imaging techniques, inform patients on preventive measures, and participate in

community health initiatives aimed at reducing the burden of preventable diseases. By examining the integration of health promotion and disease prevention strategies into the daily practices of radiologic technologists, the study underscores the importance of radiologic technologists in improving public health outcomes, particularly in addressing non-communicable diseases and health disparities.

This IEC material was developed to provide clear and accessible guidance for the radiologic technologists and the patients. It focuses on six key areas: patient education, radiation safety, health campaigns, professional development, early detection, and advocacy for public health. By covering these topics, the material aims to equip radiologic technologists with the knowledge and resources needed to effectively convey important health information to patients.

### ***Objectives***

The primary objective of this IEC material is to improve the level of implementation in health promotion and disease prevention activities of radiologic technologists. Specifically, it aims to:

1. Equip radiologic technologists with strategies to inform and educate patients about preventive measures and healthy lifestyle choices.
2. Emphasize the importance of reducing radiation exposure while maintaining image quality, enhancing patient safety and image efficiency.
3. Encourage radiologic technologists to engage in community health campaigns that aim to reduce the prevalence of preventable diseases.
4. Offer collaboration between radiologic technologists, academic institutions, and research organizations for advancing research and fostering continuous learning.
5. Provide radiologic technologists with the skills and knowledge necessary to utilize imaging techniques effectively for the early detection of diseases.

6. Enable radiologic technologists to engage in public health initiatives that expand access to care and raise awareness of early disease detection.

### ***Scheme of Implementation***

The content of the Information Education Communication (IEC) Material shall revolve around on the six key areas, specifically patient radiation, radiation safety, health campaigns, professional development, early detection, and advocacy to public health. The implementation of this IEC material will follow a multi-step strategy.

1. The researchers will begin by assessing the current knowledge and practices of radiologic technologists regarding health promotion and disease prevention through surveys or focus groups. This will help identify gaps and ensure the IEC materials are relevant.
2. The researchers then will create a clear, accessible, and visually appealing IEC materials focusing patient education, radiation safety, health campaigns, professional development, early detection, and public health advocacy. These should be easy to share with patients and the community.
3. The researchers will organize interactive training sessions for radiologic technologists to familiarize them with the IEC materials. Use group discussion to enhance understanding and confidence in applying the materials.
4. The researchers will encourage radiologic technologists to use the IEC materials in their daily routines, such as during patient consultations and community health fairs. Provide ongoing support to help them feel empowered in their use.
5. The researchers will offer collaboration between radiologic technologists, academic institutions and research organizations to expands access to care and raise awareness for early detection disease. Joint workshops and community initiatives will be developed to enhance the effectiveness of the IEC materials and broaden their impact.

6. A framework will be created by the researchers to assess the effectiveness of the IEC materials and their impact on health promotion and disease prevention activities. They will gather feedback from both radiologic technologists and patients to identify areas for improvement and ensure the materials meet their intended goals.
7. The researchers will encourage regular updates to the IEC materials based on new research findings and user feedback. This will help keep the materials relevant and effective in promoting health and disease prevention.
8. Radiologic technologists will be empowered by the researchers to engage in public health initiatives, such as community health fairs and educational workshops. These efforts will aim to raise awareness about preventive care and healthy lifestyle choices, ultimately contributing to better health outcomes in the community.

## CHAPTER IV

### Findings, Conclusions and Recommendations

This chapter presents the study's finding and conclusions. Additionally, it includes recommendations for further study that the researchers made for the readers and other researchers.

#### Findings

The findings of the study were summarized in accordance with the statement of the problem outlined in Chapter 1.

1. The findings of the study indicate a very high level of implementation to health promotion activities among radiologic technologists. Improved patient education can lead to better adherence to treatment plans and healthier lifestyle choices, ultimately reducing the incidence of preventable diseases. Strengthening equipment maintenance ensures that imaging procedures are conducted safely and effectively, minimizing radiation exposure and enhancing diagnostic accuracy. Expanding social media outreach allows technologists to reach broader audiences, particularly younger individuals, fostering greater health literacy and awareness of preventive measures. Moreover, a commitment to ongoing professional development and peer review not only elevates the quality of care provided but also fosters a culture of collaboration and continuous improvement within the healthcare team. By actively engaging in public health initiatives, radiologic technologists can bridge the gap between diagnostic services and community health, advocating for policies that promote access to essential imaging services.
2. The findings of the study indicate a very high level of implementation to disease prevention activities among radiologic technologists. This suggests that by addressing the gaps in lifestyle education, radiologic technologists can empower patients to make informed health choices

that extend beyond the imaging room. This proactive approach can lead to healthier lifestyles, ultimately reducing the risk of chronic diseases and improving overall health outcomes. Furthermore, their strong commitment to radiation safety and active participation in public health campaigns underscore their potential to influence community health positively. By enhancing their roles in these areas, radiologic technologists can not only ensure patient safety but also advocate for preventive measures that benefit the wider community.

3. The measures will improve the overall level of implementation of the radiologic technologists in health promotion and disease prevention, as evidenced on the indicators with descriptive evaluation rating ranging from highly implemented and never implemented. By enhancing radiation safety efforts, particularly in maintaining imaging equipment and improving routine calibration to limit patient exposure, enhance imaging accuracy, and reduce repeat scans. In terms of community engagement, radiologic technologists can further inform the public about the importance of preventive health measures by leveraging digital platforms. Enhancing participation in research and peer review can significantly foster advancements in radiologic technology. By enhancing their role in interpreting imaging results and monitoring patients, radiologic technologists ensure that identified conditions are regularly checked. By addressing the gap in lifestyle change communication and enhancing the already effective hygiene practice strategies, radiologic technologists can significantly contribute to health promotion and disease prevention. By enhancing the role of radiologic technologists in public outreach programs and strengthening collaborative efforts with public health agencies, we may increase public knowledge about radiologic screening and its preventive value. Additionally, engaging in campaign-based advocacy may raise awareness about the significance of timely diagnostic interventions.

## Conclusion

Based on the findings of the study, the following conclusions were drawn:

1. Based on the findings, the importance of radiologic technologists' health promotion activities in enhancing patient outcomes is evident. They improve treatment adherence, imaging safety, and overall healthcare collaboration by incorporating patient education, equipment maintenance, and digital outreach into their practice. This underscores the necessity of consistent efforts and regulations to strengthen their role in connecting diagnostic services with community health programs.
2. Radiologic technologists are effectively playing an important role in reducing the risk and prevalence of chronic diseases. Their proactive efforts not only enhance patient safety but also strengthen community health by promoting early detection, health education, and preventive measures. This emphasizes the importance of supporting and further empowering their involvement in disease prevention to achieve better public health outcomes.
3. The health promotion and disease prevention activities among radiologic technologists can be significantly improved through strategic enhancements in technology, community engagement, and professional practices. Specifically, measures such as strengthening radiation safety protocols, ensuring regular equipment calibration, and promoting public health advocacy supported by digital platforms and partnerships with health agencies will drive improvements in radiologic technology. Additionally, community health outcomes will benefit from addressing gaps in lifestyle communication, hygienic practices, and health promotion strategies. Raising awareness, encouraging timely diagnostic interventions, and ultimately enhancing the delivery of preventive healthcare all rely on expanding public outreach, education efforts, and advocacy campaigns.

## Recommendations

Based on the conclusions, the following recommendations are drawn:

1. Radiologic technologists may strengthen follow-up imaging practices and expand patient education to include lifestyle and preventive health information. Regular equipment maintenance must be prioritized to ensure safety and accuracy. Additionally, active involvement in public health campaigns can enhance their contribution to disease prevention and community health.
2. Hospitals may support ongoing training in patient education and radiation safety, and enforce consistent equipment maintenance protocols. Encouraging teamwork between technologists and other healthcare professionals can improve patient follow-up and overall quality.
3. Educational programs may integrate health promotion, lifestyle education, and public health into their curricula. Clinical training must emphasize both technical and communication skills. Encouraging student-led research on patient education and disease prevention can also drive innovation in the field.
4. Communities may promote awareness of the role of radiologic technologists in preventive care through public health events and campaigns. Encouraging regular screenings and diagnostic checkups supports early detection and better health outcomes.
5. Future studies may investigate the challenges limiting follow-up imaging, lifestyle education, and community involvement among radiologic technologists. Research on training effectiveness and the impact of patient education on health outcomes would also be valuable.

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# **APPENDICES**

**APPENDIX A**

**Letter to Adviser**

LORMA COLLEGES  
College of Radiologic Technology  
Carlatan, City of San Fernando, La Union

**Ranel G. Fontanilla, RRT**

Instructor, College of Radiologic Technology  
LORMA Colleges  
City of San Fernando, La Union

**Dear Sir,**

Greetings!

We, the undersigned third-year students of LORMA Colleges taking up Bachelor of Science in Radiologic Technology. We will conduct research entitled "Health Promotion and Disease Prevention Activities of Radiologic Technologist" as a requirement for our research subject under Ms. Ericquel Gem Milanes

In line with this, we would like to humbly request your service and expertise to serve as our research adviser. We believe that your knowledge and insights will be valuable and will greatly enrich our study.

Thank you for your consideration.

Very Respectfully yours,

  
**Back, Gee Harren A.**

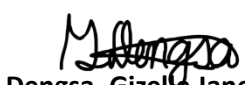
Researcher

  
**Macusi, Justin Carlo C.**

Researcher

  
**Valdez, Lovely Joy A.**

Researcher

  
**Dengsa, Gizelle Jane A.**

Researcher

  
**Santiago, Kristina Claire G.**

Researcher

  
**Edaño, Loveren E.**

Researcher

  
**Sopranes, Trisha Nicole D.**

Researcher

Noted By:

  
**ERICQUEL GEM G. MILANES, RRT**

Research Facilitator

  
**RANEL G. FONTANILLA, RRT**

Research Adviser

**APPENDIX B**  
**Letter to Dean of the College of Radiologic Technology**

LORMA COLLEGES  
 College of Radiologic Technology  
 Carlatan, City of San Fernando, La Union

**Gryn T. Salagma, MPH, RRT**  
 Dean, College of Radiologic Technology  
 LORMA Colleges  
 City of San Fernando, La Union

**Dear Ma'am,**


Greetings!


We, the undersigned third-year students of Lorma Colleges pursuing a Bachelor of Science in Radiologic Technology, are conducting a research study entitled **“HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS.”** Our objective is to determine the health promotion and disease prevention activities of radiologic technologists working at ITRMC and LMC. The outcomes of this study are anticipated to offer valuable insights into the contributions of radiologic technologists to health promotion and disease prevention activities.


Regarding this matter, we would like to seek permission to initiate the ethical review process for our ongoing research paper through the Research Ethics Committee of Lorma Colleges.

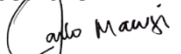
Thank you for your kind consideration. We eagerly anticipate your positive response and value your support in ensuring the ethical conduct of research within our institution.

Very Respectfully yours,

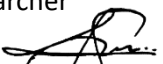
  
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Dengsa, Gizelle Jane A.  
 Researcher

  
Edano, Loveren E.  
 Researcher

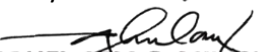
  
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Santiago, Kristina Claire G.  
 Researcher

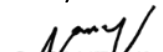
  
Sopranes, Trisha Nicole D.  
 Researcher

  
Valdez, Covely Joy A.  
 Researcher

Noted By:

  
ERICUEL GEM G. MILANES, RRT  
 Research Facilitator

Approved By:

  
RANEL G. FONTANILLA, RRT  
 Research Adviser

## APPENDIX C

## Letter of Intent to Conduct Study

LORMA COLLEGES  
 College of Radiologic Technology  
 Carlatan, City of San Fernando, La Union

**Ryan Jay G. Mostoles, MASE, RMT**

Chairman, LC-REC  
 LORMA Colleges  
 City of San Fernando, La Union

**Dear Sir,**

Greetings!

We, the undersigned third-year students of Lorma Colleges pursuing a Bachelor of Science in Radiologic Technology, are conducting a research study entitled **"HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS."** Our objective is to determine the health promotion and disease prevention activities of radiologic technologists working at ITRMC and LMC. The outcomes of this study are anticipated to offer valuable insights into the contributions of radiologic technologists to health promotion and disease prevention activities.

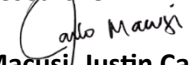
In view hereof, the researchers would like to request from your good office to allow us to conduct the research study. This will be a great help in our research study with regard to the gathering of data and in following the standard procedures and protocols. Rest assured that the information will be treated with utmost confidentiality.

Your positive response in this matter is greatly appreciated. Thank you and God Bless!

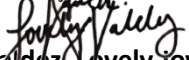
Very Respectfully yours,

  
Back, Gee Harren A.

Researcher

  
Macusi, Justin Carlo C.

Researcher

  
Valdez, Lovely Joy A.

Researcher

  
Dengsa, Gizelle Jane A.

Researcher

  
Santiago, Kristina Claire G.

Researcher

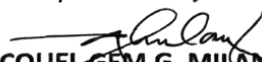
  
Edaño, Loveren E.

Researcher


  
Sopranes, Trisha Nicole D.

Researcher

Noted By:


  
ERICQUEL GEM G. MILANES, RRT  
 Research Facilitator

Approved By:

  
RANEL G. FONTANILLA, RRT  
 Research Adviser

## APPENDIX D

## Approval Sheet from Research Ethics Committee



LC-REC Form #024  
APPROVAL LETTER

**REC Reference #: 2025-121**

March 28, 2025

**To: Gee Harren A. Back, Gizelle Jane A. Dengsa, Loveren E. Edano, Justin Carlo C. Macusi, Kristin, Claire G. Santiago, Trisha Nicole D. Sopranes and Lovely Joy A. Valdez**  
LORMA Colleges, College of Radiologic Technology

**Subject: Approval of the research Study "HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS" by the Research Ethics Committee (REC).**

Dear Researchers,

The Research Ethics Committee (REC) has reviewed your application to conduct the above-mentioned research study in the LOCALE OF STUDY with you as the Principal Investigators within the duration of March 28, 2025 to March 28, 2026.

The Following documents have been reviewed and approved:

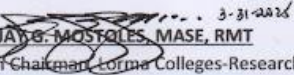
1. Letter of Intent to Conduct the Study
2. Endorsement of the Research Technical Panel
3. Title and Statement of the Problem/ Objective
4. Literature Review
5. Methods and Procedures
6. Population and Locale
7. Exclusion/Inclusion Criteria
8. Data Analysis
9. Ethical Considerations

We approved the study to be conducted in the presented form provided that ***"the end date in the informed consent form should be indicated"*** and integrated into the final research protocol.

None of the Investigators participating in this study took part in the decision making and voting procedure for this study.

The Institutional REC expects to be informed about the progress of the study, any revision in the protocol before implementation and participants'/respondents' information/informed consent. Likewise, you are required to provide the Board a copy of the final report.

Yours Sincerely,

  
RYAN JAY G. MOSTOLES, MASE, RMT  
Interim Chairman, Lorma Colleges-Research Ethics Committee

**APPENDIX E**

**Letter to the Validator**

LORMA COLLEGES  
College of Radiologic Technology  
Carlatan, City of San Fernando, La Union

**Ms. Christine Jean L. Gamisera, RRT, MBA**

CT-SCAN Staff, ISIC INC  
LORMA Medical Center  
Carlatan, City of San Fernando, La Union


Dear Ma'am,


*Greetings with a LORMA smile!*


We, the third-year students of Lorma Colleges pursuing a Bachelor of Science in Radiologic Technology, are conducting a research study entitled **"HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS."** Our objective is to determine the health promotion and disease prevention activities of radiologic technologists working at ITRMC and LMC. The outcomes of this study are anticipated to offer valuable insights into the contributions of radiologic technologists to health promotion and disease prevention activities.

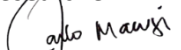
Recognizing the importance of the validation process in ensuring the reliability and effectiveness of our questionnaire, we humbly seek your assistance, expertise, and the time to validate the attached questionnaire. Your feedback on the clarity, relevance, and appropriateness of the questions will be immensely beneficial. Additionally, any suggestions for improvement or modifications will be highly appreciated.

Very Respectfully yours,

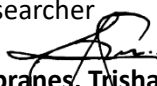
  
**Back, Gee Harren A.**  
Researcher


  
**Dengsa, Gizele Jane A.**  
Researcher

  
**Edaño, Loveren E.**  
Researcher


  
**Macusi, Justin Carlo C.**  
Researcher

  
**Santiago, Kristina Claire G.**  
Researcher

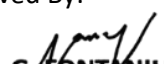
  
**Sopranes, Trisha Nicole D.**  
Researcher

  
**Valdez, Lovely Joy A.**  
Researcher

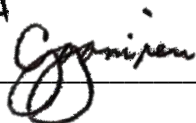
Noted By:

  
**ERICQUEL GEM G. MILANES, RRT**  
Research Facilitator

Approved By:

  
**RANEL G. FONTANILLA, RRT**  
Research Adviser

Validated by: \_\_\_\_\_

  
5/10/24

LORMA COLLEGES  
College of Radiologic Technology  
Carlatan, City of San Fernando, La Union

**Ms. Mharriel Urbano, RRT, LPT**

Part-Time Instructor, College of Radiologic Technology  
LORMA Colleges  
Carlatan, City of San Fernando, La Union


Dear Ma'am,


*Greetings with a LORMA smile!*

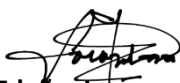
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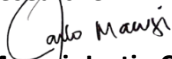
Recognizing the importance of the validation process in ensuring the reliability and effectiveness of our questionnaire, we humbly seek your assistance, expertise, and the time to validate the attached questionnaire. Your feedback on the clarity, relevance, and appropriateness of the questions will be immensely beneficial. Additionally, any suggestions for improvement or modifications will be highly appreciated.

Very Respectfully yours,

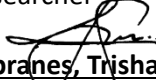
  
**Back, Gee Harren A.**  
Researcher


  
**Dengsa, Gizelle Jane A.**  
Researcher

  
**Edaño, Loveren E.**  
Researcher


  
**Macusi, Justin Carlo C.**  
Researcher

  
**Santiago, Kristina Claire G.**  
Researcher


  
**Sopranes, Trisha Nicole D.**  
Researcher

  
**Valdez, Lovely Joy A.**  
Researcher

Noted By:

  
**ERICQUEL GEM G. MILANES, RRT**  
Research Facilitator

Approved By:

  
**RANEL G. FONTANILLA, RRT**  
Research Adviser

Validated by: \_\_\_\_\_



LORMA COLLEGES  
College of Radiologic Technology  
Carlatan, City of San Fernando, La Union

**Mr. Mark B. Erikson Baladad, RMT, MMPHA**  
Instructor, College of Medical Laboratory Science  
LORMA Colleges  
Carlatan, City of San Fernando, La Union


Dear Sir,


*Greetings with a LORMA smile!*

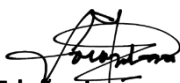
We, the third-year students of Lorma Colleges pursuing a Bachelor of Science in Radiologic Technology, are conducting a research study entitled **“HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS.”** Our objective is to determine the health promotion and disease prevention activities of radiologic technologists working at ITRMC and LMC. The outcomes of this study are anticipated to offer valuable insights into the contributions of radiologic technologists to health promotion and disease prevention activities.

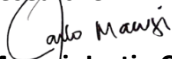
Recognizing the importance of the validation process in ensuring the reliability and effectiveness of our questionnaire, we humbly seek your assistance, expertise, and the time to validate the attached questionnaire. Your feedback on the clarity, relevance, and appropriateness of the questions will be immensely beneficial. Additionally, any suggestions for improvement or modifications will be highly appreciated.

Very Respectfully yours,

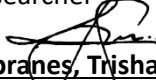
  
**Back, Gee Harren A.**  
Researcher


  
**Dengsa, Gizelle Jane A.**  
Researcher

  
**Edaño, Loveren E.**  
Researcher


  
**Macusi, Justin Carlo C.**  
Researcher

  
**Santiago, Kristina Claire G.**  
Researcher


  
**Sopranes, Trisha Nicole D.**  
Researcher

  
**Valdez, Lovely Joy A.**  
Researcher

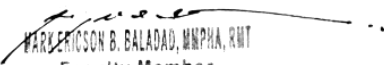
Noted By:

  
**ERICQUEL GEM G. MILANES, RRT**  
Research Facilitator

Approved By:

  
**RANEL G. FONTANILLA, RRT**  
Research Adviser

Validated by:

  
**MARK ERIKSON B. BALADAD, MMPHA, RMT**  
Faculty Member  
College of Medical Laboratory Science

**APPENDIX F**

**Letter to Participation for Pilot Testing**

LORMA COLLEGES  
College of Radiologic Technology  
Carlatan, City of San Fernando, La Union


Dear Ma'am/Sir,  
Greetings!

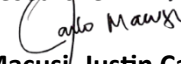
We, the undersigned third-year students of Lorma Colleges pursuing a Bachelor of Science in Radiologic Technology, are conducting a research study entitled **“HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS.”**


In line with this, we are conducting a pilot test to refine our researcher-made questionnaire, and we humbly request your participation. Your expertise and insights as a radiologic technologist will provide valuable feedback to enhance the quality of our questionnaire. Be assured that all information collected will be kept confidential and used solely for research purposes.


If you have any inquiries or concerns, you could reach out to us at lovelyjoy.valdez@lorma.edu. Your support in granting permission for this pilot testing is highly appreciated. Thank you for your time and consideration.


Very Respectfully yours,


  
**Back, Gee Harren A.**  
Researcher

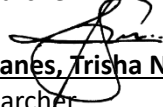
  
**Macusi, Justin Carlo C.**  
Researcher

  
**Valdez, Lovely Joy A.**  
Researcher


  
**Dengsa, Gizelle Jane A.**  
Researcher

  
**Santiago, Kristina Claire G.**  
Researcher


  
**Edano, Loveren E.**  
Researcher

  
**Sopranes, Trisha Nicole D.**  
Researcher

Noted By:

  
**ERICQUEL GEM G. MILANES, RRT**  
Research Facilitator

Approved By:

  
**RANEL G. FONTANILLA, RRT**  
Research Adviser

## APPENDIX G

## Letter to Chief Radiologic Technologist

LORMA COLLEGES  
College of Radiologic Technology  
Carlatan, City of San Fernando, La Union

**MR. OLIVER HUFANA, RRT**

Chief Radiologic Technologist  
LORMA Medical Center  
Carlatan, City of San Fernando, La Union

Dear Sir,

*Greetings with a LORMa smile!*

We, the undersigned third-year students of Lorma Colleges pursuing a Bachelor of Science in Radiologic Technology, are conducting a research study entitled "**HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS.**" Our objective is to determine the health promotion and disease prevention activities of radiologic technologists working within your esteemed hospital. The outcomes of this study are anticipated to offer valuable insights into the contributions of radiologic technologists to health promotion and disease prevention activities.

This research is undertaken as a part of our academic endeavor in the fulfillment of the requirements for the degree of Bachelor of Science in Radiologic Technology. In this light, we would like to request your authorization to administer our questionnaire to the radiologic technologists working in various imaging modalities within your esteemed hospital. Be assured that all information collected will be kept confidential and used solely for research purposes.

Very Respectfully yours,

  
**Back, Gee Harren A.**

Researcher

  
**Dengsa, Gizelle Jane A.**

Researcher

  
**Edaño, Loveren E.**

Researcher

  
**Macusi, Justin Carlo C.**

Researcher

  
**Santiago, Kristina Claire G.**

Researcher


  
**Sopranes, Trisha Nicole D.**

Researcher

  
**Valdez, Lovely Joy A.**

Researcher

Noted By:

  
**ERICQUEL GEM G. MILANES, RRT**


Research Facilitator

Approved By:

  
**RANEL G. FONTANILLA, RRT**

Research Adviser

Received By:



LORMA COLLEGES  
College of Radiologic Technology  
Carlatan, City of San Fernando, La Union

**MS. CAROL GRACE D. TADAOAN, MD, FPCR, FUSP**

Head, Radiology Department  
LORMA Medical Center  
Carlatan, City of San Fernando, La Union

Dear Sir,

*Greetings with a LORMa smile!*

We, the undersigned third-year students of Lorma Colleges pursuing a Bachelor of Science in Radiologic Technology, are conducting a research study entitled **“HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS.”** Our objective is to determine the health promotion and disease prevention activities of radiologic technologists working within your esteemed hospital. The outcomes of this study are anticipated to offer valuable insights into the contributions of radiologic technologists to health promotion and disease prevention activities.

This research is undertaken as a part of our academic endeavor in the fulfillment of the requirements for the degree of Bachelor of Science in Radiologic Technology. In this light, we would like to request your authorization to administer our questionnaire to the radiologic technologists working in various imaging modalities within your esteemed hospital. Be assured that all information collected will be kept confidential and used solely for research purposes.

Very Respectfully yours,

  
**Back, Gee Harren A.**

Researcher

  
**Dengsa, Gizele Jane A.**

Researcher

  
**Edaño, Loveren E.**

Researcher

  
**Macusi, Justin Carlo C.**

Researcher

  
**Santiago, Kristina Claire G.**

Researcher


  
**Sopranes, Trisha Nicole D.**

Researcher

  
**Valdez, Lovely Joy A.**

Researcher

Noted By:

  
**ERICQUEL GEM G. MILANES, RRT**

Research Facilitator

Approved By:

  
**RANEL G. FONTANILLA, RRT**

Research Adviser

Received By: \_\_\_\_\_

## APPENDIX H

### Letter to the Respondents

LORMA COLLEGES  
College of Radiologic Technology  
Carlatan, City of San Fernando, La Union

**Dear Respondents,**

*Greetings with a LORMA smile!*

We, the third-year students from the College of Radiologic Technology at Lorma Colleges, City of San Fernando, La Union are conducting a research study entitled **“Health Promotion and Disease Prevention Activities of Radiologic Technologist”** The study aims to investigate and discover more about the contribution of Radiologic Technologists to health promotion and disease prevention at tertiary hospitals in the City of San Fernando, La Union.

This research is undertaken as a partial fulfillment of the requirements for the degree of Bachelor of Science in Radiologic Technology. We kindly request your honest responses to this questionnaire, assuring you that all data will remain confidential and used solely for academic purposes.

If you have any inquiries or concerns, you could reach out to us by sending an email to lovelyjoy.valdez@lorma.edu. Thank You and God Bless!

Very Respectfully yours,

  
**Back, Gee Harren A.**

Researcher

  
**Macusi, Justin Carlo C.**

Researcher

  
**Valdez, Lovely Joy A.**

Researcher

  
**Dengsa, Gizelle Jane A.**

Researcher

  
**Santiago, Kristina Claire G.**

Researcher

  
**Edano, Ldveren E.**

Researcher

  
**Sopranes, Trisha Nicole D.**

Researcher

Noted By:

  
**ERICQUEL GEM G. MILANES, RRT**

Research Facilitator

  
**RANEL G. FONTANILLA, RRT**

Research Adviser

**APPENDIX I**

**Letter to Statistician**

LORMA COLLEGES  
College of Radiologic Technology  
Carlatan, City of San Fernando, La Union

**Jerome P. Vera, LPT**

Faculty, College of Education and Sciences  
LORMA Colleges  
City of San Fernando, La Union

Dear Sir,

*Greetings with a LORMA smile!*

We, the undersigned third-years BSRT students of LORMA Colleges, currently conducting research entitled **“HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS.”** The study aims to investigate and discover more about the contribution of Radiologic Technologists to health promotion and disease prevention at tertiary hospitals in the City of San Fernando, La Union.

Anent this, we would like to respectfully seek your assistance, expertise, and time to be our **Statistician** and check the accuracy of the statistical computations of our study. Other attachments include the statement of the problem and the Excel file containing the data collected from our respondents.

Your assessment would be deemed significant in the success of this study. Thank you for your kind consideration, and we sincerely hope you will be able to fulfill our request.

Very Respectfully yours,

  
**Back, Gee Harren A.**

Researcher

  
**Macusi, Justin Carlo C.**

Researcher

  
**Valdez, Lovely Joy A.**

Researcher

  
**Dengsa, Gizelle Jane A.**

Researcher

  
**Santiago, Kristina Claire G.**

Researcher

  
**Edano, Laveren E.**

Researcher

  
**Sopranes, Trisha Nicole D.**

Researcher

Noted By:

  
**ERICQUEL GEM G. MILANES, RRT**

Research Facilitator

  
**RANEL G. FONTANILLA, RRT**

Research Adviser

## APPENDIX J

## Application for Review



LC-REC Form #010  
APPLICATION FOR REVIEW FORM

## APPLICATION FOR REVIEW

(Adapted from National Ethics Guidelines for Health and Health-Related Research 2017)

INSTRUCTION: Please accomplish the form and ensure that all necessary documents are included in your submission.

**I. GENERAL INFORMATION:**

Title of the Study: Health Promotion and Disease Prevention Activities of Radiologic Technologists

REC Code : \_\_\_\_\_ No. of Study Participants: 60

Study Site : Lorma Medical Center & Ilocos Training Regional Medical Center

Name of Researcher/s: Gee Harren A. Back, Gizelle Jane A. Dengsa, Loveren E. Edaño, Justin Carlo C. Macusi, Kristina Claire G. Santiago, Trisha Nicole D. Sopranes, Lovely Joy A. Valdez

Contact Information : Telephone Number: N/A Mobile Number: 09563919013

Fax Number: N/A Email : geeharren.back@lorma.edu

gizellejane.dengsa@lorma.edu

loveren.edano@lorma.edu

justincarlo.macusi@lorma.edu

kristinaclaire.santiago@lorma.edu

trishanicole.sopranes@lorma.edu

lovelyjoy.valdez@lorma.edu

Name of Institution: LORMA Colleges

Institution's Address : Carlatan, City of San Fernando, La Union

Type of Study:  Sponsored Clinical Trial  Biomedical Research  
 Researcher-Initiated Clinical Trials  Stem Cell Research  
 Health Operations Research  Genetic Research  
 Social or Behavioral Research  Others: Descriptive Study  
 Public Health or Epidemiologic

Source of Funding :  Self-Funded  Scholarship/Research Grant  
 Government-Funded  Institution-Funded  
 Sponsored by Pharmaceutical Company  
 Others: \_\_\_\_\_

Duration of the Study: Start Date: September 8, 2024 End Date: June 3, 2025

Has the Research Undergone Technical Review?  Yes  No  
 (Please attach Technical Review Result)

Has the Research been Submitted to Another Research Ethics Committee?  Yes  No

**II. BRIEF DESCRIPTION OF THE STUDY** (Use Extra Sheet if Necessary)

The study titled "Health Promotion and Disease Prevention Activities of Radiologic Technologists" explores the evolving role of radiologic technologists (RTs) in contemporary healthcare, emphasizing their contributions beyond traditional diagnostic imaging. As healthcare increasingly prioritizes proactive health management, RTs are recognized for their pivotal involvement in health promotion and disease prevention activities. This study highlights how RTs facilitate early disease detection through imaging techniques, inform patients on preventive measures, and participate in community health initiatives aimed at reducing the burden of preventable diseases. By examining the integration of health promotion strategies into their daily practices, the study underscores the importance of RTs in improving public health outcomes, particularly in addressing non-communicable diseases and health disparities. Ultimately, the findings aim to provide valuable insights for healthcare professionals, policymakers, and educational programs, reinforcing the critical role of RTs in fostering healthier communities.

**III. CHECKLIST OF DOCUMENTS FOR SUBMISSION**

a. Basic Requirements

- |  |   |
|--|---|
| <input type="checkbox"/> Letter of Intent to Conduct a Study   | <input type="checkbox"/> Full Proposal/Study Protocol   |
| <input type="checkbox"/> Filled-up Application Form for Review | <input type="checkbox"/> Budget                         |
| <input type="checkbox"/> Endorsement of the RTP                | <input type="checkbox"/> Funding Institution            |
| <input type="checkbox"/> Timetable                             | <input type="checkbox"/> Curriculum Vitae of Researcher |

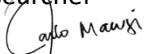
b. Supplementary Documents (if applicable)

- |  |  |
|--|--|
| <input type="checkbox"/> Questionnaire         | <input type="checkbox"/> Philippine FDA Marketing Authorization or |
| <input type="checkbox"/> Data Collection Forms | Import Licensure   |
| <input type="checkbox"/> Product Brochure      | <input type="checkbox"/> Permit/s for Special Population           |
| <input type="checkbox"/> Others: _____         |  |


Accomplished by:

  
**Back, Gee Harren A.**

Researcher

  
**Macusi, Justin Carlo C.**

Researcher

  
**Valdez, Lovely Joy A.**  
Researcher

  
**Dengsa, Gizelle Jane A.**

Researcher

  
**Santiago, Kristina Claire G.**

Researcher

  
**Edaño, Laveren E.**

Researcher

  
**Sopranes, Trisha Nicole D.**

Researcher

Date Submitted: March 13, 2025

-----  
-----

(to be filled-out by the Secretariat)

Completeness of Documents:    Complete                       Incomplete

Remarks:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date Received: \_\_\_\_\_ Received by: \_\_\_\_\_

**APPENDIX K**  
**Informed Consent**



**LC-REC Form #011**  
INFORMED CONSENT FORM

**INFORMED CONSENT FORM**

INSTRUCTION: Please accomplish the form and ensure that all necessary documents are included in your submission.

**GENERAL INFORMATION:**

Title of the Study: HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS

REC Code : \_\_\_\_\_ No. of Study Participants: 60

Study Site : LORMA Medical Center & Ilocos Training Regional Medical Center

Name of Researcher/s: Gee Harren A. Back, Gizelle Jane A. Dengsa, Loveren E. Edaño, Justin Carlo C. Macusi, Kristina Claire G. Santiago, Trisha Nicole D. Sopranes, Lovely Joy A. Valdez

Contact Information : Telephone Number: N/A Mobile Number: 09563919013

Fax Number: N/A Email : geeharren.back@lorma.edu

gizellejane.dengsa@lorma.edu

loveren.edano@lorma.edu

justincarlo.macusi@lorma.edu

kristinaclaire.santiago@lorma.edu

trishanicole.sopranes@lorma.edu

lovelyjoy.valdez@lorma.edu

Name of Institution: LORMA Colleges

Institution's Address : Carlatan, City of San Fernando, La Union

Type of Study:  Sponsored Clinical Trial  Biomedical Research  
 Researcher-Initiated Clinical Trials  Stem Cell Research  
 Health Operations Research  Genetic Research  
 Social or Behavioral Research  Others: Descriptive Study  
 Public Health or Epidemiologic

Source of Funding :  Self-Funded  Scholarship/Research Grant

- Government-Funded
   
  Institution-Funded  
 Sponsored by Pharmaceutical Company  
 Others: \_\_\_\_\_

Duration of the Study: Start Date: September 8, 2024                      End Date: June 3, 2025

***INTRODUCTION*** (Use Extra Sheet if Necessary)

Dear Ma'am/Sir,

Greetings, we, the students of the College of Radiologic Technology at LORMA Colleges, are conducting a research study entitled **“HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS.”** Ma'am/Sir, we extend an invitation for you to be a part of this research study. Before proceeding with the research study, we encourage you to read the informed consent form in its entirety. Please feel free to ask any questions or seek clarification from the researchers regarding the ongoing research study.

***PURPOSE OF RESEARCH*** (Use Extra Sheet if Necessary)

The purpose of this study is to investigate the health promotion and disease prevention activities conducted by radiologic technologists. Specifically, it aims to evaluate the extent to which radiologic technologists are involved in promoting health and preventing diseases within their professional roles. This study seeks to assess key areas such as patient's education, radiation safety, participation in health campaigns, and professional development, as well as the role of radiologic technologists in early disease detection, public health advocacy, and preventive care. Additionally, the research aims to identify potential measures or strategies that can be recommended to enhance the health promotion and disease prevention activities of radiologic technologists to improve overall patient care and public health outcomes.

***TYPE OF RESEARCH INTERVENTION*** (Use Extra Sheet if Necessary)

**1. Participant Selection**

We are inviting the participation of radiologic technologists meeting the following criteria: Radiologic Technologists working in LORMA Medical Center and Ilocos Training Regional Medical Center, and a voluntary participation of radiologic technologists who expresses a willingness to contribute to the research.

**2. Voluntary Participation**

Ma'am/Sir, your participation in this study is entirely voluntary, and the decision is yours to make. If you choose to take part, you will be asked to sign consent form. Even after signing the consent form, you are free to withdraw at any time without providing a reason. Withdrawal from this study will not affect any existing relationship, if applicable, with the researcher. If you decide to withdraw before the completion of data collection, your data will either be returned to you or securely destroyed.

**3. Procedures**

Ma'am/Sir, upon agreeing to participate, you will be requested to complete an informed consent form and respond to a paper-based questionnaire within a one-week timeframe. The questionnaire is designed to assess the extent of your adherence to health promotion and disease prevention activities and is expected to take approximately 15 minutes to complete.

**4. Risks**

Ma'am/Sir, there are no known risks associated with participating in this study.

**5. Benefits**

Ma'am/Sir, the potential benefits of this study encompass acquiring a more profound understanding of health promotion and disease prevention activities at LORMA Medical Center and Ilocos Training Regional Medical Center. This understanding may contribute to the enhancement of health promotion and disease prevention activities of radiologic technologists to improve overall patient care and public health outcomes.

**6. Reimbursements**

Ma'am/Sir, there is no monetary compensation for participating in this study. However, your contribution to this research will provide information that can help improve knowledge on health promotion and disease prevention activities of radiologic technologists and ensure the safety of everyone involved in the medical imaging procedures.

**7. Confidentiality**

Ma'am/Sir, all information collected during the study will be treated with utmost confidentiality. Your name and other identifying information will not be linked to your responses in any reports or publications. Your data will be securely stored and accessed only by authorized personnel directly involved in the research.

**8. Sharing of Results**

The results of this study will be utilized exclusively for research purposes. Your individual responses will be maintained with confidentiality and will not be disclosed to any third party without your explicit consent. While the study's findings may be presented at conferences, no identifying information about you will be included.

**9. Right to Refuse or Withdrawal**

Ma'am/Sir, you have the right to withdraw from the study at any time, for any reason, without incurring any penalty. You can simply stop participating or inform the researchers of your decision.

**10. Who to Contact**

Ma'am/Sir, if you have any questions at any time about this study, you may contact the researcher whose contact information is provided on the first page.

**CERTIFICATE OF CONSENT:**

I have read the information stated herein or it was properly explained to me. I was provided with a chance to ask questions relative to it. All questions I asked were answered properly; therefore, I consent and voluntarily participate in this study.

Name of Participant: \_\_\_\_\_

Signature of Participant: \_\_\_\_\_

Date: \_\_\_\_\_


**Statement from the Researcher/Person Obtaining the Consent**


All information pertaining to this study was explained to the possible participant and made sure that he/she fully understood what she/he has to do in the research.

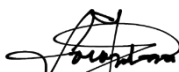
Similarly, I affirm that the potential participant was given with a chance to ask questions which I have answered accurately to the best of my ability.

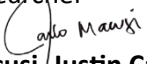
Likewise, I affirm that the participant was not coerced or forced in giving consent. That he/she has voluntarily provided the consent.

Accomplished by:

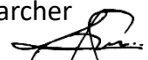
  
**Back, Gee Harren A.**  
Researcher


  
**Dengsa, Gizelle Jane A.**  
Researcher

  
**Edaño, Loveren E.**  
Researcher

  
**Macusi, Justin Carlo C.**  
Researcher

  
**Santiago, Kristina Claire G.**  
Researcher

  
**Sopranes, Trisha Nicole D.**  
Researcher

  
**Valdez, Lovely Joy A.**  
Researcher

Date Submitted: March 13, 2025

**APPENDIX L**  
**BUDGET**

ITEM	DETAILS	COST
<b>1. School Supplies</b>	Folder, paper clip, bond paper	370
<b>2. Printing Cost</b>	Printing	1,357
	Printing (Questionnaires)	560
	Printing (Progressive Report)	106
	Short Bond Paper (3 Rims)	712
	Research Poster (Tarpaulin)	130
<b>3. Transportation</b>	Travel to ITRMC for submission of letter	155
	Travel to Bethany Hospital for submission of letter	100
	Travel to ITRMC for conducting questionnaires	200
	Travel to Lorma Colleges for passing of research papers	500
<b>4. Statistician Fee</b>	---	1,500
<b>5. Title Defense Fee</b>	---	3,785
<b>6. Final Defense Fee</b>	---	6,140
<b>7. EC Fee</b>	---	1,000
	<b>Total:</b>	<b>16,615</b>







**APPENDIX N**  
**Questionnaire of the Study**

**Part 1: Health Promotion Activities**

**Instruction:** Base on your perception and experience, please read each statement carefully and indicate the extent to which the activity is implemented in your practice. Check the appropriate box that correspond to your answer. Be guided on the following rating scale:

**Rating Scale:**

Point Value	Description Evaluation Rating
1	Never Implemented
2	Poorly Implemented
3	Moderately Implemented
4	Highly Implemented
5	Very Highly Implemented

**A. Patient Education**

Statements	PROCEDURE				
	1	2	3	4	5
1. Radiologic technologist explains the purpose and process of imaging procedures to help patients understand how these tests contribute to detection of diseases					
2. Radiologic technologist inform patients about the imaging process, which helps reduce anxiety and promotes cooperation during the procedures.					

**B. Radiation Safety**

Statements	PROCEDURE				
	1	2	3	4	5
1. Radiologic technologists ensure that lead shields and aprons are used during imaging procedures to protect patients from unnecessary radiation exposure.					

2. Radiologic technologists regularly calibrate and maintain imaging equipment to ensure it operates at the lowest possible radiation dose.					
3. Radiologic technologist use dosimeters to monitor and record radiation levels for staff.					
4. Radiologic technologist enforce strict radiation safety protocols to protect patients and staff during imaging procedures					
5. Radiologic technologists instruct patients the correct positioning techniques to minimize exposure and improve image quality, reducing the need for repeat scans.					

### c. Health Campaigns

Statements	1	2	3	4	5
1. Radiologic technologist join community health fairs like medical missions to provide information about imaging services and the importance of preventive health measures.					
2. Radiologic technologists use social media platforms to share information about health promotion and disease prevention activities.					

### d. Professional Development

Statements	PROCEDURE				
	1	2	3	4	5
1. Radiologic technologist participate in continuing education and training sessions to stay updated on the latest advancements in radiologic technology and health promotion practices.					
2. Radiologic technologists share their expertise and knowledge with colleagues to improve overall health promotion efforts within them departments.					

3. Radiologic technologists participate in research studies to contribute to the advancement of radiologic technology and patient care, staying at the forefront of innovations in health promotion					
4. Radiologic technologist engage in peer review sessions to receive constructive feedback and improve professional skills.					

## Part 2: Disease Prevention Activities

**Instruction:** Base on your perception and experience, please read each statement carefully and indicate the extent to which the activity is implemented in your practice. Check the appropriate box that correspond to your answer. Be guided on the following rating scale:

### Rating Scale:

Point Value	Description Evaluation Rating
1	Never Implemented
2	Poorly Implemented
3	Moderately Implemented
4	Highly Implemented
5	Very Highly Implemented

### A. Early Detection

Statements	PROCEDURE				
	1	2	3	4	5
1. Radiologic technologist assist in the interpretation of imaging results, helping to identify any abnormalities or early signs of disease that require further investigation					
2. Radiologic technologist implements protocols for regular follow-up imaging to monitor the progression or resolution of detected conditions					
3. Radiologic Technologist utilizes advanced imaging techniques to detect diseases at an early stage.					

**B. Patient Education**

	PROCEDURE				
Statements	1	2	3	4	5
1. Radiologic technologist provides information on lifestyle changes that can prevent diseases, such as adopting a healthy diet and exercising regularly					
2. Radiologic technologist explain the importance of imaging procedures and encourage the patients to take the examination to help detect diseases early					
3. Radiologic technologist provide information on proper hygiene practices to prevent infections in healthcare settings such as hand hygiene, equipment sterilization, and infection control to maintain a safe and sanitary environment.					

**C. Radiation Safety**

	PROCEDURE				
Statements	1	2	3	4	5
1. Radiologic technologists participate in the maintenance and calibration of imaging equipment, ensuring it functions at peak performance to deliver precise diagnostic information, which is essential for effective disease prevention.					
2. Radiologic technologists follows safety protocols and utilize protective equipment to protect both patients and themselves from excessive radiation					
3. Radiologic technologist ensures that all radiologic procedures are conducted with the lowest possible radiation dose while maintaining image quality.					

**D. Advocacy for Public Health**

	PROCEDURE				
Statements	1	2	3	4	5

1. Radiologic technologists participate in public health campaigns to raise awareness about the importance of disease prevention and early detection.					
2. Radiologic technologist collaborates with public health organizations to develop and implement policies that promote preventive healthcare.					
3. Radiologic technologist engage in community outreach programs to educate the public about the benefits of radiologic screenings and preventive care.					
4. Radiologic technologists advocate for policies that support preventive healthcare and ensure access to diagnostic imaging services, contributing to public health initiatives.					

**Thank you for your cooperation.**



3. Radiologic technologist use dosimeters to monitor and record radiation levels for staff.								
4. Radiologic technologist enforce strict radiation safety protocols to protect patients and staff during imaging procedures								
5. Radiologic technologists instruct patients the correct positioning techniques to minimize exposure and improve image quality, reducing the need for repeat scans.								

### C. Health Campaigns

STATEMENTS	RELEVANCE				CLARITY			
	1	2	3	4	1	2	3	4
1. Radiologic technologist join community health fairs like medical missions to provide information about imaging services and the importance of preventive health measures.								
2. Radiologic technologists use social media platforms to share information about health promotion and disease prevention activities.								

### D. Professional Development

STATEMENTS	RELEVANCE				CLARITY			
	1	2	3	4	1	2	3	4
1. Radiologic technologist participate in continuing education and training sessions to stay updated on the latest advancements in radiologic technology and health promotion practices.								
2. Radiologic technologists share their expertise and knowledge with colleagues to improve overall health promotion efforts within them departments.								





**D. Advocacy for Public Health**

STATEMENTS	RELEVANCE				CLARITY			
	1	2	3	4	1	2	3	4
1. Radiologic technologists participate in public health campaigns to raise awareness about the importance of disease prevention and early detection.								
2. Radiologic technologist collaborates with public health organizations to develop and implement policies that promote preventive healthcare.								
3. Radiologic technologist engage in community outreach programs to educate the public about the benefits of radiologic screenings and preventive care.								
4. Radiologic technologists advocate for policies that support preventive healthcare and ensure access to diagnostic imaging services, contributing to public health initiatives.								

**Thank you for your cooperation.**

**APPENDIX P**  
**Computation of Validation**

	S-CVI	Results
Relevance	1	<b>ACCEPTABLE</b>
Clarity	1	

RELEVANCE					
Health Promotion Activities					
Items	Expert 1	Expert 2	Expert 3	Expert in Agreement	I-CVI
1	4	3	3	3	1
2	4	4	4	3	1
3	3	4	4	3	1
4	4	4	4	3	1
5	4	4	4	3	1
6	4	4	4	3	1
7	4	4	4	3	1
8	3	3	3	3	1
9	3	3	3	3	1
10	4	4	4	3	1
11	4	3	3	3	1
12	3	3	3	3	1
13	3	4	4	3	1
				<b>S-CVI</b>	<b>1</b>
Disease Prevention Activities					
1	3	3	3	3	1
2	3	3	3	3	1
3	3	3	3	3	1
4	4	4	4	3	1
5	4	3	3	3	1
6	4	3	3	3	1
7	3	3	3	3	1
8	4	4	4	3	1
9	4	4	4	3	1
10	4	4	4	3	1
11	4	3	3	3	1
12	4	3	3	3	1
13	4	3	3	3	1
				<b>S-CVI</b>	<b>1</b>

CLARITY					
Health Promotion Activities					
Items	Expert 1	Expert 2	Expert 3	Expert in Agreement	I-CVI
1	4	3	3	3	1
2	4	4	4	3	1
3	4	4	4	3	1
4	4	4	4	3	1
5	4	4	4	3	1
6	4	4	4	3	1
7	4	4	4	3	1
8	3	3	3	3	1
9	3	3	3	3	1
10	4	4	4	3	1
11	3	3	4	3	1
12	4	3	4	3	1
13	4	4	4	3	1
				<b>S-CVI</b>	<b>1</b>
Disease Prevention Activities					
1	3	3	3	3	1
2	3	3	3	3	1
3	4	3	3	3	1
4	3	3	3	3	1
5	4	4	4	3	1
6	4	3	3	3	1
7	4	4	4	3	1
8	4	4	4	3	1
9	4	4	4	3	1
10	3	4	4	3	1
11	4	4	4	3	1
12	4	3	3	3	1
13	3	3	3	3	1
				<b>S-CVI</b>	<b>1</b>

Number of Experts	Acceptable CVI Values	Source of Recommendation
Two	At least 0.80	Davis (1992)
Three to Five	Should be 1	Polit & Beck (2006), Polit et al. (2007)
At least Six Experts	At least 0.83	Polit & Beck (2006), Polit et al. (2007)
Six to Eight Experts	At least 0.83	Lynn (1986)
At least Nine Experts	At least 0.78	Lynn (1986)

## APPENDIX Q

## Computation of Pilot Testing

$$\text{Formula: } \alpha = \frac{K}{K-1} \left( \frac{\sum_{i=1}^K \sigma_{Y_i}^2}{\sigma_X^2} \right)$$

VARIABLES	VALUES	INTERNAL CONSISTENCY
# of questions (K)	26	<b>EXCELLENT</b>
Sum of the item variance ( $\sum_{i=1}^K \sigma_{Y_i}^2$ )	12.22	
Variance of total score ( $\sigma_X^2$ )	121.84	
Cronbach's Alpha ( $\alpha$ )	0.94	

RESPONDENTS											
	1	2	3	4	5	6	7	8	9	10	
QUESTIONS	1	5	4	5	5	5	5	5	5	5	5
	2	5	4	5	5	5	5	5	5	5	5
	3	5	4	5	5	5	4	4	5	5	5
	4	4	4	5	5	5	4	4	5	5	4
	5	5	4	5	4	5	5	5	5	5	5
	6	5	4	5	4	5	5	5	5	5	4
	7	5	4	5	4	5	5	5	5	5	5
	8	5	4	4	3	4	5	5	5	5	4
	9	5	4	4	4	5	4	4	5	5	3
	10	5	4	4	4	5	5	5	5	5	5
	11	4	4	5	5	5	5	5	5	5	4
	12	5	4	4	3	4	4	4	5	5	3
	13	5	4	4	3	4	4	4	5	5	4
	14	5	4	3	3	4	5	5	5	5	2
	15	5	4	3	3	3	5	5	5	5	2
	16	5	4	3	3	4	5	5	5	5	5
	17	5	4	3	3	3	2	2	5	5	4
	18	5	4	4	3	4	5	5	5	5	5
	19	5	4	3	3	4	4	4	5	5	5
	20	5	4	3	4	4	4	4	5	5	4
	21	5	4	4	4	4	5	5	5	5	5
	22	5	4	5	4	5	5	5	5	5	5
	23	5	4	3	5	3	3	3	5	5	5
	24	5	4	3	3	3	4	4	5	5	5
	25	5	4	3	3	3	4	4	5	5	4
	26	5	4	3	3	3	5	5	5	5	5

CRONBACH'S	INTERNAL CONSISTENCY
0.90 and above	Excellent
0.80-0.89	Good
0.70-0.79	Acceptable
0.60-0.69	Questionable
0.50-0.59	Poor
Below 0.50	Unacceptable

## Appendix R

### Grammarly Check Results

Report: RESEARCH-FINAL-1 (1)

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## RESEARCH-FINAL-1 (1)

by Lovely Joy Valdez

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### General metrics

<b>92,443</b>	<b>12,114</b>	<b>866</b>	<b>48 min 27 sec</b>	<b>1 hr 33 min</b>
characters	words	sentences	reading time	speaking time

---

### Score




This text scores better than 92%  
of all texts checked by Grammarly

### Writing Issues


<b>265</b>		<b>265</b>
Issues left	Critical	Advanced

## APPENDIX S

### Research Poster



# HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES OF RADIOLOGIC TECHNOLOGISTS



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## INTRODUCTION

This study emphasizes the essential role of radiologic technologists in health promotion and disease prevention through early detection, patient education, and advocacy for public health. It suggests improvements in training programs, healthcare policies, and community awareness to enhance healthcare services and promote healthier lifestyles.

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## STATEMENT OF THE PROBLEM

- Health promotion activities includes, patient education, radiation safety, health campaigns & professional development**
- Disease prevention activities includes early detection, patient education, radiation safety and advocacy for public health**
- Recommendations to improve the activities.**

## METHODOLOGY

- Descriptive-Quantitative method
- Structured questionnaire
- Weighted Mean

*Population & Locale:*

- 30 - LORMA Medical Center
- 30 - ITRMC

---

## HEALTH PROMOTION

- Patient Education**
  - 4.91 - Very Highly Implemented
- Radiation Safety**
  - 4.34 - Very Highly Implemented
- Health Campaigns**
  - 3.97 - Highly Implemented
- Professional Development**
  - 4.30 - Very Highly Implemented

## RESULTS

## DISEASE PREVENTION

- Early Detection**
  - 3.84 - Highly Implemented
- Patient Education**
  - 3.80 - Highly Implemented
- Radiation Safety**
  - 4.41 - Very Highly Implemented
- Advocacy for Public Health**
  - 3.87 - Highly Implemented

---

## MEASURES

*Recommended IEC Materials to Improve the Level of Implementation in Health Promotion and Disease Prevention Activities of Radiologic Technologists*

RATIONALE	OBJECTIVES	IMPLEMENTATION
<p>The healthcare landscape now emphasizes health promotion and disease prevention, with radiologic technologists playing key roles in early disease detection, patient education, and community health initiatives. This IEC material offers guidance on patient education, radiation safety, health campaigns, professional development, early detection, and public health advocacy to enhance their effectiveness.</p>	<ol style="list-style-type: none"> <li>Equip radiologic technologists to educate patients on prevention and healthy lifestyles.</li> <li>Emphasize reducing radiation exposure while ensuring image quality.</li> <li>Encourage participation in community health campaigns against preventable diseases.</li> <li>Foster collaboration for continuous learning and research advancement.</li> <li>Provide skills for effective early disease detection through imaging.</li> <li>Enable involvement in public health initiatives to raise awareness and access.</li> </ol>	<ol style="list-style-type: none"> <li>Researchers will assess technologists' knowledge and practices to identify gaps.</li> <li>They will develop clear IEC materials on key health topics.</li> <li>Training sessions will build technologists' confidence in using the materials.</li> <li>Technologists will be encouraged to apply the materials with ongoing support.</li> <li>Collaborations will expand care access and raise early detection awareness.</li> <li>Effectiveness will be evaluated through feedback from technologists and patients.</li> <li>IEC materials will be regularly updated based on research and feedback.</li> <li>Technologists will be empowered to lead public health awareness efforts.</li> </ol>

---

## FINDINGS

- The study shows that radiologic technologists enhance health promotion through patient education, equipment maintenance, social media outreach, and active public health engagement, leading to better health outcomes.
- The study reveals that radiologic technologists significantly enhance disease prevention and community health through lifestyle education, radiation safety, and public health engagement.
- The measures will enhance radiologic technologists' roles in health promotion and disease prevention through improved safety, community engagement, research participation, and public outreach.

---

## RECOMMENDATIONS

- Improve follow-up imaging and patient education on preventive health, ensure equipment maintenance, and engage in public health campaigns.
- Provide ongoing training in patient education and radiation safety, enforce equipment maintenance, and encourage teamwork.
- Integrate health promotion into curricula and promote student-led research on patient education.
- Raise awareness of radiologic technologists' roles in preventive care and promote regular screenings.
- Explore challenges in follow-up imaging and assess the impact of training and patient education on health outcomes.

## Curriculum Vitae

LC-REC Form #003  
CV TEMPLATE



## CURRICULUM VITAE

**GEE HARREN A. BACK****I. PERSONAL INFORMATION**

Address : Bacqui, Bacnotan, La Union  
 Contact Number : 09625670418  
 Email Address : geeharren.back@lorma.edu  
 Date of Birth : April 20, 2001  
 Place of Birth : City San Fernando, La Union

**II. EDUCATIONAL BACKGROUND**

Tertiary **2018-Present**  
 Bachelor of Science in Radiologic Technology  
 Lorma Colleges  
 Carlatan, City of San Fernando, La Union

Secondary **2016-2018**  
 Science, Technology, Engineering and Mathematics  
 Senior High School  
 Saint Louis College  
 Lingsat, City of San Fernando, La Union

**2012-2016**  
 Junior High School  
 Saint Louis College  
 Lingsat, City of San Fernando, La Union





## CURRICULUM VITAE



**GIZELLE JANE A. DENGSA**

### I. PERSONAL INFORMATION

Address : Labut, Lidlidda, Ilocos Sur  
Contact Number : 09977738877  
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Date of Birth : January 31, 2004  
Place of Birth : Bugui, Lidlidda, Ilocos Sur

### II. EDUCATIONAL BACKGROUND

Tertiary **2022-Present**  
Bachelor of Science in Radiologic Technology  
Lorma Colleges  
Carlatan, City of San Fernando, La Union

Secondary **2020-2022**  
Accountancy, Business and Management  
Senior High School  
Candon National High School  
Candon, Ilocos Sur

**2016-2020**  
Junior High School  
Lidlidda National High School  
Poblacion Sur, Lidlidda, Ilocos Sur

Primary                   **2010-2016**  
 Pentecostal Free Will Baptist Academy  
 Calungbuyan, Lidlidda, Ilocos Sur

**III. AWARDS/CITATIONS/RECOGNITIONS RECEIVED**

<b>1<sup>st</sup> Semester A.Y. 2022-2023</b>	Dean's Lister
<b>2<sup>nd</sup> Semester A.Y. 2022-2023</b>	Dean's Lister
<b>A.Y. 2019-2020</b>	With Honors
<b>A.Y. 2018-2019</b>	With Honors
<b>A.Y. 2016-2017</b>	With Honors

**IV. WORK EXPERIENCE : N/A**

**V. ELIGIBILITY : N/A**

**VI. SEMINARS ATTENDED : N/A**

**VII. INVOLVEMENT IN RESEARCH/RESEARCHES CONDUCTED : N/A**



## CURRICULUM VITAE



### LOVEREN E. EDAÑO

#### I. PERSONAL INFORMATION

Address : Taltal, Masinloc, Zambales  
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Date of Birth : February 08, 2002  
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#### II. EDUCATIONAL BACKGROUND

Tertiary **2024-Present**  
Bachelor of Science in Radiologic Technology  
Lorma Colleges  
Carlatan, City of San Fernando, La Union

**2020-2023**  
Bachelor of Science in Radiologic Technology  
Lorma Colleges  
Carlatan, City of San Fernando, La Union

Secondary **2018-2020**  
Humanities and Social Sciences  
Senior High School  
Zambales National High School

Iba, Zambales

**2014-2018**

Junior High School  
Zambales National High School  
Iba, Zambales

Primary

**2008-2014**

Taltal Elementary School  
Taltal, Masinloc, Zambales

**III. AWARDS/CITATIONS/RECOGNITIONS RECEIVED**

**A.Y. 2019-2020**

With Honors

**A.Y. 2018-2019**

With Honors

**A.Y. 2013-2014**

Journalist of the Year (Feature-Writing Filipino)

**IV. WORK EXPERIENCE : N/A**

**V. ELIGIBILITY : N/A**

**VI. SEMINARS ATTENDED : N/A**

**VII. INVOLVEMENT IN RESEARCH/RESEARCHES CONDUCTED**

**Qualitative Research (2020)**

Teenage Pregnancy and Its Effects on Girls' Academic Progression



## CURRICULUM VITAE



**JUSTIN CARLO C. MACUSI**

### I. PERSONAL INFORMATION

Address : Old Central, Sudipen, La Union  
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 Date of Birth : August 30, 2002  
 Place of Birth : City of San Fernando, La Union

### II. EDUCATIONAL BACKGROUND

Tertiary **2021-Present**  
 Bachelor of Science in Radiologic Technology  
 Lorma Colleges  
 Carlatan, City of San Fernando, La Union

Secondary **2018-2020**  
 Junior High School - Senior High School  
 Old Sudipen National High School  
 Sudipen, La Union

Primary **2009-2015**  
 Old Sudipen National High School

Sudipen, La Union

- III. **AWARDS/CITATIONS/RECOGNITIONS RECEIVED** : N/A
- IV. **WORK EXPERIENCE** : N/A
- V. **ELIGIBILITY** : N/A
- VI. **SEMINARS ATTENDED** : N/A
- VII. **INVOLVEMENT IN RESEARCH/RESEARCHES CONDUCTED**

**Qualitative Research (2019)**

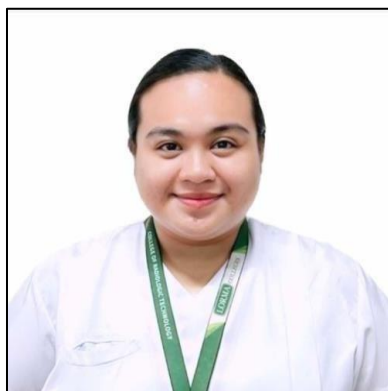
Satisfaction of Learners on Canteen Food Services

**Qualitative Research (2019)**

On Parenthood: Lived Experiences of Male Teenager Parents in Nagpanaoan



## CURRICULUM VITAE



### KRISTINA CLAIRE G. SANTIAGO

#### VIII. PERSONAL INFORMATION

Address : Banayoyo, Ilocos Sur  
Contact Number : 09205458752  
Email Address : kristinaclaire.santiago@lorma.edu  
Date of Birth : September 26, 2003  
Place of Birth : Candon City, Ilocos Sur

#### IX. EDUCATIONAL BACKGROUND

Tertiary **2022-Present**  
Bachelor of Science in Radiologic Technology  
Lorma Colleges  
Carlatan, City of San Fernando, La Union

Secondary **2016-2020**  
Junior High School - Senior High School  
Saint Joseph Institute Inc.  
Candon City, Ilocos Sur

Primary **2012-2016**  
Banayoyo Central School  
Poblacion, Banayoyo, Ilocos Sur

**2007-2012**

Saint Joseph Institute Inc.  
Candon City, Ilocos Sur

- X. **AWARDS/CITATIONS/RECOGNITIONS RECEIVED** : N/A
- XI. **WORK EXPERIENCE** : N/A
- XII. **ELIGIBILITY** : N/A
- XIII. **SEMINARS ATTENDED** : N/A
- XIV. **INVOLVEMENT IN RESEARCH/RESEARCHES CONDUCTED** : N/A



## CURRICULUM VITAE



### TRISHA NICOLE D. SOPRANES

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 Date of Birth : October 26, 2004  
 Place of Birth : Parian, City of San Fernando, La Union

#### II. EDUCATIONAL BACKGROUND

Tertiary	<b>2022-Present</b> Bachelor of Science in Radiologic Technology Lorma Colleges Carlatan, City of San Fernando, La Union
Secondary	<b>2020-2022</b> Science, Technology, Engineering and Mathematics Senior High School Felkris Academy Inc. Lingsat, City of San Fernando, La Union
	<b>2017-2020</b> Junior High School

Felkris Academy Inc.  
Lingsat, City of San Fernando, La Union

Primary

**2014-2016**

San Juan Central Elementary School  
Ili Sur, San Juan, La Union

**2011-2013**

Holy Angels Montessori and Learning Center  
Ili Norte, San Juan, La Union

### III. AWARDS/CITATIONS/RECOGNITIONS RECEIVED

**A.Y. 2024-2025**

SBO Treasurer

**A.Y. 2023-2024**

SBO Auditor

**2<sup>nd</sup> Semester A.Y. 2022-2023**

Dean's Lister

**2021-2022**

With High Honors

**2019-2020**

With High Honors

### IV. WORK EXPERIENCE

2021

**Part-time Worker**

AVON La Union Branch

G/F Juanita Bldg. Quezon Avenue, City of San Fernando, La Union

### V. ELIGIBILITY : N/A

### VI. SEMINARS ATTENDED

2019

**Environmental Leadership Seminar**

"Building Green Partnerships: Discourse and Coordination"

Lupon ng mga Indibidwal na Nangangalaga ng Kalikasan (LINK)

2018

**Leadership Seminar**

"National Youth & Educators Development Training on Human Rights"

### VII. INVOLVEMENT IN RESEARCH/RESEARCHES CONDUCTED

**Quantitative Research (2022)**

Perceived Influence of Tiktok to the Morale of Felkris Academy Students



## CURRICULUM VITAE



**LOVELY JOY A. VALDEZ**

### I. PERSONAL INFORMATION

Address : P. Burgos St., Tanqui, City of San Fernando, La Union  
 Contact Number : 09563919013  
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 Date of Birth : November 16, 2000  
 Place of Birth : City of San Fernando, La Union

### II. EDUCATIONAL BACKGROUND

Tertiary	<p><b>2022-Present</b>          Bachelor of Science in Radiologic Technology          Lorma Colleges          Carlatan, City of San Fernando, La Union</p> <p><b>2019-2022</b>          Bachelor of Science in Medical Laboratory Sciences          Lorma Colleges          Carlatan, City of San Fernando, La Union</p>
Secondary	<p><b>2017-2019</b>          Science, Technology, Engineering and Mathematics          Senior High School          La Union National High School</p>

Gov. Nisce St., Brgy. Catbangan, City of San Fernando, La Union

**2013-2017**

Junior High School

La Union National High School

Gov. Nisce St., Brgy. Catbangan, City of San Fernando, La Union

Primary

**2006-2013**

San Fernando City North Central School

F. Ortega Hwy, City of San Fernando, La Union

**III. AWARDS/CITATIONS/RECOGNITIONS RECEIVED**

**A.Y. 2017-2018**

With Honors

**A.Y. 2014-2015**

Academic Excellence

**A.Y. 2012-2013**

Outstanding Student

**A.Y. 2012-2013**

Christian Values Awardee

**IV. WORK EXPERIENCE : N/A**

**V. ELIGIBILITY : N/A**

**VI. SEMINARS ATTENDED : N/A**

**VII. INVOLVEMENT IN RESEARCH/RESEARCHES CONDUCTED**

**Experimental Research (2017)**

Palm Oil and Salt as an Additive Component in making Candle