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Job Satisfaction of Palestinian Radiographers

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Job Satisfaction of Palestinian Radiographers

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Dedication

The researcher dedicates this work sincerely to God.

Ihab Raed Salameh

Declaration:

I certify that this thesis submitted for the degree of Master, is the result of the author's own research, except where otherwise acknowledged, and that this study (or any part of this study) has not been submitted for a higher degree to any other university or institution.

Signature: IHAB SALAEMH

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Date: 18/7/2022

Acknowledgment

To my supervisor, Dr. Hussein ALMasri, I am using this opportunity to express my gratitude to you for supporting me in this research. I am thankful for your guidance, patience, constructive criticism, and friendly advice during this work.

Last but not least, to my father, mother, sister, wife, family, and beloved ones.

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Job Satisfaction of Palestinian Radiographers

Abstract

Radiographer's overall condition is paramount to the promotion of excellent patient wellbeing in every country. Thus, radiographs are highly integral and highly indispensable to healthcare institutions and patient care all over the world. This study aims to assess job satisfaction for radiographers in Palestine. A cross sectional study was conducted, using electronic questionnaire distributed among radiographers in Palestine.

There were 173 respondents. Participants were mostly males (70.5%), married (61.3%) in the age group of 30 years or less (60.1%), with a bachelor degree (81.5%), working in the private sector (63.6%), with average monthly income above 3500 New Israeli Shekel (50.3%). Most of participants (78.0%) agreed that level of Job satisfaction affect their daily performance and attendance to work. Of the radiographers, (27.2%) were satisfied in their job. The highest level of satisfaction was reported for their relationship with co-workers followed by the amount of responsibility, giving mean scores of 4.53 ± 1.445 , 4.1 ± 1.384 , respectively, and they were least satisfied with additional remuneration for work giving mean score 2.24 ± 1.465 . Spearman's ratio demonstrated that the strongest correlation factors were support from supervisors (0.820), other factors were participation in decision making (0.805) and utilization of skills (0.790), respectively. Statistically significant differences among overall job satisfaction and sector were radiographers work (p-value: 0.002) were found, which showed that radiographers are more satisfied in other sector (private and NGOs) than in public sector.

Radiographers overall job satisfaction was low, (27.2 %) were satisfied, except their relationship with co-workers followed by the amount of responsibility, participants were generally dissatisfied with other job factors. From findings, the main factors correlated with radiographers overall job satisfaction were support from supervisors, other factors that influenced their satisfaction were participation in decision making, and utilization of skills. Statistically significant differences among overall job satisfaction and sector were radiographers work were found. Healthcare policy-makers and hospital managers need to develop and institutionalize evidence based satisfaction strategies considering the factors that influence radiographer's job satisfaction.

CHAPTER ONE

Introduction

1.1. Background

An employee's job satisfaction reflects both his / her attitude about their work and the organization in which they work. In the workplace, employees' job satisfaction is linked to their compensation, benefits, recognition, promotions, colleagues and management's support, working conditions, the type of work they do, job security, managerial leadership styles, and demographics like their gender, marital status, and education level (Mohammed, Daybaso, & Habtewold, 2020).

The level of satisfaction a person feels with his/her job is affected by a number of factors. A person may enjoy some aspects of their job, but might be dissatisfied with others. For instance, the salary of a radiographer's might be enough, but the designation might not be enough (Asegid, Belachew, & Yimam, 2014).

Satisfied employees tend to be more productive, creative, and committed to their employers, and a recent study found a direct relationship between employee satisfaction and patient satisfaction in healthcare settings (Syptak, Marsland, & Ulmer, 1999).

Job satisfaction has been identified as an important factor in staff retention. Physician and nurse job satisfaction has been shown to affect quality of care, patient satisfaction, and staff turnover. Conversely, job dissatisfaction is associated with lower patient-to-provider ratios, longer waiting times, and staff burnout (Khamisa, Oldenburg, Peltzer, & Ilic, 2015), (Naburi *et al.*, 2017).

Retention and attraction strategies of radiographers should be based on factors that contribute to job satisfaction; literature shows that job satisfaction plays huge role in retention of employees. According to the literature remuneration, professional support, working

conditions, and career development structures are amongst the major factors that contribute to job satisfaction for radiographers (Probst & Griffiths, 2007), (Khoza, 2017).

1.2 Problem statement

Job dissatisfaction negatively affects the structure and workflow of an organization. There is more inconsistency in procedures and policies, more work-related accidents, and organizational conflict that can lead to more medical malpractice. Therefore, job satisfaction is an important research topic because it can threaten patient safety and increase labor costs. This leads to a shortage of radiographers personnel.

Therefore, to our best knowledge there are limited studies on job satisfaction and associated factors in the study area as to our search.

1.3 Study significance

A radiographer's overall condition is paramount to the promotion of excellent patient wellbeing in every country. Radiographs are highly integral and indispensable to healthcare institutions and patient care all over the world. It is important to identify the major factors that influence job satisfaction so that a more favorable psychological climate and a better quality of service can be provided.

In Palestine, the knowledge about the job satisfaction of radiographers would provide a valuable insight into how the ministry of health and policy makers can improve the work environment and implement new strategies that could help ensure the wellbeing and the overall job satisfaction of the radiographers.

1.4 Objective

This study aims to assess job satisfaction for radiographers in Palestine.

1.5 Study Questions

1. Do radiographers in Palestine have a good job satisfaction level?

2. Do job satisfaction level vary by variables such age gender education degree?
3. Does level of satisfaction vary based on the health (Public, or other) sectors?

1.6 Implications

Evidence-based strategies for healthcare professional's satisfaction, need to be developed and institutionalized in healthcare system by considering the predictors of job satisfaction among health professionals especially radiographers.

Health organizations and supervisors should be aware of the importance of recognizing radiographers' work in order to improve their psychological health, enhance their perceived quality of life at work, and have a positive perception of their career and their work.

1.7 Study Feasibility

- Institutional Review Board (IRB) of Al-Quds University committee approval was obtained for this research.
- The interest and knowledge of the researcher helped in the process of conducting this research.

1.8 Definitions

Job satisfaction is defined as the degree to which individuals feel positive or negative about their jobs. It is a multidimensional response toward work and workplace environment and improves positive energy and performance. It can be considered as a generalized feeling about the job or as a related constellation of attitudes about various aspects or facets of the job (Singh, Kaur, Verma, & Kumar, 2019).

Private sector – the part of the economy that is not under direct control by the government (Khoza, 2017).

Public sector – the part of the economy that is directly controlled by the government (Khoza, 2017).

Workload – the amount of work to be done by an individual in his respective place of employment (Khoza, 2017).

Remuneration – reward or pay for service rendered by an employee to an organization (Khoza, 2017).

Professional support – An organization's management or co-workers may encourage people to last out in the organization by giving them strength (Khoza, 2017).

Career development – Advancement within a profession recognized by the profession as a whole (Khoza, 2017).

Coworker Relationship - describes the participants' interpersonal relationships within their workplace (Geta, Biks, Dellie, & Yazachew, 2021).

Autonomy- reflects participants' autonomy in initiating and continuing their work behaviors and processes, such as making decisions about work methods, pace, and effort (Geta *et al.*, 2021).

Work Environment - describes the quality of the working environment, both its physical attributes and the degree to which it provides meaningful work (Geta *et al.*, 2021).

Performance Appraisal - describes the participants feeling on the measurement of their actual performance (Geta *et al.*, 2021).

CHAPTER TWO

Literature review

2.1 Introduction

This section aimed to review the latest literature about the job satisfaction, and its related factors.

2.2 Job satisfaction among healthcare professional

Numerous of studies investigated job satisfaction among health care professionals (doctors, nurses, physiotherapists, radiographers and others) in public and private sectors, the factors that associated with satisfaction or dissatisfaction in their jobs.

A health professional is anyone who has earned a diploma and/or bachelor's degree or higher in health science from an accredited college or university.

As mentioned earlier In the workplace, employees' job satisfaction is linked to their compensation, benefits, recognition, promotions, colleagues and management's support, working conditions, the type of work they do, job security, managerial leadership styles, and demographics like their gender, marital status, and education level. We found that it's beneficial to explore some of these studies about health professionals as whole, because they sharing many job related factors and some of these studies included radiographers as a healthcare professionals.

A systematic review were conducted by Abate & Mekonnen, (2021), in Ethiopia Studies were systematically searched using international databases from PubMed, Google Scholar, Cochrane Library, Embase, and CINAHL. Quality of search articles evaluated using the Newcastle Ottawa Scale for Cross-sectional Study Design. The (PRISMA) guideline was followed for reporting results. Eight studies with 4092 participants were included. The estimated pool prevalence of job satisfaction among Ethiopian health professionals was 41.17%. About one in three health care professionals were satisfied (Abate & Mekonnen, 2021).

Geta et al., (2021) in a cross-sectional study, recruited 520 healthcare professionals from public and private health facilities. In Bahir Dar, northwest Ethiopia to determine job satisfaction and associated factors. Job satisfaction and associated factors were identified through binary logistic regression. Overall, the magnitude of job satisfaction in public and private hospitals was 55.2%, while the magnitude at public hospitals was 29.0% and in private hospitals, it was 81.23%. In the model, autonomy, good remuneration, and recognition are key factors contributing to health professional satisfaction (Geta *et al.*, 2021).

Besides, Mohammed et al., (2020), investigated the level of employee's satisfaction and associated factors among employees working at Adama Hospital Medical College, Adama, Oromia Regional State, Ethiopia revealed that the overall level of satisfaction among Employees is low and accounts only (47.6%). Among them there were radiographers and the overall job satisfaction among them were (50%). Also, they argued that shisha smoking, Co-workers relationship, working environment, autonomy at their working, commitment for their organization, performance evaluation, promotion or growth opportunity and relationship with immediate supervisor shows significant association with employees' job satisfaction (Mohammed *et al.*, 2020).

Job satisfaction is directly connected to job performance. This relationship is very important in healthcare where staff performance is related to patient care. It has been reported in other organizations that workplace learning enhances job satisfaction.

Iliopoulos et al., (2018) investigated if such a correlation exists within the health service. Questionnaires on job satisfaction and on-the-job learning were distributed to healthcare professionals at the NHS Hospital. Participants were directly involved in patient care. The specialists involved in the study were doctors, nurses, emergency medical personnel, physiotherapists, and radiologic technicians. In total, 102 questionnaires were collected. There was a direct and significant correlation between job satisfaction and on-the-job learning. Compared to doctors, nurses felt that on-the-job training was better. In addition, total work experience and time spent in trust had a slight negative correlation with job satisfaction. Workplace learning was directly linked to employee job satisfaction in the NHS, and frequently scheduled departmental teaching enhances staff satisfaction (Iliopoulos, Morrissey, Baryeh, & Polyzois, 2018).

2.3 Job satisfaction among radiographers

Job satisfaction of radiographers have been studied in various manner and in association with retention or leaving the health sector, or in combination with stress and burnout, in the work place culture, condition, and environment.

According to a World Health Organization report, 40% of medical professionals (nurses, midwives, doctors) quit their jobs due to dissatisfaction. Work satisfaction is a sense of measuring the cognitive and behavioral aspects of an employee's work.

Also, Retention or leaving the public sector, were studied by researchers for radiographers according to their job satisfaction and associated factors.

Karera et al., (2022) evaluated the job satisfaction levels and their contributing factors as well as turnover intention among radiographers in Namibian state hospitals, a quantitative, correlational and cross-sectional design was used. Revealed that eighty percent of radiographers indicated moderate levels of job satisfaction. Job satisfaction was significantly associated with employee rank, and age. The turnover intention was found to be at 44.4%. Factors significantly associated with turnover intention were tenure in rank, the number of years worked as a radiographer, and the hospital of employment. there is a moderate, positive, relationship between job satisfaction, and turnover intention (Karera, Amkongo, & Kalondo, 2022).

In South Africa, a study conducted by Khoza et al., (2021) to explore factors that contribute to job satisfaction/ dissatisfaction amongst radiographers to develop a model to attract and retain radiographers in the public sector. The study Revealed that Government policies, working conditions, and poor remuneration play a significant role in job satisfaction amongst radiographers employed by public tertiary hospitals in the Gauteng province (Khoza, Sibiya, & Nkosi, 2021).

Moreover, a study by Nightingale et al., (2021) aimed to identify why radiographers leave the national health system early, and what incentives are important in their decision to stay. Results revealed three over-arching themes were identified: 1) Challenging working patterns and the impact on employee health and wellbeing; 2) Lack of flexibility in working terms and conditions; 3) Lack of timely career progression and access to Continuing Professional Development, and the need to feel valued. Manager participants recognized the

need to offer greater flexibility in working patterns but this was challenging within financial and service delivery constraints. The three themes were consistent across participants. Moreover, failure to address these concerns will exacerbate the loss of experienced and highly trained staff from the national health system at a time when demand for services continues to rise (Nightingale, Burton, Appleyard, Sevens, & Campbell, 2021).

Moreover, in some studies radiographers' job satisfaction were assessed with the stress and burnout, and the related factors of job satisfaction. Founded that job satisfaction related factors were stressors that affect job satisfaction level and the level of burnout and stress.

Alakhras, et al., (2022) conducted a study aimed to assess the level and specific factors affecting burnout and job satisfaction among radiographers and to examine the correlation between them. Results revealed that total emotional exhaustion, depersonalization and personal accomplishment scores were 28.7, 11.3 and 35.8 respectively. Most participants felt dissatisfied with pay (71.8%), opportunities for promotion (65.6%), fringe benefits (77.6%), contingent rewards (75.0%), operating procedures (61.7%), and communication (52.6%). Burnout was associated with work experience and caseload. Job satisfaction was associated with section of work. Most of the job satisfaction domains were significantly inversely related to emotional exhaustion and depersonalization domains. Emotional exhaustion and depersonalization drew a significant positive correlation (Alakhras, Al-Mousa, & Lewis, 2022).

Akyurt, (2021) conducted a study to evaluate job satisfaction and perceived stress among radiology technicians in relation to sociodemographic and occupational risk factors. Included 207 radiographers. Analysis revealed that more years in practice, being uncomfortable with working in a radiation environment and the use of public transport to get to work were significant predictors of poorer job satisfaction, whereas break time and following scientific literature significantly predicted the better job satisfaction. Being satisfied with the current job and high-income class were associated with lower perceived stress levels, while higher perceived stress level was also a significant predictor of poorer job satisfaction (Akyurt, 2021).

Besides, a study conducted in Slovenia by Jagodic et al., (2020) to define stress and correlated factors and identify which stressors are present among radiographers in relation to their workplace. A total of 236 radiographers completed the received questionnaire that covers a variety of workplace stressors, which conditions affect stress, how frequently radiographers

notice stress and to what extent they use coping mechanisms. Interpersonal relations and management staff because the highest level of stress, while the most important stressor is a conflict with a supervisor. Radiographers who value their relationships with colleagues and bosses felt less stressed. In addition, the same results can be obtained among radiographers who are satisfied because they work in a multidisciplinary team. Teaching new staff has a positive correlation with occupational stress. Radiographers noticed a variety of stressors in their workplace. The most important are related to interpersonal relations (Jagodica, Hlebec, & Starc, 2020).

Recognition of radiographers' work has received limited research attention to date, notably its link with wellbeing at work (i.e., job and career satisfaction) and emotional exhaustion.

A research by Chevalier et al., (2022) focuses on these links and examines more precisely the mediational psychological mechanism (i.e., professional identification) that could explain the link between recognition of radiographers' work with wellbeing at work and emotional exhaustion relationships. A cross-sectional, quantitative study with data obtained through an online survey. The sample comprised 713 radiographers working in France. Results suggest that radiographers who perceive more professional recognition from their supervisors, colleagues and patients are those who identify most with their profession and who are most satisfied by their job and their career; they also show lower levels of emotional exhaustion. These results underline the crucial role of recognition in the workplace for these professionals (Chevalier *et al.*, 2022).

Moreover, Alamri et al., (2020) investigated the overall job satisfaction among radiographers in Taif city. To measure job satisfaction this study used the Minnesota Scoring Questionnaire. The data collection was conducted between September 2018 and April 2019 in all major hospitals, revealed that the overall job satisfaction of radiographers was moderate. However, radiographers in military hospitals are higher than radiographers in the Ministry of Health hospitals. The job satisfaction of the male radiographers was higher than the job satisfaction of the female colleague. Finally, job satisfaction was high among those working in the advanced modality sector. Moreover, factors that affecting their satisfaction included the feeling of independence and recognition (Alamri *et al.*, 2020).

Regarding work place culture, environment and conditions with the associated factors.

Workplace culture from the radiographers' point of view was described by Lohikoski et al., (2019). Data collection was conducted in Finland in 2017 using a structured electronic survey. The target population were radiographers of working age .The results showed that radiographers rate their work culture slightly positive. They experienced some stress primarily caused by workloads and had the least stress associated with career development. The radiographers were quite pleased with their work, their personal satisfaction was rated highest, and their payments and prospects were the lowest. The practice environment felt a little positive. According to this survey, workplace culture is experienced by technicians at a moderate to slightly positive level, because the culture of the workplace is related to the quality of care, the work of staff, and the outcome of the organization (Lohikoski, Roos, & Suominen, 2019).

Fultz et al., (2018), investigated the job satisfaction of radiographers in relation to work environment, communication and leadership. Designed a 12-item survey and distributed it to 117 registered technicians (R.T.s). Data were statistically analyzed using descriptive statistics, Fifty nine technicians responded to the survey. The results showed that there was no significant difference in overall satisfaction between radiographers with an associate degree and those with a bachelor's degree. There was a significant difference in satisfaction scores among technicians with different levels of experience. R.T.s with fewer than 20 years of experience were less satisfied than technologists with 20 or more years of experience. Satisfaction was influenced by length of time in the profession. The overall high satisfaction exception for this group is was low satisfaction with recent changes related to the transition to the hospital system, value competent leadership, teamwork, mutual support and effective communication (Fultz, Walker, Lengerich, & Bugajski, 2018).

In Switzerland a survey was conducted by Lehmann et al., (2015) to appreciate workplace conditions and job satisfaction among radiographers. 753 radiographers answered the questionnaire. The response rate was estimated at 26%. 37% were working for more than 10 years in the same place. The study revealed that the highest levels were reached for the diversity of job activities, the quality of radiology facilities, team working and autonomy. The lowest levels were reached for collaboration with radiologists, salary and career opportunities. It was

concluded that radiographers in Switzerland were mostly satisfied about their job and the workplace conditions (Lehmann, Meystre, & Mamboury, 2015).

In summary the literature showed that almost the factors that associated with job satisfaction among health care professionals were not far away from those of radiographers. Almost radiographers and health care professionals working in private sector were more satisfied. Experience and work place learning were correlated with job satisfaction level.

The overall job satisfaction was in the range of moderate to low except in Switzerland, these differences depends on socio-economic status of the country.

Factors like relationship with coworker, autonomy, recognition, salary, government policies, organizational structure, supervision, and workload influence the overall job satisfaction level.

CHAPTER THREE

Study methodology

3.1 Introduction

This chapter aims to explain the methodological steps. Illustrating the study design, sampling and sample specifications, study tool and data collection procedures in addition to the data processing and analysis methods.

3.2 The study designs

A cross sectional study design was conducted to assess job satisfaction among radiographers in Palestine.

3.3 Setting

An Electronic questionnaire were distributed for this study to all radiographers in Palestine aimed to assess their job satisfaction level. All hospitals and centers in Palestine were targeted (public, private and NGOs sectors).

3.4 Population and sampling

The study population were radiographers in Palestine. Radiographers working in all centers and hospitals were targeted in this study. Purposive sample chosen via completion of online questionnaire. The sample size was 173.

Research Variables

- Independent variables: Radiographer's job factor associated with their jobs and socio-demographic characteristics
- Dependent variable: radiographers job satisfaction level

3.5 Study tool

Researcher used an electronic questionnaire to collect information about job satisfaction. Moreover, the questionnaire contains two parts: The first one included demographic information such as gender, age, work place, marital status, educational level, and average monthly income etc.

The second part about job satisfaction containing 18 items such as satisfaction with physical working conditions, salary, promotional opportunities, relationships with co-workers, workload, support from supervisors, additional remuneration, responsibilities, working hours and others.

For each factor, respondents can choose from a six-point Likert scale indicating different levels of satisfaction(1-6), (1 very dissatisfied, dissatisfied, slightly dissatisfied, slightly satisfied, satisfied, 6 very satisfied).

The questionnaire is reliable and valid (Khamlub, Harun-Or-Rashid, Sarker, Hirosawa, Outavong, & Sakamoto, 2013). A Cronbach's alpha of 0.89 indicates the job satisfaction part was a reliable measurement.

The overall levels of job satisfaction among radiographers were classified as being dissatisfied if the sum of the scores for the different factors was between 18–54, while 55–72 was moderate and 73–108 was satisfied.

3.6 Data collection procedures

An electronic questionnaire was used for collecting data, the researcher distributed the questionnaire between Septembers to November 2021 among radiographers via online Google form. The study objectives and instructions were clearly explained to the participants in the beginning of the online form, and the researcher informed the participants that they can return back to ask any questions regarding the questionnaire and study, Participants were informed of their freedom to withdraw and dropout completing the questionnaire without any penalties.

3.7 Statistical analysis

The SPSS version 23 software was used to analyze the data. Means, standard deviations and frequency were used for descriptive analysis. Non parametric tests kruskal Wallis and Mann Whitney u tests, spearman's correlations were used. A significant P value was considered of less than 0.05.

3.8 Ethical Approval

IRB of Al-Quds University committee approval was obtained (see appendix3) for this research (see Annex 3). The study objectives and instructions were clearly explained to the participants. To ensure anonymity, identity of the participants were not included. To ensure confidentiality the collected data were deleted after the analysis. Moreover, participation was voluntary and informed consent was obtained from each participant. Participants were informed of their freedom to withdraw and dropout completing the questionnaire without any penalties.

Summary

- A cross-sectional design was used in this study because it is cheap, quick and ethically safe.
- The data collection tool used in this study was self-reported questionnaires including 2 different parts: (1) socio-demographic data, (2) job satisfaction questionnaire.
- The data were analyzed by the SPSS statistical software test.
- The total population of the study was 173
- Confidentiality and various ethical measures were considered.

CHAPTER FOUR

Results and findings

4.1 Study Analysis and Result

In this chapter, results of this study were explained and revealed by data analysis. Descriptive statistics related to frequency, mean, standard deviation (SD), and percentages of characteristics of socio-demographic data analysis and variability between participants were shown in the form of tables and figures.

4.2 Distribution of sample

The demographic data of 173 respondents are shown in Table (4.2). Results revealed that , (60.1%) of the participants were in the age group of 30 years or less, were (31.2%) in the age group of 31-40 years, whereas (8.7%) in the age group of 41 years or more. Participants in this study were mostly males (70.5%), females participants in this study were (29.5%). Married participants were (61.3%), whereas single participants (38.2 %), and divorced (0.6%). (81.5%) of participants were with a bachelor degree, whereas 18.5% of participants have postgraduate certificates.

Participants with average monthly income above 3500 New Israeli Shekel were (50.3%). Moreover (36.4%) have 1501-3499 New Israeli Shekel as average income and (13.3%) have less than 1500 New Israeli Shekel. (63.6%) of Participants are working in the private sector, whereas (36.4%) are working in public sector.

(41.6%) of the participants were generally satisfied with their jobs, and (38.7%) of the participants were not generally satisfied with their jobs, whereas (19.7%) of the participants can't decide if they were satisfied in general or not Figure (4.1). Most of participants (78.0%) agreed that level of job satisfaction affects their daily performance and attendance to work, whereas (12.7%) answered No and (9.2%) answered Maybe Figure (4.2).

Table 4.2: Demographic characteristics of participants.

Demographic characteristics of participants		Frequency	Percent
Age	30 years or less	104	60.1
	31-40 years	54	31.2
	41 years or more	15	8.7
Gender	Male	122	70.5
	Female	51	29.5
Marital status	Married	106	61.3
	Single	66	38.2
	Divorced	1	.6
Level of education	Bachelor	141	81.5
	Postgraduate	32	18.5
Average monthly income in New Israeli Shekel	1500 or less	23	13.3
	1501-3499	63	36.4
	3500 or more	87	50.3
Sector	Private and NGOs	110	63.6
	Public	63	36.4
Are you generally satisfied with your job?	No	67	38.7
	Maybe	34	19.7
	Yes	72	41.6
Does level of Job satisfaction affect your daily performance and attendance to work?	No	22	12.7
	Maybe	16	9.2
	Yes	135	78.0
	Total	173	100.0

(41.6%) of the participants were generally satisfied with their jobs, and (38.7%) of the participants were not generally satisfied with their jobs, whereas (19.7%) of the participants can't decide if they were satisfied in general or not (Figure 4.1).

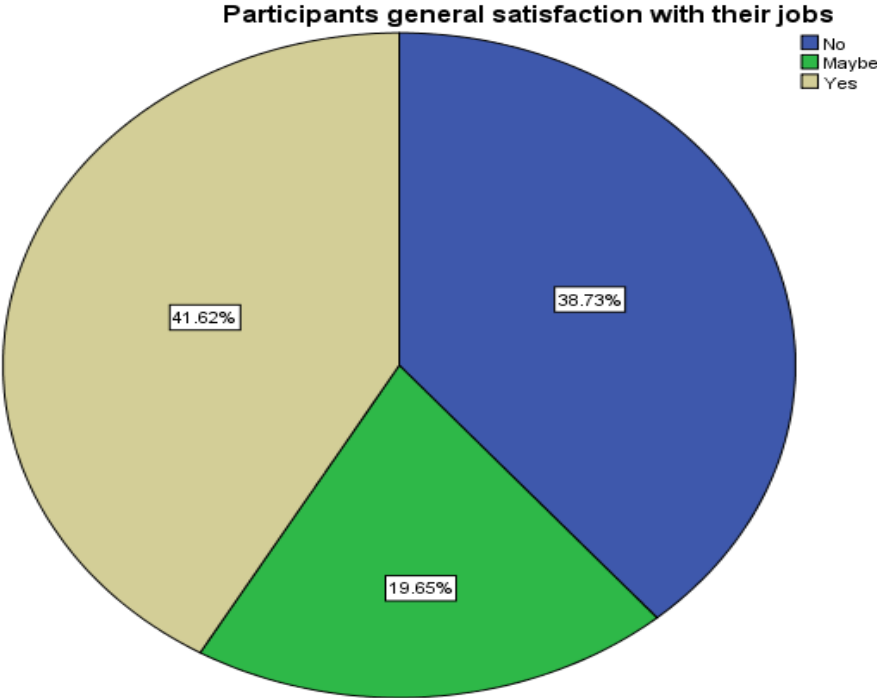


Figure 4.1: Participants general satisfaction with their jobs

Most of participants (78.0%) agreed that level of job satisfaction affects their daily performance and attendance to work, whereas (12.7%) answered No and (9.2%) answered Maybe (Figure 4.2).

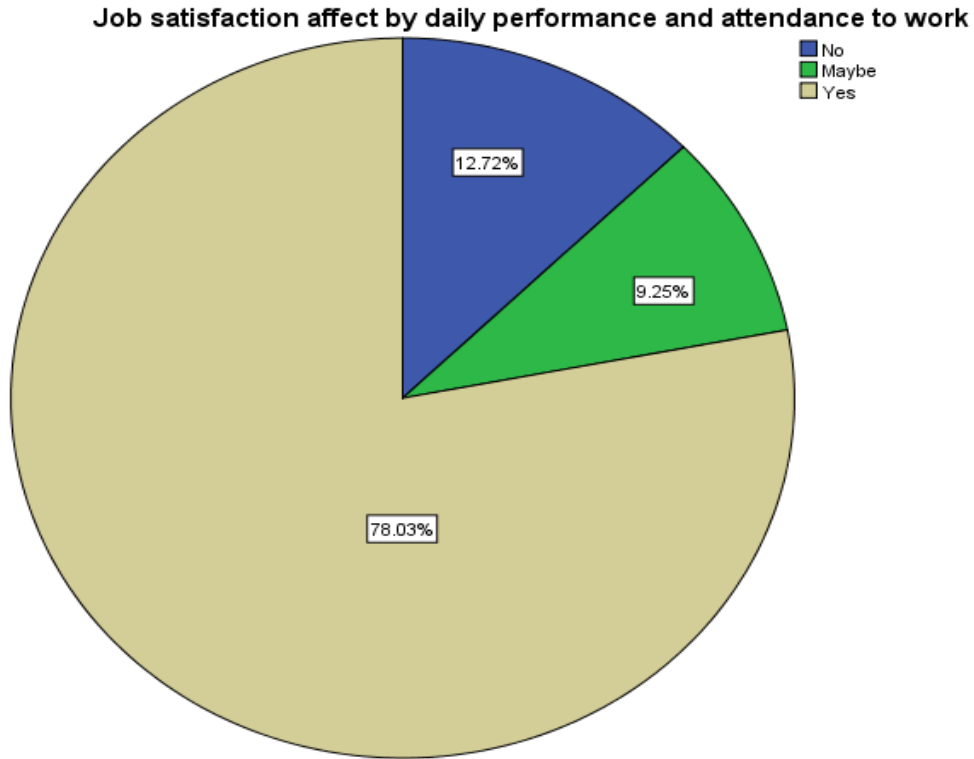


Figure 4.2: Job satisfaction affect by daily performance and attendance to work

4.3 Job Satisfaction Factors

Table (4.3) shows the participant's rates of job satisfaction according to various factors. The highest level of satisfaction was reported for their relationship with co-workers followed by the amount of responsibility, giving mean scores of 4.53 ± 1.445 , 4.1 ± 1.384 , respectively. And they were least satisfied with additional remuneration for work, giving mean score 2.24 ± 1.465 .

For both, males and females the highest level of satisfaction was reported for the relationship with co-workers followed by the amount of responsibility; it was the same. Generally according to various factors females were more satisfied regarding job satisfaction factors, or comparable to males

Table 4.3: Job satisfaction for each factor on six-point Likert scale (n=173)

No.	Factors of job satisfaction	Male		Female		Overall	
		Mean (± SD)		Mean (± SD)		Mean (± SD)	
1	Physical working place conditions	3.61	1.369	3.8	1.132	3.67	1.303
2	Salary	2.86	1.571	3.22	1.419	2.97	1.532
3	Opportunity to use abilities	3.2	1.477	3.41	1.431	3.27	1.462
4	Opportunities for advancement	3.03	1.585	3.06	1.618	3.04	1.59
5	Opportunity for training or education	2.99	1.513	3.29	1.432	3.08	1.492
6	Additional remuneration for work	2.2	1.475	2.33	1.451	2.24	1.465
7	Conflict resolution at work	3.22	1.452	3.73	1.576	3.37	1.503
8	Support from supervisors	2.89	1.442	3.27	1.457	3.01	1.453
9	Participation in decision making	2.95	1.493	3.27	1.443	3.05	1.482
10	Utilization of skills	3.32	1.439	3.61	1.372	3.4	1.422
11	Amount of variety on job	3.12	1.598	3.06	1.567	3.1	1.585
12	Organizational structure	2.76	1.5	3.27	1.415	2.91	1.49
13	Job security	2.81	1.555	3.24	1.557	2.94	1.563
14	Freedom of working method	3.43	1.526	3.49	1.488	3.45	1.511
15	Relationship with co-workers	4.48	1.517	4.65	1.262	4.53	1.445
16	Amount of responsibility	3.97	1.499	4.41	1.004	4.1	1.384
17	Total working hours	3.55	1.632	3.61	1.443	3.57	1.575
18	General feeling about job itself	3.68	1.648	4.2	1.2	3.83	1.544

4.4 The overall job satisfaction

The overall levels of job satisfaction among radiographers were classified as being dissatisfied if the sum of the scores for the different factors was between 18–54, while 55–72 was moderate and 73–108 was satisfied.

The overall job satisfaction was 27.2% satisfied, 30.6% moderate, and 42.2% dissatisfied. As shown in (Table 4.4).

Table 4.4: The overall job satisfaction

Overall scores	mean	Std. Deviation	Participants	Percentage (%)
Dissatisfied 18-54	42.4110	9.10561	73	42.2
Moderate 55-72	62.5283	5.57675	53	30.6
Satisfied 73-108	82.6596	7.48702	47	27.2
Total	59.5087	18.23287	173	100.0

4.5 Correlation between overall job satisfaction and each factor of satisfaction

The relationship between overall job satisfaction and job characteristics was analyzed as shown in Table (4.5), to determine the primary factors associated with satisfaction and/or dissatisfaction with a job.

Spearman's ratio demonstrated that the strongest correlation factor was Support from supervisors (0.820). Other factors that influenced satisfaction were participation in decision making (0.805) and utilization of skills (0.790), respectively.

Table 4.5: Correlation between overall job satisfaction and each factor of satisfaction

No.	Factors of job satisfaction	Spearman correlation coefficient	P-value
1	Physical working place conditions	0.650	< 0.001
2	Salary	0.516	< 0.001
3	Opportunity to use abilities	0.735	< 0.001
4	Opportunities for advancement	0.733	< 0.001
5	Opportunity for training or education	0.724	< 0.001
6	Additional remuneration for work	0.627	< 0.001
7	Conflict resolution at work	0.732	< 0.001
8	Support from supervisors	0.820	< 0.001
9	Participation in decision making	0.805	< 0.001
10	Utilization of skills	0.790	< 0.001
11	Amount of variety on job	0.755	< 0.001
12	Organizational structure	0.764	< 0.001
13	Job security	0.660	< 0.001
14	Freedom of working method	0.721	< 0.001
15	Relationship with co-workers	0.490	< 0.001
16	Amount of responsibility	0.477	< 0.001
17	Total working hours	0.457	< 0.001
18	General feeling about job itself	0.625	< 0.001

4.6 Comparison among demographic variables on overall job satisfaction

The Mann–Whitney U (M-W U) test revealed statistically significant differences among overall job satisfaction and sector were radiographers work (p-value 0.002). Radiographers are more satisfied in private sector and NGOs giving mean score (62.86 ± 18.50), than public sector giving mean score (53.65 ± 16.29), there were no differences in gender, social status, and level of education as shown in (Table 4.6).

Kruskal-Wallis (K-W) Test revealed statistically difference on question: Are you generally satisfied with your job? (P-value = 0.000). No differences in age group, monthly income, level of job satisfaction affect their daily performance and attendance to work questions (Table 4.5).

Table 4.6: Comparison of demographic variables for overall job satisfaction using the Kruskal-Wallis and Mann-Whitney U-test (n=173)

Overall score		N	Mean, Std. Deviation	M-W U P-Value
Gender	Male	122	58.08 ± 18.66	0.120
	Female	51	62.92 ± 16.84	
	Total	173		
level of education	Bachelor	141	58.86 ± 18.07	0.223
	Postgraduate	32	62.38 ± 18.96	
	Total	173		
Sector	Private and NGOs	110	62.86 ± 18.50	0.002
	Public	63	53.65 ± 16.29	
	Total	173		
Marital status	Married	106	57.60 ± 16.63	0.080
	Single	66	62.56 ± 20.43	
	Total	172		
		N		K-W P-value
Average monthly income in New Israeli Shekel	1500 or less	23	59.61 ± 20.82	0.984
	1501-3499	63	59.32 ± 17.53	
	3500 or more	87	59.62 ± 18.23	
	Total	173		
Age	30 years or less	104	61.64 ± 19.17	0.173
	31-40 years	54	56.94 ± 16.45	
	41 years or more	15	53.93 ± 16.22	
	Total	173		
Generally satisfied with their job	No	67	50.06 ± 17.22	0.000
	Maybe	34	57.74 ± 13.72	
	Yes	72	69.14 ± 16.20	
	Total	173		
level of job satisfaction affect daily performance and attendance to work	No	22	66.45 ± 17.43	0.128
	Maybe	16	62.06 ± 16.20	
	Yes	135	58.07 ± 18.41	
	Total	173		

CHAPTER FIVE

Discussion

Results revealed that participants in this study were mostly males (70.5%), married (61.3%) in the age group of 30 years or less (60.1%), with a bachelor degree (81.5%), working in the private sector (63.6%), with average monthly income above 3500 New Israeli Shekel (50.3%). Most of participants (78.0%) agreed that level of job satisfaction affects their daily performance and attendance to work, moreover, about half of them were satisfied with their jobs.

The participant's rates of job satisfaction among various factors, revealed that the highest level of satisfaction was reported for their relationship with co-workers followed by the amount of responsibility, giving mean scores of (4.53 ± 1.445) , (4.1 ± 1.384) , respectively.

Our results are in the line with previous study conducted in India, which stated that employee felt satisfied concerning relations with their co-workers, nature of their work, supervision and communication facet (Singh *et al.*, 2019).

Besides, Mohammed *et al.*, (2020), argues that, Co-workers relationship, working environment, autonomy at their working, commitment for their organization, performance evaluation, promotion or growth opportunity and relationship with immediate supervisor shows significant association with employees' job satisfaction. (Mohammed *et al.*, 2020).

It may be because good co-worker relationships facilitate good communication and contribute to good work conditions and satisfaction at work.

Another similarity may be due to the fact that if employees are autotomized in their work, they feel free and perform their tasks freely.

Moreover, our results revealed that radiographers least satisfied with additional remuneration for work mean score 2.24 ± 1.465 . This results is in agreement with Geta *et al.*, (2021). who revealed that factors that contribute to the satisfaction of health professionals are autonomy, good reward, and recognition (Geta *et al.*, 2021).

Similarly, Khoza et al., (2021) have revealed that government policies, working conditions, and poor remuneration play a significant role in job satisfaction amongst radiographers employed by public tertiary hospitals in the Gauteng province (Khoza *et al.*, 2021).

As a result of the fact that each employee should be evaluated based on their plan and the standards established by the organization, if this is not the case, employees will be negatively affected.

Also, if promotional strategies are not fair and clear, they will affect the life and psychology of employees.

Besides, correlated with satisfaction and/or dissatisfaction with a job, demonstrated that the strongest correlation factor was in support from supervisors (0.820). Other factors that influenced satisfaction were participation in decision making (0.805) and utilization of skills (0.790), respectively.

These results are in agreement with those in the study conducted by Jagodic et al., (2020), Interpersonal relations and management staff because the highest level of stress, while the most important stressor is a conflict with a supervisor. In addition, the same results can be obtained among radiographers who are satisfied because they work in a multidisciplinary team. Teaching new staff has a positive correlation with occupational stress (Jagodic *et al.*, 2020).

As a result of participative leadership, employees are more likely to be involved in decision making that affects their work and their relationships with co-workers, resulting in higher job satisfaction for all.

This could be because if there is a supervisor, the employee feels more supported. It could be a cause of the employee's motivation and satisfaction.

The overall job satisfaction: 27.2% satisfied, 30.6% moderate, and 42.2% dissatisfied.

This study found that overall job satisfaction was comparable to previous study conducted among radiographers in Jordan (Alakhras *et al.*, 2022), although the findings were lower than those of Switzerland (Lehmann *et al.*, 2015).

On the other hand, it is higher than studies done among health professionals in Ghana (Bonenberger, Aikins, Akweongo, & Wyss, 2014), and in Punjab, India (Singh *et al.*, 2019).

There could be various reasons for this variation, including study time differences, differences in socioeconomic status, and differences in work environment.

Our results shows statistically significant differences among overall job satisfaction and sector were radiographers work (p-value 0.002) radiographers are more satisfied in private sector than public sector. There were no differences in gender, marital status, and level of education.

Our results are in agreement with Karera *et al.*, (2022), who revealed that Factors significantly associated with turnover intention were tenure in rank, the number of years worked as a radiographer, and the hospital of employment. there is a moderate, positive, relationship between job satisfaction, and turnover intention (Karera *et al.*, 2022).

Our results are in a line with Geta *et al.*, (2021). Health professionals working in private hospitals were 9 times more likely to be satisfied with their jobs (Geta *et al.*, 2021).

A variety of factors may have contributed to radiographers leaving the public sector, such as their health workplace work, job descriptions and nature of their work, autonomy, supportive supervision, rewards and recognition. Remuneration, working conditions, professional support, and career development are also likely factors.

5.1 Conclusions

In our study radiographers overall job satisfaction was low, (27.2%) were satisfied. Except their relationship with co-workers followed by the amount of responsibility. Radiographers were generally dissatisfied with other job satisfaction factors.

From our findings, that the main factors that correlated with radiographers overall job satisfaction were support from supervisors, Other factors were participation in decision making and utilization of skills. There were a statistically significant difference among overall job satisfaction and sector were radiographers work (p-value 0.002) radiographers are more satisfied in private sector than public sector.

Healthcare policy-makers and hospital managers need to develop and institutionalize evidence based satisfaction strategies considering the factors that influence radiographer's job satisfaction.

5.2 Limitations

- This study has some limitations. It is a cross-sectional study which relies entirely on convenience sampling, which emphasizes differences between participants' characteristics.
- The study has a small sample size, it relied only on convince sampling.
- Because of limited resources and the COVID-19 epidemic restrictions, as a result, this study may not represent all radiographers in Palestine.

5.3 Recommendations

- Future comparisons of job satisfaction may be more conclusive with a larger sample size and better sampling methods.
- The findings of the influencing factors should be used to develop an effective strategy for improving job satisfaction. For example, to improve job satisfaction among radiographers, it is imperative that they attend continuing education, undergo in-service

refresher training, and regularly update their knowledge along with balance workload, income and safety at work to improve job satisfaction

- Radiographers must be provided with comprehensive job satisfaction strategies in each significant dimension.
- The organizations should work on factors associated with radiographer's job satisfaction such as additional remuneration for work, organizational structure, and job security in order to increase the satisfaction levels.

References

- Abate, H. K., & Mekonnen, C. K. (2021). Job Satisfaction and Associated Factors among Health Care Professionals Working in Public Health Facilities in Ethiopia: A Systematic Review. *Journal of Multidisciplinary Healthcare, 14*, 821.
- Akyurt, N. (2021). Job Satisfaction and Perceived Stress among Radiology Technicians: A Questionnaire Survey in Relation to Sociodemographic and Occupational Risk Factors. *International Archives of Occupational and Environmental Health, 1*-10.
- Alakhras, M., Al-Mousa, D., & Lewis, S. (2022). Assessment and Correlation between Job Satisfaction and Burnout among Radiographers. *Radiography, 28*(2), 283-287.
- Alamri, S., et al. (2020). Are Radiology Technologists Satisfied with Their Work? A Cross-Sectional Study from Taif Hospitals. *Open Journal of Radiology, 10*(02), 45.
- Asegid, A., Belachew, T., & Yimam, E. (2014). Factors Influencing Job Satisfaction and Anticipated Turnover among Nurses in Sidama Zone Public Health Facilities, South Ethiopia. *Nursing research and practice, 2014*.
- Bonenberger, M., Aikins, M., Akweongo, P., & Wyss, K. (2014). The Effects of Health Worker Motivation and Job Satisfaction on Turnover Intention in Ghana: A Cross-Sectional Study. *Human resources for health, 12*(1), 1-12.
- Chevalier, S., et al. (2022). Recognition of Radiographers in the Workplace: Why It Matters. *Radiography, 28*(3), 648-653.
- Fultz, A. R., Walker, M., Lengerich, A., & Bugajski, A. (2018). Radiologic Technologists' Job Satisfaction: A Look at Work Environment, Communication, and Leadership. *Radiologic technology, 89*(6), 536-540.
- Geta, A., Biks, G. A., Dellie, E., & Yazachew, L. (2021). Job Satisfaction and Associated Factors among Health Professionals Working at Public and Private Hospitals in Bahir Dar City, Northwest Ethiopia: A Comparative Cross-Sectional Study. *BioMed Research International, 2021*.
- Iliopoulos, E., Morrissey, N., Baryeh, K., & Polyzois, I. (2018). Correlation between Workplace Learning and Job Satisfaction of Nhs Healthcare Professionals. *British Journal of Healthcare Management, 24*(5), 226-233.

- Jagodic, M., Hlebec, V., & Starc, T. (2020). Identification of Occupational Stressors Amongst Radiographers: Identifikacija Stresorjev Na Podro? Ju Dela Radioloških Inženirjev. *Medical Imaging and Radiotherapy Journal*, 37(1).
- Karera, A., Amkongo, M., & Kalondo, L. (2022). A Cross-Sectional Assessment of Job Satisfaction, Its Contributing Factors and Impact on Turnover Intention among Radiographers in Namibian State Hospitals.
- Khamisa, N., Oldenburg, B., Peltzer, K., & Ilic, D. (2015). Work Related Stress, Burnout, Job Satisfaction and General Health of Nurses. *International journal of environmental research and public health*, 12(1), 652-666.
- Khamlub, S., Harun-Or-Rashid, M., Sarker, M. A. B., Hiroswawa, T., Outavong, P., & Sakamoto, J. (2013). Job Satisfaction of Health-Care Workers at Health Centers in Vientiane Capital and Bolikhamsai Province, Lao Pdr. *Nagoya journal of medical science*, 75(3-4), 233.
- Khoza, T., Sibiyi, M., & Nkosi, B. (2021). A Model to Enhance Job Satisfaction for Radiographers in the Public Healthcare System in Gauteng Province, South Africa. *Radiography*, 27(1), 120-126.
- Khoza, T. E. (2017). *Factors Contributing to Diagnostic Radiographers Leaving the Public Sector for the Private Sector in Gauteng: South Africa*. University of Johannesburg (South Africa).
- Lehmann, P., Meystre, N. R., & Mamboury, N. (2015). Factors for Lifelong Job Retention among Swiss Radiographers. *Radiography*, 21(2), 181-187.
- Lohikoski, K., Roos, M., & Suominen, T. (2019). Workplace Culture Assessed by Radiographers in Finland. *Radiography*, 25(4), e113-e118.
- Mohammed, E., Daybaso, H. A., & Habtewold, E. M. (2020). Job Satisfaction, Engagement and Associated Factors among Employees Working at Adama Hospital Medical College, Adama, Oromia Regional State, Ethiopia: Institution Based Cross Sectional Study.
- Naburi, H., *et al.* (2017). Job Satisfaction and Turnover Intentions among Health Care Staff Providing Services for Prevention of Mother-to-Child Transmission of Hiv in Dar Es Salaam, Tanzania. *Human resources for health*, 15(1), 1-12.

- Nightingale, J., Burton, M., Appleyard, R., Sevens, T., & Campbell, S. (2021). Retention of Radiographers: A Qualitative Exploration of Factors Influencing Decisions to Leave or Remain within the Nhs. *Radiography*.
- Probst, H., & Griffiths, S. (2007). Retaining Therapy Radiographers: What's So Special About Us? *Journal of Radiotherapy in Practice*, 6(1), 21-32.
- Singh, T., Kaur, M., Verma, M., & Kumar, R. (2019). Job Satisfaction among Health Care Providers: A Cross-Sectional Study in Public Health Facilities of Punjab, India. *Journal of family medicine and primary care*, 8(10), 3268.
- Syptak, J. M., Marsland, D. W., & Ulmer, D. (1999). Job Satisfaction: Putting Theory into Practice. *Family practice management*, 6(9), 26.

Appendices

Appendix 1: Consent form and questionnaire



Questionnaire of job satisfaction for radiographers in Palestine

Participation Consent

You have been randomly selected to participate in this research study as a part of the requirements for the Master Degree in Medical Imaging at Al-Quds University. The study title is "Job Satisfaction of Palestinian Radiographers".

The overall aim of this study is to evaluate the job satisfaction level of Palestinian radiographers working in Palestine.

Your participation is completely voluntary and you can withdraw at any time without any reason. Your participation is highly appreciated and in responding to the questionnaire you contribute to the development of the scientific research, information will be confidential used for scientific research purposes only, no need to write any personal data like name, email... etc.

The questionnaire composed of two parts, Part 1 demographic data, and part 2 job satisfaction questions.

Thank you for your patience and cooperation

Part one:

Personal Data

Age Years

Gender: () Male () Female

Social Status: () Married () Single () Widow () Divorced

Level of education: () Diploma () Bachelor () Postgraduate

Average monthly income: shekels

Sector: () Private () Public

Are you generally satisfied with your job? () yes () no

Does level of job satisfaction affect your daily performance and attendance to work? () yes () no

Part two:

Factors of job Satisfaction	Very Dissatisfied	Dissatisfied	Slightly Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied
Physical working place conditions						
Salary						
Opportunity to use abilities						
Opportunities for advancement						
Opportunity for training or education						
Additional remuneration for work						
Conflict resolution at work						
Support from supervisors						
Participation in decision making						
Utilization of skills						
Amount of variety on job						

Organizational structure						
Job security						
Freedom of working method						
Relationship with co-workers						
Amount of responsibility						
Total working hours						
General feeling about job itself						

Appendix 2: Consent form and questionnaire in Arabic



استبيان عن الرضا الوظيفي لمصوري الاشعه في فلسطين

الموافقة على المشاركة

لقد تم اختيارك عشوائياً للمشاركة في هذه الدراسة البحثية لمتطلبات درجة الماجستير في التصوير الطبي في جامعة القدس. عنوان الدراسة "الرضا الوظيفي لمصوري الاشعه في فلسطين". الهدف العام من هذه الدراسة هو تقييم مستوى الرضا الوظيفي للمصورين الفلسطينيين العاملين في فلسطين.

مشاركتك اختيارية تماماً ويمكنك الانسحاب في أي وقت دون أي سبب.

تحظى مشاركتك بتقدير كبير وفي الرد على الاستبيان ، فإنك تساهم في تطوير المراجعة العلمية ، وستكون المعلومات سرية تستخدم لأغراض البحث العلمي فقط ، ولا حاجة لكتابة أي بيانات شخصية مثل الاسم والبريد الإلكتروني وما إلى ذلك. يتكون الاستبيان من جزئين، الجزء الأول عن البيانات الديموغرافية وأسئلة الجزء الثاني عن الرضا الوظيفي.

شكرا لكم على صبركم وتعاونكم

الجزء الاول:

البيانات الشخصية

العمر:..... سنوات

الجنس: () ذكر () أنثى

الحالة الاجتماعية: () متزوج () أعزب () أرمل () مطلق

المستوى التعليمي: () دبلوم () بكالوريوس () دراسات عليا

متوسط الدخل الشهري:.....شيكل

القطاع: () خاص () عام

هل أنت راضٍ بشكل عام عن وظيفتك؟ () نعم () لا

هل يؤثر مستوى الرضا الوظيفي على أدائك اليومي وحضورك إلى العمل؟ () نعم () لا

الجزء الثاني:

عوامل الرضا الوظيفي	غير راضٍ جداً	غير راضٍ	نوعاً ما غير راضٍ	راضٍ نوعاً ما	راضٍ	راضٍ جداً
ظروف مكان العمل						
الراتب						
الفرصة لاستخدام القدرات						
فرص التطوير						
فرص التدريب أو التعليم						
مكافأة إضافية في العمل						
حل النزاعات في العمل						
الدعم من المشرفين						
المشاركة في صنع القرار						
استخدام المهارات						
مقدار التنوع في الوظيفة						
الهيكل التنظيمي						
الأمن الوظيفي						
حرية طريقة العمل						
العلاقة مع زملاء العمل						
كمية المسؤولية في العمل						
مجموع ساعات العمل						
الشعور العام تجاه الوظيفة نفسها						

Appendix3: IRB approval

Al-Quds University
Jerusalem
Deanship of Scientific Research



جامعة القدس
القدس
عمادة البحث العلمي

Research Ethics Committee
Committee's Decision Letter

Date: June 07, 2021
Ref No: 192/REC/2021

Dears Dr. Hussein ALMasri, Mr. Ihab salameh,

Thank you for submitting your application for research ethics approval. After reviewing your application entitled "Job Satisfaction among Palestinian Radiographers", the Research Ethics Committee confirms that your application is in accordance with the research ethics guidelines at Al-Quds University.

We would appreciate receiving a copy of your final research report/ publication.

Thank you again and wish you a productive research that serves the best interests of your subjects.

PS: This letter will be valid for two years.

Sincerely,

Suheir Ereqat, PhD
Associate Professor of Molecular Biology



Research Ethics Committee Chair

Cc. Prof. Imad Abu Kishek - President
Cc. Members of the committee
Cc. file

الرضا الوظيفي للمصورين الشعاعيين الفلسطينيين

اعداد: ايهاب رائد سلامة

اشراف: د. حسين المصري

ملخص:

تعتبر الحالة العامة لفني الأشعة أمرًا بالغ الأهمية لتعزيز الرفاهية الممتازة للمرضى في كل بلد. وبالتالي ، فإن الصور الشعاعية هي جزء لا يتجزأ ولا غنى عنه في مؤسسات الرعاية الصحية ورعاية المرضى في جميع أنحاء العالم. تهدف هذه الدراسة إلى تقييم الرضا الوظيفي لفنيي الأشعة في فلسطين. دراسة مقطعية أجريت باستخدام الاستبيان الإلكتروني ووزع على فنيي الأشعة في فلسطين.

كان هناك 173 مستجيبًا. كان معظم المشاركين من الذكور (70.5%) ، متزوجين (61.3%) في الفئة العمرية 30 سنة فأقل (60.1%) ، حاصلون على بكالوريوس (81.5%) ، يعملون في القطاع الخاص (63.6%) ، بمتوسط شهري. الدخل فوق 3500 شيقل (50.3%). وافق معظم المشاركين (78.0%) على أن مستوى الرضا الوظيفي يؤثر على أدائهم اليومي وحضورهم إلى العمل.

من بين فنيي الأشعة ، (27.2%) كانوا راضين عن عملهم. تم الإبلاغ عن أعلى مستوى من الرضا عن علاقتهم بزملاء العمل متبوعًا بمقدار المسؤولية ، مع إعطاء متوسط درجات 1.445 ± 4.53 ، 1.384 ± 4.1 ، على التوالي ، وكانوا أقل رضا عن الأجر الإضافي للعمل الذي أعطى متوسط درجة 1.465 ± 2.24 . أظهرت نسبة سبيرمان أن أقوى عوامل الارتباط كانت الدعم من المشرفين (0.820) ، والعوامل الأخرى كانت المشاركة في صنع القرار (0.805) واستخدام المهارات (0.790) ، على التوالي. تم العثور على فروق ذات دلالة إحصائية ($p: 0.002$) في الرضا الوظيفي بين فنيي الأشعة العاملين في القطاع العام والقطاع الخاص (مستشفيات و مراكز خاصة و مؤسسات اهلية) ، مما أظهر أن فنيي الأشعة كانوا أكثر رضا في القطاع الخاص عن القطاع العام.

كان الرضا الوظيفي العام لفنيي الأشعة منخفضًا ، باستثناء علاقتهم بزملاء العمل متبوعًا بحجم المسؤولية ، كان المشاركون غير راضين عمومًا عن عوامل الوظيفة الأخرى. من النتائج ، كانت العوامل الرئيسية المرتبطة بالرضا الوظيفي العام لفنيي الأشعة هي الدعم من المشرفين ، والعوامل الأخرى التي أثرت على رضاهم كانت المشاركة في صنع القرار ، والاستفادة من المهارات. تم العثور على فروق ذات دلالة إحصائية في الرضا الوظيفي بين العاملين في القطاع العام والقطاع الخاص ، حيث أظهر أن فنيي الأشعة كانوا أكثر رضا في القطاع الخاص عن القطاع العام. يحتاج صانعو سياسات الرعاية الصحية ومدبرو المستشفيات إلى تطوير وإضفاء الطابع المؤسسي على استراتيجيات الرضا القائمة على الأدلة مع مراعاة العوامل التي تؤثر على الرضا الوظيفي لفنيي الأشعة.