



Thesis Approval




Retention of the Radiographers in the Palestinian Health Care System

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Abstract

Health workforce's literature is increasingly emphasizing the need for paying more attention to employee's retention and its relation with the operation outcomes and performance of individuals and groups within the organizations. In the Palestinian Health Care system, there is a high demand in all sectors for workers in critical areas such as Radiology technology. The supply of qualified radiographers is limited and good workforce planning requires a twofold approach of aggressive recruitment and innovative retention strategies. Retention policies need to focus on elimination of unwanted turnover.

This study aimed to determine the factors that affect retention of the radiographers in the Palestinian health care system and to compare the different sectors of the Palestinian Health Care System according to the level of retention in each sector and the different motivational factors provided by each sector.

The population of the study consisted of all employed radiographers of the Palestinian health Care system, who have graduated before the year (2007) regardless the sector in which the radiographer is currently employed. A total of 183 radiographers were targeted for the study, 18 of them were piloted and excluded from the study. A total of 151 from the rest 165 responded, representing 92% of the study sample.

After data collection and analysis, the results revealed a high turnover frequency among the Palestinian radiographers with a frequency rate of around 70% and there is an evidence to suggest that this can be attributed to range of factors, some of them is harder to be controlled than others.

It was found that the public sector has the highest retention frequency, while the private has the least. Retirement, Job Security and Health Insurance were the most important factors for the radiographers to be employed in the Public sector, while monthly salary was the most recruiting factors for them to be employed in Private, UNRWA and NGOs. It was also found that Radiation protection plays an important role in retention of the radiographers, the study results showed that the radiographer prefer to work in a heavy loaded, well protected departments than working in a less protected one. It was also found that friendly relationships with colleagues can affect retention of the radiographers and the supervisor plays an important role in keeping good relationships among the staff. The study results showed the importance of administration efficiency on the retention of the staff, and this efficiency may differ according to the different sectors of the Health System. Despite the known shortage of the number of the radiographers in the Palestinian Health Care System, the study results showed that the rapid increase in the radiographers may create a surplus in the coming years due to the nature of the radiographer's population that tend to be young. Additionally the study showed that there is a misdistribution of the radiographers according to gender, and there is a need to increase female radiographers.

In the light of these findings, the researcher suggest that decision makers in the Palestinian Health system to improve the retention of the radiographers by addressing the problems related to payment, working conditions, Supervision quality, Administration efficiency and job security in each sector.

The researcher recommends that health workforces retention surveys need to be conducted at different times in the different sectors of the Health System.

الملخص

هدفت هذه الدراسة إلى تحديد العوامل التي تؤثر على تمسك فنيو الأشعة بأماكن عملهم في مختلف قطاعات النظام الصحي الفلسطيني، و مقارنة قطاعات النظام الصحي من جوانب مستوى تمسك فنيو الأشعة بالعمل فيها و الحوافز المقدمة من مختلف القطاعات لاستقطاب العاملين و استمرارهم بالعمل فيها. لتحقيق ذلك، طبق الباحث مسحا شاملا على جميع فنيي الأشعة العاملين الذين تخرجوا قبل عام 2007 بغض النظر عن الدرجة العلمية و طبيعة المؤسسة التي يعمل فيها الفني، حيث تكون مجتمع الدراسة من 165 فني من مختلف القطاعات، استجاب منهم 151 فني ما يمثل نسبة استجابة بقيمة 92%.

بعد جمع البيانات و تحليلها، تبين أن 70% من الفنيين تقريبا قد غيروا أماكن عملهم لمرة واحدة على الأقل خلال حياتهم المهنية، وقد أظهرت النتائج أن هذه النسبة العالية في تغيير مكان العمل تعزى لعدة عوامل تتدرج من حيث الصعوبة في إمكانية حصرها.

لقد أظهرت النتائج أن القطاع الحكومي يتميز بتمسك الفنيين بالعمل فيه وبقائهم لفترات أطول من باقي القطاعات، بينما يفتقر القطاع الخاص لهذه الميزة وقد أظهرت النتائج أهمية نظام التقاعد و التامين الصحي و الأمان الوظيفي في اختيار الفنيين للعمل بالقطاع الحكومي و أهمية الراتب الشهري العالي نسبيا في اختيارهم العمل في القطاع الخاص و الجمعيات الخيرية غير الحكومية و وكالة غوث و تشغيل اللاجئين.

هذه الدراسة أظهرت أهمية الحماية من الإشعاع و العلاقات مع الزملاء بالعمل و فاعلية الإدارة بالمؤسسة على بقاء الفنيين بالمؤسسة و تمسكهم بالعمل فيها وقد أظهرت أيضا اختلاف فاعلية الإدارة بين المؤسسات.

بالرغم من النقص الحالي في العدد اللازم من فنيي الأشعة لتطبيق الخطة الإستراتيجية الوطنية لوزارة الصحة الفلسطينية، إلا أن النتائج أظهرت أن الازدياد السريع في عدد خريجي التصوير الطبي قد يخلق فائضا في السنوات القادمة، نظرا لكون مجتمع فنيو الأشعة مجتمعا شابا، و قد أظهرت الدراسة أيضا أن هناك خلافا في توزيع فنيي الأشعة حسب الجنس، ما يستدعي زيادة الإناث بنسبة أكثر من الذكور.

في ضوء هذه النتائج، يوصي الباحث أن يقوم صانعو القرار في النظام الصحي الفلسطيني بتحسين مستوى تمسك الموظفين بأماكن عملهم بتحديد و حصر المشاكل التي يواجهها الموظفون و المتعلقة بالمستحقات المالية و ظروف العمل و الإشراف و فاعلية الإدارة و الأمان الوظيفي، كما أوصى

بإجراء مسوحا أخرى على العاملين بالنظام الصحي , بأوقات مختلفة لقياس درجة تمسك العاملين بالعمل بمختلف المؤسسات وإعطائهم الحوافز المشجعة لهم للاستمرار بوظائفهم بالمؤسسة.

Table of contents:

Declaration	i
Abstract	iii
المخلص	iv
List of Figures	xi
List of Appendices	xii
List of Abbreviations.....	xiii
Chapter One.....	1
Introduction	1
1.1 Background	1
1.2 Problem Statement	2
1.3 Justification of the study	2
1.4 Overall aim of the study.....	3
1.5 Specific objectives of the study.....	3
1.6 Study questions	4
1.7 Study Hypotheses.....	5
Chapter Two.....	7
Literature Review.....	7
2.1 Introduction	7
2.2 Satisfaction theories	7
2.2.1 Maslow's hierarchy of needs:	7
2.2.2 Herzberg's Hygiene factors and Motivators:.....	8
2.2.3 Mayo's Hawthorne experiments:.....	9
2.2.4 McClelland's Theory of Needs:	10
2.2.5 Equity theory:.....	10
2.3 Previous studies.....	11
2.3.1: Systematic review of Bub Med Center:	11
2.3.2: Continuing Education and salary Improvement:	11
2.3.3: Supervision, career advancement and sense of justice:	12
2.3.4: Working conditions, Leadership quality and personal relations:.....	13
2.4 Feedback of the previous studies	15
2.5 Summary	15
Chapter Three.....	16
Conceptual Framework	16
3.1 Introduction	16
3.2 Definition of employee retention	16
3.3 Logical Framework	17
3.3.1 Working conditions:.....	18
3.3.2 Supervision quality:	18
3.3.3 Personal relations:	19
3.3.4 Leadership quality:.....	19
3.3.5 Payment:.....	20
3.3.6 Administrative efficiency:.....	20
3.3.7 Job Security:.....	20
3.4 Conceptual framework	21
3.4.1 Payment:.....	22
3.4.2 Working conditions:.....	22
3.4.3 Supervision quality:	22
3.4.4 Administrative efficiency:.....	23
3.4.5 Job Security:.....	23

3.5 Summary	23
Chapter Four.....	24
Methodology	24
4.1 Introduction	24
4.2 Methods and design.....	24
4.3 Study population and sample size	24
4.4 Data collection method and instrument.....	25
4.5 Validity of the instrument	25
4.6 Reliability of the instrument.....	26
4.7 Data analysis	26
4.8 Ethical Considerations.....	27
4.9 Period of the study.....	27
4.10 Limitations of the study:	27
4.11 Summary	28
Chapter Five	29
Results and major findings.....	29
5.1 Introduction	29
5.2 Demographic Characteristics of the study population	29
5.3 Answers of the research questions	32
5.3.1 What is the effect of relative payment on the recruitment of the Radiographers in the Palestinian Health Care System?.....	32
5.3.2 What are the different motivations provided to the radiographers by different health care sectors?	33
5.3.3 What is the effect of job security on the retention of Radiographers in the Palestinian health care system?.....	34
5.3.4 How does supervision quality affect retention of Radiographers?	35
5.3.5 What effects have working conditions on the retention of Radiographers in the Palestinian Health care system?	37
5.3.6 What are the percentages of those changed their workplaces to each sector in the Palestinian Health Care System?.....	37
5.3.7 What factors can affect the radiographer to choose the workplace?.....	38
5.3.8 What are the most important factors that enhance the radiographer to resign his/her job?.....	39
5.3.9 What effects has administration efficiency on the retention of the radiographers in the Palestinian Health Care System?.....	40
5.3.10 What is the total effect have (Payment, Working condition, Supervision quality, administration efficiency and Job Security on the retention of the radiographer in the Palestinian Health Care System?.....	41
5.4 Results related to the study hypothesis	42
5.4.1 There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to district variable:.....	42
5.4.2 There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to nature of employer institution:	44
5.4.3 There are no significant differences at ($\alpha \leq 0.05$) among the Palestinian radiographers related to age group:	46
5.4.4 There are no significant differences at ($\alpha \leq 0.05$) among the Palestinian radiographers related to gender variable:	47
5.4.5 There are no significant differences at ($\alpha \leq 0.05$) among the Palestinian radiographers related to marital status:	48

5.4.6 There are no significant differences at ($\alpha \leq 0.05$) among the Palestinian radiographers related to academic level:.....	49
5.4.7 There are no significant differences at ($\alpha \leq 0.05$) among the Palestinian radiographers related to years of experience.	50
5.4.8 There are no significant differences at ($\alpha \leq 0.05$) among the Palestinian radiographers related to experience in current job:.....	51
5.4.9 There are no significant differences at ($\alpha \leq 0.05$) among the Palestinian radiographers related to nature of institution of the past job:	52
5.4.10 There are no significant differences at ($\alpha \leq 0.05$) among the Palestinian radiographers related to average monthly salary:	53
Table (5.24): LSD post-hoc test for the differences of working conditions domain according average monthly salary variable.....	55
* Significant at ($\alpha < 0.05$).....	55
5.6 Summary	56
Chapter Six.....	57
Discussion of the findings.....	57
6.1 Introduction	57
6.2 The study results according to the demographic factors	57
6.3 Job retention affecting factors.....	61
6.3.1 Payment:.....	61
6.3.2 Working conditions:.....	62
6.3.3 Supervision quality:	63
6.3.4 Administration efficiency:.....	63
6.3.5 Job Security:.....	64
6.4 Summary	65
Chapter Seven	66
Conclusions and Recommendations.....	66
7.2 Conclusions	66
7.3 Overall Conclusions	68
7.4 Recommendations	68
7.5 Future Research Recommendations	70
7.6 Summary	70
References	71
Appendices.....	76

Chapter One

Introduction

1.1 Background

Health workforce's literature is increasingly emphasizing the need for paying more attention to employee's retention and its relation with the operation outcomes and performance of individuals and groups within the organization regardless of the sector in which they are employed.

According to Mahler in WHO, (2006). "Work force is the corner stone of any health system and unless manpower development patterns are appropriate to people's health needs and social circumstances, countries will never be able to achieve a level of health that will enable their people to lead socially and economically productive lives".

Delman and Harnmeijer, (2006) argued that much of the of the global debate about the human resources for health is focused on macro issues such as existing or needed absolute numbers of workers with different skills, world wide salary differentials and international migration . Insufficient attention is paid to retaining and managing the health workers available within any health system

One of the key elements to success in staff retention and improvement in performance is to develop approaches that are evidence-based, to inform policy-makers as to which interventions are successful under which circumstances and for which groups of staff (Buchan, 2002)

Radiographers are an important team of the delivery of health care; they work directly with the patients and physicians, performing a wide variety of diagnostic and therapeutic procedures that contribute to early diagnosis and treatment of diseases, which contribute to improvement in health and health indicators.

According to NSHP, (2008). In the Palestinian health care system, there are 438 radiographers (221 in WB and 217 in GS) in addition to 40 new graduates each year.

Depending on the information obtained from NSHP, (2008). In the Palestinian Health Care system, there is a need for over 600 radiographers, and the expected graduates in the coming five years are not sufficient to cover the future need.

Nationally, there are three education programs (two in WB and one in GS) that graduate Radiology technologists with bachelor degree in medical imaging, with a capacity to graduate 40 students each year. These graduate programs lack of specialty in radiological sciences; ((Appendix [4]).

Health workers' number, quality and type of professionalism determine output and productivity, that they manage other resources that a large part of the health budget is spent on health workers and they greatly influence progress. (Delman and Hammeijer, 2006).

Hugges et al, (2002) found that most performance problems could be attributed to unclear expectations, skill deficit, resource or equipment shortages or lack of motivation. These causes are rooted in a failing health system, low salaries, difficult working and living conditions and inappropriate training.

1.2 Problem Statement

In the Palestinian Health Care system, there is a high demand in all sectors (public, NGOs UNRWA and private sectors) for workers in critical areas such as Radiology technology. The supply of qualified radiographers is limited and good workforce planning requires a twofold approach of aggressive recruitment and innovative retention strategies. Retention policies need to focus on elimination of unwanted turnover.

1.3 Justification of the study

Despite the evidence that Palestinian Health Care System suffers a shortage in radiographers needed for application of the (NSHP, 2008-2010) of about 600 radiographers " which is more than the available number in Palestine" .Very little information discusses the radiographer's retention in the sectors they employed in , and the factors that may

predict or limit their retention , providing such data could offer health managers insight to better direct strategies for improving retention and possibly job performance.

1.4 Overall aim of the study

The purpose of this study is to address the factors that affect retention of the radiographers in the different sectors of the Palestinian health system using the (WHO) approach of demotivation factors affecting health team.

1.5 Specific objectives of the study

1. To asses the effect of relative payment on the retention of the radiographers in the Palestinian Health Care System.
2. To determine the effect of job security on the retention of Radiographers in the Palestinian health care system.
3. To assess the effect of supervision quality on retention of radiographers in the Palestinian health care system.
4. To determine the effect of working conditions on the retention of radiographers in the Palestinian healthcare system.
5. To determine the effect of administration efficiency on the retention of the radiographers in the Palestinian Health care System.
6. To determine the relationship between socio-demographic variables and retention of the radiographers in the Palestinian Healthcare System.

1.6 Study questions

1. What is the effect of relative payment on the recruitment of the Radiographers in the different sectors of the Palestinian Health Care System?
2. What are the different motivations provided to the radiographers by different health care sectors?
3. What is the effect of job security on the retention of Radiographers in the Palestinian health care system?
4. How supervision quality does affect retention of Radiographers in the different sectors of the Palestinian Health Care System?
5. What effects have working conditions on the retention of Radiographers in the Palestinian Health care system?
6. What are the percentages from those changed their workplace to each sector of the Palestinian Health Care System?
7. What factors can affect the radiographer's in choicing the workplace.
8. What are the most important factors that enhance the radiographer to resign from his/her job?
9. What effects has administration efficiency on the retention of the radiographers in the Palestinian Health Care System?
10. What is the total effect have (Payment, Working condition, Supervision quality, administration efficiency and Job Security) on the retention of the radiographer in the Palestinian Health Care System?

1.7 Study Hypotheses

1. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to district variable.
2. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to nature employer institution variable.
3. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to age group variable.
4. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to gender variable.
5. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to marital status variable.
6. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to academic level variable.
7. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to years of experience variable.
8. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to experience in current job.
9. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to nature of institution of the past job.
10. There are no significant differences in retention at ($\alpha \leq 0.05$) among the Palestinian radiographers related to average monthly salary.

Chapter Seven

Conclusions and Recommendations

7.1 Introduction

The purpose of this study was to determine the relationship between the de-motivation factors determined by the World Health Organization (W.H.O) for the health workforce and retention of the radiographers in the different sectors of the Palestinian Health Care System (Public, NGOs, Private, and UNRWA), taking into consideration the effect of the socio demographic variables and the personal characteristics on the retention of the radiographers, and more importantly to implement the recommendations that are based on the yielded findings . This in turn will hopefully guide the path for the decision makers to use the recommendations particularly for the radiographers and probably for all health workforce of the Palestinian Health Care System, thus allowing the employees to become more retained in their jobs which in turn will yield better health results for the Palestinian society and to be more effective and efficient to their employer institutions.

7.2 Conclusions

The turnover frequency among the radiographers was high, (69.54%) of the Palestinian radiographers have changed their workplaces at least once during their professional life , they changed their workplaces seeking for better (payment, working conditions supervision quality , administration efficiency , job security) and may be for other reasons not included in this study.

Monthly salary was the most important factor for the Palestinian radiographers working in UNRWA, NGOs, and private sectors, while retirement, job security and health insurance were the most important factors in the selection of a job in the public sector.

The most important factor regarding the working conditions related to the radiographers is the radiation protection, while the least important factor is the workload, which means that the radiographers may prefer to work in heavy loaded radiology departments than working in less protected ones.

Friendly relationships with colleagues was an important factor that affect the retention of the radiographers, supervisors have an important role in keeping a friendly working environment.

The results of the study indicate that there is a significant difference on administrative efficiency domain related to the nature of employer institution that may indicate a difference in administration efficiency by different sectors of the Palestinian Health Care system.

Singles radiographers could be more affected by administration efficiency to be retained more than married radiographers.

The distribution of the radiographers according to gender does not correspond to the distribution of men and women in the overall Palestinian labor force and formal economy and there is a need to increase female radiographers more than male.

The highest frequency of turnover was in the private sector while the lowest turnover frequency was in the public sector; the radiographers employed in the public sector tend to be retained more than those employed in the other sectors of the Palestinian health care system.

Monthly salary was identified as the most important payment factor for the radiographers to stay in their current jobs.

Lower salaries and unfair salary package have an important effect on the radiographer's decision to resign a job and to seek an other workplace especially for those employed in other sectors than the public.

Working conditions may differ according to districts, which may affect retention of the radiographers, by enhancing them to seek jobs in districts of better working conditions, which may create an imbalance of the radiographers between the different Palestinian districts.

NGOs offer better (payment, working conditions, administration efficiency and job security) than the other sectors of the Palestinian Healthcare System.

The radiographers employed in the (NGOs) are more satisfied about: payment, working conditions, administration efficiency and job security than those employed in the Public sector .

7.3 Overall Conclusions

In this study, the results showed that fair relative monthly salary, retirement, health insurance, job security, good relationships with colleagues, radiation protection and efficient management policies are important factors for retention of radiographers.

Retention of the radiographers may be affected by their personal characteristics.

The current shortage of the Palestinian radiographers tends to be surplus in the few coming years.

The public sector's radiographers tend to be retained in their jobs rather than other sectors. Payment, working conditions, administration efficiency and job security tend to be better in the NGOs than other sectors of the Palestinian Healthcare System.

The radiographers employed in (UNRWA) were more satisfied about (payment, working conditions, Administration efficiency and Job security) than the radiographers employed in the Private sector.

7.4 Recommendations

- As shown in this study, the turnover rate among the Palestinian radiographers is relatively high compared to other health professions, unfair payment packages, bad working conditions, poor supervision quality, inefficient administrations and low levels of job security are important leading factors for turnover of the radiographers.
- Monthly salary is an important factor for the retention of employees. So it is recommended to improve the salaries relative to other health professions, taking into consideration the radiation danger allowance.
- Lack of retirement, health insurance and job security are important leading factors for resignation from the private and NGOs sectors. Therefore, it is recommended that Palestinian Medical Imaging Association take its role to ensure these rights for those radiographers employed in these sectors.
- Radiation protection is very important for the health of the patients and the radiographers, the radiographers should give it a high importance. Therefore, it is

recommended that Ministry of Health implement policies that ensure the availability of radiation protection instruments in every radiology department and to force a regular radiation measurement for every radiology department's employee.

- A good relationship with colleagues is an important supervision responsibility. It is recommended that supervisors implement Periodic counseling and group meetings between the radiographers of each radiology department to discuss their needs, problems, interests in relation to their jobs, to improve attitude to team work.
- The increase in the medical imaging education will create a surplus in the coming years. Therefore, it is important to control the education programs according to the need of the health system.
- The radiographer's population tends to be male rather than female. Therefore, it is important to increase female radiographers in the coming years and to lead them to female related radiology specialties.
- Specialty is important to improve the diagnostic results, the Palestinian radiographers lack of specialty. It is recommended that education programs to concentrate on different radiology specialties rather than graduation of medical imaging technologists.
- Working conditions differs from district to district in Palestine, which may create an imbalance in radiographers between the districts. It is important to implement unified licensing policies throughout the different districts, taking into consideration the working conditions under which the radiographers work.
- Continuity and quality of health services are highly dependent on the retention of the experienced and knowledgeable health workforce and require not only sufficient numbers but also working environment that offers flexibility and professional satisfaction. It is therefore important to improve working conditions such as physical environment and supplies.
- Administration efficiency is important for retention of health workforces. So it is recommended that decision maker of the health sectors work with educational institutions, to insure that managers are well-prepared for their ongoing leadership roles.

- To insure that these recommendations are continuously reviewed, evaluated and adjusted as required, to meet the changing needs. It is important to monitor the implementation, effectiveness and outcomes.

7.5 Future Research Recommendations

- Further studies are needed to involve other Palestinian Health workforce in the retention assessment studies.
- Studies are needed to assess the need of the Palestinian Health Care system for different radiology specialties.
- Studies are needed to examine the effects of other de-motivation and motivation factors on the retention of the health workforce.
- Studies are needed to assess the effect of retention on performance.
- Studies are needed to determine the need of the Palestinian Health Care system for the different health cadres in the short and the long run.

7.6 Summary

Building on the findings obtained from the study results, and after their discussion and comparison with other studies done in the field and the theoretical models, this chapter presented the conclusions, recommendations and future research recommendations.

Abstract

Health workforce's literature is increasingly emphasizing the need for paying more attention to employee's retention and its relation with the operation outcomes and performance of individuals and groups within the organizations. In the Palestinian Health Care system, there is a high demand in all sectors for workers in critical areas such as Radiology technology. The supply of qualified radiographers is limited and good workforce planning requires a twofold approach of aggressive recruitment and innovative retention strategies. Retention policies need to focus on elimination of unwanted turnover. This study aimed to determine the factors that affect retention of the radiographers in the Palestinian health care system and to compare the different sectors of the Palestinian Health Care System according to the level of retention in each sector and the different motivational factors provided by each sector.

The population of the study consisted of all employed radiographers of the Palestinian health Care system, who have graduated before the year (2007) regardless the sector in which the radiographer is currently employed. A total of 183 radiographers were targeted for the study, 18 of them were piloted and excluded from the study. A total of 151 from the rest 165 responded, representing 92% of the study sample.

After data collection and analysis, the results revealed a high turnover frequency among the Palestinian radiographers with a frequency rate of around 70% and there is an evidence to suggest that this can be attributed to range of factors, some of them is harder to be controlled than others.

It was found that the public sector has the highest retention frequency, while the private has the least. Retirement, Job Security and Health Insurance were the most important factors for the radiographers to be employed in the Public sector, while monthly salary was the most recruiting factors for them to be employed in Private, UNRWA and NGOs. It was also found that Radiation protection plays an important role in retention of the radiographers, the study results showed that the radiographer prefer to work in a heavy loaded, well protected departments than working in a less protected one. It was also found that friendly relationships with colleagues can affect retention of the radiographers and the supervisor plays an important role in keeping good relationships among the staff. The study results showed the importance of administration efficiency on the retention of the staff, and this efficiency may differ according to the different sectors of the Health System. Despite the known shortage of the number of the radiographers in the Palestinian Health Care System, the study results showed that the rapid increase in the radiographers may create a surplus in the coming years due to the nature of the radiographer's population that tend to be young. Additionally the study showed that there is a misdistribution of the radiographers according to gender, and there is a need to increase female radiographers.

In the light of these findings, the researcher suggest that decision makers in the Palestinian Health system to improve the retention of the radiographers by addressing the problems related to payment, working conditions, Supervision quality, Administration efficiency and job security in each sector.

The researcher recommends that health workforces retention surveys need to be conducted at different times in the different sectors of the Health System.