The impact of living conditions and organizational practices as brain drain cause factors on the human resource assets of the health sector in the Gaza strip - Palestine

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Abstract: This study aims at identifying the impact of some of the cause factors of brain drain, particularly, living conditions and organizational practices, on the human resource assets of the health sector in the Gaza Strip, clarifying the role of those factors in increasing the brain drain phenomenon and what influence it has over the human resource assets. The descriptive analytical approach was adopted. In addition, a questionnaire was designed to collect data from physicians from the health sector using random sample. The conclusions indicated that both living conditions and organizational practices were rated by the respondents as having negative influence as brain drain cause factors. In addition, it negatively influenced the human resource assets. Moreover, there is a significant positive relationship between brain drain cause factors (living conditions and organizational practices) and human resource assets. This means improvements in the factors causing brain drain will lead to the same in the status of human resource assets. Accordingly, it is recommended to emphasize fairness, equity, equality, and anti-discrimination policies. Furthermore, continuously review and develop advanced organizational systems, such as career advancement, promotions, salary scales, incentives and rewards, in addition to appreciation and acknowledgment of competent employees. Moreover, there is a focus on investing in human resource assets through applying professional human resource practices related to human resource planning and training and development.

Keywords: Brain drain; Human resource assets; Organizational practices; Human capital flight; Human resource planning.

1. Introduction

Several studies carried out by the League of Arab States, UNESCO and the World Bank have shown that the Arab world contributes to one third of the brain drain from developing countries, which constitute 50% of doctors, 23% of engineers, and 15% of Arab graduated competencies, who migrate to Europe, the United States, and Canada. As well reports stated that 54% of Arab students who study abroad do not return to their countries, and Arab doctors in Britain alone constitute 34% of all doctors there (Alarab Newspaper, 2018). Moreover, developed countries are competing today to offer temptations for highly qualified manpower to attract them. Recently, attention to the effects of migration on labor-exporting countries has started from the perspective of human development and not from the perspective of transfers and their developmental role. The World Health Organization has raised the risks arising from the migration of medical competencies from developing countries to developed industrial countries (Marzouk, 2010).

Brain drain which is defined as the migration of persons with skills that a country is short of (Fadayomi, 1994); is usually seen as a drag on economic development because it deprives developing countries of human
capital, one of their scarcest resources, and its negative effects coming from the fact that human resource is one of the most important pillars of society’s development; especially when these competencies of high educational levels contribute essentially to the development and sustainability of a community. Therefore, the loss of human resources in the health sector may mean that the capacity of the health system to deliver health care equitably is significantly compromised (Stilwell, et al., 2004). According to Abdullah & Ahandu (2017) study titled “African Brain Drain and its Impact on African Countries” the negative impact of the BD was affecting the development of the African countries economically and socially as well as human development in the African continent.

A local study was conducted by The Center for Studies and Measurement of Public Opinion (2018) titled “The causes of youth migration and its repercussions on Palestinian society”. Which is an exploratory study aimed at knowing the reasons behind the widespread migration phenomenon of Palestinian youth from the Gaza Strip abroad. It highlighted that half of the respondents will leave the country if they were offered immigration. Also it has been found that the main factors that lead to migration are (economic, political, social, and cultural factors) respectively. It also tested the relation between brain drain and its effect on society in general as the majority declared that it negatively affected the Palestinian society.

This research focuses on identifying the causes of migration and spot the light on the professional quality of those who leave rather than the number of migrants and assessing the impact of them on the performance of health sector in the Gaza Strip.

1.1. Study Problem Statement

Elasrag (2016) study titled “Migration of Arab Talent” revealed that the brain drain weakened Arab economies owing that it deprived them of the chance of future development, and drained strategic reserves in terms of human resources, which led to decrease productivity, a deterioration of the skill set, and put more pressure on the stability and cohesion of the country. As the results of the latest survey indicate, the proportion of those who want to migrate is relatively high, in addition of the many indicators of the weakness of different Palestinian sectors, including weak performance in the delivery of service through qualified staff.

The issue of migration began to increase in 2017 after the Egyptian authorities temporarily opened the Rafah crossing after the movement was narrowed over the past decade. Throughout this period, the crossing has been the gateway to the rest of the world under the tightening of the Israeli blockade and preventing the movement of citizens through the crossings controlled by Israel. Data released by The United Nations Office for the Coordination of Humanitarian Affairs (2021) show that 36,214 citizens have left since 2017. Official data are absent about demographic characteristics or the nature of occupations of those who left. However, local and press reports indicate that several qualified people have emigrated, especially from the health sector including various specialties.

On the other hand, the results of the survey conducted by the Center for Studies and Opinion Measurement at Al-Aqsa University in Gaza (2018) showed that 92.2% of respondents believe that youth migration has become a phenomenon in Gaza Strip. Also, 51.8% of respondents said that they have the intention and will migrate if they have the opportunity, the prevailing situation in Gaza Strip seems to play a role in increasing that rate. The health sector witnesses increasing in the phenomenon of BD, especially among physicians. As the director of the Central Archive Department at the Palestinian Ministry of Health mentioned that 145 doctors submitted their resignations during the previous 3 years, 55 of them in 2019, and explained that the causes for the resignation were mostly economical because most of the medical staff especially physicians are employed on low-paid contracts and the other cause was educational, in addition, to organizational problems (Al-Waheidi, Personal interview, 2019). Hence, the researchers believe that it is vital to study the issue of migration, the policies to limit it, and regulations that enable communication with those who left to encourage them to return to their country.

This study aims to explore the phenomenon of brain drain through the following main question: “What is the impact of living conditions and organizational practices as brain drain factors on the human resource assets of the health sector in the Gaza Strip?”.  

1.2. Study Variables:

The study variables are:

- The independent variables, brain drain cause factors:
  a. Living conditions.
  b. Organizational practices.

- The dependent variable: Human resource assets.
1.3. Study Hypotheses:

The study hypotheses are:
1. There is a statistically significant relationship at level $\alpha \leq 0.05$ between brain drain cause factors (living conditions and organizational practices), and human resource assets.
2. There is a statistically significant impact at level $\alpha \leq 0.05$ of brain drain cause factors (living conditions and organizational practices) on human resource assets.
3. There is a statistically significant difference at level $\alpha \leq 0.05$ in the responses of the study sample regarding the impact of brain drain cause factors (living conditions and organizational practices) on human resource assets due to the following demographic variables (gender, age, and marital status).

1.4. Study Objectives:

This study aims to achieve the following objectives:
1. To determine the relation between living conditions and organizational practices, with human resource assets.
2. To determine the level of impact of living conditions and organizational practices on human resource assets.
3. To determine the most important factors related to living conditions and organizational practices that are negatively influencing the human resource assets.
4. To provide recommendations to the concerned parties to reduce the negative impact of the mentioned factors on the human resource assets.

1.5. Study Importance:

The study importance aspects are:
1. Provide useful information and reference to interested researchers and academic institutions in the subject matter of the study, which is expected to develop significant research in the area.
2. Present useful information and reference to professionals interested in the subject matter of the study, which is expected to induce developments in the related area.
3. Provide professional solutions to the problems discovered by the study that will lead to improvements related to the human resource assets.
4. Generally speaking, this study is expected to contribute to the proper utilization of the human resource assets in the health sector which is considered as a very vital sector.

2. Literature and Previous Study Preview

2.1. Brain Drain Phenomenon

Brain Drain (BD) is a term used for referring to the loss of talents, experts, skilled and highly qualified human resources who left their origin country and moved to another. The term of BD first appeared in the late 1960s when the migration of well-educated workforce from developing to developed countries accelerated (Beine, et al, 2008).
Noir (2009) defined BD as the preference of specialists with higher degrees to live and work in foreign countries and serve people other than their own. According to UNESCO definition, BD is an abnormal form of scientific exchange between countries characterized by one-way flow in favor of developed countries, or what is known as reverse technology transfer. Similarly, the international community of economists defined it as an outflow forms a one-way transfer of productive resources representing technology in human skills from developing to developed countries. This is obviously a transfer of technology and, since such transfer takes place from the poorer to the richer countries, the phenomenon has been termed a "reverse" transfer of technology (Kaempf & Singh, 1987, p. 2). However, Morsi (1982) considered BD as the absence of the vital human elements needed to achieve the comprehensive development processes of a society, whether the absence period is long or short, this includes those with rare mental competencies and a high-level of scientific expertise and skills.

Skilled migrants move from developing to developed countries in response to many drivers which is a complex set of interlinking factors that influence an individual, family or population group’s decisions relating to migration, including displacement (Kaempf & Singh, 1987, p. 8).

This study briefly focuses on Brain Drain Cause Factors which are (International Organization for Migration - IOM, 2020):

1. Living conditions: which include political, economic, social and personal drivers.
   - Political factors: The conflicts, extreme violence, severe political and security instability, and peacebuilding setbacks which are considered as the main drivers of migration that displaced millions (Internal Displacement Monitoring Center - IDMC, 2017). Which was mentioned by Khawaja (2010) study titled “Highly-skilled migration into, through and from the southern and eastern Mediterranean and sub Saharan Africa. The case of Palestine” which revealed that the main motive behind the migration of Palestinians was related to economic factors that emerged from the political instability and the infighting between the Palestinian parties. Moreover, Elasrag (2016) stated that political corruption, the absence of democracy, the increasing repression and violations of human rights, and marginalization of the researcher by leaders are factors that led BD phenomenon to increase.
   - Economic factors: The higher level of income in developed countries in comparison with the developing countries explains why the upper middle-income countries have the biggest increase in migration scale (Department of Economic and Social Affairs, 2020), nearly two-thirds were labor migrants globally, 74% of them of working age (International Organization for Migration - IOM, 2019). In addition to the increased span of unemployment, which exceeds 14% in the Arab world according to Arab Labor Organization reports, the inappropriate financial returns for different scientific and technical competencies. Scientists are also attached to work that does not match their expertise and specialization (Elasrag, 2016), as well the migrant’s desire to achieve a better standard of living, and to have a better place for work (Al-Shammari, 2016), the poor distribution of wealth and income in the Arab countries, which is related to the nature of the prevailing political and economic systems (Al-Anani, 2016) is a leading driver of the brain drain.
   - Social factors: As Abdullah & Ahandu (2017) mentioned that the absence or the decline in freedom of thought, opinion, and the scientific method of community management lead to brain drain. Also, the results of (Panagiotakopoulos, 2020) exposed that the vast majority of talented personnel decided to migrate owing to the prevalent cultural mindset of most Greek citizens and the profound crisis of social values in the country. This was highlighted by Qianhui Pi (2019) study titled "Doctors with Borders: Medical Brain Drain Through the Ethical Lens” aimed to discover the ethical dimensions of medical BD concerning cultural relativism, global inequality, and epistemic injustice by viewing case studies of three countries’ experience facing medical BD: South Africa, South Korea, and Malawi. The findings showed that without understanding the culture (national cultural identity, diaspora culture, or workplace culture) policies can barely be as effective as looked-for. Moreover, with understandings of cultural relativism and that cultures form ethics, not to mention that the ethics of policies can differ by culture.

2. Organizational practices: Lack of economic growth, going hand in hand with political repression, discrimination, and a lack of freedom, drive personnel to flee their country. Economic and institutional development are also prime determinants of migration (Docquier, 2014). The most common push factor for migration is inadequate payments for health professionals. To be precise, migrants from developing countries mentioned several reasons for their decision to migrate among which: the lack of essential supplies and, materials, excessive workloads, low staff motivation, and incompetent management. In addition to professional reasons represented by prospects of additional training, better career opportunities, and working conditions offered by destination countries (Mataria, Abu Hantash, & Amer, 2008), multiple media stated that migrants are not looking only for financial resources. But also, they are looking for loyalty in work relationships, the reliability of the career path, and certainly in the rights and duties relationship. Also, the need for transparency and fairness in the recruitment process (Rampini, 2003 as cited in Morano Foadi, 2006).

This is clearly emphasized by the study of Jalali (2018) titled “Investigating Causes of Human Capital Flight of Doctors and Engineers from Pakistan” which revealed work environment emerged as the main cause of human
capital flight of doctors and engineers from Pakistan, followed by economic causes, then the social factors come as the third such as the lack of security, the desire to live a better life in a foreign country, which were considered among the main motives, in addition to worsening political situation and political interference. Nepotism and lack of social justice had also led the doctors and engineers to think of leaving the country. The study of (Salmani, Taleghani, & Taatian, 2011) also, pointed out that justice considered a crucial issue among scientific competencies of Iranian society as they do not perceive the distribution of financial, physical, and social resources fair which exaggerates their migration intentions. Emotional justice also highly affects competencies’ migration decisions, which means the respondents do not see the society as providing adequate justice. As for procedural justice, respondents perceive inequity and inconsistency in the application of society’s stated rules and procedures. Meanwhile, transactional justice is driving BD phenomenon to increase, indicating that elites do not believe that agreements are honored or complied with. Finally, respondents indicate that poor informational justice was also perceived as a motive to migrate.

2.2. The Human Resource Assets

Human resource assets are a form of intellectual capital and considered as a vital element formed by a combination of the enterprise individuals’ competence, including knowledge, skills, attitudes, expertise, relationships, and capabilities shaped in the minds, bodies, and actions of individuals (Mention & Bontis, 2013). The idea of human assets can be traced back to the eighteenth century to Smith (1789), who referred to it in his book, and proposed that improving human assets through training and education leads to a more profitable business, which adds to the collective wealth of a society. More recently, the term was used to define the workforce required to produce goods. However, the most recent theory concerning human assets or capital was used by Gary Becker and Theodore Schultz, who invented the term in the 1960s to reflect the value of human capacities (Kenton, 2019). To conclude, the researchers define human resource assets as the people who make up the workforce of an organization, business sector, or economy, who possess various competencies such as skills, education, knowledge, experience, attitudes, talent, capacity, and attributes, which, in turn, affect the workforce productive capacity and earning potential. It is usually managed by an organization’s human resources (HR) department.

Skills matching and anticipation are becoming a harder task for developing countries, due to the complexity and dynamics of the process and the countries’ particular socio-economic conditions, capacities, weak institutions, and governance systems. Many of these countries have little labor market information and need more effort and investment to build a strong information system. Still, it is vital for policy-makers to be aware of the significance of reducing the risk of creating large skills gaps that undermine the employability of individuals and hinder the productivity of enterprises and economic growth (EG) (Řihová, 2016). Thus, human assets are resource for the most important inputs into production. Given that the labor input and the characteristics of the environment are inseparable, and due to the differences in the wealth of nations and their economic progress many economists give more attention to these attributes than others: the skills and aptitudes of employees, their educational qualifications, health status, ambitions, mobility, and willingness to adopt new ideas and methods (Durand, 2015). This was also supported by the International Labour Organization, Bureau for Workers’ Activities (2015). Hence improvements in the quality of the labor force are important contributors in EG (International Labour Office, 2008). Therefore, the migration of skilled and trained personnel in the developing countries is perceived as a threat to successful development efforts due to their essence in the development and operation of an economy that depends upon modern technology.

Investing in human assets leads to economic and noneconomic benefits, which accrue to both the person undertaking the investment and to the economy in general (United Nations Economic Commission For Europe, 2016):

1. Economic benefits: For example, enhancing persons’ employability and, if the person is employed, it can lead to enhancement in earnings and career prospects.
2. Non-Economic benefits: It can lead to increase the person’s productivity in performing nonmarket activities such as household production or of personal benefits that do not relate to production such as better health status and subjective well-being.

Accordingly, the benefits of investing in human capital can be seen in different levels and aspects as follows:

1. At the company level, having higher productivity employees, due to their higher education and experience, lead to enhancing other employees’ performance and, hence, the company’s profits.
2. At the macro-economic level, there is evidence of the positive effect of human assets on economic growth. There are also the feedback effects, caused by the benefits created by investing in human assets which increases the level of human capital stocks.
3. At the social level, education makes individuals better citizens and better parents, which in turn lead to greater social cohesion.
4. At the national level, there are arguments on the tendency of causality between education and economic growth. Several studies have shown that the causality may operate in both aspects, indicating that a feedback loop may also operate at the macro level.

2.3. The Relationship Between the Brain Drain and the Human Resource Assets:

The relation between the occupational life quality and migration intentions was studied locally by Abu Qurah (2019) titled “The Level of Occupational Life Quality among the Faculty Members of Palestinian Universities and its Relation to the Foreign Migration”. It examined the relation between the quality level of occupational life among Palestinian universities’ faculty members and foreign migration. The findings showed that the occupational life’s quality level among academics in the Palestinian universities was great with a relative weight of 72.60%; the intention to migrate abroad of the academics in the Palestinian universities was at a medium degree, with a relative weight of 57.60%; there was no relationship between the level of quality of work-life among Palestinian universities’ academics and their trends towards migration.

In addition, according to Al-Qudah (2019) study titled “The Factors Leading to Arab Brain Drain to Developed Countries and Suggestions to Reduce them”. Which aimed to identify the driving factors behind the Arab brain drain from the perspective of the students at the University of Jordan. There was an increase in economic, social, political, and scientific factors that drive the Arab brain drain, which in turn led to intense competition with other institutions to retain specialized human resources. Along with the study of (Al-Ahmad, 2019) titled “The Impact of Qualified Human Resources Migration on the Labor Market in Syria (Medical Sector as an example)” that showed that the economic, scientific, and political and security motives were strong stimuli of the BD phenomenon which, in turn threaten the health services provided. In addition to the study of Idoud & Asous (2018) titled “The Reality of Scientific Research and its impact on the Algerian Brains” highlighted the problems that face the scientific research, and the relationship between these conditions and the migration of elites. It showed that there were many problems and challenges facing scientific research. Mainly, it was represented by the lack of financial capabilities and administrative problems, political and social instability and the disappearance of democracy, low standard of living and weak material income, lack of requirements necessary for the advancement of scientific research, lack of some specializations, insufficient appreciation of scholars and competent people, and problems with routine and bureaucracy.

Institut National d’Administration (2016) study titled “The Repercussions of Migration and Displacement of National Cadres on the Sectors of Health, Education and Higher Education” aimed at investigating the impact of the migration and displacement of cadres on the performance of the three sectors in conjunction with demographic changes in the Syrian governorates, and if it affects the size and the quality of the services provided. The findings showed that the migration and displacement of the cadres reflected negatively on the efficiency of the health sector performance in five governorates. The study of Ngoma and Ismail (2013) titled “The Impact of Brain Drain on Human Capital in Developing Countries” aimed at examining the effects of the short-run and long run of skilled migration rates (brain drain) on human capital formation in migrants’ source developing countries (OECD). Also, it highlighted that in the short-term, BD impacted adversely on human capital formation in immigrants’ source nations; however, long-term incentive impact was statistically insignificant. The results suggested that the findings of the positive impact of brain gain was influenced by inappropriate specification and unaccounted endogeneity. Furthermore, the globalization practices might excessively drain skills from developing nations and hinder their potentials for growth and convergence. Additionally, the increasing bias in migration policies against skilled workforce of specific talents escalate the costs and effects of brain drain and further delay growth prospects in the source nation.

The study of Popescu, Picu, & Popescu (2018) titled "Empirical Research Regarding the Migration of Highly Qualified Human Resources from Romania - Example of the Medical Field“ aimed at underlining to what extent the international migration of Romanian highly qualified human resources particularly in the healthcare sector could deeply affect the prospects of Romania’s sustainable economic development, and to prepare proposals that could limit the departure of highly qualified human resources, especially that of medical doctors. The findings showed that 78.43% of respondents left Romania because of the salary, and 11.49% because of the working conditions, while 10.08% of them referred to other causes (mentioned as being, mostly: a perceived lack of respect of society towards medical doctors, lack of viable professional development, the precarious and unpredictable environment). The phenomenon was doubled due to the decline in the number of highly qualified human resources in healthcare. Also, Romania was ranked the second in the world regarding the human resources migration, the phenomenon of the medical doctors’ migration has reached distressing levels, Romania lost more than 43 thousand migrants in only 10 years, while the investment made to train them amounted to be more than 3.5 billion euro. Nearly, this amount was not an investment, but an irretrievable loss.

3. Study Methodology

The descriptive analytical approach was adopted, as according to Devi (2017), the descriptive approach describes the situation as it exists at present as it is reported by the researcher as it has happened. While, in the
analytical approach the researcher has to use facts or information already available, and analyze these to make a critical evaluation of the material.

3.1. Study Data Sources:

The data sources are as follows:
1. The secondary data sources: include text books, journals, research papers, statistics, and web sites.
2. The primary data sources: a questionnaire was developed and distributed to collect the needed data from physicians from the health sector.

3.2. Study Population and Sample:

The population of this study composed of physicians from the health sector totaling 2,850 (Palestinian Health Information Center - PHIC, 2020). Furthermore, a random sample was used to present the targeted population. The sample size was calculated using the following equation (Moore et. al. 2003):

\[
 n = \left( \frac{Z}{2m} \right)^2
\]

Accordingly, the minimum sample size was 339 respondents, the researchers have randomly distributed 400 questionnaires to collect the data, and 360 were retrieved with a response rate 90%.

3.3. Study Tool Design and Data Measurement Scale:

A questionnaire was designed to study "The Impact of Living Conditions and Organizational Practices as Brain Drain Factors on the Human Resource Assets of the Health Sector in the Gaza Strip". The questionnaire included the following sections:
1. Section one: Includes personal traits of the research sample which are: (gender, age, and marital status).
2. Section two: Includes living conditions (12 items).
3. Section three: Includes organizational practices (11 items).
4. Section four: Includes human resource assets (12 items).

A 1 to 10 scale was used to answer the questionnaire items. As 10 indicates the highest level of approval, were 1 indicates the lowest level of approval. As it is explained in the following table:

| Item | Strongly Disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Strongly Agree |
|------|-------------------|---|---|---|---|---|---|---|---|---|----------------|
| Scale|                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10              |

The following steps were followed in order to design the questionnaire:
1. Review and utilize the available literature and previous studies related to study area.
2. Consult several academic and professional personnel from different universities and institutions.
3. Identify the main fields of the questionnaire and the items under each field.
4. The questionnaire was designed, reviewed, and modified by the researchers.
5. Again, several academic and professional personnel were approached as referees. Based on the referees’ comments modifications were done as appropriate.

3.4. Study Tool Validity and Reliability Testing:

A pilot study sample of 45 questionnaires was distributed to help test the validity and reliability of the questionnaire according to the following:
1. Content Validity: 13 academic and professional personnel reviewed and provided valuable notes to improve the questionnaire validity, as their inputs were taken into consideration. Content validity of the questionnaire was conducted in order to assure that the content of the questionnaire is consistent with the study objectives, and problem statement. Modifications were conducted till the questionnaire appeared in its final form as it is presented in appendix (1).
2. Internal Validity: Internal validity of the questionnaire is used to test the validity of the questionnaire. It is measured through measuring the correlation coefficients between each item in a field and the whole field according to the following:
   - The internal validity of the living conditions field:
Table (2): Clarifies the Correlation Coefficient for Each Item of the Living Conditions Field and the Total of the Field

| #  | Item                                                                 | Pearson Correlation Coefficient | P-Value (Sig) |
|----|----------------------------------------------------------------------|---------------------------------|---------------|
| 1. | The general security and political situation have pushed the scientific and professional competencies to migrate. | .506*                           | 0.000         |
| 2. | The decline in the standard of daily life due to the blockade and closure has encouraged talented competencies to migrate. | .764*                           | 0.000         |
| 3. | Inequality of opportunity in the recruitment process due to political affiliation resulted in leaving the country. | .503*                           | 0.000         |
| 4. | The insufficient income to meet the needs and requirements of competencies has impacted their decision to migrate. | .764*                           | 0.000         |
| 5. | The mismatch of financial return with the magnitude of job tasks and skills of competencies led to their decision of leaving the homeland. | .773*                           | 0.000         |
| 6. | The lack of job opportunities that match the skills and specializations of competencies has caused them to migrate. | .568*                           | 0.000         |
| 7. | The poor distribution of income and wealth in the country pushed the scientific competencies to migrate. | .822*                           | 0.000         |
| 8. | The low wages of the competencies compared to what their colleagues get for the same job in other countries pushed them to migrate. | .802*                           | 0.000         |
| 9. | The lack of awareness seminars for competencies related to instilling the values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at α ≤ 0.05. Thus, the items of this field are valid to measure what it was set for. |
| 10. | The desire for a better place to work pushed the competencies to migrate. | .700*                           | 0.000         |
| 11. | Job insecurity (instability) and the employee’s feeling that he/she can be dispensed have affected their migration decision. | .695*                           | 0.000         |
| 12. | The absence or deterioration of freedom of thought, opinion, and the scientific method of managing society has led to leaving the country. | .761*                           | 0.000         |

* Correlation is significant at level α ≤ 0.05

Table (2) indicates that the p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at α ≤ 0.05. Thus, the items of this field are valid to measure what it was set for.

- **The internal validity of the organizational practices field:**

Table (3): Clarifies the Correlation Coefficient for Each Item of the Organizational Practices Field and the Total of the Field

| #  | Item                                                                 | Pearson Correlation Coefficient | P-Value (Sig) |
|----|----------------------------------------------------------------------|---------------------------------|---------------|
| 1. | The marginalization of the scientific competencies based on political affiliation encouraged their decision to migrate. | .747*                           | 0.000         |
| 2. | Political and partisan struggles in the work environment have caused in deciding to migrate. | .761*                           | 0.000         |
| 3. | Excluding competencies from participating in decision-making institutions due to political affiliation led to their decision in leaving the country. | .676*                           | 0.000         |
| 4. | The lack of a clear and adequate wage system within the institution and the employees’ lack of satisfaction with the annual increments have affected the competencies in making the migration decision. | .694*                           | 0.000         |
| 5. | The routine that characterizes the institutional systems and the existence of restrictions and complex governmental procedures pushed competencies to migrate outside. | .768*                           | 0.000         |
| 6. | The lack of transparency and fairness in the recruitment and promotion process has led competencies to leave their homeland. | .841*                           | 0.000         |
| 7. | Insufficient appreciation, respect for freedoms, and low motivation in the institution have caused the decision to migrate. | .838*                           | 0.000         |
| 8. | Dissatisfaction with the conditions of the physical work environment (infrastructure) led to the decision of leaving the country. | .697*                           | 0.000         |
| 9. | Excessive workloads resulted in the competencies’ decision to leave their homeland. | .673*                           | 0.000         |
| 10. | The lack of investment in the scientific energies has encouraged competencies to leave the homeland. | .677*                           | 0.000         |
| 11. | The lack of awareness seminars for competencies related to instilling the values of belonging and loyalty have affected the migration decision. | .437*                           | 0.002         |

* Correlation is significant at level α ≤ 0.05

Table (3) indicates that the p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at α ≤ 0.05. Thus, the items of this field are valid to measure what it was set for.

- **The internal validity of the human resource assets field:**

Table (4): Clarifies the Correlation Coefficient for Each Item of the Human resource Assets Field and the Total of the Field

| #  | Item                                                                 | Pearson Correlation Coefficient | P-Value (Sig) |
|----|----------------------------------------------------------------------|---------------------------------|---------------|
| 1. | The brain drain has led to intense competition with other institutions to retain specialized human resources. | .407*                           | 0.001         |
| 2. | Migration has caused a lack or limited specialized competencies in a specific field compared to the targeted workload. | .624*                           | 0.000         |
| 3. | Migration has placed additional responsibilities and workloads on employees that exceed their scientific and practical capabilities. | .698*                           | 0.000         |
| 4. | Migration has led to a decline in employee satisfaction with the organization’s environment and infrastructure. | .505*                           | 0.000         |
| 5. | The departure of some competencies led to problems or obstacles affecting the | .812*                           | 0.000         |

* Correlation is significant at level α ≤ 0.05

Table (4) indicates that the p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at α ≤ 0.05. Thus, the items of this field are valid to measure what it was set for.
This range is of the Palestinian society such opportunities are more in the Gaza Strip by Palestinian Central Bureau of Statistics 3.5.

The questionnaire is valid considered high; the result ensures the reliability of each field of the questionnaire. Cronbach's Alpha equals 0.000.

Table (4) indicates that the p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at α ≤ 0.05. Thus, the items of this field are valid to measure what it was set for.

3. Construct Validity: Construct (structural) validity is used to test the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It is measured through measuring the correlation coefficient between one field and all the fields of the questionnaire that have the same level of scale.

Table (5): Clarifies the Correlation Coefficient of Each Field and the whole Questionnaire

| No. | Field                          | Pearson Correlation Coefficient | P-Value (Sig.) |
|-----|--------------------------------|---------------------------------|----------------|
| 1.  | Living conditions              |                                 |                |
| 2.  | Organizational practices       |                                 |                |
| 3.  | Brain drain cause factors      |                                 |                |
| 4.  | Human resource assets          |                                 |                |

*Correlation is significant at level α ≤ 0.05

Table (5) indicates that the p-values (Sig.) are less than 0.05, so the correlation coefficients of all the fields are significant at α ≤ 0.05, so it can be said that the fields are valid to measure what it was set for.

4. Reliability of the Questionnaire: Cronbach's coefficient alpha test is used to test the reliability of the questionnaire. It ranged between 0.0 and +1.0 and the higher values reflects a higher degree of internal consistency.

Table (6): Cronbach's Alpha for Each Field of the Questionnaire

| No. | Field                          | Cronbach's Alpha |
|-----|--------------------------------|------------------|
| 1.  | Living conditions              | 0.992            |
| 2.  | Organizational practices       | 0.897            |
| 3.  | Brain drain cause factors      | 0.938            |
| 4.  | Human resource assets          | 0.905            |
| 5.  | All Fields                     | 0.940            |

Table (6) indicates the value of Cronbach's Alpha was in the range from 0.892 and 0.938. This range is considered high; the result ensures the reliability of each field of the questionnaire. Cronbach's Alpha equals 0.940 for the entire questionnaire, which indicates a high reliability of the entire questionnaire.

According to the previous results of testing the validity and the reliability of the questionnaire, it is clear that the questionnaire is valid, reliable, and ready for distribution as it is in its final form in appendix (1).

3.5. Descriptive Analysis of the Sample Personal Characteristics:

Table (7): Sample Personal Characteristics

| Gender | Frequency | Percentage |
|--------|-----------|------------|
| Male   | 267       | 74.2       |
| Female | 93        | 25.8       |
| Total  | 360       | 100        |

| Age     | Frequency | Percentage |
|---------|-----------|------------|
| Less than 30 years | 154 | 42.8|
| From 30 to less than 40 years | 96 | 26.7|
| From 40 to less than 50 years | 79 | 21.9|
| 50 years and above | 31 | 8.6|
| Total   | 360       | 100        |

| Status  | Frequency | Percentage |
|---------|-----------|------------|
| Single  | 112       | 31.1       |
| Married | 244       | 67.8       |
| Other   | 4         | 1.1        |
| Total   | 360       | 100        |

Table (7) shows that 74.2% of the respondents are "males", and 25.8% are "females". This is higher than Palestinian Central Bureau of Statistics (2020) results identify the male's participation rate in the labor force in the Gaza Strip by 62.3% while females' participation rate only 19.2%. According to the cultural and social norms of the Palestinian society such opportunities are more available for males than females. This is owing to the health
sector’s job nature and due to the nature of male’s body structure and their ability to stand for more working hours than females and having more tolerability to work under rough conditions.

Regarding age, it shows that 69.5% of respondents are less than 40 years, while 30.5% of respondents are 40 years or more. The main reason is that many employees stopped working as a result for the Palestinian fraction, and as a result new staff have been appointed in recent years. Another reason is the increase in the population size which implies increase in the human resources to deliver the needed health services.

Also, it shows that most respondents are married with a percentage of 67.8%. There is compliance with age and income source availability due to the nature of the Palestinian community that encourages marriage at an early age and as soon as getting a job opportunity.

3.6. Normality Testing:

Kolmogorov-Smirnov test was used to examine normality as shown in the following table:

| Table (8): Kolmogorov-Smirnov test |
|-----------------------------------|
| **Dimension**                   | **Kolmogorov-Smirnov** |
| -                                | Statistic | P-value |
| Living conditions                | 1.330     | 0.058   |
| Organizational practices         | 0.996     | 0.274   |
| Brain drains cause factors       | 1.201     | 0.111   |
| Human resource assets            | 0.650     | 0.791   |
| All Fields                       | 0.940     | 0.340   |

According to table (8) the p-value for each variable is greater than 0.05 level of significance, thus the distributions for the data follow the normal distribution. Therefore, for statistical data analysis purposes parametric tests were used.

3.7. Statistical Analysis Tools:

The data was analyzed using the following statistical analysis methods:

1. Frequency and Descriptive Analysis: This analysis is used to determine the measures of central tendency which are mean, mode, and median. These measures help the researcher to evaluate the results.
2. Kolmogorov-Smirnov test of normality: It is a statistical test used to determine if the data follows normal distribution and it compared the sample with a normal distribution.
3. Pearson Correlation Coefficient for Validity: It is a statistical test used to measure correlation between variables.
4. Cronbach’s Alpha for Reliability Statistics: This test measures reliability of the questionnaire to determine whether it measures well what it should be designed for or not.
5. One-sample T Test: This test compares the sample mean with a predefined value. It requires a random sample, independent data, and a normally distributed data.
6. Multiple Linear Regression Model: This analysis is used to clarify the relationship between number of the research independent variables and the dependent variable.
7. Independent Samples T-test: This test determines the differences between two groups of data such as males and females. It is used when the population mean is unknown and with two independent samples.
8. Analysis of Variance (ANOVA): This test compares between the means of a number of variables to determine the differences among them. It helps to find out whether to reject or accept the null hypothesis.

4. Data Analysis

The mean, standard deviation, proportional mean, and T test-value were used for data analysis purposes for all fields and items of the questionnaire to determine the tendency and ranking according to the following:

- **The Independent Variable “Living Conditions”**

| Table (9): Means and Test values for “Living Conditions” |
|---------------------------------------------|
| **Item** | **Mean** | **SD** | **Proportional mean (%)** | **T value** | **P value (Sig.)** | **Rank** |
| 1. The general security and political situation have pushed the scientific and professional competencies to migrate. | 8.21 | 2.13 | 82.06 | 24.06* | 0.000 | 9 |
| 2. The decline in the standard of daily life due to the blockade and closure has encouraged talented competencies to migrate. | 8.88 | 1.71 | 88.81 | 37.62* | 0.000 | 4 |
| 3. Inequality of opportunity in the recruitment process due to political affiliation resulted in leaving the country. | 8.02 | 2.34 | 80.22 | 20.45* | 0.000 | 10 |
| 4. The insufficient income to meet the needs and requirements of competencies has impacted their decision to migrate. | 9.63 | 1.63 | 90.25 | 40.93* | 0.000 | 3 |
| 5. The mismatch of financial return with the magnitude of job tasks and skills of competencies led to their decision of leaving the homeland. | 9.12 | 1.56 | 91.22 | 44.08* | 0.000 | 1 |
| 6. The lack of job opportunities that match the skills and specializations of competencies has caused them to migrate. | 8.66 | 1.63 | 86.61 | 36.74* | 0.000 | 5 |
| 7. The poor distribution of income and wealth in the country | 8.62 | 1.74 | 86.22 | 34.02* | 0.000 | 7 |
pushed the scientific competencies to migrate.
9. The low wages of the competencies compared to what their colleagues get for the same job in other countries pushed them to migrate.
10. The unethical and illegal infringement of the basic rights of employees had led to their departure from the country.
11. The desire for a better place to work pushed the competencies to migrate.
12. Job insecurity (instability) and the employee’s feeling that he/she can be dispensed have affected their migration decision.

Table (9) shows that item “5” ranked first by having the highest proportional mean valued 91.22% where item “12” ranked twelfth by having the lowest proportional mean valued 76.78%. In general, the items of the “Living Conditions Field” were statistically very high with a proportional mean valued 85.40%. This indicates that the living conditions as a brain drain cause factors are strongly perceived as influential factors leading to the decision of leaving the country. As those were considered as serious issues influencing the life of physicians negatively. This is attributed to the human needs of feeling safe and having a decent life, which implies that the bad economic conditions causing decrease and insecurity in income in the Gaza Strip were classified as major cause reasons for emigration.

This agrees with the results of (Popescu, Picu, & Popescu, 2018) which indicate that many of the physicians left Romania because of the low salary. This occurs because Romania is one of the most corrupt countries in the EU and people continue to display a deep lack of trust in the government.

This disagrees with the results of (Qianhui Pi, 2019), and (Ngoma and Ismail, 2013) which considered the ease of mobility and globalization practices may or may not drain skills from developing nations and increase the migration intensity. This is due to the nature of country's culture, as the result of this study shows that the Israeli bans on the movement and blockade encourage the brain drain phenomenon.

- The Independent Variable “Organizational Practices”:

| # | Item                                                                 | Mean | SD  | Proportion mean valued (%) | Test value | P-value | Sig. Rank |
|---|----------------------------------------------------------------------|------|-----|---------------------------|------------|---------|-----------|
| 1. | The marginalization of the scientific competencies based on political affiliation encouraged their decision to migrate. | 8.66 | 2.06 | 86.61                     | 29.16*     | 0.000   | 1         |
| 2. | Political and partisan struggles in the work environment have caused in deciding to migrate. | 8.32 | 2.15 | 83.17                     | 24.91*     | 0.000   | 3         |
| 3. | Excluding competencies from participating in decision-making institutions due to political affiliation led to their decision in leaving the country. | 8.18 | 2.10 | 81.83                     | 24.27*     | 0.000   | 4         |
| 4. | The lack of a clear and adequate wage system within the institution and the employees’ lack of satisfaction with the annual increments have affected the competencies in making the migration decision. | 8.62 | 1.81 | 86.22                     | 32.78*     | 0.000   | 2         |
| 5. | The routine that characterizes the institutional systems and the existence of restrictions and complex governmental procedures pushed competencies to migrate outside. | 7.18 | 2.21 | 71.78                     | 14.40*     | 0.000   | 10        |
| 6. | The lack of transparency and fairness in the recruitment and promotion process has led competencies to leave their homeland. | 7.69 | 2.24 | 76.89                     | 18.53*     | 0.000   | 8         |
| 7. | Insufficient appreciation, respect for freedoms, and low motivation in the institution have caused the decision to migrate. | 8.08 | 2.00 | 80.81                     | 24.49*     | 0.000   | 5         |
| 8. | Dissatisfaction with the conditions of the physical work environment (infrastructure) led to the decision of leaving the country. | 8.03 | 1.96 | 80.28                     | 24.52*     | 0.000   | 7         |
| 9. | Excessive workloads resulted in the competencies’ decision to leave their homeland. | 7.51 | 2.29 | 75.06                     | 16.61*     | 0.000   | 9         |
| 10. | The lack of investment in the scientific energies has encouraged competencies to leave the homeland. | 8.06 | 1.95 | 80.58                     | 24.90*     | 0.000   | 6         |
| 11. | The lack of awareness seminars for competencies related to instilling the values of belonging and loyalty have affected the migration decision. | 4.73 | 2.91 | 47.33                     | -5.01*     | 0.000   | 11        |

Table (10) shows that item “1” ranked first by having the highest proportional mean valued 86.61% where item “11” ranked eleventh by having the lowest proportional mean valued 47.33%. In general, the items of the “Organizational Practices Field” were statistically high with a proportional mean valued 77.32%. This indicates
that the organizational practices as a brain drain cause factors are perceived as influential factors leading to the decision of leaving the country. As those were considered as serious negative working conditions influencing the professional life of physicians. As the respondents revealed that they are unsatisfied with many organizational practices which contradict with their need of suitable and comfortable work environment in a time there are other opportunities are available.

This agrees with the results of (Qianhui Pi, 2019), and (Popescu, Picu, & Popescu, 2018) which showed that work environment emerged as the main cause of leaving. This is due to the similarities with the regions in which the above-mentioned studies were conducted, and the region of this study as they all are facing issues with the administration and low satisfaction with organization regulations.

While this disagrees with the results of (Abu Qurah, 2019) study as there was no relationship between the level of quality of work-life among Palestinian universities’ academics and their trends towards migration. This is due to the fact that the health sector in Gaza Strip most of its institutions are governmental, which were impacted more with the current situation and facing more problematic issues, which in turn, affected employees' satisfaction, whereas the higher education sector most of its institutions are private and have more stable conditions. Also, the results were inconsistent with regarding item “11” (Abu Ghamajah, 2016), and (Institut National d’Administration, 2016), this is because of the Palestinian nature as they are considered as close-knit families hence; they have a strong affiliation towards their families and society.

- The Dependent Variable “Human Resource Assets”:

  Table (11): Means and Test values for “Human Resource Assets”

| #       | Item                                                                 | Mean | S.D  | Proportion (%) | Test value | P-value (%) | Rank |
|--------|----------------------------------------------------------------------|------|------|----------------|------------|-------------|------|
| 1.     | The brain drain has led to intense competition with other institutions to retain specialized human resources. | 4.81 | 2.67 | 48.06          | -4.93*     | 0.000       | 10   |
| 2.     | Migration has caused a lack or limited specialized competencies in a specific field compared to the targeted workload. | 7.63 | 2.26 | 76.33          | 17.87*     | 0.000       | 1    |
| 3.     | Migration has placed additional responsibilities and workloads on employees that exceed their scientific and practical capabilities. | 7.20 | 2.28 | 72.00          | 14.17*     | 0.000       | 5    |
| 4.     | Migration has led to a decline in employee satisfaction with the organization’s environment and infrastructure. | 7.29 | 2.30 | 72.92          | 14.76*     | 0.000       | 3    |
| 5.     | The departure of some competencies led to problems or obstacles affecting the performance of employees. | 7.08 | 2.23 | 70.81          | 13.42*     | 0.000       | 6    |
| 6.     | Migration negatively affected the ideal level of efficiency of the institution due to the lack of available competencies. | 7.42 | 2.27 | 74.17          | 16.00*     | 0.000       | 2    |
| 7.     | Migration has caused a decline in the level of new creative ideas and intellectual and scientific contributions. | 7.01 | 2.42 | 70.11          | 11.84*     | 0.000       | 7    |
| 8.     | Migration caused a lack of talents and competencies that are capable of leading the institution and developing its business. | 7.24 | 2.33 | 72.42          | 14.16*     | 0.000       | 4    |
| 9.     | Migration has helped reduce employee motivation to accomplish in the organization. | 6.44 | 2.50 | 64.42          | 7.16*      | 0.000       | 9    |
| 10.    | Migration has impeded the transfer of knowledge and education among employees. | 6.54 | 2.48 | 65.42          | 7.96*      | 0.000       | 8    |
| 11.    | The migration has affected the budget allocated for the employees’ training. | 4.43 | 2.79 | 44.28          | -7.28*     | 0.000       | 12   |
| 12.    | Migration has affected in an increase in the budget allocated to attract and recruit qualified employees. | 4.51 | 2.93 | 45.14          | -6.39*     | 0.000       | 11   |

Table (11) shows item “2” ranked first by having the highest proportional mean valued 76.33% where item “11” ranked twelfth by having the lowest proportional mean valued 44.28%. In general, the items of the “Human Resource Assets Field” were statistically significant with a proportional mean valued 64.67%. This indicates that the human resource assets are perceived as problematic because of the number of physicians migrated and left the country because of brain drain cause factors at many levels.

This agrees with the results of (Idoud and Asous, 2018), (Abu Ghamajah, 2016), (Elasrag, 2016), (Institut National d’Administration, 2016), and (Popescu, Picu, & Popescu, 2018), which indicated that there was a lack or limited specialized competencies in a specific field compared to the targeted workload, which negatively affected the ideal level of efficiency of the institution due to the lack of available competencies This is due to the bad living conditions and the unfair organizational practices that push competencies to migrate.

At the same time this disagrees with the results of (Al-Qudah, 2019), (Idoud and Asous, 2018), (Abu Ghamajah, 2016) which indicated that brain drain has led to intense competition with other institutions to retain specialized human resources, migration has affected the budget allocated for the employees’ training and increase
in the budget allocated to attract and recruit qualified employees. This is due to that the health sector in the Gaza Strip do not have the ability to compete with other worldwide institutions by increasing its budget owing to the economic conditions and the deficiency in the financial resources that are allocated to attract, hire, and train the needed human resources.

5. Hypotheses Testing

The hypotheses were tested as follows:

- **There is a statistically significant relationship at level \( \alpha \leq 0.05 \) between brain drain cause factors (living conditions and organizational practices), and human resource assets. The Pearson correlation coefficient was used to test this hypothesis as illustrated by the following table:**

| The Hypothesis | Pearson Correlation Coefficient | P-Value (Sig.) |
|----------------|---------------------------------|---------------|
| There is a statistical significant relationship at level \( \alpha \leq 0.05 \) between living conditions, and human resource assets | 0.384* | 0.000 |
| There is a statistical significant relationship at level \( \alpha \leq 0.05 \) between organizational practices, and human resource assets | 0.504* | 0.000 |
| There is a statistical significant relationship at level \( \alpha \leq 0.05 \) between brain drain factors (living conditions and organizational practices), and human resource assets | 0.470* | 0.000 |

Table (12) shows that the correlation coefficient equals 0.470 and the p-value (Sig.) equals 0.000 which is less than 0.05. This indicates the existence of a significant positive relationship between brain drain factors (living conditions and organizational practices) and human resource assets. This is reasonably understood as living conditions and organizational practices are justifying taking migration decision, and at the same time this will negatively influence the availability of human resources as an asset specially if it is highly qualified and experienced.

This agrees with the results of (Popescu, Picu, & Popescu, 2018) which showed that 78.43% of respondents in the medical field left Romania because of the salary. Also, it agrees with (Al-Ahmad, 2019) results which found that there was a significant relationship between the political situation of Syrian Arab Republic represented in the civil war that its citizens witness and the desire of migration on the quality of the health sector in terms of its staff and the services which are provided. This is due to the similarity of the sector which the study is conducted in also, the current circumstances that the professional Palestinians in the field suffer from as there is a need to have suitable salaries that matches their skills and qualification, in addition to the fact that the salaries awarded do not commensurate with the high responsibilities they are given, or the workloads preformed, and efforts made. In addition to the same political situation which is the division.

These results agree with (Abdullah & Ahandu, 2017) which found that there was significant relation between the brain drain social and personal factors and the human resources, this is because of the unstable social situations that constitute conflicts in most African countries. Besides, the African competencies feel that they are sequestered in their own country so they search for a living situation that can promise them freedom, stability, and peace.

- **There is a statistically significant impact at level \( \alpha \leq 0.05 \) of brain drain cause factors (living conditions and organizational practices) on human resource assets. To test this hypothesis, the Multiple Linear Regression Model was used, as illustrated by the following table:**

| Variable | B | T | Sig. | R | R-Square | F | Sig. |
|----------|---|---|-----|---|-----------|---|------|
| (Constant) | 1.925 | 3.369 | 0.001* | 0.505 | 0.251 | 61.098** | 0.000 |
| Living conditions | -0.081 | -0.735 | 0.463 | | | | |
| Organizational practices | 0.677 | 7.189 | 0.000* | | | | |

* The variable is statistically significant at 0.05 level
** The relationship is statistically significant at 0.05 level

Table (13) shows that the multiple correlation coefficient R = 0.505 and R-Square = 0.251. This means 25.1% of the variation in the human resource assets in Gaza Strip is explained by organizational practices as the living conditions are statistically insignificant. Though, the analysis of variance for the regression model, F = 61.098, p-value (Sig.) is less than 0.05, so there is a significant relationship between the dependent variable the human asset and the independent variables.
This agrees with the results of (Jalali, 2018) which showed that work environment such as job security, career development, and nepotism emerged as the main cause that led doctors and engineers to leave Pakistan and that administrative and organizational practices were significantly related to the brain drain which in turn affect the human resources. This is due to that both studies conducted in developing countries and have similar issues in the administrative system, beside the fact that the respondents are highly educated and need a suitable work environment and just laws to make them stay, in a time they are offered a better job with much more better environments outside.

This disagrees with the results of (The Center for Studies and Measurement of Public Opinion, 2018) which indicated that living conditions factor such as low wages and unemployment strongly affect human resources as it ranked the economic conditions as factor number one that led to the increase of brain drain phenomenon. In addition to (Khawaja, 2010) which showed that the main motive for migration by Palestinians was related to economic factors that emerged from the political instability and the infighting between the Palestinian parties, which in turn impact the human resources at many levels.

- **There is a statistically significant differences at level α ≤ 0.05 in the responses of the study sample regarding the impact of brain drain cause factors (living conditions and organizational practices) on human resource assets due to the following demographic variables (gender, age, and marital status).**

  a. There's a statistically significant difference at level α ≤ 0.05 in the responses of the research sample due to gender:

  Table (14): Independent Samples T-test of the fields and their p-values for Gender

  | #   | Field                  | Means   | Test Value | Sig.  |
  |-----|------------------------|---------|------------|-------|
  |     | Field                  | Male    | Female     |       |
  | 1   | Living conditions      | 8.46    | 8.78       | -2.309| 0.021|
  | 2   | Organizational practices| 7.65   | 7.98       | -2.021| 0.044|
  | Brain drain cause factors| 8.07    | 8.40      | -2.277 | 0.023|
  | Human resource assets   | 6.43    | 6.58       | -0.731 | 0.465|
  | All Fields               | 7.51    | 7.77       | -1.802 | 0.071|

* The mean difference is significant α 0.05 level

Table (14) shows that there is an insignificant difference among the male and female respondents toward brain drain cause factors (living conditions and organizational practices) and human resource assets, this indicates that females and males had the same opinion regarding the impact of these factors on human resource assets.

This agrees with the results of (Al-Ahmad, 2019), and (Al-Qudah, 2019) studies which indicated that females and males had the same opinion regarding the impact brain drain economic factors on human resource. On the other side, it disagrees with the same studies which indicated that females and males have different opinions about the causes of the brain drain phenomenon toward political, administrative, and organizational factors, and social factors. This is due to the nature of the country as in Syria the males are obliged to be recruited in military.

b. There’s a statistically significant difference at level α ≤ 0.05 in the responses of the research sample due to age:

  Table (15): ANOVA Test of the fields and their p-values for age

  | #   | Field                  | Means                 | Test Value | Sig.  |
  |-----|------------------------|-----------------------|------------|-------|
  |     | Field                  | Less than 30 years    | From 30 to less than 40 years | From 40 to less than 50 years | 50 years and above |
  | 1   | Living conditions      | 8.66                  | 8.69       | 8.40  | 7.88 | 4.874 | 0.002 |
  | 2   | Organizational practices| 7.78                  | 7.82       | 7.68  | 7.37 | 0.955 | 0.414 |
  | Brain drain cause factors| 8.24                  | 8.27                   | 8.05       | 7.63  | 7.63 | 2.708 | 0.045 |
  | Human resource assets   | 6.41                  | 06.62                   | 6.35       | 6.56  | 6.56 | 0.460 | 0.710 |
  | All Fields               | 7.61                  | 7.71                   | 7.47       | 7.27  | 7.27 | 1.359 | 0.255 |

* The mean difference is significant α 0.05 level

Table (15) shows that there is an insignificant difference among respondents toward brain drain cause factors (living conditions and organizational practices) and human resource assets due to age groups, this indicates that the respondents had the same opinion regarding the impact of these factors on human resource assets.

This disagrees with the results of (Al-Ahmad, 2019), which indicated that there were difference among the respondents toward brain drain causes due to age this is because of the age groups perceive and affected by these factors in different ways; if the employee is younger, he/she will be in need to secure work and social environment to start and establish a life and in turn shall seek for more stable political, economic, and administrative conditions, however for more aged groups, they have already secured a decent life conditions for their families and had a good job opportunity.
c. There's a statistically significant difference at level $\alpha \leq 0.05$ in the responses of the research sample due to marital status:

| #   | Field                          | Single | Married | Other | Test Value | Sig.  |
|-----|-------------------------------|--------|---------|-------|------------|-------|
| 1   | Living conditions             | 8.69   | 8.46    | 9.19  | 2.167      | 0.116 |
| 2   | Organizational practices      | 7.82   | 7.68    | 8.25  | 0.668      | 0.513 |
| 3   | Brain drain cause factors     | 8.28   | 8.09    | 8.74  | 1.415      | 0.244 |
|     | Human resource assets         | 6.43   | 6.47    | 7.21  | 0.413      | 0.652 |
|     | All Fields                    | 7.54   | 7.53    | 8.21  | 0.908      | 0.404 |

* The mean difference is significant at 0.05 level

Table (16) shows that there is an insignificant difference among the respondents toward brain drain cause factors (living conditions and organizational practices) and human resource assets due to marital status. This indicates that the respondents had the same opinion regarding the impact of these factors on human resource assets.

This agrees with the results of (Al-Qudah, 2019) which indicated that there were no differences toward brain drain cause factors due to marital status. This is because all the respondents need to live in stable conditions, have a decent life, and work under fair and just laws.

This disagrees with the results of (Al-Ahmad, 2019), which indicated that there were differences among the respondents toward brain drain cause factors and human resources due to marital status. This is due to the fact that widowed and divorced ones need a higher and stable source of income and they are more affected by economic factors as they are the only breadwinner for the family, as for singles, this is because they are at the beginning of establishing their lives, which requires a better economic situation and better jobs. As for married people, this is owing to they already have settled in their lives and their needs have become more specific.

6. Conclusions

The most important conclusions found are as the following:

1. Conclusions related to living conditions field: It was concluded that living conditions as brain drain cause factor was rated highly by the respondents as a strong influence. Though it was rated lower than organizational practices. The respondents considered the following factors as the most prevailing:
   a. Insufficient income, inappropriateness of financial returns compared to job tasks and level of competencies, poor distribution of income and wealth, and the decline in the standards of daily life.
   b. Low wages, lack of better job opportunities, inequality of recruitment opportunities, suitability of the workplace, and high job insecurity.
   c. The unstable security and political situations, unethical and illegal infringement of basic rights, and the deterioration of freedom of thoughts and opinions.

2. Conclusions related to organizational practices field: It was concluded that organizational practices as brain drain cause factor was rated highly by the respondents as a strong influence. Actually, it was rated higher than living conditions. The respondents considered the following factors as the most prevailing:
   a. Marginalization and participation elimination based on political affiliation, in addition to internal political and partisan conflicts in the work environment.
   b. Improper salary system and annual increments, moreover, insufficient appreciation, low motivation, poor investment in human resources, and extensive workload.
   c. Lack of transparency and fairness in recruitment and promotion processes, rigidity of organizational systems, and dissatisfaction with physical work conditions and environment.

3. Conclusions related to brain drain cause factors: It was concluded that only organizational practices have a strong impact on the physicians’ migration decision.

4. Conclusions related to human resource assets field: It was concluded that brain drain cause factors negatively influenced the human resource asset. The respondents considered these elements as the most influenced:
   a. Limitations in specialized competencies, added additional responsibilities on available employees, and performance problems.
   b. Lower satisfaction level with organizational environment, lower organizational efficiency, lower creativity, and lack of talented leadership.
   c. Nevertheless, the influence was less regarding reducing available employees’ motivation, and impeding transfer of knowledge and education.
   d. Finally, there was minor influence regarding the budget allocated for training and recruitment due to financial incapability.

5. Conclusions related to hypotheses testing:
   a. It was concluded that there is a significant positive relationship between brain drain cause factors (living conditions and organizational practices) and human resource assets. This indicates that improvements in the factors causing brain drain will lead to the same in the status of human resource assets. Therefore,
inducing positive changes to living conditions and organizational practices will result in improvements in human resource assets.

b. It was concluded that organizational practices have strong impact on the human resource assets. Where, there was no impact for living conditions on human resource assets. This means that though the respondents expressed their belief that the living conditions are very negative but still it have no influence over the migration decision as it is statistically insignificant. As a result, only positive improvements in organizational practices are influencing human resource assets.

c. It was concluded that there are no differences in the responses of the study sample regarding the impact of brain drain cause factors (living conditions and organizational practices) on human resource assets due to the any of the following demographic variables (gender, age, and marital status).

6.1. Recommendations:

According to the previously mentioned conclusions a set of recommendations are introduced to reduce the negative influence of brain drain causes and improve human resource assets as following:

1. Eliminate the consequences of local political division on the professional life of employees.
2. Consider radical development of the compensation package for talented employees to obtain appropriate income, which will result in influencing positively their satisfaction level, help meeting their needs, improving the living standards, and live a decent life.
3. Emphasize fairness, equity, equality in available opportunities, and anti-discrimination policies, to improve negative feelings toward current organizational policies. Through enforcing equal employment opportunity procedures and follow up the implementation of those procedures. Updating the public service law with human resources such as scholarships, education, health education, and allowances.
4. In addition, implement talent-based policies regarding recruitment, selection, career advancement, and promotions.
5. Continuously review and develop advanced organizational systems, such as; career advancement, promotions, salary scales, incentives and rewards, in addition to appreciation and acknowledgment of competent employees.
6. Focus on investing in human resource assets through applying professional human resource practices related to human resource planning, and training and development. In order to enhance the value of human resource assets. The top-level management needs to follow those practices on the strategic level in order to assure the positive impact of those practices. Developing succession strategies / designing a succession system for supervisory positions, and listing (identify) the various expected competencies on a regular basis.
7. Improve participatory, free expression, and professional liberty mechanisms to allow enough space for talented employees to impart positive change and development. Using forums, open communication channels, public meetings, complaints procedures, etc.
8. Consider conducting on regular bases surveys to assess employees’ satisfaction, migration intentions, perceived occupational life quality, etc this will help being proactive and reduce the migration rate.
9. Communicate with migrated employees to investigate reasons behind their leaving decision to develop solution to brain drain cause factors.
10. Establish in collaboration with international bodies a joint fund or a program that targets general physicians needs to specialize. In addition to facilitate specialist physicians from abroad to run the board programs needed but not available in the Gaza Strip.

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