The Impact of Total Employee Involvement and Management Leadership on the Healthcare Effectiveness inYemen

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Abstract: This research was developed for the purpose of finding out the impact of total employee involvement and management leadership on organizational effectiveness in the health sector in Yemen. The main problem of this research was found based on the research of Dureab et al. (2020) who indicated that the healthcare services in Yemen lack effectiveness, specifically over the COVID-19 crisis. The healthcare sector suffered from the high demand for its services, which almost become out of control.

For this research, it was decided to use the quantitative approach. Because the quantitative approach was used, the data source will be primary data for this research. This research will use the questionnaire instrument to be the tool to collect the data. This research will be located at Sana'a city (the capital city in Yemen); because most of the healthcare institutions are located there. These questionnaires were distributed to the research samples, who were having the size of 379 employees in the healthcare institutions in Yemen.

Regression test has been used to conduct statistical analysis from the primary data. Several tests have been conducted for the collected data. The main results found that there is a positive and significant relationship between total employee involvement and organizational effectiveness in Yemen. Also, there is a positive and significant relationship between management leadership and organizational effectiveness in Yemen.

It has been observed that healthcare professionals in this group perceive the quality of health services they produce in their institutions as low. In order to eliminate this perception, it should be evaluated according to the leadership qualities of the managers selected under the responsibility of the top managers of the health institutions, and the workload should be reduced with the transfer of authority

Keywords:

1. Introduction

Effectiveness was used as a synonym for efficiency until the 20th century. For this reason, the founders of the Classical School were contented with developing universal principles to increase efficiency (Aoun et al., 2018). Organizational effectiveness has been handled in different ways by many authors due to differences in their perspectives. Some authors have emphasized their internal strength and their impact on organizational effectiveness, and stated that the organization can be effective only when the relevant constraints are satisfied and organizational outcomes approach or exceed the goals. On the other hand, (Aoun et al., 2018) considered organizational effectiveness as an external standard of how well the organization meets the demands of various groups. These authors included the usefulness of the work done by the organization and the extent to which its resources were used during the work. Despite the differences in approach, organizational effectiveness is explained in the literature as the level of achieving the "end" that the organization aims to reach (Wang et al., 2017).

Yemen is one of the poor countries that face many economic, political, and health problems. Post the demonstrations and protests in Yemen in 2011 and the situation is getting worse year after year. Post the war in 2015, Yemen entered into more complex and ruinous stages than before. Currently, there is no stability in Yemen at all, which makes the issue of health a serious issue that is largely ignored in the country (Al-Worafi, 2020). Most of the conflicting groups in Yemen are looking for victory over other groups, forgetting the entire tragic health situation in Yemen. Many diseases and epidemics have recently spread in Yemen over the past five years, which affects the general health situation in Yemen (Suprenant et al., 2020).

Dureab et al. (2020) indicated that the healthcare services in Yemen lack the effectiveness, specifically over the COVID-19 crisis. The healthcare sector suffered from the high demand on its services, which almost become out of control (Raju, 2021).

The aim of this study is to find out the impact of total employee involvement and management leadership on the healthcare effectiveness in Yemen. The remaining sections of this research are designed as follows: Section 2 defines the literature review towards the study variables; Section 3 focuses on illustrating the model used in the

study as well as the hypotheses development; Section 4 shows the methodology used; Section 5 analysis the collected data; Section 6 discusses the findings and compare them with the findings of previous studies; and finally Section 7 represents conclusion which includes future research directions.

2. Literature Review

2.1 Total Employee Involvemnt and Management Leadership (Total Quality Management)

Ali and Raza (2017) wrote on quality, beginning with a booklet called Statistical Methods Applied to Manufacturing Problems. He conceptualized the Pareto principle, emphasized the responsibility of management to improve the fulfillment of customer needs. Among his main contributions, the quality trilogy stands out, which is a cross functional management scheme, composed of three administrative processes: planning, improving and reaching unprecedented levels of performance, Al-Maamari et al. (2017) ensures that quality occurs when a product or service is suitable for use; thus, quality consists in the absence of deficiencies in those characteristics that satisfy the customer, that is, the user's opinion is that which indicates that quality is in the actual use of the product or service, Andrade et al. (2017) focus is towards quality improvement. Aquilani et al. (2017a) played an important role in the movement for quality in Japan due to his promotional activities and his contribution in innovative ideas for quality. Ishikawa was more people-oriented than statistics-oriented, promoted greater participation from all employees. Like other authors, he believed that quality begins with the customer, and understanding their needs is the basis for improvement; complaints should be actively handled as opportunities to adjust quality (Hardcopf et al., 2019).

According to Feng et al. (2017) quality circles in Japan, or groups of people from the same work area who are dedicated to generating improvements, the use of the seven basic quality tools in which it stands out, the cause-effect diagram, also called the Ishikawa diagram, and the mention of total quality control, as a new management philosophy, since it achieves a superior organization with a better competitive position in the market. Ishikawa's main objective was to involve everyone in quality development and not just management, Garcia et al. (2017) proposals focus on the problems of motivation and expectations. Some of his most important contributions are: fourteen steps, where he explains step by step how an organization could start and continue its movement for quality, determined the phrase to do it right the first time, resulting in a cost reduction important, applies the concept of prevention to achieve zero defects. Hrnčiar and Madzík (2017) defines what quality is conformity with needs or fulfillment of requirements. This definition is framed towards production; it is closely related to the inspection of processes. In keeping with its motto, quality is free, Crosby establishes the effect of nonconformity and focuses attention on prevention issues. For Janssen et al. (2017) quality is a corporate way of life, a way of managing an organization. In the 1950s he defined total quality as an effective system of integrating the development of quality, its maintenance and the efforts of the different groups in an organization to improve it, allowing production and services to be carried out at the most economic levels that allow the satisfaction of a client.

According to Karim (2017), the quality of the product and service can be defined as the total result of their characteristics, in terms of marketing, engineering, manufacturing and maintenance, through which the product or service in use will satisfy the customer expectations. After reviewing the concepts described above, quality is defined as that which aims to fully satisfy customer needs, through products and services made with zero defects that exceed their expectations. It should be noted that the concept of quality is multidimensional, because the needs of consumers are multiple and diverse, as they include aspects such as aptitude for use, design, safety, reliability or respect for the environment, it is also flexible so factors such as turn, size and others are not decisive for the application (Osei et al., 2017).

Quality, therefore, is considered as a primary administrative strategy of business, since it mainly encourages positively and firmly the healthy growth of the business, provides a competitive advantage, is oriented to full customer satisfaction, planning reasonable costs in this way. quality. Quality does not cost, but generates profits in all aspects, since every penny spent doing things wrong, doing them again or doing them instead of others becomes half a cent in profits. In this way, quality helps to reduce the operating costs of organizations by defining methods to eliminate the rework that causes mistakes and by establishing a continuous improvement in processes, thus generating an increase in the productivity. Khoja et al. (2017a) mentions that quality consists of continuous improvement activities that involve each of the members of the organization. Quality, then, is vigorously and revolutionary projected as a new business management system and a first-order factor for the competitiveness of companies (Mebratu et al., 2019).

According to, the previous concepts of quality have partially interpreted it. The concept of quality as excellence highlights the quality of design. The technical definition of quality insists on the quality of conformity. Statistical and fitness-for-use views combine both dimensions. The concept of quality based on customer

perception focuses on quality of service. Therefore, they focus either on internal efficiency (conformance to specifications, fitness for use, reduced variability or cost reduction), or on external efficiency (meeting customer expectations). The concept of total quality tries to combine both approaches, considering them complementary. The intense competition in the design and development of products in better and faster ways, the constant demand for new requirements by customers, rapid technological change, the demand by other stakeholders for new attributes - environmental quality by related stakeholders with the protection of the natural environment, to cite an example-, together with the limitations of the first concept of quality as value, have led to the multidimensional concept of total quality as value creation (Zhou et al., 2019).

It was in the second half of the 20th century, when extraordinary attention was devoted to quality management, due to its concepts of planning, control, assurance and improvement, particularly from the 80's and up to the Today, taking as a reference the so-called Japanese industrial miracle of which the Western world is just beginning to understand the factors of its success. In Yemen, this has been going on since the early 90's, although at a slow pace and with strong ups and downs, if it compares it with that of first world countries. The signing of the Free Trade Agreement (FTA) between the United States of America, Canada and Yemen in 1993 is a sign that globalization has intensified and has determined the need for companies to implement a quality approach in their administration (Mundiri, 2017).

Quality management is defined by various authors as follows: According to Owusu-Sarpong et al. (2017), quality management is the commitment of an entire organization to do things well, that is, it affects each person in an organization and therefore, for quality management to be prosperous and successful, it must be accepted by all members of the organization. Pantouvakis and Karakasnaki (2017) suggests that quality management is a global way to improve the efficiency and flexibility of the business, through the incursion of a cultural revolution. Psomas and Antony (2017) affirms that quality management is a management philosophy generated by a practical orientation, which conceives a process that visibly illustrates its commitment to growth and survival organizational, that is, action focused on improving quality at work and the organization as a whole. Quality management, then, can be considered as the management mode of a company, focused on quality and based on the participation of all the members that aims at customer satisfaction and the benefit of all members of society. On the other hand, quality management is considered as the set of activities of the business function that determines the quality policy, objectives and responsibilities and implements them by means such as quality planning, control quality, quality assurance and quality improvement, within the framework of the Quality system (Peter et al., 2016) .

Quality management operates throughout the quality system. According to Ross (2017) quality management is in the hands of each member of the company after being promoted by the management, with the aim of obtaining the quality required by the client at the lowest possible cost. According to Shams (2017), the quality system management has to demonstrate that the organization is capable of providing a product or service that consistently meets the requirements of the clients and the corresponding regulations, achieving customer satisfaction through the effective application of the system, including the prevention of non-conformities and the process of continuous improvement (Hsu et al., 2017).

Total Employee Involvement: Staff involvement in the long-term commitment of staff, with a change in the culture of the enterprise (Esen, 2011). Everyone's participation is important in TQM. Participation should not be just for the continuous improvement of quality. Full Participation is also important to increase motivation. In the decision-making process, employers will try to implement the decisions more carefully if the participation of the employees, even if only in consultation, is ensured (Öztürk, 1993). All the talents and skills of human resources are used with total participation. In addition, the internal parts of the organization are ensured to work in harmony. If a business does not have Full Participation, the company will depend on the capabilities of only a few people and will be deprived of the synergy to be achieved. (Bozkurt, 1997) TQM is a methodology, philosophy, or culture that does not exist without teamwork. There should be more to be stated in an organizational chart regarding teamwork. Team members should feel free to be honest and afraid of making minor mistakes. The teams can take various forms, such as design review teams, executive committees, quality improvement circles, cross-functional teams. In order for any team shape to be successful, it must be empowered and more or less self-managed to decide based on their level (Fletcher, 1996).

Management Leadership: In Total Quality Management, the leader is responsible for creating groups and influencing individuals and groups to achieve goals (Esen, 2001). Perhaps the most important element of Total Quality Management is strong management leadership. This concerns not only the top-level person in the organization but also those directly connected. (Pulat, 1994) Leaders should be aware of whether their employees are ready to implement the changes. Otherwise, the vision of leaders about the future cannot go beyond dreams. (Fraizer, 1997) Managers' task is to make management decisions and follow developments. Therefore, the

transition from the existing system to TQM depends on the decision of the top management. It is impossible for a change in this direction to occur without the leadership of the managers. The changes that should take place should start at the top management level. If these changes start from the lower tier, there will be conflicts in management (Şimşek, 2002).

2.2 Quality in Healthcare

It is often stated that "quality" in healthcare is a relative concept, for various reasons. It is relative to who uses the term and the circumstances in which it is invoked. Similarly, relativism has another perspective, since quality is similar in nature to truth and beauty, and constitutes an ideal that is difficult to compromise (Martíni et al., 2020).

The foregoing leads to the conclusion that "quality" is also a term that carries the user's values, thus being highly subjective. Hence, in the specialized literature there are different conceptions of quality that transcend the evaluation processes in healthcare institutions. Among the most traditional is the classification by (Khoja et al., 2017a) that raises four options, namely: a) Quality as an exception is a traditional conception that takes for granted that it is something special. Three variants are presented in this conceptualization:

- Quality seen as something of a class, with an elitist and exclusive character.
- Quality equivalent to excellence, to the achievement of a very high standard that is achievable, but in very limited circumstances.
- Quality understood as compliance with minimum standards.
- Quality as perfection or consistency.

In this case, to establish it, a judgment is formulated in accordance with the specification, which is predefined and measurable. This definition allows hospitals to have different sets of standards for different types of institutions. This definition is based on two premises: that of "zero defects", and that of "doing things right." In this case, excellence is defined in terms of particular specifications. The specification itself is not a standard nor is it evaluated against one (Zakrisson et al., 2020).

On the other hand, it has been seen that the provision of non-universal standards for healthcare is possible. The "zero defects" approach is, in the opinion of Peters and Waterman (1982), intrinsically linked to the notion of "quality culture", in which everyone in the organization is equally responsible for the final product. Doing things, it implies that there are no errors at any stage of the process and that quality is a shared responsibility, which is close to the concept of "total quality".

b) Quality as an aptitude for the achievement of a mission or purpose implies the relationship with the way in which a certain product or service fits a purpose, which usually corresponds to the specifications of the "client". In the context of healthcare, the use of the concept of quality, according to user requirements, raises several questions. Among them: Who is the customer? Patients or funding agencies? Employers or parents who pay for their children's healthcare? And what are patients? Customers, products, or both? In this definition, a quality institution must clearly establish its mission or purpose and be efficient and effective in achieving the objectives that it has proposed. But how does it know that it is fulfilling the mission? Specialists point out that this is the role of self-regulation, since it consists in making sure that there are mechanisms, procedures and processes to ensure that the desired quality, however defined and measured, is effectively delivered (Gräff et al., 2017).

This definition is usually used by governments to ensure that the allocation of resources is appropriate.

c) Quality as added value. This conception has been used in healthcare since the mid-eighties, in several countries, associating it with cost and demanding efficiency and effectiveness from the sector. Quality could also be defined in this perspective as "the degree of excellence at an acceptable price and the control of variability at an acceptable cost". Underlying this approach is the concept of "accountability", since the responsibility lies with the funding agencies and the beneficiaries.

d) Quality as transformation is based on the notion of qualitative change. It questions the product-centered approach to quality A quality healthcare is one that effects changes in the patient and, therefore, presumably enriches him. The second element of this definition is the empowerment of the patient to influence their own transformation (Kolotkin et al., 2016).

This allows, on the one hand, to take ownership of the learning process and acquire responsibility in determining the style and way of learning. On the other hand, the transformation process itself strengthens the ability to make decisions. According to Teoman and Ulengin (2018) for ISO standards, quality has been defined as "the degree to which a set of inherent characteristics meets certain requirements". Deming points out that quality "is the reduction of variance, for which evaluation is essential". In turn, Al-Najjar et al. (2019) argues that

the concept of quality is a social construction, which varies according to the interests of groups inside and outside the institutions. For example, academics assign importance to academic aspects (knowledge); employers to the competencies with which patients graduate and that allow them to integrate into work; patients to employability. It is necessary that this social construction is adopted and shared and goes through the work of the essential functions of the hospital (Liou et al., 2020).

Given that there are different concepts and definitions of quality in healthcare, any intervention carried out to ensure or increase it implies having the ability to harmoniously and differentially integrate the different components involved in all healthcare al action, that is, it means considering both the orientations and processes and results. For, "quality assurance" is understood as compliance with a set of minimum requirements that guarantee that institutions have the conditions required for perform their peculiar academic functions; research, teaching and extension. For the problem of the quality of healthcare is not simple, it is associated with a multiplicity of factors such as study programs, patients, physical abilities, institutional climate, etc. And although it is not clear what the relative weight of each of these factors is, it is known that without better 63 employees, without renewed and without patients with the ability and willingness to study, there is no possibility of obtaining good results (Liou et al., 2020).

From the comparison of the quality indicators, it could summarize that the quality model for the hospitals of our country, in the hospital professional careers of administration, specify in considerable detail the way to measure quality, which, it could limit the creativity and ingenuity of the people involved in this process, however it should be clarified that it is not oriented as how to plan, organize people, direct and control the entire process. Likewise, in this comparison there are coincidences in factors such as study programs, patients, infrastructure and management. The accreditation process is a way of getting hospitals to do quality work and to achieve this they will have to decide how to manage quality (Gupta and Gupta, 2019).

2.3 Healthcarein Yemen

The health care system remains behind in Yemen. Total spending on health care in 2002 accounted for 3.7% of GDP in the same year. Spending per person for health care was very low compared to other countries in the Middle East. According to the World Bank, the number of doctors in Yemen increased by more than 7 percent between 1995 and 2000, but as of 2004 there were still only three doctors per 100,000 people and 0.6 beds available per 1,000 people. Yemen ranks among the countries that suffer most from Health problems and diseases, as this sector still faces many challenges, the most important of them are: The low share of health in public spending, which ranges between (3-4)%, which made many health centers suffer from a lack of equipment and financial resources and technical and medical cadres in addition to limited The spread of health services, especially in the countryside (Morris et al., 2019).

The well leaving Yemenis can travel abroad for either the Gulf states, Europe, and the United States to receive treatment, even Ali Abdullah Saleh went to Saudi Arabia to treat burns he sustained following a failed assassination attempt in 2011. Members of the slim and shrinking middle class are heading to Egypt and Jordan. He does not go to the Yemeni hospitals located in the cities, although most of the population lives in the countryside except for the poor classes that is most of the Yemenis.

The United Nations has said it will seek to raise two billion dollars for Yemen to keep aid programs running until the end of the year, noting that I am already on the brink now and the situation is very worrying (Suprenant et al., 2020).

The charitable organization Doctors Without Borders, which runs the main center for treating people infected with Coronavirus in southern Yemen, said that the center recorded at least 68 deaths in about two weeks, which is more than twice the outcome announced by the Yemeni authorities so far. A spokesperson for the government committee on coping with the Coruna virus was not available in Aden, the main city and port in the south of the country.

War-ravaged Yemen, whose population suffers from malnutrition and has levels of immunity among the worst in the world, is divided between the Saudi-backed government that is based in Aden and its opponents in the north, the Houthi group.

The government announced in Aden since April 10 that it had monitored 180 cases of HIV and 30 deaths in the areas it controlled, while the Houthis, who control most of the major urban centers in the country, announced the detection of only four injuries and that no deaths were recorded in the capital, Sanaa (Suprenant et al., 2020).

Médecins Sans Frontières said that the center for the treatment of those infected with Covid-19 infection caused by the virus in Aden, which serves the entire south of the country, received 173 patients between April 30 and May 17, at least 68 of them died, indicating "a wider disaster" A band unfolds in the city. "

"What we are seeing in our treatment center is just the tip of the iceberg in terms of the number of people who have become infected and are dying in (Aden)," Caroline Sejan, director of operations for MSF in Yemen said in a statement.

"People come to us and it is too late to save them, and we know that many others do not come at all, they just die in their homes." Sources said that the two parties do not reveal the total number of cases. A government official in Aden acknowledged that the authorities were having difficulties monitoring cases. The Houthis have denied the government's accusations that they are covering up the spread of the disease.

In its statement, Doctors Without Borders said that the lack of ability to perform the tests made it difficult to determine the exact numbers, but that the patients who died "were clearly infected with symptoms of Covid-19". The statement added that endemic diseases such as malaria and dengue fever "never result in such a large number of deaths during this short time" in Yemen.

2.4Theoretical Framework

The TQM approach, based on the best use of resources, the absence of waste, stops and intermediate stocks, has emerged as a result of the obligation to meet unlimited human needs by using scarce resources efficiently. This is the most important reason behind the spread of the TQM understanding from Japan, which has very limited resources in terms of resources, to the whole world. Total Quality Management in accordance with the Quality Award criteria, "the customer satisfaction, the satisfaction of employees and to ensure the total positive ethics, business results in the employee policies and strategies to achieve excellence, resources and processes in an appropriate leadership style of managing and directing (Malik et al., 2018).

Total Quality Management “It is a business management model that aims to provide customer satisfaction with long-term goals, to gain benefits for the society and to work, based on quality and participation of all employees.

According to Gholipour et al. (2018), Total Quality Management; is a form of business management that focuses on quality and aims to achieve customer satisfaction in the long term and to gain advantages for its own employee and society. According to Habbal and Jreisat (2018), Total Quality Management is a management idea that aims to ensure that employees are informed and empowered and that all processes are continuously improved through teamwork.

Total Quality Management is an organization's integration of all its functions and processes to succeed in continually improving the quality of its goods and services. The aim is customer satisfaction. The understanding of Total Quality Management increases the efficiency of the organization while increasing the quality on the one hand. Employee satisfaction should also be taken into account in the production and service activities carried out considering customer satisfaction (Gholipour et al., 2018).

Total quality ensures that quality costs do not decrease but, on the contrary, decrease. The aim here is not to have a quality based on inspection and control of a specialist, but to have a quality system that employees are responsible for. Because quality is an issue that concerns the entire organization of an organization. All members of the organization are responsible for meeting the demands and expectations of the produced goods and services. Employees are responsible for achieving this level of quality as well as management. Organizations wishing to establish the Total Quality System must accept the mutual interaction and coordination of the internal units (Bajaj et al., 2018).

As it can be understood from the explanations, it emphasizes the need for a kind of restructuring in Total Quality Management in which principles such as customer orientation, continuous development, statistical thinking group work, continuing education, cooperation with suppliers, leadership of the senior management and preventive approach are adopted. Today's professionals should understand the importance of historical approaches in management. If the historical perspective of managing the environment is understood, existing scenarios can be easily addressed. If management theories are understood, it is clear that individuals can do business in a defined and structured way as their strategies will be very clear and conceptually correct. Management is a science dating back centuries. At this critical time, a “guide” is required to ensure quality, increase efficiency and achieve success in order to meet daily expectations and public demands (Raju, 2021). This guide, which can also be applied in government and non-governmental organizations, is very common. Throughout history, many have contributed to management theories with their experience and research. The concept of management continues to grow by developing new strategies and will continue until the world returns (Bajaj et al., 2018).

The concept of theory was defined by Bacharach (1989) as an expression of the relations between the concepts within a series of assumptions with certain limits. Koontz (1961) divided management theories into six different groups as follows (Kitana 2016): management process thought school, empirical school of thought, human

behavior school of thought, and social systems school of thought, school of thought theory of thought and math school of thought.

Kitana (2016) stated that there are many other classifications, for example, in 1976, Evans categorized the administrative theories into eleven. But Hitt, which clearly differs from previous perspectives, states that the classification of Michael A, Middle Sis, R Dennis and Mathis, Robert L. (1979) is now widely accepted. This classification:

- Classical school of thought,
- Neoclassical school of thought,
- It is a modern school of thought.

Kitana (2016) also stated that the categories mentioned above have a similar management ideology group.

2.3 Conceptual Framework

The effectiveness of a system is measured by the output obtained as a result of a certain time. This output is related to the degree of realization of the enterprise's goals or duties. From this point of view, business effectiveness can be considered as the evaluation of all efforts made to meet the objectives of the business. The measurement of business effectiveness is a process that determines how far the business has reached its goals. Setting and measuring effectiveness targets is related to feedback. The effectiveness measurement system can be seen as an information-gathering process to make decisions within the organization and to support them during the implementation phase and to harmonize or regulate them. It is important to plan future works rather than checking past activities in TQM. In order to do this, the information should be collected for possible problems in the future (from customers, the latest control of the product and the production process). In TQM, it is aimed to reach zero errors by using this information especially in continuous improvement (Oakland and Marosszeky, 2017).

Considering the impact of human resources in business activities, we can consider the criteria in effectiveness measurement from two different aspects as qualitative and quantitative criteria. These are (Khoja et al., 2017b); Qualitative criteria; its subordinate relations are related to staff training, empowerment and orientation. Quantitative criteria; Cost analysis and standard deviations can be defined as quality levels depending on the amount of production, sales rates, profit rates, earnings and circulation rates of assets, market share, and growth rate. Criteria classified as qualitative measures have an important place in terms of being impressive effectiveness in the quantitative criteria of the business. As a result of the positive reflections on the qualitative measures, which are maximized with the TQM approach, it maximizes the quantitative effectiveness.

As a result of the effects of the TQM understanding on management effectiveness, it was observed that the intra-company effectiveness increased positively and the profitability increased in parallel. The effects of the TQM understanding on customer satisfaction, employee motivation, productivity and quality in products maximize business effectiveness (Feng et al., 2017). The integrity in the chain of activities provided by the TQM approach requires the same integrity between effectiveness dimensions in order to make a sound assessment. Each effectiveness should be analyzed not in different dimensions, but in relation to each other. The effectiveness of the targets determined by the management should be in a dimension covering all processes. The effectiveness of quality and efficiency dimensions in the processes is also integrated dimensions in terms of operating performance. When the effectiveness of the enterprise in all areas is integrated with the quality and efficiency of its activities, this situation will lead to efficiency throughout the enterprise, and the increase in the overall effectiveness of the enterprise will be manifested by the increase in the convenience and profitability in the budget (Raju, 2021).

Deming regarded the quantitative effectiveness measurements in enterprises as a fatal disease and foresees to give up. According to Deming, excessive adherence to labor standards and goals will prevent continuous improvement efforts in businesses. As an example; When workers are asked to produce a certain number of production on a given day, the worker will produce as much as that number, but there will be quality problems. In order to achieve zero errors underlying TQM management, employees must do their job right the first time. Employees who want to reach a certain number will make faulty production because they compete over time. This contradicts zero error, the basic principle of TQM. Therefore, quantitative effectiveness measurements should be abandoned (Aletaiby et al., 2017).

In his study, Stachevsky, and Elizur (2000) examined the relationship between the degree of participation of employees and effectiveness. The degree of involvement of employees in decisions in quality management is the factor that affects their improvement efforts the most. Improvement efforts also affect the performance of employees as they affect their performance. The degree of participation of employees in decisions plays a key role in the success of TQM. The degree of participation in decisions can be defined as the mutual relationship between

supervisors (superiors) and those who are supervised or subordinates. A motivation program should be designed to increase performance and satisfaction in the workplace with participatory management (Al-Maamari et al., 2017).

3. Research Model and Hypotheses

Brockman et al. (2019) by the higher percentage obtained from the surveys we decided that the quality of service that It is practiced in Plaza Vea hypermarkets, it is good since they meet the expectations of customers, 61% stating that they are satisfied, in this way repeating the purchase and recommending the service to close people is achieved, since it is one of the key factors to achieve business success. Fulfilling the expectations of the clients about the needs that arise from the product or service offered by the companies, in this case Hipermercados Plaza Vea, leads to the repetition of the service; the customer perceives that the quality offered is adequate and feels comfortable when making purchases. Then the authors demonstrated that there is a direct relationship between the variables of service quality and customer satisfaction (80%) according to the Chi-square statistic. In another part of the survey, the degree of satisfaction generated by the service provided was asked, showing that 52% are satisfied and there is 14% dissatisfied, so it is necessary to carry out a control by area and by store, depending on what is failing, to be able to reinforce and improve them. In this way that customers feel satisfied with the service provided. Plaza Vea has equipment with a modern appearance, its facilities are visually attractive, it has the necessary material to improve customer service, the distribution of rooms or offices is adequate, thus allowing to provide an improved quality of service manifesting itself in satisfaction the client's.

Regarding the personnel of Plaza Vea, it is efficient demonstrating that 70% are satisfied, but there is a percentage dissatisfied with respect to the treatment of the cashier personnel, it is one of the main problems and it must be taken into account that all the Members of the company are responsible for the level of quality of service perceived by customers. Based on the question about the cashier staff, the waiting time to be attended, customers show 29% satisfied and 31% are dissatisfied, so it is necessary to try to improve this aspect since the quality of service is also perceived by the waiting time Education in customer satisfaction is very important since it helps to help the organization's objective, this education encompasses both the capacity and technical skills to offer a better service and that which every employee should have. Konadu et al. (2020) raise the User satisfaction degree in opening a savings account at Banco de la Nación – Lambayeque. For which the type of research used was descriptive, with a proposal since it collaborated with a proposal in accordance with reality and that allowed to solve the problem raised, likewise the non-experimental research design was applied based on information obtained and generated, in Regarding the population, it was 600 people from which a sample of 65 clients of the Banco de la Nación de Lambayeque was obtained. The instruments used to collect information were originated by a survey directed at clients, a question guide directed at workers and the observation method for the care processes based on the Kano model, then the degree of user satisfaction rises in the opening of a savings account in the Banco de la Nación - Lambayeque. 0.710) to know the quality of the management of territorial sports federations, allowing their interpretation, determining the strong, intermediate and weak points to maintain or readjust and propose action strategies to improve the management of the entity. Grisel Castillo Almeida Cecilio Valdes García Rosa A. Hernández MartínezAmarilys de la C. León ParedesHaidelynDifurniauGráu Management of quality indicators to improve the editorial process. The objective of this article was to analyze the scientific methods used to measure the quality of scientific journals and evaluate the selected indicators to determine the critical success factors for improving the editorial process. Scientific methods were used in the research, an expert assessment of the journal was carried out and a bibliographic research was carried out. The result of the study of quality indicators for the improvement of the editorial process of the RevistaAvances is shown, taking into account the difficulties in managing them in digital magazines. The indicators that were selected were evaluated and success factors were determined.

The need to strengthen said process was emphasized, where taxpayers, technological and information resources, as well as the skills, knowledge and ethics of the participants, are essential to meet the challenges of the new times. To do this, a diagnosis of the current situation was made, then the conditions that frame the use of quality systems were described. It is a descriptive research with field design. Two questionnaires were applied. One aimed at general administrative managers and another aimed at those in charge of the departments and / or bodies responsible for quality. Between the Most relevant results are that only two companies have a quality management system based on strategic thinking. Most companies use quality management tools routinely and they are not given due importance, additionally, there are weaknesses in customer relationships (Barabino and Di Francesco, 2016). Hence, this paper hypotheses the following:

H1: There is a positive and significant relationship between total employee involvement and the healthcare effectiveness in Yemen.

H2: There is a positive and significant relationship between management leadership and the healthcare effectiveness in Yemen.

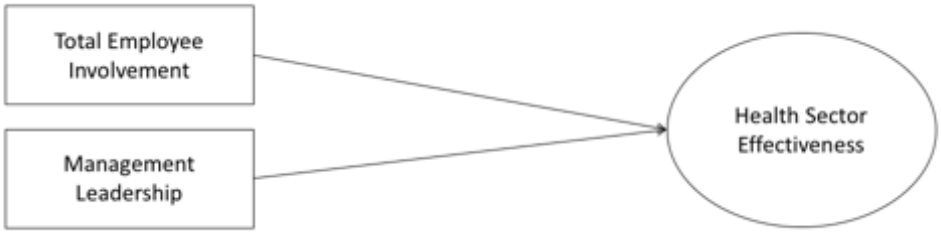

Fig. 1. Research conceptual model.

4. Methodology

For the current research, the researcher has come up with the problem statement followed by the research objectives and questions. Several literature were provided for the purpose of coming up with the most fitting methodology to be used in the study. This research will use the quantitative research approach. In the quantitative approach, this research will use the survey questionnaire instrument to collect the data from the research sample. The sample of the study will be all the employees, staff, doctors, and nurses working in the healthcare institutions in Yemen. The analysis will take a place in the collected data. The analysis will be conducted using the SPSS program.The sample is the subset of the population. The road to choosing a sample is known as sampling. The number of components in the sample is the sample size.For this research, the population will be all the employees of healthcare institutions in Yemen. According to the ministry of health. Hence, based on the table of optimal sampling for social sciences of Krejcie and Morgan (1970), the sample is presented in the 379 respondents that will be receiving the questionnaires to fill. The sampling technique that will be used in this research will be 379.

5.Data Analysis and Results

5.1 Profiles of Respondents

Table 1 shows the respondent's profile for those participating in the study. As shown in the table, 62.3% of the participants belong to the male gender category and (n=236), while 37.7% of the participants belong to the female gender category and (n=143). The result confirms that male respondents were the majority.

The age levels of the participants divided into 4 categories, where 52.5% ranged between 17-25 years of age with n = 198, 37.4% ranged between 26-30 years of age with n = 141, 8.5% ranged between 31-35 years of age with n = 32, and 1.6% ranged between 36-40 years of age with n = 8 from the sample. It is confirmed that most of the respondents are below the age of 30 years old.

Most of the participants hold a Ph.D. with a percentage of 52% with n = 198, for diploma degree 3.4% with n = 12, and for the bachelor level 44.6% with n = 169. It ensures that all the participants were well educated.

The experience of the participants ranged between 1 to 9 years, 86.7% of the participants has an experience from 4 to 6 years with n = 328, 12.2% has experience from 1 to 3 years with n = 46, and only 1.1% has an experience from 7 to 9 years with n = 5. Most of the respondents had experience in between 4-6 years.

Table 1: Profiles of Respondents

	n	**%**		**n**	**%**
Gender			**Education Level**		
Male	236	62.3	Diploma	12	3.4
Female	143	37.7	Bachelor	169	44.6
			PhD	198	52
Age			**Experience**		
17-25 years	198	52.5	1 to 3 years	46	12.2
26-30 years	141	37.4	4 to 6 years	328	86.7

31- 35 years	82	8.5	7 to 9 years	5	1.1
36- 40 years	8	1.6			

5.2 Missing Data Analysis

In statistics, missing information or missing values occur when no information value is discarded for a variable in a perception. Missing information is a typical occurrence and can significantly affect the purposes that can be deduced from the information.

As a result of the non-responsiveness, there may be missing information: no data is hosted for at least one thing or for an entire unit ("subject"). Few things will not be more responsive than others: things related to private matters like pay, for example. Continuous loss is a kind of shortcoming that can arise in longitudinal examinations for example, thinking about progress where a forecast is rewritten after a certain period of time. Missing occurs when members leave before test closings and at least one guess is missing.

In some situations, one or more observation dates produce invalid or missing values. The ignorance solution simply discards the missing value of the time series, but based on several scholars such as A. Little and Rubin (2014) accept a missing value within 15% to 25%, and considered it common. The following table 2 confirms that the total missing values numbers are not exceeding 25 % from the total observations of the study, while the total number of missing values for the variables was 21.

Table 2: Missing Values

Variable	Number of Missing Values
Total employee involvement	3
Management leadership	0
Organizational effectiveness	1
Total	**4**

5.3 Assessment of Outliers

Outlier is an informational point that differs fundamentally from other information foci within an informational collection. Outliers hinted at here and there as irregularities, oddities, or freaks, can occur by chance in some random distribution. In the enormous examples, there is an assumption for a few outliers, and their quality alone does not suggest any oddity and should not cause concern over the entire index of knowledge. In any case, outliers can likewise be indicative of estimation error, a sloping distribution, or foci of information from an alternative hidden allocation. Numerous factual tests are sensitive to the presence of outliers, and the capacity to discern an outlier along these lines is an important piece of information analysis. Normally outliers are registration and prediction errors or erroneous circulation assumptions (Brannen, 2017).

Fr the current research, the assessment of outlier is used to find out if there is observed problems with the collected data or not. However, the following table 3 confirms that there is no significant of outliers issues within the data.

Table 3: Examining the Existence of Significant Outliers

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.708	4.718	2.977	.925	379
Std. Predicted Value	-2.452	1.882	.000	1.000	379
Standard Error of Predicted Value	.029	.138	.058	.016	379
Adjusted Predicted Value	.685	4.725	2.977	.926	379
Residual	-1.222	1.088	.000	.473	379

Std. Residual	-2.569	2.287	.000	.993	379
Stud. Residual	-2.589	2.309	.000	1.001	379
Deleted Residual	-1.241	1.110	.000	.480	379
Stud. Deleted Residual	-2.609	2.323	.000	1.003	379
Mahal. Distance	.410	30.752	4.987	3.429	379

5.4 Discriminant Validity

Discriminant validity (or divergent validity) proves that constructs that should not have any factual relationship do not.

Discriminant validity would ensure that, in the study, factors that do not overlap do not in fact overlap. Discriminant validity or divergent validity tests whether concepts or measurements that are not supposed to be related are actually unrelated. In other words, discriminant validity helps a researcher to determine if two measures that should not be correlated/related are actually not related. According to the following table 4, the variables have shown perfect and positive correlation because all the variables obtained values of r = greater than 0.4. The values found for the variables (total employee involvement, management leadership, and organizational effectiveness) were in the range of 0.795 and 0.835.

Table 4: Results of discriminant validity by Fornell-Larcker criterion

	IEG	OC	TC
Total employee involvement	**0.819**		
Management leadership	0.223	**0.835**	
Organizational effectiveness	0.562	0.496	**0.795**

Note: Diagonals are representative of the square root of the average variance which is extracted, whereas the other entries represent the correlations.

5.5 Descriptive Analysis

Descriptive analysis is the first step in the statistical analysis of social surveys. The preliminary analysis and summarization of a large amount of data obtained from the survey are carried out to find out the inherent laws of these data—concentration trend and decentralization trend. Univariate analysis is performed mainly by means of statistics represented by various data, such as mean, percentage, and the like.

For the current research, the descriptive statistics is to reflect the perceptions of the respondents based on the questionnaire items based on the mean and standard deviation of the study's variables. According to table 5, the mean statistics for the variables total employee involvement, management leadership, and organizational effectiveness = 3.596, 2.937, and 2.977 respectively. These results ensure that respondents are in average agreement with the items stated for each variable in the questionnaire. Furthermore, the standard deviation for the same variables were = 0.952, 1.147,and 1.039 respectively.

Table 5: Descriptive Statistics for Study Variables

Constructs	N	Minimum	Maximum	Mean	Std. Deviation
TEI	379	1.00	5.00	3.596	0.952
ML	379	1.00	5.00	2.937	1.147
OE	379	1.00	5.00	2.977	1.039

Key: TEI: total employee involvement; ML: management leadership; OE: organizational effectiveness

5.6 Direct Effect Analysis (Hypotheses Testing)

The path analysis in the current study is used to identify the type of relationship between the independent variables and the dependent variable. According to table 6, this test has come up with the following conclusions:

- There is a positive and significant relationship between total employee involvement and the organizational effectiveness in Yemen with Std Beta = 0.305, t = 9.694, and a p-value = 0.000.
- There is a positive and significant relationship between management leadership and the organizational effectiveness in Yemen with Std Beta = 0.307, t = 9.281, and a p-value = 0.000.

Table 6: Summary of the path analysis – the direct effect

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Decision
H1	TEI ->OE	0.305	0.031	9.694	0.000	Supported
H2	ML ->OE	0.307	0.033	9.281	0.000	Supported

Key: TEI: total employee involvement; ML: management leadership; OE: organizational effectiveness

6. Discussion and implications

6.1 Total employee involvement and organizational effectiveness

This study has applied the direct effect test and it found that the total employee involvement influences the organizational effectiveness in the healthcare industry in Yemen positively and significantly with beta = 0.305, t = 9.694, and p = 0.000.

These results fit the results of the previous studies, where the conceptual guidelines of (Moosavi et al., 2017), this work is aimed at determining the organizational structure of the nursing unit within the institution that provides health services of the third and fourth level of health care, and from it, determine the structure and elements that make up the quality management of nursing care, addressing its stages of planning the quality of care, organization of the quality of care and control and improvement of the quality of care as variables (Mukhopadhyay, 2016);

In this way, the foundations are supported that later, in the design framework, allow describing the activities in which in the context of daily practice, the nursing unit is involved in these institutions, approached as a great process, the quality of care management, which articulates the planning, organization, control and improvement of the quality of care in relation to four aspects (subtopics): the teaching-service relationship in the IPS, the nursing model in the IPS, the in the IPS and the quality of care management model in the IPS; and; Finally, and as an added value, the self-evaluation result is offered, which was carried out by the nursing unit with the help of the verification guide designed by the author for this purpose (Gettelfinger et al., 2020).

6.2Management leadership and organizational effectiveness

This study has applied the direct effect test and it found that the management leadership influences the organizational effectiveness in the healthcare industry in Yemen positively and significantly with beta = 0.307, t = 9.281, and p = 0.000.

These results fit the results of the previous studies, where according to Varo, “when production was artisanal, communication between the producer and the client was direct, the product was exactly adapted to the needs of this and, therefore, the quality was maximum and the cost very high”(Nupap, 2016). It can be inferred that the customer determined the quality specifications, production was slow and its costs high, so that customer satisfaction was the concept of quality (Karaca and Durna, 2019).

According to (Manatos et al., 2017), “with the arrival of industrial production, the production, costs were reduced but also the quality of the products. This led to the search for manufacturing procedures that at the same time allowed to improve their quality and lower production costs. That is why at the end of the 19th century the pieces were standardized (manual standardization of pieces). Later, with the formulation of the scientific organization of mind work, the production chain was implemented as a productive system, where manual adjustments can no longer be made” (O’Neill et al., 2016).

According to (Liu, 2017), “the production chain imposed the need to produce the parts according to their specifications in order to reduce costs by reducing average production time, eliminating reprocessing, and reducing the number of parts. faulty. The classic definition of the quality of a product then arises as its conformity to its specifications. From that moment they began to develop statistical methods of quality control that made it possible to infer, with the analysis of samples, if the batches were within the specified tolerance limits ”. In that order of ideas, history records that quality control was a classic approach until 1957. It was precisely that year that, “after the AGREE report; conducted by the Advisor Group on Reliability of Electronic Equipment, Office of Assistant Secretary of Defense (R&D) -, it was found that, despite having passed quality controls, certain products failed shortly after entering service. This finding led to the development of the theory of reliability, which was

identified as a temporary component of quality: the probability that a piece of equipment fulfills specific functions without failure during a specific time (Okwir et al., 2018).

7. Conclusion

This research was developed for the purpose of finding out the impact of total employee involvement and management leadership on organizational effectiveness in the health sector in Yemen. The main problem of this research was found based on the research of Dureab et al. (2020) who indicated that the healthcare services in Yemen lack effectiveness, specifically over the COVID-19 crisis. The healthcare sector suffered from the high demand for its services, which almost become out of control.

This research has developed a comprehensive literature review for the regarding the research topic. This literature review contained theoretical framework that included the underpinning theories and the related theories, as well as conceptual framework. This research has proposed a model to be tested in the study, the model contained two independent variables (total employee involvement and management leadership) and one dependent variable (organizational effectiveness in the health sector in Yemen). Two hypotheses were developed to analyse the proposed model.

The descriptive analytical approach was used in this study; it is one of the most used methods in the study of social and human phenomena, and because it fits the phenomenon under study. It also examines an existing phenomenon or issue from which information can be answered to answer study questions, without the intervention of the researcher.

For this research, it was decided to use the quantitative approach. Because the quantitative approach was used, the data source will be primary data for this research. This research will use the questionnaire instrument to be the tool to collect the data. This research will be located at Sana'a city (the capital city in Yemen); because most of the healthcare institutions are located there. These questionnaires were distributed to the research samples, whowere having the size of 379 employees in the healthcare institutions in Yemen.

For this research, the instrument used to collect data from the research sample in Yemen was the survey questionnaire. The measurement of the direct impact of the independent variables (total employee involvement and management leadership) on the organizational effectiveness in the health sector in Yemen.

SPSS has been used to conduct statistical analysis from the primary data. Several tests have been conducted for the collected data. The main results found thatthere is a positive and significant relationship between total employee involvement and the organizational effectiveness in Yemen. Also, there is a positive and significant relationship between management leadership and organizational effectiveness in Yemen.

It has been observed that healthcare professionals in this group perceive the quality of health services they produce in their institutions as low. In order to eliminate this perception, it should be evaluated according to the leadership qualities of the managers selected under the responsibility of the top managers of the health institutions, and the workload should be reduced with the transfer of authority.

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