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The American University in Cairo

School of Global Affairs and Public Policy

**POTENTIAL USES OF PUBLIC-PRIVATE-PEOPLE-PARTNERSHIPS FOR
IMPROVING THE HEALTH SERVICES IN EGYPT:
A CASE STUDY OF “EGYPT FREE FROM VIRUS C” PROGRAM**

A Thesis Submitted to the

Public Policy and Administration Department

**In partial fulfillment of the requirements for the degree of
Master of Public Administration**

By

Sarah Mohamed Mohamed Farahat

Supervised by

Dr. Khaled Abdelhalim

Fall 2015

The American University in Cairo

School of Global Affairs and Public Policy

Department of Public Policy and Administration

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ABSTRACT

Egypt's healthcare system focuses on providing treatment at the expenses of the strategies of prevention due to the budget limitations. This thesis studies the adopting of Public Private People Partnership (4Ps) model as people oriented development approach that evolved out of the Public Private Partnership (3Ps) approach to improve healthcare infrastructure and its services. The 4Ps model is a partnership that embraces collaboration between public sector and private sector; while engaging the people represented by civil society throughout strategy making and implementation. This approach was conducted through collaboration between the Ministry of Health and Population and Telecom Egypt, with civil society engagement through Misr El Kheir Foundation in "Egypt Free from Virus C" program that aims at reducing the percentage of Virus C infections. The thesis studies the potential of applying the 4Ps model adopted in this program in the healthcare sector in the Egyptian context. Based on both the literature and the case study, the thesis concludes that the 4Ps model can be used as a development model to upgrade and advance healthcare services in Egypt. Despite the challenges that faced implementing the program, the findings indicate that the (4Ps) model is a successful developmental approach for the developing countries to deal with their developmental challenges.

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Chapter 1

Introduction

"The wealth of a nation lies within the health of its people ... citizens of any country to lead healthier lives, access to a basic standard of healthcare is necessary" (Haley D. et al., 2011, pp. 83). In Egypt, a large group of citizens do not have access to the basic standards of healthcare; as there are people in Egypt who die from infected blood transfusion. According to H. Razavi (2014), "It was estimated that 24.3% of the prevalent population were infected through transfusion" (H. Razavi et al., 2014, pp. 40). Most of these blood transfusion infections lead to liver related deaths (Waked, et al., 2014, pp. 6) and this is one of the healthcare system challenges in Egypt that this research will shed light on. The Egyptian healthcare system is, to a large extent, a complicated one; "The Egyptian healthcare system may best be described as multifaceted and disjointed as a result of the various levels of government agencies and private organizations that comprise this system of care" (Haley D. et al., 2011, pp. 84).

Lately, the Ministry of Health and Population (MOHP) is encountering challenging issues; most of which are related to financing resources. According to the World Health Organization report in Egypt (2015), the "total health expenditure as GDP is 4.9% in 2011 and 2012, yet the percentage has increased through 2013 to reach 5.1%" (WHO, 2015). After calculating the healthcare spending average in Egypt and being compared to those of other developing countries', it is obvious that the Egyptian expenses are lower than what

the government should actually spend on the healthcare sector as shown in the following table:

Country	2011	2012	2013	Average
Brazil	9.2	9.5	9.7	9.5
Afghanistan	8.1	8.5	8.1	8.2
Jordan	9.1	8.0	7.2	8.1
Iran	6.3	6.6	6.7	6.5
Morocco	6.0	6.1	6.0	6.0
China	5.1	5.4	5.6	5.4
Egypt	4.9	4.9	5.1	5.0

Table 1: Total average of health expenditure % of GDP; by the author and the figures were taken from (The World Bank Official Website, 2015).

The MOHP has two main objectives reflected in its administrative structure and budget allocation: 1) providing treatment, and 2) preventive measures. Most of the government's budget is to cover the treatment section in order to provide healthcare services for patients, with the least resources being allocated to the preventive measures. As a result of the government focusing on providing treatments, it unintentionally neglect upgrading and improving the healthcare infrastructure. The health infrastructure has many components; for instance: physical facilities that make healthcare accessible, and the laboratory devices, as well as the professional training systems.

According to one of the representatives of the Ministry of Health and Population (2015), public healthcare institutions lack the needed professionalism, efficiency, and effectiveness in delivering an adequate and high quality healthcare services. The delivered

services have deteriorated as a result of government's mismanagement, limited financial resources, misdistribution of financial resources, and deteriorating infrastructure.

Thus, there is an urgent need for the government to find new ways to finance the healthcare services development and to encourage investments, with priority given to upgrade and advance the healthcare infrastructure as a way for meeting the increasing demand for access to and high quality of healthcare services. "It is imperative for Egypt's new government to plan for and invest in improving the health of its citizens" (Haley D. et al., 2011, pp. 89).

Consequently, the government started to partner with the private sector to deliver adequate healthcare services through Public Private Partnership (3Ps). Public Private Partnership is defined as "collaborative arrangements between government and private providers for accomplishment of specific activities. PPPs are considered as an instrument for transforming the public services" (A. Singh et al., 2010, pp. 830). According to Naoum (2003), "It is suggested that partnering improves productivity, lowers costs" (Naoum, 2003, pp. 71); therefore, Public Private Partnership (3Ps) has been used in development generally and in the infrastructure services particularly.

Egypt has already applied the 3Ps development model successfully; for example, according to International Finance Corporation (IFC, a member of the world Bank Group), "The government of Egypt sought IFC's assistance in the country's first public private partnerships in the health sector to design, build and operate two new specialty teaching hospitals. These will be located at Alexandria University {in 2012}". Moreover, IFC stated that, "Alexandria University Hospitals successfully secure Egypt's first health sector PPP, providing healthcare services to a population center of 7.4 million" (IFC, 2012, pp. 1).

Governments use the 3Ps model as a financial based approach aiming to use the private financing to deliver the infrastructure services (A. Roumboutsos et al., 2010, pp. 235). According to A. Singh (2010), the 3Ps “can enhance the coverage and availability of affordable and high quality services”. However, because of the multiplicity of actors in the 3Ps model, there were "overlapping roles and fragmentation of authority and power in PPP" (A. Singh et al., 2010, pp. 832- 833).

Moreover, Klijin (2003) stated that, "PPPs are less ideal than the idea. Partners have difficulty with joint decision-making and organization and tend to revert to traditional forms - by contracting out and by separating responsibilities" (E. Klijin et al., 2003, pp. 137) due to the difficulty of achieving mutual understanding and coherence between the partners. In addition, there were some gaps in this kind of partnerships; these gaps came up as a result of neglecting the community engagements and people’s participation starting from planning, decision-making, and implementation till the service provision. Thus, there was a call for engaging the people; i.e. the beneficiaries of the services and the organizations representing them and their interests (Zhang et al., 2015, pp. 408- 409).

Therefore, regarding the 3Ps difficulties, the 3Ps gradually developed into Public Private People Partnership (4Ps) by involving the people in the partnership re-presented in: civil society, NGOs, charitable organization, and community foundation. Thus, the 4Ps model has been suggested by adding another dimension to the 3Ps model as a solution for the government to advance and promote their services. The Public Private People Partnership model “embraces the bottom-up participative strategies which bring the public engagement clearly visible for infrastructure planning and policy making” (S.T. Ng et al., 2013, pp. 370). Zhang (2015) stated that, “the proposed 4P approach is tailored to deliver

reconstruction projects by integrating the 4th P “people” into PPP” (Zhang et al., 2015, pp. 407).

In this regard, this study examines the potential uses of Public Private People Partnership (4Ps) model for improving the healthcare services in Egypt. The research will tackle this kind of partnership (4Ps) in particular to highlight all the required elements, which will lead to a successful partnership and better development results. This will help in avoiding all the obstacles that may encounter either the partners or the program's implementation and management. Consequently, this research covers the following targets:

1. Study the Public Private People Partnership (4Ps) as a potential development model.
2. Investigate a case study in the healthcare sector, to assess the potential uses of the 4Ps model within the Egyptian context.

Furthermore, in order to address the potential of conducting the 4Ps approach in Egypt, this thesis tackles the Public Private Partnership (3Ps) as a developing approach, and its evolution into the Public Private People Partnership (4Ps) model. Subsequently, some cases were chosen based on their successful results within the infrastructure projects in developing countries related to healthcare services. The analysis led to suggesting its usage within the healthcare sector in Egypt, being particularly relevant to facing and solving the problems countered by the Ministry of Health and Population (MOHP).

To illustrate the mentioned potential, a case study was analyzed, which aims to support the essential medical services by upgrading the healthcare infrastructure. The case study “Egypt Free from Virus C” program is considered the first program in Egypt that

targets preventive measures through collaboration between the Ministry of Health and Population, Misr El Kheir, and Telecom Egypt.

This study covers the global literature review of some cases that adopted the Public Private People Partnership framework, as an imperative solution to improve the healthcare infrastructure.

The intended purpose is to present a development model that is not only adopted, but also encouraged by the government to improve and upgrade the healthcare infrastructure in Egypt to meet the citizen's needs, with a view to be replicated in other sectors of national importance such as education, poverty, employment, and others in the Egyptian context to improve public services.

Scope of Research

The government failed to meet the increasing demand on affordable, high quality healthcare service delivery; and is still searching for solutions to improve it. The deterioration of the infrastructure of the health sector has led to the spread of Virus C infection among public hospitals' patients. Therefore, the research concentrates on studying the potential of applying the 4Ps model adopted in Egypt Free from Virus C program as a development model to promote the healthcare infrastructure to see to what extent conducting the 4Ps model is sufficient for improving and upgrading the healthcare infrastructure as a preventive measure to reduce the percentage of virus C infection.

The healthcare sector was selected due to the presence of the 4Ps program, which was used as the case study in this research; however, the thesis addresses the applicability of the 4Ps model in other developmental sectors.

The research tackles the (4Ps) partnership in particular to highlight all the required elements that lead to a successful partnering and developmental result and helped in avoiding all the obstacles that may encounter either the partners or the program's management and implementation.

Chapter 2

Problem Statement

"Egypt has the highest prevalence of hepatitis C virus (HCV) in the world, estimated nationally at 14.7%" (CAPMAS, 2013); according to Lavanchy (2011), "Egypt has a very high prevalence of HCV ... and the country suffers high morbidity and mortality from chronic liver disease ... Approximately 20% of Egyptian blood donors are anti-HCV-positive" (Lavanchy, 2011, pp. 111). The infection occurs among different population groups in Egypt especially in the rural areas (Mohamed, 2006, pp. 1185). According to one of the representatives of the Ministry of Health and Population (2015), the deterioration of the infrastructure of the health sector has led to the spread of Virus C infection among public hospitals' patients.

The hepatitis C infection' percentage depends on the results of two blood tests, which are:

- a) ELISA: it is a specific blood test that examines the presence of the virus and its antibodies within the human blood, regardless whether the person carrying the virus is still infected or had been infected and got treated and cured.
- b) PCR/ NAT: it is another blood test that depends on the presence of an active virus within the human blood. The NAT test targets the DNA of Virus C.

Based on the WHO requirement "primary prevention activities" (WHO Official Website, Dec. 2015) that each country suffering from high prevalence of Haptic C should adopt the NAT blood test - screening and testing of blood, plasma donors- because it searches for the DNA of the Virus itself, which is more appropriate for a country with a

high prevalence of Virus C like Egypt; as the manager of the National Blood Transfusion Center in Cairo (2015) mentioned that, the WHO asked for the minimum blood safety measures for blood transfusion.

The problem occurs when a blood donor has the HCV infection, yet his immunity system did not produce antibodies; because releasing these antibodies -Virus B/ C - usually takes around 24 week. Accordingly, the donors may donate at any week before the week 24; thus, the ELISA blood test would not be able to discover the Virus' antibodies. However, the NAT blood test is capable of discovering the existence of the Virus' DNA. Thus, applying the NAT blood test has the potential to limit and narrow down the infection window period as shown in the following table:

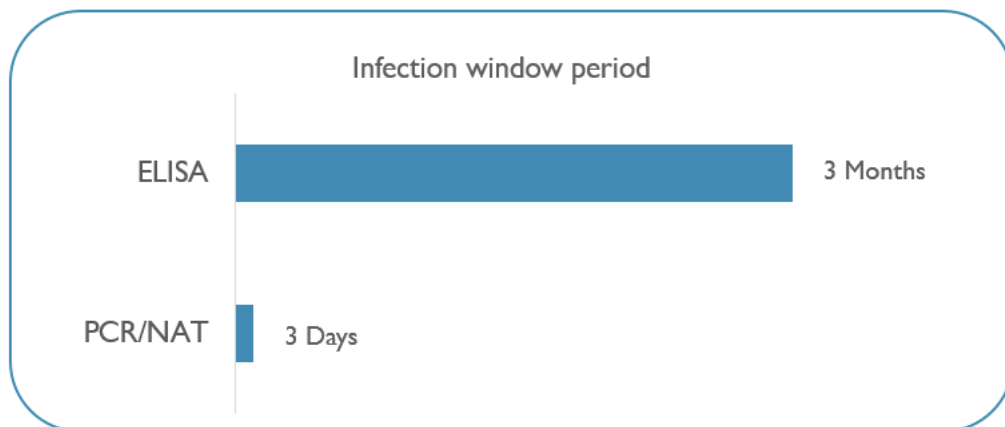


Figure 1: Infection window period, by the author based on interviews.

Within the ELISA blood test, the infection window period estimation is around 3 months, while the NAT blood tests close the infection window period almost 3 days. The NAT blood test technology works on narrowing the infectious period window, which decreases the potential of the Virus C infection. Therefore, the WHO has a regulation for safe blood transfusion services, which requires conducting minimum 4 blood tests by using

the NAT device, which are: 1) Hepatitis epidemic C, 2) Hepatitis epidemic B, 3) HIV, and 4) Syphilis.

However, conducting the NAT blood test in Egypt will cost the government millions to be able to respond to the WHO regulation. The government already handles the responsibility of the treatment as Gaber (2014) mentioned, "Treatment of HCV is costly. Given the size of the problem in Egypt, it is addressed as a national health priority. However, budget limitations remain the main barrier to expanding treatment" (Gaber, 2014, pp.7). The government thought that providing treatments is an adequate solution to fight and reduce the high percent of infection. According to Waked (2014), "A number of new treatment options have become, and will become, available in the immediate future, with much higher efficiency (cure rates >90%) compared to the current standard of care." (Waked, 2014, pp. 1)

Although there are many organizations that help the government finance these HCV treatment programs, but this was insufficient due to the constant increase of the infection. As the Representative of the Ministry of Health and Population (2015) stated that, "the government is providing treatments, yet they are keeping the infection door wide open for cases still yet to come"; the government realized that all these ways of treatment programs are not adequate to help with the current circumstances: lack of effective infrastructure, financing and management, and also realized that this epidemic is leading Egypt to a national deadlock, and the government needs not only to prioritize its action plans but also to have a kind of emergency procedure to respond promptly to this issue. Thus, the government started to consider adopting partnering as a key mechanism for improving healthcare services through preventing the infection along with providing treatment.

Consequently, it is the government's role and other sectors', private and civil society organization, each to improve healthcare infrastructure. The research concentrates on applying and studying the problem analysis to the field of HCV prevention through improving blood transfusion infrastructure and equipment.

Research Question

In this regard, there are many countries whether developed or developing countries that apply the Public Private People Partnership (4Ps) to advance their public services and to upgrade their infrastructure. Consequently, the ultimate question that the research tackles is:

What are the potential uses of the Public Private People Partnership (4P) model for improving the healthcare services in Egypt and their replication in other development sectors in Egypt?

The importance of the research question relies on the urgent need to find a new approach for financing, managing, and upgrading the public services, in particular, the healthcare sector in Egypt. The 4Ps approach encourages the public sector not only to partner with the private sector but also to engage the people who are represented by the civil society and Non- Governmental Organizations (NGOs) to be a part of the development process.

Adopting the 4P model is specifically important for the healthcare sector in Egypt because people's health is a critical issue that requires people's participation and community engagement and awareness.

Thus, the intention is not just arguing for or against adopting the 4Ps, but to demonstrate both advantages and disadvantages so as to determine whether it is efficient and effective enough to be applied and replicated in Egypt.

Within the main research question, there are some key research questions that guide the study, such as:

Q1) What is Public Private People Partnership (4Ps) & how different it is from Public Private Partnership (3Ps)?

Q2) Does the 4Ps model offer solutions for improving the healthcare infrastructure in Egypt? In this respect, how successful was the HCV prevention program?

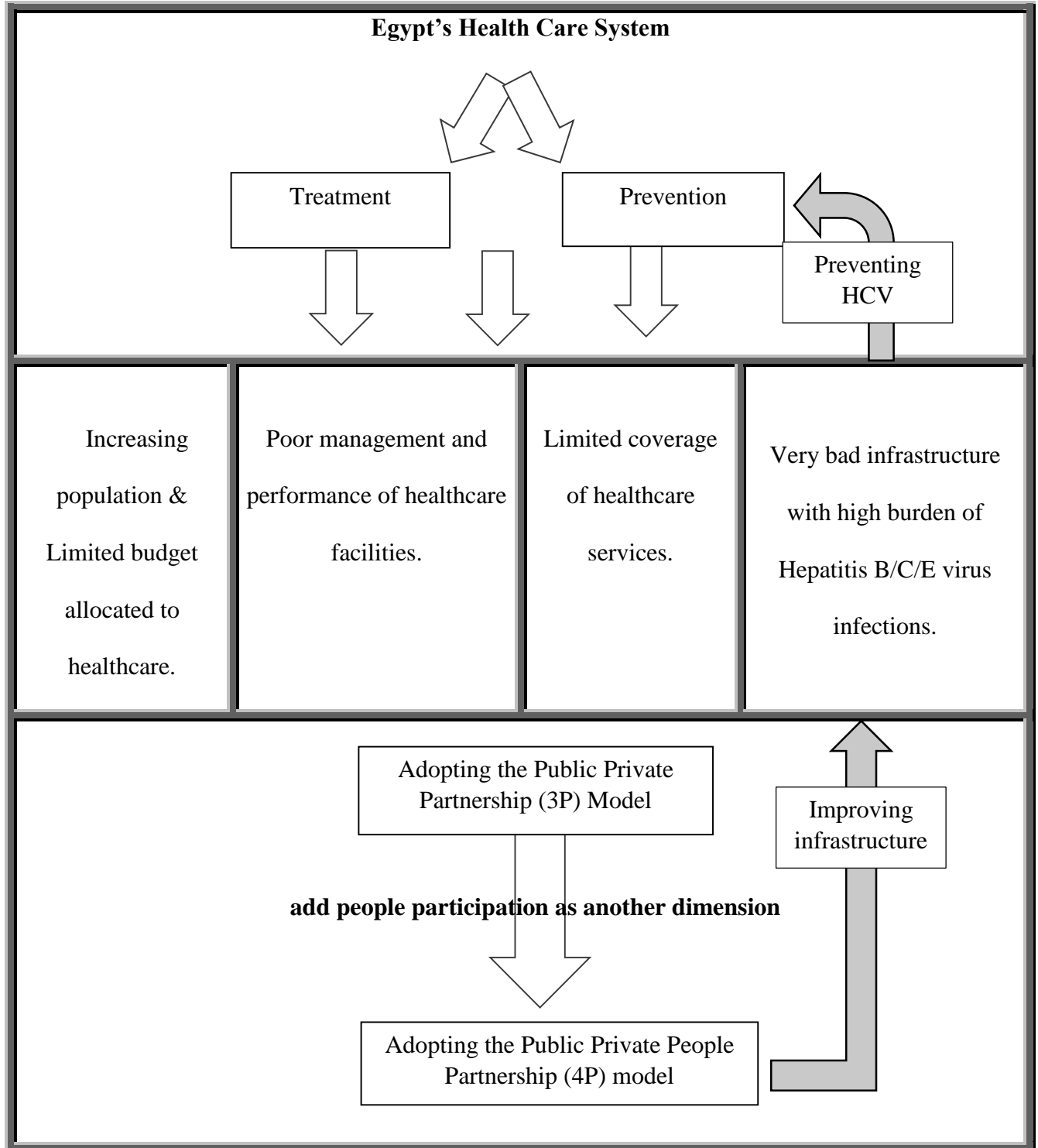
Q3) Does this kind of partnerships provide solutions for overcoming the health sector's challenges in Egypt?

Q4) What are the obstacles that faced adopting the 4Ps model in Egypt?

This study only attempts to present the 4Ps approach as a complementary measure to the government's investment for improving the public healthcare service in Egypt. Public Private People Partnership model has been adopted to upgrade the infrastructure services, especially for critical cases around the world, which could be relevant to Egypt to apply this approach. According to Zhang et al. (2015), "4P is proposed and introduced to provide an alternative in appropriate scenarios... 4P has great potential to deliver certain types of reconstruction projects better" (Zhang et al., 2015, pp. 415).

Conceptual Framework

Table 2: The conceptual framework for the Egyptian healthcare system.



This framework is based on the current status of the Egyptian healthcare system according to literature review and interviews with selected personnel from the Ministry of Health and Population. Within this conceptual framework several points can be noted by their sequence in the chart (table 2) as follows:

First, the Egyptian healthcare system is divided into two main functions: 1) treatment and 2) prevention of diseases; the government focuses on providing treatment more than the preventive function due to its financial constraints and limitations. For so many years, this Egyptian healthcare sector has been suffering from various issues such as: inefficient performance, limited coverage of healthcare services and unaffordable expenses for the disadvantaged, inefficient social health insurance and lack of responsiveness. Moreover, the healthcare sector is suffering from poor healthcare infrastructure with a high burden of Hepatitis B/C/E virus infection (World Bank, 2015).

Second, in order to overcome the healthcare's problems, the government started to apply the Public Private Partnership (3Ps) approach. The 3P model includes a group of actors for one main purpose, which is to improve and upgrade public services. The Minister of Health stated that the private sector is the investment resolution to future expansion and public reforms as a way to improve the sector (Daily News Egypt, 2013). Consequently, in the last few years the 3Ps model has been widely applied in Egypt especially in the healthcare sector. According to the International Finance Corporation (IFC), "Alexandria University Hospitals successfully secure Egypt's first health sector PPP to design, build and operate two new specialty teaching hospitals; these hospitals are providing healthcare services to a population center of 7.4 million" (IFC, 2012, pp. 1).

However, applying the 3Ps model with its benefits did not meet the people's expectations and did not satisfy their needs as a result of overlooking their participation and contribution (Ahmed et al., 2006, pp. 782).

In theory, adding community engagements and people participation as another dimension would lead to better healthcare services delivery. Consequently, the research focuses on the potential of adopting the 3Ps model together with community engagement and people's participation. This makes it the Public Private People Partnership (4Ps) model, which if used in the healthcare sector in Egypt, has the potential for promoting healthcare services.

Therefore, the research started first with both public and private sectors separately and then moved to Public Private Partnerships (3Ps). Then, it explained the collaboration that happened with the people, which led to the Public Private People Partnership (4Ps) model and its influence on the infrastructure development, especially in the Egyptian context. This is shown in the following chart:

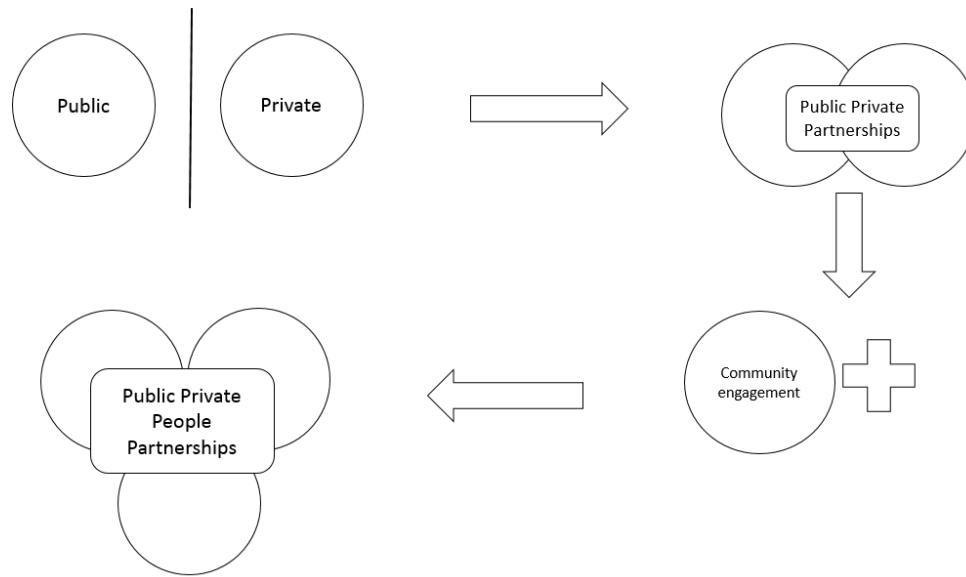


Figure 2: Partnering model; by the author

Both public and private sectors used to work separately in their development work. Then, the government partnered with the private sector to work together; both sectors started to cooperate to achieve bigger goals and purposes to satisfy the people and to improve their living conditions. Raman & Bjorkman (2009) stated that, partnering came as a result of government failure in delivering public healthcare services; therefore, partnering aims to provide an alternative logical solution to the government's role for delivering sufficient healthcare services (Raman, 2009). According to the World Bank, "A growing number of governments are using Public-Private Partnerships (PPPs) to deliver infrastructure and other essential basic services". However, this cooperation did not meet people's expectations because this partnership was based only on financing and managing services delivery (World Bank, 2015); according to Klijn (2003) "PPPs are less ideal than the idea. Partners have difficulty with joint decision-making" (Klijn et al., 2003, pp.137).

Consequently, the 3Ps model has evolved and developed to be the Public Private People Partnership (4Ps) and the difference here is engaging the people through their representative civil society organizations from the very beginning till the very end, as they are the main stakeholders (Zhang et al., 2015, pp.409).

Lately, there are many countries that have started to conduct the 4Ps model as a result of their local causes and conditions; there are many cases from both developed and developing countries who have already conducted the 4Ps approach to promote development in different sectors such as: health, education, water, and waste management. Currently, there are indications referring that the Public Private People Partnership (4Ps) will continue to grow as a developing model widely because the 4Ps "provide a platform

to develop fruitful and practical partnerships between the public, private sector and people-NGOs, communities... to reconstruct certain types of public infrastructure" (Zhang et al., 2015, pp. 415).

Thus, the hypothesis is that applying the Public Private People Partnerships (4Ps) would improve and promote the healthcare infrastructure in Egypt. Thus, the aims of this research are to: 1) clarify the meaning of (Public - Private - People) 2) explain the public private Partnership and the Public Private People Partnership definitions, concepts, theories and practices as a proposed solution, 3) initiate public private people partnership programs in Egypt to upgrade the healthcare services, especially in the infrastructure, 4) illustrate more by studying one of the 4Ps programs in Egypt which is "Egypt Free from Virus C" Program as a case study to be examined and evaluated to show the benefits of applying this kind of partnership in Egypt, 5) Introduce the 4Ps approach and requirements necessary which led to successful partnership.

Chapter 3

Literature Review: Partnership and the Healthcare System in Egypt

The purpose of this literature review is to explain the Public Private People Partnership and how it has been applied in the Egyptian context as well as to discuss its potential for further application in other development sectors. Therefore, the literature review is divided into:

- 1) Role of both Government and Private Sectors.
- 2) The Concept of Partnering.
- 3) Public Private People Partnership.
- 4) Healthcare System in Egypt.
- 5) Public Private People Partnership in Egypt “Egypt Free from Virus C” Program.

The Role of both Government and Private Sectors:

First, the Government’s Role:

The government’s role relies on its ability to provide healthcare service nationwide on an equitable basis. There are many roles for the government to enhance adequate healthcare services; such as: 1) Healthcare policies formulation, 2) Develop and promote healthcare infrastructure, technologies, and practices, 3) Ensure sufficient healthcare services for vulnerable populations, 4) Establish standards and regulations of healthcare services delivery for both public and private institutions, 5) Establish monitoring and modifying systems (Ministry of Health and Population Official Website, Feb. 2014).

In the healthcare sector, the government includes both the Ministry of Health and Population (MOHP) as well as the Health Insurance Organization (HIO). The MOHP runs a network of healthcare facilities; besides managing the government spending on healthcare services including: hospitals, specialized hospitals, health centers, clinics, etc. Also, the University hospitals are important providers of healthcare services in Egypt (Nakhimovsky et al., 2011, pp. 46).

The Ministry of Health and Population (MOHP) is the legitimate and major provider of healthcare in Egypt, which operates a nation-wide system of healthcare services delivery across the 27 governorates. "Egypt's MOHP is currently the primary provider of preventive and curative care, composed of approximately 5000 health facilities and more than 80,000 beds nationwide" (Haley D. et al., 2011, pp. 84-85). The MOHP's roles are divided into: 1) drawing and establishing healthcare policies, 2) recording health data, 3) conducting statistical and economic studies to be analyzed, 4) providing central healthcare services, 5) medicine quality control, 6) effective management of health crisis, 7) coordinating between healthcare activities at the local level in all governorates and development fields, and 8) healthcare centers and population management (Ministry of Health and Population Official Website, Feb. 2015).

The Ministry's services are administered on a de concentrated basis through Egypt's 27 governorates, and the Ministry of Finance funds all these governmental healthcare institutions. According to the Central Agency for Public Mobilization and Statistics (CAPMAS), the total governmental hospitals numbers were estimated around 657 hospitals in Egypt (CAPMAS Official Website, 2015). The hospitals distribution across the country illustrates the well-established coverage of public healthcare institutions, and the

number of hospitals in these governorates directly proportional according to population. Also, all the university hospitals in Egypt fall under the Ministry of Health and Population's umbrella, whose total number was estimated to be around 81 hospital in 2013 (CAPMAS, 2013). All of these healthcare institutions require huge financial resources.

The Health Insurance Organization (HIO) is the second major provider of the healthcare services in Egypt, which is a compulsory social insurance organization. "The HIO is a governmental social insurance organization supervised by the MOHP" (Haley D. et al., 2011, pp. 85). It is a public insurance organization that provides both healthcare and financial coverage for certain categories of people based on their social security criteria such as governmental employees, widows, necessitous, and pensioners.

"The Health Insurance Organization was established in 1964 with the intention of eventually covering the whole population" (Nandakumar, 2015, pp.5). The HIO "manages several separate social health insurance programs under different legislation: certain government employees under Law 32, enacted in 1975; other government employees along with public and private sector employees, pensioners, and widows under Law 79, enacted in 1975; and the Student Health Insurance Program (SHIP) for school children under Law 99, enacted in 1992" (Abd El Fattah et al., 1997, pp. xi). "The HIO is divided into eight regional branches with the head office located in the capital city of Cairo. At present, "it is the largest health insurer in Egypt, with a total of 30 million enrolled members" (Haley D. et al., 2011, pp. 85).

According to the new Egyptian Constitution of 2014, Article (18): "The State shall establish a comprehensive health insurance system covering all diseases for all Egyptians." However, its main goal was not achieved as a result of the shortage of the financial

resources, so it failed in responding to the healthcare services' demands. The HIO only covered approximately 58% of the population and unfortunately this percentage is not sufficient. (General Authority for Health Insurance Official Website, Feb. 2015).

Second, the Private Sector's Role:

Regarding the private initiative, "Egypt's private healthcare sector consists of both non-profit and for-profit providers"; it's divided into two types (Haley D. et al., 2011, pp. 85).

a) For-profit Organizations:

According to CAPMAS' report, the total private for-profit hospitals reached 937 during 2013 (CAPMAS, 2013). Clark (2004) stated that, the private healthcare services only target the middle class rather than the poor (Clark, 2004). Private for-profit healthcare facilities in Egypt require a large amount of money to afford treatment; thus, these kinds of services target specific classes in the Egyptian society. As a result, the non-profit facilities were established as a kind of balancing the society's needs and demands.

b) Non-profit Organizations:

The non-profit healthcare facilities were established with the consideration of the current economic status in Egypt; it is limited within the religious (Islamic and Coptic) charities and nonprofit organizations, and their contributions are mostly allocated in the urban areas.

The private sector providers include: private hospitals, sophisticated hospitals, day-care centers, clinics, polyclinics, and pharmacies; their initiatives "account for 42.6 percent of provider-level expenditure in Egypt" (Nakhimovsky et al., 2011, pp. 48). Yet, "statistics on the delivery of care within Egypt's private sector are generally more difficult to quantify

because the financing of private health services occurs as out of-pocket payments by the patient and on a fee-for-service basis to the provider for both ambulatory and inpatient care" (Haley D. et al., 2011, pp. 85).

Third, Non-Governmental Organizations:

Regarding the non-governmental initiatives, Egypt has seen a stunning expansion in the size, scope and capacity of non- governmental organizations during the past decade; such as: national NGOs, international NGOs, civil society, non-profit organizations, charitable organizations, and community foundation. These organizations were established as a result of the deterioration of the country's situation. "In the mid-1990s there were fifteen thousand to twenty-eight thousand Egyptian NGOs; by 2008 the number reached thirty thousand. About 43 percent were Islamic associations, 9 percent were Coptic associations, and 25 percent were quasi-governmental community development associations" (Beinin, 2014, pp. 399).

The Concept of Partnering:

There are various partnering definitions, and after reviewing many of these definitions, it is believed that the definition of the Construction Industry Institute in the USA is the most comprehensive and elaborating one. The Construction Industry Institute in the USA defined partnering as: "A long-term commitment between two or more organizations for the purposes of achieving specific business objectives by maximizing the effectiveness of each participant resources. This requires changing traditional relationships to a shared culture without regard to organizations boundaries. The relationship is based on trust, dedication to common goals, and an understanding of each other's individual expectations and values" (As cited in Partnering for

construction excellence - A reality or myth, 2005, pp. 1926). This definition illustrates the most important features in partnering, which are: trust, dedication, and mutual understanding between the partners.

Partnering came up as a result of the public's demand in response to the government weakness in providing public services. Also, partnering targets productivity, efficiency, and effectiveness in delivering public services for national benefits and customer satisfaction. Partnering “means that both parties have agreed to work together in implementing a program and that each party has a clear role and say in how that implementation happens” (Blagescu et al., 2005, pp. 2-3). Consequently, partnering programs could happen between different partners who have the same vision and goals, and these partners can be public, private, non-government, or non-profit, and they all must be committed to their purposes which are eventually for the public good.

According to Naoum (2003, pp. 74), there are some features for successful partnering; such as:

- Vision agreement, objectives and goals: bringing different partners is hard; therefore; all the partners should have a mutual agreement on achieving partnership goals and objectives.
- Mutual trust is an "essential prerequisites to partnering" (Naoum, 2003, pp. 74), in order to achieve a mutual trust, all the partners must understand each other's roles, objectives, and needs of the partnership.
- Solving mechanism of problems: there should be a sort of mechanism for solving problems shared with all the partners to be applied.

- Continuous improvement: a good partnership should consist of a stage of continuous monitoring and evaluation to be able to modify and improve the partnership's outcomes.

Regarding this point, there are some more important features must exist through the partnership and between the partners, which are: 1) Flexibility: all partners should be flexible enough to negotiate and reach a "win-win" agreement, 2) Responsibility: each partner should have a sense of responsibility towards achieving partnership's goals, 3) Commitment: all the partners should be committed and obliged towards the partnership's vision and goals, and 4) Long term relationship (sustainable partnership): good partnership depends on a long term agreement to be able to achieve the partners' goals and objectives.

By time, governments knew the imperatives for adopting the Public Private Partnership (3Ps) approach as a key development mechanism, especially in the healthcare sector in order to improve the delivery of healthcare services and to prompt their infrastructure. There are various classifications and definitions for each of the public and private sectors; which could be clarified as follows: a) the public: includes the government with its ministries, departments, centers, agencies, institutions, etc. (Singh et al., 2010, pp. 831), and b) the private: includes private for-profit organizations, companies, and institutions, etc.

The Public Private Partnership (3Ps) approach started to appear during the 1990s, and the main reason behind applying it is to improve and upgrade the public services (Levy, 2011, pp.1). Governments started to apply the 3Ps model to deliver better services, especially in infrastructure projects. Walzer (1998) mentioned that, “there is a rich

historical legacy of such local collaboration-Public Private Partnership-, fostered by the absence of public capital investment mechanisms at the national level, local governments' need to finance infrastructure investment" (Walzer et al., 1998, pp. 24). Governments apply partnerships as a result of their environment and local reasons or conditions. The changing economy and the constant population are increasing obviously pushing towards partnership as a tool of development. Financial deficit is still the main challenge, which is facing the developing countries to initiate, implement, and sustain the infrastructure of the developmental programs. Therefore, the government started to increase the investment in the community through partnering with the private sector (Walzer et al., 1998).

Thus, partnering with the private sector came as a result of the government's failure to deliver public services with the needed quantity and quality due to many obstacles facing the government (Raman et al., 2009, pp. 4). In light of some initiatives around the world, the cooperation and collaboration between public and private sectors came as an alternative solution in order to:

- a) increase the financial expenditures,
- b) improve the services' quality (Raman et al., 2009, pp. 3-4)

In light of various studies, there are numerous definitions for Public Private Partnership in the health sector; for instance: it is a way that gathers a group of actors for one main purpose which is improving the healthcare of a population (WHO, 1999). In 2005, the Ministry of Health & Family welfare (MoHFW, 2005) has defined the Public Private Partnership as "collaborative efforts between public and private sectors, with clearly identified partnership structures, shared objectives, and specified performance

indicators for delivery of a set of services in a stipulated time period.” (Singh et al., 2010, pp. 831).

Moreover, Paoletto (2000) tried to explain the 3Ps model as timely collaborative activities among interested parties working to achieve a common goal through efficient communication (As cited in International Journal of Applied Public-Private Partnerships, Volume 1, Issue 2, pp. 2). According to the World Bank report (2007), the private partnership with the public sector in order to invest in infrastructure is considered as the productivity incentive especially in the developing countries. Hodge (2007) stated that, "PPPs are connected with infrastructure projects and are institutional arrangements for cooperation expressed through the establishment of new organizational units" (Hodge, 2007, pp. 545). Within this context, Levy (2011) has also defined the 3Ps as “A relationship between the public and private sectors where a long-term contract permits the public agency to retain full ownership of an infrastructure project as well as full oversight of the private sector's activities in that project while the private entity operates the facility and collects the generated revenue" (Levy, 2011, pp. 1). Indeed, the 3Ps partnership is a financial model, which enables governments to make a good use of private finance capital to improve public services.

The Public Private Partnership came as a result of the widening gap between the constant requirements especially in the infrastructure compared with the government's ability to sponsor and finance this kind of projects (Levy, 2011, pp. 6). In this regard, there are many studies conducted in both developed and developing countries that applied the 3Ps reform model. Zhang (2015) stated that, PPP “is now increasingly applied to deliver selected public services worldwide, {PPP} has performed better than the traditional

approach on certain types of new infrastructure development” (Zhang et al., 2015, pp. 408). For example, Malaysian public sector has been suffering from: red tape, inefficiency, ineffective accountability, lack of flexibility, and poor management and performance. Reforming is an efficient choice for policy makers in order to initiate and implement innovation in the public sector, especially in case of financial resources shortage and where it is necessary to counter public inefficiency, increase access, promote equity and reduce operational costs. From this perspective, Malaysia started to think about fostering the 3Ps strategy in many sectors such as: housing, healthcare and education. The administrative reforms in the Malaysian public services included the health sector, with the aim of upgrading and improving the public services in order to meet the people’s expectations.

The Malaysian healthcare system has witnessed improvements in delivering its services through a dual system between public and private sectors. The government was the dominator of the policy making process, which aimed to achieve the Malaysian healthcare main goals: "to improve the health status of the population, to improve the responsiveness of health services to the population, and to improve the financial fairness of funding for the health system" (As cited in Report of a consultation with the Planning and Development Division Ministry of Health, Malaysia, 2002). Thus, the Ministry of Health started applying the Public Private Partnership model to improve their healthcare services. They already achieved some tangible results from adopting such a model and still gaining positive results till now. Phua (2014) stated some of the 3Ps successful results, “PPPs we identified include the provision of dialysis services, harm reduction programs (MMT and the NSP were launched in 2005 and 2006), the promotion of medical tourism,

and the production of more health care personnel through private medical education" (Phua et al., 2014, pp. 510-512).

Yet, like any other development model the 3Ps model has both positive and negative consequences. The advantages as the Ministry of Health & Family welfare (MoHFW) mentioned, "PPPs can enhance the coverage and availability of affordable and quality services, improve efficiency, improve management of public health facilities" (As cited in PPP in Health Services Delivery, 2010). Levy (2011), added that the 3Ps provides governments with financing alternatives to be redistributed effectively in the needed infrastructure projects (Levy, 2011).

The 3Ps model can be used as a key mechanism to improve the public health system management in an efficient and effective way (Singh et al., 2010, pp. 830-831). Thus, it can be said that the 3Ps model is an appropriate approach to advance the public healthcare services' delivery and suitability, especially for improving the infrastructure programs and projects. Despite the success of applying the 3Ps, Phua (2014) stated that, "Care must be taken to ensure that the potential costs of PPPs do not outweigh or overshadow the anticipated benefits of these partnerships (Phua et al., 2014, pp. 512).

The disadvantages of the 3Ps appeared as a result of the government dominant position and role; the public sector still has the full right and the authorities of ownership and retains control on the decision making process, while the private sector is more concerned with financing, operations and implementation processes (Levy, 2011). The 3Ps model does not prevent governments from centralized, top-down planning and decision-making; but on the contrary, it empowers governments with more resources to provide public services according to this non-participatory governance model. In addition to

ignoring the people's role and participation in this kind of partnership, and due to this issue there is a more developed trend toward engaging the people within the programs' initiatives and implementation.

The Public Private People Partnership (4Ps) model was developed based on the 3Ps model and responding to its disadvantages by involving people and communities' participation in the partnering model.

The Public Private People Partnership:



Figure 3: Public Private People Partnership; by the author

As a result of applying the 3Ps worldwide to deliver public infrastructure services, there were increasing demands to involve the people, as they are the major stakeholder and the target of these partnerships. Therefore, Public Private People Partnerships (4Ps) came as a result of the dominant role that the government play in the 3Ps model; the government used to centralize all the authorities and to take control of the decision making process. Thus, the 4Ps model is considered as an evolution of the 3Ps and the difference here is engaging the people from the beginning till achieving the partnership's targets; besides treating them as the key stakeholder for initiating and implementing developmental programs. This came as a result of some "various challenges have been encountered in some PPPs initiatives causing undesirable project failure"(S.T. Ng et al., 2013, pp. 370).

Therefore, governments started to involve people more in the partnership more widely to avoid these kinds of issues and obstacles.

Governments use the 4Ps for the same purpose they use the 3Ps for, which is to upgrade and improve public services, particularly the infrastructure of services. S.T. Ng et al., (2013) identified the Public Private People Partnership meaning as, “(P4) process framework embraces the bottom-up participative strategies which bring the public engagement clearly visible for infrastructure planning and policy making. With this newly developed framework and associated engagement strategies, decision-making power can deviate from policy makers, who are traditionally holding the ultimate decision authority, towards the citizens through proactive engagement”(S.T. Ng et al., 2013, pp. 370). Also Zhang (2015) stated that, the 4Ps tailored to “enable the public, private and the people to work together to deliver public infrastructure in formal partnerships legalized ... with the spirit of mutual trust, openness, transparency and commitment” (Zhang et al., 2015, pp. 408).

Non-governmental organizations, local communities, and civil societies all represent the involved people’s participation as Zhang et al. (2015) explained people's participation as, “community-based means people’s participation should be mobilized and sustained ... starting from the very beginning of planning and not ending until the achievement of desired goals” (Zhang et al., 2015, pp. 409).

Reviewing the existing literature on the 4Ps success stories reveals that India is a best practice regarding adopting the 4Ps model. According to the United Nations, "4PCCD - Public Private People Partnerships for Climate Compatible Development- shows that business, governments and communities can work together to address climate change

through local partnerships" (2014). Maputo, and Mozambique are very poor cities with deteriorated infrastructure encountering natural crisis; therefore, the government adopted the 4Ps developing model. According to the United Nations, "It {4Ps} focuses on producing local plans and engaging municipal and national government institutions" with their citizens' participation through developing strategies and decisions making (U.N., 2014). In addition, at the end of the United Nations' report they recommended that the 4Ps "can be replicated in other neighborhoods" suffering from the same problems to use the 4Ps model to improve their living conditions (U.N., 2014).

Another example of applying the 4Ps model in Nigeria, the government conducted the 4Ps or what they have called it Public Social Private Partnership (PSPP) to deliver social services related to the water supply system. According to Ajibad's (2012) study about Nigeria's water supply system, he mentioned that "indeed the efficiency and effectiveness of the PPPP mechanism have been proved" (L. T. Ajibade et al., 2012, pp. 219).

Zhang (2015) proposed a 4Ps framework, which outlines the main steps and procedures to deliver public services through adopting the 4Ps development model. This procedures chart explaining the four major required steps to deliver public services by adopting the 4Ps model including: 1) the preparation phase, 2) agreement phase, 3) procurement phase, and 4) services delivery phase. The first stage "the preparation" includes current status assessment and analysis done by the public sector to narrow and identify the problems, which need to be countered. The purpose of the second stage is to have an agreement between the partners with a specific plan and framework; the third stage is based on the two previous stages and includes procurement for the works to be done and

selection of implementing agencies. The fourth stage targets the delivery services with a constant monitoring and improvement in order to deliver high standard services (Zhang et al., 2015, pp. 414).

The Healthcare System in Egypt

First, adequate healthcare services are undoubtedly a primary role of any successful government. Egypt is the most overpopulated country in the Arab World with over 89 million citizens. According to Nakhimovsky (2011), “Over the past decade and a half, Egypt’s total health expenditure has risen from 7.5 billion Egyptian pounds in 1994/95 to 23.1 billion LE in 2001/02, 42.5 billion LE in 2007/08, and 61.4 billion LE in 2008/09”; however, "compared with most other middle-income countries in the region, Egypt invests smaller percentage of its gross domestic product (GDP) on health care" (Nakhimovsky et al., 2011, pp. 15). The Egyptian health sector is not really well equipped enough to face such an increasing number of the citizens and to meet their healthcare demands. Throughout history, Egypt has been trying to provide suitable and sustainable healthcare services within its limited budget and resources.

According to a World Bank report (2015), the challenges facing the Egyptian health sector, are: “lack of a strategic purchaser to enable a transition to social health insurance coverage for disadvantaged groups”; in addition to “inequitable maternal and child health especially in the rural, remote and slum areas. Lack of responsiveness of health systems to disadvantaged groups; limited citizens’ participation including lack of grievance redress mechanisms at facility, district, governorate, or national levels, especially for the disadvantaged;” besides the “increasing prevalence of substance abuse and mental health issues especially among youth and women”; and also “high burden of disabilities especially

among illiterate and rural populations.” Last but not least, Egypt is suffering from a “high burden of Hepatitis C overall with increased prevalence among the poor, rural, and low-education citizens” (World Bank, 2015). Regarding this last challenge, some of the main reasons that cause this high rate of Virus C infection are: a) lack of healthcare awareness in general, b) lack of the concept and practice of safe blood transfusions, and c) lack of funds to provide efficient preventive and curative healthcare services.

The Egyptian healthcare system is not sufficient enough by itself to face the increasing numbers of virus C patients or even prevent the virus infection within the healthcare treatment service. In light of some statistics, there are more than 15 million Egyptians infected with Virus C and more than 250 thousand Egyptians increase annually. As a result of this, the government focuses on ensuring the treatment of the infected ones while leaving the others being exposed to a high infection risk. This is due to the lack of infection prevention percussions within the healthcare service due to the government limited budget for this factor (Interviewee, Jul. 29, 2015). Consequently, there is an essential need to work upon new trends to help the government satisfy their citizens’ needs and expectations to have a decent healthy life. Hence, this issue is a worthwhile matter to study the application of new development models to improve the healthcare infrastructure in order to prevent Virus C infection during the healthcare service delivery.

As a result of all of these issues, the Ministry of Health and Population has undertaken series steps to transform and promote its services. The healthcare sector has launched various reform programs to upgrade the healthcare services since 1996.

In 1996, a project for restructuring the blood transfusion service was signed between the Egyptian MOHP and Switzerland. Blood transfusion service in Egypt is one

of a kind; there is no specific policies to control such an important service. Blood transfusion is a process of receiving blood and storing it away from contamination. The transfusions are used for various medical critical conditions. In the past they used to transfer the whole blood, but nowadays they divide one blood bag into: 1) red blood cells, 2) white blood cells, 3) plasma, and 4) platelets. Mofteh (2009) stated that, "Egyptian blood transfusion services were recognized as a separate specialty independent... these services were very fragmented and primitive till 1996, when the Ministry of Health and Population realized on that year that blood services should be restructured in order to keep up with other health system". Therefore, the project aimed at centralizing the production of blood components and converting all the HBBs to storage facilities"; the project's objectives were: 1) "establishing adequate facilities for blood components production, 2) capacity building of the different staff categories, and 3) implementing the national blood policy" (Mofteh, 2009, pp. 124).

The Switzerland collaboration aimed at improving the blood transfusion services in Egypt, which was implemented by SECO in cooperation with the Ministry of Health and Population; they were supposed to establish and upgrade national blood banks in all the Egyptian governorates and connect them with a network. Their main goal was to establish the concept of safe blood transfusion through blood bags collection, conservation and distribution. Indeed, they succeeded to establish and upgrade the headquarter blood center in Cairo "the National Blood Transfusion Center"; besides, establishing eight Regional Blood Transfusion Centers, yet the blood collection system was not enough to meet the needs of the health institutions (Mofteh, 2009, pp. 124). Unfortunately, the collaboration

with Switzerland stopped as a result of the Egyptian political instability before and during the 25th January Egyptian revolution.

In June 2006, the Egyptian Public Private Partnership (3Ps) law was approved by the Parliament. Then, the government issued a new legal framework by PPP law 67 for the year 2010 that included standard PPP contracts, procurements, documentations and procedures in May 2010. The Public Private Partnership in Egypt was promulgated as a part of the government's strategy to reform the country's health sector by leveraging the private sector, and the civil societies experience and efficiency to facilitate the timely and cost effective procurement of the public utility services. Thus, the Egyptian government established a national 3Ps policy framework for the implementation, guidelines, and methodologies that are appropriate to the current Egyptian status. Within this scope, the Ministry of Health and Population signed an agreement with the World Bank in 2009 to "increase awareness of beneficiaries and empower the local community, and ultimately to improve quality and utilization of public health services" (World Bank, 2015).

Egypt has already started to widely apply the 3Ps model in many sectors as a way to improve its public services delivery; two of which are: "the New Cairo Wastewater Treatment Plant, the first PPP in Egypt, and the 6th of October" (PPIAF Official Website, 2013). Regarding the Egyptian current healthcare status and based on some former studies, the government has applied the Public Private Partnerships (3Ps) model in the healthcare sector as a solution. For example, there are two programs related to the 3Ps model which were established in Cairo and Alexandria. The former healthcare Minister, Hamed, mentioned earlier that the private sector investment is the key to future expansion in the health sector given the size of the Egyptian market; also he stated that, "private sector

participation looks likely to rise, provided the necessary structures." (Daily News Egypt, 2013).

The Public Private People Partnership in Egypt “Egypt Free from Virus C” Program:

In an attempt to upgrade the health sector services and infrastructure in Egypt, the Ministry of Health and Population signed in 2013 a contract with both Misr El Kheir Foundation and Telecom Egypt in a form of Public Private People Partnership. This partnership aims to improve and upgrade healthcare infrastructure in some governorates in Egypt- piloting the 4Ps model-, namely (Gharbiya “Tanta”- Fayoum – Al Minya - Sohag - and Qena) within a program called “Egypt Free from Virus C Program”.

The 4Ps model was launched in an attempt to upgrade the healthcare infrastructure with a view to fight the spread of Virus C infection in Egypt. The program was proposed by Misr El Kheir Foundation and then they have signed the agreement of the partnership with both the Ministry of Health and Population and Telecom Egypt in a form of Public Private People Partnership in 2013. The partners in this partnership and their main roles are as shown in the following table:

Table 3: The partnership’ official three partners and their roles in “Egypt Free from Virus C program”; by the author

Partner	Ministry of Health and Population	Misr El Kheir	Telecom Egypt
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Role	Legitimate, regulator & facilitator partner	Initiative & implementer partner	Financing partner (CSR)
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1-The Ministry of Health and Population:

The MOHP has a vision, which is to provide a high quality wide coverage of health insurance services to all Egyptians; services that are sustainably funded, regularly monitored and tracked.

The reason behind welcoming such an agreement is due to the government limited financial resources; besides, the inevitability of the existence of the NAT blood test based on the WHO's requirements and regulation. Also, it can be said that the proposed project was in line with the Ministry's visual perceptions and objectives.

2-Misr El Kheir Foundation:

Misr El Kheir Foundation is a non-governmental organization founded in 2007 which aims "to participate in the building of humanity and services, in the health areas, scientific research, and social solidarity, and all fields, with the hope of eliminating unemployment, illiteracy, poverty, and different types of diseases." Misr El Kheir Foundation has many social programs serving different fields based on community's needs and demands (Misr El Kheir Foundation Official Website, 2015).

The foundation was interested in pursuing this kind of prevention programs as a result of their awareness and promotion of the importance of the preventive measures in

healthcare. Misr El Kheir is one of the largest NGOs in Egypt that is familiar with partnering with each of the government and private sector.

3-Telecom Egypt:

It is an Egyptian shareholder company that works as a provider of several services; such as: landline phones, cell-phones, and Internet services. Telecom Egypt was established in 1854, and after many reforms it is now considered the largest communication network in Egypt and the Middle East (Telecom Egypt official website: <http://te.eg/history>, 2015).

3.1-Telecom Egypt Social Responsibility:

First, the Corporate Social Responsibility (CSR) approach became well known since the 1960s. According to the Business Dictionary, it is “a company’s sense of responsibility towards the community and environment in which it operates. Companies express this citizenship: 1) through their waste and pollution reduction processes, 2) by contributing to educational and social programs and 3) by earning adequate returns on the employed resources.”

Telecom Egypt group aims at providing a decent life for all the Egyptians by changing their lives for the better. It believes in giving back to the society through adopting several projects that contribute to the development of the country and improve the lives of its citizens. Telecom Egypt’s vision is to “provide better life for the Egyptians as they are Egypt’s genuine treasure. The company pays special attention to helping those affected by the poor social services, and the problems related thereto, such as poor health services, unemployment and poverty (Telecom Egypt official website: <http://te.eg/history>, 2015). Telecom Egypt’s CSR aims to support many fields: health, combating poverty, education, and empowering youth, etc.

Second, Telecom Egypt's working strategy depends on "working hard to ease the effects of our society's main problems" and they achieve this by "building long term partnerships with reputable civil community institutions, well-known for their efficiency"; in addition to, exerting every possible effort to support raising the Egyptians' awareness, using all technical, financial and media-related tools, in addition to encouraging other companies to shoulder their responsibility in developing the society (Telecom Egypt official website: <http://te.eg/history>, 2015).

3.2-Telecom Egypt welcomed this partnership for many reasons:

a) Telecom Egypt as a big company has huge CSR budget; hence, the board of the company wanted to invest in big national development programs as a CSR function. When the board announced their CSR intention, Misr El Kheir proposed with the company the virus C program and explained its importance.

b) The proposed program has three projects; one of which is related to establishing an internal and external telecommunication networks, which squares with Telecom Egypt business line; therefore, the company was excited about Egypt Free from Virus C Program.

Egypt Free from Virus C Program aims to enhance the healthcare infrastructure through changing and upgrading the blood test system in the Egyptian National Blood Transfusion Services and to use more advanced new blood test technology by using the NAT technology. Besides, the project links all the public blood banks through electronic network to be able to exchange and track the patient's information record. In addition, to develop more than 202 blood banks, which are under the MOHP.

Regarding the program's nature, the partners consider it as a national program. It is a huge program and needs a massive budget to ensure achieving the program major targets and to sustain the program's work. The program's total budget was estimated to be around 42 million Egyptian pound.

Chapter 4

Research Methodology

The ultimate question that this research tackles is:

What are the potential uses of the Public Private People Partnership (4P) model for improving the healthcare services in Egypt and their replications in other development sectors in Egypt?

Aims and Objectives

In attempting to answer the above research question, the thesis targets to investigate a new development approach which is Public Private People Partnership (4Ps) development model with a concentration on the relationship between all the partners, and the potentiality of working upon this model within the Egyptian context. Therefore, the objectives of this research are to:

- Explain the importance of applying the 4Ps model and how it was applied in “Egypt Free from Virus C” program.
- Evaluate the program results (outputs and outcomes).

- Study the obstacles facing this kind of partnership in Egypt and how to overcome these obstacles.
- Study the potential of enhancing the 4Ps model in Egypt in other development sectors.

This research focuses on the healthcare sector where there is a prime part of the thesis that focuses on “Egypt Free from Virus C” Program as an existing case study to examine the potentiality of applying the Public Private People Partnership (4Ps) in the healthcare sector as to upgrade the healthcare infrastructure in Egypt. In order to have a comprehensive review, the case study was studied and evaluated according to the following main elements:

- Partners & Leadership
- Decision Making & Management
- Process Management & Implementation
- Results: (Output & outcome).

Therefore, according to the nature of the research; the qualitative analysis was used, as it is more appropriate than the quantitative analysis because qualitative research is a primarily exploratory research used to understand reasons, relations, and opinions, and it helps to develop ideas and hypotheses. Thus, my qualitative analysis involves:

- 1- Analysis of both primary and secondary sources of data including both public and private. Many eligible studies were conducted in the literature review to show a comprehensive model. The literature review depended on books, journals, academic articles, official documents, and official websites of partner organizations, etc.

- 2- Conducting in-depth face-to-face interviews with semi-structured open ended questions. The interviews were held with the three partners' staff and managers; covering various managerial and executive levels. 20 interviews were conducted in total; the interviewees were asked to sign a consent form and they were aware that the research will be published in the AUC library. The interview was specifically conducted as a tool to illustrate the relations between the three partners within the partnership.
- 3- Field visits were done to gather information from the Ministry of Health and Population to know the current situation of the blood banks infrastructure and their plans and efforts of improvement. Direct observations were used to provide documentations on the current condition of the infrastructure after implementing the program. Permission was obtained from the Ministry of Health and Population to take photos to triangulate the collected data. The field visits covered three main areas:
 - a) The headquarter blood bank center in Cairo.
 - b) The central blood bank in Tanta, which covers Delta.
 - c) The central blood bank in Al Minya, which covers Upper Egypt.
- 4- Comparative analysis of the interviews and field visits' results to conclude to the success factors of adopting the 4Ps model. This is in addition to identify the obstacles that faced both the partners and the program implementation.

There was one formal meeting with the Director of Preventive Medicine of the health sector in Misr El Kheir. This meeting aimed to have an agreement about the research

framework and its main points before getting the approval to start conducting the interviews. The following chart explains the interviews plan as divided between all the three partners:

Table 4: Partners' Interviews

Partners' Interviews Table

<p><u>1. The Ministry of Health and Population (MOHP)</u></p>	<p><u>Cairo</u></p> <p>1- The Minister's Office Secretary 2- The Manager of the Public Unit of National Blood Banks 3- IT Manager 4- The Manager of the Headquarter Blood Center in Cairo</p> <p><u>Tanta</u></p> <p>5- The Director of the Regional Center for Blood Transfusion Services 6- The Head of serological Department 7- The Deputy Regional Centre for Blood Transfusion Services 8- Chemist</p> <p><u>Al Minya</u></p> <p>9- The Representative of the Ministry of Health in AL Minya 10- The Director of the Regional Center for Blood Transfusion Services 11- Chemist 12- Blood Transfusion Services Officer</p>
<p><u>2. Misr El Kheir Foundation</u></p>	<p>1- Director of Preventive Medicine Program</p>

**3.Telecom
Egypt**

2-The General Manager of the Egypt
Free from Virus C Program
3-The Manager of Safe Blood Project

TE Data CSR Manager

The following are some of the key questions conducted in the interviews:

- Could you give me a description of the 4Ps current partnership?
- Who's responsible for the partnership at the Ministry?
- Would you explain the relation dynamics within the partnership context?
- What are the obstacles facing the partnership and the virus C program?
- What are the successful factors in this partnership?
- According to what elements can the partnership be evaluated as a successful one or not?
- What are your recommendations as one of the key partners?

As mentioned before, the focus in this research depended on a case study that is "Egypt Free from Virus C" Program. There are numerous non-profit organizations in Egypt initiating and implementing varied development programs within a partnership context, yet this case study in Misr El Kheir was particularly chosen based on the following reasons:

- The size of the non-profit organization, which is Misr El Kheir and it's considered one of the biggest non-profit organizations in Egypt (umbrella NGO).

- The size of the program itself based on partners, the budget and hence the expected impact.
- The nature of the program as it's considered the first healthcare preventive program in Egypt.
- The importance of both the partners and the program vision; besides the partners' dedication and commitment toward delivering high quality healthcare services.

These qualitative tools were used towards ending up with triangulated adequate data. Thus, this makes the case study representative of many other cases of partnering related to civil society.

Limitation of the study

Field visits were planned as part of the methodology to the governorates that the program was implemented in to observe and evaluate their current infrastructure after implementing the program as a way to triangulate the collected data. However, the access to all the Upper Egypt governorates to complete my field observation was limited as a result of time limitations, security issues and weather instability conditions. Thus, it was settled to visit Al Minya, which is the Regional Center for Blood Transfusion Services in Upper Egypt; responsible for testing and scanning blood bags for all the Upper Egypt governorates.

The results of this research are limited to the 4Ps model and not to other development models. Most of the analysis, however, may apply to the 3Ps development programs, which are also under-evaluated in Egypt.

Ethics statement

This study needed an ethical approval and it was written by Misr El Kheir and signed by the researcher; their permission and authorization was to make sure that the collected data will be used only within this research and not for any other domain and purposes.

Chapter 5

The Case Study of Egypt Free from Virus C Program

Program Information:

Initiating an agreement:

The Ministry of Health and Population focused its resources and efforts on treatment. Waked (2014) stated that, “A number of new treatment options have become, and will become, available in the immediate future, with much higher efficacy (cure rates >90%) compared to the current standard of care” (Waked, 2014, pp. 1) with much less attention given to prevention and awareness. In response, Misr El Kheir targeted and focused on both prevention and awareness pillars; as Misr El Kheir main goal was to secure all the national blood banks around Egypt to prevent the spread of Hepatitis C. The main reason behind pursuing this goal was that all other agencies wanted to provide treatment

for the infected people regardless of any preventive measures to reduce the infection percentage.

The agreement plan was signed in 2013 proposing cooperation between:

- The Ministry of Health and Population ((public sector as the regulatory partner))
- Misr El Kheir Foundation ((people initiatives as the implementer partner))
- Telecom Egypt ((Joint Stock Company as the financier partner/ CSR))

Vision & Mission Statement:

The program’s vision and mission statement is “to avoid infection and give attention to the health of the community by increasing awareness with continued support to providers, blood donors, means and places of health services to provide safe medical service of high quality {and} build an integrated system to fight infection at government hospitals and to reduce the incidence of virus C infection within the governmental hospitals; besides providing a model which can be reapplied”.

Thus, the two main targets of the program were to fight the spread of Hepatitis C infection among people in the public hospitals; besides launching awareness campaigns to educate the people the causes of Virus C, and the preventive measures to avoid the infection.

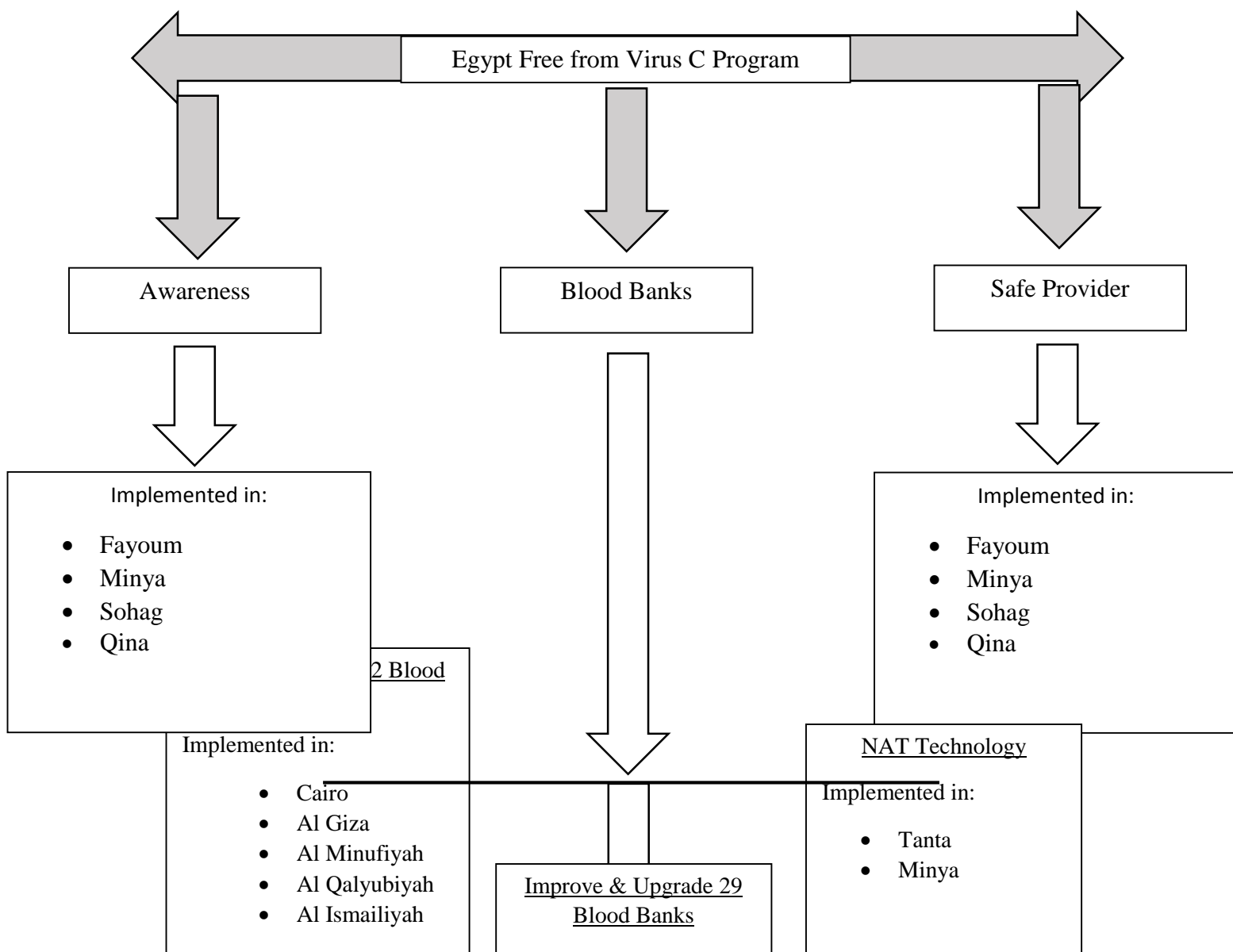
Goals & Objectives:

- Assess the public hospitals and provide the needed equipment to develop these health institutions' capacities to be able to provide safe medical service; the development includes around 80 public health facilities in Egypt.

- Piloting the program in five governorates (Gharbiya “Tanta” - Fayoum - Al Minya - Sohag - and Qena) as a start and then continue implementing the program in the rest of the 27 governorates of Egypt.
- Upgrade the blood test system in the Egyptian National Blood Transfusion Services (as the main responsible blood facility in Egypt) with the NAT technology, which depend on testing the Virus DNA in the human blood to ensure the absence of virus C, HBV and HCV, etc.
- Create a network that links between all the notional public blood banks across the country; besides developing all the blood banks and improve their services' quality.
- Train 80 cadres with specialists and produce a simplified guide for virus C includes all the information about the disease and methods of prevention.
- Raise the level of public health awareness for virus C for school children and young people in 20 villages in the four target governorates as a start.
- Initiate electronic awareness campaign (on the social networking pages) about the disease in order to provide new information and resources.

Program Framework and Implementation:

Figure 4: Egypt Free from Virus C Program includes three main projects:



Initiating and implementing Egypt Free from Virus C Program was achieved through a very detailed action plan. The program was implemented within some governorates; these governorates were selected in this program based on their 1) population, and 2) their current health infrastructure condition, and 3) their blood banks stock, and they were selected upon agreement within the three partners followed by the approval of the Ministry of Health and Population.

Egypt Free from Virus C program includes three main projects:

- 1) Providing safe blood (Safe Provider Project)
- 2) Improving and enhancing Blood Banks (Blood Banks Projects)
- 3) Raising awareness (Awareness Project)

The following table contains the most important details of each project:

Table 5: The Three Projects' Scope; by the author

THE PROJECTS' SCOPE

1-SAFE PROVIDER PROJECT	Establish a preventive system to fight the infection within 80 public health institution in Al Fayoum, Al Minya, Sohag, and Qena; by providing new medical devices and equipment
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	<p>needed to develop the capacity of public healthcare institutions of all sizes and specialties to provide safe medical services.</p> <p>The estimated budget for this project is 11 million Egyptian pound.</p>
<p>2-BLOOD BANKS PROJECT</p>	<p>Divided into 3 sub projects:</p> <p><u>1-NAT Technology:</u> established in Tanta and Al Minya, depends on inserting the NAT technology in the blood tests.</p> <p><u>2-Improve & Upgrade 29 Blood Banks:</u> related to the National Center for Blood Transfusion Services, by providing new medical devices and equipment.</p> <p><u>3-Link & Connect 202 National Blood Banks:</u> establish an electronic network to link 202 national public blood banks related to the Ministry of Health and Population. They started in Cairo, Al Giza, Al Minufiyah, Al Qalyubiyah, and Al Ismailiyah.</p> <p>The estimated budget for this project is around 31 million Egyptian pound.</p>
<p>3-AWARENESS PROJECT</p>	<p>The awareness project was established in Al Fayoum, Al Minya, Sohag, and Qena to educate over 18 thousands.</p>

These three projects were implemented in parallel with each other. The partners designed the program step by step within a timeframe of one year in order to follow and track the implementation process in every step.

Chapter 6

Program Analysis

In order to answer the research questions, this chapter investigates the success of the partnership in the case study program, hence identifying the potential success of the 4Ps model in Egypt. The analysis of the case study program is based on assessing the extent to which the partners has achieved from the program's objectives and targets within their time frame, and on studying the partners relationships and the success of the partnership. Thus, matching the results of program outputs compared to the program targets and objectives.

⇒ Safe Provider:

The program succeeded in: 1) establishing a preventive system within 80 public health hospitals in order to fight the spread of Virus C infection in Al Fayoum, Al Minya, Sohag, and Qena, 2) delivering the needed medical equipment, 2) training more than 130 healthcare workers of both doctors and nurses.

⇒ Blood Banks:

This project was divided into three sub projects:

A) The NAT Technology: they succeeded in establishing the NAT technology; the program bought two blood screening units in Tanta and Al Minya and thousands of blood tests are being run using the NAT. All the needed medical equipment related to the NAT blood tests were also provided.

B) Improving and upgrading 29 blood banks related to the National Center for Blood Transfusion Services for delivering medical devices for blood bags separation and storage. The program has delivered the needed medical equipment; besides, training the healthcare workers within these banks.

C) Linking and connecting 202 national public blood banks related the Central Unit of Public Blood Banks which are affiliated to the MOHP through an electronic/ telecommunication network to record and track the donors' medical information. The program started to operate in 50 blood banks in five governorates and the rest of blood banks will join at their scheduled time. The following table explains this project's results:

Table 6: The project's Results

<u>Equipment, Devices & Training</u>	<u>Servers & System</u>	<u>Local Area Network (LAN)</u>	<u>Wide area Network (WAN)</u>
Delivered 467 computers, 467 printers, 394	Delivered the supplying servers with their operation	Started up installing internal network within the 202	They connected and started operating the network within

barcode devices, 78 barcode Printers.	programs in the five governorates.	national blood banks in the 27 governorates.	five governorates as a soft operations.
Trained healthcare workers (staff, doctors, nurses) on how to use new medical equipment.			

Output & outcome:

➤ Regarding the outputs' indicators show through various things:

- Applying the NAT blood test.
- Establishing the national linking blood network.
- Utilizing new equipment.
- Training and professional development for healthcare workers: (staff, doctors, and nurses).
- Enhancing the healthcare infrastructure within four governorates.

➤ Regarding the outcome, this definitely will appear by time through the declining of Virus C infection percentage in the future.

There were some blood samples which were tested by the ELISA and the results were negative. However, the NAT test discovered a positive active virus DNA in one of these samples, which proves that the NAT is more accurate. Therefore, the program has its eligibility.

⇒ Awareness:

The program trained around 180 volunteers/ facilitators, who were responsible for the training of more than 18,000 within the four governorates of Al Fayoum, Al Minya, Sohag, and Qena. In addition, the program trained and raised awareness of 120 barbers about safe shaving and consequently; the awareness project presents people's participation through the volunteer work, and the community engagement and collaboration.

Egypt Free from Virus C Program was guided by a shared insight among all the partners, which focuses on combating virus c. The program's objectives were well developed to achieve the main program vision, and the implementation strategy was very detailed and geared to achieve efficiency and high levels of coverage and success with cost effectiveness.

Another advantage of the program is that the program was established in five governorates at first as piloting for specific objectives and target specific groups. The program designers focused on identifying both direct and indirect program beneficiaries to be able to deliver high quality healthcare services. The direct beneficiaries are the public hospital users, blood receivers, blood donors, and medical staff. While the indirect beneficiaries are the people living in these five governorates. The following tables represent the numbers of both direct and indirect beneficiaries from implementing Egypt Free from Virus C program:

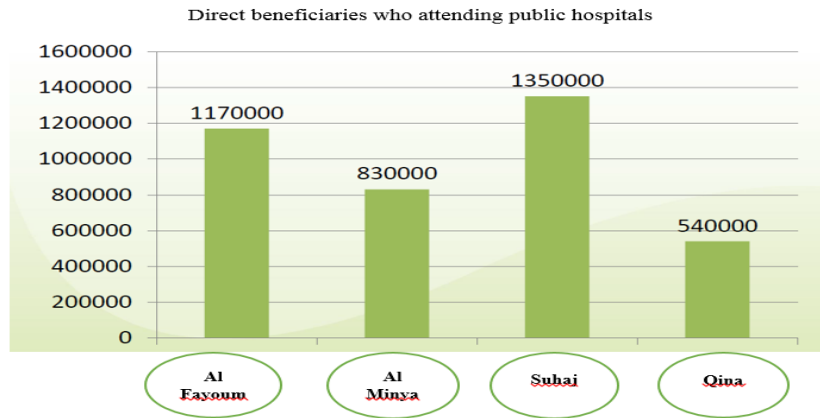


Figure 7: Direct beneficiaries; based on permission from Misr El Kheir

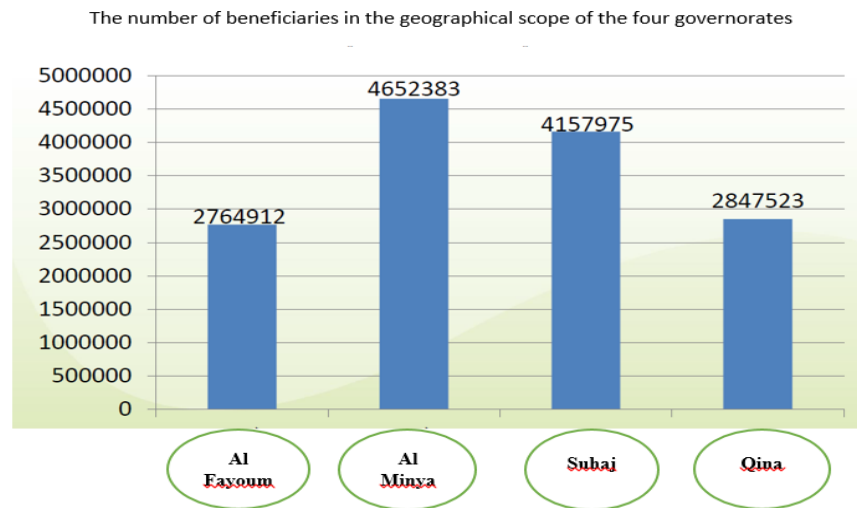


Figure 8: Indirect beneficiaries; based on permission from Misr El Kheir

This program aims to tackle some of the health problems in Egypt through: improving the healthcare infrastructure, preventing blood's diseases, and promoting healthcare services. Indeed, the program's achievement of goals leads to achievement of direct outcomes, such as modernizing healthcare infrastructure, disease prevention, and improve healthcare services coverage and access.

Partnership Analysis

Evaluating the program's results and objectives allows the evaluation of the partnership model. The implemented program includes almost all the needed elements required for an effective partnership of a development program, which are: mutual understanding, agreement, collaboration, financial resources, workforce, needed technology and equipment.

Regarding the partnership evaluation, the following is the partnership definition adopted for this purpose: it is an agreement among several institutions, each of whom owns part of the program, each partner organization has its strengths and wants to help the other partners to achieve both common and private goals; so it's a win-win agreement. Egypt Free from Virus C partnership is a good example for that. The MOHP wanted to upgrade the healthcare infrastructure and improve blood banks services to prevent the spread of blood infection. However, they lacked the needed financial resources and the qualified workforce. On the other hand, Misr El Kheir as a NGO, their main vision and goal is to develop the Egyptian community. However, they lacked the needed authorizations from the government to deliver high standard public services. Finally, Telecom Egypt as a business company, their goal by this partnership was to achieve their corporate social responsibility (CSR).

The case study of Egypt Free from Virus C program represent a Public Private People Partnership (4Ps) model, which includes: the public partner "Ministry of Health and Population", the private partner "Telecom Egypt", and community engagement through "Misr El Kheir Foundation." Managing this kind of partnership is a very complex work to get all the partners working together and to make them agree to co-work (partner) with

each other. That is why managing such a program requires a high level of flexibility and transparency between all the partners.

The analysis of the program's partnership depended on several factors; such as:

1-Partners & Leadership: This factor examines the partnership between the three partners.

Yet, the partners' number is not a measure of a success in itself, rather who is in the partnership and what role does each partner play in terms of accomplishing the overall goal. The program initiator and implementer is Misr El Kheir Foundation, the legislative and facilitator partner is the Ministry of Health and Population, and the financial partner sponsor is Telecom Egypt. Each partner has an essential clear role within the implementation of the program which suits its capacity and mandate. For example:

- a) The Ministry of Health and Population controls and facilitates policies and procedures and it also helps with the assessment part to determine what they need exactly. At the same time the Ministry of Health and Population has the upper hand and controls all the decisions as a result of its dominant position in the partnership. But in return, it enables access to public institutions and ensures the legitimate cooperation of medical staff.

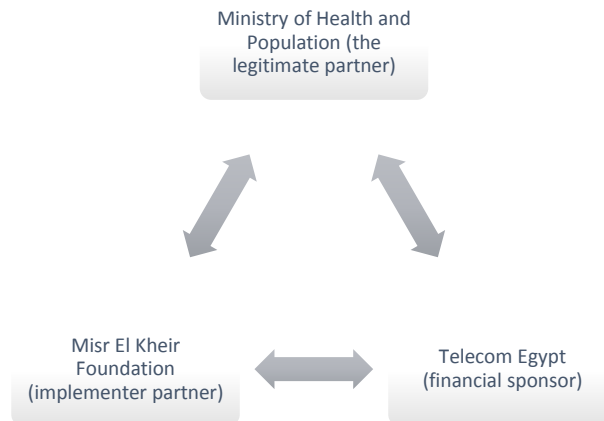


Figure 5: Partners & Leadership; by the author

b) Misr El Kheir Foundation deals with implementing the action plan according to a specific time frame; besides their financial participation. It is the leadership of the implementation process that ensures the required flexibility.

c) Telecom Egypt is the main financial sponsor that has an important role regarding technical processing and networking and that suits its core business and competency as a telecom company.

2-Decision Making & Management: A good partnership must be built on a high level of effective communication, flexibility, and dedication. Joint decision-making was taken by the partners' cooperation and collaboration at equal level within the program structure. Based on interviews, decisions were taken after consulting the three partners, yet the final decision was issued by the government, which is the main authority; represented in the Ministry of Health and Population, because it has the dominant position in the partnership (Interviewee, Oct. 9, 2015). However, the logistic and technical decisions were made based on Telecom Egypt expertise (Interviewee, Nov. 23, 2015).

Through the program's steps the decisions were taken strategically according to the partnership's policy and the program's framework with a wide range of flexibility and understanding between the three partners. For example, from the early beginning, when Misr El Kheir proposed Egypt Free from Virus C program, the government informed them of what they need and expect from this partnership and Misr El Kheir adjusted the program details according to these requirements (Interviewee, Oct. 9, 2015).

3-Process Management: All the program's activities were executed according to the action plan in a logical sequence. Process management was divided between two partners, which are a) Misr El Kheir that took control of the implementation of the program's processes; specifically, the daily work on all levels, and b) Telecom Egypt, which was responsible for management and implementing all the technical work.

Based on interviews, managing the program was not easy due to the continuous changes in the MOHP, yet they -Misr El Kheir & Telecom Egypt- succeeded in achieving the program goals (Interviewee, Nov. 23, 2015). There are a lot of evidences related to process management's flexibility and mutual understanding. For example, the program was supposed to be implemented within a timeframe of one year; however, the program implementation took almost two years delay (Interviewee, Oct. 9, 2015), (Interviewee, Nov. 8, 2015), (Interviewee, Nov. 23, 2015).

4-Relation Management: Both relations, external or internal, were managed according to the partnership's agreement, and it depended on partners' cooperation and flexibility; yet the government still has the dominant managing role.

The partners had an interactive communication channel depending on mutual understanding; where they deal with each other through a horizontal relation structure where all partners were extremely helpful and flexible in a collaborative environment.

On the other hand, the partnership lacked monitoring and follow up mechanisms; based on the interviews, "there is no one to go back to... there is no monitoring and follow up system."(Interviewee, Nov. 8, 2015)

Issues and Challenges

This section, discusses both issues and challenges that encountered the partnership, separating the challenges related to the partnership itself from other challenges. The issues and challenges are divided into two main categories:

- 1- Internal issues and challenges,
- 2- External issues and challenges.

The analysis also connects each factor to its relation to the 4Ps model itself or related to other factors; such as: mismanagement, and political problems.

First: internal issues and challenges:

The program was facing the following obstacles:

- Factors related to the partnering the (4Ps) model:

1-Centralized structure: The Ministry of Health and Population has the dominant role: all the decisions must be taken by the MOHP within the government routine (red tape). Besides, conflicts within the Ministry of Health and Population's internal sectors delayed some procedures.

However, both Misr El Kheir and Telecom Egypt have overcome the government centralized structure by their commitment and dedication towards achieving Egypt Free from Virus C as the program's goals. They really believed in the program importance. Based on interviewees opinions, "dealing with the government was very challenging and different, here in Telecom we accomplish our tasks in no time, yet the government usually take longer time causing us problems, but we were committed to the program because it is a national project requiring a massive budget" (Interviewee, Nov. 23, 2015).

2-Lack of trust: Lack of trust between the partners in the first stages pushed Telecom Egypt to enforce Misr El Kheir to get their expected results as soon as possible; which would be strictly represented in their advertising campaigns as different expectations towards the program from Telecom Egypt other than those of Misr El Kheir as a result of Telcom Egypt concern for the results.

The concept of "Preventive Medicine" is really new to the Egyptian culture; at first the partners did not share the same perception of the importance of this kind of programs. However, the trust issue was solved once the nature of the program was understood clearly. Based on interviews, the upper management expected immediate results compared to other developing programs. However, when they understood that Preventive Medicine programs usually take longer time to give echoing results, they were more patient regarding results (Interviewee, Nov. 2, 2015).

3-Financial and logistical problems: Despite the huge budget, the program's budget was not enough due to the medical devices and equipment prices. Only two screening blood test devices were bought in Tanta and Al Minya, yet were not enough compared to the workload and demand of the governorates. The financial issue was defeated by launching a second phase of the program covering the sustained work in these five governorates, and piloting the program in other new governorates (Interviewee, Jul. 29, 2015).

4-The program sustainability: There was a critical question about till when the partnership can continue and whether it would sustain financing, operating and implementing the program activities. This was a concern among the MOHP's members regarding the program sustainability.

Launching the second phase already answered this concern because there is a part of the second phase that covers the element of sustainability within these five governorates (Interviewee, Jul. 29, 2015).

➤ Factors related to other program management aspects:

1-Relationship influence & authority: The program depended more on the power of the leading positions and their relationships inside the organizations. In other words, if the person is powerful enough and in a good position, the employees will cooperate faster and efficiently using “wasta” in getting things done” (Interviewee, Jul. 29, 2015).

2-Governorates resistance: There was great resistance in the governorates, as expected, while implementing the program as they used to work away from using this kind of advanced technology. Besides, referring every action to the Ministry of Health and Population's approval required more time.

3-Independent and centralized departments and operations: All partners have centralized departments and operation teams. For example, the “Procurement Section” in Misr El Kheir supposed to serve all the organization's programs. As a result, there was a delay in handling the program’s procurement. The same issue exists at the Ministry of Health and Population and Telecom Egypt, centralized departments and decisions.

4-Time: There was a difference and struggle in comprehending the use of time between the partners. The public sector is used to red tape and routine procedures on the implementation level while the private sector depends more on getting things done effectively and efficiently without wasting any time.

Second, external issues and challenges:

There were a huge number of external issues that encountered the partnership and postponed implementing the program; such as:

- 1- Political instability: The program implementation was delayed as a result of the continuous change within the governorates and government employees after the 2011 revolution and the replacement of administrators and managers.
- 2- Bad security conditions: The bad security conditions to reach some of the remote areas especially in the Upper Egypt.
- 3- Poor infrastructure: The current healthcare infrastructure lacked the needed basic structure and network to establish and connect the electronic network in order to link the 27 governorates.
- 4- Lack of supplies in the Egyptian Market: Lack of qualified companies in Egypt to provide the supplies and to execute the program, which required the import of all the tools and equipment from abroad because of the weakness of the local market, which affects meeting the program timeline.
- 5- Cost containment: Costs have been increasing rapidly in Egypt recently; as a result of inflation, which made maintaining the cost according to the estimated one very hard.
- 6- Meeting deadlines: Difficulty in managing time due to many factors; such as: a) Equipment suppliers needed longer time to deliver the medical equipment, b) Political and security challenges, c) Unrealistic frame timeline.

Regarding the issues and challenges, it's clear that the factors relating to the partnership (4Ps) model, are minor and controllable, which can be planned and managed

in the future. Consequently, with these obstacles, Egypt Free from Virus C program has already achieved remarkable results and the conclusive evidences for these accomplishments and achievements are:

- The continuity of implementing the program despite all these obstacles,
- The continuity of the 4Ps partnership.
- Planning for a second phase of the program and the partners already started up both the assessment and the agreement stages.
- The potential and possibility of adopting the 4Ps in other healthcare services has been proven.

Findings and Discussion

Findings of this thesis presented here are based on combining and analyzing all of the literature review, interviews, and field observations in order to answer my research questions:-

1. What is Public Private People Partnership & how different it is from Public Private Partnership?
2. Does the 4Ps program offer solution for improving the healthcare infrastructure in Egypt?
3. Do these kinds of partnerships provide solution for combating the healthcare sector's challenges in Egypt?
4. What are the obstacles that faced adopting the 4Ps model in the case study program?
5. Could the 4Ps model be replicated again in other sectors in the Egyptian context?

First, What is Public Private People Partnership & how different it is from Public Private Partnership?

The 4Ps model is a partnership that embraces collaboration between public sector and private sector with engaging the people as represented by civil society organizations throughout strategies-making and implementation. This developing model combines all the benefits of the 3Ps model; such as: sharing costs, flexibility, affordability, and efficiency; as well as having the benefits of community engagement and representation. Hence, the 4Ps is a kind of an evolving model based on the 3Ps approach. According to Ahmed (2006), “citizens can contribute significantly to service delivery” (Ahmed et al., 2006, pp. 781).

Thus, people's participation was a vital element in achieving and accomplishing the desired goals.



According to Zhang and Kumaraswamy (2015), “The 4Ps systems developed on the base of 3Ps approach, can be tailored to deliver reconstruction projects by integrating the 4th ‘P’ people into PPP” (Zhang et al., 2015, pp. 408). In addition, the Future of HealthCare Report in India (2014) stated that, there are “imperatives for public private people partnership” in order to counter the rise in healthcare costs and demands, and also to face the rapid population increase. Thus, there is an urgent call to promote people participation and community engagement to ensure delivering high quality services.

Regarding the Egypt Free from Virus C program, it’s definitely a 4Ps model as a result of the existence of the three main sectors, which are: 1) the public, represented by the Ministry of Health and Population, 2) the private, represented in Telecom Egypt, and 3) the community, through Misr El Kheir –NGO-.

The reason behind applying the 4Ps not the 3Ps is to avoid power overlapping between the partners; plus engaging and involving the people from the beginning till the end helped the partners to achieve their targets. Therefore, adding the people's dimension in Egypt Free from Virus C program has been reflected through initiating and implementing the program starting from the early beginning till the end. For example, Misr El Kheir proposed the program to the MOHP and Telecom Egypt and worked hard to gather

both partners to reach a mutual agreement. Moreover, Misr El Kheir has planned, prepared and shared the program targets with all partners. They were the main implementer partner who handled the program daily work.

Second: Does the 4Ps program offer solution for improving the healthcare infrastructure in Egypt?

According to Zhang and Kumaraswamy (2015), the 4Ps are “tailored to deliver selected public infrastructure reconstruction projects.” They also stated that, “4P is proposed and introduced to provide an alternative... 4P has great potential to deliver certain types of reconstruction projects better” (Zhang et al., 2015, pp. 408). Thus, the 4Ps model is designed specifically to reconstruct projects related to infrastructure services.

Moreover, S.T. Ng (2013) stated in his article that, "public-private-people partnership based development process gives flexibility and benefits to all stakeholders and helps create desirable infrastructure facilities" (S.T. Ng et al., 2013, pp. 379). Indeed, the 4Ps model presents an alternative approach for the government to face their infrastructure challenges.

In theory and practices, the 4Ps model offer solutions for improving the healthcare infrastructure in Egypt. According to the interviewees, they all agreed on one thing; the 4Ps model represented in Egypt Free from Virus C program is an effective solution to counter the blood disease infection in Egypt based on the program results.

Evaluating the results of implementing Egypt Free from Virus C program in the Program Analysis section revealed that the program has achieved its results; according to the Safe Provider Project Manager:

“Despite the obstacles that we faced, the first stage results were on a realistic level ... the medical tools at the hospitals are now being sterilized, and the medical equipment has arrived and the healthcare workers are using them now” (Interviewee, Jul. 29, 2015).

As the Safe Provider Project Manager mentioned, the program delivered 467 computers, 467 printers, 394 barcode devices, and 78 barcode printers, the healthcare workers started to use these equipment.

According to the Public Unit of Blood Banks’ Manager, this kind of partnerships offer a solution to improve the healthcare blood infrastructure in Egypt, as stated by her that,

“This partnership succeeded to provide safe blood for patients, reduce the numbers of blood bags execution, and establish a national blood banks network across the country that links 202 blood banks which will enable us to follow up and to keep a good track of the blood donors and the recipient patients” (Interviewee, Nov. 8, 2015).

The Public Unit of Blood Banks’ Manager explained the importance of conducting such a program is that the program will establish a network linking all the national blood banks across the country. This network will work as a national database for both the donors and recipients.

Also, the Director of Preventive Medicine has declared that,

“Definitely Egypt Free from Virus C program offers a solution to improve healthcare infrastructure and services in Egypt, that's why we in Misr El Kheir are welcoming and encouraging this kind of partnerships” (Interviewee, Nov. 2, 2015).

Based on field observation, the program offers a solution to improve the healthcare services; particularly its infrastructure. For example, the general public hospital in Al Minya is using the sterilizing device provided by the program. The nurses used to wash and sterilize the surgical instruments by their hands and there was a susceptibility to blood infection; according to one of the nurses in the general public hospital in Al Minya,

"I don't have to worry anymore about getting my hand cut during washing and sterilizing the surgical instruments" (Interviewee, Nov. 25, 2015).

Now, the whole hospital depends on this sterilizer device and the nurses do not worry about sterilizing the medical instruments by their hands anymore.

Third: Do these kinds of partnerships provide solution for combating the healthcare sector's challenges in Egypt?

The 4Ps model provides an alternative solution to face the healthcare's challenges; as Zhang (2015) stated that, the 4Ps are "tailored to deliver selected public infrastructure reconstruction projects" (Zhang et al., 2015, pp. 408). According to the Public Unit of Blood Banks' Manager in the MOHP said that,

"This partnership is what we need right now to improve our blood banks, and the government should organize the effort with the other partners to achieve the maximum results" (Interviewee, Nov. 11, 2015).

The Public Unit of Blood Banks' Manager in the MOHP meant by her statement that the 4Ps is an alternative solution for the government to improve blood transfusion services and also the government should coordinate with the other partners in order to have a mutual agreement towards providing adequate services. According to the IT Manger in

the MOHP, responsible for establishing the electronic network, the 4Ps model indeed provide a perfect solution to improve the healthcare services and also to encounter the health challenges in Egypt; as he stated that,

“This partnership gather three strong partners, each one has its power and strengths and has a specific goal to achieve; so with their power and strengths they can face the healthcare challenges” (Interviewee, Nov. 11, 2015).

The IT Manger meant by his statement that partnering shows what's best in each partner; for example, Telecom Egypt is the dominant telecommunication company in Egypt which is the best partner for establishing the blood banks network across the country.

Also, according to the IT Manager in the MOHP,

“Of course this kind of partnership can be replicated, and in order to do that the Ministry has to encourage the cooperation with other sectors to launch such major projects to improve healthcare services” (Interviewee, Nov. 11, 2015).

According to the IT Manger, the government should encourage private companies to invest more with the government.

After studying and analyzing the program results it is believed that launching the second phase of Egypt Free from Virus C program is a sign of replicating the 4Ps, and the partners comprehended and overcame the obstacles they faced.

Fourth: What are the obstacles that faced adopting the 4Ps model in the case study “Egypt Free from Virus C” program?

There are a lot of barriers faced conducting the 4Ps model through designing and implementing Egypt Free from Virus C Program. According to the Public Unit of Blood Banks’ Manger, there were many obstacles that encountered the partnership; such as:

- Insufficient organizing and planning between the relevant departments within the partners throughout the initial assessment and planning stage.
- Lack of coordinated monitoring and evaluation among the different partner organizations throughout implementing the program.
- Confused accountability concerning the financial transactions.

Also the Public Unit of Blood Banks' Manger mentioned that,

“we agreed on upgrading the infrastructure in Al Fayoum with a certain amount of money; however, while implementing the program Misr El Keir responsible said that they spent this amount of money on something else as it was re-distributed in other activities within the program” (Interviewee, Nov. 11, 2015).

The Public Unit of Blood Banks' Manger meant by her statement that the program was lacking the needed follow up and monitor from the Ministry and also she suggested that, the Ministry should have a special unit for monitoring the program implementation.

In addition, each one of the Minister's Office Manager, IT Manager, and the TE Data CSR Manager complained about time planning and inability for meeting deadline; the IT Manager stated that:

“there was no problem with the equipment's planning; however, there was a problem with the time planning as it was not realistic enough and the implementation process took longer time than they planned” (Interviewee, Nov. 11, 2015).

Moreover, the Minister's Office Secretary mentioned that, the program time frame was not realistic, and there were a lot of delays while implementing the program. Furthermore, the TE Data CSR Manager stated that,

“There are many challenges that faced the program; for example, lack of information, and lack of statistics; besides, the absence of the concept of time value, yet we will continue working because it’s a national project” (Interviewee, Nov. 23, 2015).

In addition to the lack of figures and statistics that show the numbers, the percentage of infection within these governorates was a barrier that all the partners encountered. For example, there was a difficulty in measuring and comparing the program’s effectiveness in reducing the infection rate.

Despite the previous obstacles, Egypt Free from Virus C Program achieved its main targets and objectives to a large extent. According to the IT Manager in the MOHP, *“The program achieved its targets, and the Ministry of Health is in deep need to this kind of developing projects at all levels”* (Interviewee, Nov. 11, 2015).

Fifth: Could the 4Ps model be replicated again in other sectors in the Egyptian context?

The most important proof that the program is successful is that there is a second phase of Egypt Free from Virus C program. The three partners are preparing for the program’s second phase to be applied in different governorates. The second phase of Egypt Free from Virus C program provide financial resources in order to sustain the work within the first phase governorates till the Ministry of Health has the ability to carry on and sustain it by itself, besides operating in other new governorates. Indeed, the second phase of Egypt Free from Virus C program is evidence that the 4Ps model has the potential to be replicated again.

The success of the 4Ps model in the health sector is expected to happen in other sectors of national importance such as education, poverty alleviation, employment generation, and combating illiteracy, because these national challenges mobilizes the

interest of all stakeholders: government, private sector and NGOs to do participate. The common factor among these sectors that ensure replication of the 4Ps model is that they all require huge resources and different competencies that encourage the collaboration of the three sectors in one program of action.

The framework conditions are also suitable for this model: the government is encouraging the role of each stakeholder in Development: NGOs and private sector; so it is expected that it can encourage their cooperation in one model as well. Yet, there are some conditions that must be fulfilled first concerning the following:

1. A shared clear vision with a detailed and comprehensive strategic plan.
2. An adequate political support with stakeholder's engagement on various levels.
3. Strong commitment of well-trained and qualified employees.
4. Monitoring and evaluation throughout the program steps.
5. Re-assess, modify and sustain improving.

Chapter 7

Recommendations

To strengthen our nation's ability to respond to the public health needs and demands, we must re-examine and assess the role of the Egyptian public healthcare system first. This examination will define both the strengths and weakness of the healthcare system to be able to design better targeted programs in the future. Then the government should examine how these issues can be addressed within a strategy for reforming the healthcare system programs, besides sustaining the strength points.

Indeed, the recommendations are based on former studies and experts' suggestions, which are divided into five main points as follows:

1. Recommendations for Egypt Free from Virus C Program:

Reviewing the program design to identify and remove ineffective interventions, and replace expensive items with cheaper alternatives. The program has all the required partnering steps, but it lacks the monitoring and evaluation step. Therefore, the partners should establish a sufficient monitoring system starting from the early beginning of implementing the program till achieving the targeted goals and objectives.

2. Recommendations for the partners:

The government (the MOHP) needs to develop a 4Ps policy framework to improve the healthcare system. This framework will be as a development guide for involving private sectors and civil society in government programs as development model (4Ps) enhances flexibility and reduces routine procedures at the government which increases efficiency.

The private sector “Telecom Egypt” needs to focus on building a mutual trust by communicating with the other partners; besides, developing more programs with the government to be implemented in the future.

The community “Misr El Kheir” needs to develop more preventive programs that will improve the healthcare services and outcomes. In addition, civil society organizations such as Misr El Kheir should seek to develop partnerships with both government and private sectors agencies. They also need to act as true representatives of people’s and communities’ priorities and interests.

3. Recommendations for the 4Ps as a model for preventive measures programs in the healthcare sector:

- The 4Ps model should be guided by a shared vision, well-developed program with expected results, specific objectives, well-designed implementation strategy, and the existence of a matrix of measurable results and outcomes. In addition, reforming the healthcare services needs a handbook that explains every detail within the program, besides paying attention to every detail through analyzing each step.
- Building a collaborative team from the partners’ organizations would ensure cooperation of each partner.
- Monitoring stakeholders’ participations all the way through the program is recommended.
- The partners must conduct rigorous analysis of their institutional strengths and weaknesses. They must also discuss factors that would affect their success and failure.

- Make a good use of both internal and external allies, as they can be powerful tools to provide rationale for reforms.
- Focusing on results: the partners should not focus on failures, but should start to work on achieving goals and success within an effective management. Also, regular communication can be supplemented by a smart media campaign focusing on the results to motivate the partners as well as the people.

As the IT Manager in the Ministry of Health and Population suggested that in order to improve this kind of program, the Ministry of Health should adopt and promote a successful story of this kind of development programs parallel with launching marketing campaigns to encourage and raise the awareness of the people. In addition to the existence of the transparency element of a good management and administrative system, all these factors would work on encouraging other sectors to partner with the government in other development sectors using the 4Ps model (Interviewee, Nov. 8, 2015).

4. Recommendations for improvements of the 4Ps model in Egypt:

The Egyptian government may need to consider:

- Expanding work through the Public Private People Partnership (4Ps) more within the government sector.
- Initiating laws that encourage private organizations to partner with the public sector.
- Promote citizens, civil societies, and NGOs' participations.

- Comparing similar 4Ps projects to study the potential replication of these projects in the Egyptian context, besides studying the projects' strengths to support it and the weaknesses to avoid them.
- Replicating other successful partnership programs within the national capacity: most countries seem to share similar healthcare systems. Thus, international comparisons of other healthcare centers would reform experiences and can offer an opportunity for countries like Egypt to learn from other's experiences in managing the healthcare systems.

5. Recommendations for further research to identify gaps in the research knowledge

For further research, it is recommended that more investigations should be conducted in order to cover laws and regulations affecting the 3Ps and 4Ps models. This is in addition to studying the organizational factors affecting partnerships.

Conclusion

There is no doubt that the growing awareness of the need for human development enhances investment in the healthcare sector. Egypt's healthcare system is focused on providing treatment at the expense of prevention strategies due to limited financial budget. The government's expenses to improve and promote the healthcare infrastructure is limited resulting in the deterioration of the healthcare infrastructure. The deterioration of blood transfusion services in Egypt has led to the high prevalence of transmitted diseases like HIV / Virus C, and Syphilis. Per the WHO regulations, Egypt has to conduct certain blood transfusion measures to be able to provide safe blood transfusion services. Therefore, the government has to prioritize its plan to meet the increasing demand for access to and high quality of healthcare services

According to S.T. Ng (2013), "Public-Private-People Partnerships based development process gives flexibility and benefits to all stakeholders and helps create desirable infrastructure facilities" (S.T. Ng et al., 2013, pp. 379). Consequently, the government started to partner with the private sector through Public Private Partnership to deliver adequate healthcare services; whereas, the multiplicity of actors and because of the overlapping roles and fragmentation of authority the 3Ps gradually developed into Public Private People Partnership (4Ps) by involving all partners. As Zhang (2015) stated that the 4Ps model is tailored to deliver reconstruction projects.

The 4Ps model has been expanding worldwide; therefore, this study proposes to examine what are the potential uses of Public Private People Partnership (4Ps) model to improve the healthcare services in Egypt.

The government has chosen to conduct the 4Ps developing model in parallel with Misr El Kheir Foundation and Telecom Egypt to enhance and improve the healthcare infrastructure within five governorates as a start. Thus, this research focuses on the healthcare sector and a main part of the thesis focused on “Egypt Free from Virus C” Program as an existing case study to examine the potentiality of applying the Public Private People Partnership in the healthcare sector to enhance the healthcare infrastructure in Egypt. In order to have a comprehensive review the paper relied on the qualitative analysis to understand reasons and relations in the 4Ps model.

Challenges facing the program can be summarized in two main categories: 1) internal challenges due to the dominant role of the government, and 2) external challenges as a result of political instability and poor security conditions which delayed the program implementation.

Despite the previous challenges, there are tangible results from conducting the 4Ps model within the healthcare sector in Egypt, which are: 1) improving the healthcare infrastructure, 2) facilitating providing healthcare services, 3) inserting the NAT blood test, 4) providing blood bags for the patient on time, and 5) reducing the execution of infected blood bags.

Based on the literature review and Egypt Free from Virus C program case study, the findings indicate that the Public Private People Partnership (4Ps) model is a successful development approach for developing countries to deal with their development challenges, as was demonstrated in this thesis on the example of promoting and enhancing the healthcare infrastructure in Egypt through the collaborative efforts of the government, private sector and the civil society.

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Appendices

CASE #2014-2015-169



To: Sarah Farahat
Cc: Enas Abdel Azim
From: Atta Gebril, Chair of the IRB
Date: July 9, 2015
Re: Approval of study

This is to inform you that I reviewed your revised research proposal entitled "The potential of Public Private People Partnerships for improving the infrastructure in the health sector in Egypt" and determined that it required consultation with the IRB under the "expedited" heading. As you are aware, the members of the IRB suggested certain revisions to the original proposal, but your new version addresses these concerns successfully. The revised proposal used appropriate procedures to minimize risks to human subjects and that adequate provision was made for confidentiality and data anonymity of participants in any published record. I believe you will also make adequate provision for obtaining informed consent of the participants.

This approval letter was issued under the assumption that you have not started data collection for your research project. Any data collected before receiving this letter could not be used since this is a violation of the IRB policy.

Please note that IRB approval does not automatically ensure approval by CAPMAS, an Egyptian government agency responsible for approving some types of off-campus research. CAPMAS issues are handled at AUC by the office of the University Counsellor, Dr. Amr Salama. The IRB is not in a position to offer any opinion on CAPMAS issues, and takes no responsibility for obtaining CAPMAS approval.

This approval is valid for only one year. In case you have not finished data collection within a year, you need to apply for an extension.

Thank you and good luck.

A handwritten signature in black ink that reads "Atta Gebril".

Dr. Atta Gebril
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The NAT blood test device: Tanta, Nov. 16, 2015; taken by the author



The NAT blood test device: Al Minya, Nov. 25, 2015; taken by the author



Sterile device: Al Minya, Nov. 25, 2015; taken by the author