

USING QUALITY TOOLS TO ENHANCE FINANCIAL STABILITY IN HEALTHCARE INSTITUTIONS IN LEBANON

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***Abstract:** Lebanon suffered from many crises over the last decades. The healthcare sector is in need for financial lift and reform strategies to maintain healthcare services. In this study we applied one of the quality tools in two dialysis centers in two different areas in Lebanon to enhance procedures and consumables consumption. We concluded that the use of quality tools in one procedure in two dialysis centers showed that there is a big room for saving consumables. This practice helps maintaining financial stability.*

***Keywords:** Financial Crisis, financial stability, quality Management, quality tools, lean practice.*

Introduction:

The world witnessed in the last few years several global impacts that affected the international economy. Covid-19, economic crisis, and wars. Governments, huge companies, and even communities are directing their strategies now towards cost cutting and maintaining financial stability. Lebanon is one of the countries which was hit severely by the previously mentioned crises and is looking for economic miracles to lift its severely damaged sectors of which healthcare sector is among.

Overview of the Lebanese healthcare system:

Lebanon is a middle-income country with increasing public debt, minimal growth since 1999, and increasing poverty (Sfeir, 2005). The Lebanese health care sector suffered collapse and fragmentation after the Lebanese war that took place between 1970s and 1980s. In 1983 there was a trial to rehabilitate the severely damaged sector where many hospitals were shelled and most of the medical staff left the country (WIM VAN LERBERGHE, 2018). Between 2000 and 2015 there was serious approach to reboot the healthcare system in the country by implementing measures to decrease expenditure and maintain high quality healthcare services (Mustapha D Ibrahim, 2018).

According to the World health organization report in 2006 the total expenditure on health is approximately 10.6% of the GDP. Private health expenditure accounts for 70% and public expenditure for 30%. Due to the high cost of hospitalization the new approach is to direct patients towards primary health care (WHO World health organization, 2006). The system is financed by seven public funds (two employment-based schemes, four security forces schemes and the MOPH), 71 mutual funds, 56 private medical insurance companies, numerous NGO and OOP expenditure. Each fund has a different authority and a different package of benefits (Sfeir, 2005).

In Lebanon Hospitals are usually owned by physicians where it is loosely controlled (Ammar, et al., 2007). Starting 2001 there was an attempt to subject the hospitals to what is known now “Lebanese accreditation system” for hospitals in Lebanon. On 2002 the Lebanese MOH developed the new accreditation system with the help of the Australian consultant team where the aim was to link services quality to payment methods following the (P4P) principle (El-Jardali, 2007). The system developed through the years with the help of the Lebanese MOH until it reached a semi-mature stage on 2013 (Saleh, et al., 2013). The last accreditation standards

update was on January 2019 (Lebanese MOPH, 2019) where it was supposed to take place on September 2019. The aim of this accreditation was to classify hospitals into categories from A to E where the hospitals who belong to class A being paid the best. This approach helped in enhancing the quality of care and controlling payments. (Ammar, et al., 2007). In 2019 the Economic situation in the country started to collapse with hyperinflation of the local currency followed by Covid-19 pandemic beginning of 2020 and then Beirut port's explosion on August 2020 which left the healthcare sector devastated and depleted (Farah & Jaoude, 2020). In 2022 the situation deeply worsened when even cancer patients couldn't find their medications where the minister of public health decreased the subsidized medications and medical supplies from 120 million dollars to 35 million dollars only (Gibon, 2022). The previous attempts that took place in the beginning of 2000s were evaporated and the Lebanese health sector found itself again struggling and continuing over the ruins of its premature glory.

Current Situation of the healthcare system in Lebanon:

According to statistics from the Central Administration of Statistics Consumer Price Index, the annual inflation rate for Lebanon reached 215 percent in February 2022. The inflation rate has hit the average consumer very hard. Compared to the prices from February 2021 until February 2022, transportation increased by 510 percent, restaurants by 449 percent, healthcare by 413 percent, food and non-alcoholic beverages by 396 percent, and water, electricity, gas and fuels by 372 percent. (The Cradle, 2022). Hospitals who earn their bills from third party payers get their payments in LBP while most of the medical equipment and consumables are imported and priced in dollar which devalue the number of receivables (Hussein Isma'eel, 2020)

Lebanon used to have an abundance of Physicians to cover its healthcare needs. There are 22.71 physicians for every 10,000 people, the fifth highest density in the Eastern Mediterranean region. On the other hand, it suffers from a shortage of nurses, with 16.74 nurses and midwife personnel per 10,000 people (World Health Organization, 2020). Nurses and medical staff in Lebanon had to face the stress of covid-19 along with the economic crisis that affected their salaries where many nurses were subject to salary cuts, layoffs, or furloughs (Deeb, 2020). Hence, many Healthcare providers left the country for better opportunities (Lewis, 2020).

Using quality tools to enhance financial situation in HealthCare institutions in Lebanon:

Many industries used quality management system and its tools to increase quality of their products and services, increase profitability and decrease costs. The concept of using quality tools in hospitals to increase profitability and maintain financial stability was still in its very early stages in Lebanon before the financial crisis hit the country on 2019. Malak Aoun et al in her research in 2018 where more than 300 healthcare employees were involved, showed the significance of lean management and strategies on the innovation skills on employees. (Malak Aoun, 2018).

In our study we took two dialysis centers in two different areas in Lebanon over two months from November 2021 till December 2021. The first month we observed the procedures and the equipment used for each procedure. We noticed that some procedures had repetitive unnecessary steps or a little chaotic. We chose one procedure to apply the lean management practice without interfering of course with safety and infection control measurements:

After each dialysis session the “dialysis station” should be cleaned the dialysis station includes the dialysis machine, patient’s bed, dialysis table. We

observed in the first month that the nurses were cleaning the machines wearing gloves, then they take it off go elsewhere to do another thing then they come back wearing other gloves and continue cleaning. This practice was causing lots of delays and an extra pair of gloves. In the second month nurses were trained to focus on cleaning the full dialysis station before going and doing something else. By applying this simple measure in two centers where 3000 sessions were done on monthly basis 3000 extra pairs of gloves were saved per month. That means saving $3000 \times 12 = 36,000$ pairs of gloves in a year from one procedure only. If only such a number of consumables can be saved from one procedure imagine how much more can be saved from all other procedures in different departments of the hospital over a year. The cost must be tremendously significant.

Those simple yet effective measures and help hospitals and healthcare facilities to maintain some financial stability while healthcare system in the country is under the process of reforming which can take quite long time.

Conclusion:

In a collapsing healthcare system like the Lebanese one, we need to start thinking about every single solution to maintain financial stabilities for hospitals. Quality management tools such as lean practices in medical procedures that doesn't not impact patient and staff safety can help drastically those institutions to maintain an acceptable level of financial stability in a time where every single penny counts.

Abbreviations:

MOPH: Ministry of public health

NGO: Non-governmental organizations

WHO: World Health Organization

OOP: Out of pocket

P4P: Pay for performance

LBP: Lebanese pound

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