AMERICAN UNIVERSITY OF BEIRUT

FACTORS INFLUENCING IMPLEMENTATION OF THE ACCREDITATION PROCESS IN PRIMARY HEALTHCARE CENTERS IN LEBANON

by MIRAY SAMIR ALHARAKEH

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ABSTRACT OF THE PROJECT OF

<u>Miray Samir AlHarakeh</u> for <u>Master of Science in Nursing</u> Major: Nursing

Title: Factors influencing implementation of the accreditation process in primary healthcare centers in Lebanon.

Aim: The aim of this project is to assess factors that influence implementation of the accreditation process in primary health care centers and provide possible recommendations to minimize these factors.

Background & Significance: Primary health care in many countries is the first point of contact the community has with health care services. A strong primary healthcare system is a predictor for better health outcomes. Accreditation is one approach to strengthen the primary health care system.

In Lebanon, during the 1970s, the public sector collapsed due to the war leading to a mushroom of primary healthcare centers governed by different entities to meet the demands. However, most of these primary healthcare centers were not providing high quality of services. Thus, the Ministry of Public Health, wanted to use the accreditation as a mean to raise the performance level by providing standards for the existing services.

Research design & methods: The proposed study is based on a descriptive cross-sectional study design that involved 117 PHCs registered in the accreditation program at the Ministry of Public Health. Data was collected using a mailed self-reported questionnaire that was sent to the participants to consent to and fill at their own convenience. A reminder was sent one week after the first mail to elicit more responses. Data was analyzed using frequencies, median, and crosstab analysis for the variables.

Results: Results revealed that financial issues, lack of equipment, lack of trained professional staff, and excessive workloads were the main barriers for implementing the accreditation process. While instructions and help provided by the ministry of health coordinators on accreditation, as well as the policies provided to PHCs were facilitators for accreditation.

Recommendations: to overcome the multiple barriers for successful accreditation, several actions can be done in order to facilitate implementing the accreditation process such as: working with insurance companies for financial help; introducing the concept of accreditation to healthcare professionals at an early stage, educational sessions about accreditation; using the media as a tool to inform the community about PHC accreditation

and its benefits as well as close follow up by the government to keep the policies up to date with the need of the community in Lebanon.

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CHAPTER I

INTRODUCTION

Primary health care (PHC) is an essential element and in principle the first contact with the health care system (World Health Organization [WHO], 2003; El-Jardali, Ammar, Hemadeh, Jaafar, & Jamal, 2013). Several studies have shown that the health of a country's population is strongly affected by the strength of its primary health care (WHO, 2017; Cueto, 2004; WHO, 2003; Walt & Vaughan, 1982).

After the Alma Ata Declaration in 1978, seven major pillars for a strong primary healthcare system were stated (WHO, 2008). Those included: health and not just the absence of disease; equality in health status between all individuals and countries; economic and social development; the right of people to participate in healthcare; adequate health and social measures in the spirit of social justice; appropriate technology; appropriate policies and procedures as well as proper use of resources and working in partnership to reach the desired goals (WHO, 2006). Accordingly, a spectrum of services from prevention (i.e. vaccinations and family planning) to the management of chronic health conditions and palliative care (WHO, 2006) were included in the basket of services of primary healthcare systems.

Studies have shown that the lack of quality in providing these services was associated with poor client outcomes even when it comes to the simplest diseases. For example, Saleh et al. have shown that 11% of children not well treated for diarrhea ended up with serious complications; and 20% of untreated pneumonia in children died within a few days (Saleh,

Alameddine, Natafgi, & Mourad, 2015). Thus, addressing the quality of PHC services is crucial for improving morbidity and mortality rates in a country (WHO, 2015).

Accreditation is often the mean for boosting the quality of services.

Accreditation is an ongoing assessment of an organization against standards of excellence. Its purpose is to identify what needs to be changed, improved or kept; it also provides access to reliable and evidence-based information on health care and infrastructure (WHO, 2008; WHO, 2017; WHO, 2003). Accreditation is ultimately meant to help an organization use its resources efficiently, increase safety and quality of services, improve communication among staff while providing consistent services to the clients (El-Jardali, et. al, 2013; Macinko, Shi, & Starfield, 2003). Furthermore, accreditation is meant to improve the community's confidence, to stimulate quality improvement, to provide continued education for staff and to allow the organizations to meet specific government requirements (WHO, 2008; El-Jardali, et. al, 2013; WHO, 2008).

Several organizations, including the World Health Organization (WHO), have taken accreditation as one of their priorities. In recent years, WHO organized several meetings in the Eastern Mediterranean and the South-East Asia regions to discuss the feasibility of implementing accreditation in their health care institutions and the mechanism for acting on such an initiative (WHO, 2018). Accordingly, countries have strived for accreditation since the declaration of the International Conference on Primary Health Care held in Alma-Ata. Training workshops and quality benchmarks were placed and emphasized by WHO to improve health care (WHO, 2003).

The Ministry of Public Health (MoPH) in Lebanon was among those countries committed to improving primary health care through accreditation. MoPH with the help of Accreditation Canada, started working on accrediting the primary health care centers in Lebanon (El-Jardali, et al., 2014; MoPH, 2018). In 2019, there were 229 PHCs in Lebanon that were considered part of the PHC network, out of which 117 were part of the accreditation program, 52 PHCs already accredited while the other 65 PHCs were still in process. (MoPH, 2019).

The accreditation process begins when a primary health care center receives basic accreditation training followed by refresher training, and afterwards submits a self-assessment form to MOPH (MoPH, 2018). Within a period of 4-6 months, MOPH in collaboration with Accreditation Canada, conducts a mock survey and offers recommendations using a documented visit report (MoPH, 2018). Then after one to two years, an actual accreditation survey visit is conducted to the center followed by post-accreditation monitoring visits twice per year to ensure that the standards used are sustained. Reaccreditation is done every three years (MoPH, 2018).

Worldwide, accreditation faces several challenges. These challenges include organizational resistance to change, increased staff workload after adding policies and procedures, lack of awareness about continuous quality improvement, insufficient staff training and support, lack of applicable accreditation standards for local use, and lack of performance outcome measures (Zarifraftar, Aryankhesal, 2016).

Similar barriers while working on accreditation of PHCs in Lebanon were reported including financial issues, staff resistance, staff shortage, lack of referral system and applicability of some of the accreditation standards to Lebanon (El-Jardali, et al., 2014). However, this study has been done five years ago and with the continuous changes in the community in Lebanon, an update to reassess the implementation of accreditation in PHCs is necessary.

Hence, the purpose of this project is to assess factors that influence implementation of the accreditation process in primary health care centers and provide possible recommendations to minimize the barriers and build on the facilitators in order to provide quality services in the primary health care network in Lebanon.

CHAPTER II

REVIEW OF LITERATURE

A. Primary health care in Lebanon

Primary health care on many occasions is the first point of contact the community has with health care services (WHO, 2008). It is a priority for countries worldwide hence, a strong healthcare system should be based on equity and efficiency while having low costs and maintaining client satisfaction (WHO, 2017). While the services provided should be comprehensive, accessible, and community-based; they should also meet the health needs of individuals throughout their life (WHO, 2008).

Historically in Lebanon, after the independence in 1943, the health sector became the responsibility of MOPH where its main role was to supervise, coordinate and protect the environment and community. During the 1950s, MOPH began developing a public health system and a network of hospitals and primary health care centers, mainly to cater for the health care needs of the poor. Yet, many remained deprived of these services due to accessibility issues since the major work was done in the capital as a start and the cost of the new services (WHO, 2006; National Health Statistics Report in lebanon, 2012).

Then came the civil war between 1975 and 1990. The large number of casualties throughout this period were treated in mainly private hospitals funded by MOPH. This led to bleeding the government's resources and eventually to the collapse of the public sector, including its primary healthcare system (WHO, 2006; National Health Statistics Report in lebanon, 2012). In the meantime, a number of PHCs and dispensaries started to emerge

governed by international non-governmental organizations, religious or social organizations. These centers grew in a very chaotic way. Most services were curative rather than preventive, varied by quality and quantity of services, and were unequally distributed geographically, thus reducing accessibility. In terms of human resources, qualified personnel were attracted by job opportunities outside the county causing a massive immigration of health professionals (WHO, 2006; National Health Statistics Report in lebanon, 2012).

With the end of the civil war, the reform started in the 1990s. MOPH regained its momentum and started working on reinvigorating its role. One of the initiatives that have been adopted was its role in regulating the PHCs in terms of package of services that needed to be delivered, the introduction of electronic technology and improving and standardizing the quality of services. They identified a number of PHCs that would qualify to be part of the PHC network and signed for providing them access to accreditation with the help of Accreditation Canada.

B. Accreditation: background information

Accreditation of primary health care centers is meant to standardize care between different countries and thus providing safe and quality care to the community (MoPH, 2018). Without accreditation, disparities in health care services can widen the gap between communities (WHO, 2008).

Accreditation can be traced back to the 1880s when accreditation agencies began to emerge; a report distributed by the UNESCO in 2001 called "Accreditation in the USA: origins, developments and future prospects" showed that during that time higher education was a major concern for the public hence, four major accreditation bodies emerged between 1985 and 1995 in the U.S. The purpose of accreditation during that time was to form a bridge between colleges and secondary schools in order to set up a close relation between their administrations as well as standardize the requirements for adequate preparation for college studies. During that time, accreditation agencies had a limited scope of practice and their function was limited to solving minor issues in education; but these steps set place for further evolvement that led to the wide-spread of accreditation for different sectors including healthcare after governments noticed the positive effects they had on education (El-Khawas, 2001).

The medical profession was the first to adopt accreditation between 1876 and 1903 when standards or medical school were placed after which the American Medical Association formed their own committee and developed their own accreditation standards that spread to medical school and hospitals quickly (Zarifraftar & Aryankhesal,

2016). The first stages of accreditation were slow to develop; initially, gaps were identified and solved one problem at a time (El-Khawas, 2001). The process was time-consuming and developed in an uneven pattern before it started to spread out with constant remodeling to fit all organizations, and over the decades, the process became more detailed and organized (Zarifraftar & Aryankhesal, 2016).

Challenges in the implementation of accreditation were reported in various studies, but they mostly targeted hospital not primary healthcare centers; these challenges were divided by the WHO into technical, social, and managerial challenges (WHO, 2003; Zarifraftar & Aryankhesal, 2016). The literature analysis showed that the most common factors affecting accreditation implementation were financial, under supply of proper technology, staff education and training, lack of proper documentation systems, ineffective policies and procedures (WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016).

In particular, financial barriers were found to be the most significant challenge to overcome in countries looking for accreditation due to low income in regards to the high expenses for primary healthcare centers especially when it came to electronic medical records and hiring professional staff (WHO,2008; Zarifraftar, Aryankhesal, 2016). The second most significant challenge was adequate human resources and staff acceptance of the changes that were needed to have standardized care in an organization (Bateganya et al., 2009; Bukonda et al., 2002; Pongpirul et al., 2006; WHO, 2008).

Moreover, lack of governmental regulations also affected accreditation because of poor emphasis on preventive care particularly during the early 1970s when the WHO set the

standards of care for primary health believing that a large number of people had no access to health care (WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016).

C. Accreditation in Lebanon

As indicated above, in Lebanon, several factors led to transform health care; these included the civil war, social, economic, industrial and political influences that pushed the country to take the first step towards universal health coverage (Ministry of Public Health, 2016). With that, primary health care can be traced back to the 1970s when the first national conference on primary health care was executed and a call for building a proper primary health care system was established in Lebanon based on the Alma Ata decisions where primary health care was placed at the front of the agenda for international health (WHO,2017; Ministry of Public Health, 2018).

Since part of the Ministry of Public Health's vision was to have an equitable health system, a law was placed to decentralize the health care system and a plan to develop the first national strategy for primary health care was written in 1994 by the Ministry of Public Health (WHO, 2017). In 1998 Lebanon spent 12.4% of its monetary income on health, more than any other country in the Eastern Mediterranean Region (WHO, 2017). Since then, a series of reforms has been implemented by the MoPH to improve equity and efficiency (WHO,2017; MoPH, 2018).

The key components of this reform were restoring the primary care network and improving quality of health care for the community (WHO,2017; MoPH, 2018). The MoPH

then began an accreditation system for public hospitals while contracting with private hospitals for specific inpatient services at specified prices (WHO,2017; MoPH, 2018). The ministry now has a database that is used to monitor service provision in public and private health facilities (WHO,2017; MoPH, 2018).

It was not until 2008 that the Ministry of Public Health in collaboration with Accerditation Canada that decided to start a national program for primary health care center accreditation across Lebanon after which a national expert committee was formed and contextualize standards of quality, followed by a pilot test which to this date with more than 17 centers accredited across Lebanon (WHO, 2017; Ministry of Public Health, 2018). The accreditation process was customized to the Lebanese healthcare context and made to be interactive; a self-assessment tool was provided to primary health care centers to assess accreditation readiness (Ministry of Public Health, 2016).

Major barriers for accreditation implementation where tackled in one study done by Dr. Jardali et. al; results showed that financial issues, staff resistance to change, staff shortage and lack of referral systems were the major challenges faced by PHCs during accreditation (El-Jardali, et al., 2014).

CHAPTER III

METHODOLOGY

This descriptive cross-sectional survey-based study targeted all 117 PHCs from across Lebanon; there were 229 PHCs in Lebanon out of which 117 of them were part of the accreditation program led by the MoPH and Accreditation Canada. We assessed the facilitators and barriers for implementing the accreditation process on a ranked scale from most perceived to least. The factors we assessed were based on the Donadedian Framework discussed below.

A. Theoretical Framework

In 1966, Dr. Avedis Donabedian proposed a model for measuring quality in healthcare systems; this model divided the healthcare system into three main components "structure, process, and outcome" to examine factors influencing an implementation of programs.

Structure was defined as the settings, qualifications of providers, and administrative systems through which care takes place; Process as the components of care delivered; and outcome as the product of the program (Ayanian & Markel, 2016).

Accordingly, structure in this project represented the human and physical resources, including organizational structure, training, experience, and education of the staff (WHO, 2003; Donabedian, 1966). 'Process' referred to the interaction between clients and the healthcare system reflecting the services provided, while 'outcome' indicated measures

such as outcome of care, client satisfaction (WHO, 2003; Donabedian, 1966). For example, the context of the structure included accessibility of healthcare services, equipment found in the centers, the training, experience, and level of education of the staff (WHO, 2004). The process included the professionalism of the staff and their friendliness when dealing with clients, client's waiting time and more importantly the delivery of evidence-based practice. The outcome included accreditation status, client satisfaction.

B. Targeted Primary Health Care Centers

A list of PHCs with their accreditation status was secured from the Ministry of Public Health (MOPH). The list included: PHCs that have failed the accreditation process, in the process of accreditation or accredited. The list excluded dispensaries and those not within the accreditation program. The list of targeted PHCs from the six regions of Lebanon is shown in Appendix A.

C. Participants

We targeted directors, nurses, and other staff members including physicians and ministry of health officers responsible for these PHCs. They were purposefully targeted because of their intimate involvement in the accreditation process. For example, directors were responsible for distributing the accreditation policies for implementation to the proper staff members in the PHC; they know who can handle what tasks and are eventually responsible to oversee the entire accreditation process. Nurses were responsible for policy

implementation and constant feedback to directors on how the accreditation process is being implemented.

D. Recruitment.

First, we secured the approval of MOPH to approach the PHCs (appendix B: approval letter/email from MOPH). Thus, we sent emails to PHC directors as per the list provided by MOPH. On that email, we explained the purpose of the study and the benefits for participating in the study (Appendix C/D: email sent to PHCs).

Those who accepted our invitation were sent an email containing the following: 1- a cover letter, 2- consent form; 3- survey instrument. In the cover letter, we explained the purpose of this study, the consent form explained the participant's rights and that at any time they can stop and leave the survey. The first e-mail reminder was sent on July 21, 2020. A second e-mail reminder was sent one week after the initial mail and the survey closed after 1 month of the first email (Appendix E).

E. Consent form

In the e-mail, we included a consent form to be electronically signed by each participant, we also took into consideration that anyone who fills the survey has automatically approved and consented to the study (Appendix F/G). In the consent form, we included the following information: the purpose of the study, the benefits of

participation, in addition to a description of the research question, recruitment and study procedures, risks and benefits of participation.

F. Survey instrument

A self-administered survey instrument was used as a data collection approach. Based on previous experience, surveys were successfully used in collecting data from similar populations, with the addition of open-ended questions, which captured further anecdotal evidence.

The survey instrument contained three parts. Part 1- we collected demographic information about participants and PHC center characteristics. The demographic information included questions on: age, gender, education, position, and years of association with the PHCs. The PHC center characteristics included questions on accreditation status, accreditation training and implementation of accreditation policies.

In Part 2, we collected information about the facilitators and barriers for accreditation, 21 in total. We adopted previously used questions by El-Jardali et. al (El-Jardali, et. al, 2013; El-Jardali, et al., 2014). Those questions covered structural factors (questions 1-8), processes of care (question 9-12) and perceived outcomes of accreditation (question 13-21). Participants were asked to respond to the question on a 5-point Likert scale where 1 was strongly disagree and 5 was strongly agree. In the analysis though, due to the low response rate, we lumped the response into three categories: those who answered 1 or 2 were considered as disagree (Disagree=1); those who answered 3 were considered neutral i.e.

neither agree nor disagree (Neutral=2); while those who answered with 4 or 5 were considered as agree (Agree=3). For the structural and processes questions, higher ranking pointed to barriers and lower ranking pointed to lack of. For the outcomes, higher ranking pointed to facilitators, lower ranking pointed to lack of.

In part 3, we had two open-ended questions. First question, what additional comments would you give regarding the accreditation process? Second question, what are, in your opinion, some strategies to better implement the accreditation process in the future? We were interested to elicit participants perspective on other factors that affect the accreditation process in the primary health care centers that were not covered in the survey questions.

The whole survey was translated into Arabic then back translated by a sworn translator. The survey was pilot tested for clarity, coherence, and logical flow by 10 individuals working in different PHCs around Lebanon. No changes were made to the survey after the pilot test, the 10 individuals who filled the survey were not included in the analysis and were asked not to participate in the actual data collection (Appendix H/I: Survey instrument for data collection).

G. Data analysis

For data analysis, SPSS the latest version (26.0) was used. Categorical variables were presented using numbers and percentages. The factors influencing accreditation were analyzed using medians and standard deviation. Moreover, descriptive statistics were used to sort the demographics of the participants. We tested the association between structure, processes and outcomes and demographic variables using cross tabs and chi square.

CHAPTER IV

RESULTS

A. Sample characteristics

A total of 117 primary health care centers who met the inclusion criteria were invited to participate during the study period but only 50 centers (43% response rate) voluntarily consented and participated in the study.

Table 1 presents the demographic characteristics of the participants. More than half of the study respondents were females (66%), while around half of them (58%) were between the ages of 25 and 45 years. The majority (64%) have worked at their centers from 1 to 10 years. More than half (58%) of the sample were currently in process of accreditation while the others were accredited already (42%). Two thirds (70%) of the participants had a university degree while 30% have had a vocational/technical degree. Around half of the participants were directors of the primary health care centers (48%) while 32% were registered nurses and the rest (20%) were staff members who were involved in the accreditation program or those who were the leaders of accreditation in each center. Almost all centers have participated in accreditation training given by the Ministry of Public Health leaving only 10% with no training while all participants have implemented some accreditation standards in their centers before (Table 1: demographic characteristics by selected variables (N=50).

Table 1. Demographic characteristics by selected variables (N=50)

Variables	Frequency	Percent
Gender		
Male	17	34.0
Female	33	66.0
Age (years)		
25-45	29	58.0
46-65	21	42.0
How long have you worked for or been associated		
with this primary health care center? (Years)		
1 to 10	32	64.0
More than 10	18	36.0
Accreditation Status		
Accredited	21	42.0
In Process	29	58.0
Highest degree of education		
University degree	35	70.0
Vocational and Technical degree	15	30.0
Registered Position		
Director	24	48.0
Nurse	16	32.0
Other	10	20.0
Have you participated in training for accreditation?		
Yes	45	90.0
No	5	10.0
Have you ever implemented accreditation standards		
before?		
Yes	50	100.0

No 0.0

B. Facilitators and barriers

Table 2 shows the median and spread of each variable. We calculated the median rather than the mean because the data was not normally distributed. When the median was 1, this was an indication that half of the participants strongly disagreed or disagreed, 2 an indication that half of participants were neutral, while 3 an indication that half agreed or strongly agreed.

1. Structure factors

a. Facilitators

More than half of participants indicated that the accreditation standards were not difficult to understand, not difficult to implement, recommendations given by the primary healthcare coordinators were not difficult to understand, but they were neutral on whether they were difficult to implement.

b. Barriers

The factors that were identified by more than half of the participants as barriers included that the accreditation process was costly, required time from employees, more professional staff and more equipment.

2. Processes of care factors

a. Facilitators

There were no processes that were identified as facilitators.

b. Barriers

The barriers for process implementation included increase in workload of reporting indicators, required trained nurses to provide these services, more outreach services, and more trained nurses to fulfill the range of services.

3. Perceived outcomes of accreditation

a. Facilitators

More than half of the participants perceived the positive outcomes of accreditation, except for one factor.

Accreditation was valued because it led to improved client care, provided services that were client-centered, and created a collaborative approach with partners. Accreditation was also perceived as an approach to motivate the staff to work as a team, to increase staff satisfaction. Finally, accreditation was a tool to implement change, to develop values shared by all health care professionals, they also thought that accreditation changes were sustainable.

Participants were neutral to whether accreditation was a stressful experience.

Table 2. The median and spread of variables (N=50)

Factors	Median	SD
Structural factors		
The accreditation standards are difficult to understand.	1	0.87
The accreditation standards are difficult to implement.	1	0.82
Recommendations given by the Primary Healthcare	1	0.89
Coordinators are difficult to understand.		
Recommendations given by the Primary Healthcare Coordinators are difficult to implement.	2	0.76
Implementing the accreditation process is costly.	3	0.38
Implementing the accreditation process requires more	3	0.39
time from employees.		
Implementing the accreditation process requires more professional staff.	3	0.45
Implementing the accreditation process requires more equipment.	3	0.68
Processes of care		
Implementing the accreditation process increases the workload of reporting indicators.	3	0.75

Implementing the accreditation process increases the	3	0.67
range of services offered by the clinic.		
Implementing the accreditation process requires more	3	0.36
outreach services.		
Implementing the accreditation process requires trained	3	0.56
nurses to deliver the range of services.		
Perceived outcomes		
Accreditation standards enable the improvement of	3	0.61
client care.		
Accreditation policies enable the primary health care	3	0.71
center to better respond to the clients' needs.		
Accreditation contributes to the development of	3	0.55
collaboration with partners in the health care system.		
Accreditation is a valuable tool for the primary health	3	0.62
care center to implement changes.		
Accreditation standards enable the development of	3	0.41
values shared by all professionals at the primary health		
care center.		
Accreditation standards increase the motivation of staff	3	0.57
for change and encourage teamwork and collaboration.		
The implementation of accreditation policies increases	3	0.64
employee satisfaction.		
The changes brought about by accreditation policies	3	0.68
are sustainable.		
The accreditation process is stressful.	2	0.83

Legend: SD=Standard deviation

C. Demographic variables associated with the structure, processes and outcomes influencing accreditation

We tested the association between structure, processes and outcomes and demographic variables.

1. Structure factors

Participants whose degree were technical were more likely to report difficulty understanding the standards (OR 1.03, CI (0.30-3.49) p = 0.004) and those working in accredited were less likely to report those difficulty in understanding (OR 0.89, CI (0.29-2.75) p = 0.038).

Difficulty in implementing the standards were statistically significant by gender, age, and accreditation status. Females and younger age were less likely to report difficulty than males and older age (OR 0.92, CI (0.28-3.05), p=0.001) & (OR 0.87, CI (0.27-2.75), p=0.005) respectively. Those working in accredited centered reported more difficulty implementing those standards (OR 1.14, CI (0.31-3.62) p=0.005).

Difficulty implementing recommendations provided by PHC coordinators were more reported among females (OR 1.19, CI (0.37-3.81), p=0.007).

Technical trained participants were more likely to report the cost as influencing the accreditation process (OR 1.7, CI (0.41-2.47) p = 0.002).

Younger age participants were more likely to report needing more equipment than older age group (OR 1.1, CI (0.55-4.45) p = 0.021). Participants working in accredited centers were less likely reporting the need for more equipment (OR 0.9, CI (0.22-3.71) p = 0.021).

Table 3. A- Significant association between structure factors and demographic variables.

Structure factors	Gender	Age	Education	Accreditation
	(Ref=female	(Ref=Old	(Ref=BS)	status
)	age)		(Ref=non-
				accredited)
The accreditation standards are difficult to	0.24	0.91	0.004	0.038
understand				
The accreditation standards are difficult to	0.001	0.005	0.39	0.005
implement				
Recommendations given by the Primary	0.007	1.62	2.06	0.33
Healthcare Coordinators are difficult to				
implement				
Implementing the accreditation process is	0.52	0.73	0.002	0.73
costly				
Implementing the accreditation process	1.41	0.021	0.59	0.021
requires more equipment				

2. Process factors

Participants whose education was technical were less likely to report needing more outreach services than bachelor prepared (OR 0.39, CI (0.05-3.09), p=0.005). Those working in PHC for less or equal to 10 years reported requiring more trained nurses to deliver the services (OR 2.49, CI (0.25-2.33), p=0.001).

Table 3.B Association between process and demographic variables:

Process	Years of work	Education	
	(> 10 years)	(Ref=BS)	
Implementing the	1.27	0.005	
accreditation process requires			
more outreach services			
Implementing the	0.001	0.72	
accreditation process requires			
trained nurses to deliver the			
range of services			

3. Perceived outcome factors

The implementation of accreditation policies increases employee satisfaction ^a.

a Comparison between policies increasing employee satisfaction by education was statistically significant [OR 0.31, CI (0.075-1.03) p = 0.005, significant].

Accreditation standards increase the motivation of staff for change and encourage teamwork and collaboration ^b.

b Comparison between increasing motivation of staff by accreditation status was statistically significant [OR 1.04, CI (5.23-0.27) p = 0.002, significant].

The perceived outcome of sustainability was statistically higher among younger than older participants [OR 1.10, CI (0.27-4.55), p=0.002). Comparison between sustainability

of accreditation standards by educational level was statistically significant [OR 1.00, CI (0.22-4.56), p=0.01, significant].

The perceived outcome of developing values shared by all professionals was statistically higher among those working 10 years or less than those more than 10 years (OR 1.13, CI (0.09-1.31), p=0.04). Those who had technical degree were less likely to perceive the value of collaboration than bachelor prepared (OR 0.82, CI (0.17-3.86), p=0.005). Female gender and ten years and under were significantly more likely to report accreditation as an important tool to implement change (OR 3.07, CI (0.67-1.56), p=0.003) & (OR 3.9, CI (0.43-3.53), p=0.04) respectively.

Table 3. C. Association between outcomes and demographic characteristics (N=50)

Perceived outcome	Gender	Age	Years	Education	Accreditation
	(Ref=female)	(Ref=old)	of	(Ref=BS)	status
			work		(Ref=non-
			(>10		accredited)
			yrs)		
The implementation of	3.08	1.01	0.20	0.005	2.05
accreditation policies					
increases employee					
satisfaction					
Accreditation standards	0.28	2.56	1.66	0.64	0.002
increase the motivation of					
staff for change and					
encourage teamwork and					
collaboration					

The changes brought	0.20	0.002	0.19	0.01	0.32
about by accreditation					
policies are sustainable					
Accreditation standards	0.15	0.12	0.04	1.78	0.09
enable the development of					
values shared by all					
professionals at the					
primary health care center					
Accreditation contributes	5.21	2.71	2.91	0.05	0.33
to the development of					
collaboration with partners					
in the health care system					
Accreditation is a valuable	0.003	0.47	0.04	0.18	1.72
tool for the primary health					
care center to implement					
changes					
The accreditation process	0.23	0.67	0.52	0.10	0.87
is stressful					

D. Additional comments

In terms of additional comments, participants recommended continued improvement in the accreditation standards and keeping up to date with the changes going on around the world. Most of the participants also recommended that the accreditation process becomes a standard for all primary health care including dispensaries for better community outcomes.

As for recommendations for strategies to better implement the accreditation process in the future, the most suggestions included: training sessions from professionals in accreditation, more funding from the MoPH, more support during the accreditation process, more resources and equipment, as well as more follow up from MoPH. More than half of the participants (70%) said that they require "more training sessions for the staff to enhance their knowledge" and "more flexibility in applying the required standards of the accreditation". Several participants reported that "more funding by the MoPH" is necessary for the accreditation process and that this funding will help overcome other challenges such as the need for equipment and professional staff in the health care centers

CHAPTER V

DISCUSSION

The aim of this study was to assess factors that influence implementation of the accreditation process in primary health care centers and provide possible recommendations to minimize these factors. This chapter includes discussion of the study findings in relation to those present in the literature. The discussion is organized according to the findings, followed by directions for future research. Limitations of the study, ethical consideration, recommendations, and conclusion are included in this chapter.

Our findings on barriers to accreditation were also echoed in the literature including financial issues, under supply of proper technology, staff education and training, lack of proper documentation systems, ineffective policies and procedures (WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016). Moreover, the rise in number of patients, inadequate nurse – patient ratio, constraints regarding infrastructure, inadequate supplies, limited drugs, and scarcity of resources have impeded the growth of accreditation worldwide. While in Lebanon, major barriers for accreditation where partially tackled in one study done by Dr. Jardali et. al (2014); results showed that financial issues, staff resistance to change, staff shortage and lack of referral systems persisted as major challenges facing PHCs during accreditation (El-Jardali, et al., 2014) five years after.

Financial barriers are key challenges and influence other factors. Several studies worldwide reported that money was a major factor influencing accreditation, mainly the

financial cost of accreditation is key for many small hospitals and PHCs (WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016; Rahat, 2017).

This factor seemed to be linked to other factors influencing implementing the accreditation process such as employee satisfaction. Jardali et. Al (2014) reported in their study that accreditation is linked to staff satisfaction and financial rewards seemed to be a major factor influencing this issue. Financial limitations influence recruiting more professional staff and obtaining better equipment (Jardali et. Al, 2014), thus influence staff satisfaction.

The literature review showed that staff resistance to change was another barrier for accreditation (El-Jardali, et al., 2014). This was not shown in this study where participants had verbalized the need for accreditation "the accreditation process should be standardized in Lebanon" as well as their agreement that that accreditation process increases collaboration and teamwork, improves the services and client care provided by PHCs. This agreement to implement accreditation standards may be partially due to the studies done by El-Jardali, et al. (2014) where recommendations were given to the ministry of public health and worked on for the past few years (Ministry of Public Health, 2018).

Findings also show that equipment is a factor that influences the accreditation process (SD=0.68, p=0.021). Similar studies have shown that the lack of proper technology and equipment is a challenge faced by PHCs when it comes to implementing the accreditation process (WHO, 2003; Zarifraftar & Aryankhesal, 2016). Also, insufficient resources and faulty equipment were some of the major challenges that PHCs faced in Lebanon according to Jardali et. Al (2014).

Moreover, several studies have showed that having "structure (equipment)" (WHO,2003) firmly established within a hospital or primary health care center improves quality of care delivered as such increases patient satisfaction (WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016). This was exemplified by health information technology as it often takes a large chunk from the budget of PHCs; also, complaints surround electronic medical records and other IT-related areas were an important factor in financial issues worldwide (WHO, 2008). However, medical records and technological equipment are needed by primary health care centers in order to facilitate collaboration with other healthcare facilities.

Stress was a neutral factor. Several studies have shown that implementing the accreditation process increases the workload on the employees of primary health care centers (WHO, 2003; Zarifraftar & Aryankhesal, 2016). This increase in workload increases the stress on employees thus affecting their performance in implementing the accreditation standards (WHO, 2003; Zarifraftar & Aryankhesal, 2016); however, the results showed that stress was a neutral factor in PHCs and had little to no impact on the implementation of the accreditation process (p= 0.003).

The study also shows that having the appropriate professional staff is essential for accreditation; moreover, studies have shown that accreditation standards will be implemented more successfully when they are accepted by professionals of healthcare organizations (Rahat, 2017; WHO, 2003). There are also professional needs and requirements that the government should consider before integrating PHCs into the accreditation program, this step would help health care centers build the appropriate

infrastructure and be better prepared to begin the accreditation process (Rahat, 2017; WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016).

Accreditation standards will be implemented more successfully when standards are designed and implemented according to the nation's setting and not just adopted from other countries' infrastructure without adaptation (Rahat, 2017; WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016). Working with proper policies was a major factor in influencing the implementation of accreditation standards in this study. Participants agreed that the accreditation standards are easy and most reported that implementing them is feasible; participants also agreed that recommendations given by the ministry of health coordinators were easy to understand (68%). Several studies have shown that ineffective policies and procedures were some of the major barriers for accreditation (WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016); however, as shown in this study, PHCs did not find understanding and implementing the accreditation standards as a barriers influencing accreditation though it was a major factor that affected this process.

In this study, financial issues, lack of equipment, lack of trained professional staff, and excessive workloads were the main barriers for implementing the accreditation process. Though the instructions and help provided by the ministry of health coordinators on accreditation, as well as the policies provided to PHCs were facilitators for accreditation. Such results seem to be similar to the results of previous studies done on accreditation in Lebanon where education and training of staff were critical for the implementation of accreditation as well as providing incentives, resources, rewards and publicizing the names of centers (Jardali, et al., 2014; Ministry of Public Health; 2016). On the other hand, stress

and staff resistance to change were factors that have been resolved since the previous study done by Jardali, et al. (2014).

A. Role of the Advanced Practice Nurse

When it comes to accreditation, advanced practice nurses (APNs) working in the community, take on more complex tasks and manage them with greater independence, judgement, and accountability (American Nurse Association; 2010). With that, advanced practice nurses play an important role in accreditation including supervising, leading, guiding, and reporting performance during the accreditation process.

APNs supervise implementing the standards and policies as well as the recommendations of the MoPH during accreditation; advanced practice nurses aid in the development of professional nursing standards in health care centers and possess the appropriate knowledge to help in molding the accreditation standards to fit the community in which they work with.

Results of this study showed that some nurses in different PHCs face some difficulties in understanding and implementing accreditation standards. With that the role of the advanced practice nurse in guiding and coaching other nurses will be valuable during the accreditation process. APNs will act as a resource and referral agent for any questions others may have, they will also train and supervise nurses as well as manage nurse led services in primary health care centers. After which, APNs will participate in evaluating these services and their impact on their communities.

Finally, advanced practice nurses will be able to gather information about the clients in their respective communities and as such plan and implement services tailored to the community and the needs of the clients in each primary health care center. This will aid implementing the accreditation process especially when the standards provided to each PHC is customized to their specific clients.

B. Limitations

The major limitations of this study may be that participants were biased towards their centers as well as the social desirability associated with the survey which influences the validity of the responses. Low response rate since questionnaire was distributed by e-mail and reminders done follow up mails after 1 week. Moreover, with the situation in Lebanon with the global pandemic as well as the bombing that happened, several PHCs were damaged while others were focused on helping the community, these issues also added to the low response rate for the study. The results of the study may not be generalized to all primary health care centers.

C. Ethical Consideration

IRB approval was secured before the questionnaire was disseminated to the primary health care centers. Approval from the Ministry of Public Health was also be secured in order to conduct the study. A consent form was sent by e-mail to all participants in the study for approval (Appendix F and G). All questionnaires and data will be kept in a

password-protected computer in a secure office at the Hariri School of Nursing at the American University of Beirut. The data was analyzed on a password-protected computer in a secure office at the Hariri School of Nursing. Data access is limited to the Principal Investigator and researchers working directly on this project. Records were monitored and audited without violating confidentiality. All data will be destroyed responsibly after the required retention period (3 years). To ensure confidentiality, data were reported in aggregate form. Anonymity of the participants were insured by not mentioning the names of any of the primary healthcare centers or their directors in the results; privacy was insured by giving the participants time to fill the questionnaire alone at their own time.

D. Recommendations

With the results of the study, several recommendations can be proposed to facilitate the accreditation process for primary health care centers. These recommendations include:

- 1- Financial help: Government aid and funding can act as a catalyst in enhancing the pace of accreditation in the healthcare sector. The Ministry of Public Health should allocate special budgets for accreditation, though with the economic crisis this may be difficult but needs to be implemented as soon as the situation clears.

 Furthermore, special contracts with organizations which have been accredited can also play a major role in stabilizing the programs.
- 2- Spreading the knowledge for healthcare professionals about accreditation in universities or in PHCs before employment: Collaboration among universities and teaching hospitals and other healthcare organizations and their mutual role in

introducing the concepts of accreditation standards and continuous improvement are essential for encouraging healthcare experts to realize the necessity of professional standards which are delivered through the accreditation programs. This can be done by integrating accreditation into the curriculum or having the ministry of public health officers as spokespeople for special lectures (Rahat, 2017; WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016; El-Jardali, et al., 2014).

- 3- Also, the administrators of PHCs are called to address the findings related to BSN participants stating that the accreditation needs more outreach services. This could be done by involving the BS nurses in searching, identifying, planning, and implementing outreach programs such as mobile clinics, telehealth, or telephone-based strategies to support community health and access to care.
- 4- Media: Marketing and publicizing accreditation and its importance in health service delivery among the population representing the accreditation results in terms of quality, patient safety and cost effectiveness for the consumer. This may also encourage other healthcare facilities to seek out accreditation.
- 5- Education: Continuous Education and technical assistance of the staff to increase their knowledge and skills regarding implementation of accreditation standards and encouraging an atmosphere of knowledge sharing within the organization. The findings showed that accreditation standards were difficult to understand and implement for participants with technical degrees, mainly male and older adults. Thus, when planning training sessions on accreditation, it would be beneficial to offer support sessions for those staff to address their questions and concerns.

- a. This can be done by having the ministry of public health allocate an educator for PHCs or having their accreditation coordinators give session for the staff regarding different topics on accreditation.
- b. Have the order of nurses in collaboration with nursing schools in Lebanon help in with this issue by volunteering nurses to teach or give sessions at PHCs about accreditation or have them help with explaining the policies.
- 6- Flexibility in applying accreditation standards: most studies have shown that accreditation is stressful for all stakeholders and healthcare centers. Extending the time for implementing policies and procedure may help ease some tension for PHCs (Rahat, 2017; WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016; El-Jardali, et al., 2014).
- 7- Laws: If the ministry helps PHCs with funding then there should be a regulatory law that mandates healthcare centers to become accredited and execute penalties for failure and rewards for success stories (Rahat, 2017; WHO, 2008; Cueto, 2004; Zarifraftar & Aryankhesal, 2016; El-Jardali, et al., 2014).
- 8- Motivation: Since the staff of accredited centers reported having fewer difficulties and perceived more value in the accreditation process, inviting them to share their experiences with centers applying for accreditation for the first time, might motivate the staff and relief their stress. Creating motivation in the tasks and responsibilities of the personnel who participate in the implementation of accreditation standards. This can be in the form of any type of reward that can be given to the staff with the collaboration of agencies or organizations around each center.

9- During the implementation process, it is recommended to provide close follow-up and support to less experienced staff as suggested by experienced participants who reported that implementing the accreditation standards requires trained nurses to deliver the range of services.

E. Conclusion

Establishment of accredited primary health care centers in Lebanon requires empowerment from the government in terms of resources and knowledge. Lack of efficient management, sufficient human and financial resources, and the related knowledge and skills in primary healthcare centers that are within the accreditation system are the main barriers for implementing the accreditation process in Lebanon. However, stress no longer affects the accreditation process, similarly, the notion that staff are resistant to change seems to have been resolved during the past few years. Implementing the accreditation process is feasible in Lebanon though attention should be made to all aspects of primary healthcare centers with early and frequent communication with all stakeholders to promote accreditation as a means for community improvement.

APPENDIX A

List of 117 Primary health care centers targeted for the study:

وزارة الصحة العامة مراكز شبكة الرعاية الصحية الاولية Updated on 13/July/2020

العدد: 117

اسم المركز	اسم المركز
مركز بلدية الغبيري	مركز الزهراء الصحي - زقاق البلاط
مركز الرعاية الصحية الأولية - حارة	جمعية إنماء بيروت
حريك	55
مركز رأس المتن الطبي	سان أنطوان الصحي
الطبي الإجتماعي - عين الرمانة	مركز الحرج المقاصدي
دار الحوراء - بئر العبد	مركز الظريف الطب
مركز بلدية برج البراجنة	مركز الباشورة المقاصدي
الصحة العامة – الجامعة اللبنانية - الحدث	العناية بالطفل والام ـ بيروت
مركز بلدية الشياح للرعاية الصحية الأولية	دار الفتوى الصحي
المركز الصحي الاجتماعي بلونه	خاتم الأنبياء - النويري
مركز الأرز الطبي ـ زوق مكايل	مركز مخزومي الطبي ــ المزرعة
الطبي الاجتماعي - ذوق مكايل	مركز طب العائلة في الجامعة الاميركية في بيروت
مركز الصحي الاجتماعي - برجا	الطبي الإجتماعي بولغورجيان - برج حمود
مركز الاقليم للرعاية الصحية الاولية -	مركز مار انطونيوس - الجديدة
شحيم	
كفرحيم للرعاية الصحية الأولية	قره كوزيان لرعاية الأطفال في لبنان
الباروك الصحي الحكومي	الطبي الإجتماعي - الفنار
مركز بيت بعقلين الطبي	مركز بلدية الجديدة
الشويفات الحكومي	مركز د. وديع الحاج الصحي - بسكنتا
مركز الإمام الصادق الصحي	مركز طبابة قضاء جبيل
مركز الإمام الرضى الصحي	الإيمان - الميناء

المركز الصحي الإجتماعي عبيه	ابن سينا الصحي الإجتماعي
الطبي الاجتماعي - الخالدية	مركز الكرامة الخيري
مركز مزيارة الخيري	مركز العزم والسعادة
جيهان فرنجية للخدمات الإنمائية	مركز الرحمة الطبي
مركز بلدية مرياطة القادرية الصحي	ti . Jeti .c
الاجتماعي	مركز القلمون الصحي
مركز الإيمان الطبي سير الضنية	
. J	الر عاية الصحية الأولية - مستشفى طر ابلس الحكومي
مركز النهضة الإجتماعية المنية	
	النجدة الشعبية - كفرصارون
مركز الحنان الطبي – المنية	مشحا الصحي الخيري
. بر ـر ، ــــــ ر ، ــــــ بي ـــ ، ــــــ بي ا	ــــــ ، ـــــــي ، ـــــــــر پ
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مركز الأرز الطبي - قنات	الصحى المقاصدي - وادي خالد
الامام الحسين - جلالا	المركز البلدي لرعاية صحة الأم والطفل - مشمش
عين كفرزبد الصحي الإجتماعي	مركز الإيمان الطبي - ببنين
مركز قب الياس	مركز النجدة الشعبية – حلبا
بر الياس الصحي الحكومي	مركز الإرشاد الطبي – برقايل
مركز رفيق الحريري الطبي - تعنايل	مركز البيرة الصحي الاجتماعي
الابرار الطبي - عزة	مركز التنمية الصحي
الصليب الاحمر اللبناني - راشيا	المركز الطبي المتطور - مشتى حسن
الشهيد فرج بلوق	مركز جمعية اللجان للمتابعة - الخريبة عكار
النبي شيت الصحي	مركز مشغرة للرعاية الصحية الأولية
شمسطار الصحي	الجمعية اللبنانية للرعاية الصحية الإجتماعية - سحمر
مركز بوداي الصحي	مركز الحاج مهدي عيدي - عامل الصحي - مشغرة
مركز اللبوة الصحي	الطبي الاجتماعي – كفريا/البقاع
مركز بلدية سرعين الفرقا	الصليب الأحمر اللبناني - الهرمل
عامل الصحي العين - بعلبك	البتول الصحي
مركز الخدمات الإنمائية - بعلبك	مركز الغسانية الصحي
	· ·

عامل الصحي - البازوريه	مجمع نبيه بري لتأهيل المعوقين
مؤسسات الامام الصدر – مركز الشهابيّة للرعاية الصحيّة الأوليّة	مركز الدكتور نزيه البزري
الامام الخميني - المعشوق	الغازية الصحي - جمعية البر والإحسان
مركز الكيان الطبي - صور	الر عاية الصحية الأولية - مستشفى صيدا الحكومي
عامل الصحي ـ صور	المركز الصحي لجمعية سربتا
طب العائلة - عيتيت	مركز الكيان الطبي - المروانية
مركز الزهراء الخيري ـ مرجعيون	مرکز کاریتاس - صیدا
مؤسسات الامام الصدر – مركز دير سريان للرعاية الصحيّة الأوليّة	مركز بلدية انصار
الخيام الصحي الحكومي	الرعاية الصحية الاولية - النبطية
عامل الصحي - الخيام	جباع الصحي الحكومي
مركز الرعاية الصحية الاولية حاصبيا	مركز دير الزهراني الصحي
مركز عين جرفا الصحي	مركز الخدمات الإنمائية - بنت جبيل
مركز برج قلاوية الصحي	مركز الخدمات الإنمائية - عيتا الشعب
	الرعاية الصحية الاولية -
	مستشفى تبنين الحكومي

Appendix B

From: Imad El Haddad <<u>i.haddad@hotmail.com</u>> **Date:** November 28, 2018 at 8:24:50 AM GMT+2 **To:** Mary Arevian Bakalian <<u>mb00@aub.edu.lb</u>>

Subject: Re: Approval of a project for Miray Harakeh

Dear Ms. Arevian,

I hope all is well.

On behalf of Dr. Randa Hamadeh, I would like to inform you that with great pleasure we approve for Miray's project.

However, there are several steps that need to be taken into consideration prior to the start of the project which are summarized below.

- The final questionnaire that will be used should be sent to the Ministry prior to initiating the project
- The number of PHCs that the questionnaire will be sent should be communicated to us and their status if Mock or Actual Accredited centers will be selected
- A draft memo in Arabic targeting the PHCs that will be contacted should be prepared and sent to the Ministry for approval (Template attached)
- A final copy of the project with the results should be sent to the Ministry upon completion.

For further questions, do not hesitate to contact me.

Best Regards,

Imad El Haddad

Accreditation & NCD Coordinator

Mobile: 03-918099 Fax: 01-843798 www.moph.gov.lb

Tel.: 01-830371/2

Lebanese Ministry of Public Health, Primary Healthcare Department

Jnah, MoPH building, 2nd Floor

Beirut, Lebanon

APPENDIX C

Invitation to Participate in a Research Study

This notice is for an AUB-IRB Approved Research Study

for Dr. Gladys Honein at AUB.

Hariri School of Nursing, 4th floor

It is not an Official Message from AUB

I am inviting you to participate in a research study about Factors influencing implementation of the accreditation process in primary health care centers in Lebanon, the purpose of the study is to highlight the factors influencing implementation of the accreditation process in primary health care centers in Lebanon. We will also provide recommendations to bypass the barriers and have more primary health centers accredited in Lebanon.

You will be asked to complete a short survey/questionnaire with demographic information and questions regarding facilitators and barriers of accreditation.

You are invited because we are targeting i.e. directors and/or nurses working in primary healthcare centers. (you are eligible for this study if you are an Arabic speaking adult, your age is between 20 to 65 years and have been an employee, director/head nurse, at this primary health care center for more than 1 year)

The estimated time to complete this survey is approximately 15 minutes.

The research is conducted online and is hosted on AUB server.

You can access the survey by clicking on either links below:

For Arabic: https://phcs.limequery.com/623841?lang=ar

For English: https://phcs.limeguery.com/261113?lang=en

Please read the consent form and consider whether you want to be involved in the study.

If you have any questions about this study, you may contact the investigator/research team Miss Miray Harakeh at mh221@aub.edu.lb

APPENDIX D

العوامل المؤثرة في تنفيذ عملية الاعتماد في مراكز الرعاية الصحية الأولية في لبنان

جانب إدارة مركز الرعاية الصحية الأولية

تقوم وزارة الصحة العامة بالتعاون مع الجامعة الأميركية في بيروت – مدرسة التمريض ونقابة الممرضات والممرضات والممرضين في لبنان ببحث علمي حول العوامل المؤثرة في تنفيذ عملية الاعتماد في مراكز الرعاية الصحية الأولية في لبنان.

هدف هذه الدراسة هو تسليط الضوء على العوامل المؤثرة في تنفيذ عملية الاعتماد في مراكز الرعاية الصحية الأولية في لبنان وتقديم التوصيات لتجاوز الحواجز.

تتضمن هذه الدراسة البحثية مشاركة جميع مراكز الرعاية الصحية الأولية ضمن برنامج الاعتماد في وزارة الصحة العامة.

المشاركة في هذه الدراسة طوعية بالكامل، يمكن للمركز رفض المشاركة أو عدم الإجابة عن جميع الأسئلة في الاستبيان. عدم المشاركة في الاستبيان أو إجابة استبيان غير مكتمل لن يؤثر بأي حال من الأحوال على علاقتك بالمركز أو مع الجامعة الأميركية في بيروت.

يطلب من مراكز الرعاية الصحية الأولية (مدير المركز او منسق الإعتماد او الممرض المجاز) تعبئة الاستبيان باستخدام الروابط أدناه:

الغة العربية: https://phcs.limequery.com/623841?lang=ar العادية: https://phcs.limequery.com/261113?lang=en

الرجاء ملء الاستبيان قبل نهار الثلاثاء الواقع في2020/7/28.

يطلب منكم التعاون لإنجاح هذه الدراسة لما فيه من فائدة علمية وصحية لمراكز الرعاية الصحية الأولية وللمجتمع.

الرجاء الاتصال بالأنسة ميراي حركة على الرقم 71/171338 للمراجعة او الأسئلة عن الدراسة.

Ministry of Public Health Primary Health Care Department

Phone: +961 1 830371-72-73-74 +961 1 830300 ext: 901 & 902

Fax: +961 1 843798 www.moph.gov.lb Jnah, MoPH building, 2nd Floor

Beirut, Lebanon

APPENDIX E

Miray Harakeh harakeh.miray@gmail.com

to PHCCoordinatorBeirut@gmail.com, PHCCoordinatorML@gmail.com, phccoordinator.north@gmail.com, F

Kind Reminder.

On Tue, Jul 21, 2020 at 2:32 PM PHC Lebanon <moph-phc-leb@hotmail.com> wrote:

جانب إدارة مركز الرعاية الصحية الأولية

تقوم وزارة الصحة العامة بالتعاون مع الجامعة الأميركية في بيروت – مدرسة التمريض ونقابة الممرضات والممرضين في لبنان ببحث علمي حول العوامل المؤثرة في تنفيذ عملية الاعتماد في مراكز الرعاية الصحية الأولية في لبنان.

هدف هذه الدراسة هو تسليط الضوء على العوامل المؤثرة في تنفيذ عملية الاعتماد في مراكز الرعاية الصحية الأولية في لبنان وتقديم التوصيات لتجاوز الحواجز.

تتضمن هذه الدراسة البحثية مشاركة جميع مراكز الرعاية الصحية الأولية ضمن برنامج الاعتماد في وزارة الصحة العامة.

المشاركة في هذه الدراسة طوعية بالكامل، يمكن للمركز رفض المشاركة أو عدم الإجابة عن جميع الأسئلة في الاستبيان. عدم المشاركة في الاستبيان أو إجابة استبيان غير مكتمل لن يؤثر بأي حال من الأحوال على علاقتك بالمركز أو مع الجامعة الأميركية في بيروت.

يطلب من مراكز الرعاية الصحية الأولية (مدير المركز او منسق الإعتماد او الممرض المجاز) تعبئة الاستبيان باستخدام الروابط أدناه:

اللغة العربية: https://phcs.limequery.com/623841?lang=ar اللغة الإنجليزية: https://phcs.limequery.com/261113?lang=en

الرجاء ملء الاستبيان قبل نهار الثلاثاء الواقع في2020/8/4.

APPENDIX F

American University of Beirut

Hariri School of Nursing

Study Title: Factors influencing implementation of the accreditation process in primary health care centers in Lebanon

Investigative team: Dr. Gladys Honein, Principal Investigator Co-Investigators: Ms. Miray Harakeh, Dr. Lina Younan

CONSENT DOCUMENT

Dear Sir/ lady

You are kindly invited to participate in a **research study**. The purpose of the study is to highlight the factors influencing implementation of the accreditation process in primary health care centers in Lebanon. We will also provide recommendations to bypass the barriers and have more primary health centers accredited in Lebanon.

You were selected as a possible candidate to participate because you are an Arabic speaking adult, your age is between 20 to 65 years and have been an employee at this primary health care center for more than 1 year.

Please read the following information carefully and feel free to ask any questions that you may have.

- This informed consent document is applicable for use only in the present study.
- The direct recruitment approach in relation to inviting subjects directly to participate in the study was approved by the ethics committee of the American University of Beirut.
- Your participation is completely anonymous. No one will be able to link the information you provide to you.
- You will receive a copy of the consent form you sign.

A. Project Description

PHCs will be contacted through mails to solicit their support, these mails will be forwarded to directors/head nurses with an explanation of the significance of the study and its results, as well as important ethical considerations that shall be ensured such as confidentiality and anonymity. You will also receive the questionnaires' links by email online for filling and a reminder will be sent by mail to the centers after one week.

You will be filling out a questionnaire based on a Likert Scale:

- 1. Please read the first page and sign it if you decide to take part in the study.
- 2. All what we require is that you fill a questionnaire that revolves around factors influencing accreditation. We expect the questionnaire to take 15 min at most of your time.

B. Voluntary Participation

Participation in this study is voluntary; there are no penalties of any kind for declining to take part or for not answering all the questions in the survey. Not taking part in the survey or answering an incomplete questionnaire will in no way affect your relationship with the center, Ministry of Public Health or with the American University of Beirut.

C. Privacy

Your participation in this survey is completely anonymous. There is no way anyone will be able to link your answer to your identity, not since we will not include identifying information on the questionnaire. Data will be reported in aggregate only, so none of the information you will provide will be used in a way that could identify you.

D. Confidentiality

I would like to assure you that all the information you provide will be used for research purposes and that format of the study results will not allow the identification of any study participant.

To secure the confidentiality of your responses, we will not include any identifying information on the questionnaires. All questionnaires and data will be kept in a password-protected computer at the Hariri School of Nursing at the American University of Beirut. The data will be analyzed on a password-protected computer in a secure office at the Hariri School of Nursing. Data access is limited to the Principal Investigator and researchers working directly on this project. Records will be monitored and may be audited without violating confidentiality. All data will be destroyed responsibly after the required retention period (3 years.)

E. Risks and Benefits

Your participation in this study does not involve any physical risk or emotional risk to you beyond the risks of daily life. You have the right to withdraw your consent or discontinue participation at any time for any reason. Your decision to withdraw will not involve any penalty or loss of benefits to which you are entitled. Discontinuing participation does not affect your relationship with any primary health care center.

You will receive no direct benefits from participating in this research; however, your participation will help shed light on the factors influencing accreditation and possible means to overcome barriers of accreditation.

F. Contact Information

1) If you have any questions or concerns about the research, you may contact the principal investigator, Dr Gladys Honein, American University of Beirut, Riad El Solh 1107 2020;

PO Box: 11 0236; Beirut, Lebanon

Tel.: (961) 1-350000, Fax.: (961)1-744476 e-mail: gh30@aub.edu.lb

2) If you have any questions, concerns, or complaints about your rights as a participant in this research, you can contact the following office at AUB:

Social & Behavioral Sciences Institutional Review Board, American University of Beirut. Telephone: (961)1350000-extension 5454; email: irb@aub.edu.lb

APPENDIX G

الجامعة الأمريكية في بيروت

مدرسة رفيق الحريري للتمريض

عنوان البحث: العوامل المؤثرة في تنفيذ عملية الاعتماد في مراكز الرعاية الصحية الأولية في لبنان

فريق البحث: د. غلاديس حنين, الباحث الرئيسي

باحث مشارك: ميراي الحركة و د. لينا يونان

موافقة على المشاركة في البحث

وثيقة الموافقة سيدي العزيزة العزيزة

أنت مدعو للمشاركة في دراسة بحثية. هدف هذه الدراسة إلى تسليط الضوء على العوامل المؤثرة في تنفيذ عملية الاعتماد في مراكز الرعاية الصحية الأولية في لبنان. سنقدم أيضًا توصيات لتجاوز هذه الحواجز.

لقد تم اختيارك كمرشح محتمل للمشاركة لأنك من البالغين الناطقين بالعربية ، وعمرك يتراوح بين 20 إلى 65 عامًا وكنت موظف في مركز الرعاية الصحية الأولية هذا لأكثر من عام.

يرجى قراءة المعلومات التالية بعناية ولا تتردد في طرح أي أسئلة قد تكون لديكم.

- وثيقة الموافقة المستنيرة هذه قابلة للتطبيق للاستخدام فقط في الدراسة الحالية.
- تمت الموافقة على طريقة استقطاب المشاركين في الدراسة من قبل لجنة الأخلاقيات في الجامعة الأمريكية في بيروت. وسيتم عرض المعلومات بشكل مجمع بحيث لا تجيز ربط المعلومات بالمخبر.
 - ستتلقى نسخة من نموذج الموافقة الذي توقعه.

أ. وصف المشروع

سيتم التواصل بمراكز الرعاية الصحية الأولية من خلال البريد للحصول على دعمهم، وسيتم إرسال هذه الرسائل إلى المديرين /الممرضين الرئيسيين مع شرح لأهمية الدراسة ونتائجها، بالإضافة إلى الاعتبارات الأخلاقية الهامة التي يجب ضمانها مثل السرية وعدم الكشف عن الهوية. ستتلقى أيضا روابط الاستبيانات عن طريق البريد الإلكتروني عبر الإنترنت لملئها وسيتم إرسال تذكير بالبريد إلى المراكز بعد أسبوع واحد.

سوف تقوم بملء استبيان بناءً على مقياس Likert: 1. يرجى قراءة الصفحة الأولى وتوقيعها إذا قررت المشاركة في الدراسة. 2. كل ما نطلبه هو أن تقوم بملء استبيان يدور حول العوامل المؤثرة على الاعتماد. نتوقع أن يستغرق الاستبيان 10 دقائق في معظم وقتك

ب. المشاركة الطوعية

المشاركة في هذه الدراسة طوعية بالكامل؛ لا توجد عقوبات من أي نوع بسبب رفض المشاركة أو عدم الإجابة عن جميع الأسئلة في الاستبيان. عدم المشاركة في الاستبيان أو إجابة استبيان غير مكتمل لن يؤثر بأي حال من الأحوال على علاقتك بالمركز أو مع الجامعة الأميركية في بيروت.

ج. الخصوصية

مشاركتك في هذا الاستطلاع مجهولة تمامًا. ليس هناك طريقة تمكن أي شخص من معرفة ما إذا كنت شاركت أم لا. سيتم الإبلاغ عن البيانات بشكل مجمع فقط، لذلك لن يتم استخدام أي من المعلومات التي ستقدمها بطريقة يمكن أن تحدد هويتك.

ج. السرية

أود أن أؤكد لك أن جميع المعلومات التي تقدمها ستستخدم لأغراض البحث وأن شكل نتائج الدراسة لن يسمح بتحديد أي مشارك في الدراسة.

لضمان سرية إجاباتك، يرجى الامتناع عن كتابة اسمك أو أي معلومات تعريفية أخرى. سيتم الاحتفاظ بجميع الاستبيانات والبيانات على جهاز كمبيوتر محمي بكلمة مرور في كلية الحريري للتمريض في الجامعة الأمريكية في بيروت. سيتم تحليل البيانات على جهاز كمبيوتر محمي بكلمة مرور في مكتب آمن في مدرسة الحريري للتمريض. يقتصر الوصول إلى البيانات على الباحث الرئيسي والباحثين الذين يعملون مباشرة على هذا المشروع. سيتم مراقبة السجلات ويمكن مراجعتها دون انتهاك السرية. سيتم تدمير جميع البيانات بشكل مسؤول بعد فترة الاحتفاظ المطلوبة (لفترة ثلاث سنوات).

ه. المخاطر والقوائد

مشاركتك في هذه الدراسة لا تنطوي على أي خطر جسدي أو خطر عاطفي بالنسبة لك. فهي لا تتجاوز مخاطر الحياة اليومية. لديك الحق في سحب موافقتك أو التوقف عن المشاركة في أي وقت ولأي سبب. لن يتضمن قرار السحب الخاص بك أي عقوبة أو خسارة في المزايا التي يحق لك الحصول عليها. لا تؤثر المشاركة المتوقفة على علاقتك مع أي مركز للرعاية الصحية الأولية.

لن تتلقى أي فوائد مباشرة من المشاركة في هذا البحث؛ لكن مشاركتك ستساعد الباحثين على ايجاد حلول للعوامل المؤثرة على الاعتماد .

معلومات الاتصال

1) إذا كان لديك أي أسئلة أو استفسارات حول البحث يمكنك الاتصال بالباحث الرئيسي، الدكتورة جلاديس حنين، الجامعة الأمريكية في بيروت،

رياض الصلح 1107 2020

صندوق بريد: 11 0236

بيروت، لبنان

هاتف: (961) 1-350000 ، تحويلة.

الفاكس: (961) 1-744476

البريد الإلكتروني: gh30@aub.edu.lb

2) إذا كان لديك أي أسئلة أو مخاوف أو شكاوى حول حقوقك كمشارك في هذا البحث، يمكنك الاتصال بالمكتب التالي في الجامعة الأمريكية في بيروت: مجلس المراجعة الاجتماعية والعلوم السلوكية ، الجامعة الأمريكية ببيروت. رقم الهاتف: (961) 1350000- مجلس المراجعة الإجتماعية والعلوم السلوكية ، الجامعة الأمريكية ببيروت. رقم الهاتف: (961) 1350000- في البريد الإلكتروني: irb@aub.edu.lb

APPENDIX H

Survey

Demographics:

Gender:	1- Ma	le	2-	Female	
Age: 1-	25-35	2- 36-45	3- 46	-55 4-	56-65
How long have you worked for or been associated with this	or 1-	1 to 2 years	2- 2 to 4 years	3- 4 to 6 years	4- Mo
primary health care center?					yea
Accreditation Status:	1- Ac	credited	2-	In Process	
Registered 1-	Director	2-	Registered	3- Othe	rs
Position:			Nurse		
Highest Degree of Education:					
Have you participated in training for accreditation?	1- No)	2-	Yes	
Have you ever implemented accreditation standards before?	1- No)	2-	Yes	

Factors influencing accreditations:

St	trongly	Disagree	Neither		
di	isagree	Disagree	agree	Agree agree	agree

				nor		
				disagree		
Struct	ural factors					
1.	1	1	2	3	4	5
	are difficult to understand.					
2.	1	1	2	3	4	5
	are difficult to implement.					
3.	Recommendations given by					
	the ministry of health	1	2	3	4	5
	officers are difficult to			_		-
	understand.					
4.	Recommendations given by					
	the ministry of health	1	2	3	4	5
	officers are difficult to	1	2	J		J
	implement.					
5.	Implementing the					
	accreditation process is	1	2	3	4	5
	costly.					
6.	Implementing the					
	accreditation process	1	2	3	4	5
	requires more time from	1	2	3	7	3
	employees.					
7.	Implementing the					
	accreditation process	1	2	3	4	5
	requires more professional	1	2	J	+	J
	staff.					

8.9.	Implementing the accreditation process requires more equipment. The changes brought about by accreditation policies are sustainable.	1	2	3	4	5
Proces	sses of care					
1.	Implementing the					
	accreditation process			_		_
	increases the workload of	1	2	3	4	5
	reporting indicators.					
2.	Implementing the					
	accreditation process	1	2	2	4	E
	increases the range of	1	2	3	4	5
	services offered by the clinic					
3.	Implementing the					
	accreditation process	1	2	3	4	5
	requires more outreach	1	2	5	4	3
	services					
4.	Implementing the					
	accreditation process	1	2	3	4	5
	requires trained nurses to	1	2	J		3
	deliver the range of services					
5.	The accreditation process is	1	2	3	4	5
	stressful					

Perceived benefits as facilitators for accreditation:

1	Alikeki	Strongly	Disagree	Neither agree nor disagree	Agree	Strongly
1.	Accreditation policies enable the development of values shared by all professionals at the primary health care center.	1	2	3	4	5
2.	Accreditation policies enable the improvement of client care.	1	2	3	4	5
3.	Accreditation policies increase the motivation of staff for change and encourage teamwork and collaboration.	1	2	3	4	5
4.	Accreditation policies enable the primary health care center to better respond to the clients' needs.	1	2	3	4	5
5.	Accreditation contributes to the development of collaboration with partners in the health care system.	1	2	3	4	5
6.	Accreditation is a valuable tool for the primary health care center to implement changes.	1	2	3	4	5

7. The implementation of accreditation policies
increases employee
satisfaction.

• What additional comments would you give regarding the accreditation process?

• What are, in your opinion, some strategies to better implement the accreditation process in the future?

APPENDIX I

الاستبيان

	2- أنثى				الجنس
65-56	55-46	45-3	6	35-25	العمر
أكثر من 6 سنوات	4-6 سنوات		2- 4 سنوات	2-1 سنوات	منذ متى وأنت تعمل في مركز الرعاية الصحية الأولية هذا أو كنت
. العمل للوصول باد	2- قيد للاعته		1- معتمد		مرتبطًا به؟ حالة الاعتماد:
3- آخرون	مرض مجاز	2- مد		1- مدير	الوظيفة المسج
¥ -2		1- نعم		، التدريب على طبقت معايير	الاعتماد؟
¥-2		1- نعم		• • •	الاعتماد من قب

العوامل المؤثرة في الاعتماد:

على الاتفاق	على الاتفاق	علی حیاد	على اختلاف	على اختلاف	
بقوة				بشدة	
					العوامل الهيكلية

سعب فهم سیاسات عتماد	1	2	3	4	5
ن الصعب تنفيذ	1	2	3	4	5
ياسات الاعتماد					
ن الصعب فهم	1	2	3	4	5
وصيات التي تقدمها					
زارة الصحة					
ن الصعب تنفيذ	1	2	3	4	5
وصيات التي تقدمها					
زارة الصحة					
، تنفيذ عملية	1	2	3	4	5
عتماد مكلف					
طلب من الموظفين	1	2	3	4	5
مزيد من الوقت					
فيذ عملية الاعتماد					
طلب زيادة	1	2	3	4	5
موظفين لتنفيذ عملية					
عتماد					_
طلب شراء مزیدا	1	2	3	4	5
ن المعدات لتنفيذ					
ملية الاعتماد					
نغييرات التي	1	2	3	4	5
ودثتها سياسات					
عتماد مستدامة					
مليات الرعاية					
فيذ عملية الاعتماد	1	2	3	4	5
يد العمل على					
مؤشرات					
برسر، دي تنفيذ عملية	1	2	3	4	5
إعتماد إلى زيادة					
لماق الخدمات التي					
دمها العيادة					
طلب تنفيذ عملية	1	2	3	4	5
عتماد المزيد من					
خدمات الاجتماعية					
·	·	·		·	·

5	4	3	2	1	يتطلب تنفيذ عملية
					الاعتماد الى
					ممرضین مجازین
					لتقديم الخدمات
5	4	3	2	1	عملية الاعتماد
					مر هقة

فوائد

	art auch bt - T		• N. 1 . 1		
	على الاتفاق	على حياد	على اختلاف	على اختلاف	
بقوة				بشدة	
5	4	3	2	1	تتيح سياسات الاعتماد
					تطوير القيم المشتركة
					بين جميع المهنيين في
					مركز الرعاية
					الصحية الأولية
5	4	3	2	1	تتيح سياسات الاعتماد
					تحسين رعاية
					المرضى تزيد سياسات الاعتماد
5	4	3	2	1	تزيد سياسات الاعتماد
					من دوافع الموظفين
					من أجل التغيير
					وتشجع العمل
					الجماعي والتعاون
5	4	3	2	1	تمكن سياسات
					الاعتماد مركز
					الرعاية الصحية
					الأولية من الاستجابة
					بشكل أفضل
					لاحتياجات المرضى
5	4	3	2	1	يسهم الاعتماد في
					تطوير التعاون مع
					الشركاء في نظام
					الرعاية الصحية
					الأولية
5	4	3	2	1	الاعتماد أداة قبّمة
Č	•	J	_	-	- لمركز الرعاية
					* 3 3 5 -

					الصحية الأولية لتنفيذ
					التغييرات
5	4	3	2	1	یزید تنفیذ سیاسات
					الاعتماد من رضا
					الموظفين

• هل هنالك تعليقات إضافية بعملية الاعتماد؟

•ما هي، في رأيكم، بعض الاستراتيجيات لتنفيذ عملية الاعتماد بشكل أفضل في المستقبل؟

REFERENCES

- American Nurse Association (2010). *Nursing: Scope and standards of practice* [Internet]. Washington DC: ANA.
- Ayanian, J., & Markel, H. (2016). Donabedian's lasting framework for health care quality.

 New England Journal of Medicine, 205-207.
- Cueto, M. (2004). The origins of primary health care and selective primary health care .

 American Journal of Public Health, 1-11.
- Diab, S. (2015). The effect of primary health accreditation standards on the primary health care quality and employees satisfaction in the Jordanian health care centers.

 *International Journal of Academic Research in Business and Social Sciences, 204-220.
- El-Jardali, F., Hemadeh, R., Jaafar, M., Sagherian, L., El-Skaff, R., Mdeihly, R., et al. (2014). The impact of accreditation of primary healthcare centers: successes, challenges and policy implications as perceived by healthcare providers and directors in Lebanon. *BMC Health Services Research*, 14:86.
- El-Jardali, F., Ammar, W., Hemadeh, R., Jaafar, M., & Jamal, D. (2013). Improving primary healthcare through accreditation: baseline assessment of readiness and challenges in Lebanese context. *The International Journal of Health Planning and Management*, 256-279.

- El-Khawas, E. (2001). Accreditation in the USA: origins, developments and future prospects. Paris: International Institute for Educational Planning.
- Macinko, J., Shi, L., & Starfield, B. (2003). The contribution of primary care systems to health outcomes within organization for economic cooperation and development (OECD) countries, 1970–1998. *Health Services Research*, 831-865.
- Medcalf, A., Bhattacharya, S., Momen, H., Saavedra, M., & Jones, M. (2015). The journey to universal health coverage. In S. Litsios, *Health for All* (pp. 1-129). York, The United Kingdom: Centre for Global Health Histories.
- Ministry of Public Health. (2016). *Health strategic plan*. Beirut: Ministry of Public Health.
- Ministry of Public Health. (2018). Retrieved from https://www.moph.gov.lb/en
- Unschuld, P. U., & Zhang, D. (2008). China's barefoot doctor: past, present, and future. *The Lancet*, 1865-1866.
- Van Lerberghe, W., Mechbal, A., & Kronfol, N. (2018). The collaborative governance of lebanon's health sector twenty years of efforts to transform health system performance. Beirut.
- Walt, G., & Vaughan, P. (1982). Primary health care approach: how did it evolve? *A Journal of Modern Medical Practice*, 145-147.
- WHO. (2003). *Quality and accreditation in health care services: A global review.* Geneva: World Health Orginization.

- WHO. (2003). Accreditation of hospitals and medical education institutions—challenges and future directions. World Health Organization
- WHO. (2006). Health Systems Profile-Lebanon. World Health Organization.
- WHO. (2008). *The World Health Report 2008 primary health care now more than ever.*World Health Organization.
- WHO. (2017). Primary health care systems (PRIMASYS): case study from Lebanon.

 Geneva: World Health Organization.
- Zarifraftar, M., & Aryankhesal, A. (2016). Challenges of implementation of accreditation standards for health care systems and organizations: a systematic review. *Journal of Management Sciences*, 191-201.