STAY SAFE: A DOWNSTREAM SOLUTION FOR HEALTH CARE ACCESS IN LEBANON

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Contents

Abstract

Purpose: This study is a narrative synthesis addressing the importance of health care coverage and how education in particularly impacts health care access in Lebanon. Previously filled registration forms will be analyzed and interpreted. This study provides insights towards implementing solutions that target the health of marginalized individuals in Lebanon.

Data sources: A search was conducted including the Balamand library data bases and Google scholar. Search terms include "SDOH" in combination with "rights", "health access", "associations". Data searches concentrated on studies published between2006 &2018. In addition to previously filled registration forms.

Target Audience: This narrative synthesis targets associations, health care providers, public health workers and the general population within common interest of the topic addressed.

Results: Education and health care coverage impacts health service access in Lebanon. Stay Safe health fair is a link for health care access in Lebanon, there is a significant difference between education and different health coverage groups.

Conclusion: Downstream solutions provides temporary solutions for those in need to gain access to health care services however, governments should take actions and provide upstream solutions to achieve health equity.

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Introduction

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO,1948). According to the WHO in the world health day in 2017 they declared that, all people should have the right to access health care at a maximum acceptable level of quality for himself and his family. The ''right to health'' is ''not to be understood as a right to be healthy,'' because too many factors beyond states' control influence health. Rather, it is ''the right to a system of health protection which provides equality of opportunity to enjoy the highest attainable level of health'' (Braveman et. al, 2011). Health access is always defined as entree to a service, a provider or an institution, thus defined as the opportunity or ease with which consumers or communities can use appropriate services in proportion to their needs (Levesque et. al, 2013). "Health service are delivery systems that are safe, accessible, high quality, people-centered, and integrated and are critical for moving towards universal health coverage" (WHO,2018). Cross-national epidemiological and econometric analyses show that health systems, or elements within them, can and do promote population health, independent of other influences (Gilson et al., 2007). In Lebanon, health service delivery system is characterized by an oversupply of private hospital beds and a recovering public hospital sector heading towards the complete execution of the public hospital autonomy law (WHO,2006). The Primary Health Care strategy that was enacted in 1994, and newly revised in 2004, has provided a widespread network of services and established a very successful link between the public sector and the private sector through the Non-Governmental Organizations and the existing local authorities in districts (WHO,2006). The World Health Organization's Commission on the Social Determinants of Health has presented overwhelming evidence that health and quality of life are socially determined and that entrenched health inequities among people originate not so much from lack of hospital or community-based services as from

the failure of Governments to address the "social determinants of health" (Shankar et. al, 2013). The impact of social and economical factors on health refers to the term social determinant of health that is often used to refer broadly to any nonmedical factors influencing health, including health-related knowledge, attitudes, beliefs, or behaviors (Braveman et. al, 2011). While health care services, food, housing and a social safety net are important social determinants of health, recent reports show that the level of educational attainment is a strong predictor of long-term health and quality of life (Shankar et. al, 2013). The level of educational attainment is increasingly being recognized as an important social determinant of health (Shankar et. al, 2013). Braveman et al. (2011), adds that education can improve health by increasing health related knowledge and activities, work opportunities, social and psychological factors. Disparities in health and its determinants are the metric for assessing health equity, the principle underlying a commitment to reducing disparities in health and its determinants; health equity is social justice in health (Braveman et. al, 2011). As mentioned previously one of the downstream solutions include the link between access to the private and public sector is NGOs that's where Stay Safe association provides a downstream solution through the health fair concept "Hospital Without Walls" that gives access to health care services for marginalized people in Lebanon.

Methods

A narrative synthesis was employed to associate education and health care coverage to health care service access in Lebanon. Information was collected by four health workers where information was gathered from patients before they enter the health fair (face-to-face reporting). 299 registration forms were filled, after cleaning data and removing duplicates 262 eligible registration forms were left. The registration form included Name, DOB, Gender, residence, Marital status,

contact information (mobile, email, telephone), education level, health coverage, blood group, interest in donation, and whether they used this kind of service before (appendix a).

Data was then entered to excel first and imported to SPSS for further analysis. The study was limited to those who attended the health fair.

Intervention

Stay Safe Association is a non-profit association initiated on the behalf of our beloved angle Adonai Al-Awar. It aims to tackle health aspects directly or indirectly by providing upstream and downstream solutions. Stay Safe health fair is a downstream health service support for all of those in need focusing on the marginalized and disadvantaged people in Lebanon, developed from the idea of implementing a hospital without walls. The first health fair took place in Kobbeih Mount Lebanon, in the municipality's club in July 14th 2018 Saturday from 11:00 am – 6:00 pm it targeted the high Maten region, residents and foreigners resenting there where 299 patients attended to benefit from this health fair. Stay safe health fair services were offered incorporation with Saint George Hospital university medical center, Vision care association, and stay safe medical dietary clinic.

The health fair included diagnostic educative, preventative and follow-up services. More than 80 health workers, dietitians, nutritionists, nurses', residents and physicians were present this was made to succeed by the attendance of several organizations such as SAID NGO, Alzheimer's Association, Kids First and the nutritional science program from the University of Balamand. The clinics included, Pediatrics, Wound Care and Fatal injuries, Mental and nervous system, Cardiovascular, men's health, women's health, dermatology, endocrinology, dietetics, ENT, family medicine and ophthalmology.

In addition, Patients received a card that provide access to SGHUMC for clinical follow ups by paying only 20,000L.L for a year in addition to some free diagnostic tests, also, Stay Safe Medical Dietary Clinic Provided free follow ups for all those attending the health fair.

Results

299 total registrartions were reached and 1015 consultations done, table 1 shows the distribution of consultations per clinics the top three clinic registrations accounted as follows, first, blood glucose testing accounting for 158 tests followed by the ophthalmology clinic, 149 consultation registered with 103 medical eyeglasses provided by Stay Safe Association and third, 110 registries at Stay Safe medical dietary clinic.

Table 1 : The distribution of consultations per clinics.

CLINICS	**KOBBEIH**
REGISTRATIONS	**299**
Blood Glucose	158
Blood Pressure	73
Breast Cancer Screening	39
Cardiac Screening	74
Cervical Screening	25
Cervical Screening (Pap Smear)	20
Dermatology Screening	30
Stay Safe Medical Dietary Clinic	110

E.N.T. (Hearing Screening)	68
Education on Colon Cancer (SAID NGO)	36
Endocrinology Screening	22
Family Medicine Screening	31
Gastro Screening	5
HBA1C	33
Head, Neck & Spine Screening	24
Ophthalmology Screening (VCA)	149
Osteoporosis Screening	64
Pediatric Screening	18
Pneumology Screening	14
Prostate Screening	9
Wound Care	13
TOTAL OF CONSULTATIONS	**1015**

Gender distribution in the health fair attendees includes 38.2% of the total patients attending the health fair were males (n=100) and 61.8% (n=162) were females. **(table 2)**

Table 2: Patient Distribution According to Gender.

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	100	38.2	38.2	38.2
	Female	162	61.8	61.8	100.0
	Total	262	100.0	100.0	---

Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Illiterate	26	9.9	11.3	11.3
	Primary	52	19.8	22.6	33.9
	Secondary	40	15.3	17.4	51.3
	Complementary	54	20.6	23.5	74.8
	University	58	22.1	25.2	100.0
	Total	230	87.8	100.0	---
Missing	999	32	12.2	---	
Total		262	100.0	---	

Table 3: Education Level.

Most patients reached school, 40% were between primary and secondary education level (n=92). 25.2% university graduates (n=58), 23.5% complementary education (n=54) and only 11.3% are illiterate (n=26). **(table 3)**

In relation to patients' health coverage 49.2% (n=95) of patients had no health care coverage, 32.6% (n=63) had Social Security, 6.2% (n=12) covered by Security Forces, 5.7% (n=11) insurance, 2.1% (n=4) army, 1.0% (n=2) Ministry of Public Health and 3.1% (n=6) others. **(table 4)**

Health Care Coverage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	95	36.3	49.2	49.2
	Social Security	63	24.0	32.6	81.9
	Insurance	11	4.2	5.7	87.6
	Army	4	1.5	2.1	89.6
	Security forces	12	4.6	6.2	95.9
	MOPH	2	.8	1.0	96.9
	Others	6	2.3	3.1	100.0
	Total	193	73.7	100.0	---
Missing	9	69	26.3	---	---
Total		262	100.0	---	---

Table 4: Distribution of health care coverage among patients.

Health Care coverage * Education Level Crosstabulation

Count

		Education Level					Total
		Illiterate	Primary	Secondary	Complementary	University	
Health Care coverage	None	16	18	13	19	14	80
	Social Security	2	11	7	15	21	56
	Insurance	0	0	1	1	8	10
	Army	1	1	0	0	1	3
	Security forces	3	3	3	1	0	10
	MOH	0	1	1	0	0	2
	Others	1	1	1	0	2	5
Total		23	35	26	36	46	166

Table 5:Health coverage distribution according to the level of education.

ANOVA

Education Level

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	54.639	6	9.106	5.189	.000
Within Groups	279.054	159	1.755	---	---
Total	333.693	165	---		

Table 6: Education level by health coverage groups.

Table 5 shows health care coverage distribution according to the patients' level of education where almost half the sample (n=84) reached secondary education accounting to the majority of those with no health coverage. While almost all insured patients n=8 have a university degree. Table 6 reveals the association between education among the different groups of health coverage it reveals a significant difference $p<0.05$ thereby we reject the null hypothesis and at least one group is significantly different further analysis using the Post Hoc test reveals the difference between groups table 7.

Table 7:Post Hoc test , Bonferroni Multiple comparison

*. The mean difference is significant at the 0.05 level.

(I) Health Care coverage		(J) Health Care coverage		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
dimension2	None	dimension3	Social Security	-.788*	.231	.017	-1.50	-.07
			Insurance	-1.738*	.444	.003	-3.11	-.37
			Army	.296	.779	1.000	-2.11	2.70
			Security forces	.762	.444	1.000	-.61	2.13
			MOH	.462	.948	1.000	-2.47	3.39
			Others	-.238	.611	1.000	-2.12	1.65
	Social Security	dimension3	None	.788*	.231	.017	.07	1.50
			Insurance	-.950	.455	.805	-2.35	.45

		Army	1.083	.785	1.000	-1.34	3.51
		Security forces	1.550*	.455	.017	.15	2.95
		MOH	1.250	.953	1.000	-1.69	4.19
		Others	.550	.618	1.000	-1.36	2.46
Insurance		None	1.738*	.444	.003	.37	3.11
		Social Security	.950	.455	.805	-.45	2.35
	dimension3	Army	2.033	.872	.441	-.66	4.73
		Security forces	2.500*	.592	.001	.67	4.33
		MOH	2.200	1.026	.705	-.97	5.37
		Others	1.500	.726	.847	-.74	3.74
Army		None	-.296	.779	1.000	-2.70	2.11
		Social Security	-1.083	.785	1.000	-3.51	1.34
	dimension3	Insurance	-2.033	.872	.441	-4.73	.66
		Security forces	.467	.872	1.000	-2.23	3.16
		MOH	.167	1.209	1.000	-3.57	3.90
		Others	-.533	.967	1.000	-3.52	2.45
		None	-.762	.444	1.000	-2.13	.61

Security forces	dimension3	Social Security	-1.550*	.455	.017	-2.95	-.15
		Insurance	-2.500*	.592	.001	-4.33	-.67
		Army	-.467	.872	1.000	-3.16	2.23
		MOH	-.300	1.026	1.000	-3.47	2.87
		Others	-1.000	.726	1.000	-3.24	1.24
MOH	dimension3	None	-.462	.948	1.000	-3.39	2.47
		Social Security	-1.250	.953	1.000	-4.19	1.69
		Insurance	-2.200	1.026	.705	-5.37	.97
		Army	-.167	1.209	1.000	-3.90	3.57
		Security forces	.300	1.026	1.000	-2.87	3.47
		Others	-.700	1.108	1.000	-4.12	2.72
Others	dimension3	None	.238	.611	1.000	-1.65	2.12
		Social Security	-.550	.618	1.000	-2.46	1.36
		Insurance	-1.500	.726	.847	-3.74	.74
		Army	.533	.967	1.000	-2.45	3.52
		Security forces	1.000	.726	1.000	-1.24	3.24
		MOH	.700	1.108	1.000	-2.72	4.12

Discussion

Stay Safe health fair results showed that marginalized people gained access to high quality and patient centered health care services empowering the right to a healthy living.

The results also revealed that there is a significant association between the level of education and health coverage related to health access in Lebanon. The decrease in the level of education and health-related knowledge is linked to lower access to health care services due to lack of coverage. As stated previously in literature social determinants of health are interrelated where one leads to the other, poor health related knowledge and low levels of education will lead to decrease in work opportunities thereby leading to a decreased economic status and decreased capability to access health care services (Braveman et, al. 2011). Health coverage was a major issue combined with low levels of education where the likelihood of those people to access health care is decreased. Stay Safe Association linked the private hospital sector and the public hospital sector by providing the solution to health services access by Stay Safe health fair. Education is another factor to be targeted in our future actions where the association found was true and it affects our health and is considered a main social determinant of health worldwide. It is widely recognized that education can lead to improved health by increasing health knowledge and healthy behaviors. This may be explained in part by literacy, allowing more-educated individuals to make better-informed, health-related decisions—including about receipt and management of medical care—for themselves and their families (Braveman et. al, 2011). Increasing health related knowledge and awareness is one of the future targets to maintain as part of the medical department of Stay Safe Association.

Limitations

The limitations of this study are related directly to downstream solutions where Stay Safe Health Fair only provides a temporary solution for marginalized people to access health care services. However, it does not tackle the central problems of health care access in Lebanon. The health fair was only one day from 11:00 am – 6:00 pm, limited in time. Information recorded might be biased since patients were publicly providing information to fill the registration forms, also interviewer might have faced difficulties filling the forms due to the crowd on the entrance gate. The study results can't be generalized, the sample size is small and only information from one health fair located in Mount Lebanon was included. The classification of health coverage in the registration form could've been adapted differently.

Recommendations

- Downstream factors are influenced by upstream factors when solving a problem its ideal to target the upstream factors as for this study we couldn't due to several factors that include behavioral (people's attitude towards such events), psychological(perception of health fair and its services, trust ect..), economical (initiation/ free access to health care systems).
- Association of SDOH to health care services and access.
- Programs that protects patients and enables them to build trust.
- Highlight the impact of knowledge, health coverage, health care access on SDOH.
- Further studies in Lebanon is recommended.
- Governmental implementations for the social determinants of health is needed for upstreaming solutions.

Conclusion

Downstream solutions provide temporary solutions for those in need to gain access to health care services however, governments should take actions and provide upstream solutions to achieve health equity. Social Determinants of Health are the main factors influencing our health status in order to reach health equity they must be first tackled. Upstream solutions require much time and efforts for implementation hence till we reach a central solution in Lebanon providing downstream solutions maybe the first step towards better health and wellbeing .

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