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Health Care, The Arab Spring and After

Sonia Alianak, University of Texas Rio Grande Valley

Abstract

This study analyzes the effect of health care on Middle Eastern countries on the eve of and soon after the Arab Spring. It posits that countries that were most stable were the healthiest ones; countries which underwent revolutions were the unhealthiest ones; whereas countries that settled for reforms were moderate in health. It presents a hypothesis, the Inverted Funnel Model Hypothesis, that states that as the level of health care of a country rises so does its stability, which in turn leads to better health care as if down an inverted funnel to hypothetical maximums of both health care and stability. To test the hypothesis both quantitative and qualitative methods are used. The quantitative part involves first of all compiling seven health indicators based on the World Health Organization Annual Reports on twelve individual countries, for a period of five years preceding the Arab Spring's onset in 2011 and in the immediate aftermath of 2011, and, second of all running correlations with political stability of each country, grouped in a three-way typology of countries. This is supplemented by a qualitative part which analyzes the health perceptions and demands of Arab Spring protestors in search of social justice.

Key Words: Health Care, Middle East, Arab Spring, Inverted Funnel Model

Introduction

This study analyzes the effect of health care on Middle Eastern countries on the eve of and soon after the Arab Spring. It posits that countries which were stable were the healthiest ones; countries which underwent revolutions were the unhealthiest ones; whereas countries which settled for reforms were moderate in health. It constructs a hypothesis, the Inverted Funnel Model Hypothesis, that states that as the level of health care of a country rises, so does its stability, which in turn leads to better health care as though down an inverted funnel to hypothetical maximums of both health care and stability.

It also posits that once health care is considered a right, perceived violation of it tends to be a contributing factor to uprisings as it augments feelings of injustice. Certainly, public opinion polls conducted by Zogby Research Services right before the Arab Spring of 2011¹ confirm that in the Arab Region health care was considered one of the top priorities of the people. In addition, citizens were cognizant of the importance of health care internationally as a recognized United Nations right and as a United States foreign policy “soft power.”

Notable in the post-Arab Spring literature is the contribution of Dr. Enis Boris, the health sector manager for the Human Development Department for the Middle East and North Africa at the World Bank, who stated on 29 August, 2012 that health care inaccessibility played a role in the Arab Spring. Specifically, he focused on how “frustrations with the lack of health care accessibility in the Middle East was a contributing factor to the Arab Spring” revolts.² He stated: “Arab people [are frustrated] with their health

¹ Zogby Research Services, “Zogby International: Attitudes of Arabs, 2005”; “Zogby International: 6 Nation Poll, 2009.”

² Nourhan Elsayed, “Healthcare Inaccessibility Plays Role in Arab Spring,” *Duke Chronicle* (2012), 1, accessed February 11, 2014, <http://www.dukechronicle.com/article/2012/08/health-care-inaccessibility-plays-role-arab-spring>



care systems, corruption, inequalities in health, financial barriers ... people in the education and health sector” specifically. He continued “These are some key words... if you do a discourse analysis of what they say, they are pretty much fed up.”³ Further, the situation had not improved much by August 2012, when 54 per cent of Egyptians interviewed wished that health care was addressed by their government as a pressing issue.⁴

THE INVERTED FUNNEL MODEL AND HYPOTHESES

The Inverted Funnel Model Hypothesis states that as the level of health care of a country rises so does its stability which in turn leads to better health care as though down an inverted funnel to hypothetical maximums of both health care and stability.

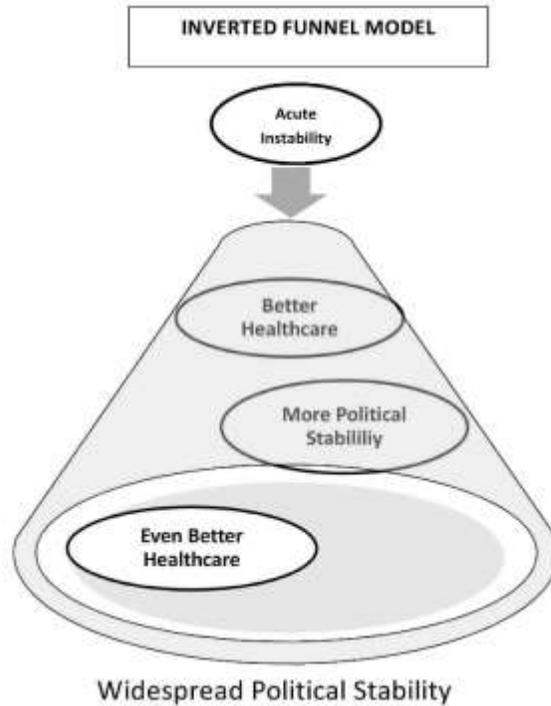


Figure 1
The Inverted Funnel Model

This study analyzes specifically the effect of health care on Middle Eastern countries on the eve of and soon after the Arab Spring. It posits that countries which were most stable were the healthiest ones; countries which underwent revolutions were the unhealthiest ones; whereas countries which settled for reforms were moderate in health.

METHODOLOGY

To test the hypothesis this study used both quantitative and qualitative methods. The quantitative part involved at first compiling seven health indicators, as the Independent Variables, based on the World Health Organization’s Annual Reports Statistics on twelve individual countries grouped into three typologies, for

³ Ibid., 2.

⁴ Ibid., 2.

a period of five years⁵ (from 2006 to 2010 and 2011) on the eve of and soon after the Arab Spring's onset in 2011, and second, running Pearson correlations with political stability of each country for 2010 and 2011. The Dependent Variable of Political Stability and Absence of Violence/Terrorism Index, which measures the likelihood that a government will be destabilized or overthrown, is from the World Bank Data Bank.⁶ Color-coded Scatter-plots per indicator showed the grouping of countries per typology of countries. The five-year trends were depicted by line graphs color-coded per type of country. The quantitative study is supplemented by a qualitative part which analyzes the health perceptions and demands of Arab Spring protestors.

Indicators

The seven health indicators, the Independent Variables, selected were chosen on the basis of their immediate contribution to citizens' healthy well-being. They are: Life expectancy for both sexes, physician density per ten thousand, nurses and midwives density per ten thousand, hospital beds per ten thousand, general government expenditure on health as per cent of total expenditure on health care, private expenditure on health as per cent of total expenditure on health, and out-of-pocket expenditure as per cent of private expenditure on health.

Sample Countries

This study has divided the Arab countries of the Middle East undergoing the Arab Spring into a three-way typology: "stable countries" (Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates), which did not undergo uprisings; "uprising countries" (Egypt, Libya, Syria, Tunisia and Yemen), which resorted to uprisings and where protests aimed at the toppling of their leaders on the eve of and soon after the Arab Spring demonstrations; and "reform countries" (Jordan and Morocco), which underwent moderate protests and whose citizens were satisfied with reforms and did not attempt to topple their leaders.⁷

HEALTH CARE AS A RIGHT

The Importance of Health Care in the Arab Middle Eastern Countries in Terms of Priorities of Citizens

Health care is of paramount importance in the lives of any of the citizens of a country. Certainly, Arabs were aware of it as a political issue before the Arab Spring of 2011. According to the Zogby International polls conducted in 2004, 2005 and 2009, "improving health care" featured as an important priority region-wide. It ranked as number 1 in 2004 and number 2 in 2005 after "expanding employment opportunities."⁸ If taken country by country, health care ranked among the top three issues on the eve of the Arab Spring in 2009. In the stable oil-rich monarchies such as Saudi Arabia it ranked in 1st place and 3rd place in the United Arab Emirates; whereas in Egypt, a future revolutionary country, it ranked as number 1; and in the countries which were to undergo reform, it ranked as number 1 in Morocco but was not a top-three-issue in Jordan where citizens were more concerned with foreign policy, notably with the Israeli-Palestinian issue.⁹

A poll of preferences taken just after the Arab Spring of 2011, published by Zogby Research Services in December 2011, highlighted that the basic fundamentals remained the same as in 2009 (which included

⁵ World Health Organization (WHO), *Annual Reports Statistics*, 2006, 2007, 2008, 2009, 2010, 2011.

⁶ World Bank, *Political Stability and Absence of Violence/terrorism Index*, *World Bank Data Bank*, 2010 and 2011.

⁷ Sonia Alianak, *The Transition Toward Revolution and Reform: The Arab Spring Realised?* (Edinburgh: Edinburgh University Press, 2014), 163-164.

⁸ Zogby Research Services, "Attitudes of Arabs, 2005," 6.

⁹ Zogby Research Services, "6 Nation Poll, 2009," 12.



“health care when they needed it”) although a new vocabulary was also introduced, mainly “ending corruption and nepotism,” “political reform,” “advancing democracy” and “protecting personal and civil rights.”¹⁰

The one revolutionary country where no change occurred from the priorities of 2009 was Egypt where the top four issues featured health care along with employment, education, and corruption. Zogby polls concluded: “It appears that the Egyptian revolt had less to do with politics and more to do with people’s basic needs. Most Egyptians want a non-corrupt government that could provide for the basic needs of life (a job, health care and education).”¹¹

How did the Arab Middle Eastern countries studied by Zogby Research Services of Tunisia, Egypt, Lebanon, Jordan, Iraq, Saudi Arabia and the United Arab Emirates (UAE) view the performance of their governments? According to Zogby Research Services “Not surprisingly, the highest satisfaction rates come in Saudi Arabia and the UAE.”¹² Both countries are oil-rich monarchies where no revolution occurred and where health care is entirely financed by the governments.

Long before the Arab Spring, namely in the 1960s, the socialist leaning republics, like Egypt, had emphasized the importance of health care as a right of citizens which was to be provided by the government. And certainly, Arabs were and had been cognizant of international recognition of health care as a right since the 1990s.

International Recognition of Health Security as a Right: A Historical Background

It was in 1994 that the United Nations Development Program’s (UNDP) Human Development Report called health an individual human right.¹³ It asserted that human security included not only political security, and economic security but also access to health care. Writing in 2000, then United Nations Secretary-General, Kofi Annan, defined human security in what he called the “broadest sense embraces far more than the absence of violent conflict. It encompasses human rights, good governance, access to education, and health care and ensuring that each individual has opportunities and choices to fulfill his or her potential.”¹⁴ Later on, in 2003, the Commission on Human Security followed with a report entitled *Human Security Now* which updated and enlarged the previous report. It recognized that health crises caused by armed conflicts and health problems caused by poverty in turn could destabilize families, communities, and even entire states.¹⁵

Kofi Annan’s 2005 Report *In Larger Freedom* also featured health in his freedom from fear, from want, and freedom to live in dignity; and covered health in his United Nations Millennium Development Goals.¹⁶ Health Security is further defined by the *World Health Report 2007* as involving “the activities required,

¹⁰ Zogby Research Services, “The ‘Arab Spring’ Effect,” (December 19, 2011), 1-2.

¹¹ Ibid., 1.

¹² Ibid., 2.

¹³ United Nations Development Program (UNDP), *Human Development Report 1994*.

¹⁴ Zaryab Iqbal, “Health and Human Security: The Public Health Impact of Violent Conflict,” *International Studies Quarterly* 50 (2006), 632.

¹⁵ United Nations Development Program (UNDP), *Arab Human Development Report (AHDR) 2009*, Chapter 7.

¹⁶ David P. Fidler, “Globalization for Health: Health as Foreign Policy: Harnessing Globalization for Health,” *Health Promotion International* 21, no. 81 (2007), 54.

both proactive and reactive, to minimize vulnerability to acute public health events that endanger the collective health of populations living across geographical regions and international boundaries.”¹⁷

Internationally, the Foreign Policy and Global Health Initiative was launched by the foreign ministers of France, Norway, Brazil, Indonesia, Thailand, Senegal and South Africa. It came up with the Oslo Ministerial Declaration and Agenda for Action in March 2007 aiming to link health and foreign policy in establishing common global goals. It was joined a year later by WHO in a symposium in Geneva¹⁸ which recognized the need for new forms of governance, including health security, in support of equity, development, peace and security.¹⁹ The United States, also, emphasized the importance of health care as seen in the US National Intelligence Council Report in 2000 which warned of the perils caused by the spread of infectious diseases, across borders, on political stability.²⁰ This possible role of health, a “soft” power, on political stability was recognized by various analysts.²¹

Right before the Arab Spring of 2011, health care featured in the “Smart Power” strategy advocated by the Obama Administration in its Global Health Initiative as seen in the 2010 Fiscal Year Budget request. Citing the interconnectedness of the world and hence the “demands [for] an integrated approach to global health,” Obama stated “... we have a responsibility to protect the health of our people, while saving lives, reducing suffering, and supporting the health and dignity of people everywhere [globally].”²² Notable here is the connection he made between security at the state level (“protect our people”) and security at the human level (“dignity of people everywhere”), as far as health care is concerned. In this connection, Alan Ingram, while pointing out that both goals are important to pursue, argued about the possible tensions between the two views of security, state and human, in actual implementation by showing that while state security had emphasized infectious diseases, threats to the rich, instruments of foreign policy and macroeconomics, human security was broader and emphasized detriments of health, global burden of disease, human rights and political economy.²³

Although recognized internationally and by the United States, the importance of health care had, however, been neglected in the region by Middle East scholars until 2009, which was right before the Arab Spring, when the UNDP’s Arab Human Development Report (AHDR) expressed this concern by devoting its entire Chapter 7 to “Approaching health through human security – a road not taken.”²⁴ It is true that in 2002, an attempt had been made by WHO, UNFPA and UNAIDS to bring the international discourse to the Greater Middle Eastern region by holding a three-day discussion, the Cairo Consultation on Health and Security. However, according to AHDR, the situation in 2009 amounted to “the Arab health community appear[ing] to have either resisted or ignored a human security approach to health in practice.”²⁵ At best

¹⁷ World Health Organization (WHO), *World Health Report 2007*, ix.

¹⁸ Margaret Chan, Jonas Gahr Store and Bernard Kouchner, “Editorials: Foreign Policy and Global Public Health Working Towards Common Goals,” *Bulletin of World Health Organization* 86, no. 7 (2008), 498.

¹⁹ Thomas E. Novotny, “US Department of Health and Human Services: A Need for Global Health Leadership in Preparedness and Health Diplomacy,” *American Journal of Public Health* 96, no. 1 (2006), 11 – 13.

²⁰ Alan Ingram, “The New Geopolitics of Disease: Between Global Health and Global Security,” *Geopolitics* 10 (2005), 532.

²¹ Gro Harlem Brundtland, “Global Health and International Security,” *Global Governance* 9, no. 4 (2003): 417 – 423; Scott C. Ratzan, “Cooperation to Develop Health Security,” *Journal of Health Communication* 8 (2003), 206.

²² Statement by the President [Obama] on Global Health Initiative, May 5, 2009. The White House, accessed October 31, 2016, <https://www.whitehouse.gov/the-press-office/statement-president-global-health-initiative>

²³ Ingram, “The New Geopolitics of Disease,” 540.

²⁴ UNDP, AHDR, 2009, Chapter 7.

²⁵ Ibid.

the conference had defined health security narrowly as “relative liberation from illnesses and infection”; however, AHDR stressed, health security as a component of human security went beyond the traditional medical services, health care, and common disease prevention. It could only be accomplished by also securing and stabilizing the following factors: Political Security, Nutrition Security and Environmental Security.²⁶

How did this perceived general right to health care translate itself in terms of specific types of health care (indicators used) per country and moreover per type of country on the eve of the Arab Spring (2010) and in its immediate aftermath (2011) as far as political stability is concerned? In response to this question, this study presents both quantitative and qualitative analyses which follow.

QUANTITATIVE STUDY OF HEALTH CARE AND STABILITY OF ARAB SPRING COUNTRIES: THE FINDINGS

2010 and 2011 Samples and Correlations

An indicator of the importance of health care for the Arab peoples of the Middle East is “life expectancy in years for both sexes.” It seemed, at first, that as people observed that they would live longer, the end result of health care that should matter most, they would tend to uphold more the political stability of the regimes in 2011. Indeed, preliminary results showed that life expectancy was positively correlated with “political stability of the countries.”

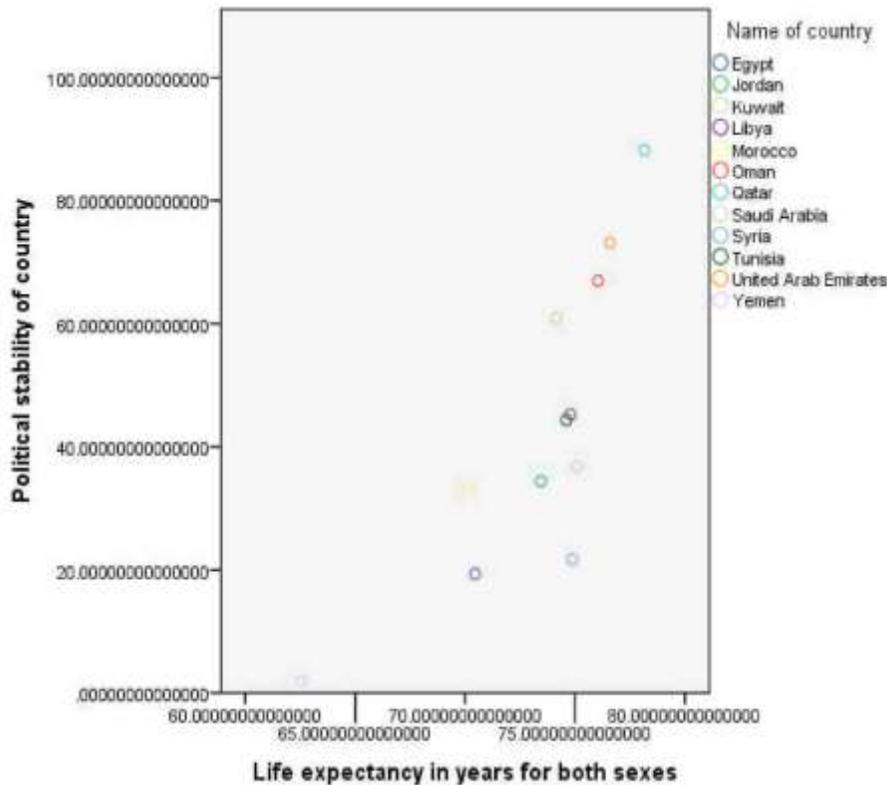


Table 1
Relationship of Political Stability and Life Expectancy (2010)

²⁶ Ibid.

In 2010, it was found that a significant (positive) relationship exists between the Political Stability Index and Life Expectancy ($r=.802$, $r^2=.643$) at the 0.01 level. The higher a nation's life expectancy, the higher its Political Stability Index, a measure of the government's stability in operating and reducing civil conflict, appears to be. This study also found a significant positive relationship between the Political Stability Index and Life expectancy ($r= .64$, $p<.05$) for 2011. The countries where life expectancy was the highest were the countries where no Arab Spring uprisings occurred. The longest life expectancy was at Qatar which was also the most stable country, followed by the United Arab Emirates, Oman, and then Saudi Arabia – three of the oil-rich Gulf States.

Three of the countries undergoing uprisings came next in life expectancy (Tunisia, Libya and Syria), followed by the countries undergoing reforms (Jordan and then Morocco). The country with the worst life expectancy, Yemen, was also the most unstable. As depicted by the Scatter-plot there did not tend to be very much difference in life expectancy between the countries undergoing uprisings and those which settled for reforms. But it might be said that in general in the countries touched by the Arab Spring life expectancy tended to be lower. People revolted but the end result of their protests, whether the toppling of the leader or reform with accommodations with the ruler, albeit with some changes, was not determined by life-expectancy. Clearly other intervening factors were at work here.

Were these intervening variables the number of physicians, and/or the number of nurses and midwives, and/or the number of hospital beds per ten thousand people? This study found mixed results in the various delivery systems and the Political Stability Index for 2010 and 2011. The “physician density per ten thousand” was not significantly correlated with “political stability” ($r=.47$, $p>.05$) in 2010. Neither was the “hospital beds per ten thousand” indicator, which was not significantly correlated with “political stability” ($r = .21$, $p>.05$) in 2010. Further, there was no significant relation between each one of these variables and “political stability” in 2011. It seemed that citizens did not blame the scarcity of doctors and hospital beds on their governments or they were not inclined to avail themselves of these delivery systems since doctors refused to go to the villages upon graduation and concentrated in the cities. Therefore, attention should also be given not only to the availability of doctors and hospitals but to their accessibility and especially affordability. This is in line with the conclusion of Dr. Enis Boris, who as seen above argued that health care inaccessibility played a role in the Arab Spring. But did people prefer to resort to homecare and the availability of “nurses and midwives” and resented it if these too were not made available in the villages?

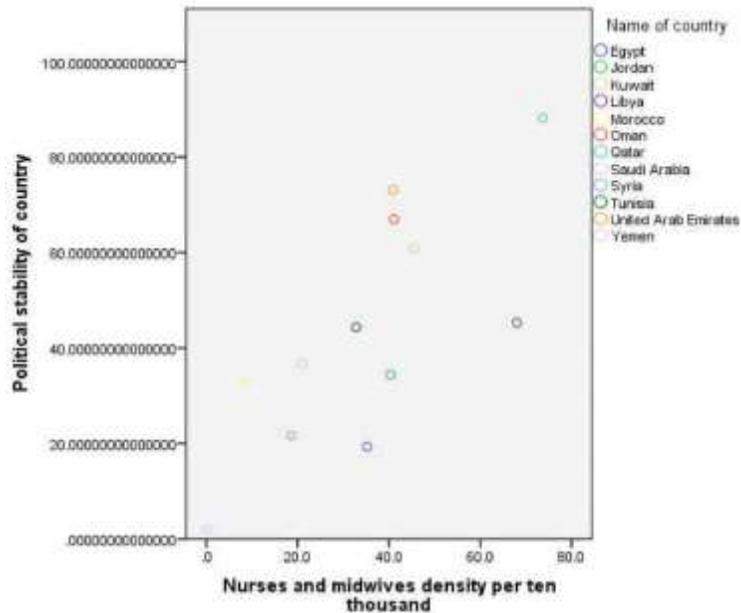


Table 2
Relationship of Political Stability and Nurses/midwives density (2010)

In 2010, it was found that a significant (positive) relationship exists between the Political Stability Index and the density per ten thousand of nurses and midwives ($r=.747$, $r^2=.558$) at the 0.01 level. The higher a nation's density of nurses and midwives per ten thousand, the higher its Political Stability Index, a measure of the government's stability in operating and reducing civil conflict, appears to be. Although this did distinguish between the grouping of countries which were not touched by the Arab Spring and those that experienced uprisings in general (except for Libya, an oil-rich North African nation, that had the second largest number of nurses and midwives after Qatar and yet it was unstable and was attacked by NATO), it did not differentiate between the countries which underwent revolutions and those that settled for reform.

Clearly something else was at work here. Thereupon, this study hypothesized that it was not the number of doctors, nurses and midwives, and hospitals that was important but their actual availability as perceived by the citizens. Also was affordability the clincher? Were people thinking along these lines: "I do not care about the number of doctors, nurses and midwives, and hospitals, as much as I care about whether I will be able to use them and afford them when I am in need of them." Accordingly, this study explored whether the perception of citizens of the extent of their government's caring measured in terms of the regime's providing for the health and making it affordable for the citizenry was significant.

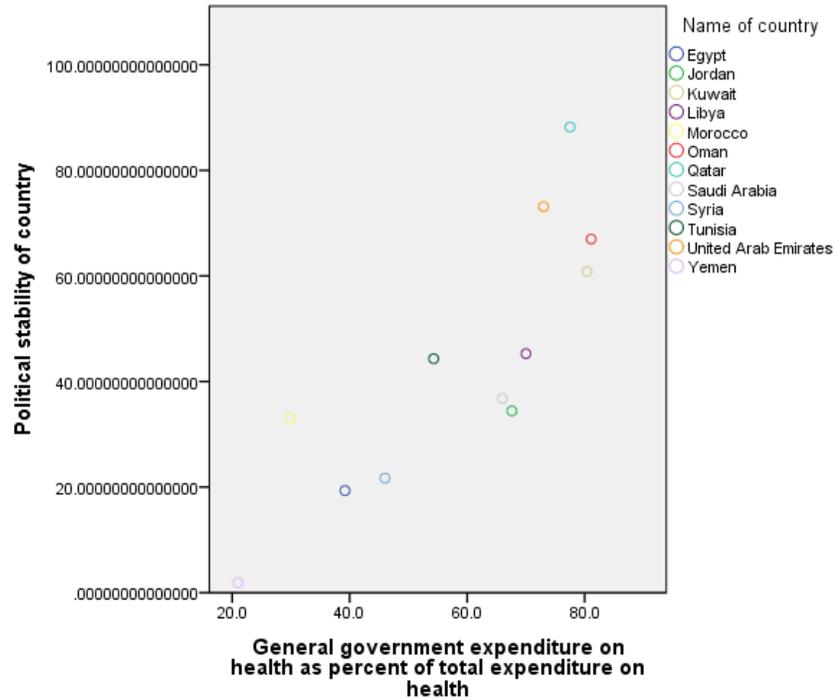


Table 3

Relationship of Political Stability and General Government Expenditure on Health (2010)

Correlations between “stability of countries” and “general government expenditures on health as per cent of the total expenditure on health” confirmed this idea for 2010 figures. In 2010, it was found that a significant (positive) relationship exists between the Political Stability Index and the general government expenditure on health as a percent of total expenditure on health ($r=.74$, $r^2=.700$) at the 0.01 level. The higher a nation’s general government expenditure on health as a percent of total expenditure on health, the higher its Political Stability Index, a measure of the government’s stability in operating and reducing civil conflict, appears to be. This was confirmed by the 2011 sample as well. Here there was a significant positive relationship between the Political Stability Index and the general government expenditure on health as a per cent of total expenditure on health ($r = .71$, $p < .01$). It is also important to note that “private expenditure on health as per cent of total expenditure on health” was negatively correlated with political stability.

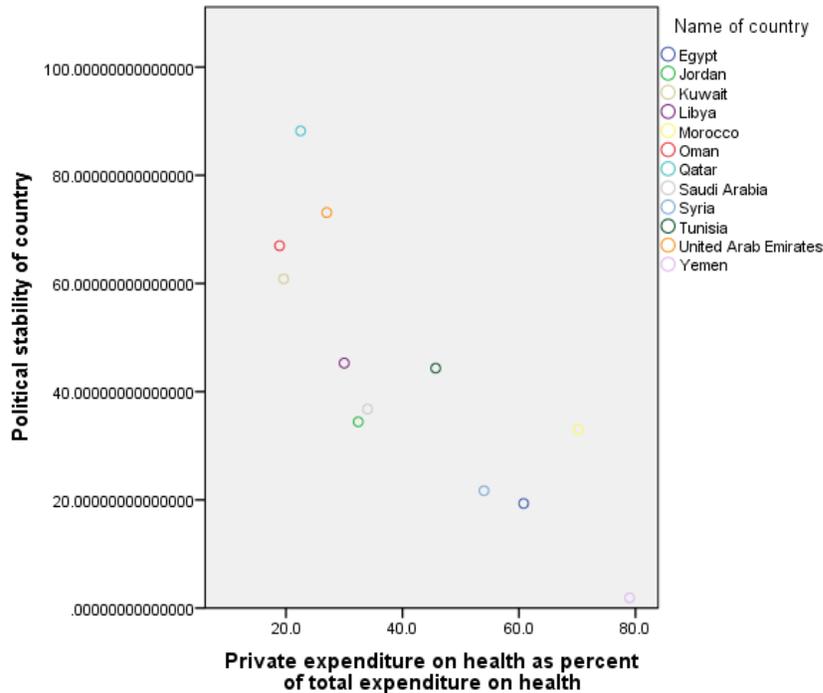


Table 4
Relationship of Political Stability and Private Expenditure on Health (2010)

In 2010, it was found that a significant (negative) relationship exists between the Political Stability Index and the private expenditure on health as a percent of total expenditure on health ($r = -.837$, $r^2 = .700$) at the 0.01 level. The lower a nation's private expenditure on health as a percent of total expenditure on health, the higher its Political Stability Index, a measure of the government's stability in operating and reducing civil conflict, appears to be. Also, the greater the burden of health on the citizens in terms of "out-of-pocket expenditure as per cent of private expenditure on health," the less stable the country was. The Pearson Correlation between "out-of-pocket expenditure as per cent of private expenditure on health" and "political stability of the countries" was negatively significant in 2010 ($r = -.60$, $p < .05$). This is corroborated by a much earlier study, published in 2006, by David McCoy, Mike Rowson and David Sanders on a global level through Global Health Watch. They came to the conclusion, after conducting a cross-national study of health quality and private financing: "the higher levels of private finance and provision lead to worse health outcomes" and that "private financing and provision leads to commercialization of health care, which widens inequities, lowers access to quality care for the poor, increases inefficiencies and diminishes levels of trust and ethical behavior."²⁷ In the more stable countries, governments tended to spend more on health care. In the lead was Kuwait, followed in turn by Oman, Qatar, the United Arab Emirates and then Saudi Arabia.

The countries undergoing uprisings tended to spend between 40 to 58 per cent by their governments in the following order of Tunisia, then Syria, then Egypt and then Yemen spending the least and being the most unstable. The only exception was Libya which spent in the 70 per cent range but was unstable. Some explanations may be that the money spent on educating Libyan doctors abroad did not pay dividends for

²⁷ David McCoy, Mike Rowson and David Sanders, "The Global Health Watch: A Global Health Report with a Difference," *Scandinavian Journal of Public Health* 34 (2006), 226.

the country because most of them did not return home due to low salaries and corruption. Also the stability figures tended to be skewed and magnified in the direction of higher instability because there was a foreign intervention of NATO that prolonged the instability since without NATO's intervention Qaddafi would most likely have succeeded in quelling the rebellion, however cruel this might have been.

Of the reform countries, Jordan was as expected between the uprising countries and those not touched by the Arab Spring with about 65 per cent spent by the government. But here there was the exception of Morocco where the government spent below 40 per cent on health care and yet it did not face a revolution aiming to topple the monarch, King Muhammad VI. Perhaps the results as far as "reform countries" are concerned are not conclusive because the sample size was only two countries and therefore not large enough. This study concluded that there must be a more significant intervening variable. Indeed, here it was discovered that there was a significant negative relationship between the Political Stability Index and the "out-of-pocket expenditure on health care as per cent of private expenditure on health" ($r = -.75, p < .01$) in 2011. The lower a nation's out-of-pocket expenditure on health the higher was its Political Stability Index. It is here that there is also a definite differentiation and grouping in the sample countries. Those countries undergoing revolutions had the most out-of-pocket expenditure by citizens: Syria, Libya, then Yemen, and then Egypt followed by Tunisia. Second came, in terms of stability and the burden on health care on citizens, Morocco and then Jordan, which tended to confirm the hypothesis about "reform countries." In the countries not touched by the Arab Spring, the citizens spent the least out-of-pocket and these were the most stable countries: Saudi Arabia, then Oman, then United Arab Emirates, and then Qatar.

These repeated the results of 2010-sample, where as seen there was a significant negative relationship between the Political Stability Index and out-of-pocket expenditure ($r = -.60, p < .05$). Here too there was a differentiation between the three groupings of states confirming the hypothesis. Therefore, out-of-pocket expenditure by citizens turned out to be the most defining, differentiating and significant factor in health care and the stability of Arab Spring countries undergoing revolutions, those settling for reforms, and those not affected by any uprisings. In 2010, it was found that a significant (negative) relationship exists between the Political Stability Index and the out-of-pocket expenditure on health as a percent of private expenditure on health ($r = -.607, r^2 = .368$) at the 0.05 level. The lower a nation's out-of-pocket expenditure on health as a percent of private expenditure on health, the higher its Political Stability Index, a measure of the government's stability in operating and reducing civil conflict, appears to be.

2010 Indicator Averages per Type of Country

To check these findings, averages were computed for each type of country group for the following indicators: stability, government expenditure on health care, private expenditure on health care, out-of-pocket expenditures in the private health care expenditures, and the number of nurses and midwives per ten thousand citizens. These indicators were chosen for further analysis because the Pearson Correlations, which were conducted earlier, showed that they were significantly correlated with the "political stability" figures for 2010, the central point of this paper.

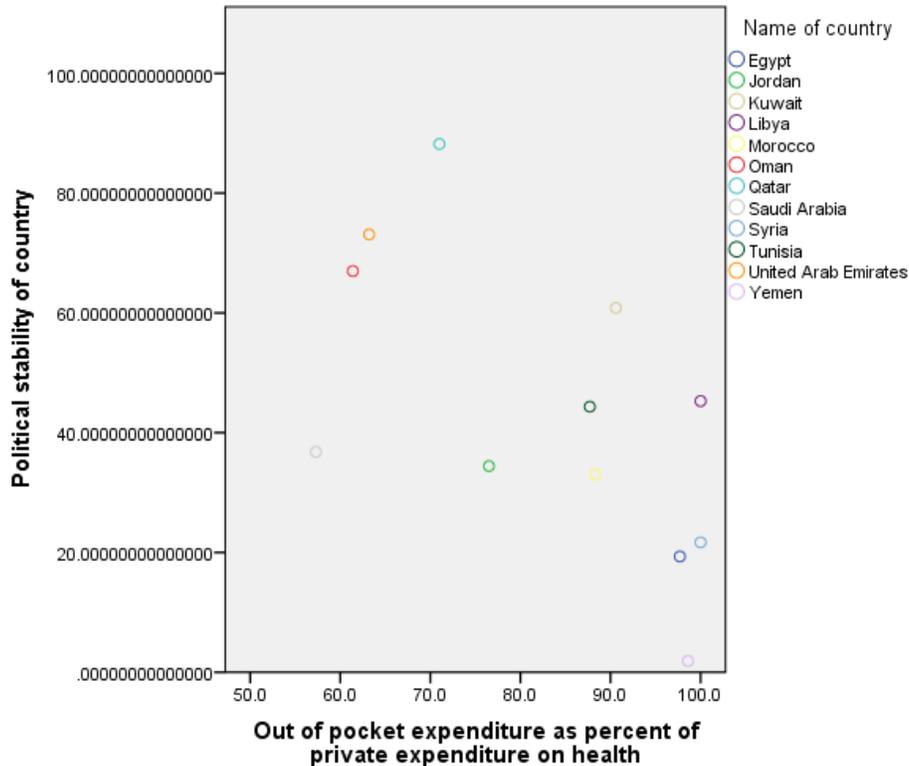


Table 5

Relationship of Political Stability and Out-of-pocket expenditure on health (2010)

The averages confirmed that the “stable countries,” which did not undergo the Arab Spring uprisings, had a score of 65.19 on the Stability Index; the “reform countries” came next with 33.73; whereas the “uprising countries” were most unstable at 26.51 in 2010, on the eve of the Arab Spring, a harbinger of what was going to come next. As far as the “number of midwives and nurses per ten thousand people” goes, this study found that the “stable countries” had, as expected, the highest average at 44.44, next came the “uprising countries” at 32.32; whereas the two “reform countries” showed mixed results with Jordan at 40.3 as expected coming between the “stable” and “uprising” countries but Morocco showed only 8.9 thus making the average of “reform countries” at 24.6 well below the “uprising countries.”

In 2010, the governments of “stable countries” spent most on health care at an average of 75.6 per cent; next came as expected the “reform countries” with an average of 48.7 per cent and last came the “uprising countries” with an average of 46.1 per cent. On the other hand, private expenditures were the least in the “stable countries” at 24.4 per cent, followed by the “reform countries” at 51.3 per cent, followed in turn by the “uprising countries” at an average of 53.9 per cent. The burden on the citizen in terms of “out-of-pocket expenditures as a per cent of private expenditures on health” was the heaviest in the “uprising countries” at an average of 96.8 per cent, followed by the “reform countries” at an average of 82.4 per cent, and the lowest average of 68.7 per cent was found in the “stable countries.” These averages show the importance of the out-of-pocket indicator in differentiating between the three types of countries.

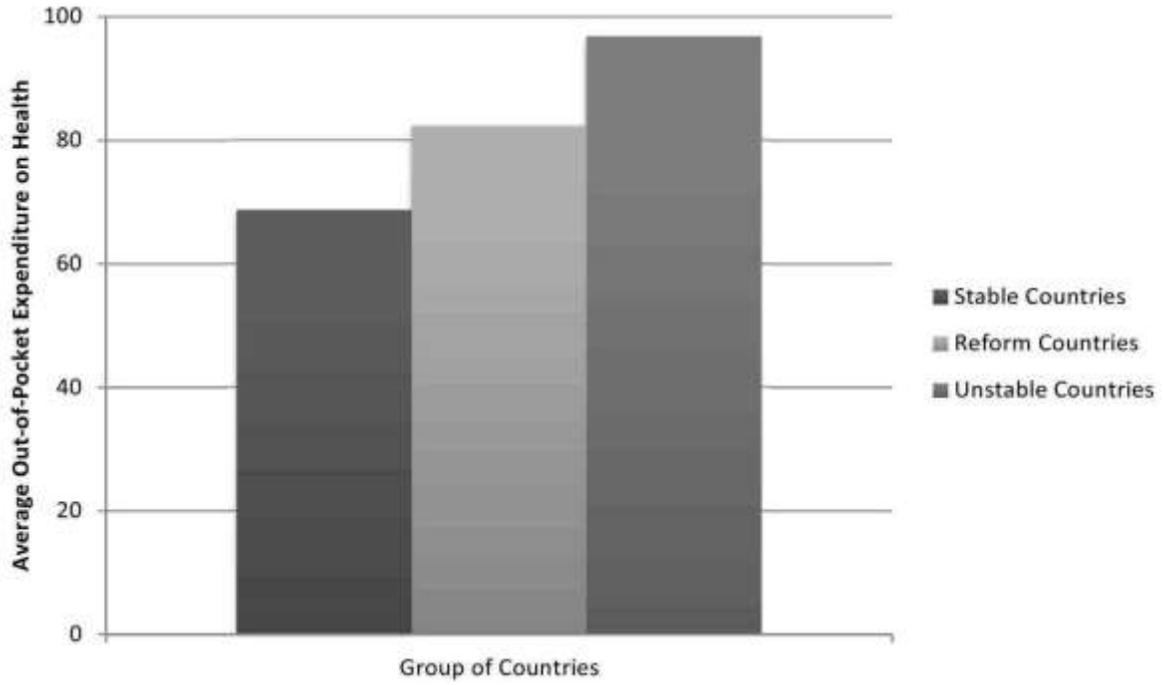


Table 6

Average Out-of-Pocket Expenditure on Health by Group of Countries

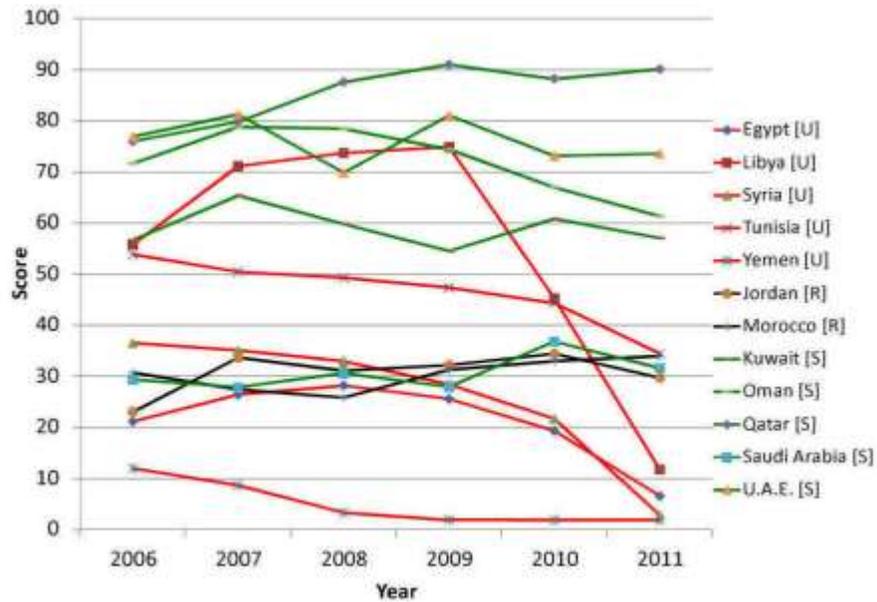


Table 7

Political Stability

Analyzing Five-year Trends: Line Graphs

To analyze trends of the indicators over a five-year period preceding the onset of the Arab Spring from 2006 to 2010 and in 2011, line graphs were drawn per indicator per country. For each indicator cumulative country graphs were color-coded showing the superimposed lines per type of country but with symbols for each country enabling perception at a glance of the bunching of the similar color lines per type of country per indicator while being able to also see each individual country's trends. The “stable countries” were color coded in green; the “uprising countries” in red; whereas the “reform countries” in black.

The trend for “life-expectancy at birth” over the five-year period from 2006 to 2010 – 2011, as depicted by the line graphs, was upward in all countries. People tended to expect to live longer on the eve of the Arab Spring than they did in 2006. Clearly no life-expectation decline occurred and there was no dislocation in this regard at the onset of the Arab Spring in all the countries. But life-expectancy line graphs did discriminate between higher life-expectancy in the “stable countries” and lower in the “uprising countries” with the life-expectancy in the “reform countries” inter-mixed with those of uprising countries. These general trends confirmed the earlier correlations.

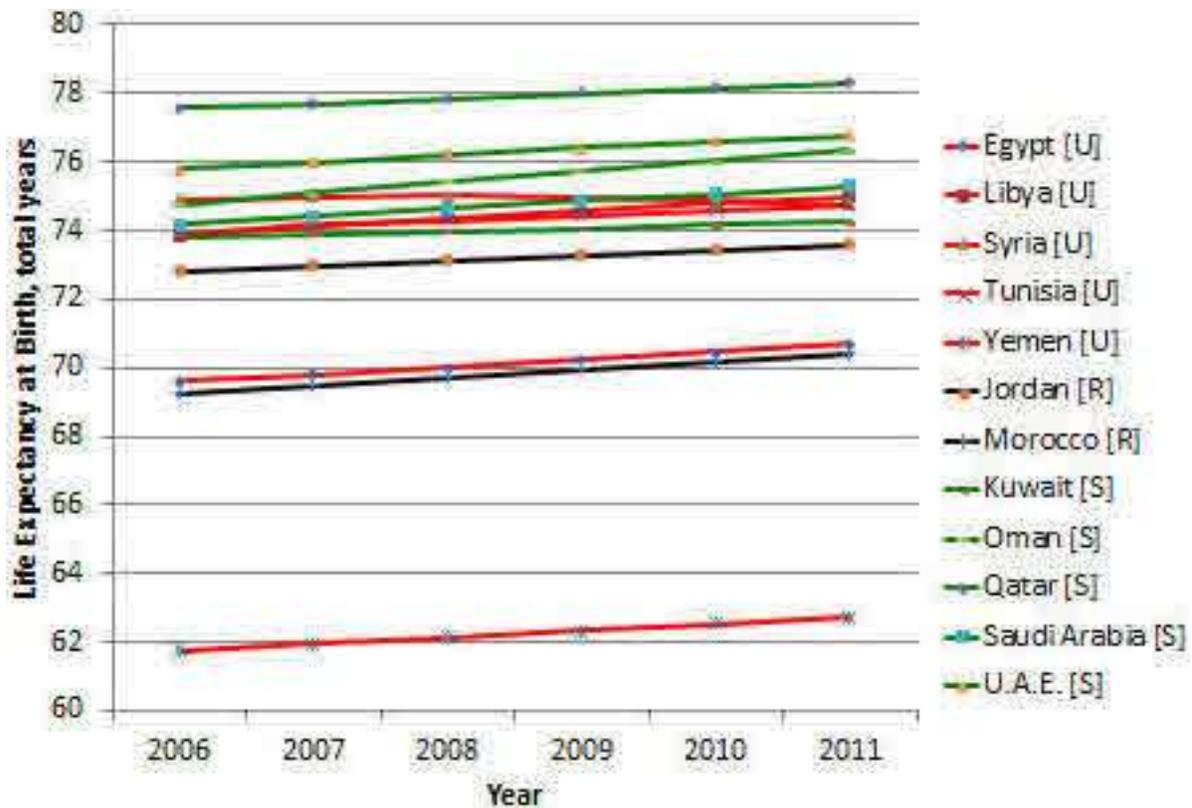


Table 8
Life Expectancy

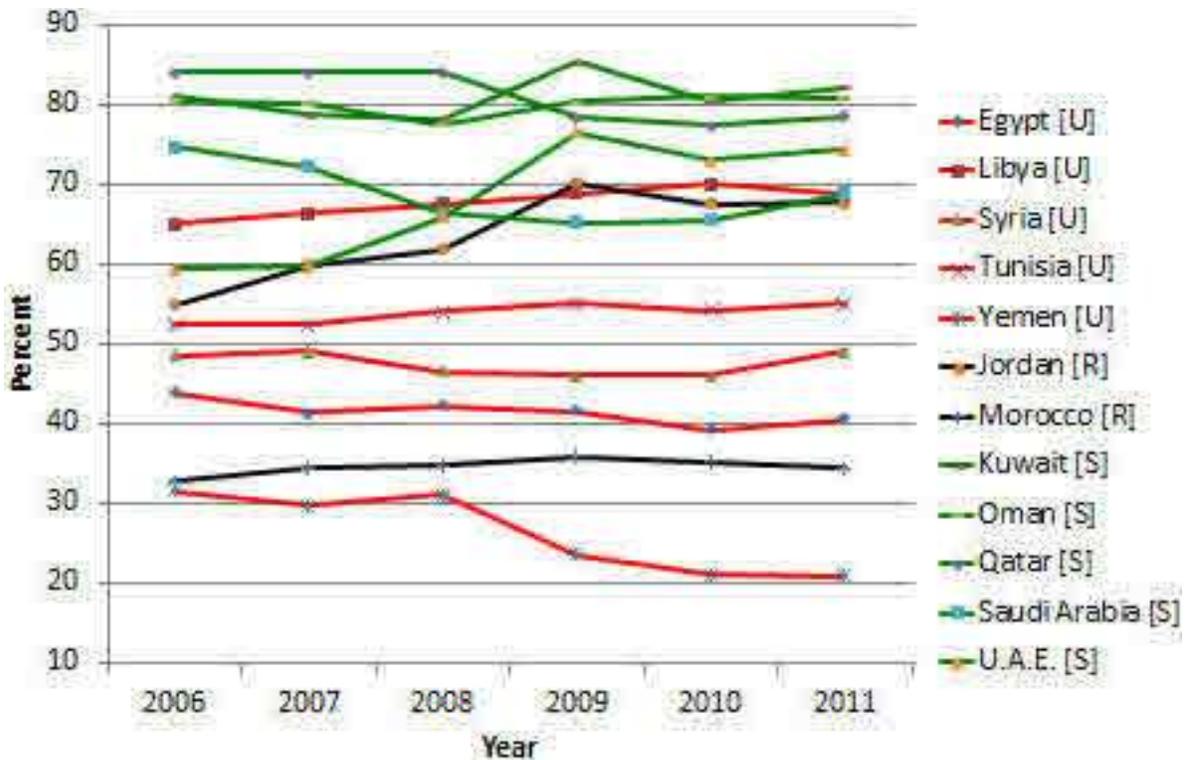


Table 9
Government Expenditure on Health as percent of Total Health Expenditure

The trend for “general government expenditures on health as per cent of the total expenditure on health” over the 2006 to 2010 – 2011 period showed a general decline in the “uprising countries” of Egypt (from 44 per cent in 2006 to 39 per cent in 2010), Syria (from 48.5 per cent in 2006 to 46 per cent in 2010) and considerably lower in Yemen (from 31.5 per cent in 2006 to 21 per cent in 2010). Tunisian expenditures had increased in 2009 from 52 per cent in 2006 to 55 per cent in 2009 but were declining somewhat in 2010 to 54 per cent. The only exception was Libya which showed a steady rise between 2006 at 65 per cent and 2010 at 70 per cent; but in this case consideration should be given to the foreign intervention of NATO that fanned and encouraged the extent of the protests.

The “reform countries” showed a rise in government expenditures in 2009 (with Morocco at 36 per cent compared to 33 per cent in 2006 and Jordan at 70 per cent compared to 54 per cent in 2006). But both showed slight declines in 2010 with Morocco at 35 per cent and Jordan at 67.5 per cent. However, these figures were considerably higher than those for 2006 for both countries. Clearly, there was no jarring J-Curve dislocation (where conditions would improve only to decline sharply causing revolutions according to the theory of J. C. Davies in 1962²⁸). This may have accounted for reform rather than uprising in these countries.

The “stable countries” that showed a decline in government expenditure between 2006 and 2010 were Qatar from 84 per cent in 2006 and 77 per cent in 2010 and Saudi Arabia from 75 per cent in 2006 to 65.5 per cent in 2010. Perhaps, with these reduced figures, government expenditures were so much higher than those of the uprising and reform countries that Qatar and Saudi Arabia remained stable. However, Kuwaiti

²⁸ J. C. Davies, “Toward a Theory of Revolution,” *American Sociological Review* 27 (1962): 5 – 19.

government expenditures tended to remain somewhat even between 2006 at 81 per cent, 2009 at 85 per cent and 2010 at 80 per cent. So did Omani government expenditures from 80.5 per cent in 2006 to 81 per cent in 2010. The one stable country that showed a sharp increase in spending was U.A.E. with 59 per cent in 2006 to 76.5 per cent in 2009 with a modest decline in the following year of 2010 to 73 per cent. Clearly, the line graphs of the stable countries were bunched together at the higher levels of government expenditures. These trends confirmed the earlier correlations.

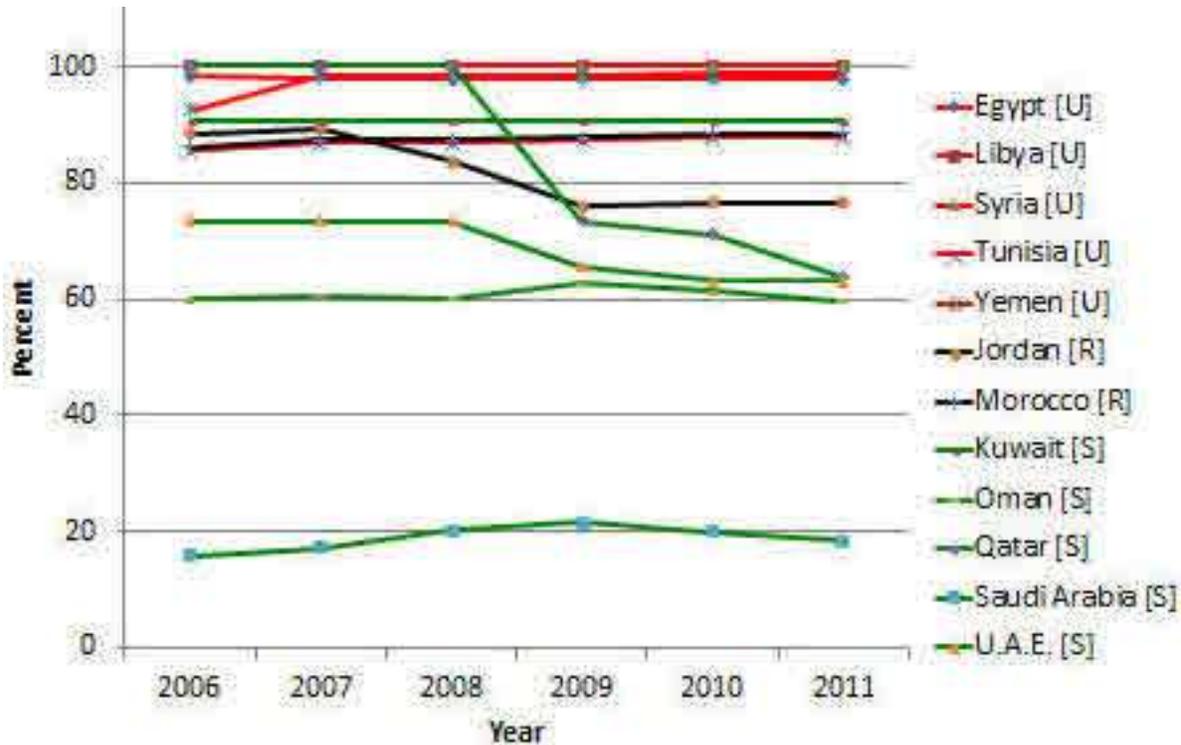


Table 10
Out-of-Pocket Expenditure on Health as Percent of Private Expenditure on Health

The inverse was the case for “out-of-pocket expenditure on health as per cent of private expenditures on health” with the bunching together of the line graphs of the “uprising countries” around 90 to 100 per cent for the period from 2006 to 2010 – 2011. The citizens of the more unstable countries paid more out of pocket. However, the line graphs tended to show almost no variation between 2006 and 2010. Syrian and Libyan citizens each paid 100 per cent out-of-pocket from 2006 up to 2010. Next, were the Egyptian citizens with again no variation over the period, hovering at around 98 per cent. Yemenis payments of out-of-pocket expenditures increased from 92 per cent in 2006 to 98 per cent in 2007 and continued in a straight line to 98.5 per cent in 2008 and to 99 per cent in 2010. The only country not in the 90 per cent range among the uprising countries was Tunisia with 85.5 per cent 2006 but increasing steadily to 87 per cent in 2007 and 2008, and to 88 per cent in 2010 which is close to 90 per cent. Therefore, as seen, while the citizens of a couple of countries (Tunisia and Yemen) had to pay more out-of-pocket, another pair of countries (Syria and Libya) had citizens who paid the maximum of 100 per cent steadily, with the fifth one, Egypt, near the maximum steadily at 98 per cent. Clearly no sudden jolt occurred at the onset of the Arab Spring as far as out-of-pocket expenditures were concerned in the uprising countries. But, as we will argue later, these high out-of-pocket payments created general feelings of dissatisfaction which could be readily tapped into and which augmented perceptions of the degree of injustice felt by the protestors when combined with rising

unemployment in a holistic interconnected manner in the pre-revolutionary situation on the eve of the Arab Spring.

The citizens of the reform countries came next with Moroccans paying more during the period, from 86 per cent in 2006 to 87 per cent in 2007 and 2008 to around 88 per cent in 2009 and 2010. However, Jordanians tended to pay less out-of-pocket with a sharp decline in 2009 at 76 per cent from the highs of 88 and 89 per cent in 2006 and 2007 respectively. This coincided with the sharp increase of the government expenditures in 2009. Perhaps this was a contributing factor to the Jordanian citizens' settling for reform.

The graph lines of citizens' out-of-pocket expenditures of "stable countries" were bunched together in the lower figures. Whereas, Qataris had paid 100 per cent in 2006 this had declined to 71 per cent in 2010. The same decline was observed in the case of the U.A.E. citizens from 73 per cent in 2006 to 63 per cent in 2010. Omanis paid steadily around 60 per cent out-of-pocket from 2006 to 2010 (the latter at 61 per cent). The two exceptions were the out-of-pocket payments of Saudi citizens (at the lower end) and Kuwaiti citizens (at the higher end). Saudis started at 16 per cent in 2006 and ended up paying 20 per cent in 2010. Kuwaitis paid 90.5 per cent steadily throughout the whole period. Perhaps with high incomes, Kuwaitis were not prone to resenting paying so much out-of-pocket for health care. Indeed a Gallup poll taken on the eve of the Arab Spring showed that 89 per cent of Kuwaitis were satisfied with their health.²⁹

This study therefore recognized the need to go beyond the mere quantitative analysis of health care and the Arab Spring into a qualitative analysis, as well, of the actual demands of the protestors in the Arab countries studied in terms of perceptions of health care and historical factors.

QUALITATIVE ANALYSIS OF HEALTH CARE AND THE ARAB SPRING

The level of out-of-pocket expenditures has been considered as important to the study of the extent of inequities in health care in a country confirming this study's quantitative findings. Specifically, this has been affirmed by Shadi S. Saleh et. al. in their study of the countries that underwent uprisings and revolutions such as Tunisia, Egypt, Libya and Yemen where they alluded to "fairly high levels of out-of-pocket spending on health care."³⁰

Also, in the Arab world, user fees are still in force and between 50 and 70 per cent of health care costs amount to out-of-pocket expenditures which burdens most heavily the poor, according to a series of papers presented at the American University in Beirut entitled "Health in the Arab World: a view from within" in 2014.³¹ These difficulties in health care were aggravated by 2011. Although the treatment of diseases had progressed in the last 20 years, it had become much more expensive. It is true that communicable diseases, including malaria, measles, tuberculosis (TB), and meningitis had been more or less successfully dealt with and inexpensively as they required limited doctor visits. However, the biggest killers were the non-communicable diseases of heart disease and stroke, which, in addition to diabetes, required more prolonged, extensive, and expensive care because of their chronic nature.³² Moreover, in the future, after the Arab Spring, the expenses were expected to skyrocket as the present 70 per cent of the Arab population which is below 40 years of age, would grow older resulting in an increased burden of chronic illnesses of older

²⁹ "Life Evaluations in the GCC: Subjective Well-being and Health" (2014), *Abu Dhabi Gallup Center*, 10.

³⁰ Shadi S. Saleh et. al., "Health in the Arab World: A View from Within 3: The Path Towards Universal Health Coverage in the Arab Uprising Countries, Tunisia, Egypt, Libya, and Yemen," *The Lancet*, January 20, 2014, 1.

³¹ "Arab Spring Complicates Shifting Demands in Health Sector," *IRIN News*, January 30, 2014, 2, accessed February 11, 2014, <http://www.irinnews.org/feature/2014/01/30/arab-spring-complicates-shifting-demands-health-sector>

³² *Ibid.*, 1.

peoples.³³ This is a harbinger of more instability if the governments do not manage to cope with their increased expenses, as the correlations and Inverted Funnel Model and hypothesis in this study suggest.

Given the fact that the Arab Spring protestors were complaining about the lack of equitable social, economic and human rights and were demanding the institution of social justice, this study's findings as they relate to out-of-pocket expenditures assume further importance. In this connection it will discuss why the health burden on citizens increased on the citizens in the revolutionary countries in terms of the health history of each country until 2011 and how it related to the other complaints of the protestors in a holistic "social determinants approach to health"³⁴ and in terms of the "structural vulnerabilities" leading to the Arab Spring.³⁵

Country Studies

Uprising Countries

The countries undergoing revolutions went through two historical phases. Phase 1 was the post monarchy phase starting in the 1950s and 1960s of post-monarchy socialism, where the welfare state was instituted which sponsored the notion of free access to health care and the incorporation of this notion in the new constitutions. But this led to problems of budget deficit as populations grew in size. The consequent poor pay to physicians de-motivated the doctors and led to poor care in public health facilities.³⁶

In phase 2, the era of privatization and cost recovery of the government in health care, the rulers introduced user fees to be paid by the patients and simultaneously reduced public spending on health care as part of the economic structural adjustment programs mandated by the World Bank and the IMF. As a result, governments reduced spending on social sectors including major cuts in health care and also encouraged private investment in medical industries. This obliged patients to seek private health care leading to "passive privatization" which incurred higher costs to them.³⁷

What follows is a country-by-country analysis.

Egypt

On the eve of the revolution, specifically in mid-December 2009 the government was no longer able to pay its health bills to the hospitals having incurred debts of US \$219 million to hospitals. Thereupon, the hospitals stopped treating patients that the regime sent them. Around 35 million out of 80 million Egyptians were covered in the state health insurance system with most of the rest being supposed to get free health care, according to the Health Ministry. With economic growth reduced from 7.2 per cent in 2008 to just 4 per cent in 2009 and with the looming global financial crisis, Egyptians concluded that the situation was not going to improve health-wise anytime soon. This hit the poor the hardest.³⁸

³³ Ibid.

³⁴ "WHO's Interview with Samer Jabbour [editor of book *Public Health in the Arab World*, Cambridge University Press, 2014], "Arab Health Professionals Hold Key to Future," *Bulletin of World Health Organization* (2014).

³⁵ Adam Coutts et. al., "The Arab Spring and Health: Two Years On," *International Journal of Health Service* 43, no. 1 (2013): 49 – 60, accessed October 31, 2016, http://www.adamcoutts.com/uploads/1/3/2/6/13265243/ijhs_finalproof_feb2013.pdf

³⁶ Saleh, "Health in the Arab World," 4.

³⁷ Ibid., 5.

³⁸ "Egypt: End of Free Health Care Hits Poor Hardest," *IRIN News*, February 15, 2010, 1, accessed February 24, 2014, <http://www.irinnews.org/news/2010/02/15/end-free-health-care-hits-poor-hardest>

The lack of guaranteed treatment for the poor and state negligence in an overextended health system was “normalized as an unfortunate fact” to be “postponed” by the Mubarak regime.³⁹ Thereupon many middle class activists and protestors took the cause of the poor in the name of Islam. They referred to the Prophet Muhammad’s discouragement of extreme self-denial and they called for the provision of basic material comforts as leading to their being nourished morally and spiritually. Hence they strongly believed the Egyptians should not be deprived of health care.⁴⁰ Indeed the delivery of health care in Egypt was not equitable as it entailed high out-of-pocket expenditures for low income individuals disproportionately in larger amounts than for those with higher incomes.⁴¹

Tunisia

Tunisia had 95 per cent of its population with insurance coverage, either through government schemes for the vulnerable and the poor (30 per cent), or through social health insurance for workers in private and public sectors (65 per cent) served by a national insurance fund. Despite an increase in the Ministry of Health’s budget, public health facilities were underfunded and there developed a two-tier system. One was for the rich and one was for the poor. As in Egypt, structural adjustment reforms mandated by the IMF and the World Bank led to the government instituting user fees to compensate for the decline in government budgets including health care. In 2008, out-of-pocket spending grew to nearly 45 per cent.⁴² In 2010, the lowest 10 per cent households incurred 68 per cent of their total out-of-pocket expenditures on health services compared to an average of 10 per cent nation-wide.⁴³ There were also regional disparities with the state requiring “civil service” of the doctors in remote interior areas compared to rich coastal towns.⁴⁴ And although analysts praised Tunisia for its health care advances in terms of biomedical numbers, Tunisians felt otherwise. According to the Abu Dhabi Gallup Center, whereas 71 per cent of Tunisians had expressed satisfaction with health care to which they had access in 2009, the figures had dropped to 51 per cent on the eve of the revolution in 2010.⁴⁵

Yemen

As part of the economic restructuring scheme, user fees were also introduced in the mid-1990s. Although nominal at first, they had increased with time and “became a substantial financial burden for many people in Yemen.”⁴⁶ Public expenditure had decreased in the last decade from 35 per cent to 28 per cent of the total health spending and out-of-pocket spending had increased from 57 per cent to 71 per cent. Also, the government spending showed discrepancies between rural and urban areas and the 21 governorates, which had continued to increase in a major way prior to the toppling of the leader.⁴⁷ In

³⁹ Sherine F. Hamdy, “Strength and Vulnerability after Egypt’s Arab Spring Uprisings,” *American Ethnologist* 39, no. 1 (February 2012), 40.

⁴⁰ *Ibid.*, 41.

⁴¹ Saleh et. al., “Health in the Arab World,” 41.

⁴² *Ibid.*, 6.

⁴³ World Bank, “The Arab Republic of Egypt Macro-fiscal Context and Health Financing Factsheet,” (2010), 11 – 12.

⁴⁴ Azadeh Shahshani and Corinna Mullin, “The Legacy of US Intervention and the Tunisian Revolution: Promises and Challenges One Year On,” *Interface* 40, no. 1 (May 2012), 88.

⁴⁵ Abu Dhabi Gallup Center, “Tunisia: Analyzing the Dawn of the Arab Spring,” 2009 – 2010, 5, accessed February 24, 2014, <http://www.gallup.com/poll/157049/tunisia-analyzing-dawn-arab-spring.aspx?Version=print>

⁴⁶ Saleh et. al., “Health in the Arab World,” 7.

⁴⁷ *Ibid.*

addition due to the fact that Yemen was involved in the war on terror, thousands of people displaced by the fighting faced dire health situations.⁴⁸

Syria

Syria is a country experiencing uprisings and an on-going civil-war at this writing. It is very difficult to get accurate health care information on Syria because of the severity of the fighting at the moment. The health situation has become precarious as depicted by humanitarian organizations. According to Adam Coutts and Fouad M. Fouad, “The health and humanitarian response to the crisis in Syria is being severely hampered by a lack of coordination and insufficient funding.”⁴⁹

Libya

Libya underwent a civil war too but here Qaddafi was overthrown with the help of NATO and killed, unlike Bashar al-Asad who is still in power, albeit involved in an intense civil war. Qaddafi provided for the right to free health care which he incorporated in some of Libya’s laws and bylaws.⁵⁰ Consequently, high levels of success in health care were reported by WHO in 2010.⁵¹ However, “erratic planning and poor use of valuable resources prevented Libya from capitalizing on the global push towards UHC [Universal Health Care].”⁵² An example here is the major decentralization scheme in 2000 that abolished several ministries including health and education. Although in 2006 Qaddafi re-centralized the government ministries, including health, the newly constituted ministries were still fairly weak.⁵³

Also Libyan poor wages for health workers led doctors to practice abroad after they were sent there to complete their specializations at state expense. Thus despite Libya’s wealth, the Qaddafi health system was considered to be lacking in doctors and medical services.⁵⁴ The alarm bell of the “Brain Drain” of doctors was sounded prior to the revolution.⁵⁵ This was in spite of the fact that public expenditure on health as per cent of GDP had risen steadily from 2.8 in 2007 to 3.0 in 2008 to 3.9 in 2009.⁵⁶

Moreover, the Libyan private sector was passively encouraged which resulted in a two-tier system. For example, figures show that despite the fact that in 2008 government expenditure as per cent of total expenditure on health was high at 70.3 per cent, out-of-pocket expenditure, as part of the rest of 29.7 per cent of private expenditure, was 100 per cent.⁵⁷ This contributed to the poor trust in public health facilities with deteriorating quality of care. And in 2010, out-of-pocket payments had risen to 31.2 per cent, which was considerably higher than in the other oil-rich countries of the Gulf Cooperation Council,⁵⁸ which proved to be stable in the Arab Spring.

⁴⁸ May Meleigy, “Yemen Conflict Takes its Toll on Civilians,” *The Lancet* 375, no. 9711 (January 2010), 269 – 270.

⁴⁹ Adam Coutts and Fouad M. Fouad, “Response on Syria’s Health Crisis – Poor and Uncoordinated,” *The Lancet* 381, 2242-2243 (June 29, 2013).

⁵⁰ Saleh et. al., “Health in the Arab World,” 7.

⁵¹ Elvin Aghayev, “Analysis and Background of the ‘Arab spring’ in Libya,” *European Researcher* 39, no. 1 – 2 (2013), 194.

⁵² Saleh et.al., “Health in the Arab World,” 7.

⁵³ Ibid.

⁵⁴ Maryam Hedayat, “Opinion: Reforming Health Care Sector in Libya,” *The Tripoli Post*, December 1, 2013, 2.

⁵⁵ Sami Zaptia, “Opinion: Libyan Doctors’ ‘Brain Drain’ – New Research,” *The Tripoli Post*, May 1, 2010, 1 - 2.

⁵⁶ “Libya Country Report,” (BTI 2012) Gutersloh: Bertelsmann Stiftung, 2012.

⁵⁷ Hani Benamer, “Healthcare System in Libya: Factual Report,” January 2012, 8, accessed October 31, 2016, <http://documents.mx/documents/libya-health-report-2012.html>

⁵⁸ Saleh et. al., “Health in the Arab World,” 7.

Stable Countries

The “stable countries” were the oil-rich Gulf Cooperation Council monarchies which survived the Arab Spring basically unscathed. They provided for their citizens all of the basic necessities. For example, nearly all Saudis received free health care along with housing assistance and education.⁵⁹ Further, apart from these objective measures, subjective measures suggest positive life evaluations by citizens in the Gulf countries. This contributed to a holistic view of health which according to WHO’s definition of health involves a “state of complete physical, mental and social well-being and not merely the absence of disease and infirmity.”⁶⁰ Hence there is the need to conduct subjective studies of perceptions of well-being. The Gallup Poll taken on the eve of the Arab Spring, from February to December 2010, filled the gap. It reported that 86 per cent of Bahrainis, 89 per cent of Kuwaitis, 87 per cent of Saudi Arabians and 96 per cent of United Arab Emirate citizens expressed satisfaction with their health.⁶¹ These subjective measures are in tandem with this study’s quantitative study of health care and the stability of regimes by types of states during the Arab Spring, specifically as far as the stable countries of the Gulf Cooperation Council monarchies are concerned.

Social Determinants of Health Care and the Arab Spring: Further Studies

Whereas health care, especially in terms of out-of-pocket expenditures, was a contributing factor of the Arab Spring, it was by no means the sole determining factor. Rather, it was affected by more prominent factors and in turn it affected them. Here, factors such as the effects of unemployment, food insecurity, environmental degradation, and corruption should be addressed. Hence there is a need to study the social determinants of health care and go beyond a mere biomedical approach. Also, rather than concentrating on health inefficiencies, there is a need to look at demands for equity within the context of broader structural violence leading to instability by taking into consideration the effects of unemployment, food insecurity, corruption and shrinking resources on health. The Arab Spring focused on a rights-based model where citizens became agencies of change rather than just recipients of generosity bestowed on them.⁶²

Thus what is needed here is a look at health care from the angle of “structural vulnerabilities” leading to the Arab Spring.⁶³ For example, the adverse health effects of unemployment and under-employment, which led to the Arab Spring protestors, included both mental and physical health dimensions, especially in the absence of comprehensive and even reduced social protection and welfare systems such as universal health coverage and unemployment insurance. Health problems were also exacerbated through food insecurity which became acute as the global food shortages occurred starting in 2008, just preceding the Arab Spring and leading to instability.⁶⁴ Moreover, there is a need to address, in connection with the Arab Spring, the two-way interactions between health care and the “population-environment-development dynamics” in the Arab world which had led to “dismal ecological and development records over the past

⁵⁹ Adnan F. Sher, “How Kingdoms Survived Arab Spring?” *Nation*, February 24, 2012, 1, accessed October 31, 2016, <http://www.nation.com.pk/columns/24-Feb-2012/how-kingdoms-survived-arab-spring>

⁶⁰ “Life Evaluations in the GCC,” 1.

⁶¹ *Ibid.*, 10.

⁶² Sonya Soni, “Social Movements and Health System Reforms: The Impact of the Arab Spring in Re-conceptualizing Health Delivery in the Middle East,” *Global Health Review*, Panorama 25, Harvard College, April 22, 2012.

⁶³ Coutts et. al, “The Arab Spring and Health,” 51.

⁶⁴ *Ibid.*, 52.

two decades” involving the effects of water, energy, food and labor over health.⁶⁵ The effect of this interaction on the Arab Spring can be more elaborated upon in further studies.

CONCLUSION

These results confirm the hypothesis that health care and political stability are correlated especially in the Arab Spring countries. The more the burden of health care on Arab citizens, the more they were prone to be dissatisfied with their rulers and the more likely they were to revolt during the Arab Spring.

By 2010, on the eve of the Arab Spring, the peoples of the Arab Middle East were cognizant of their right to health care. They also recognized that although Political Stability itself was desirable because it led to economic prosperity and development and was hence a component of good governance, they needed more – such as social justice. Unlike some of their rulers they did not prioritize stability over social justice.⁶⁶ For the protestors social justice came first even if they had to eschew stability in the short run by calling for the overthrow of some rulers (Tunisia, Egypt, Libya, Syria, and Yemen), or demanding some reforms from others (Morocco and Jordan), or being content with their economic situation in some other monarchies (Saudi Arabia, United Arab Emirates, Qatar, Kuwait and Oman), the countries in our sample. The people tended to recognize that there is an ultimate need to go beyond stability and emphasize the need for transparency, ethical business practices, civil society and human rights as steps to a peaceful society based on the principles of justice. It is then that there would be the most widespread stability and hopefully the meeting of the needs that are essential for human happiness. A component of this happiness was considered to be good health care as depicted by the demands of the protestors.

What were then the main aspects of health care that Arabs prioritized? How were they related to the political stability of their countries? This study’s quantitative and qualitative analyses show the upper-most concerns in the minds of the peoples studied were:

1. How long will I live?
2. How concerned is my government about my health care (as depicted by the general government expenditure on health as per cent of state’s total expenditure on health)?
3. How much of a burden will my health care put on my pocket book in terms of affordability for me? In other words, will I be able to afford health care when I need it? (This was measured in terms of out-of-pocket expenditure on health as a per cent of private expenditure on health care on the part not provided by the government, charities, and in very few countries through insurance).

A quantitative study of correlations for 2010 and 2011 confirmed the hypothesis pertaining to the importance of out-of-pocket expenditure on health care and stability, which were supplemented by a qualitative analysis.

There is a need to emphasize at the end of this study one paramount, albeit negative, point: the study is not claiming that health care is *the* determining factor of the Arab Spring uprisings. Rather health care costs augmented feelings of social injustice, acting as one more source of aggravation felt by the protestors of the Arab Spring. However, it does claim that the Inverted Funnel Model tends to have heuristic value in explaining the levels of instability in the three-way typology of Arab Middle Eastern countries during and in the immediate aftermath of the Arab Spring.

⁶⁵ Abbas El-Zein et. al., “Health in the Arab World: A View from Within 5: Health and Ecological Sustainability in the Arab World: A Matter of Survival,” *The Lancet* 383 (February 1, 2014), 458.

⁶⁶ Alianak, *The Transition Toward Revolution and Reform: The Arab Spring Realised?*, 164.

REFERENCES

- Abu Dhabi Gallup Center, “Tunisia: Analyzing the Dawn of the Arab Spring”, 2009 – 2010, 5, accessed February 24, 2014.
<http://www.gallup.com/poll/157049/tunisia-analyzing-dawn-arab-spring.aspx?Version=print>
- Aghayev, Elvin, “Analysis and Background of the ‘Arab spring’ in Libya”, *European Researcher* 39, no. 1-2 (2013).
- Alianak, Sonia, *The Transition Towards Revolution and Reform: The Arab Spring Realised?* Edinburgh: Edinburgh University Press, 2014.
- “Arab Spring Complicates Shifting Demands in Health Sector”, *IRIN News*, January 30, 2014, accessed February 11, 2014. <http://www.irinnews.org/feature/2014/01/30/arab-spring-complicates-shifting-demands-health-sector>
- Benamer, Hani, “Healthcare System in Libya: Factual Report”, January 2012, 8, accessed October 31, 2016, <http://documents.mx/documents/libya-health-report-2012.html>
- Brundtland, Gro Harlem, “Global Health and International Security,” *Global Governance* 9, no. 4 (2003).
- Chan, Margaret; Store, Jonas Gahr; and Kouchner, Bernard, “Editorials: Foreign Policy and Global Public Health Working Towards Common Goals”, *Bulletin of World Health Organization* 86, no. 7 (2008).
- Coutts, Adam and Fouad, Fouad M., “Response on Syria’s Health Crisis – Poor and Uncoordinated”, *The Lancet* 381, 2242-2243 (June 29, 2013).
- Coutts, Adam et. al., “The Arab Spring and Health: Two Years On”, *International Journal of Health Service* 43, no. 1 (2013): 49 – 60, accessed October 31, 2016, http://www.adamcouthts.com/uploads/1/3/2/6/13265243/ijhs_finalproof_feb2013.pdf
- Davies, J. C., “Toward a Theory of Revolution”, *American Sociological Review* 27 (1962): 5-19.
- “Egypt: End of Free Health Care Hits Poor Hardest,” *IRIN News*, February 15, 2010, 1, accessed February 24, 2014, <http://www.irinnews.org/news/2010/02/15/end-free-health-care-hits-poor-hardest>
- Elsayed, Nourhan. “Healthcare Inaccessibility Plays Role in Arab Spring”, *Duke Chronicle* (2012). Accessed February 11, 2014, <http://www.dukechronicle.com/article/2012/08/health-care-inaccessibility-plays-role-arab-spring>
- El-Zein, Abbas et. al., “Health in the Arab World: A View from Within 5: Health and Ecological Sustainability in the Arab World: A Matter of Survival”, *The Lancet* 383 (February 1, 2014), 458.
- Fidler, David P. “Globalization for Health: Health as Foreign Policy: Harnessing Globalization for Health”. *Health Promotion International* 21, no. 81 (2007).
- Hamdy, Sherine F., “Strength and Vulnerability after Egypt’s Arab Spring Uprisings”, *American Ethnologist* 39, no. 1 (February 2012).
- Hedayat, Maryam, “Opinion: Reforming Health Care Sector in Libya”, *The Tripoli Post*, December 1, 2013.
- Ingram, Alan, “The New Geopolitics of Disease: Between Global Health and Global Security”, *Geopolitics* 10 (2005).
- Iqbal, Zaryab, “Health and Human Security: The Public Health Impact of Violent Conflict”, *International Studies Quarterly* 50 (2006).

- “Libya Country Report”, (BTI 2012) Gutersloh: Bertelsmann Stiftung, 2012.
- “Life Evaluations in the GCC: Subjective Well-being and Health” (2014), *Abu Dhabi Gallup Center*, 10.
- Meleigy, May, “Yemen Conflict Takes its Toll on Civilians”, *The Lancet* 375, no. 9711 (January 2010), 269 – 270.
- McCoy, David; Rowson, Mike; and Sanders, David, “The Global Health Watch: A Global Health Report with a Difference”, *Scandinavian Journal of Public Health* 34 (2006).
- Novotny, Thomas E., “US Department of Health and Human Services: A Need for Global Health Leadership in Preparedness and Health Diplomacy”, *American Journal of Public Health* 96, no. 1 (2008).
- Ratzan, Scott C., “Cooperation to Develop Health Security”, *Journal of Health Communication* 8 (2003).
- Saleh, Shadi S. et. al., “Health in the Arab World: A View from Within 3: The Path Towards Universal Health Coverage in the Arab Uprising Countries, Tunisia, Egypt, Libya, and Yemen”, *The Lancet*, January 20, 2014.
- Shahshani, Azadeh and Mullin, Corinna, “The Legacy of US Intervention and the Tunisian Revolution: Promises and Challenges One Year On”, *Interface* 40, no. 1 (May 2012).
- Sher, Adnan F., “How Kingdoms Survived Arab Spring?” *Nation*, February 24, 2012, 1. Accessed October 31, 2016. <http://www.nation.com.pk/columns/24-Feb-2012/how-kingdoms-survived-arab-spring>
- Soni, Sonya, “Social Movements and Health System Reforms: The impact of the Arab Spring in Re-conceptualizing Health Delivery in the Middle East,” *Global Health Review*, Panorama 25, Harvard College, April 22, 2012.
- Statement by the President [Obama] on Global Health Initiative, May 5, 2009, The White House, accessed October 31, 2016, <https://www.whitehouse.gov/the-press-office/statement-president-global-health-initiative>
- United Nations Development Program (UNDP), *Arab Human Development Report (AHDR)*, 2009, Chapter 7. New York: United Nations Publications, 2009. (accessed October 31, 2016.) <http://www.arab-hdr.org/publications/other/ahdr/ahdr2009e.pdf>
- United Nations Development Program (UNDP), *Human Development Report 1994*. New York: Oxford University Press, 1994. (accessed October 31, 2016.) http://hdr.undp.org/sites/default/files/reports/255/hdr_1994_en_complete_nostats.pdf
- World Bank, “The Arab Republic of Egypt Macro-fiscal Context and Health Financing Factsheet”, (2010), 11 – 12. (accessed October 31, 2016) <http://documents.worldbank.org/curated/en/787141468026409841/Arab-Republic-of-Egypt-Macro-fiscal-context-and-health-financing-factsheet>
- World Bank, *Political Stability and Absence of Violence/terrorism Index*, *World Bank Data Bank*, 2010 and 2011. (accessed October 31, 2016). <http://databank.worldbank.org/data/Databases.aspx?orderby=Alphabetical&direction=desc&qterm=Political%20Stability%20and%20Absence%20of%20Violence&pagenumber=1>
- World Health Organization (WHO), *World Health Statistics*, 2006, (accessed October 31, 2016). http://www.who.int/whosis/whostat2006_erratareduce.pdf?ua=1

- World Health Organization (WHO), *World Health Statistics*, 2007, (accessed October 31, 2016).
http://www.who.int/gho/publications/world_health_statistics/whostat2007.pdf
- World Health Organization (WHO), *World Health Statistics*, 2008, (accessed October 31, 2016).
http://www.who.int/gho/publications/world_health_statistics/EN_WHS08_Full.pdf
- World Health Organization (WHO), *World Health Statistics*, 2009, (accessed October 31, 2016).
http://www.who.int/gho/publications/world_health_statistics/EN_WHS09_Full.pdf
- World Health Organization (WHO), *World Health Statistics*, 2010, (accessed October 31, 2016).
http://www.who.int/gho/publications/world_health_statistics/EN_WHS10_Full.pdf
- World Health Organization (WHO), *World Health Statistics*, 2011. (accessed October 31, 2016).
http://www.who.int/gho/publications/world_health_statistics/EN_WHS2011_Full.pdf
- World Health Organization (WHO), *World Health Report 2007*. (accessed October 31, 2016).
http://www.who.int/whr/2007/whr07_en.pdf
- “WHO’s Interview with Samer Jabbour [editor of book *Public Health in the Arab World*, Cambridge University Press, 2014], “Arab Health Professionals Hold Key to Future,” *Bulletin of World Health Organization* (2014).
- Zaptia, Sami, “Opinion: Libyan Doctors’ ‘Brain Drain’ – New Research,” *The Tripoli Post*, May 1, 2010.
- Zogby Research Services. “The ‘Arab Spring’ Effect,” (December 19, 2011).
- Zogby Research Services. “Zogby International: Attitudes of Arabs, 2005”; “Zogby International: 6 Nation Poll, 2009”.