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A retrospective health policy analysis of the development and implementation of the voluntary health insurance system in Lebanon: Learning from failure

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ABSTRACT

Public policymaking is complex and suffers from limited uptake of research evidence, particularly in the Eastern Mediterranean Region (EMR). In-depth case studies examining health policymaking in the EMR are lacking. This retrospective policy analysis aims at generating insights about how policies are being made, identifying factors influencing policymaking and assessing to what extent evidence is used in this process by using the Lebanese Voluntary Health Insurance policy as a case study. The study examined the policymaking process through a policy tracing technique that covered a period of 12 years. The study employed a qualitative research design using a case study approach and was conducted in two phases over the course of two years. Data was collected using multiple sources including: 1) a comprehensive and chronological media review; 2) twenty-two key informant interviews with policymakers, stakeholders, and journalists; and 3) a document review of legislations, minutes of meetings, actuarial studies, and official documents. Data was analyzed and validated using thematic analysis. Findings showed that the voluntary health insurance policy was a political decision taken by the government to tackle an urgent political problem. Evidence was not used to guide policy development and implementation and policy implementers and other stakeholders were not involved in policy development. Factors influencing policymaking were political interests, sectarianism, urgency, and values of policymakers. Barriers to the use of evidence were lack of policy-relevant research evidence, political context, personal interests, and resource constraints. Findings suggest that policymakers should be made more aware of the important role of evidence in informing public policymaking and the need for building capacity to develop, implement and evaluate policies. Study findings are likely to matter in light of the changes that are unfolding in some Arab countries and the looming opportunities for policy reforms.

1. Introduction

The importance of evidence-informed health policies in improving health, reducing health inequities and contributing to economic development is increasingly recognized (Hanney et al., 2003). The Beijing, Montreux, and Bamako calls to action emphasized the importance of Knowledge Translation (KT) and urged national governments and international development agencies to continue to promote and finance KT towards the application of evidence-informed policymaking by developing trust between researchers, practitioners and policymakers, and drawing on multiple sources of knowledge (Global Ministerial Forum on Research for Health, 2008; Global Symposium on Health Systems Research, 2012).

Despite these calls, research evidence is still underutilized in policymaking in the Eastern Mediterranean Region (EMR). Recent

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studies from the EMR showed that the gap between research and policy is still wide and work on KT is limited (El-Jardali et al., 2011, 2012a). Studying the role of evidence in policymaking through careful policy analysis allows a better understanding of the contribution of research in the formulation of policies, factors influencing success or failure, and why some issues get into the policymakers' agenda (Trostle et al., 1999; Buse et al., 2007).

Health policy analysis in the EMR is limited and in-depth case studies examining the health policymaking process are lacking. A recent priority setting exercise from the region called for conducting case studies in selected countries to better understand the health policymaking process (El-Jardali et al., 2010).

This study describes the results of a retrospective policy analysis exercise in Lebanon, a LMIC in the EMR. It aims at generating in-depth insights about how policies are being made, identifying the factors that influence policymaking and assessing the extent that evidence is used in this process. Selecting the Lebanese National Social Security Fund (NSSF) voluntary insurance policy as a case study, this policy analysis explores how and why this policy was developed and how it was implemented, explains its impact and draws on lessons learned for informing future public policymaking and provides insights for structuring the decision-making process, particularly for large-scale decisions.

In the policymaking process, research evidence is difficult to separate from other types of information that may be considered evidence by policymakers and stakeholders (Moat et al., 2013). As such, we considered evidence to include both information derived from research evidence and from other sources that might be conceived as evidence in policymaking (e.g., local health system indicators, feasibility studies, published/grey reports).

In Lebanon, out-of-pocket expenditure reached 56.5%, which is considered catastrophic by WHO. As such, selecting this case study in Lebanon presents an opportunity to draw lessons for informing the design and implementation of policies for attaining universal health coverage (UHC). This policy analysis can also help inform future decisions for mitigating the adverse impact of voluntary insurance policy on society and on the health sector.

Lowi's typology of public policies was used to make sure that the policy under study fits the definition and types of public policy. Lowi's typology differentiates between three types of policies: distributive, regulatory and redistributive. Distributive policies provide specific benefits or services to specific segments of the population without regard to limited resources. Regulatory policies involve a direct choice as to who will be indulged and who deprived. While, redistributive policies involve broad categories of citizens to whom benefits are provided or from whom losses are taken (Lowi, 1964). The NSSF voluntary insurance policy fits the distributive typology of public policy.

2. Case study background and context

The Lebanese political system is a parliamentary democratic system formed of three authorities: legislative (the Parliament), executive (the council of ministers) and judicial. Public policies are made through the legislative and executive authorities in the form of decrees or laws (Presidency of the Republic of Lebanon, 2012). The political system in Lebanon places the deeply seated political sectarianism within an institutional framework (Cammett, 2011). The posts of President, Prime Minister and Speaker of the House are assigned based on sect to the Maronite, Sunni and Shia respectively (El-Khazen, 2003). Political secularism plays a significant role in shaping health policies in the country (Premkumar et al., 2012).

The Lebanese healthcare system is characterized by the multiplicity of financing intermediaries consisting of six different publicly managed employment-based social insurance funds, which have different financing and governance mechanisms. These funds include the NSSF that covers the formal sector of employees, the Civil Servant Cooperative that covers civil servants, as well as four military schemes that cover the uniformed armed forces, in addition to private insurance. The NSSF and other insurance schemes cover 57% of the Lebanese population. While, 43% of the population remains uninsured and can benefit from the MOPH coverage for hospitalization and catastrophic drugs.

2.1. The NSSF

The NSSF is the largest publicly managed social insurance fund in Lebanon. It was established in September 1963 (decree no. 13955) under a Bismarckian social security model, which is financed through the contributions of employers and employees with government subsidies. This independent public institution is under the mandate of the Council of Ministers and the Ministry of Labor (MOL). All decisions related to the NSSF should be discussed and approved by its board of directors prior to their approval by the Council of Ministers and the MOL. At the same time, the NSSF depends on the Council of Ministers and the MOL for a source of revenue, which undermines its autonomy and makes it possible for political powers outside its administrative structure to intervene in its decision-making process.

The NSSF is mandatory for all employees of the formal sector, which encompasses private sector and government-owned corporations, in addition to contractual and wage earners of the public administration not subject to civil and military service protection. NSSF coverage also extends to specific categories outside the formal sector, these are taxi drivers, newspaper sellers, university students, teachers in private schools, elected mayors and physicians. These categories constitute a comprehensive list of NSSF coverage. The NSSF provides health coverage for 23% of the Lebanese population. The enrollees' dependents (spouse, children and parents over 60 years) are also covered by the NSSF. The enrollees and their dependents can no longer benefit from NSSF medical coverage after retirement or losing jobs. These groups are left uninsured especially that purchasing private insurance is expensive and cannot be afforded by the majority specifically the elderly (Ammar, 2009).

In 2002, the voluntary health insurance policy was established in the NSSF based on a governmental decree (decree no. 7352). This voluntary insurance policy allows the uninsured segment of the population (employers, those who were previously enrolled in the NSSF, self-employed) to voluntarily enroll in the NSSF and benefit from medical coverage. The voluntary insurance fund at the NSSF became bankrupt two years after its establishment, which had a significant negative impact on enrollees' admission, the hospitals' ability to provide services and the quality of care (Ammar, 2009). Namely, more than 32,000 families were deprived of access to healthcare and the health sector suffered from large financial deficits as a result of the debt incurred by the voluntary health insurance fund.

2.2. Public policy models

Two public policy models were used to guide study design and frame the analysis in this case study: the policy triangle framework for policy analysis (Walt and Gilson, 1994) and Kingdon's multiple streams theory (Kingdon, 1984).

Walt and Gilson's policy analysis triangle framework incorporates context, actors, process and content concepts in analyzing policies. The framework allows the analysis of the contextual factors-social, economic, political and international – that influenced the policy, the process by which the policy was initiated, formulated, developed, implemented and evaluated, the

objectives of the policy and the actors involved in the decision-making. It presents a simplified approach to a complex set of interrelationships.

Kingdon's multiple streams theory was also used to examine how this particular policy emerged to the policy agenda at this particular time. Kingdon's streams theory is considered one of the most influential theories of the public policy process (Walt et al., 2008). It argues that a "policy window" opens only when three independent streams – the problem, the policy and the politics streams – converge, propelling governments to act. The problems stream contains the broad problems facing societies. The policy stream refers to the set of policy alternatives that researchers and other stakeholders propose to address problems. The politics stream consists of political transitions, national mood, elections, or pressure from interest groups (Kingdon, 1984).

3. Methods

3.1. Study design

The study examined the "NSSF voluntary insurance" policy-making process through a policy tracing technique that covered a period of 12 years. The study employed a qualitative research design using a case study approach and was conducted in two phases: i) data collection and analysis, and ii) validation (Fig. 1). Study activities took place from September 2010 to January 2013.

In the first phase, data was collected in a stepwise approach using a comprehensive media review, key informants interviews and document review.

In the second phase, a panel discussion was organized to validate the findings, identify any gaps and gain insights and feedback from the panelists. Eight participants including two parliamentarians, one minister, senior policymakers from NSSF and representatives of the syndicate of hospitals and the order of physicians, who were initially involved in the decision-making process and were interviewed in Phase I, participated in the panel in addition to stakeholders from the civil society and international donor agencies. Panelists shared their experience on the development and implementation of the voluntary health insurance policy and discussed the main challenges in the policymaking process in Lebanon.

3.1.1. Media review

A chronological examination of the published media was conducted. The aim of the media review was to capture reports about the development and the implementation of NSSF voluntary insurance policy over time, assess the climate for evidence-informed health policymaking, obtain an overview of the social, political and economic conditions and events that might have shaped the policy, as well as identify the actors in this policy. Media coverage can bring evidence to the attention of policymakers to inform policy formulation or implementation (Waddell et al., 2005; Cheung et al., 2011). Kingdon's model (1984) also highlights the role of the media in opening a policy window that allows issues to get to the fore of the policymakers' agenda through pinpointing the problem and exerting pressure on the government to respond. The media review included Arabic and English published newspapers in Lebanon that were issued between 2000 and 2012. Newspaper articles tackling NSSF issues were selected from the Syndicate of Hospitals' archive of health-related newspaper articles and through an online search for newspaper articles. Out of 306 articles reporting NSSF issues, a total of 86 articles tackled the NSSF voluntary health insurance policy specifically. Each article was reviewed and information was extracted onto a coding form adapted from Cheung et al. (2011) and slightly modified to fit the purposes of the study.

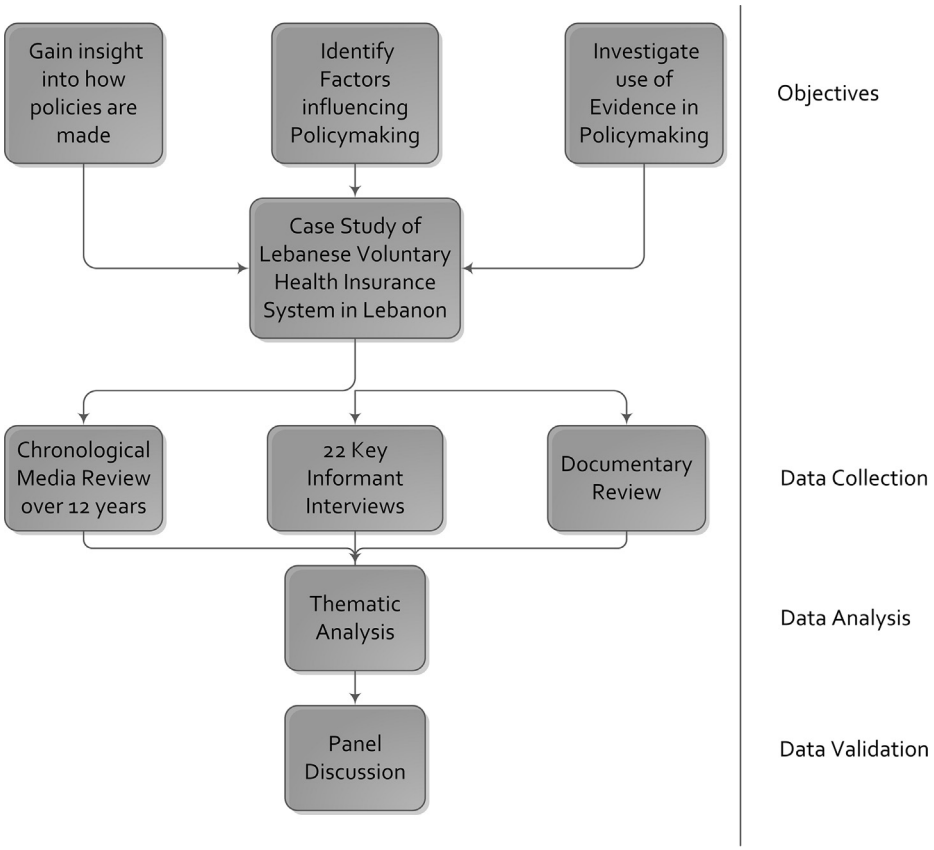

Fig. 1. Summary of research activities.

A sample of the media articles was first reviewed independently by two members of the research team. The articles were also reviewed and summarized chronologically to describe the key milestones in NSSF voluntary insurance policymaking process.

3.1.2. Interviews

Key informant interviews aimed at exploring the role of stakeholders and policymakers in the NSSF voluntary health insurance policy, investigating the context within which this policy was developed and the process by which it was developed and examining the role that evidence played in the NSSF voluntary insurance policymaking process. Interviews took place from November 2011 to March 2012. A sampling frame was developed to identify the selection criteria for the key informants. The sampling frame was adapted from a similar tool developed in Canada and used in previous studies in the region (Lavis et al., 2006). Of the 25 key informants identified and approached, 22 accepted to be interviewed including two parliamentarians, three ministers, and key personnel from the order of physicians and the syndicate of hospitals, senior officials from the NSSF, the MOPH, the cabinet of ministers and the Middle East Airlines (MEA) and media. Face-to-face, semi-structured interviews were conducted and lasted between 45 and 60 min. Interviews were digitally recorded after obtaining signed informed consent from interviewees; only three interviewees refused to be tape-recorded and their responses were recorded by extensive note-taking. The development of the interview tool was guided by Lavis et al. (2002) framework.

The recorded interviews were transcribed verbatim. Arabic interviews were translated to English then back-translated to Arabic to avoid deviation from what interviewees intended to convey. Interview transcripts were reviewed independently by two members of the research team and the coding framework was discussed until agreement was reached. The transcripts were coded using NVivo 9 software.

3.1.3. Document review

The document review examined existing documents in order to collect more data on the NSSF voluntary insurance policy, explore the role of evidence in this policy process and validate the information obtained from the media review and interviews. The documents were identified and obtained from the interviews and the media analysis. One document dating 1963 and 26 documents dating from 2001 to 2012 were obtained including official letters between the MOL, Ministry of Finance, the Council of Ministers and NSSF officials, legislations including law articles, governmental decrees, reports and actuarial studies and minutes of meetings of the NSSF board of directors. Each document was then reviewed and summarized in a data collection sheet that included the title of the document, the type, the date, the actors, whether evidence was used or not and a summary. The review of documents was conducted independently by two different reviewers from the research team to achieve consensus. The document review was guided by a protocol adapted from Hanney et al. (2003) and customized to fit the purposes of the study.

For the three sources of data thematic analysis was conducted, and themes were categorized based on the Walt and Gilson (1994) framework: content, actors, process and context. Additional themes were also identified.

Patterns of convergence were assessed by comparing results across multiple data sources. Triangulating among multiple sources of data would minimize bias, provide in-depth data and increase the reliability, validity and consistency of the findings through cross-checking of information across different data sources.

Ethical approval for the study protocol, data collection tools and consent forms was obtained from the Institutional Review Board at the American University of Beirut.

4. Findings

Findings are presented in two parts. The first part (I) "Content, Actors, Process, and Context in the development of the NSSF voluntary health insurance policy" consists of the analysis of the voluntary insurance policy including a timeline presenting the chronological progress of the policy from 1963 to 2013 (Fig. 2). It also includes an analysis of the four components of policy: the context within which it was developed, the content and objectives, the actors involved in this policy and the process of how the policy was initiated, formulated, implemented and evaluated (Fig. 3). Additionally, this first section includes an analysis of how the policy emerged to the policy agenda. The second part (II) "Use of evidence in public policymaking" presents findings on the use of evidence in policymaking, barriers to the use of evidence in policymaking and strategies to reform the policymaking process.

4.1. Context, content, actors, and process in the development of the NSSF voluntary health insurance policy

This section presents the findings of the three sources of data as validated in Phase II of the study.

The timeline below presents the chronological progress of the NSSF voluntary insurance system from 1963 to 2012.

4.1.1. Context

Findings revealed that the development of the NSSF voluntary health policy was triggered by an urgent event, namely the MEA company restructuring project, which appears to be a political crisis unrelated to health policy. The MEA has been suffering from a critical financial situation of USD330 million worth of debt, which could have led to the shutdown of the company. In 1998, the newly appointed board of directors implemented a restructuring plan to restore the company to profitability which included, as cost reduction measures, the termination of 1550 employees in 2001 (Middle East Airlines, 2009) and the abolishment of the after-retirement medical plan.

As such, a considerable number of the population was deprived from medical coverage and the government was urged to find an alternative as it was one of the main demands of the employees. The voluntary health insurance policy was thus a political decision taken by the government to provide medical coverage for laid off employees and to solve the problem of the MEA.

As an official from the NSSF stated:

> "*The main reason behind [the voluntary health insurance decision] is the restructuring project of the MEA … the decision was made to provide these employees with health coverage after they leave the MEA*."

Findings showed that some politicians approved the decree to gain popularity and electoral advantage for providing health insurance for the uninsured. Findings also revealed how political factors and sectarianism came into play in the NSSF voluntary insurance policymaking process. Most of the released employees of the MEA belonged to the Shia sect which put great pressure on the government, its Sunni Prime Minister and the Sunni president of the board at MEA to issue this policy decision in an attempt to avoid tension between the sects which in turn could lead to political strife.

In addition, findings suggest that those who approved the policy knew that it was an improper decision, particularly due to the lack of clarity on its implementation and lack of financial sustainability:

> "*Policymakers made the decision but the NSSF officials approved it … Even if politicians made a wrong decision, implementers should not have approved*." [NSSF official]

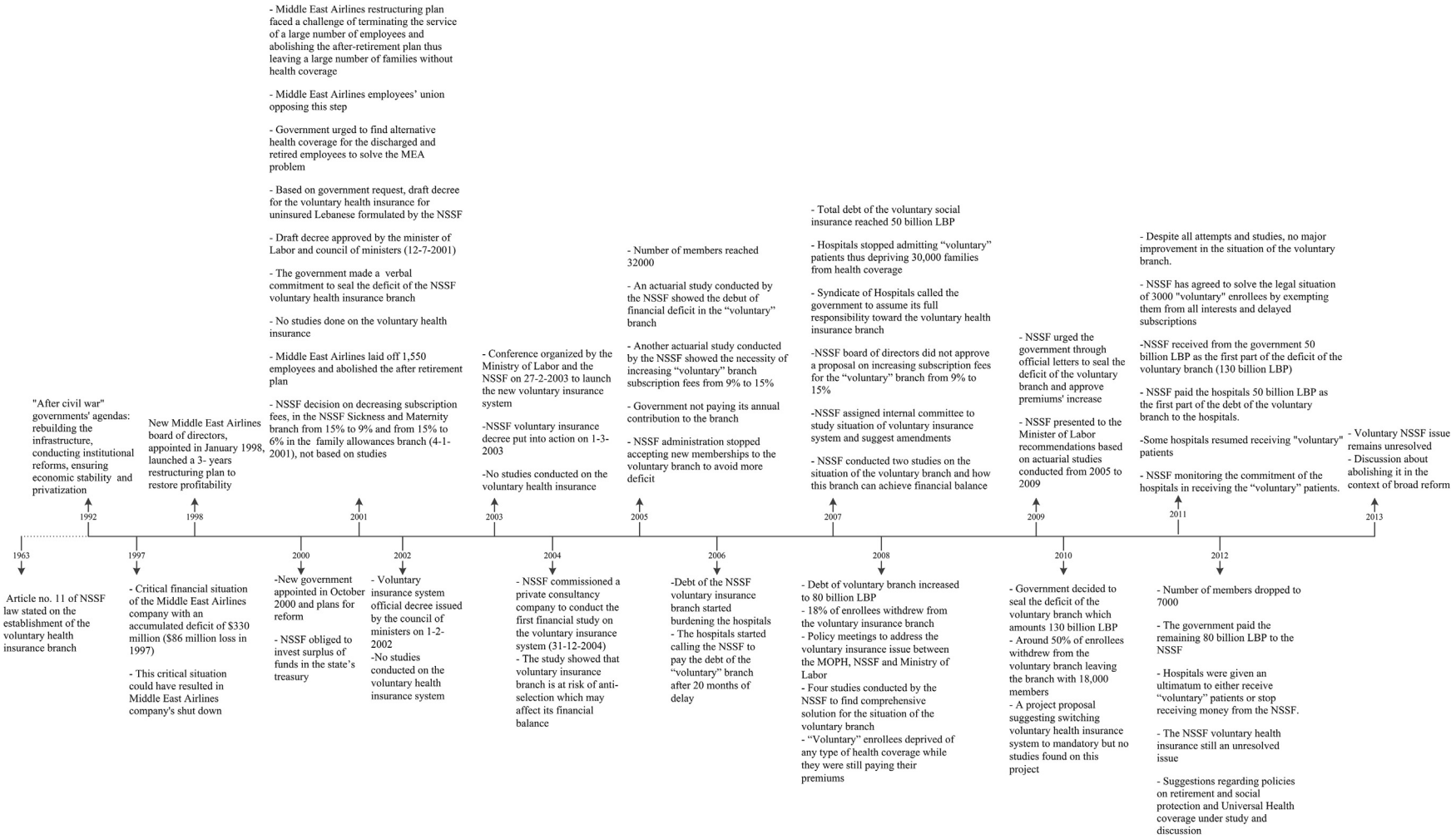

Fig. 2. Historical progress of the NSSF voluntary insurance policy.

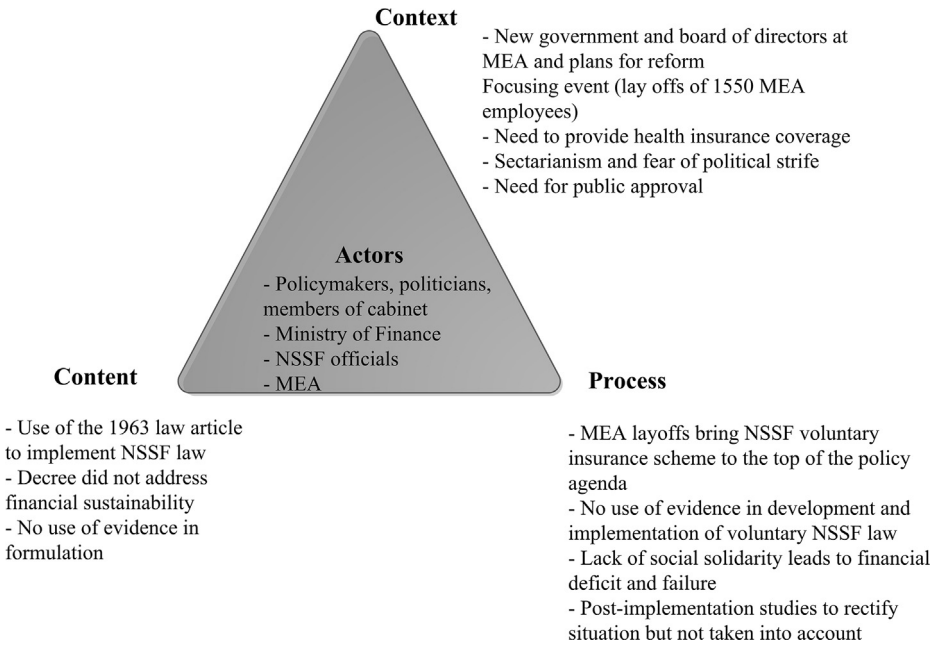

Fig. 3. Results within Walt and Gilson's policy analysis triangle framework.

4.1.2. Content

Findings revealed that the released and retired MEA employees were the trigger to implement article no. 11 of the NSSF law. Article No. 11 was drafted in 1963 but was not implemented until 2001 when the MEA restructuring project pushed it to the government's agenda. Law article no. 11 stated the establishment of a voluntary insurance branch in the NSSF that provides health insurance to uninsured Lebanese. The article allows employers, agriculture workers, independent workers and those who were previously enrolled in the mandatory scheme of the NSSF to voluntarily enroll in the branch (Article no. 11 of the NSSF law). The released MEA employees are eligible for this insurance since they fit the category of "those who were previously enrolled in the mandatory scheme of the NSSF". As reported by an official from the NSSF:

> "*Someone suggested to the Prime Minister to implement the article no. 11 of the NSSF law as a solution to cover the released employees of the MEA.*"

The decree no. 7532, issued on February 2nd 2002 by the Council of Ministers, implemented article no. 11 of the social insurance law (1963) that states the establishment of the voluntary insurance branch in the NSSF. This decree was put into action by the President of the Republic based on the recommendations of the NSSF board of directors and the Minister of Labor, consultation with the advisory council and the approval of the Council of Ministers. The text of the decree outlined the eligibility for enrollment, subscription fees and expenses of this branch (Governmental Decree no. 7532). However, the decree did not state how the voluntary branch would be financially sustainable and there was lack of clarity on policy implementation.

4.1.3. Actors

Findings from the three sources of data revealed that the NSSF voluntary health insurance policy was a quick political decision made by policymakers at the level of the government. The government insisted on passing the decree regardless of the reservations of the Ministry of Finance and the NSSF that warned the government that this policy was at risk of financial bankruptcy particularly because it lacked social solidarity, whereby the young and healthy bear the cost of the elderly and sick. The Ministry of Finance and NSSF officials speculated that, based on its design as a financially independent branch from other NSSF branches, voluntary health insurance would attract self-selected high risk adherents requiring high cost medical care, and as such was at high risk of bankruptcy (Ministry of Finance, 2001, 2002; Minutes of the NSSF board of Directors meetings No. 121, 2001).

Despite these recommendations, the government insisted on moving forward with the decision. Respondents from the Ministry of Finance and the NSSF mentioned that the Ministry of Finance and most members of the NSSF board of directors were against this decision. An NSSF official stated:

> "*There was political pressure that obliged the Minister of Finance to sign the decree and the NSSF to establish the branch.*"

Although the Lebanese political system is democratic, the decision-making process is not participative and transparent in that stakeholders and civil society do not participate in policy discussions and decisions. An official from the order of physicians stated: "*I was not consulted regarding [the NSSF voluntary insurance decision] …*". The implementation of the article no. 11 of the NSSF law was made through the government by issuing a decree; thus, it was not presented to the Parliament for discussion since its discussion by the Parliament in 1963.

4.1.4. Policy process

The voluntary health insurance policy stems from a law article that was not implemented until the MEA restructuring project brought it to the fore of the government's agenda in 2001. Findings showed that scientific evidence did not have a role in bringing the voluntary insurance to policymakers' agenda. Furthermore, other types of evidence such as actuarial or financial studies that are considered as legal requirements in the NSSF were not used in the development and formulation of this policy, though such studies are considered crucial when initiating a public project that adds

financial burden on the government treasury (Ministry of Finance, 2001; Minutes of the NSSF board of Directors meetings No. 121). As repeatedly emphasized by respondents, policymakers were pressured to solve the MEA problem; thus, they made the decision regardless of the availability of evidence on feasibility.

Although the policy aimed to provide the uninsured citizens and the MEA employees with health coverage at an affordable cost and regardless of their age and health status (Governmental Decree No. 7532; The Daily Star, 2003), its implementation mechanisms were improper and were not based on any type of evidence (Minutes of the NSSF board of Directors meetings No. 121, 2001; Governmental Decree No. 7532; Ministry of Finance, 2001). Many respondents referred to the policy as a "missed opportunity" to providing uninsured citizens, including MEA employees, with health coverage. A policymaker stated: "The government's intent was a good one but the decision was improperly implemented at the level of the NSSF". Findings revealed that a number of gaps in implementation led to the failure of this policy. The voluntary insurance policy does not foster the main principle of social insurance which is "social solidarity". In the voluntary insurance branch, almost 50% of enrollees were above 64 years of age and most of them had chronic and serious diseases and needed expensive medical services. At the same time, the percentage of the healthy and young people was very low which does not bear the cost of the elderly and the sick: *the percentage of those less than 30 years old did not exceed 1.33%* (Assafir, 2007; NSSF, 2007). The lack of "social solidarity" in the branch resulted from improper implementation at the level of the NSSF. As an official from the NSSF reported:

> "*The problem is not with the decision but with its implementation and the capacity of the public institution. If the voluntary insurance system were merged with the NSSF general system it would have been successful. Being a separate branch it lacked social solidarity*."

Findings revealed another gap in the implementation of this policy. The government that passed the voluntary insurance decree in 2002 made a verbal commitment to close the deficit of the voluntary branch as reported by officials from NSSF and other policymakers. However, there was not any written statement in the implementation decree that obliges the government to fulfill its commitment (Minutes of the NSSF board of Directors meetings No. 121, 2001; Governmental Decree no. 7532). Following a change in government in 2005, the government did not abide by its predecessor's verbal commitment and refrained from paying its mandatory annual contribution (25%) to the voluntary branch and refused to close the deficit (Hamdan, 2011; NSSF, 2009).

Findings revealed that the policy did not achieve its intended objectives. Moreover, it had negative consequences on different levels. The financial deficit and the systematic defects in the voluntary branch appeared after less than two years from its initiation (NSSF, 2005; Hamdan, 2005). Due to its lack of social solidarity, voluntary health insurance attracted self-selected high-risk adherents requiring high cost medical care, as speculated by actors such as the Ministry of Finance and the NSSF. The fund was not able to pay hospitals their fees, which in turn negatively impacted the ability of hospitals to provide services to these enrollees and the quality of care. Due to the huge accrued debt (USD106 million), hospitals stopped admitting patients enrolled in voluntary health insurance; thereby, risking the health and lives of about 30,000 families who were deprived of any type of health coverage (Assafir, 2007; NSSF, 2008a, 2008b, 2009; Al-Khatib, 2006). Afterward, enrollees started withdrawing from this branch (Hamdan, 2011). More than 50% of enrollees withdrew leaving the branch with 7000 active enrollees in 2012 (NSSF Statistics, 2012). In addition to being deprived of medical services, the voluntary enrollees were legally sued by the NSSF for not paying their subscription fees (Dib, 2011; Hamdan, 2011). This was illustrated in the following quote:

> "*The NSSF kept on charging the members even after hospitals stopped admitting them. This caused financial problems and legal complexities for voluntary insurance members*." [Ex-Minister]

Some respondents also pointed out that the failure of the voluntary insurance negatively affected the reputation of the NSSF as a trusted public institution.

Respondents reported that many actuarial studies were conducted at the post-implementation stage in an attempt to rectify the voluntary insurance policy. An official from the NSSF mentioned:

> "*… we did many actuarial studies in a trial to adjust the situation. The studies came after the voluntary branch started suffering from deficits*."

Ten studies and reports were among the reviewed documents. The studies were conducted by the actuarial experts at the NSSF and a private consultancy company. None of the studies were conducted by academic institutions, researchers, or think tanks. The aim of these studies and reports was to evaluate the policy as well as to rectify and improve the situation of the voluntary branch. The reports investigated how amending clauses and terms of the voluntary system can improve its financial situation (NSSF, 2005, 2007). These reports urged the government to close the deficit of the voluntary branch (USD106 million) and to commit to close future deficits. Study findings revealed that most recommendations were not adopted by the government. Although the government paid the LBP130 billion (USD106 million) deficit of the voluntary branch in 2012, the problem of the voluntary insurance policy is still unresolved.

Results can be summarized as follows:

Consistent with Kingdon's theory (1984), a policy window opened for this policy when the three streams – problem, politics, and policy – converged. The problem stream was illustrated by the emergence of the MEA employees' crisis. The existing NSSF law article presented the policy stream to address the problem, while the political stream was the pressing demand of the MEA employees representing a specific sect opposing the government and the existence of new government. While the politics and policy streams agreed on the formulation of the policy to address the problem, they differed on the implementation of policy.

4.2. Use of evidence in public policymaking

The below section presents findings on the use of evidence in the policymaking process in Lebanon, the barriers to the use of evidence and the strategies to reform how policies are made.

4.2.1. The use of evidence in policymaking in Lebanon

Policymakers showed appreciation for the role of research and studies in improving societies and supporting policies and recognized the importance of the use of evidence in public policymaking. Respondents mentioned that although there is no systematic way of integrating evidence into decisions, there are few examples where laws and decisions were based on evidence, as a parliamentarian mentioned:

> "*Scientific studies are very important when making such critical decisions*."

However, several respondents reported that evidence and studies is underutilized in policymaking in Lebanon. They mentioned that sometimes even when the evidence is available, it is not taken into consideration by policymakers:

"*Decision-making in the Parliament is unstructured. Suggestions presented in the Parliamentary committees are impromptu and not based on evidence*." [A parliamentarian]

Respondents declared that there is no clear system for mapping the decision-making process for policymakers and there is no mandatory procedure or legislation that encourages policymakers to utilize scientific evidence before making decisions.

Some respondents stated that the use of evidence in the policymaking process depends on policymakers' individual initiative. One policymaker mentioned:

"*There is no system that maps the decision-making process for policymakers. The way decisions are taken is based on the expertise of the policymaker and how he chooses his consultants*."

While no evidence was used in the formulation of the NSSF voluntary health insurance policy, when asked what sources of evidence policymakers generally refer to they mentioned that they usually access and use evidence generated from international organizations and commissioned from private consultancy companies. However, rarely do policymakers access evidence generated from academic institutions, research centers and think tanks.

4.2.2. Barriers to the use of evidence in policymaking

As cited by most respondents, the political context was the main barrier to the application of evidence in policymaking. Respondents agreed that corruption, sectarianism and favoritism dominated the work of public institutions and negatively influenced the use of evidence in public policymaking.

"*The discussions in the Parliament are mainly political and sectarian but not scientific or legal*."

In fact the structure of public institutions fosters the influence of political factors as with every changing government or minister, strategies and priorities of ministries shift.

Another barrier to the use of evidence in policymaking is weak political commitment. Many participants mentioned that the availability of relevant evidence is not enough to come up with good policies and that political commitment plays an important role in shaping policies:

"*To come up with a successful policy, there should be political commitment along with strong scientific evidence*." [An ex-minister]

Political commitment wanes when personal interests come into play as they were also reported to influence policymaking:

"*Policymakers use evidence when it supports their decisions … sometimes policymakers are aware of the evidence but they ignore it because it does not serve their goals*." [MOPH Official]

However, even if there were commitment to evidence-based policymaking, there is no infrastructure to support that process in public institutions. Lack of resources, both technical and financial, was reported to hinder the use of evidence in policymaking. Public sector employees, who are supposed to provide policymakers with evidence, do not have the expertise and knowledge to generate or use evidence. A policymaker stated:

"*Public institutions are weak and do not have the capacity to conduct studies and come up with evidence due to the inability of these institutions to provide financial incentives to recruit competent people with expertise …*"

Findings also revealed that policymakers lack technical expertise to use evidence and are not supported by a team of researchers and experts. Other major barriers that impede evidence-informed policymaking as mentioned by participants were the poor quality of research, the lack of policy-relevant research and the technical language of the research.

The lack of policy-relevant research was also highlighted by a journalist:

"*Sometimes when writing about certain topics we cannot find any reference so we rely on interviews with stakeholders and experts*."

4.2.3. Strategies to reform the policymaking process

When asked about strategies to enhance the use of evidence in policymaking, policymakers and stakeholders stressed on the need for relevant operational research that responds to priority policy issues.

Enhancing accountability was stated by several respondents as an important strategy for reforming the way public policies are made.

"*Policymakers will only learn to take evidence-informed decisions when there is accountability*".

Different mechanisms for enhancing accountability were suggested by the respondents specifically strengthening the public institutions that exert accountability, strengthening the role of media, establishing civil society accountability associations, and promoting the culture of accountability among people through making people more aware of their rights.

Some respondents stated that the use of evidence should be a mandatory procedure in the decision-making process.

A number of respondents, mainly policymakers, suggested strengthening public institutions through staffing them with experienced individuals who are familiar with using research evidence to inform policies. Policymakers expressed a need for experts' assistance since they do not have the necessary knowledge and time to retrieve, understand, and assess research:

"*Employees of the public sector should have the technical expertise but the ministers should have the general knowledge and the logic that enables them to choose the right option among many presented to them*."

Some respondents also mentioned that evidence may be available but the culture of using it is absent. Therefore, they suggested increasing awareness and building capacity of policymakers on the use of evidence in policymaking. This was expressed by an ex-minister:

"*The culture of using evidence would be prompted by raising awareness of policymakers and bureaucrats*."

4.3. Discussion

The NSSF voluntary health insurance policy is well-intentioned at its core, aiming to provide an opportunity for uninsured

Lebanese to benefit from health insurance at low cost. Nevertheless, the realization of its objectives was undermined by political factors and weaknesses in policy implementation. Perspectives in the literature on the components of policy implementation can be summarized in a framework outlining seven dimensions. These dimensions are the policy, its formulation, and dissemination, social, political, and economic context, leadership for policy implementation, stakeholder involvement in policy implementation, implementation planning and resource mobilization, operations and services, and feedback on progress and results (Bhuyan et al., 2010). Main weaknesses in the implementation of the voluntary health policy, as identified by this framework, included lack of evidence-based planning, lack of political commitment, inadequate resources and weak capacity of public institutions. The success of policies depends on integrating knowledge from the following three sources: political know-how, scientific and technical analysis, as well as professional experience (Head, 2008). Findings showed that political judgment predominated policy implementation and was influenced by political interests, sectarianism, urgency, and the values and opinion of policymakers. However, evidence from scientific research and expert opinion was not taken into account. The policy implementation reflected the "quick-fix" mentality of policymakers, with little regard to scientific evidence and expert opinion. The gap in using evidence in policymaking was exacerbated by the lack of a culture that places value on the use of evidence in policymaking. The voluntary insurance policy was made in a top-down non-participative approach. In addition, there was a "yes, minister" approach to the policy since implementers who were initially against the policy design approved it later on. These influences on policymaking and weaknesses in implementation contributed to policy failure.

Findings highlighted the need to establish links between policymakers and stakeholders, researchers and research institutions. Barriers to the use of evidence included lack of policy-relevant and context-specific evidence that can guide policy formulation and implementation. This case study also revealed the influence of sectarianism and favoritism in widening the gap between policymaking and use of evidence. It also makes useful suggestions for Lebanon and countries of similar contexts for strategies to strengthen evidence-informed policymaking such as capacity building of public institutions, enhancing accountability and integrating knowledge utilization at the institutional level. Despite challenges to mandating the use of evidence in policymaking, studies from the region and from LMICs suggested this as a promising strategy (El-Jardali et al., 2010, 2011, 2012a, 2012b, 2014; Orton et al., 2011). A successful example that can guide countries for systematically integrating the use of evidence in policymaking was reported from the Ministry Of Health and Long-term Care (MOHLTC) in Ontario (Wilson et al., 2012).

4.4. Findings in relation to other studies

Findings from the case study concur with studies conducted outside the region (Innaver et al., 2002; Gilson and Raphaely, 2008).

Findings on the policymaking process and the barriers to evidence-based policies support those reported from the EMR, LMICs and developed countries (El-Jardali et al., 2012a; 2012b; WHO EMRO, 2011; Hyder et al., 2011; Hennink and Stephenson, 2005).

4.5. Strengths and limitations

The study has several strengths. The policy tracing technique was developed based on findings from three different sources of data. The policy triangle framework used for analysis helped build a comprehensive understanding of the NSSF voluntary insurance policy process. There was a high response rate among participants as all key actors closely involved in this policy participated in the study and most of the official documents on the NSSF voluntary policy were obtained. This study is to our knowledge the first country-based health policy analysis case study conducted in the EMR.

As for limitations, the occurrence of recall bias is one. However, the influence of recall bias on study results was minimal since data from the interviews on the NSSF policy were validated by the document and media review.

5. Conclusion

Findings from this policy analysis case study highlighted the complex nature of the policymaking process and the multiple influences over this process. This policy analysis can help researchers and other stakeholders understand and influence future policymaking in the region and LMICs. Findings contributed to understanding the complexities of agenda-setting in contexts with considerable health system challenges.

Lessons derived from the failure of this policy are critical in light of recent policy discussions in Lebanon and some EMR countries about UHC and social protection policies. Findings are also likely to matter in light of the changes that are unfolding in some "Arab Spring" countries and the looming opportunities for policy reforms. These changes may open policy windows and present opportunities for policy reforms and for the engagement of researchers, civil society, the public, and the media among other actors in policymaking. Retrospective and prospective policy analysis in these countries can help analyze how these changes impact policymaking and the use of evidence in heath policymaking. Lessons on implementation of this policy can help guide other countries on their paths to UHC. This study emphasized the importance of using several sources of input into the policymaking process including political judgment, scientific research, and expert opinion in implementation of policies on UHC.

Study methodology can be replicated in future policy analysis case studies in Lebanon and the region including comparative case studies.

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