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Public health response and resilience during emergencies: a policy analysis of the Syria refugee crisis

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1. Introduction

The Syrian refugee crisis has placed immense strain on the healthcare systems of neighboring countries, creating both challenges and opportunities for evaluating health policies and humanitarian responses. This dissertation examines the health system responses of Egypt, Iraq, Jordan, Lebanon, and Turkey to the Syrian refugee influx, focusing on the integration of migrant-sensitive practices and their capacity to manage health emergencies. The dissertation aims to answer the following question: How have the health policies and humanitarian response plans (HRPs) of Egypt, Iraq, Jordan, Lebanon, and Turkey addressed the healthcare needs of Syrian refugees, and what policy recommendations can be made to enhance national health system capacities for future migration crises?

To answer this question, the study examines existing migration health policies and practices in these five countries, evaluating their effectiveness in strengthening national healthcare system capacities. The

findings aim to inform the development of a policy framework that can better prepare health systems for future migration-related crises.

2. Methods

Using Bardach's Policy Analysis Framework, this study systematically evaluates key policy dimensions, including access to free or subsidized health care, culturally sensitive services, operational preparedness, and refugee inclusion in outbreak response plans. A structured set of indicators, derived from four key international guidelines including the World Health Assembly Resolution WHA 61.17, European Centre for Disease Prevention and Control (ECDC) public health guidance, the International Organization for Migration (IOM) Migration Crisis Operational Framework, and World Health Organization (WHO) priorities on migration and COVID-19, is used to assess policy effectiveness. A mixed-methods approach, combining a comprehensive literature review with policy analysis and

quantitative scoring, ensures a robust evaluation of each country's response.

3. Results

Findings indicate that national strategies vary significantly. Turkey and Jordan demonstrate strong refugee health integration through practices such as enrolling the Syrian healthcare professionals into the health sector and implementing contingency plans. Egypt and Lebanon, while ensuring basic healthcare access, face persistent challenges related to financial barriers, bureaucratic constraints, and limited cultural adaptation. Iraq's response reflects an evolving framework that, despite some progress in service integration, struggles with resource shortages and infrastructural gaps. This policy analysis underscores the need for a standardized framework that ensures equitable healthcare access, effective crisis management, and culturally competent communication.

4. Discussion

The study concludes by identifying the components of a gold-standard policy and proposing recommendations for future migration crises. These recommendations serve as a guide for policymakers to enhance cooperation and develop resilient health systems capable of responding to refugee crises effectively.

This section applies the methodology further to the evidence presented in the results chapter to answer the research question. This will enable us to move to the second stage of the Bardach framework methodology, which involves comparing the policy responses implemented by the countries under study. This comparison allows us to assess the extent to which each country addressed the crisis relative to predefined standards and indicators. The following analysis evaluates the efficiency of these policies through a scored comparative assessment, identifying best practices, gaps, and potential for improving regional cooperation.

Comparative Matrix of the Analysis of Health Policy

Indicator	**Egypt**	**Iraq**	**Jordan**	**Lebanon**	**Turkey**
Indicator 1: Promotion of Migrant-Sensitive Health Policies (Based on WHA 61.17 and ECDC Public Health Guidance)					
Provides a set of basic healthcare services free of charge	1	0.5	1	0.5	1
Presence of trained intercultural mediators	1	1	1	0.5	1
Calendar and catch-up vaccination and screening for key infectious diseases	0	1	0.5	0	1
Subtotal score for Indicator 1	**2**	**2.5**	**2.5**	**1**	**3**
Indicator 2: Operational Framework for Migration Crises (Based on IOM Migration Crisis Operational Framework)					
National contingency plan for large influxes of migrants, including a health component for communicable diseases	0	0.5	1	0.5	1
Subtotal score for Indicator 2	**0**	**0.5**	**1**	**0.5**	**1**
Indicator 3: Promotion of Migrant-Sensitive Health Policies (Based on WHA 61.17 and ECDC Public Health Guidance)					
Reduction of overcrowding and enhanced access to sanitation	0	0.5	0.5	0	1
Removing barriers to healthcare services in humanitarian policies and HRPs	1	0.5	0.5	0.5	0.5
Removing barriers to adequate health information (culturally and linguistically accessible)	1	1	1	0.5	1
Subtotal score for Indicator 3	**2**	**2**	**2**	**1**	**2.5**
Indicator 4: Inclusion of Refugees and Migrants in Outbreak Response Plans (Based on WHO Lancet Priorities for Migration and COVID-19)					
Addressing national security concerns in outbreak response plans	0	0	0	0	0
Implementing healthcare models recognizing socio-economic and legal challenges	1	1	1	0.5	0.5
Incorporating these populations in health surveillance and data collection efforts?	0	0	1	0.5	1
Subtotal score for Indicator 4	**1**	**1**	**2**	**1**	**1.5**
TOTAL SCORE	**5 /10**	**6 /10**	**7.5 /10**	**3.5 /10**	**8 /10**

Interpretation of Findings

The above comparative evaluation of Egypt, Iraq, Jordan, Lebanon, and Turkey highlights significant differences in their health policy responses to the Syrian refugee crisis. By examining these responses against the predefined indicators, we can identify best practices, gaps, and opportunities for regional cooperation - these insights will then inform the development of a standardized framework for refugee health policies.

Indicator 1: Migrant-Sensitive Health Policies

Egypt's health policies are weak but partially migrant-friendly. Encompassing primary health care provisions and cultural brokerage through non-state actors. Iraq has somewhat successfully integrated Syrian refugees into its national healthcare system, particularly in the Kurdistan Region. Nonetheless there were reports of high costs, shortages of essential drugs and medical equipment, and insufficient cultural interpreters hinder effective

healthcare delivery. Finally, while the EWARN and vaccination campaigns receive support, there is no evidence of specific screening programs for newly arriving refugees.

Lebanon's approach to migrant health policies reflects its heavily privatized healthcare system, making healthcare unaffordable for many Syrian refugees. Although UNHCR and international organizations subsidize primary healthcare at primary health centers, secondary and tertiary care require out-of-pocket payments, which are prohibitively expensive. The LCRP provides a structured framework for refugee health, but financial and infrastructural constraints remain significant obstacles. Although public health campaigns like the COVID-19 vaccination, demonstrate an open-door policy, routine immunization programs have been disrupted due to funding shortages. The scarcity of professional intercultural mediators further hampers culturally appropriate healthcare services. Lebanon has acknowledged refugee health issues, but the sustainability

and equity of healthcare delivery remain unresolved challenges.

Jordan has made substantial progress in advancing migrant health policies, initially offering free healthcare to Syrian refugees before reinstating user fees. To mitigate this, the Jordan Health Fund for Refugees was established; however, affordability remains a concern. Mobile clinics and intercultural mediators have improved health equity, while vaccination and disease screening campaigns maintain high coverage. Nonetheless, financial barriers continue to limit refugee access to healthcare services.

Turkey has significantly enhanced its migrant health policies by providing free health care to registered refugees within the public health sector. The MHCs staffed by Syrian healthcare professionals, have increased both the accessibility and cultural sensitivity of healthcare services. A success was the full integration of the vaccination services. On the other hand something to be

noted is that refugees with documentation issues still face restrictions in accessing specialized healthcare services.

Indicator 2: Migration Crisis Operational Framework (IOM)

Egypt lacks a clearly documented national contingency plan with dedicated health components, although it participates in regional frameworks addressing migration crises. The country has transitioned from emergency humanitarian assistance to long-term refugee integration within public services. However, no comprehensive national contingency plan, particularly one with a health-specific component, is available.

Jordan has integrated refugees into its national health care system through subsidized services, although financial constraints persist. Mobile clinics and outreach programs improve accessibility, and intercultural mediator training enhances communication. Vaccination campaigns achieve high coverage and contribute to strong public health outcomes.

Lebanon has incorporated some contingency planning for refugee health within the LCRP. However, political and economic instability has obstacled the full implementation of a structured national response plan. While Lebanon collaborates with international agencies to support refugee healthcare, its highly privatized healthcare system imposes financial barriers to secondary and tertiary care. Efforts to integrate refugee health services into national frameworks are constrained by funding shortages and systemic challenges, limiting preparedness for large-scale health crises.

Turkey has established a robust operational framework for managing migration crises, with public health preparedness integrated into its national response. Supported by WHO , Turkey has effectively managed large refugee influxes while ensuring healthcare service continuity during emergencies such as the COVID-19 pandemic.

Indicator 3: Health Access and Sanitation (IFRC, IOM, UNHCR, WHO, and ECDC)

Egypt has made efforts to reduce healthcare access barriers and improve language services but lacks clear policies on managing overcrowding and sanitation improvements.

Iraq has focused on relocating refugees from camps and finding long-term solutions to congestion. However, no identifiable policies specifically aim at improving sanitation conditions. While national healthcare integration is a goal, financial barriers continue to prevent many refugees from accessing necessary care.

Jordan has improved sanitation and hygiene in refugee camps; however, overcrowding remains a persistent issue in urban areas, where most refugees reside. Financial and legal barriers still restrict healthcare access, although health education campaigns have raised public awareness.

Lebanon faces significant challenges in addressing high overcrowding and poor sanitation for refugees, as most Syrian refugees live in informal settlements with

inadequate infrastructure. Limited access to clean water and sanitation facilities exacerbates health risks, while financial and legal barriers hinder healthcare access. NGO-led cultural health initiatives exist but lack widespread implementation, and there is a lack of a coherent national strategy.

Turkey has reduced operations in large refugee camps, yet population density remains high in provinces with large refugee populations. Legal barriers limit healthcare access for non-registered refugees. However, employing Syrian doctors and training bilingual patient guides have enhanced healthcare accessibility and trust in the system.

Indicator 4: Migration and COVID-19 Response (WHO Lancet Priority)

Egypt includes refugees in its public healthcare system but lacks specific policies addressing the balance between national security and health policies, resulting in lack of access and therefore not in a fully effective mitigation of

the pandemic through all the population regardless of the legal status.

During the COVID-19 pandemic, Iraq ensured refugee inclusion in national outbreak response measures such as vaccination and health education. However, limited information is available on how refugee-specific vulnerabilities were considered in national security and socio-economic planning.

Jordan effectively incorporated refugees into national outbreak response plans, implementing checkpoint health controls and balancing security and humanitarian concerns. The integration of refugee health care into national systems enhances resilience against future health crises.

Lebanon included Syrian refugees in its COVID-19 vaccination campaign, reflecting public health awareness into its emergency response plan – even though the plans were lacking explicit policies on national security and healthcare intersections. Political instability and financial constraints have hindered the development of a

sustainable healthcare system, in addition the absence of systematic refugee health data impedes long-term planning and surveillance.

Turkey integrated refugees into its national outbreak response, addressing public health and national security concerns. Its healthcare model allows refugees access to treatment for infectious diseases, maternal care, and chronic conditions – for most Syrians. The information system has also been updated, and the public health surveillance includes refugee data collection to inform policy decisions.

Reflecting on the above findings, by indicators and by overall performance, proceeding to a comparative analysis of these five countries provide valuable insights for developing a “golden standard” policy framework. The next chapter will build on this so that future policymaking could incorporate best practices to ensure sustainability, equity, and resilience in refugee healthcare access.

5. Conclusions

This dissertation provides a comprehensive evaluation of refugee health policies in Egypt, Iraq, Jordan, Lebanon, and Turkey through a structured framework of indicators. The health responses of these countries to the Syrian refugee crisis have been analyzed through their policies and HRPs. Furthermore, this study assesses the extent to which these policies have reinforced national health systems and identifies strategies that could be enhanced to improve national capacities in addressing the consequences of human migration in future crises. By identifying the strengths and weaknesses of each country's strategy, this research distills policy recommendations for sustainable, inclusive, and resilient healthcare policies.

Public health policies and theories must be continuously evaluated and refined through real-world observation and policy outcome studies. By analyzing the matrices presented, it is possible to assess the effectiveness of current policies and determine whether

the theoretical frameworks underpinning them remain valid. The preceding chapters have provided a comprehensive understanding of the positive and negative aspects of each country's response to the Syrian refugee crisis, enabling an assessment of the effectiveness of health interventions and the identification of best practices and gaps in policy frameworks.

The following discussion highlights key insights from each indicator, outlining successful strategies, persistent challenges, and areas for improvement in developing a more integrated, sustainable, and humane approach to refugee healthcare. A critical aspect of this evaluation is the promotion of migrant-sensitive health policies, especially concerning the availability, affordability, and cultural sensitivity. The conclusions are therefore based on the idea underpinned in the introduction that policies are justified not by their intent but by their impact on the ground. With that in mind, a clear pattern emerges among the five countries: while basic healthcare services are available to refugees, there

are issues related to cost, documentation, and procedural barriers. Turkey is the only country to have fully integrated refugees into its public health system, providing universal primary healthcare and employing Syrian doctors in MHCs to address linguistic and cultural barriers. Jordan and Egypt have enabled refugee healthcare access with varying degrees of restriction—Jordan initially provided free healthcare but later introduced fees that created financial barriers, while Egypt allows refugee access to public health facilities but lacks formal mechanisms for culturally adapted care. Lebanon, with its privatized healthcare system, presents significant financial challenges for refugees, and Iraq, despite efforts to integrate refugees into its health system, struggles with resource limitations that affect service quality and availability.

The importance of policies that ensure accessible, private, and culturally competent health care remains a critical issue across all cases. Additionally, the existence of an operational framework for addressing migration-

related health crises, particularly regarding contingency planning for health emergencies, varies across the region. Turkey and Jordan have established comprehensive national contingency plans to address potential communicable disease outbreaks among refugees. Iraq is a member of the 3RP framework but lacks a robust contingency structure for migration-related health crises. Egypt has adopted a partial approach without a clearly defined health contingency plan within its emergency management framework. Lebanon, in theory, is covered by the LCRP; however, financial and political constraints hinder long-term preparedness and response capacity. These disparities underscore the need to incorporate migration health strategies into national emergency frameworks to enhance resilience and ensure timely responses to large-scale displacement.

Overcrowding, inadequate sanitation, and barriers to healthcare access remain significant challenges, particularly in Lebanon and Iraq, where informal settlements and limited resources exacerbate health risks.

In contrast, Jordan's camp-based approach in Zaatari and Azraq has facilitated better sanitation control and reduced overcrowding within structured settlements, though challenges persist for urban refugees. Turkey's urban integration strategy has advantages but has also contributed to overpopulation in some municipalities. While Turkey and Jordan have developed effective strategies to improve healthcare access, Lebanon and Egypt continue to struggle with financial and bureaucratic obstacles. Notably, the availability of linguistically and culturally appropriate health information has emerged as a crucial factor influencing healthcare service utilization. Policies that promote the use of appropriate language in refugee healthcare services significantly improve health outcomes. The active participation of refugees and migrants in outbreak control and surveillance systems is another important aspect of this analysis.

The COVID-19 pandemic served a test of national health systems, exposing both vulnerabilities and strengths in integrating refugees into public health

programs. Turkey demonstrated a strong commitment to involving refugees in vaccination campaigns, data collection, and health surveillance, setting a model for migrant-friendly health policies. Jordan also effectively included refugees in its national pandemic response. In contrast, Iraq and Lebanon faced structural and financial challenges that hindered full implementation, while Egypt's refugee health program was constrained by systemic financial and bureaucratic barriers. This comparison underscores the necessity of integrating migrants into national health surveillance systems not only for humanitarian reasons but also for broader public health imperatives. The findings of this study provide a foundation for developing best practices and optimizing policy recommendations for refugee health responses.

Based on the positive experiences observed in each country, supported by empirical evidence for real-world scenario graded emergency responses, this research concludes by identifying key actionable principles for

developing responsive, equitable, and sustainable migration health policies in future refugee crises.

Golden Standard Policy Recommendations for Policymakers

Indicator	Essential Elements for a Golden Standard Policy
1. Promotion of Migrant-Sensitive Health Policies (Based on WHA 61.17 and ECDC Public Health Guidance)	a. Ensure confidential and anonymous healthcare access, as implemented in Jordan's mobile outreach programs. b. Train and deploy intercultural mediators in healthcare settings, as demonstrated by Turkey's employment of Syrian healthcare professionals in migrant health centers. c. Guarantee free or subsidized basic healthcare services for refugees, as seen in Turkey and Egypt. d. Implement vaccination and disease screening programs for newly arrived migrants, integrated into Jordan's and Turkey's national immunization plans.
2. Operational Framework for Migration Crises (Based on IOM Migration Crisis	a. Develop a national contingency plan for migration crises with a dedicated health component, as established in Jordan and Turkey. b. Integrate health crisis management into national emergency preparedness plans.

Operational Framework)	c. Establish inter-ministerial coordination for overseeing health responses, as exemplified by Iraq's transition from emergency aid to structured public health integration.
3. Promotion of Migrant-Sensitive Health Policies (Based on WHA 61.17 and ECDC Public Health Guidance)	a. Improve sanitation and hygiene facilities in refugee-hosting communities, as demonstrated in Jordan's structured refugee camps. b. Eliminate financial and legal barriers to health care, and consider the effects of privatized healthcare models. c. Provide culturally and linguistically appropriate health information, as effectively addressed in Turkey through Syrian-run health centers.
4. Inclusion of Refugees and Migrants in Outbreak Response Plans (Based on WHO Lancet Priorities for Migration and COVID-19)	a. Balance national security concerns with inclusive health policies, as successfully achieved by Turkey and Jordan during the COVID-19 pandemic. b. Implement healthcare models that account for refugees' socio-economic vulnerabilities, also during outbreaks onset c. Integrate refugees and migrants into national health surveillance and data collection systems d. Ensure equitable access to pandemic and infectious disease response measures, as exemplified by Jordan's and Turkey's proactive public health strategies.

Publication List

PhD Scientific Article:

Strengthening Country Readiness for Pandemic-Related Mass Movement: Policy Lessons Learned (2021) by Matteo Dembech *Zoltan Katz and Istvan Szilard

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Topic related articles and publications:

- WHO, (2019), "Survey on health status, services utilization and determinants of health of the Syrian refugee population in Turkey"
- Panorama Public Health Journal, (2018) Pavel Ursu, Dorit Nitzan, Serap Şener, Bahadır Sucaklı, Murat Şimşek, Mërkur Beqiri, Matteo Dembech, Akfer Karaoğlan Kahiloğulları, Altin Malaj, "Protracted emergency in Turkey – supporting provision of

essential health services to Syrians under temporary protection"

Other articles and publications:

- The Lancet Infectious Diseases, Dondorp et All, (2025) "Impact of the Global Fund Regional Artemisinin-Resistance Initiative on Malaria Control and Elimination in the Greater Mekong Sub-Region of Southeast Asia"
- The European Journal of Public Health, (2017), Matteo Dembech, "Access to healthcare for migrants during emergencies: a health policy analysis"
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