Opinion Article Submission Date: August 13, 2023 Acceptance Date: August 23, 2023

Al-Abdulla, O., Alaref, M. (2023). Navigating the Aftermath: The Complex Landscape of COVID-19 in Northwest Syria. Journal of Health Systems and Policies (JHESP), V. 153-163, DOI: 10.52675/jhesp.1342517

# Navigating the Aftermath: The Complex Landscape of COVID-19 in Northwest Syria

Orwa AL-ABDULLA<sup>1</sup> 

Maher ALAREF<sup>2</sup>

#### **ABSTRACT**

In the aftermath of the global upheaval caused by the COVID-19 pandemic, a nuanced perspective emerges, underscoring the need for vigilant and strategic healthcare responses. This article delves into the intricate landscape of COV-ID-19 within northwest Syria, highlighting the enduring challenges and the imperative for astute resource allocation, sustained vaccination efforts, and effective risk communication and community engagement programs. Situated within a region characterized by historical complexities and ongoing conflict, Northwest Syria remains a microcosm of persistent healthcare challenges amidst an intricate web of adversities. The shifting pandemic classification, while marking a changing phase, does not diminish the lasting impact that demands continuous vigilance. The region's intricate dynamics amplify the need for sustained attention, even as the classification shifts. This article delves into the intricate landscape of COVID-19 within Northwest Syria, highlighting enduring challenges and the imperative for astute resource allocation, sustained vaccination efforts, and effective risk communication and community engagement programs. The imperative of vaccination, coupled with the formidable challenge of hesitancy, underscores the need for targeted and adaptable risk communication and community engagement initiatives. Drawing lessons from

<sup>1</sup> Institute of Public Health and Clinical Nutrition, Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland

<sup>2</sup> Strategic Research Center ÖZ SRC, Gaziantep, Türkiye

<sup>\*</sup> Corresponding author: Orwa AL-ABDULLA, info@strategicresearchcenter.com

past shortcomings, Northwest Syria is poised to recalibrate its approach, fostering a blueprint for future crises that is attuned to community sentiments and responsive to evolving challenges. As Northwest Syria navigates the path to recovery, a comprehensive and adaptive response strategy anchored in effective risk communication and community engagement programs becomes a linchpin, guiding the region towards fortified health systems and improved public health conditions.

Keywords: Community Engagement, COVID-19, Risk Communication, Syria, Vaccine Hesitancy

#### INTRODUCTION

In the tumultuous odyssey that has marked the global community's journey through the labyrinthine complexities of the COVID-19 pandemic, the once-pervasive atmosphere of panic has gradually given way to a tempered ambiance of cautious optimism (Vazquez et al., 2021). However, the metamorphosis of COVID-19 from a pandemic classification has not ushered in an era of resounding conclusion (Harris, 2023; Soriano and Infante, 2023); rather, its persistent impact continue to reverberate within the intricate tapestry of healthcare systems spanning the globe (Alhassan et al., 2023). Among the regions grappling with the profound and lasting impact of the pandemic, the intricate context of northwest Syria (NWS), a region beyond the reach of governmental authority, serves as a striking example. While there are other countries facing similar challenges, such as Yemen, Haiti, and Somalia, the unique convergence of historical complexities, ongoing conflict, and healthcare vulnerabilities in NWS magnifies the intensity of this impact (Barnard and Winter, 2023; Ekzayez et al., 2020).

In recent years, the northwestern region of Syria has faced considerable upheaval as a result of the ongoing Syrian conflict. It has been the epicenter of intense fighting and displacement, resulting in immense humanitarian challenges (Pollock et al., 2019). The conflict has had a significant impact on the region's infrastructure, healthcare, and socio- economic conditions, requiring international attention and assistance (Garry and Checchi, 2020). Given the challenges posed by the conflict, humanitarian organizations and international entities have been actively involved in providing aid, relief, and health services to the affected population in the region. The humanitarian response in NWS has been led by the United Nations coordination mechanism since 2014 (Al-Abdulla et al., 2023). In 2020, the health cluster responsible for the humanitarian response in NWS, led by the World Health Organization (WHO), formulated an elaborate preparedness and response strategy to address the challenges posed by the COVID-19 outbreak in the region. This comprehensive plan includes nine fundamental pillars, with a notable emphasis on the implementation of multi- sectoral risk communication and community engagement (RCCE) programs (Al-Abdulla and Kallström, 2023).

Against this complex backdrop, a delicate equilibrium teeters, weighed down by the twin forces of healthcare capacity and the ever-evolving nature of the outbreak (Chowdhury et al., 2020). It is a conundrum that calls for renewed attention and a recalibration of resource allocation strategies (Yuda and Munir, 2023). In the ensuing discourse, this article unravels the multifaceted facets that encapsulate the prevailing COVID-19 scenario in NWS. It underscores the indispensable need for the sustained cultivation of vigilance, the astute optimisation of resource deployment, the unwavering prioritisation of vaccination efforts, and the imperative of taming the tide of hesitation through the deliberate, laser-focused implementation of RCCE programmes.

This article is in line with various publications from the Strategic Research Center (ÖZ SRC) that focus on reviewing and improving the COVID-19 outbreak response strategy in NWS.

### **Transitioning Beyond Pandemic Status**

As the global community moves forward into the pandemic's aftermath, a nuanced understanding emerges that while COVID-19 may have shed its pandemic label in the conventional context (Wise, 2023), its far-reaching effects continue unabated, especially in low and middle-income countries (Sahoo et al., 2023; Mobarak et al., 2022). The healthcare infrastructure of Syria remains entrenched in a constant struggle against the reverberations caused by the virus and is grappling with the enduring complexities resulting from its capricious trajectory (Swed et al., 2022). Amidst this dynamic landscape, healthcare professionals and policymakers are engaged in a delicate endeavour to achieve equilibrium, mindful that the ongoing presence of the virus continues to exert

a significant influence, warranting strategic orchestration of planning and resource allocation (Alsalem et al., 2022; John et al., 2023).

## **Rethinking Resource Mobilization**

In the current context, the imperative for a comprehensive and carefully orchestrated resource allocation strategy takes on even greater significance, especially within the intricate tapestry of NWS (Al-Abdulla et al., 2023; Alkhalil et al., 2022). As the initial surge of urgency that accompanied the onset of the pandemic gives way to a more measured approach, the call for discerning and strategic allocation of resources resonates profoundly (Hanafi et al., 2023). Within the unique complexities of NWS, where the intersection of historical, cultural, and geopolitical factors intertwine with the healthcare landscape, a delicate equilibrium must be achieved. This equilibrium demands deft navigation between the ongoing management of the COVID-19 outbreak and the simultaneous pursuit of other critical healthcare imperatives that precede and transcend the pandemic (Al-Abdulla and Kallström, 2023). Within this nuanced balance, the prudent allocation of resources emerges not only as a vital necessity, but also as a poignant emblem of resilience – a model response strategy that reconciles the challenges posed by the lingering effects of COVID-19 with the broader, intricate tapestry of healthcare needs within the region (Foroughi et al., 2022). Based on the accessible data, a total of 384.2 million US dollars was deemed necessary to address the response efforts pertaining to the COVID-19 outbreak within the specified nation-states (NWS). It is noteworthy that of this amount, a sum of 197.6 million US dollars was secured through funding mechanisms (OCHA, 2023). The careful deployment of resources becomes an instrumental enabler, especially after the devastating impact of the last earthquake in Syria and Türkiye that occured on February 6, 2023, ensuring that both the immediate and long-term healthcare challenges are met with foresight, agility, and an unwavering commitment to the well-being of NWS's diverse and resilient population (Al-Abdulla and Kallström, 2023; Jabbour et al., 2023).

#### The Continued Need for Vaccination

Amidst the ever-evolving global landscape, the unwavering importance of COVID-19 vaccination stands as a beacon of hope and necessity, that transcends negotiations. Nowhere is this imperative more evident than within the complex and resilient context of NWS (Karaca and Celik, 2022; Swed et al., 2022). Based on the data provided by the health cluster – NWS response, the proportion of the overall population that had received complete COVID-19 vaccinations by the end of July 2023 remained below 18% (OCHA, 2023). A recent study by (Alhaffar et al., 2023) revealed that the low levels of COVID-19 vaccine acceptance within the context of NWS can be attributed to health-related apprehensions, anxieties concerning potential adverse effects, informational deficiencies, and the propagation of conspiracy theories intertwined with ideological viewpoints.

The contextualized pursuit of extensive vaccination initiatives serves as a key element, intricately interwoven with the region's determination to contain the spread of the virus and reduce the burden on its healthcare infrastructure (Marzo et al., 2022). Within the fabric of NWS, however, looms a challenge that cannot be underestimated - the formidable obstacle of vaccine hesitancy, a barrier that casts a shadow of doubt and uncertainty over the comprehensive immunisation effort. This disconcerting gap underscores a stark and disturbing shortcoming and highlights the need for an urgent and holistic recalibration of strategies aimed at dismantling the fortress of hesitancy. At this critical pivotal juncture, the collective efforts of healthcare authorities, community leaders, and global partners are needed to chart the way forward. The multifaceted approach must include tailored education, culturally sensitive engagement, and an unwavering commitment to rebuilding confidence in the life-saving potential of vaccination (Alhaffar et al., 2023; Marzouk et al., 2022). As NWS navigates this complex landscape, the imperative goes beyond mere rhetoric - it beckons for a determined and concerted effort to rebuild the flame of confidence and unity, foster a renewed sense of purpose in the immunisation endeavour, and ultimately chart a trajectory towards a safer and healthier future.

#### **Addressing Hesitancy Through RCCE Programs**

In the current dynamic landscape, marked by the lingering effects of the COVID-19 pandemic, the imperative of vaccination remains resolute. As the global community strives to inoculate itself against the persistence of virus, a major concern is emerging in the form of vaccine hesitancy. This ongoing challenge, characterised by reluctance or skepticism toward vaccination, increases the urgency for multifaceted and far-reaching interventions (Alhaffar et al., 2023; Douedari et al., 2020). The WHO's Strategic Advisory Group of Experts (SAGE) on immunization defined vaccine hesitancy as: "Vaccine hesitancy refers to delay in acceptance or refusal of vaccines despite availability of vaccination services. Vaccine hesitancy is complex and context-specific, varying across time, place, and vaccines. It is influenced by factors such as complacency, convenience, and confidence" (Galagali et al., 2022). Over the past decade, a substantial body of research has been undertaken concerning vaccine hesitancy and the diverse array of factors exerting influence on an individual's inclination to either embrace or decline a vaccine (Nuwarda et al., 2022). Nonetheless, research pertaining to this topic within protracted emergency contexts remains profoundly restricted (Al-Abdulla and Kallström, 2023).

In this complex tapestry of response strategies, RCCE programs emerge as a pivotal linchpin, ready to break down the barriers that impede vaccine acceptance and cultivate a fertile ground for informed decision-making (Al-Abdulla and Kallström, 2023). By orchestrating strategic dialogues that resonate within communities, these programs have the potential to debunk entrenched myths, alleviate lingering concerns, and underscore the critical significance of vaccination as an integral tool for protecting public health (Khan et al., 2022; Zhu et al., 2022). However, the landscape in NWS reveals a troubling oversight - the underutilisation of model-driven RCCE programmes as a powerful tool to drive vaccine uptake, signalling a clarion call for immediate and targeted action to bridge this gap and harness the full transformative power of these initiatives (Al-Abdulla and Kallström, 2023; Habboush et al., 2023).

## Acknowledging Shortcomings and Pioneering a New Path for **RCCE**

The undeniable failure to comprehensively harness the potential of RCCE programs to mitigate vaccine hesitancy within the complex landscape of NWS serves as a poignant call to action and heralds a pivotal juncture for transformation (Al-Abdulla and Alaref, 2022). This juncture calls for a critical evolution that transcends traditional paradigms and necessitates the metamorphosis of RCCE programmes from their static role as mere information providers to dynamic catalysts for change that are seamlessly woven into the fabric of communities (Habboush et al., 2023). Inspired by resounding global initiatives in this regard, NWS stands at the threshold of recalibration, ready to embark on a new trajectory.

The journey through the COVID-19 outbreak has taught us invaluable lessons. The shortcomings in addressing vaccine hesitancy emphasise the importance of early and proactive engagement with communities (Mills and Thindwa, 2022). The failure to comprehend the complexity of public opinion and address concerns promptly has magnified the challenge of achieving high vaccine uptake (Alhaffar et al., 2023). NWS must draw from these lessons to create a blueprint for future crises - one that prioritizes adaptable RCCE strategies rooted in science and attentive to the pulse of the community. Years of conflict and the intricacies of public opinion, often multifaceted and diverse, have proven difficult to fully understand, and the resulting delay in addressing concerns has notably compounded the formidable challenge of achieving a substantial vaccine uptake (Al-Abdulla and Alaref, 2022; Alhaffar et al., 2022). NWS finds itself at a pivotal juncture, ready to absorb these profound lessons and forge a resilient blueprint for managing future crises. A blueprint underpinned by an unwavering commitment to adaptive COVID-19 vaccine hesitancy response strategies, firmly rooted in scientific rigour and acutely attuned to the nuanced cadence of community sentiment.

#### **CONCLUSION**

In the wake of the COVID-19 pandemic, the NWS stands at a pivotal juncture as it endeavors to restore stability. This moment demands evidence-based decision-making, as the transition away from pandemic classification reshapes response strategies while the enduring aftermath of the virus necessitates unwavering vigilance and strategic resource allocation. The significance of vaccination as a cornerstone for resurgence cannot be overstated, compelling a proactive revitalization of RCCE programs and active engagement of humanitarian stakeholders to overcome the barriers of hesitancy.

The effectiveness of these strategies hinges on their contextualized adaptation to align with the unique regional landscape. Infused with well-founded

insights and characterized by adaptability, this customization emerges as the linchpin for steering northwest Syria toward a bastion of resilient health systems. Guided by knowledgeable humanitarian entities and empowered workers, this journey is poised to navigate the evolving healthcare challenges that loom ahead.

It is crucial to recognize that the challenges encountered in addressing vaccine hesitancy and enhancing uptake in the NWS offer invaluable lessons. These lessons underscore the imperative of systematically contextualizing aid programs and intertwining them with the humanitarian response plan. This approach reinforces the essence of effective crisis management, firmly rooted in the enhancement of public health conditions.

As the NWS charts its course forward, the convergence of strategic foresight, adaptive implementation, and holistic collaboration will be paramount. By internalizing the experiences of the past, the NWS can not only fortify itself against future uncertainties but also set a resilient precedent for safeguarding public health on a broader scale.

Ethical Approval: Not applicable.

Authors' Contributions: Conceptualization, resources, writing, original draft, and administration, O.A; review and editing and resources: M.A.

Funding and Acknowledgement: This article was undertaken in cooperation with the Strategic Research Center (ÖZ SRC).

**Conflict of Interest Statement:** The authors declare no conflict of interest.

#### REFERENCES

Al-Abdulla, O., Alaref, M. (2022). The forgotten threat of cholera in Syria. Journal of Water and Health, 20, 1755-1760.

Al-Abdulla, O., Ekzayez, A., Kallström, A., Valderrama, C., Alaref, M., Kauhanen, J. (2023). Health system recovery in Northwest Syria - challenges and operationalization. Humanities and Social Sciences Communications, 10, 1-10.

Al-Abdulla, O., Kallström, A. (2023). Community engagement and adherence to COVID-19 prevention measures in Northwest Syria: A systematic review. Medicine, Conflict and Survival, 1-18.

Alhaffar, M., Douedari, Y., Howard, N. (2023). "In general people aren't excited about the vaccine...": Frontline perspectives on COVID-19 vaccine hesitancy across Syria. Human Vaccines and Immunotherapeutics, 19, 2235239.

Alhaffar, M., Mkhallalati, H., Alhiraki, O. A., Marzouk, M., Khanshour, A., Douedari, Y., Howard,

N. (2022). "They cannot afford to feed their children and the advice is to stay home. How ..?": A qualitative study of community experiences of COVID-19 response efforts across Syria, PLoS ONE, 17, e0277215.

Alhassan, R. K., Nketiah-Amponsah, E., Afaya, A., Salia, S. M., Abuosi, A. A., Nutor, J. J. (2023). Global Health Security Index not a proven surrogate for health systems capacity to respond to pandemics: The case of COVID-19. Journal of Infection and Public Health, 16, 196-205.

Alkhalil, M., Alaref, M., Mkhallalati, H., Alzoubi, Z., Ekzayez, A. (2022). An analysis of humanitarian and health aid alignment over a decade (2011-2019) of the Syrian conflict. Conflict and Health, 16, 1-13.

Alsalem, M. A., Mohammed, R., Albahri, O. S., Zaidan, A. A., Alamoodi, A. H., Dawood, K., Alnoor, A., Albahri, A. S., Zaidan, B. B., Aickelin, U., Alsattar, H., Alazab, M., Jumaah, F. (2022). Rise of multiattribute decision- making in combating COVID-19: A systematic review of the state-of-the-art literature. International Journal of Intelligent Systems, 37, 3514-3624.

Barnard, I. K., Winter, C. (2023). Reframing Jihadism: Deciphering the identity, politics, and agenda of Hay'at Tahrir al-Sham in Northwest Syria. Khalil, J.F., Khiabany G., Guaaybess, T., Yesil B. (Ed.), The Handbook of Media and Culture in the Middle East (396-413 pp.). John Wiley & Sons,

Chowdhury, R., Luhar, S., Khan, N., Choudhury, S. R., Matin, I., Franco, O. H. (2020). Long-term strategies to control COVID-19 in low and middle-income countries: An options overview of community-based, non-pharmacological interventions. European Journal of Epidemiology, 35, 743-748.

Douedari, Y., Alhaffar, M., Al-Twaish, M., Mkhallalati, H., Alwany, R., Ibrahim, N. B. M., Zaseela, A., Horanieh, N., Abbara, A., Howard, N. (2020). "Ten years of war! You expect people to fear a 'germ'?": A qualitative study of initial perceptions and responses to the COVID-19 pandemic among displaced communities in opposition- controlled northwest Syria. Journal of Migration and Health, 1, 100021.

Ekzayez, A., Al-Khalil, M., Jasiem, M., Al Saleh, R., Alzoubi, Z., Meagher, K., Patel, P. (2020). COV-ID-19 response in northwest Syria: Innovation and community engagement in a complex conflict. Journal of Public Health, 42, 504-509.

Foroughi, Z., Ebrahimi, P., Aryankhesal, A., Maleki, M., Yazdani, S. (2022). Toward a theory-led meta- framework for implementing health system resilience analysis studies: A systematic review and critical interpretive synthesis. BMC Public Health, 22, 1-13.

Garry, S., Checchi, F. (2020). Armed conflict and public health: Into the 21st century. Journal of Public Health (United Kingdom), 42, e287-e298.

Habboush, A., Ekzayez, A., Gilmore, B. (2023). A framework for community health worker optimisation in conflict settings: Prerequisites and possibilities from Northwest Syria. BMJ Global Health, 8, e011837.

Hanafi, I., Alzamel, L., Alnabelsi, O., Sallam, S., Almousa, S. (2023). Lessons learnt from the first wave of COVID-19 in Damascus, Syria: A multicentre retrospective cohort study. BMJ Open, 13, e065280.

Harris, E. (2023). WHO declares end of COVID-19 global health emergency. JAMA, 329, 1817.

Jabbour, S., Abbara, A., Ekzayez, A., Fouad, F. M., Katoub, M., Nasser, R. (2023). The catastrophic response to the earthquake in Syria: The need for corrective actions and accountability. The Lancet, 401, 802-805.

John, T., Cordova, K. E., Jackson, C. T., Hernández-Mondragón, A. C., Davids, B. L., Raheja, L.,

Milić, J. V., Borges, J. (2023). Engaging early-career scientists in global policy-making. Angewandte Chemie International Edition, 62, e202217841.

Karaca, B., Çelik, B. (2022). Evaluation of the opinions of patients applying to the emergency department in the north of Syria about COVID-19 vaccine. Archives of Current Medical Research, 3, 199-207.

Khan, S., Mishra, J., Ahmed, N., Onvige, C. D., Lin, K. E., Siew, R., Lim, B. H. (2022). Risk communication and community engagement during COVID-19. International Journal of Disaster Risk Reduction, 74, 102903.

Marzo, R. R., Ahmad, A., Islam, M. S., Essar, M. Y., Heidler, P., King, I., Thiyagarajan, A., Jermsittiparsert, K., Songwathana, K., Younus, D. A., El-Abasiri, R. A., Kucuk Bicer, B., Pham, N., Respati, T., Fitriyana, S., Martinez Faller, E., Baldonado, A. M., Billah, M. A., Aung, Y., Hassan, S.M., Asad, M.M., El-Fass, K.A., Bhattacharya, S., Shrestha, S., Elsayed Hamza, N.A., Friedmann P., Head, M., Lin, Y., Yi, S. (2022). Perceived COVID-19 vaccine effectiveness, acceptance, and drivers of vaccination decision-making among the general adult population: A global survey of 20 countries. PLoS neglected tropical diseases, 16, e0010103.

Marzouk, M., Alhiraki, O. A., Aguas, R., Gao, B., Clapham, H., Obaid, W., Altaleb, H., Almhawish, N., Rihawi, H., Abbara, A., Douedari, Y., Hariri, M., Howard, N., CoMo Consortium. (2022). SARS-CoV-2 transmission in opposition-controlled Northwest Syria: modeling pandemic responses during political conflict. International Journal of Infectious Diseases: IJID: Official Publication of the International Society for Infectious Diseases, 117, 103-115.

Mills, L., Thindwa, J. (2022). Social accountability for a strong COVID-19 recovery: A review and analysis of the role of civil society.

Mobarak, A. M., Miguel, E., Abaluck, J., Ahuja, A., Alsan, M., Banerjee, A., Breza, E., Chandrasekhar, A.G, Duflo, E., Dzansi, J., Garrett, D., Goldsmith-Pinkham, P., Gonsalves, G., Hossain, M.M., Jakubowski, A., Kang, G., Kharel, A., Kremer, M., Meriggi, N., Nekesa, C., Olken, B.A., Omer, S.B., Qadri, F., Rees, H., Salako, B., Voors, M., Marren S., Wiecek, W. (2022). End COVID-19 in low- and middle-income countries. Science, 375, 1105-1110.

OCHA. (2023). COVID-19 monthly update Northwest Syria-Syrian Arab Republic. (Access Address: https://reliefweb.int/report/syrian-arab-republic/covid-19-monthly-updatenorthwest-syria) (Access Date: December 31, 2022)

Pollock, W., Wartman, J., Abou-Jaoude, G., Grant, A. (2019). Risk at the margins: A natural hazards perspective on the Syrian refugee crisis in Lebanon. International Journal of Disaster Risk Reduction, 36, 101037.

Sahoo, K. C., Sahay, M. R., Dubey, S., Nayak, S., Negi, S., Mahapatra, P., Bhattacharya, D., Barrio, M. O. Del, Pati, S. (2023). Community engagement and involvement in managing the COVID-19 pandemic among urban poor in low-and middle-income countries: A systematic scoping review and stakeholders mapping. Global Health Action, 16, 2133723.

Soriano, J. B., Infante, A. (2023). Aiming for the end of the COVID-19 pandemic: The what, how, who, where, and when. Chinese Medical Journal, 136, 1-3.

Swed, S., Baroudi, I., Ezzdean, W., Sawaf, B., Bohsas, H., Patwary, M. M. (2022). COVID-19 vaccine hesitancy among people in Syria: An incipient crisis. Annals of Medicine and Surgery, 75, 103324.

Vazquez, C., Valiente, C., García, F. E., Contreras, A., Peinado, V., Trucharte, A., Bentall, R. P. (2021). Post- traumatic growth and stress-related responses during the COVID-19 pandemic in a national representative sample: The role of positive core beliefs about the world and others. Journal of Happiness Studies, 22, 2915-2935.

Wise, J. (2023). Covid-19: WHO declares end of global health emergency. BMJ (Clinical Research Ed.), 381, 1041.

Yuda, T. K., Munir, M. (2023). Social insecurity and varieties of family resilience strategies during the COVID-19 pandemic. International Journal of Sociology and Social Policy, 43, 756-776.

Zhu, R., Song, Y., He, S., Hu, X., Hu, W., Liu, B. (2022). Toward dialogue through a holistic measuring framework- the impact of social media on risk communication in the COVID-19. Information Technology and People, 35, 2518-2540.