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The Little Country that Could: Creative Solutions to Early COVID-19 Vaccination in the Republic of Moldova

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ABSTRACT The Republic of Moldova, a developing nation in Eastern Europe, adopted novel approaches to their initial COVID-19 vaccination campaign, displaying tenacity and creativity in the rapid creation of a vaccination campaign that attempted to overcome barriers related to available resources, public access to vaccination sites, and anti-vaccination sentiment. Moldova developed approaches to vaccination and implementation strategies that addressed context-specific concerns. Examples include those aimed at 1) flexible use of resources, 2) meeting people where they are at, 3) ensuring equal accessibility of public health offerings, and 4) engaging with local community leaders. Information was primarily obtained via interviews with local public health officials from June to August 2024. Moldova's strategies and solutions regarding COVID-19 vaccination may provide insight and inspiration in implementing similar, rapid public health campaigns, including those in resource-limited settings.

KEY WORDS Public Health, Covid-19 Vaccination, Health Campaigns, Moldova, Resource-Limited Settings

INTRODUCTION

The Republic of Moldova is an upper-middle-income country in Eastern Europe, which experienced significant ramifications of the COVID-19 pandemic in 2020-21. The 2024 Census reported that Moldova has a population of 2.4 million, with 53.6% residing in rural areas[1]. With high infection rates and an underdeveloped health infrastructure, Moldova's per capita death rate for COVID-19 was roughly 3 times the worldwide average at 2.96 fatalities per 1000 people compared to 0.88 per 1000[2]. It was thus especially important for the Ministry of Health to be able to rapidly develop and implement a vaccination strategy upon vaccine availability.

As a developing nation, Moldova had limited financial resources to purchase vaccines; many of their vaccines were donated by philanthropic organizations such as Covax[3]. Vaccines first became available in Moldova in March 2021 at about the same time that the mRNA vaccines' rare pericarditis and myocarditis complications became public knowledge[3-4]. Interviews with health officials indicate that concerns about these complications exacerbated underlying vaccine hesitancy surrounding the vaccines' rapid development and was particularly problematic for Moldova. Indeed, in a survey conducted in March 2021, 83% of respondents expressed concern about serious health side effects of the vaccine[5]. As a result, Moldova's immunization campaign faced

challenges related to both resource constraints and vaccine hesitancy.

The creative initiatives implemented as part of Moldova's 2021 vaccination campaign, including those to address the aforementioned challenges, and the resulting takeaways may prove instructional to other countries' public health campaigns, especially those that may be enacted rapidly or in resource-limited settings. These lessons learned may apply not only to immunization but also to a wider variety of public health initiatives.

METHODS

The authors obtained information for this paper from individuals with firsthand experience with Moldova's COVID-19 vaccination campaign. In the summer of 2023, one of the authors contacted individuals who were closely familiar with the vaccination campaign and conducted anonymous, semi-structured interviews in Russian or English with two local health officials and one health non-governmental organization (NGO) representative. While the authors initially intended to investigate challenges and successes related to the quantification of COVID-19 vaccination rates, Moldova's exact rates are uncertain due to frequent vaccination abroad, falsification of vaccine certificates, and reporting dynamics of the de facto breakaway Transnistrian region. In light of this unreliability, the interviewees preferred to discuss approaches to vaccine administration, which revealed the creativity employed in Moldova's early vaccination campaign. Final interview questions ultimately addressed 1) primary vaccination locations and strategies; 2) vaccine hesitancy; 3) influence of geopolitics, including Western vs. Russian vaccine preferences, the ongoing war in Ukraine and the 2021 Moldovan energy crises; 4) approaches for registration and quantification of vaccination and 5) effective solutions and takeaways for vaccine administration. Additional insight came from the experiences of one of the authors, who worked on the campaign as part of Moldova's Ministry of Health at the time.

Information from sources was not always concordant, which represents the tumultuous times of the COVID-19 pandemic as well as the rapid rate of the vaccination campaign's implementation. In these cases, we sought to represent the primary methods, goals and takeaways of initiatives, which were deemed the most useful to interested parties, including those who may envision similar undertakings.

This project was exempt from review by the Institutional Review Board as it did not meet the definition of Human Subjects Research.

RESULTS

We have selected four strategies from Moldova's COVID-19 vaccination approach to highlight. These initiatives demonstrate 1) addressing vaccine hesitancy, 2) using resources flexibly, 3) meeting people where they are and 4) ensuring equitable access.

Addressing Vaccine Hesitancy: Partnering with Community Leaders

As previously mentioned, vaccine hesitancy was a significant challenge for Moldova's COVID-19 vaccination rates. From 2019–2021, vaccination rates for basic childhood vaccines had dropped by over 5% in Moldova[6]. In the same time period, administration of the first measles vaccine dropped by 14%, although part of this decrease was attributed to reduced access to health service during the pandemic[7]. In March 2021—when COVID-19 vaccines first arrived in Moldova—only 41% of surveyed Moldovans said that they would get vaccinated against COVID-19, whereas 37% said that they “definitely [would] not” get vaccinated[6]. A later survey conducted by UNICEF in late 2023 and early 2024 rated attitudes toward COVID-19 vaccination in Moldova as “moderately negative”[8].

To address this, Moldovan health leaders identified the public's primary and trusted sources of information. One example of this investigation comes from researchers at the School of Public Health Management who utilized “social listening” techniques to analyze the sentiment of social media engagement surrounding COVID-19 and to identify the most influential information sources on social media platforms[9]. Television proved to be a key information source for many Moldovans, and the Ministry of Health arranged for positive vaccine messages to be included as part of regular programming.

In a more unique approach, health officials recognized that religious officials are trusted community leaders for many Moldovans. 93% of Moldovans identify as Russian Orthodox, and other religions such as Baptism and Judaism are also prominent in Moldova[10]. The Ministry of Health thus sought to partner with these prominent community leaders to encourage vaccination among their congregations. Health officials found that religious

leaders generally viewed vaccination in a favorable manner and were effective proponents of vaccination against COVID-19.

This contrasts with neighboring Romania, which has a similarly high proportion of the population practicing the Orthodox faith [11]. On one hand, the Romanian Orthodox Patriarch issued a public statement supporting vaccination in early 2021 and released supplementary informational pamphlets[12]. However, in other cases, religious figures actively contributed to anti-vaccination sentiments. One notable instance included a priest telling parishioners that vaccination would cause them to grow tails and scales, which invoked a demonic image[13]. Moldova's vaccine approach thus underscores the importance of not only identifying these opportunities but also engaging in the necessary active measures to ensure their success.

The vaccination campaign was not the first time that Moldovan health leaders successfully partnered with local figureheads for public health messages during the COVID-19 pandemic. In fact, this tactic began as early as March 2020, when within days of Moldova's first confirmed case, Chisinau City Hall released a video in partnership with music icons from SunStroke Project[14-15]. The band, known internationally through the internet meme "Epic Sax Guy," created a bilingual cover of their own song to encourage Moldovans to stay home and practice social distancing[15]. The video received nearly three-hundred-thousand views – representing over 10% of the Moldovan population – with over three-thousand positive reactions[14].

Flexible Use of Resources: The Repurposed Mobile Clinic

The initial vaccine roll-out in March 2021 posed a potential infrastructural strain for Moldova's limited resources. At the time of vaccine availability, Moldova had only two refrigeration units capable of maintaining the required storage temperature. For vaccination efforts in the capital of Moldova, Chisinau, many individuals were vaccinated via centralized "vaccine marathons" held at the local expo center. Health officials also sought to find a strategy that would allow access throughout the capital without posing a resource burden.

The solution was a city bus, which was converted into a fully functional mobile vaccination unit. The bus was retrofitted to include a reception area, dedicated vaccination room, and refrigerated storage compartment. Special attention went into ensuring that the bus's design adhered to all safety and hygiene standards. The bus traveled on a designated schedule in which it was stationed in various neighborhoods.

The mobile vaccination clinic allowed Moldova to offer vaccination options throughout the capital without requiring the distribution of the resources that would be required at fixed clinics in individual neighborhoods. Repurposing a bus that the government already owned—and that subsequently returned to transportation service upon the program's conclusion—avoided wasteful and costly development of infrastructure to be used for only a limited period of time. The bus primarily operated in the capital and was also used for special initiatives elsewhere.

Meeting the People Where They Are: Vaccinating Vacationers

Old Orhei, an archaeological complex home to a cave monastery and ancient coral fossils, is a popular destination for Moldovans to spend time outdoors. Moldovan health officials arranged for the mobile vaccination unit to be stationed there throughout the summer. The goal was to increase convenience vaccination among the vacationers visiting the site. Workers at the vaccination site also assisted Moldovans in developing plans to complete their vaccination course near their residence to remove logistic barriers in obtaining subsequent doses.

Similar campaigns were also offered at other locations, which were chosen to maximize community outreach. For example, the mobile vaccination unit was deployed to high-traffic locations such as Chateau Purcari, a prominent winery in the republic's southern region, and Saharna Monastery, a frequented pilgrimage site. This inclusive approach aimed to enhance vaccine accessibility across diverse demographic groups and geographic locations, ensuring that no community was left behind.

While Moldova does not publish disaggregated vaccine administration data by vaccination point, the Ministry of Health indicates that approximately 20,000 vaccines were administered daily across 535 fixed vaccination sites in June 2021[16]. While these vaccination sites are unlikely to have been homogeneous or to have administered the same number of vaccines, these figures provide a rough estimate of approximately 35-40 vaccines administered per site per day. In comparison, over 80 individuals were vaccinated on the day that the vaccine bus visited Old Orhei[17].

These initiatives highlight the value of meeting people where they are – both physically and metaphorically – and the power of convenience-focused public health offerings. Local officials anecdotally reported that the majority of vaccination doses administered through these stations were given as a first dose, which further emphasized the efficacy of initiating the vaccination series through convenience mechanisms. Such approaches break down any potential barriers and render it easier for the community to opt in to public health interventions.

Equitable Vaccine Access: At-Home Vaccination

At-home vaccination was another strategy that not only allowed Moldovans to conveniently receive their vaccine but also sought to make vaccination more accessible, especially for individuals with chronic diseases, who were identified as a priority group[18]. For Moldovans with accessibility concerns or immunocompromised status, obtaining a vaccine in public spaces would have been challenging. For these individuals, the option to request vaccination in their own home overcame these barriers, allowing them to get vaccinated when they may have otherwise faced undue obstacles. Similarly, local non-governmental health organizations conducted door-to-door campaigns, which were primarily focused on areas with low vaccination rates. As in Old Orhei, vaccination was offered on the spot to encourage vaccination via convenience mechanisms.

The door-to-door efforts took place primarily in rural areas, as these communities had lower vaccination rates. In a 2023-24 UNICEF survey, 42% of urban residents were not vaccinated, whereas 55% of rural residents were not, despite the fact that the survey demonstrated similar attitudes toward vaccine efficacy and safety across these populations[8]. A door-to-door campaign in one rural area vaccinated over 300 people in a span of mere hours, whereas another campaign across two rural communities vaccinated another 400 people in one day[19-20]. Community members noted that these efforts eliminated accessibility barriers in obtaining the vaccine from their usual health centers[20]. In a similar initiative through UNICEF, 2 “Health Vans” visited 25 regions over 4 months in 2022; this program reached over 17,500 individuals with general health services and doubled vaccination rates in 12 regions by administering nearly 6,000 vaccines over 2 months[7]. In some instances, vaccine outreach was conducted at a central location within rural communities, yet these efforts continued to offer the option of requesting home visits[21].

Moldova’s at-home vaccination approach was multifaceted; it not only addressed accessibility and health concerns but also sought to improve rates in communities that would benefit most. Perhaps the most important takeaway is the power of in-home interventions. House calls remain a popular service in Moldova, which likely contributed to the strength and success of at-home vaccinations. Allowing individuals to receive health interventions in the comfort and safety of their own home could prove a valuable tool for other nations to ensure that public health initiatives reach as many people as possible.

Comparisons to Neighboring Countries

Even though Moldova’s vaccination rates remain below the global average, Moldova was able to achieve better coverage than its neighbors, Romania and Ukraine. One source cites that 15.6% of Moldovans were fully vaccinated at the end of 2021, although this does not take into consideration the large proportion of the population that live outside the country[22]. At the start of 2022, the Moldovan Ministry of Health stated that the official vaccination rate was 29%, and this figure rose substantially to 47% when considering only Moldovans maintaining residence within the country[23]. In comparison, the proportion of individuals fully vaccinated in Romania and Ukraine at the end of 2021 was 28% and 22%, respectively, putting Moldova’s vaccination rate at nearly double that of its neighboring countries[22].

Still, similar strategies were embraced by Moldova’s geographic neighbors and other LMICs. For example, the “Health Vans” program was also active in Romania, focusing on the country’s especially prominent anti-vaccination sentiment [11, 24]. Early efforts in Ukraine also aimed to combat disinformation through public information campaigns and partnerships with NGOs, although the vaccination campaign as a whole was significantly hindered by the 2022 Russian invasion and newfound challenges related to destruction of healthcare facilities, security issues, and breakdown of supply chains[25]. Retrospective studies indicated that other LMICs also utilized mobile vaccination strategies and vaccination points at popular travel locations aimed at hard-to-reach populations[26].

Some aspects of Moldova’s vaccination campaign could have been improved, including using strategies from its neighboring countries. For example, Romania overcame supply chain issues related to cold storage by partnering with the Ministry of Defense, which not only possessed necessary refrigeration units but also happened to be an

entity trusted by the public[12]. A significant challenge for Moldova and other Eastern European nations was preferences regarding vaccine manufacturers[26]. It is unclear what, if any, steps Moldova took in this regard; interviewees noted that vaccines were distributed equally across the country, regardless of whether a region's preferences leaned toward a particular manufacturer. If Moldova had taken these preferences into account – by sending a higher proportion of Russian-manufacturer vaccines to Russian-leaning Gagauzia, for example – this may have increased vaccine uptake in these regions.

DISCUSSION

Moldova's early COVID-19 vaccination campaign presents a case study that emphasizes the impact of strategic thinking in public health initiatives and the importance of tailoring to the local context. By working creatively, Moldova was able to offer accessible vaccination and positive public health messaging without excessive strain on local resources. The programs highlighted in this paper allowed Moldova to use resources wisely, offer convenient vaccination, ensure that vaccination was accessible to all, and engage with community leaders to promote vaccination messages. A notable commonality through all four vaccination initiatives is Moldova's attentiveness to its community. Whether to meet the needs of a particular group or to collaborate with leaders toward a common goal, community-focused interventions were at the center of Moldova's COVID-19 vaccination strategy. Moldovan health leaders demonstrated a particularly strong example of engaging community leaders to promote the success of public health initiatives. In particular, the cover video by SunStroke Project underscores the ability to leverage social media platforms to disseminate messages through popular icons and internet memes. Likewise, the contrast between Moldova's successful engagement of religious figures as partners in the vaccination campaign contrasts with the mixed response in Romania. Moldova's community-centered approach in spreading positive messages emphasizes the value in identifying and partnering with trusted individuals and organizations to facilitate and strengthen community buy-in.

Additionally, Moldovan health leaders strove for equity of vaccination access to all identity groups, including those in varied geographic locations, those of differing physical ability, those with chronic health concerns or fears of being exposed in public areas and those practicing different faiths. This aligns with the priority groups that were identified for targeted efforts, including geographic regions with low vaccination rates, rural communities, individuals with chronic disease and Roma individuals[18, 24]. Moldovan health officials also made strong efforts to utilize vaccination data to identify communities that may potentially be falling behind and enacted special programs, such as the aforementioned door-to-door vaccination campaign, to pay special attention to these groups.

The sentiment behind these initiatives is applicable in a variety of contexts, including in other geographic locations and for other public health aims. The lessons demonstrated through Moldova's creative vaccination need not apply only to immunization but may also support public health undertakings in other spheres. All public health campaigns can benefit from tactics that use resources efficiently, effectively spread information to the target audience, and allow for accessible community engagement.

The examples in this paper may prove inspirational to health leaders seeking to improve their community's health by utilizing novel approaches. While this case study in Moldova highlights the particular benefit of innovative thinking for resource-limited settings, such takeaways can prove beneficial to maximizing efficiency in varying contexts. Ultimately, Moldova's vaccination strategies demonstrate that successful public health interventions do not always require extensive resources but rather may simply need creative approaches and a keen eye toward community.

REFERENCES

- Lozovanu, D. (2025, July 15) *Final results of the 2024 Population and Housing Census: Geographic Distribution of the Population*. National Bureau of Statistics of the Republic of Moldova. Retrieved November 14, 2025 from https://statistica.gov.md/en/final-results-of-the-2024-population-and-housing-census-geographical-distributio-10121_61877.html
- Shitov A. (2025, March 16). *Covid-19 World Statistics*. Covid Observer. Retrieved March 16, 2025 from <https://covid.observer/>
- Munteanu, A. (2021, March 4). *COVID-19 vaccines shipped by COVAX arrive to the Republic of Moldova*. UNICEF Moldova. Retrieved May 30, 2025 from <https://www.unicef.org/moldova/en/press-releases/covid-19-vaccines-shipped-covax-arrive-republic-moldova>
- Abraham, N., Spruin, S., Rossi, T., et al. (2022). Myocarditis and/or pericarditis risk after mRNA COVID-19 vaccination: A Canadian head to head comparison of BNT162b2 and mRNA-1273 vaccines. *Vaccine*, 40(32), 4663-4671. doi:10.1016/j.vaccine.2022.05.048
- Ministerul Sănătății al Republicii Moldova. (2021, May 6). *Studiul: 41% dintre respondenți are accepta să se vaccineze împotriva COVID-19*. Retrieved November 14, 2025 from <https://ms.gov.md/comunicare/buletin-informativ/studiu-41-dintre-respondenti-ar-accepta-sa-se-vaccineze-impotriva-covid-19/>
- Ministerul Sănătății al Republicii Moldova. (2021, October 29). *Conferința științifico-practică: "Împreună oprim pandemia COVID-19"*. Retrieved November 14, 2025 from <https://ms.gov.md/comunicare/comunicate/conferinta-stiintifico-practica-impreuna-oprim-pandemia-covid-19/>
- UNICEF Regional Office for Europe and Central Asia. (2023) *Integrating health and communication to achieve better results for routine and COVID-19 immunization in Moldova*. Retrieved November 14, 2025 from <https://www.unicef.org/moldova/media/11926/file/Integrating%20health%20and%20communication%20to%20achieve%20better%20results%20for%20routine%20and%20COVID-19%20immunization%20in%20Moldova.pdf>
- Cvjetkovic, S., Jeremic-Stojkovic, V., et al. (2024, May). Behaviour insights research on drivers influencing COVID-19 vaccination-related behaviours in Moldova. *UNICEF Regional Office for Europe and Central Asia*. Retrieved November 14, 2025 from <https://www.unicef.org/moldova/media/15416/file/BI%20Research%20report%20COVID-19%20Moldova%20-%20LONG%20ENG.pdf.pdf>
- Timotin, A., Paladi, A., Mița, V., et al. (2023). Digital social listening in Covid-19 pandemic or informed interventions in the Republic of Moldova: integrated data. *One Health & Risk Management*, 4(3), 56-63. doi:10.38045/ohrm.2023.3.09
- Gagauz O, Stratan A, Buciuceanu-Vrabie M, et al. (2016). *Analiza Situației Populației în Republica Moldova*. Centrul de Cercetări Demografice & UNFPA. Retrieved March 16, 2025 from https://moldova.unfpa.org/sites/default/files/pub-pdf/PSA_RO.pdf
- Dascalu, S., Geambasu, O., et al. (2021). COVID-19 in Romania: What Went Wrong?. *Frontiers in public health*, 9, 813941. <https://doi.org/10.3389/fpubh.2021.813941>
- Dascalu, S., Geambasu, O., et al. (2021). Prospects of COVID-19 Vaccination in Romania: Challenges and Potential Solutions. *Frontiers in public health*, 9, 644538. <https://doi.org/10.3389/fpubh.2021.644538>
- Mărcău, F. C., Purec, S., & Niculescu, G. (2022). Study on the Refusal of Vaccination against COVID-19 in Romania. *Vaccines*, 10(2), 261. <https://doi.org/10.3390/vaccines10020261>
- Primăria Municipiului Chișinău. (2020, March 18). *Campania de sensibilizare a cetățenilor cu privire la minimalizarea răspândirii virusului COVID-19, lansată de primăria municipiului Chișinău, s-au alăturat și* [Video attached]. Facebook. Retrieved March 16, 2025 from <https://www.facebook.com/watch/?v=3134952613182034>
- Sunstroke Project. (2020, March 19) *Sunstroke Project mamastayinghome (with subtitles) Quarantine Covid-19*. YouTube. Retrieved March 16, 2025 from https://www.youtube.com/watch?v=KDs4drN8M_8
- Ministerul Sănătății al Republicii Moldova. (2021, June 22). *OMS salută eforturile depuse de MSMPs în procesul de vaccinare a populației împotriva COVID-19*. Retrieved November 14, 2025 from <https://ms.gov.md/comunicare/comunicate/oms-saluta-eforturile-depuse-de-msmps-in-procesul-de-vaccinare-a-populatiei-impotriva-covid-19/>
- Ministerul Sănătății al Republicii Moldova. (2021, July 4). *Vaccinează-te pentru a călători în siguranță! Vizitatorii Rezervației Cultural-Naturală „Orheiul Vechi” au fost informați și vaccinați împotriva COVID-19*. Retrieved November 14, 2025 from <https://ms.gov.md/comunicare/vaccineaza-te-pentru-a-calatori-in-siguranta-vizitatorii-rezervatiei-cultural-naturala-orheiul-vechi-au-fost-informati-si-vaccinati-impotriva-covid-19/>
- Mandić-Rajčević, S., Cvjetković, S., et al. (2024). Using Behavior Integration to Identify Barriers and Motivators for COVID-19 Vaccination and Build a Vaccine Demand and Confidence Strategy in Southeastern Europe. *Vaccines*, 12(10), 1131. <https://doi.org/10.3390/vaccines12101131>
- Ministerul Sănătății al Republicii Moldova. (2021, July 18). *Vaccinarea împotriva COVID-19 ia amploare și în zonele rurale. La Otaci, au fost organizate mai multe echipe mobile pentru imunizarea persoanelor*. Retrieved November 14, 2025 from <https://ms.gov.md/comunicare/comunicate/vaccinarea-impotriva-covid-19-ia-amploare-si-in-zonele-rurale-la-otaci-au-fost-organizate-mai-multe-echipe-mobile-pentru-imunizarea-persoanelor/>
- Ministerul Sănătății al Republicii Moldova. (2021, July 3). *Maratonul vaccinării de la casă la casă. 15 echipe mobile au informat și vaccinat cetățenii din raioanele Briceni și Edineț*. Retrieved November 14, 2025 from <https://ms.gov.md/comunicare/comunicate/vaccinarea-impotriva-covid-19-ia-amploare-si-in-zonele-rurale-la-otaci-au-fost-organizate-mai-multe-echipe-mobile-pentru-imunizarea-persoanelor/>
- Ministerul Sănătății al Republicii Moldova. (2021, October 30). *Mai mulți cetățeni informați și vaccinați împotriva COVID-19. Reprezentanții autorităților din prima linie și voluntari au participat la intensificarea procesului de vaccinare*. Retrieved November 14, 2025 from <https://ms.gov.md/comunicare/mai-multi-cetateni-informati-si-vaccinati-impotriva-covid-19-reprezentantii-autoritatilor-din-prima-linie-si-voluntari-au-participat-la-intensificarea-procesului-de-vaccinare/>
- Enciu, B. G., Tănase, A. A., et al. (2022). The COVID-19 Pandemic in Romania: A Comparative Description with Its Border Countries. *Healthcare (Basel, Switzerland)*, 10(7), 1223. <https://doi.org/10.3390/healthcare10071223>
- Ministerul Sănătății al Republicii Moldova. (2022, January 18). *Peste 1 000 000 de persoane s-au vaccinat cu schema completă împotriva COVID-19*. Retrieved November 14, 2025 from <https://ms.gov.md/comunicare/peste-1-000-000-de-persoane-s-au-vaccinat-cu-schema-completa-impotriva-covid-19/>
- Ministerul Sănătății al Republicii Moldova. (2021, August 4). *MSMPs lansează o campanie de informare a populației din mediul rural despre importanța vaccinării împotriva COVID-19*. Retrieved November 14, 2025 from <https://ms.gov.md/comunicare/msmps-lanseaza-o-campanie-de-informare-a-populatiei-din-mediul-rural-despre-importanta-vaccinarii-impotriva-covid-19/>
- Zoab Habib, T., Ennab, F., et al. (2022). Double trouble: COVID-19 vaccine misinformation amidst conflict in Ukraine. *Annals of medicine and surgery* (2012), 80, 104127. <https://doi.org/10.1016/j.amsu.2022.104127>
- Tupps, C., Curry, D., et al. (2025). COVID-19 vaccination implementation in six lower- and middle-income countries: Successes, challenges, and lessons for pandemic preparedness. *PLoS global public health*, 5(5), e0004417. <https://doi.org/10.1371/journal.pgph.0004417>