



Community Health Volunteers Deliver Quality Care to Refugees with Hypertension and Diabetes Amid COVID-19 Treatment Interruptions

In Jordan, the COVID-19 pandemic quickly caused the closure of health care clinics, cutting off access to critical health services for Syrian refugees and vulnerable Jordanians. For those with non-communicable diseases, like hypertension and diabetes, the closures increased the difficulty of managing and monitoring their conditions, creating a gap in care with the potential for severe health consequences.

To improve the quality and continuity of care, the International Rescue Committee implemented a remote, community health volunteer program for patients under care in their clinics. Trained community health volunteers (CHVs) conducted telephone consultations with patients where they monitored for life-threatening complications, offered counselling, and provided COVID-19 information and screenings as well as referrals to testing and care. **The CHV program’s outcomes demonstrate the important role that CHVs play in delivering consistent, quality care for refugees and other vulnerable populations.**

What’s a Community Health Volunteer/Worker Program?



Community health programs use community health workers or volunteers to diagnose and manage a set of illnesses. They provide a critical link to services for hard to reach and vulnerable populations who have poor access to primary health care. In a resource constrained environment, these programs can lessen the burden on the primary care system by managing routine health issues and providing life-saving treatment and medication. As members of the community, community health workers and volunteers are often viewed as trusted source of information and guidance.

These programs have proven effective in the management of NCDs, particularly when embedded in primary health systems, in low and middle-income countries in South Asia, though more evaluation is needed to assess their efficacy both in the Middle East and in humanitarian contexts.

IRC-Led Community Health Volunteer Program in Mafraq and Ramtha

Community health volunteers were...

Trained. Community health volunteers were taught how to remotely support the management of non-communicable diseases like hypertension and diabetes using a tablet-based CommCare program and linkages to primary care and medication delivery. The CHVs used a monthly telephone consultation to facilitate the monitoring of prescription stockouts, medical complications, mental health concerns, and the need for referrals for acute complications.

Prepared for COVID-19. Patients with chronic diseases are at higher risk of severe COVID-19 infection and outcomes. CHVs were trained how to identify a potential COVID-19 case using the patient’s self-

reporting of symptoms for themselves and members of their household, and to connect the patient with appropriate testing, treatment, and home-based measures to prevent further spread.

Integrated. CHVs were embedded in a primary care program that included linkages to clinics for urgent care and pharmacies for delivery of medications. This integration ensured that primary care was responsive to the patient's needs and that the CHVs received supervision and support.

They provided...

Screening. CHVs conducted monthly calls to patients to assess for potential complications, prescription adherence and stockouts, and COVID-19 infection or exposure, and offer psychosocial support, health education, and referrals for further care as needed.

COVID-19 Management. CHVs provided patients with information on infection prevention and screened for potential infection among the patient and other household members.

Referrals. CHVs identified urgent events, such as mental health needs, suspected COVID-19 infection, and acute complications like a diabetic foot requiring further action and connected the patients to the necessary care.

Ongoing Feedback. CHVs provided ongoing feedback to the patient's nurse to maintain a longitudinal care and monitoring approach to the patient's primary care, enabling the continuity of integrated, quality care during a severe disruption.



Mobile outreach via WhatsApp helped patients manage conditions.

Key Findings: Community Health Volunteer Programs Are High-Impact Approach to Health Care

- **The CHV program filled critical gaps in care.** More than 50% of patients had both hypertension and diabetes while 40% had serious comorbidities and 12% were dependent on insulin. During the COVID-19 outbreak, the CHV program provided these patients with ongoing care that would have otherwise lapsed and potentially led to more severe disease, and augmented the care provided by onsite clinics.
- **The program was high functioning.** Even with the reliance on telephone consultation, most patients effectively managed their condition throughout the program. 87% of patients remained in care and 90% adhered to their monthly medication(s). CHVs provided a critical contribution to identifying COVID-19 cases in the household; more than 50% of those referred for testing were positive.
- **It was cost-effective and provided more consistent care.** Assuring continuous care for non-communicable diseases in humanitarian settings remains constrained by resources. This CHV program used minimal human and financial resources to reach a large set of patients. While one primary care consultation for a non-communicable disease for a Syrian refugee in Jordan is approximately INT\$209-253 annually, the combined monthly consultations for the study period through the CHV program cost INT\$218 per patient per year.

Recommendations

Incorporate community-based health programs into service delivery for refugees and hard to reach populations. CHVs not only provide critical care during a disruption of service (i.e., pandemic or instability), they also overcome significant gaps in primary care. Prior to the pandemic, primary care for refugees and vulnerable populations already lacked the resources to effectively manage and monitor non-communicable

- Fatima Rawashdeh, IRC Jordan, fatma.rawashdah@rescue.org
- Ruwan Ratnayake, Principal Investigator, ruwan.ratnayake@lshtm.ac.uk
- Parveen Parmar, Principal Investigator, parveen.parmar@med.usc.edu

diseases. **The program showed that community-based care that focus singularly on disease management can overcome some existing limitations, making them a valuable element of health care delivery at all times.**

Invest in remote strategies to ensure continuity of care. The program demonstrated that with training and technological resources, remote management can be effective. CHVs were a key resource for educating refugees and vulnerable Jordanians on COVID-19, detecting possible infections among the population, and linking people to testing and care. **Remote programming will remain relevant for future COVID-19 waves and other disruptions to routine care posed by conflict and insecurity.**

Prioritize integration across the health system, particularly for refugee and hard to reach populations. Research shows that CHV programming is most effective when embedded in a fully functional and integrated health care system that includes clinics, pharmacies, and access to referrals. While urgent referrals were rare in the program, a lack of funding and refugees' fragmented access to secondary care limited the system's ability to respond to increased demand. **Despite this challenge, by providing ongoing feedback to patients' primary care providers, CHVs help strengthen the quality of care for refugees and vulnerable Jordanians.**

- Fatima Rawashdeh, IRC Jordan, fatma.rawashdah@rescue.org
- Ruwan Ratnayake, Principal Investigator, ruwan.ratnayake@lshtm.ac.uk
- Parveen Parmar, Principal Investigator, parveen.parmar@med.usc.edu