Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of Foreign Affairs FDFA
Directorate of Political Affairs DP
Division for Security Policy DSP

No 67

Politorbis

Zeitschrift zur Aussenpolitik
Revue de politique étrangère
Rivista di politica estera

www.eda.admin.ch/politorbis

Non-Communicable Diseases in Emergencies: where do we stand ? where do we go ?

1/2019

Contact:

Federal Department of Foreign Affairs FDFA
Directorate of Political Affairs DP
Division for Security Policy DSP
Politorbis
Effingerstrasse 27
3003 Bern

Phone: + 41 58 464 81 53
Fax: + 41 58 464 38 39

politorbis@eda.admin.ch
www.eda.admin.ch/politorbis

Politorbis

Sommaire

Preface

Dr. Olivier Hagon[1]

Disaster but also humanitarian medicine are facing new challenges during their interventions, namely the increase in the global prevalence of chronic diseases in relation to the epidemiological transition. NCDs are no longer the prerogative of the high-income countries. Emerging countries are not spared by diseases such as diabetes, chronic lung disease, heart and kidney failure, cancer, etc. These diseases, which are often linked to changes in lifestyle, have an immense impact on people beyond their health, including financial and social aspects. In low- and middle-income countries health systems are not adapted to prevent, manage or deliver palliative services. The costs of the NCDs (incapacity to work, care costs, care resources...) are important and have a negative impact on the sustainable development of the poorest countries. These impacts are further exacerbated during a natural disaster or humanitarian emergency increasing the vulnerability of those with an NCD in these contexts. Vulnerable populations include children with asthma and Type 1 diabetes, pregnant women at risk of pre-eclampsia and gestational diabetes and those with hypertension and diabetes.

The occurrence of a disaster leads to a health crisis through the destruction of health care structures and the reduction of health care resources as their activity is diverted to deal with the acute situation. The continuity of care, essential for the follow-up of patients with chronic diseases is thus interrupted.

In humanitarian crises, it is not only the change from a focus on communicable diseases and maternal and child health, but also a change from acute care needs to chronic care needs. The emergency response has to include both the provision of a rapid response to the acute crisis, in parallel to ensuring continuity of care for all patients. This approach requires a population-based approach with a focus on, in most instances, traumatic aspects and also the overall care needs of the affected population. In order to achieve this continuity of care, collaboration is needed to strengthen existing health resources according to the needs identified in each specific situation. The response can no longer be "standardized" interventions based on a top-down model, but rather a bottom-up model which integrates and complements local resources and takes into account the needs identified by local providers. By providing adapted resources and having the response evolve with changing needs this would allow for the evolving of the response from a health perspective in line with the changes in context.

Through these difficult circumstances an opportunity arises to have international healthcare teams learn from regional partners, enable them to enrich their practice, and also to contribute to training a new generation of emergency teams capable of adapting to different situations, working in a collaborative and integrative way. While crisis management protocols are well established, known and applied, this new challenge requires humanitarian actors to rethink their training, collaborations and interventions. Considering the increasing of the local capacity and capabilities, the future will certainly be to work more and more the local partners and to include from the beginning the challenges related to the “humanitarian-development” nexus.

1 Deputy Head, Division of Tropical and Humanitarian Medicine, HUG
Medical Director, Coordinator Medical Unit Swiss Rescue, SHA/SDC

Introduction

Manuel Bessler[1]

This issue of Politorbis, dedicated to Non-Communicable Diseases (NCDs) in Emergencies, follows on from the annual 'humanitarian dialogue' between SDC Humanitarian Aid and MSF. It features contributions by the participants to the dialogue on this topic, which took place in November 2018.

As the subtitle suggests, the ambition was to take stock of the humanitarian community's progress in the management of NCDs in emergencies, to investigate the challenges ahead and identify potential or desirable options and developments. How can the main actors collaborate better, increase the coordination of their activities and be more efficient in fragile settings?

These are the questions which all of the contributors in this issue of Politorbis address, disclosing how their respective organisation integrate NCD-related concerns into health policies and programmes in emergency situations.

A growing threat for the poor

We know today that Non-communicable diseases are globally responsible for more deaths than all other causes combined. Diseases more commonly associated with wealthy countries, such as diabetes, hypertension and heart failure, are both prevalent and rising in developing countries.

In Africa, especially in North Africa, the rate of NCDs has become alarming. Changes in lifestyle and nutrition, for example the adoption of sedentary lifestyles, have been identified as major drivers of the increase in NCDs. Over the next 20 years, NCDs are set to become the leading cause of morbidity and mortality on the African continent.

The poor of the developing world are especially at risk from the growing incidence of NCDs. The expense of long-term treatments can easily drive families into extreme poverty. Out-of-pocket payments quickly exhaust family savings and insurance cover is rapidly depleted, forcing patients to pay for treatment themselves or seek help through fundraising amongst community members.

Growing concern in emergencies

It has become increasingly clear that NCDs need to be managed in conjunction with the contagious diseases more typically addressed in emergency situations. Programmes addressing NCDs are now being designed and implemented.

This change in disease patterns – often referred to as the 'double burden of disease' – has hit fragile and conflict-affected countries especially hard. Health systems disrupted by violence and chaos struggle to cope with the wounded, which inevitably puts people suffering from NCDs such as cardiovascular diseases, diabetes, hypertension, cancer, dialysis-dependent kidney failure and epilepsy at increased risk.

In emergency situations, infrastructure is destroyed, medical supplies are cut off and healthcare providers are killed, injured, displaced or unable to return to work. Under such conditions, healthcare is very limited – if available at all. People who become displaced often lose their prescriptions or access to drugs and healthcare services. This interruption of continuous care can have disastrous consequences, causing additional health complications and further reducing their ability to cope.

Several contributors to this issue write from their experience about the continued need for preparedness, planning and coordination to prevent interruption of continuous care.

Growing interest from the humanitarian community

While NCDs have always existed in poor and underdeveloped countries, it is only lately that the issue has come to the fore as a major concern for the international humanitarian health community, especially in emergencies. Gatherings and workshops devoted to NCDs are now being organised all over the world. Most of the contributors to this issue of Politorbis took part in the international symposium on diabetes in humanitarian settings[2] at Harvard this April.

1 Ambassador and head of Swiss Humanitarian Aid, Deputy Director General of the Swiss Agency for Development and Cooperation (SDC)

2 Diabetes in Humanitarian Settings, Symposium at Harvard University , 4-5 April 2019, with the participation of Philippa Boulle from MSF, Sigiriyn Aebischer from ICRC, Slim Slama from WHO and David Beran from the Geneva University Hospitals. See http://globalendocrinology.bwh.harvard.edu/symposium/

Ambassador Bessler gets health briefing from WHO staff while visiting Aqsa Hospital (Gaza Strip)
Photo UN OCHA

The private sector is also 'discovering' the importance – and economic potential – of NCDs in emergency situations. Swiss pharma giant Novartis has just published a booklet presenting its Access Program, a portfolio of anti-NCD drugs available in Africa, Asia and Latin America to fight diabetes, breast cancer, hypertension, asthma and childhood pneumonia in particular. According to the programme's director in the preface, "while drug provision is not the single magic bullet to solve the NCD problem, Novartis is pleased to contribute to this fight providing affordable drugs, eventually benefitting the patients and improving clinical outcomes."[3]

As Harald Nusser, head of the review *Novartis Social Business*, explains in the latest issue, "the WHO Independent High-Level Commission on Non-communicable diseases (NCDs) declared that NCD interventions could bring a return of up to USD 7 per person for every dollar invested. This shows that investing in healthcare today is an investment in a sustainable future."[4]

Most humanitarian health organisations, including some small NGOs, have taken the concern on board and are adopting their own responses to NCDs.

Growing engagement by the main humanitarian actors

As on many other issues, MSF is among the leading organisations fighting NCDs in emergencies. In an extensive contribution, Dr Philippa Boulle, NCD Adviser at MSF Switzerland, explains that it was only in 2011, with the Syrian crisis and the refugees who fled to Lebanon and Jordan, that the need to systematically tackle NCDs emerged within MSF. Several other crises followed in which there was a need for NCD care, in particular in Central Asia, South Sudan, Yemen, Iraq and Ukraine, and in refugee camps

3 Towards Universal Health Coverage, The Novartis Access Program on Non-communicable diseases, NVS Kenya Limited, Nairobi, Sept. 2018

4 Novartis Social Business, Report 2018, Basel, p.3

in Burundi, Tanzania, Kenya and Greece. MSF started to operate in these settings with a focus on continuity of care, and the simplification and integration of NCD services.

Dr Boulle admits that launching this new approach has taken a lot of effort and innovation at MSF, which has faced many difficulties, including resistance within the organisation. Things have moved forward nevertheless, and Dr Boulle observes that MSF is today committed to systemically including NCDs in its health programmes, although she recognises that "there is still significant need for more routine integration of NDC care in emergency response."

Dr Sigiriya Aebischer, NCD Advisor of ICRC and in charge of the NCD programme health unit at the Geneva University Hospitals (HUG), togehter with her ICRC colleague Esperanza Martinez, head of Health at the ICRC, provide in this issue of Politorbis some examples and thoughts on the ICRC's approach to NCDs, focusing in particular on Niger, Syria and Lebanon. She calls on all humanitarian actors to strenghten collaboration and partnerships with each other, to share tools and experience, improve access to healthcare for patients with NCDs in armed conflicts and to coordinate the overall effort with other actors. Her emphatic appeal for exchange and openness is based on the observation that no single actor has the capacity to respond to a need of this magnitude. Only multidisciplinary, multi-stakeholder approaches to the issue of chronic conditions can provide solutions that extend beyond health responses and single point-in-time interventions.

Growing role of research

Two other articles in this edition of Politorbis, highlight one of Switzerland's strengths that often goes forgotten: academic institutions and research that is constantly contributing to knowledge generation. Dr David Beran and Dr François Chappuis describe the role that academic institutions play in Geneva in addressing the global challenge of Non-communicable diseases.

In their article they highlight both the expertise of the Division of Tropical and Humanitarian Medicine, Geneva University Hospitals and University of Geneva Faculty of Medicine, and the innovation and savoir faire that a large university hospital and multi-faculty university bring to the table. In discussing the role of academic institutions in research, they show how teaching and engagement activities are essential and benefit from both local and global partnerships.

The COHESION Project article gives an example of a global partnership tackling the burden of non-communicable diseases. Although the project seeks simple solutions, its novel approach emphasises research as a key component to understanding the complexity of the problem of NCDs. The research is then used in efforts led by local stakeholders and adapted to the local conditions. Involving local partners in the search for solutions is essential to tackling NCDs, and can serve as a model for finding local solutions to local problems on a whole range of issues, with the overall aim of more responsive health systems geared to the need of individuals.

Growing engagement at the Swiss Agency for Develpment and Cooperation (SDC)

The SDC is also gradually integrating NCD concerns into its health programmes. According to Erika Pancella, Health Adviser for Eastern Europe and Central Asia, the SDC is in fact a major bilateral donor in the fight against NCDs in Eastern Europe, where chronic diseases are the leading cause of mortality, responsible for 80% of deaths. She explains in her contribution, how the SDC uses national healthcare systems and holistic approaches to tackle the main determinants of NCDs.

Pancella also emphasises the tremendous cost of inaction for national economies (NCDs affect productivity, GDP, healthcare budgets and household incomes), especially in humanitarian situations. If there is no major increased financial effort to address NCDs, in additional to negatively impacting people's health, it will also jeopardise the achievement of Sustainable Development Goal targets 3.4 and 3.8 on health.

Barbara Profeta, based on several years of experience as SDC Regional Health Adviser in the Horn of Africa, offers some personal insights to what I would describe as 'epistemological considerations', on the conditions needed to address NCDs effectively. She notes that in today's world, rapid onset emergencies, although not infrequent, are not as pervasive as protracted crises and do not account for the dispro-

portionate burden of preventable complications and deaths to NCDs in poor countries.

Profeta's observations in the field have shown her how emergencies reveal and exacerbate pre-existing gaps in health systems. She concludes that if NCDs are not addressed in the majority of emergencies affecting fragile environments, it is likely because NCD services (preventative, curative and palliative) were already scarce or non-existent in times of peace and stability. Overlooking this fact leads according to her to the overoptimistic double assumption that: (i) NCD-specific emergency interventions introduced by international actors will be effectively absorbed by existing health systems once the latter recover; and (ii) health systems were functional and responsive before a rapid onset crisis and always recover.

Difficult operational environments are navigated with reasonable success by the aid community in collaboration with other actors such as the private sector, with local (often informal) businesses providing 'last-mile' healthcare delivery to hard-to-reach communities, including NCD patients. Although labelled as 'fragile', such contexts harbour key assets, capacities (including seemingly unconventional solutions) and resources, all of which practitioners tend to underestimate. Local solutions, although often imperfect, need to be acknowledged and nurtured since they fill important voids left by the overburdened formal state-led model. Profeta concludes by urging us to seek strategic rather than purely programme-based engagement with the private sector.

The articles assembled here show the importance of the often neglected issue of NCDs in emergencies, and the necessity to further unify approaches and modes of intervention. The WHO has started to play its traditional role as standard-setter in this matter, with the active participation of Dr Slim Slama, Regional Adviser at the WHO Eastern Mediterranean Regional Office in Cairo. More is required, however, in particular guidelines for NCD care to improve access to treatment for patients in need. This would lead to a more coordinated and standardised approach across different agencies, focus research appropriately, improve continuity of treatment for people living with NCDs, and encourage the appropriate training of health professionals.

This issue of *Politorbis* comes at an opportune moment, in the wake of the joint Call to Action launched by Switzerland and Afghanistan to accelerate progress towards universal health coverage (UHC) in emergencies for people affected by armed conflicts, fragile settings, health problems and other emergencies. I would like to thank the Swiss Humanitarian Aid's African Division, and Pierre Maurer in particular, whose organisation and support enabled its publication.

Part 1:
The big players and NCDs in Emergencies

Non-Communicable Diseases in Emergencies: a need to innovate, advocate and integrate

Dr Philippa Boulle[1]

Introduction (the why)

NCDs in Emergencies – why should an organisation like MSF get involved?

Despite their increasing prominence on the global health stage, Non-communicable diseases (NCDs) in humanitarian crisis and limited-resource settings are poorly addressed; they still suffer from some misconceptions, including regarding their prevalence and impact in vulnerable places and populations. In fact, NCDs – from which the vast majority (82%) of premature deaths occur in lower resource settings - have a disproportionate impact on the vulnerable, who are more likely to be diagnosed late (such as after complications have developed), and less likely to be able to access ongoing care, particularly care for complications (such as amputations and blindness from diabetes, disability from strokes, or daily breathlessness and immobility from COPD). Given their chronic nature, and the fact that they often first affect people in their productive years, they also impose a significant financial burden on patients, their families and their communities, as well as on health systems. Multimorbidity is common with NCDs (and even more so amongst people of low socioeconomic status), further increasing their contribution to poverty. Common comorbidities include depression, which is associated particularly with diabetes and cardiovascular disease, and this in turn affects medical outcomes.

Given these factors, and acknowledging both the changing global epidemiology with an ageing population and increasing prevalence of NCDs, and the occurrence of large humanitarian crises in middle income settings where NCDs constitute a significant pre-existing burden, MSF is increasingly committed to systematically including NCDs in our health programming. This enables us to more adequately address the needs of the populations that we are serving, and to minimize the disproportionate impact that these diseases have on the most vulnerable.

MSF response to NCDs (the how)

The Syrian crisis – highlighting the changing medical needs in humanitarian crises

In 2011 Médecins sans Frontieres started to address medical needs of increasing numbers of people affected by the conflict within Syria. As refugees poured across the Syrian border into surrounding countries, and humanitarian organisations began to respond, it became clear that there were differences in the medical needs of the displaced Syrians compared to those in the lower resource settings with which many NGOs were more familiar. Non-communicable diseases such as cardiovascular disease and diabetes were responsible for a high proportion of mortality and morbidity in Syria prior to the conflict, and thus care for them constituted a significant medical need in those affected by the crisis. As a responding organisation, MSF included NCD management in the package of medical care provided to those displaced or affected by the conflict in locations outside and within Syria.

However, although NCDs had been managed on an ad hoc basis by MSF practitioners for many years as part of response to general primary and secondary healthcare needs, addressing these diseases in an organized way on a large scale was not yet an established part of MSF's expertise, despite isolated examples of such programmes in MSF's past. The Syrian crisis thus proved a catalyst for the development of MSF's capacity to respond to NCDs in emergencies in a manner adapted to humanitarian settings, an important need for medical humanitarian organisations as we confront the changing global epidemiology and nature of humanitarian crises.

Developing a response capacity

For MSF, responding to NCDs has primarily meant addressing hypertension, cardiovascular disease, diabetes, asthma, chronic obstructive pulmonary disease and epilepsy, and occasionally other diseases including chronic renal failure and haematological disorders like sickle cell anaemia and thalassaemia. Specific cancers such as Kaposi sarcoma and cervical cancer are primarily addressed in HIV cohorts;

1 Chronic Non-Communicable Diseases Advisor, Medical team leader, Chronic Conditions Team, MSF

Lebanon - Dar Al-Zahraa Hospital, Tripoli
Photo: Jose Michelena

beyond this MSF is starting to investigate what role we might have towards different cancers in humanitarian settings.

Our response capacity has extended to a range of different contexts and crises. Currently the greatest number of MSF NCD patients remain Syrian refugees in countries in the Middle East, particularly Lebanon and Jordan. However, MSF also manages cohorts of patients in Central Asia and Eastern Europe, and is seeing increased numbers of patients with NCDs in many different African contexts. NCDs are also co-managed in MSF's large HIV and TB cohorts in a range of settings.

Implementing these programmes has required the development and implementation of medical guidelines, standard lists of medications and investigations, and systems or models of care. Unfortunately, there has been and still exists a deficiency of evidence on responding to NCDs in humanitarian settings. MSF guidelines for NCD management were therefore developed using evidence-based guidance from high income settings, adapted to our contexts according to pragmatism and increasing experience. To achieve a feasible, scalable response, the MSF guidelines adopt a rationalised approach regarding resource use, including medication, investigations and human resources.

To develop approaches to systems of management of NCD patients, MSF has drawn on its significant experience with management of chronic infectious diseases, particularly HIV, and has adapted lessons from HIV care to apply to NCD care. These lessons include use of task sharing between doctors, nurses and laypersons (usually involving shifting of tasks to less trained health workers than would perform them in high resource settings), use of a follow-up system for patient review, and inclusion of patient education as an integral part of the care.

Difficult choices in an emergency – defining the package of care

When addressing the needs of a population affected by an emergency, a humanitarian actor such as MSF is usually confronted with multiple competing needs, and must make choices regarding resource allocation. Immediate causes of mortality are usually given highest priority, including relevant communicable diseases. NCDs may not present as the most urgent need in many contexts. However, the importance of these diseases to the suffering of the populations affected by emergencies is increasingly

recognised, as well as the fact that the stress of the emergency, and other contextual factors such as lack of access to healthcare and medication, unsanitary living conditions, and inadequate food supply can increase a patient's risk of exacerbation of their disease. MSF is therefore more routinely including care for emergency presentations of chronic disease and for continuity of care in emergency response programming. For some diseases such as diabetes and epilepsy, this can indeed be a life-saving activity.

Furthermore, NCDs can indeed cause life-threatening presentations (such as heart attacks, diabetic emergencies and asthma attacks), for which capacity to respond is usually a high priority for an emergency organisation like MSF. After this, prioritization in the spectrum of NCD response would usually go to capacity to respond to symptomatic patients, closely followed by provision of continuity of care for those with diagnosed conditions. Identification of undiagnosed disease may happen in patients who present with symptoms or risk factors ascertained by the treating clinician, but it is not usually proactively sought except in particular circumstances (such as where comorbid diabetes may present as a risk factor for progression of disease in patients with tuberculosis, or where cardiovascular disease results from HIV disease and treatment). However, primary prevention of undiagnosed disease is not part of the response, notwithstanding the fact that health education in the waiting room or in the community may allow the broader community to benefit from messages regarding lifestyle management that help with prevention of type 2 diabetes and cardiovascular disease.

MSF most commonly cares for NCDs in the setting of primary health care, which plays a central role in humanitarian care response. In conflict and other settings, we may provide emergency room and inpatient care services, and increasingly include provision for management of acute NCD complications. Given that an humanitarian actor like MSF is rarely able to respond to the whole spectrum of care required for patients with NCDs, where possible we link with other care providers in order for the patient to receive the required management.

Lack of care for chronic complications is not uncommon in humanitarian settings, since it is often more challenging to provide or access, and the MSF response to complications in NCD patients ranges from linking with or supporting existing providers (where they exist), providing very basic management in the PHC setting, or not managing at all. As an example, MSF has limited instances of support to existing dialysis services in conflict-ridden Ukraine and Yemen in the past, where provision of supply enabled patients to continue to access their usual services, albeit with some restrictions. However, in other settings where dialysis is not readily available, care for renal impairment in diabetes is limited to detection and attempted prevention of disease progression. To this end, very simplified guidelines were developed to support inexperienced general practitioners in adjusting diabetes and other medications and with regular monitoring of renal status.

This use of adapted, simplified guidelines extends to other settings where higher levels of care are not available or no longer functioning, and MSF remains the definitive care provider at primary or secondary care level. For example, in Agok in South Sudan, MSF provides basic secondary health care in the absence of other providers. Here the level of local nursing and medical care and the lack of electrolyte testing and syringe pumps has meant that algorithms for diabetic ketoacidosis have been significantly adapted and simplified, which involved pragmatic compromises to try to balance safety with life-saving care for a complex condition. In this same setting, given the lack of referral options, patients with chronic complications like renal failure, diabetic retinopathy or cardiovascular disease requiring intervention are left without the specialised care required, and clinical staff must focus on preventing complications or their deterioration, and caring for patients at the end of life.

Examples from the field - confronting the need

MSF teams in the field are developing different ways of including NCD patients in their care provision even where there are many competing needs. For example, in Nduta camp in Tanzania, MSF has been the main medical actor since October 2015, and provides a broad medical response to Burundi refugees with a range of preventive, primary and secondary health services. Here the team deals with high rates of malaria, and important needs including malnutrition and vaccination. However, confronted with patients having existing and new NCDs, they incorporated a chronic disease clinic to facilitate management of these sometimes-complex patients. Managing these

diseases amongst multiple other needs has been especially challenging, but the importance of not neglecting these patients – including those on life-saving insulin - was clear to the team.

Similarly, in responding to the overwhelming needs in Yemen, MSF has implemented programmes in several emergency departments. Yet, similarly to other such conflicts in the region (including the battle for Mosul in 2016-2017), emergency department staff addressing the consequences of acute conflict-related violence were also seeing complications of non-communicable diseases including acute presentations of ischaemic heart disease and diabetes. Whilst teams are equipped to manage the emergency presentations of these diseases, they have realised that achieving follow-up care for these diseases can be challenging for patients in such contexts. Although there are always limitations to the care that one actor can provide, MSF is increasingly trying to assess availability of ongoing care in such circumstances, with a view to understanding what support it can provide if this care is not existing, so as not to leave patients without continuity of care and the risk of recurrent disease exacerbations and hospital presentations.

Examples from the field - defining the extent of care

The comprehensiveness of care implemented will normally be determined by the phase and type of humanitarian response. Given the spectrum of care required for NCDs, and the limitations of humanitarian resources and settings, it is often important for MSF to clarify treatment objectives. These objectives impact upon how the model of care is implemented, including the frequency of follow up (which could be decreased with less stringent clinical objectives), and the use of investigations (which can be minimised to hand held devices). For example, in mobile clinics run by MSF during the Iraq conflict in 2015-2016, NCDs constituted a regular and significant burden of morbidities seen. Given that MSF aimed to remain flexible in activities and location according to changing needs in this context, teams implemented a light system of care including basic follow up care and education, aiming to achieve continuity of care and minimise acute complications. Investigative equipment in this setting was limited to sphygmomanometers for measuring blood pressure, and glucose meters for checking blood sugar.

In more stable or protracted settings, achieving good patient control becomes both more feasible and important. In the conflict area of Ukraine, the MSF mobile clinic response in the buffer zone between the self-proclaimed Donetsk People's Republic and Ukrainian controlled territory has seen up to 90% of consultations being for NCDs. It is predominantly an elderly population who stayed behind whilst the younger population has moved away from the conflict; thus hypertension, cardiovascular disease and diabetes are the most common conditions seen in the mobile clinics run along the buffer zone. As the conflict became protracted, the teams were able to implement a more thorough system of care than that of the Iraq mobile clinics, including using point of care tests for diabetes and renal monitoring. In more stable protracted crisis settings, such as the Syrian refugee response in Lebanon and Jordan, NCD care is integrated into primary health care or provided through specific NCD clinics, with a comprehensive approach including use of outpatient laboratory testing, dedicated patient education, and referral to specialists when required.

MSF response to NCDs – key components

Supporting patients to self-manage

Chronic conditions require patients to understand their disease, and have capacity to self-manage. MSF is committed to empowering NCD patients to self-manage, through education adapted to the patients and the contexts in which they live. It is provided in groups and/or on an individual basis (this latter particularly for more complex medical aspects of care, such as insulin injection), by a variety of team members including doctors, nurses, and health promotion staff. Medical staff providing the education use flipcharts, posters and patient handouts adapted to patients' culture, language, literacy levels and setting, as well as to the spectrum of existing disease literacy. Patients are also taught to check their feet and manage simple wounds, thus reducing the dependence on health services. Patient-held booklets containing simple information are given to patients to assist them in their self-management.

Self-management skills such as blood sugar monitoring are potentially of added importance in a humanitarian setting where sustained access to health care may be challenging, but can also be more diffi-

Home insulin programme - Abyei - South Soudan
Photo: Musa Mahad

cult to achieve. Selected diabetes patients in MSF settings are provided with glucose monitors according to need and willingness, but current systems of glucose monitoring are invasive, require basic numeric understanding, have temperature sensitive strips which are not transferrable between meters, and are expensive, and so new solutions are needed. MSF has started a pilot implementation of a non-invasive continuous monitoring device in Lebanon, but these are currently expensive and their place in humanitarian settings remains to be seen.

Lack of patient control over lifestyle factors, such as when food is provided, or in conditions of food insecurity, can prove a significant barrier to patient self-management. For example, MSF staff struggled to manage patients with type 1 diabetes in two different refugee camps in east Africa, when food rations from the World Food Program were cut due to funding issues, with consequent food insecurity and irregular meal intake for patients needing to inject insulin multiple times a day.

Mental health – a key comorbidity

Patients with noncommunicable diseases, particularly those of diabetes and cardiovascular disease, have an increased incidence of comorbid mental illness, especially depression. As well as chronic disease being a risk factor for depression, having a mental illness in turn can increase the risk of developing some NCDs, and the coexistence of a mental illness and NCD(s) can lead to worse medical as well as mental health outcomes. Thus, MSF has recognised the importance of co-management of mental illness and NCDs, including in emergency settings where the population is at high risk of stress and anxiety precipitated by trauma. In settings like Ukraine and Lebanon, MSF has introduced routine screening for depression in the NCD cohort, with subsequent referral to psychologists for those in need. MSF also has a pilot implementation of management of severe mental disorders by the generalist doctors responsible for management of NCD patients (according to the WHO mhGAP programme: https://www.who.int/mental_health/mhgap/en/), in clinics in Lebanon, with a view to expanding this to other locations.

Relieving the suffering of life-limiting and life-threatening diseases

For incurable diseases like NCDs, MSF finds it important to have an approach that aims at improving and restoring quality of life rather than just striving to attain treatment targets. Patients with NCDs and other chronic diseases may reach a terminal stage of illness, or suffer from a complication that significantly limits their daily life, such as a stroke. Although not the traditional remit of humanitarian organisations, MSF is realising the importance of addressing the physical and mental suffering caused by such illnesses, by implementing a response that addresses management of pain, other physical symptoms, and psychosocial and spiritual needs. Accordingly, MSF is increasingly looking at ways to introduce a palliative care perspective into our NCD programming, focusing on establishment of patient-defined treatment goals, training staff on communication around goal setting and end of life care, and patient education around disease progression and self-management. In Dadaab refugee camp in Kenya, MSF has had a home-based palliative care programme for a number of years, after field staff set up a programme in response to an unmet need. A medical and mental health team visit patients with life-threatening illness and those who are bed-bound with chronic conditions. They teach families how to perform basic physiotherapy for bed-bound patients, help patients to link with spiritual providers, and advocate for easier provision of vital food supplies. The programme has been very well appreciated in the community.

Innovating in response to field realities

MSF teams have set up chronic care clinics in refugee camps and remote villages in sub Saharan Africa in response to need, and where some of the most challenging patients to manage are those with insulin dependent diabetes. In Dadaab refugee camp in Kenya, patients were coming twice a day to receive insulin injections in the clinic. However, the inconvenience of this, and increasing security issues including curfews in the evening, meant that patients often missed injections and were later arriving in the emergency with severe life-threatening hyperglycaemia. In response to a field request for more feasible management of these patients, studies were done assessing the stability of insulin exposed to the high temperatures found in the camp, showing its relative stability despite product information requiring storage at refrigeration temperatures. Based on this, MSF teams in Dadaab, have implemented programmes to teach patients safe self-injection and storage of insulin, as well as glucose self-monitoring, in the absence of home refrigeration. Decreased rates of hospitalization of patients from acute consequences of high blood sugar have been clearly demonstrated in MSF's field hospital in Dadaab. The clinicial team has implemented a similar programme in Agok, South Sudan, where patients come from far distances and where access is very difficult during the rainy season. In both locations, children have been able to return to school as a result of the home insulin management programme.

Patients on the move

Recent years have seen the largest numbers of displaced people in history, with a record 68.5 million forced from home in 2017 (https://www.unhcr.org/figures-at-a-glance.html). For patients with chronic conditions, ensuring continuity of care during periods of displacement can be particularly challenging and leave them especially vulnerable. MSF sees people on the move at various points of departure, arrival and transit around the world, and is trying to address their chronic care needs at many of these locations. It is in the early stages of implementing a travel medicine programme for people on the move, a service intended to facilitate healthcare continuity, through health advice, vaccination, medication, and referrals to MSF services elsewhere. Patients with chronic care needs including NCDs are given sufficient medication to try to support them during their travel until they are able to reach a healthcare provider at their destination, and given tailored education relating to their specific health risks during travel, as well as ensuring that key vaccinations are up to date. Patient passports are provided, a card containing the patient's key health information, as well as information booklets with health information to take with them on their travel. This programme has been implemented in various locations in Greece, including islands at which people first arrive, and in Athens to where they can be transferred from the islands. From Lebanon and Kenya, some Syrian and Somali refugees respectively are returning to their home countries, and in these locations MSF similarly provides patients with a pre-travel consultation and extended supply of medication to help preserve their health status during their forthcoming periods of travel.

Chronic diseases programme-Bekaa Valley
Photo: Abbass Salman

MSF response – issues of access

There are significant access issues impacting patients with NCDs in general, and most particularly in humanitarian settings. There is a huge lack of non-industry funding for these diseases despite global initiatives to address them, and a lack of availability of medications despite there being cheap drugs available for many of them. Some medications do remain very expensive despite their existence for a long time, with insulin being a key and stark example, as well as inhaler medications for chronic respiratory diseases. Recognising this, the MSF Campaign for Access to Essential Medicines (CAME) has engaged in the fight against NCDs, with an initial focus on diabetes-related challenges (particularly insulin and glucose monitoring), and hypertension/cardiovascular disease (particularly fixed dose combination medications for hypertension).

Access to insulin – an emergency in emergencies

The term noncommunicable diseases is a broad one that covers a wide variety of diseases, and whilst some have common risk factors and often co-exist, it can be difficult for donors and policy-makers to truly grasp the term and its needs and consequences. WHO names four NCDs as the biggest killers with similar risk factors (CVD, diabetes, cancer and chronic respiratory diseases), and for now MSF focuses on those that cause significant morbidity in our settings and are feasible to address (CVD, diabetes, chronic respiratory diseases, epilepsy and thyroid disorders, as well as some haematological disorders and renal impairment). However, there are important specificities among these diseases, and MSF considers the issue of type 1 diabetes in emergencies to be a key life-threatening disease for which access to insulin is an emergency. It comes with multiple layers of challenges. Insulin product information specifies the need for cold chain for transport and storage, and its use requires injecting equipment and glucose monitoring capacity, both of which increase the financial and logistic resource requirements. The insulin market is dominated by three big companies, and prices have continued to increase over the years, with particularly high prices for analogue insulins and pen injection devices, which are therefore out of reach of most diabetes patients in lower resource setting (and even in some high resource settings includ-

ing the United States where patients are increasingly turning to cheaper human insulins). Through the MSF Access Campaign we are starting to try to understand the different challenges of the over-priced insulin market, investigating the use of biosimilar insulins, and linking with other actors who are researching this issue, in order to comprehend how the barriers to affordable insulin for all can be addressed for this life-saving issue.

Conclusion

Although experience of NCD care in emergencies is increasing amongst different agencies, there is still significant need for more routine integration of NCD care in emergency response. The advent of the WHO NCD emergency kit (https://www.who.int/emergencies/kits/ncdk/en/), as well as the inclusion of some NCD drugs in the interagency emergency health kit (https://www.who.int/emergencies/kits/iehk/en/), facilitate the provision of NCD care in emergencies. Many challenges remain, including the development of easier approaches to enable expansion of care to all those in need. MSF is working toward increased simplification of protocols, implementation of fixed dose combination medications, and further work on community-based models of care, to enable greater numbers of patients to be treated more feasibly in humanitarian crisis contexts.

As a direct implementer of medical humanitarian action, a strength of MSF is the role it can play in demonstrating models of care and different approaches to addressing various diseases in a manner adapted to humanitarian and low resource settings. There are important examples from HIV and TB where these models of care have been adopted by ministries of health to enable continuity of care in a resource-friendly manner, and for these diseases MSF continues to innovate and evaluate different approaches. Similarly, as an actor with some of the largest numbers of NCD patients in the humanitarian domain, MSF has an important role to play in documenting, researching and capitalizing on different experiences in our treatment of these patients. This includes continuing to innovate in response to different field challenges, and to advocate for the needs of patients. MSF is now accepting the importance of addressing NCDs in emergencies, and will continue to work on how to integrate, innovate and advocate for better care of NCD patients in these settings.

ICRC's Non-communicable diseases management: the experience of a humanitarian organization

Sigiriya Aebischer Perone[1] and Esperanza Martinez[2]

Non-communicable diseases in crisis-affected settings: a global challenge [2]

The World Health Organization estimates that 41 million people die yearly due to non-communicable diseases (NCDs)[3] accounting for 70% of deaths that occur globally, the majority of which are in low-and middle-income countries. The rise in NCDs, namely heart and lung disease, diabetes and cancer, coupled with an increasingly unstable humanitarian landscape is posing many challenges for people and communities affected by armed-conflict or natural disasters, and the traditional actors trying to cater to them.

In 2017, forced displacement reached a record total of 68.5 million people[4]. Refugees and other displaced people suffering from NCDs have heightened vulnerabilities due to the stress of fleeing, the often harsh conditions in the areas where they seek refuge and the lack of regular access to adequate healthcare. For people living in humanitarian crises, the risk of exacerbating pre-existing conditions or experiencing acute complications, is two-three times higher[5] than in stable settings. The situation is further compounded by the immense challenges to effectively managing NCDs in these environments. Chronic conditions require an integrated approach across a continuum of care, which is difficult to deliver in the absence of functional health systems. Moreover, as humanitarian organisations are more accustomed to dealing with acute emergencies, finding ways of tackling conditions that are chronic is difficult and demands longer term strategies and commitment in terms of programming and financing.

Health and humanitarian providers also face questions that are unique to crises environments, particularly when they are linked to armed conflict and violence: how to ensure medical supply chains when sanctions prevent the import of certain equipment or supplies? How to reach patients who are prevented from accessing health care? How to ensure a continuum of treatment along migratory routes? How to deliver care where doctor and nurses have fled or are being attacked?

In non-humanitarian, stable settings, the management of NCDs has a strong focus on preventive activities. However, in conflict-affected contexts, and during humanitarian crises, it is not feasible to carry out traditional prevention programs. In addition, screening programs are not appropriate, nor would it be responsible, as often access and continuum of care cannot be ensured.

Addressing the global burden of NCDs is a challenging task requiring solid and sustained health interventions in fragile settings and protracted crises. Moreover, no single agency, or government can do this alone. An effective multi-disciplinary and multi-stakeholder approach, coupled with strong leadership is required.

NCDs in ICRC field operations

The International Committee of the Red Cross (ICRC) is an independent, impartial and neutral organization providing assistance and protection to populations affected by armed conflict and violence in more than 80 countries around the world[6]. It is estimated that more than 10% of the adult population[7] living in at least half of the countries where the ICRC conducts its main operations are affected by diabetes[8]. Furthermore, diabetes and vascular causes account for 15 and 40% of amputations in some of ICRC's Physical Rehabilitation Centres (PRP)[9].

1 NCD advisor, ICRC

2 Head of Health. ICRC

3 https://www.who.int/emergencies/ten-threats-to-global-health-in-2019

4 UNHCR annual Global Trends report 2017

5 Hayman KG, Sharma D, Wardlow RD, Singh S. Burden of cardiovascular morbidity and mortality following humanitarian emergencies: a systematic literature review. Prehosp Disaster Med. 2015;30:80-8.

6 https://www.icrc.org/en/doc/who-we-are/mandate/overview-icrc-mandate-mission.htm

7 Defined as persons over 18 years of age

8 Aebischer Perone, S. Martinez E et al. Non-communicable diseases in humanitarian settings: ten essential questions Conflict and Health (2017) 11:17 DOI 10.1186/s13031-017-0119-8

9 15% in Niger and 40% in Syria

Patient Case Studies: Niger, Syria and Lebanon

Niger

In Niger, the prevalence of diabetes is estimated to be 4.1% (4.5% males and 3.7% females) with poor availability of medicines, basic technologies and procedures in the public health sector[10]. Insulin is available only in hospitals and private clinics and covers only 35% of estimated needs (with only 7-8% of needs covered at primary health care –PHC- level). In addition, essential oral antidiabetic drugs are available in less than 20% of health facilities[11]. A survey using data[12] from diabetic patients published in 2010 highlighted that 52.2% of patients were treated by traditional healers before admission and that 14% had a diabetic foot problem, for which an amputation was proposed for half of them.[13]

In the physical rehabilitation (PRP) centre, supported by the ICRC since 2012, currently 37% of the beneficiaries are amputees. While in this context most of the patients have trauma-related amputations, 15.8% are amputated due to a non-communicable disease (4% diabetes, 5.7% cancer and 6% cardiovascular)[14].

Issa practising the use of her prosthetic leg at the ICRC's PRP centre in Niger

Issa is a 50-year-old woman diagnosed with diabetes 17 years ago. She reports to have been in treatment and regular follow-up by the National Hospital of Niamey when a wound appeared on one leg. However, she did not go to the hospital to get her wound treated but consulted a traditional healer. She did not receive any information about skin care and feets checks from the hospital although she knew about the risks of having a wound and being diabetic. After following traditional treatment, she was an in-patient in the hospital for two months to try to save her leg which was then amputated. She was fitted with a prosthesis 3 months ago in the rehabilitation service supported by the ICRC in the hospital. Issa indicates she is happy now as she can carry out her household chores, go to the market and undertak her normal activities. She wears the prosthesis the whole day. She continues her medical follow-up for diabetes at the National Hospital of Niamey.

10 WHO, Diabetes country profiles, 2016

11 Beran D. Accès aux soins et traitements pour le diabète en Afrique: défis et opportunités. Médecine et Santé tropicales, 2018 ;28 :351-354

12 with data collected in the Hospital of Niamey between 2001 and 2003

13 Sani R. et al. Le pied diabétique : aspects épidémiologiques, cliniques et thérapeutiques à l'hôpital national de Niamey A propos de 90 cas. MEDECINE D'AFRIQUE NOIRE, vol. 57, n° 3, 2010, pages 172-176, 13 réf., ISSN 0465-4668, SEN

14 PRP center data ICRC, dec 2018

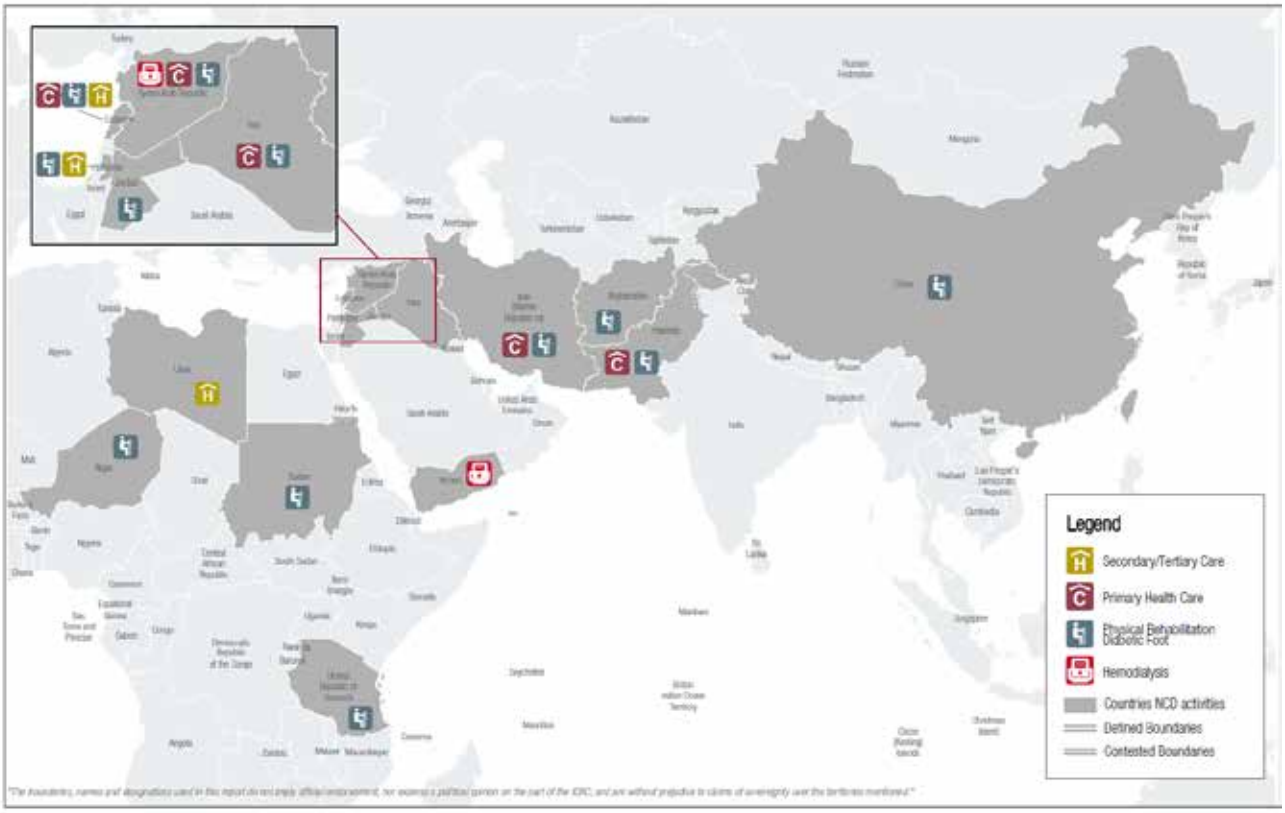
Mamane's stump assessment at ICRC's PRP Center

Mamane is a 56 years old man who was diagnosed with diabetes following a consultation at the National Hospital of Zinder for a small foot ulcer in 2017. Regular diabetes treatment and wound care were difficult as he was a truck driver travelling long distances. Three months later he was amputated. After 6 months he was fitted with a prosthesis in Niamey (at the ICRC's PRP center).

He is now treated with oral diabetes medicines and has a regular quarterly check-up at a private clinic. He walks independently but cannot return to his work as a truck driver and is unemployed now.

Data from the PRP centre confirms that diabetic patients are diagnosed late and amputated at a relatively young age15, impacting not only their health but also their employment status and opportunities.

15 Compared to the average age of amputation of 67.5 years in Scottland. Prosthet Orthot Int. 2017 Feb;41(1):19-25. doi: 10.1177/0309364616628341. Epub 2016 Jul 9.



Countries where the ICRC has health programs addressing NCDs

Syria and Lebanon

In Syria, the prevalence of Diabetes Mellitus in adults is estimated to be at 12%[16]. Of the 150'000 diabetic patients registered in the Ministry of Health (MoH) centres, 40'000 (26.6%) are reported as needing insulin treatment by the MoH. The World Health Organisation (WHO) documented critical shortages of insulin in Syria since March 2016[17] and the ICRC identified proper management of diabetes as a key health priority country-wide[18]. It is estimated that about 40% of amputees in Syria are patients affected by a NCD and facing significant challenges to access comprehensive and continuous care.

In Lebanon NCDs are estimated to account for 91% of the total number of deaths[19]. In addition, Syrian refugees in Lebanon have a higher number of complications due to their disrupted access to care during the Syrian conflict. Among the amputees receiving care at ICRC-supported PRP centres in Lebanon, 19% have a chronic condition, mostly diabetes. As a response, the ICRC has included the provision of NCD care for both refugees and vulnerable host communities as a priority within its programming[20].

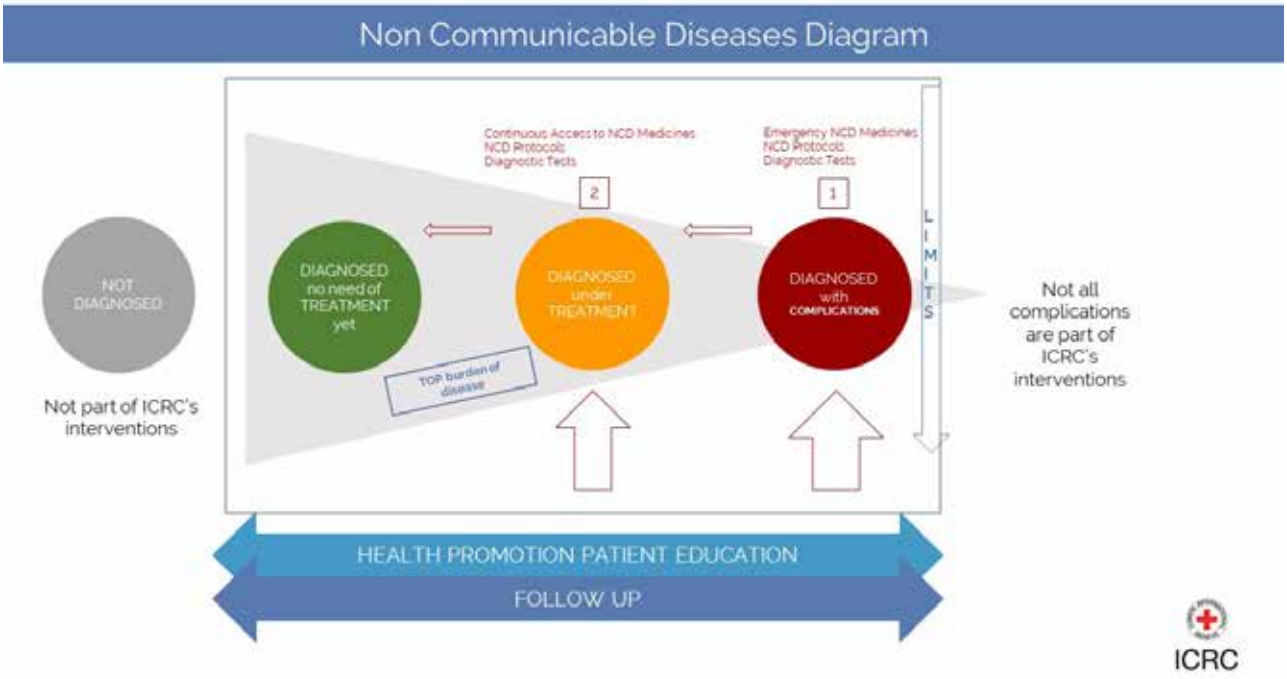
16 World Health Organization 2016: Syrian Arab Republic Diabetes Country Profile 2016 (accessible at http://www.who.int/diabetes/country-profiles/syr_en.pdf?ua=1)

17 http://www.who.int/features/2016/diabetes-patients-syria/en/ WHO helps diabetes patients in Syria, March 2016

18 ICRC project document Non communicable diseases management in Syria, Dec. 2017

19 World Health Organization 2016: Lebanon Country Profile 2016 (accessible at https://www.who.int/nmh/countries/lbn_en.pdf?ua=1)

20 Primary Health Care strategy 2018-2020 in Lebanon, May 2018



ICRC's framework on NCD management

ICRC's framework to respond to NCD needs

The ICRC Health Strategy[21] highlights the need to develop a coherent and innovative approach to managing NCDs. However, considering the challenges in humanitarian settings, the organisation focuses on addressing those NCDs with high prevalence and severe complications if left un-treated[22] [23].

Importantly, ICRC's interventions do not include screening and state clear parameters for the management of complications and referrals of patients. Interventions at tertiary level (e.g. haemodialysis) are generally not designed in contexts with significant levels of unmet primary and secondary healthcare needs as this is not compliant with ICRC's public health approach (the dialysis cost for one patient could be equivalent to the cost for monitoring blood sugar for all diabetic patients in the same setting). In alignment with other humanitarian actors and UN agencies, the priority objective is to avoid and/or delay complications[24].

The basic principles of ICRC interventions for NCDs are 1) **patient-centred care**, 2) **continuum of care**, 3) **integrated approach**, and 4) **sustainability** of the response through **partnerships** and **advocacy**.

Patient-centred care – delivery of NCD services

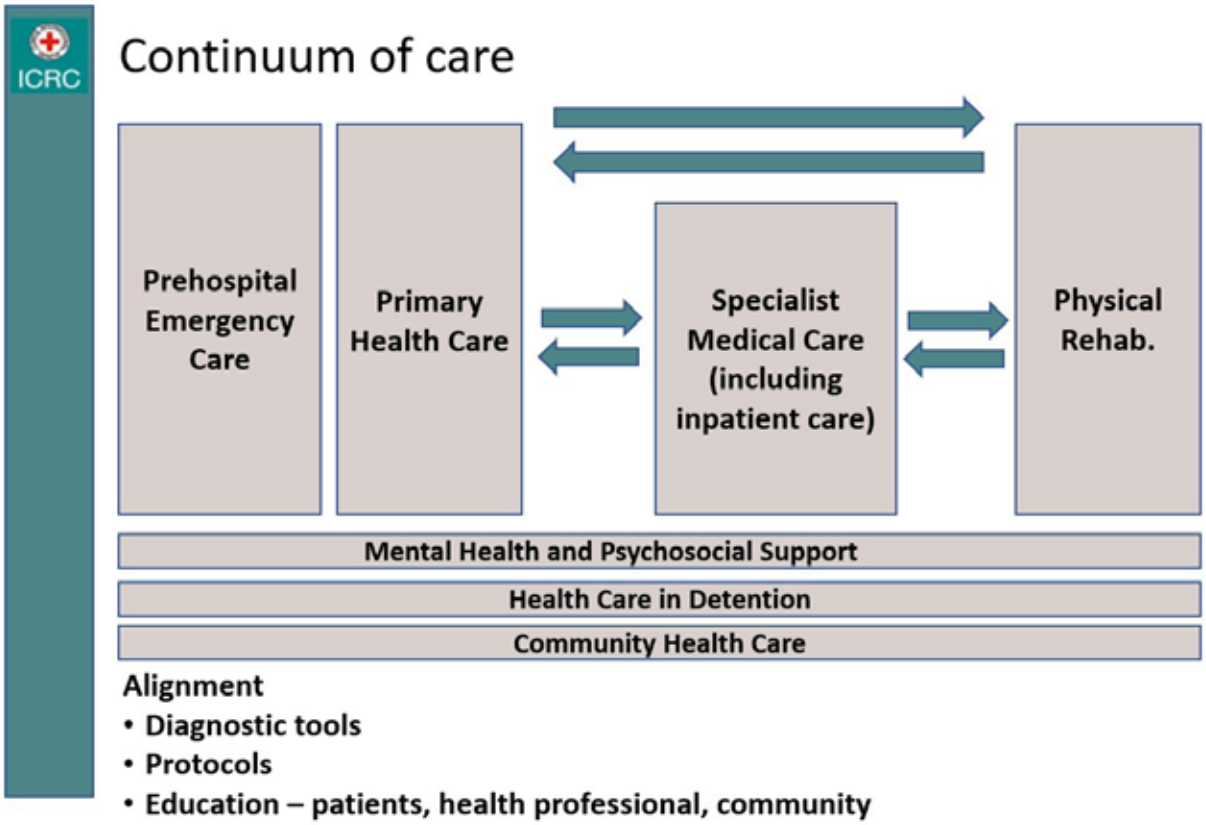
In each context, health activities delivered by the ICRC are tailored to the needs and the identified gaps in care. As a result, instead of having a "kit approach" (i.e. Interagency Health Kit -IEHK), each NCD is addressed and managed with a "bundled approach" that includes the provision of required essential medicines, diagnostic tools and devices.

21 https://www.icrc.org/en/publication/4203-icrc-strategy-2015-2018-adopted-icrc-assembly-18-june-2014

22 Cardiovascular diseases with focus on hypertension, diabetes, asthma, COPD, mental health within its mental health and psychosocial programmes

23 Non-communicable diseases (NCDs) in armed conflict: the ICRC perspective, 2017

24 Informal Inter-Agency Group on NCDs in Humanitarian Settings, meeting 24 Jan 2019



During an initial consultation, the health care worker provides urgent care to his/her patients with standard essential medicines and supplies to prevent complications for a period of time depending on individual characteristics (e.g. 1-3 months for individuals on migratory routes or in areas with difficult access). During clinical follow-up, attention is given to each individual based on his/her circumstances and actions are adapted accordingly (e.g. additional supplies, referral to tertiary care – if existing). Emphasis is placed on empowerment of patients in relation to self-management, prevention of complications and adherence to treatment. Patient empowerment and buy-in are particularly important when managing mobile populations (i.e. refugees, displaced persons) that find themselves seeking care from different providers[25]. The ICRC collaborates with local health authorities and specialized centres to elaborate, review and/or up-date culturally appropriate self-management educational materials that are approved by health authorities for use in its centres.

25 Operational guidelines on NCD management in humanitarian settings, ICRC adapted version 2019

Continuum of care- integrated approach

The ICRC defines Continuum of Care in its health interventions as "access to comprehensive services and interventions that address the health needs and the well-being of a person, from the identification of a health condition until the recovery of a functional state consistent within the context"[26]. Considering that NCDs are chronic by nature, the management of NCDs is integrated into existing health services including the identification/establishment of referral mechanisms and the internal coordination of care for patients between different health services (i.e. from pre-hospital care, to PHC, Hospital, Health Care in Detention and Physical Rehabilitation, including Mental Health and Psychosocial support).

Any changes in the pathways along the continuum of care are monitored by the ICRC. Supply chain analyses and interventions are carried out as needed. For example, this includes the mobilization of key stakeholders if sanctions hinder essential supply imports, as well as the deployment of contingency stocks to

26 ICRC definition of Continuum of Care 2019

key facilities[27]. Pre-defined indicators are used for monitoring and adjustment of health activities as well as for reporting and accountability purposes.
As NCDs management goes beyond the provision of health services, the "continuum of care" also foresees an integrated approach with other relevant sectors of ICRC's field operations such as economic security, water and habitat or protection. Moreover, as communities are often better reached through volunteers, the ICRC collaborates with local National Societies of the Red Cross or Red Crescent and provides training to enhance education outcomes at community level[28].

Sustainability of the response: partnerships and advocacy

The needs of patients affected by NCDs evolve over time and may span from prevention and stabilisation of the condition to the management of complications and palliative care. Therefore, to ensure sustainability of services during armed conflict and to strengthen the capacity of health systems to provide adequate services, the ICRC actively engages and coordinates its activities with health authorities and other actors (WHO, NGOs, National Societies). While most of the ICRC's NCD health programmes focus on the PHC level (see map), health interventions may, in exceptional cases, target the tertiary level based on needs and in agreement with health authorities (e.g. in Libya, where hospitals are the main facilities providing NCD care, the ICRC provides insulin and diagnostic devices).

Over the past few years, the ICRC has also been exploring and developing collaborations and partnerships with key actors from the humanitarian, academic and private sectors in the following areas:

- Training and capacity building of staff working in ICRC's supported health facilities on NCD management (e.g. support by Ministry of Health to the training of medical personnel by the health authorities in Syria and Pakistan)
- Sharing and adapting of existing tools, guidelines and protocols to address NCDs in contexts affected by armed conflict and other situation of violence (e.g. development of guidance for the management of diabetic foot - the "offloading guidelines"- in collaboration with specialists from Geneva university hospitals and D-foot),
- Mobilizing others to improve access to health care for people with NCDs in armed conflict and other situation of violence (e.g. Health Care in Danger –HCiD-29 interventions for the maintenance of supply chain and to ensure access of patients to treatment, and "humanitarian" pricing of insulin with the ICRC playing a "neutral intermediary" role between Ministries of Health and pharmaceutical companies as seen in Yemen).
- Participating in inter-agency coordination and technical groups on NCD management (e.g. Informal Inter-Agency Group on NCDs in Humanitarian Settings, chaired by UNHCR and with the participation of MSF, WHO, IFRC, Primary Care International, University Hospitals of Geneva, IRC, HelpAge).
- Identifying and driving best practices in humanitarian settings (e.g. partnership with the Danish Red Cross, Novo Nordisk and the London School of Hygiene and Tropical Medicine to explore innovative approaches and models for cross-sectoral and multi-stakeholder collaboration at field level).
- Exploring the feasibility to develop a collective impact model with multiple stakeholders across sectors to address the challenges of NCD management in humanitarian crises at a wider scale.

Conclusion

Managing NCDs is challenging and more so in humanitarian settings. As no single actor is able to address the significant volume of needs alone, multidisciplinary, multi-stakeholder and collaborative approaches are required. Moreover, responding to the needs of patients with chronic conditions, requires approaches that extend beyond health responses and single-point-in-time interventions.

27 Operational guidelines on NCD management in humanitarian settings, ICRC adapted version 2019

28 In Pakistan for example, the ICRC supports training and monthly meetings of Lady Health Workers (LHWs) to provide home visits and health education in their communities.

29 HCiD is a Red Cross and Red Crescent Movement initiative that aims to make access to health care and its delivery safer during armed conflict and other emergencies. www.healthcareindanger.org

Part 2:
The researchers and NCDs in Emergencies

The role of academic institutions in addressing the global challenge of Non-communicable diseases

Dr. David Beran[1] and Dr. François Chappuis[2]

The Division of Tropical and Humanitarian Medicine (DTHM) at the Geneva University Hospitals (HUG) and Faculty of Medicine at the University of Geneva (UNIGE) established in 2007 is a rare example of a division within public institutions dedicated to improving health globally. Included in the HUG Strategic Plan is an actual area of action on the hospital's role in humanitarian action[3] as well as the UNIGE's values of "international perspective, respect for human rights, sensitivity to diverse cultures, ethics, humanism, and the scientific research tradition."[4] These guiding principles at institutional levels are translated into the work and ethos of the DTHM. The DTHM comprises 25 professionals including medical doctors, nurses, a public health specialist, health economist and project managers. Currently the DTHM has ongoing projects in close to 20 countries.

The building blocks of the DTHM

The activities of the DTHM can be divided into four pillars. Firstly, travel medicine clinic focusing on the local population's needs prior to and after travel abroad to "at risk" countries for different communicable diseases. This anchors the DTHM firmly within the Geneva and HUG community as a reference centre for various vaccine related and other communicable diseases.

The second area of expertise is development projects with the area of focus being on human resource development. For example, the DTHM is currently working on two Swiss Agency for Development and Cooperation (SDC) projects aiming at strengthening medical and nursing resources in Bosnia Herzegovina and Kyrgyzstan. The project in Kyrgyzstan initiated in 2007 is focused on medical education reforms and the DTHM coordinates the technical support provided by both the HUG and UNIGE. For 20 years the DTHM and the Faculty of Medicine of the UNIGE have been involved in supporting the primary care reform in Bosnia-Herzegovina. The current phase of the project focuses on strengthening nursing with three components: community nursing, basic nurse training and continuous professional development. Another example of a project is a training program in Togo in collaboration with the Togolese Association of Nurses with the aim of continued professional development of nurses. This project coordinated by the DTHM includes experts from the HUG and outside to address different training needs of Togolese nurses. The project has also included two study visits by Togolese colleagues to the HUG and the development of a decentralised consultation for chronic diseases.

Ultrasound/Radiology course at Gorkha District Hospital Nepal
Photo: Service de Médecine Tropicale et Humanitaire, Hôpitaux Universitaires de Genève

Colleagues within the DTHM also have multi-national research projects in the areas of Non-communicable (NCD) and Neglected Tropical (NTD) diseases. One of these, the COmmunity HEalth System InnovatiON (COHESION) Project funded by the Swiss National Science Foundation (SNSF) and SDC under the r4d programme, focused on developing innovative approaches to address chronic disease management at Primary Health Care[5]. Other projects include the Addressing the Challenge and Constraints of Insulin Sources and Supply (ACCISS) looking at the issue of access to insulin[6], and the SNSF-funded SNAKE-BYTE study that collect data from the community to the national level to improve

1 Division of Tropical and Humanitarian Medicine, Geneva University Hospitals and Faculty of Medicine, University of Geneva

2 Division of Tropical and Humanitarian Medicine, Geneva University Hospitals and Faculty of Medicine, University of Geneva

3 https://www.hug-ge.ch/sites/interhug/files/documents/plan-strategique.pdf

4 http://www.unige.ch/rectorat/static/2016/Plan_Strat_2015_english.pdf

5 https://cohesionproject.info

6 http://haiweb.org/what-we-do/acciss/

our understanding of snakebite burden and existing health services to tackle it in both human and animal sectors in Cameroon and Nepal.

NTDs represent a disease area where the DTHM can be viewed as an international leader in terms of research. Long-term collaborations in this area with the B.P. Koirala Institute of Health Sciences (BPKIHS) in Dharan, Nepal, have led to a variety of spin-off projects such as exchange programs of students (Geneva to Nepal) and medical doctors (Nepal to Geneva) or extension of the research partnerships to other medical fields. Many of these research projects have also been in collaboration with *Médecins Sans Frontières* (MSF) or the Institute of Tropical Medicine, Antwerp, for example improving diagnostic algorithms for individuals with neurological disorders, persistent fever or digestive symptoms in several NTD endemic countries.

In the area of NCDs the DTHM has been involved in a mental health project in Bosnia-Herzegovina since 2013. This project focuses on quality improvement, capacity building, occupational health, prevention and health promotion, continuing training of health professionals and decreasing stigma and discrimination of patients. Similar to its involvement in NTDs, the DTHM has developed its expertise in a variety of areas with regards to access to medicines and health systems for the management of NCDs.

Finally, the DTHM provides technical support to a variety of humanitarian actors by serving as a resource or link to other expertise within the HUG or UNIGE. For this area of work the DTHM acts as a coordinator of a pool of experts that can be called upon by different humanitarian actors during complex emergencies (e.g. earthquake in Haiti, typhoon in the Philippines), enabling the temporary recruitment of HUG collaborators with governmental (e.g. humanitarian aid of the SDC) or non-governmental (e.g. ICRC and MSF) organizations, providing medical expertise in NTD and NCD in humanitarian crisis settings, e.g. sleeping sickness for MSF or development of operational guidelines for NCD management for UNHCR. The DTHM was actively involved in the recent Ebola crisis with both on the ground project implementing local production of alcohol-based hand rub solution in Liberia and Guinea and directly providing care to returning expatriates or travellers. For the Ebola response the DTMH contributed to the shaping of the response of the Swiss authorities to this crisis. Related to the ongoing Middle East humanitarian crisis, the DTHM manages a project with the government in Jordan to develop their ambulance services.

These four components complement each other in terms of bringing different expertise together from within the DTHM as well as the wider institutions where it is based.

NCDs as a core competency

Given their increasing global impact the DTMH has built on its core competencies and existing partnerships to develop a specific area of work in NCDs. This expertise spans many of the building blocks of a health system proposed by the World Health Organization (WHO).[7] Addressing all of these elements are necessary to achieve Universal Health Coverage (UHC) a key component of Sustainable Development Goals (SDG). As mentioned previously the DTMH is active in the area of human resource development. In Togo for nurses and in Nicaragua for doctors DTMH colleagues and staff from the HUG have been involved in NCD specific training. In Nicaragua this training focused on Type 1 diabetes in children, in partnership with the Ministry of Health and diabetes associations with the aim to develop competencies outside the capital city. The focus of this training was also inter-disciplinary, bringing nurses and doctors together from both Nicaragua and Switzerland.

For access to medicines the ACCISS Project is a unique approach to mapping and understanding the global factors impacting access to insulin. This global study in its first phase provided a first of its kind overview of the wide-ranging challenges of access to insulin, including pricing, regulatory, intellectual property and market dynamics. Now in its second phase, this project has ongoing pilot work in Kyrgyzstan, Mali and Peru as well as developing some work in Tanzania.

Service delivery for NCDs is a key component and again the DTMH addresses a variety of issues important to improve the care received by people. This includes developing the role of nurses for example in mental health and end of life care in Bosnia Herzegovina. For this the expertise of the HUG and other Swiss partners enabled lessons to be shared with col-

7 https://www.who.int/whr/2000/en/

Nurse showing how to use Hand-Rub Solution in Guinea
Photo: Service de Médecine Tropicale et Humanitaire, Hôpitaux Universitaires de Genève

leagues increasing the role and reach of nurses. From a research perspective the COHESION project aimed to change the delivery of chronic disease care in Mozambique, Nepal and Peru by developing innovative interventions focusing on health system responsiveness. Responsiveness aims at improving the patient "experience of care" by addressing issues of communication, dignity, autonomy and prompt attention.

With regards to the other three components of the WHO's health system building blocks, namely, Governance, Financing and Information, although DTMH projects do not directly focus on these, all its projects build on these components through close interactions and collaborations with local and national authorities, discussions on UHC and health financing (e.g. via the ACCISS project) and research contributing to the overall data available on NCDs and related factors in these contexts.

Partnerships a key component

Given the focus on global activities partnerships are a key component of the DTMH. This also contributes to SDG 17 which is focused on partnerships. These partnerships are both with internal and external organisations, such as different Divisions within the HUG or UNIGE, as well as other NGOs, academic institutions and other organisations. The 11 principles proposed by the Swiss Commission for Research Partnerships with Developing Countries (KFPE)[8] provide the DTMH guiding principles for how to establish and nurture existing partnerships.

8 https://naturalsciences.ch/organisations/kfpe/11_principles_7_questions

Long-standing partnerships with Mali, Nepal and Peru are examples of the DTMH's view on partnerships. In Mali links between the DTMH and an NGO active in the area of diabetes were established close to 15 years ago. These links remain through formal projects, e.g. ACCISS, as well as more informal links through technical support, being part of the same networks as well DTMH staff playing a role on the board of the NGO. In Nepal the relationship was established over 20 years ago and although initially focused on NTDs has evolved to include NCDs. Nepal has also been a location where through the initial links established via the DTMH additional links with the HUG and UNIGE have been developed, e.g. telemedicine, child development, student internships and study tours for Nepali and Swiss colleagues. The Peruvian collaboration is also built on strong foundations with research collaboration on NCDs, Peru being involved in both the COHESION and ACCISS projects, but also further links being developed with a Peruvian PhD who received a Swiss Government Excellence Scholarship being based at the DTMH. This link with Peru has also initiated a new area of collaboration through a project funded through ESTHER Switzerland looking at health systems responses to HIV and Sexually transmitted diseases in indigenous populations in the Peruvian Amazon. Another long-standing partnership is with MSF with staff from the DTMH having worked or still currently working with MSF. This link has been via research, operational and technical support.

What role for academia in NCDs

As an academic department the DTMH contributes to the NCD agenda through research, teaching and engagement activities. Research and the expertise gained abroad allows this to be shared with students in Geneva and thus provides a link between the global and local. In addition, competencies developed abroad by DTMH, HUG and UNIGE staff is beneficial to personal and professional development. Expertise in Chagas disease (an NTD also known as American trypanosomiasis, endemic in many Latin American countries with chronic cardiac complications) was beneficial in addressing this challenge in migrant populations in Switzerland. Methodological and theoretical knowledge developed in health systems and chronic disease management in low income settings enabled the DTMH to collaborate with colleagues from the Department of Primary Care on a research project focusing on the challenge of deliv-

ering chronic care for Primary Care doctors in Geneva.

The DTMH's teaching role also means that staff need to keep abreast of the latest developments, which in turn allows for the development of new research. Research then feeds engagement through DTMH staff's expertise and knowledge in the field. For example, being involved with WHO in different expert meetings. This allows for engagement activities at the highest level in the areas of NTDs, NCDs and access to medicines. These links and engagement activities at a global level then result in stronger links and networks at country level through sharing networks and experiences. Work in Kyrgyzstan on diabetes in 2009 allowed for strong links to be developed with Kyrgyz partners and the WHO European Region. This expertise was of benefit to the medical education reform project as well as serving as the basis for ACCISS including Kyrgyzstan as a pilot country. This work further strengthened the link between the DTMH and WHO Europe.

Besides these elements of research, teaching and engagement the ethos of the DTMH also highlights the role of academics as an independent voice. NCDs are complex diseases requiring multiple stakeholders to be involved including the private sector. With experience from MSF as well as "academic" independence the DTMH can also serve as an advocate for certain issues around NCDs, for example access to medicines. This independent voice in the NCD space is key given the lack of current civil society mobilisation and the strong position taken by the private sector. Thus, the role of academia goes beyond providing evidence to one that uses the evidence to try to change the status quo. For this the DTMH can build on its existing networks as well as experience from different areas, e.g. NCDs learning from NTDs in how to address the issue of access to medicines as well as engage in meaningful collaborations with the private sector.

The global nature of health determinants and consequences means that academic institutions need to be open to the outside world. Through its work, ethos and collaborators the DTMH is the global gateway for the HUG and UNIGE. This allows for mutual learning between Swiss and international colleagues for the benefit of health in Geneva, Switzerland and globally.

The COHESION project: Addressing the complexity of Non-communicable diseases in low- and middle-income countries

David Beran[1], Albertino Damasceno[2], Nilambar Jha[3], J. Jaime Miranda[4], Claire Somerville[5] and L. Suzanne Suggs[6]

Introduction

Non-communicable diseases (NCD) are complex diseases rooted in socio-cultural factors with increases in prevalence driven by a wide range of environmental elements. The World Health Organization (WHO), through the development its Global Action Plan on NCDs, as well as the United Nations (UN), holding different High-Level Meetings on the subject, have laid the foundations on the global response to addressing these health challenges. Some have argued that the focus has been primarily on the common risk factors, namely, tobacco use, excessive use of alcohol, unhealthy diet and insufficient physical activity, versus health system responses for those already with NCDs. In parallel it has been implied that weaknesses in health systems and their inability to address the health needs of vulnerable populations were barriers to achieving the Millennium Development Goals (MDGs) and these problems persist in the Sustainable Development Goal (SDG) era.

The health system response to NCDs is intimately linked with other global health agenda elements, including Primary Health Care (PHC) and Universal Health Coverage (UHC). PHC and the celebration of the 40th Anniversary of the Alma-Ata Declaration on PHC have reinvigorated debates about the role of PHC in addressing the health needs of populations. In the Alma-Ata declaration, PHC was defined as "essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community"[7]. At the time of the declaration, PHC aimed to address maternal and child health as well as communicable diseases. This now needs to be adapted to responding to NCDs.

WHO states that PHC includes the objective of UHC, which aims to provide affordable, quality healthcare services to all people[8]. Three dimensions of UHC include: who is covered, what is included in the package of covered services (e.g. all care related to maternal health), and how much of the total cost is covered. UHC is included in the SDGs with the aim to achieve this milestone by 2030. Many low- and middle-income countries (LMIC), although aiming for UHC, face the gap in delivering services that populations need, especially for NCDs. To propose a health system response to NCDs there is the need to consider that currently, a minority of those in need of services access such services. For example, in Mozambique[9], where the prevalence of hypertension in adults is 33.1%, only 14.8% of these adults were aware that they had hypertension and of those aware only 51.9% received treatment. Of those receiving treatment, 40% were controlled. These data stress the importance of the need to educate the population about the existence of services and make services accessible (available and affordable) to people who need them.

So, to understand this complexity and offer a comprehensive response, the COmmunity HEalth System InnovatiON (COHESION) Project (www.cohesionproject.info) conducted formative research and co-created interventions. This was made possible through funding from the Swiss National Science

1 University of Geneva and Geneva University Hospitals, Geneva, Switzerland

2 Universidade Eduardo Mondlane, Maputo, Mozambique

3 B.P. Koirala Institute of Health Sciences, Dharan, Nepal

4 CRONICAS Centre of Excellence in Chronic Diseases, Universidad Peruana Cayetano Heredia, Lima, Peru

5 Gender Centre, Graduate Institute of International and Development Studies, Geneva, Switzerland

6 BeCHANGE Research Group, Institute of Public Communication, Università della Svizzera italiana, Lugano, and Swiss School of Public Heath+, Switzerland

7 WHO and UNICEF. Declaration of Alma-Ata. . International Conference on Primary Health Care. Alma-Ata; 1978.

8 Beran D, Perel P, Miranda JJ. Forty years since Alma-Ata: do we need a new model for Noncommunicable diseases? Journal of Global Health 2019 (in press).

9 Damasceno A, Azevedo A, Silva-Matos C, Prista A, Diogo D, Lunet N. Hypertension prevalence, awareness, treatment, and control in Mozambique: urban/rural gap during epidemiological transition. Hypertension 2009; 54(1): 77-83.

Dr. Suman Singh, COHESION Team Nepal presenting finding from formative work to communities
Photo: COHESION Project

Foundation (SNSF) and the Swiss Agency for Development and Cooperation (SDC) under the Swiss Program for Research on Global Issues for Development.

COHESION's Focus and Approach

In many countries the lowest utilisation of health systems is by the poor as these services are not available or sensitive to their needs. LMICs are also facing an epidemiological transition from a burden of communicable diseases to NCDs as well as a shift in the need to manage acute versus chronic diseases. For this purpose, the COHESION Project used both NCDs and selected Neglected Tropical Diseases (NTD) with chronic sequalae as tracer conditions. By using NCDs and NTDs as tracer conditions, the aim of the COHESION Project is to ensure that responses developed do not increase competing demands on the health system, but rather enable the NCD and NTD interventions developed to benefit other conditions and the health system as a whole. It is also important to see how PHC fits into the overall health system and community in providing the first point of entry for care, a link to higher levels of the health system or other services to improve health as well as a coordinating role with a focus on the individual.

NCDs and NTDs have both been neglected on the global agenda despite the impact they have on poverty and development in comparison to HIV/AIDS, tuberculosis, or malaria. NCDs and NTDs also impact social aspects for the individual and their families, such as stigma and the role that family members, especially women and children, play as caregivers. Women are particularly vulnerable to NCDs given the social, gender and economic inequalities that create inequities in access to health services.

The COHESION project bridges the MDGs, where both NCDs and NTDs were not included, to the SDGs. It addresses the issue of poverty (SDG Goal 1) by tackling both NCDs and NTDs as both diseases of poverty and causes of poverty. It aimed to improve health and well-being looking at barriers to UHC (SDG Goal 3). By integrating gender roles in care, barriers to care and also having gender appropriate interventions developed as part of this project it addressed the issue of gender (SDG Goal 5). By comparing two poor areas in three LMICs, the project highlighted inequalities within and between countries and link these issues back to PHC in developing interventions at policy, health system, and community levels (SDG Goal 10). As both NCDs and NTDs have their determinants in the environments where people live some of the interventions at policy, health system and community levels included elements in the proposed SDG Goal 11. Finally, as COHESION is a global partnership between 4 countries (Mozambique, Nepal, Peru, and Switzerland) and 7 institutions, it has developed North-South and South-South collaboration and capacity building (SDG Goal 17).

In line with SDG 17 the COHESION Team also invested time in developing the partnerships. The work done by COHESION used the 11 principles proposed by the Swiss Commission for Research Partnerships with Developing Countries (KFPE) framework to guide the modus operandi of the actual partnership in line with the following core values and guiding principles of mutual learning; focus on the most vulnerable; health systems strengthening; and robust design and evaluation of complex interventions.

Research as a key component

In Mozambique, Nepal, and Peru, a rural and urban or peri-urban area were selected. The NCDs that the COHESION project focused on were diabetes and hypertension. This selection was based on the high burden of these conditions and the importance of PHC and community in disease management. The NTDs selected in this project, schistosomiasis, Chagas, and leprosy, highlight distinctive elements of the health system and link back to the use of these as tracer conditions for health system capacity to man-

data collection in Nepal
Photo: COHESION Project

age NCDs and NTDs. Schistosomiasis was chosen in Mozambique as it is one of the 10 high burden countries in sub-Saharan Africa[10]. This underscores issues of primary prevention as the main interventions are environmental (water and sanitation) and the mass administration of medicines for preventive purposes. In contrast Chagas disease, which is endemic to Peru, is a good tracer for health system management issues. Diagnosis in acute or latent chronic phase is an opportunity to detect and successfully treat patients early, which if not successful results in the management of long-term complications[10]. Finally, the focus on leprosy in Nepal allows the assessment of early detection, clinical management, and management of complications such as wound care, surgery and rehabilitation[10]. Leprosy is also a highly stigmatised disease. Nepal is one of the 14 countries globally reporting more than a 1,000 new cases of leprosy per year, with 3,225 new cases in 2013[10].

These characteristics of the selected NTDs complement the responses for the NCDs in terms of prevention of hypertension and diabetes using lifestyle interventions, diagnosis and treatment within the health system of conditions (Chagas, diabetes and hypertension) which are "silent" in their early stages as well as more "technical" aspects, for example diabetes foot care and its link to leprosy management[11].

10 WHO. Investing to overcome the global impact of neglected tropical diseases: third WHO report on neglected diseases 2015. Geneva: World Health Organization, 2015.

11 Boulton AJ. Diabetic foot--what can we learn from leprosy? Legacy of Dr Paul W. Brand. Diabetes Metab Res Rev 2012; 28 Suppl 1: 3-7.

These commonalities between diseases were used to plan scalable, sustainable, gender and context appropriate interventions, as well as means to effectively communicate these to different audiences.

To gain a comprehensive understanding of the context, the project comprised three methodological approaches. First, a policy analysis was carried out at global and national levels for NCDs and NTDs so to understand the overall policy environment as well as how and if these policies were implemented in the three countries. Second, a health system assessment based on Rapid Assessment Protocols (RAP), which have been used extensively to assess services for CDs, including malaria, TB and Sexually Transmitted Diseases, for the purpose of developing interventions, was conducted by gathering data at national policy level, regional level, facilities, health professional, and individual levels. To further investigate the challenges of the double NCD/NTD burden, including the burden on caregivers, in depth interviews using a convenience sample of households where at least one person had an NCD or NTD or both. In Nepal, a household survey was also carried out.

What did we learn?

The global policy analysis provided a contextualized understanding of NCD and NTD policies, including identification of key actors and stakeholders who played key roles in shaping the socio-political and economic priorities of the health agenda. Overall, NTDs are viewed as diseases of the poor and as an impediment to development, with globally agreed

recommendations including the provision of medicines and/or water and sanitation interventions to eliminate or eradicate priority NTDs. For NCDs, policies focus more on mitigating the impact of this "new" health challenge in low and middle-income countries. Although a variety of global meetings and declarations for both NTDs and NCDs, those for NTDs seem to have generated more traction.

The national policy analyses conducted in Mozambique, Nepal, and Peru found that progress at global level has not effectively translated into implemented policies nationally. NCD and NTD policies exist in each country (except for an NTD strategy in Peru), and are aligned with WHO recommendations. However, none of the three countries have allocated the necessary resources (financial, human, material) to implement the policies into a response at PHC level. For Mozambique, there is a clear disparity in advances in policy development, policy implementation and context-specific practice between HIV, TB and Malaria if compared to NTDs and NCDs. In Nepal, the leprosy policy, with its aim of elimination, has shown success. However, "national" elimination targets are threatened due to diminishing interest in leprosy. The main challenge in Peru is with regards to policy translation and implementation from national to regional levels.

At the health system level, difficulties related to access to PHC facilities were reported in all three countries. An overall lack of skilled staff, required diagnostic tools and consumables, shortages of essential medicines, and low levels of knowledge of patients on the diseases they had was found. Even though essential NCD and NTD drugs are supposedly provided for free or at a very low price at public services in all countries, stock outs were frequently reported, forcing patients to buy medicines from private pharmacies or stop their treatment. An exception was found for leprosy treatment in Nepal, which was available and distributed at no cost. As for PHC staff, we found that medical doctors were frequently absent for a variety of reasons and most PHC staff, including doctors, nurses, and Community Health Workers, claimed not to be sufficiently trained to manage NCDs and NTDs.

In Mozambique, the focus of NCD care is still at secondary or tertiary level. For schistosomiasis, the response is focused on mass drug administration campaigns. In Nepal, services for diabetes and hypertension are poor at PHC. Attention to and activities for leprosy have decreased since Nepal reached elimination of leprosy in 2010. In Peru, PHC does not respond adequately and promptly to the care of NCDs and treats them mainly at secondary and tertiary levels. NCC is only managed at tertiary level, which sometimes implies travel to the capital city to receive treatment. Referral pathways are weak, with no coordination, except again for leprosy in Nepal where cases have to be notified and monitored at the district level. Overall access to higher levels of the health system results in high out of pocket payments. Late diagnosis is therefore a recurrent issue.

Prof. Johanna Schellnberg COHESION Advisor, Prof. Albertino Damasceno COHESION Team Mozambique Dr. Tavares Madede COHESION Team Mozambique, Dr. Varsha Manandhar COHESION Team Nepal, Dr. David Beran COHESION Team Switzerland speaking with Community Health Workers
Photo: COHESION Project

Required follow-up mechanisms for chronic conditions are not in place at PHC level in any of the three countries. Challenges prevail for counselling services on healthy lifestyles or education about self-management. In Peru, even when information on lifestyles and treatment for NCDs is provided at the PHC facility, people do not fully understand the instructions given by health personnel. In Nepal, adequate therapeutic patient education is available for leprosy affected patients, but only at specialized NGO clinics.

As for community health workers, who are in place in the three countries, those in Mozambique are mobilized only for HIV/malaria/tuberculosis and mother and child health related activities. In Nepal, volunteer female health workers as well as patient support groups are working for leprosy or disabled patients, but not involved in any NCD-related activity (although a recent study has described their use

in hypertension[12]). In Peru, community health workers focus on maternal and child health in the studied communities and low involvement was found for other conditions.

At the community level, community members, patients and caregivers confirmed the health information and health care gaps observed in the health system assessment. They reported difficulties in accessing PHC centres, frequent stock outs of medicines, absence of staff, and no basic diagnostic or counselling on self-management of diseases. As a result, affected people prefer to go to traditional healers, private pharmacies, or secondary or tertiary levels of care. Knowledge and practices related to diabetes and hypertension are poor in the three countries, particularly in rural areas compared to peri-urban areas. Community members frequently associate the two NCDs with sugar and stress. Explanations about their origins are inconsistent and combine biomedical with folk explanations, for example complications were often associated with "witchcraft" in Mozambique or "bad air" in Peru. As for NTDs, knowledge about leprosy is high in Nepal, likely as a result of repeated campaigns to reach elimination, except among the most at-risk populations, who still report strong and negative misconceptions. Many people in our study lacked trust in PHCs. Importantly, community members in rural areas in the three countries, although interviewed on the management of NCDs and NTDs, reported to be mainly preoccupied by basic material deprivation, access to water and sanitation, general and perceived limitations to access healthy diets, and lack of financial resources for general health needs.

Moving from Research to interventions: Co-creation

The results from the formative research were used to co-create interventions with stakeholders at every level. Co-creation, a process often used in social marketing and community-based participatory research, allows for solutions to be designed with the participation of people whom the interventions are aimed to help.[13 14 15 16 17 18 19] The COHESION project took on a multi-stakeholder co-creation approach including involvement from stakeholders at policy, health system, and community levels. Due to the mandate that interventions be sustainable and scalable, COHESION operated under the assumption that NCD and NTD health care services must be "people centred", appropriate to the context, as well as involve communities in defining and solving the health problems they face.

The co-creation process composed two interactions with each category of stakeholders (policy, health system, and community) where they the results from the formative research were presented and brainstorming of possible solutions to address the problems were organised[20]. To prioritize interventions suggested by the stakeholders, the COHESION teams used a predetermined set of criteria and removed proposals that were either not feasible, beyond the scope of the project, likely not scalable, beyond budgetary restraints, etc. This process resulted in a list of "possible interventions" which then needed further discussion and development. The criteria

12 Neupane D, McLachlan CS, Mishra SR, Kallestrup P. Understanding and Motivations of Female Community Health Volunteers About Blood Pressure Control: A Prerequisite for Developing Community-Based Hypertension Interventions in Nepal. Glob Heart 2017; 12(3): 227-32.

13 Lefebvre RC. Transformative social marketing: co-creating the social marketing discipline and brand. Journal of Social Marketing 2012; 2(2): 118-29.

14 Koster R, Baccar K, Lemelin RH. Moving from research ON, to research WITH and FOR Indigenous communities: A critical reflection on community-based participatory research. The Canadian Geographer / Le Géographe canadien 2012; 56(2): 195-210.

15 Desai D. Role of Relationship Management and Value Co-Creation in Social Marketing. Social Marketing Quarterly 2009; 15(4): 112-25.

16 Sanders E, Stappers, P.J. Co-creation and the new landscape of design. CoDesign: International Journal of CoCreation in Design and the Arts 2008; 4(1): 5-8.

17 Suggs LS, Rots G, Jacques J, et al. I'm Allergic to Stupid Decisions: An m-health campaign to reduce youth alcohol consumption. Cases in Public Health Communication & Marketing 2011; 5: 111-35.

18 Hills M, Mullett J. Community-Based Research: Creating Evidence-Based Practice for Health and Social Change. . Victoria, BC, Canada: Community Health Promotion Coalition, University of Victoria 2000.

19 Lang D, Wiek A, Bergmann M, et al. Transdisciplinary research in sustainability science: practice, principles, and challenges. Sustain Sci 2012; 7(1): 25-43.

20 Beran D, Lazo-Porras M, Cardenas MK, Chappuis F, Damasceno A, Jha N, Madede T, Lachat S, Perez Leon S, Aya Pastrana N, Pesantes MA, Singh SB, Sharma S, Somerville C, Suggs LS, Miranda JJ. Moving from formative research to co-creation of interventions: insights from a community health system project in Mozambique, Nepal and Peru. BMJ Glob Health. 2018, Nov 16;3(6):e001183.

used to select interventions included: all three stakeholder groups agreed they were a priority, if the project resources were sufficient to implement the intervention (human, financial, knowledge, etc.), and they could be sustained after the project ended and scaled up to other similar settings. Meetings were held in each country with all stakeholders where the list of eligible interventions were discussed. The process was repeated for community, health system, and policy stakeholders where each discussed problem to be addressed, possible intervention(s) to respond, ranking of these interventions, justification of its importance, and finally why was this intervention seen as a priority versus other interventions.

Health systems responsiveness

The challenge in deciding an intervention for health system response to NTDs and NCDs was that we aimed to address both the patients and the health system´s needs, as well as move away from a disease-oriented intervention into one that also addressed the human experience. The WHO Responsiveness Framework[21] proved to do just that as it suggests how well the health system interacts with the population and how to improve its response towards different diseases. It also points out a positive association between health outcomes and a responsive health system. Several of its elements resonate with the types of barriers that were identified during the formative research across the three countries: poor communication between users of health services and healthcare providers, long waiting times, and the perception that patient needs were not being heard and/or respected. It also overlapped with several of COHESION's principles: focus at PHC, people centered, involving the communities' participation, use of gender approach and consideration for the needs of the most vulnerable populations. It also fit the COHESION project in that improving care for chronic conditions could not be disease-specific, but rather tackle the shared problems the health systems face to treat various diseases, in particularly those affecting vulnerable populations and that require long-term care.

Conclusion

Through the Swiss Agency for Development and Cooperation (SDC), Switzerland is active in promoting health as a "global public good and a universal human right."[22] The Swiss strategy focuses on developing and implementing location-specific health promotion, prevention, care and rehabilitation activities. This aim is aligned with the aims of the COHESION Project which brought together a multi-level assessment of the context using tracer conditions and combined this with the development of interventions based on the formative research findings in collaboration with local stakeholders.

This innovative approach enabled an overall view of the context in which the interventions will be implemented, taking a multi-disciplinary approach and insisting on sustainability and scalability. By adopting a co-creation approach to move from research to intervention, COHESION researchers also avoided a paternalistic view of research needs and priorities into generating and guaranteeing jointly defined areas for interventions with key stakeholders, particularly the community level, which potentially ensures higher levels of uptake or adoption of the proposed interventions.

Our results contribute to the knowledge of NCDs and NTDs in three given contexts, by providing unique insight into the global and national policy environments, an in-depth analysis of the health system, and a clear understanding of the communities. This provides a vast understanding of the local context where the interventions will be implemented. Stakeholders have been involved along the way in defining and designing the interventions, which strengthened the relationships, fostered buy-in, and ultimately both the potential impact and sustainability of the interventions.

With the need to find responses to complex health needs, context specific responses and actively involve local partners in identifying and implementing solutions, the COHESION project offers a model that might be of use to others in addressing NCDs.

21 de Silva A. A Framework for measuring responsiveness. Geneva: World Health Organization, 2000.

22 SDC. SDC Health Policy. Berne: Swiss Agency for Development and Cooperation SDC, 2013.

Part 3:
The SDC and NCDs in Emergencies

The SDC contribution in shaping the country and global NCDs agenda

Erika Placella[1]

Non-communicable diseases (NCDs) are the leading cause of death globally, killing 41 million people each year, equivalent to 71% of all deaths globally. 15 million people die from NCDs between the ages of 30 and 69 years. Over 85% of these premature deaths occur in low- and middle-income countries (LMICs)[2].

Building the Case for Investment in Prevention and Control

Investing in NCDs prevention and control is key to achieving SDG target 3.4 (reducing premature mortality from NCDs by a third) and to progress towards realizing Universal Health Coverage (SDG target 3.8).

NCDs negatively impact on macroeconomic productivity, national incomes, health care budgets, and household income. Over the period 2011–2025, it is estimated that the cumulative global economic losses due to the four main NCDs (cardiovascular diseases, diabetes, cancer and chronic respiratory diseases) will surpass US$ 51 trillion. While the cost of inaction associated with the four major NCDs in LMICs alone is projected to be more than US$ 7 trillion between 2011 and 2025, the cost of action in these countries is estimated at US$ 170 billion in the same period[3].

The four main NCDs could be dramatically reduced and related costs contained, through efficient prevention and promotion of healthy behaviors and healthier living environments. The economic benefits of an investment strategy to prevent and control cardiovascular diseases in 20 countries with the highest NCD burden have recently been estimated, showing that benefit–cost ratios reach an average ratio of 5·6 for economic returns and a ratio of 10·9 if social returns are included[4]. In September 2018, WHO launched a new web portal which features country-specific information on the potential health gains and economic benefits of investing in a set of policies - the WHO Best Buys - which represent the greatest cost-benefit for tackling NCDs.

Although dominating the global burden of death and disability, NCDs attract less than 2% of all global health funding[5]. This funding gap is a major concern in LMICs facing an increasing burden of NCDs. There are many reasons for this "striking mismatch"[6] between funding and burden of disease. An "unengaging name and narrative" is one of them and public health specialists call therefore for renaming NCDs, considering it as a "non-definition that only tells what this group of diseases is not"[7]. NCDs have also less emotional charge than communicable diseases and funders may be more concerned by infectious diseases because these conditions expose others to risk. As regards NCDs risk factors, too much focus is still put on individual behavior rather than societal and external drivers which largely influence individual lifestyle choices (i.e. consumer environment for dietary risk factors, air pollution or working conditions). The common perception is that it is the responsibility of the individual to reduce risk factors for NCDs and nobody else should pay for something which is avoidable. Difficulties in making the economic and business case for investing in NCD pre-

1 Health Advisor, SDC, Bern

2 http://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases

3 WHO Global Coordination Mechanism on the Prevention and Control of Non communicable Diseases, Final report and recommendations from the Working Group on ways and means of encouraging Member States and non-State actors to realize the commitment included in paragraph 45(d) of the Political Declaration of the High-level Meeting of the United Nations General Assembly on the Prevention and Control of NCDs, https://www.who.int/global-coordination-mechanism/working-groups/final_5_1with_annexes6may16.pdf?ua=1

4 Melany Y. Bertram, Kim Sweeny, Jeremy A. Lauer, Daniel Chisholm, Peter Sheehan, Bruce Rasmussen, et al. Investing in non-communicable diseases: an estimation of the return on investment for prevention and treatment services, The Lancet Task Force on NCDs and Economics, Volume 391, May 2018, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)30665-2/fulltext

5 Luke Allen, "Why Is There No Funding For Non-Communicable Diseases?", Journal of Global Health Perspectives, 2016, http://jglobalhealth.org/article/why-is-there-no-funding-for-non-communicable-diseases/pdf/

6 Luke Allen, op.cit.

7 Luke Allen, Andrea B. Feigl, "What's in a name? A call to reframe non-communicable diseases", The Lancet Global Health, February 2017, https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(17)30001-3/fulltext

Occupational therapy for mentally-challenged people in Bosnia and Herzegovina.
Photo: SDC

vention and control persist and donors tend to prefer vertical programs focusing on diseases which show quick results and wins. Returns on investments are also considerably slower for NCDs than for communicable diseases. Finally, some funders may fear the interference of private sector in promoting regulatory changes in tobacco, alcohol, and food policy.

Reframing the NCDs Challenge

By adopting the 2030 Agenda, Switzerland recognizes NCDs as a major challenge for the sustainable development of LMICs (target 3.4): health creates wealth and poverty drives and is driven by NCDs. Furthermore, reducing NCDs and their main risk factors is explicitly mentioned in the Dispatch on Switzerland's International Cooperation 2017–2020. Preventing and controlling NCDs, as well as improving social, economic and environmental determinants of health, are both goals of the Swiss Health Foreign Policy and a main priority of the SDC Health Policy.

SDC is one of the major bilateral donors in the fight against NCDs in Eastern Europe and Central Asia where chronic diseases are the most prominent cause of mortality, reaching 80% in total. All bilateral programs, including in new EU member States, focus on NCDs prevention and control, including mental health, mainly in development settings.

At global level, SDC advocacy priorities are the following:

- Changing the narrative on NCDs, by highlighting the costs of inaction versus costs of action, by focusing on inequities in access to protection, exposure to risk factors, and access to care, and by understanding the interconnected nature of SDGs to address NCDs, as pointed out by a recent Lancet Series[8].

- Developing a comprehensive investment framework for NCDs and making the economic and business case for investing in developing and implementing NCDs prevention and control policies.

- Strengthening policy coherence and promoting consistency of multilateral financial, investment, trade, development and environment policies, as well as increased cooperation between major international institutions and stronger donor alignment in addressing NCDs.

- NCDs prevention, control and treatment to be part of universal health coverage packages and to be given priority in overall health budget.

- Increasing health expenditure for addressing NCDs, with a view to attaining national NCD targets for 2025 and 2030[9].

- Supporting governments in efficiently use and expand domestic resources to implement national NCD plans, including by making greater use of revenue from tobacco and other health-related taxes to achieve national health objectives.

Two initiatives addressing the regulatory and legal framework on child obesity dietary risk factors and the access to NCDs medicines, diagnostics and products have been recently launched by the SDC Global Program Health. Potential support to healthy cities global and regional movements is also currently being explored.

Results at country level are leveraged by a robust policy dialogue at global level: projects provide strong evidence which is continuously fed into national and global policies and strategies. This sound evidence highly contributes to the positioning of SDC as a reliable and innovative stakeholder in the fight against NCDs.

Taking a whole-of-government approach through close collaboration with the Federal Office of Public Health, the Sectoral Foreign Policies Division, and the Permanent Mission of Switzerland to the UN Office, SDC promotes policy coherence and the integration of NCDs goals in development and sectoral planning processes.

Switzerland's contribution in global policy-making processes in relation to NCDs is significant. The preparation of the third United Nations High-level Meeting on NCDs and the negotiation of its political Declaration was a major highlight in 2018. It was preceded by regional and global preparatory meetings where SDC advocated for more alignment and resources in the response to NCDs[10] and showcased evidence and good practices from programs in Ukraine, Albania, Moldova, and Kyrgyzstan[11].

SDC is an active member of various WHO NCDs working groups and initiatives addressing health promotion (follow up on Shanghai Conference 2016), health literacy (GCM), monitoring and evaluation of NCD National Strategies and Action Plans in the WHO European region, and the Coalition of Partners to strengthen essential public health services and capacities across the WHO European Region.

8 Rachel Nugent, Melanie Y. Bertram, Stephen Jan, Louis Niessen, Franco Sassi, Dean Jamison, et al., "Investing in non-communicable disease prevention and management to advance the Sustainable Development Goals, The Lancet Series, volume 391, April 2018, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)30667-6/fulltext

9 Based on the nine global, voluntary targets for NCDs, https://www.who.int/beat-ncds/take-action/targets/en/

10 WHO Global Dialogue on financing for prevention and Control of NCDs, Copenhagen, 9-11 April 2018.

11 WHO Europe High Level meeting regional meeting, Health Systems Respond to NCDs: Experience in the European Region, 16–18 April 2018, Sitges, Spain.

A Comprehensive Intervention Framework

Aiming to strengthen health systems to better respond to NCDs, SDC interventions take a comprehensive and systemic approach in tackling the policy framework, promotion of healthy lifestyles, prevention, reshaping primary health care services, health literacy, consumer environment, and determinants of health.

The use of different aid modalities, ranging from budget support to mandated projects, long-term engagement, and high flexibility in terms of project set-up, administrative arrangements and partnerships, allow leverage efforts and foster commitment of key stakeholders.

Interventions mostly support the introduction of "Best Buys" part of the *WHO Global Action Plan on NCDs 2013–2020*[12]. It consists in the implementation of a number of multisectoral and multistakeholder evidence-based policy options and cost-effective public health interventions, such as banning trans-fats in the food chain or raising taxes on sugar-sweetened beverages to reduce sugar consumption. In order to ensure a strong multisectoral collaboration, in Moldova and Ukraine, governments are for example supported in establishing effective and transparent intersectoral governance structures in charge of NCDs, with a dedicated budget and clear responsibility and accountability lines.

Promoting physical activity to prevent obesity in schools in Ukraine.
Photo: SDC

12 http://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf;jsessionid=8F68364361B00F282F3DED D5BB29CDAE?sequence=1

NCD interventions aim at strengthening people-centered primary health care and moving from a "level-of-care approach" to a life-course approach. Programs work with different partners at local, regional and national level on three pillars: individual-based interventions, population-based interventions, and creating enabling environments.

In Kosovo, SDC supports the introduction of a financial protection mechanism covering NCDs and thus reducing related private or informal expenditures; in Moldova programs aim at strengthening the capacities of the healthcare insurance fund for strategic purchasing of services for NDCs.

In most of the countries where SDC supports health programs, other sectors are also addressed as part of the country cooperation strategy, such as water and sanitation, rule of law, income or education, thus allowing to address major determinants of NCDs. This is the case in Tajikistan and Kyrgyzstan.

Chronic care implies the diversification of services and the integration of medical and social care. SDC interventions highly contribute to the deinstitutionalization of primary health care by using and transposing Swiss models and expertise: home-based care inspired by the Swiss Spitex model has been introduced in Bulgaria; community-based mental health in Bosnia and Herzegovina, Moldova and Ukraine; general practitioners clusters in Hungary; and palliative care in the Czech Republic.

In addressing NCD risk- and health-seeking behaviors, specific interventions targeting men have been designed. In Bosnia and Herzegovina, programs are focused on improving health literacy and changing stereotypes and social and cultural norms about masculinity which can lead to unhealthy lifestyle choices.

Mobilizing civil society around NCD prevention and healthy lifestyles promotion is also a key component of all NCD interventions. It mainly consists in fostering grass-roots and civil society movements and consumer-led advocacy calling for more investments in NCDs and improved environments.

Challenges and Bottlenecks

Weak political commitment and inadequate institutional set up to address NCDs seriously hamper programs' efforts. In most countries where SDC works, there is no dedicated unit for NCDs within the Ministry of Health or no inter-ministerial unit. It is also difficult to have key non-health sector ministries (transport, trade, education) on board.

NCD policy and regulatory frameworks remain weak: national NCD targets and indicators not set, operational national multi-sectoral policy and action plan on NCDs not developed, measures to reduce risk factors not introduced, difficulties in introducing price policies to promote healthier diets such as taxes on saturated fats, sweets, soft drinks, and sugar.

Other structural obstacles include the existence of unsustainable insurance schemes and the lack of pro-poor health financing mechanisms, the inability to generate reliable cause-specific mortality data on a routine basis, to carry out a comprehensive mapping of risk-factors, or to develop evidence-based guidelines for the management of NCDs.

At service delivery level, the main difficulty lies in strengthening NCDs prevention and promotion of healthy lifestyles at primary care level, mainly due to high resistance to change from health care staff. Referral systems remain weak and rehabilitation systems dysfunctional. Generic, affordable NCD drugs and technologies are still not available in most countries.

Changing population's unhealthy behavior patterns is also a major challenge, as well as going beyond individual behavior and tackling underlying drivers (food, urban development, trade). The influence of the food, beverage and tobacco industry is high and building partnerships with the private sector in order to promote healthy lifestyle choices remains difficult.

From pursuing innovation to promoting new standards of normality: reflections on what it takes to address NCDs effectively in protracted emergencies, fragile and conflict-affected contexts

Dr. Barbara Profeta[1]

Premises for a shift of discourse

According to a brief on Non-communicable diseases in emergencies published in 2016 by the UN Interagency Task Force on the Prevention and Control of Non-communicable Diseases (NCDs) "almost three quarters (28 million people) of all NCD deaths (82%) and the majority of premature deaths occur in low- and middle-income countries"[2]. These data speak about a fast unfolding epidemiological transition away from an almost exclusive focus on infectious diseases and maternal and child health needs in the MDG era, that is disproportionately affecting most of the developing world, particularly on the African continent. This is the same developing world where during the last decade not only have infectious diseases and maternal and child mortality at best only dropped in consistence with internationally positive trends and therefore remain significantly high, but also where health systems have not been evolving at quite as rapid a pace in the direction required by the double burden of disease experienced. The latter statement becomes even more painfully real when applied to contexts affected by conflict, protracted crises and other forms of fragility, that often fall below the radar of global health statistics on specific diseases (for example due to lack of reliable data) or whose capacity to respond to poor health outcomes is bound to be measured almost exclusively in volumes and effectiveness of external aid flowing their way. Sub-saharan Africa hosts the highest concentration of such scenarios worldwide.

The OECD *States of Fragility Report 2018* recognizes that the share of the extreme poor living in conflict-affected situations is expected to rise to 80% by 2030, if no action is taken"[3]. Field evidence suggests that there is a correlation between countries categorized as low- and middle-income and the likelihood of these countries to also be fragile and/or affected by chronic crises and conflict [4]. At the same time, it is also true and worrying that today "more than half of fragile contexts are middle-income countries"[5], where NCDs are a primary health concern. Consequently, when addressing NCDs in emergencies one needs to not forget that a critically high proportion of the world population lives in a fragile or conflict affected environment on a permanent basis. These are communities where cyclic turmoil, seasonal disasters, political instability or even multiple displacements, taken separately or in combination, have affected their lives for more than one generation. In Africa, where over 60% of the entire continent's population is below 25 years of age, millions of individuals have known no other reality and are likely to struggle to problematize the issue of NCDs in emergencies, let alone adequately adapting to global response efforts and guidelines.

The majority of existing literature (still quite limited) discussing operational standards for addressing NCDs in emergencies[6] or describing programmatic experience on NCDs in emergencies largely focuses on the service provider's point of view in the immediate aftermath of a shock. In today's world, these situations, although not rare, are not as frequent as protracted crises and fragile environments. They are also not the ones accounting for the disproportionate burden of preventable complications and deaths by NCDs in poor countries. What is more, this documentation either features or addresses the work and area of influence of the sole international humanitarian community which, in contexts of protracted emergencies, represents at best 20% of the response

1 SDC, Regional Health Advisor for the Horn of Africa at the International Cooperation Division of the Swiss Embassy in Nairobi and board member of the Technical Working Group on Fragile and Conflict Affected States attached to the Health Systems Global research network.

2 https://www.who.int/ncds/publications/ncds-in-emergencies/en/

3 OECD (2018), States of Fragility report, p. 37. http://www.oecd.org/dac/states-of-fragility-2018-9789264302075-en.htm

4 https://rebuildconsortium.com/about/

5 OECD (2016) quoted in OECD (2018), « Crises in Middle-Income Countries », Commitment into Actions Series, World Humanitarian Summit: "Putting Policy into Practice, p. 2.

6 This refers to the Package of Essential Non-Communicable Disease Interventions (PEN) for Primary Health Care in Low-Resource Settings.

to population's health needs, including on NCDs. Humanitarian interventions stem from the precondition that existing systems weaken or collapse during an emergency. Their understanding of a needs based approach tend to overlook broader contextual specificities from the perspective of the patients and other local actors preceding the emergency. As a result, the recommended prioritization of health policies and healthcare delivery in favour of increased consideration for NCDs, in line with the high-level commitments embedded in the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases[7], implies the assumption of a health system that is State-centric and territorially defined. Interestingly enough, already back in 2009 WHO manual for Analyzing Disrupted Health Sectors"[8] challenged this assumption and described a very different reality for health systems in fragile and conflict-affected settings. The latter appear as crowded and organically developing spaces, often emerging from informal and unlikely partnerships, where whatever is identified as the formal government-led health system is the only one among a number of parallel systems to consistently fail. Post-hoc analysis of recent large-scale health emergencies such as the 2014 Ebola epidemics suggests that this failure pre-exists the onset of the crisis[9].

According to this perspective, this article argues that:

- Emergencies reveal and exacerbate gaps in health systems that pre-exist a shock. If NCDs are not addressed in the majority of emergencies affecting fragile environments, it is appropriate to assume that NCDs services (preventative, curative and palliative) were already scarce or dysfunctional in times of peace and stability. It is important to take this fact into consideration when planning and delivering NCD programmes in emergencies;

- Scholarly application of the Declarations' postulates in narrowly defined emergency contexts leads to a predictable risk of falling into the trap of seeking solutions for effectively addressing NCDs in the very institutions that failed the health of entire populations in the first place, across disease burden. Another common mistake is to programme around the assumption that NCD-specific emergency interventions introduced by international actors will be effectively absorbed by existing recovering health systems;

- Potentially worse, there is a risk to over-appraise the successes achieved by the integration of NCDs preventative and curative interventions within the limited horizon of ad hoc humanitarian operations and thereby implicitly suggest that effective management of NCDs in emergency requires smarter and larger investments in increasingly complex, but short-sighted humanitarian responses. Radical reconsideration of health system strengthening efforts in contexts of permanent systemic distress is purposely avoided, if ever considered, until a recovery stage is (often politically and quite arbitrarily in protracted crises) eventually declared.

- Addressing effectively NCDs in emergencies, fragile and conflict-affected settings requires more, than just re-prioritization of entire countries' health policy agendas with related reallocation of funds from competing problems, and/or inclusion of NCD care into standard operating procedures of humanitarian actors. NCDs more than any other public health issue require multidisciplinary and comprehensive approaches that only complex health systems are able to cope with. Best-fit services and programmes adapted to chronic emergencies start from avoiding the over-simplistic solutions proposed by imported blueprints. Fragile and conflict-affected environment host complex (not necessarily collapsing) health systems that need to be acknowledged and fostered, instead of avoided and replaced.

---

7 https://www.who.int/nmh/events/un_ncd_summit2011/political_declaration_en.pdf

8 Pavignani, E., Colombo, S. (2009), "Analyzing Disrupted Health Sectors: A Modular Manual", WHO, Department of Recovery and Transition Programmes. Health Action in Crises. https://www.who.int/hac/techguidance/tools/disrupted_sectors/adhsm_en.pdf?ua=1

9 Save the Children (2015). "A Wake-Up Call: Lessons from Ebola for the World's Health Systems".

Some of the thought-provoking reflections contained in this document aim at illustrating that the search for innovative approaches to addressing NCDs in emergencies can only be productive, if a significant shift in discourse is operated at global public health policy level and if committed stakeholders demonstrate that they are able and willing to walk the talk. SDC working and research experience in the Horn of Africa between 2013 and 2019 represents the (mostly empirical) evidence base for the elaboration of key messages for interested and concerned readers to take into consideration when designing interventions to address NCDs in protracted emergencies.

Message 1: Fragility is time-bound, context-defined and in constant evolution

Women awaiting to be attended at a mother and child clinic in Bosaso, Puntland.
Photo: author's personal archives (2018)

Local community attending a vaccination campaign (human and livestock combined). Village of Shinile, Somali Region of Ethiopia.
Photo: Jigjiga University, 2017

An emergency is a rapid onset, unexpected and usually dangerous event[10]. Its occurrence temporarily disrupts the entire life of a community, including its health sector and, with it, services that cater for individuals in need of sustained critical care. According to this scenario, an emergency forces the adoption of equally temporary extraordinary measures to limit negative long-term consequences of the shock and the interruptions it entails, until stability returns. The PEN (Package of Essential Non-Communicable Disease Interventions for Primary Health Care in Low-Resource Settings) and the IEHK (Interagency Emergency Health Kit), resulting from internationally approved recommendations, belong to this set of temporary extraordinary measures that at different stages of an emergency[11] provide medical response to NCDs patients. Considerations of duration and sustainability are, by definition, not embedded in the guidelines that define the use of PEN and IEHK approaches in emergencies, because these assume that once normality resumes, NCD patients will be referred back to the system that responded to their needs prior to the disaster. This system would be led by a government that has committed to the 2011 Political Declaration on Prevention and Control of NCDs[12] and would have recovered reasonably well from the causes of the disrupting factor to be able to adequately cater again for its NCD patients. This is the story of post-2011 earthquake Japan or New Zealand and post-2017 hurricane Harvey US. It could even be the story (to a certain extent) of a number of post-war countries, such as Kosovo, Afghanistan or Lebanon. All these disruptions and similar ones to come certainly cause numerous unnecessary victims of NCDs, but the reason we know about it, is usually because these patients were accounted for by a functional system before the same was hit by a shock.

10 Free reformulation of the Cambridge Dictionary definition.

11 IEHK (its version reviewed after 2016 to include NCD drugs) is most appropriate for a response during the first 90 days following an emergency, while the PEN is particularly relevant for long-term support. Read: Slama, S. Kim, H., Roglic, G. Boulle, P. Hering, H. Varghes, C. Rasheed, S. Tonelli, M. (2016), Care of non-communicable diseases in emergencies, The Lancet, Vol.389:10066, pp.326-330.

12 The Political Declaration was adopted by consensus of the members of the UN General Assembly.

The kind of situations SDC office for the Horn of Africa was compelled to reflect and react upon since the launch of the Whole of Government Regional Horn of Africa Strategy in 2012[13], is fundamentally different. For contexts like Somalia, parts of Ethiopia and Kenya, with similarities observed in "neighboring" countries such as South Sudan, Chad, Burundi and DRC, the post-emergency or "return to normality" period has yet to be experienced after several decades of instability characterized by fluctuating intensity. In the Horn of Africa, emergencies represented by seasonal environmental calamities (mainly alternations of droughts and floods according to fairly predictable cyclical patterns) or open conflicts and sociopolitical tensions, are only one specific (acute) manifestation of a permanent state of broad regional fragility that "hits" selected territories within and between countries, and destabilizes entire sectors of the concerned society at mostly unpredictable times and in unexpected forms, but affects the whole region constantly. Every separate episode of recrudescence of one or the other determinant of fragility is time-bound and triggered by context-specific dynamics, and so are the effects of its resolution. The complexity of the factors interacting to maintain the permanent state of instability is such, that similar ingredients combined at different times in comparable circumstances can trigger opposite effects (this is often the case around election times, for example) that can hardly be anticipated even by the most professional context analysis.

Since it is widely recognized that "different aspects of fragility are usually intertwined"[14], the kind of fragile and conflict-affected settings SDC is operating within in the Horn of Africa hosts health systems that are distressed in various degrees and forms, usually prior, during and after an acute destabilizing event. The approach adopted by such systems to respond to specific sets of diseases materializes, at best, in convincing policy documents or platforms (such is the case in Ethiopia and Kenya as far as NCDs are concerned[15]) and in organized prevention campaigns emanating from central health authorities and usually not reaching far beyond the capital cities and major affiliated regions. In Somalia, similar measures are confined to WHO country programme, which illustrates strategic priorities and operational intentions aligned with the 2011 Political Declaration on NCDs. In both scenarios concrete impact on NCD patients is challenged by the multifaceted fragility of the system, but also attained through alternative and, at times, unorthodox, strategies discussed in further chapters thanks to the same nature of the health system in place.

A typology of the currently known and documented "distress scenarios" applicable to health systems has been proposed in 2016 by two scholars, Enrico Pavignani and Sandro Colombo, as a complement to the 2009 WHO Manual. At the center of each scenario lies a weak government that, for a number of different reasons and circumstances (hence the various types of distress), often non-static over time, is incapable of fulfilling its social mandate. A snapshot of this typology is reproduced below[16]:

13 The Regional Horn of Africa Strategy (RHoA) brings together the comparative advantages of various instances of the Swiss Confederation in a Whole of Government approach that is aiming at making complementary use of political, humanitarian, development, peacebuilding and foreign migration policy instruments to reduce the regional causes of instability in the Horn of Africa. The first phase of the RHoA strategy was operational between 2012 and 2017. The second phase of the strategy is under implementation since January 2018 and will end in 2021.

14 Pavignani, E., Colombo, S. (2009), "Analyzing Disrupted Health Sectors: A Modular Manual", WHO, Department of Recovery and Transition Programmes. Health Action in Crises. https://www.who.int/hac/techguidance/tools/disrupted_sectors/adhsm_en.pdf?ua=1

15 Ethiopia has created a Task Force for addressing NCDs as part of the 2016-2020 UN Development Assistance Framework for the country. The Kenya Health Policy 2014-2030 has prioritized NCDs through one of its objectives. In addition, the sector is tasked to provide prevention activities addressing the major non-communicable conditions through establishment of screening programs in health facilities and other institutions for major NCDs.

16 Source: Pavignani, E., Colombo, S. (2016), « Strategizing in distressed health contexts", in Strategizing national health in the 21st century: a handbook, Chapter 13, WHO, p. 20.

This typology divides fragile States into five distress scenarios, paraphrased below:

- The "willing" and legitimate government with poor technical capacities to lead the development of the health system;
- The "unwilling" and/or resourceless government that outsources the responsibility of leading the development of the health system (both policy and service provision) to other actors;
- The poor and vulnerable government with weak leadership capacity in health matters, despite stability and relatively peaceful environment;
- The government struggling with legitimacy across the country territory and/or contested by external players on political or human rights grounds;
- The contested government in permanent turmoil, facing cyclical conflicts and power fights .

One striking evidence appears, when reflecting WHO recommendations emerging from the Global Action Plan for Prevention and Control of NCDs 2013-2020 on distressed contexts: health systems in fragile and conflict-affected settings lack almost all essential requirements for effectively delivering the PEN, even before and without the onset of a shock or an emergency situation. The main such requirements are: (i) the ability and resources to provide health services to large portions of the population (leading to partial external aid-dependence, usually equally insufficient to cover the volume of the needs), (ii) effective referral systems and protocols for managing them, (iii) functional formal supply chain mechanisms, (iv) human resources for health in adequate numbers and capacities, (v) reliable health information systems, (vi) functional enforcing mechanisms for the operationalization of potentially existing national health policies related to NCDs response, and (vii) sufficient coordination oversight and monitoring capacity of existing and required health services according to needs. In the Horn of Africa, some of these key health systems features are generally poor or inexistent in most of the national territory entrusted to the formal public health system; often the same features are partly functional, but unequally clustered according to time-bound and territorially defined political dynamics in permanent readjustment. Concretely, it means that in this and similar contexts the government-led health system in place is often not delivering the most basic of services to large population groups, among them NCD patients, regardless of the level of awareness of selected Ministries of Health about the rising burden of so called "modern diseases" on their territory, and the number of high-level declarations of good intentions endorsed by the highest country's representatives. Global recommendations for addressing NCDs in emergencies tend to focus on best practices to reach target populations that are traditionally categorized as victims of emergencies by the international aid community, such as people on the move (IDPs and refugees). These standards are not applicable to the remaining world population for whom not being able to count on a decently functional public healthcare is the norm. While the PEN gets eventually adapted to dysfunctional health systems, actors such as SDC and its partners and interlocutors have to develop their creativity, stretch their mandates and look for alternative opportunities to avert disastrous consequences of the increase of NCDs and improve the perspectives of existing NCD patients across fragile and conflict-affected settings.

Message 2: Perspectives matter - Fragile environments for some are frontier economies for others

Photo: Access Accelerated programme's website 2019

For the whole of Sub-Saharan Africa, disproportionate burden of NCDs has been compared with the "next poverty trap"[17]. Of all LMICs contexts, this particular region of the world hosts the highest concentration of populations that struggle to afford basic primary health care and cannot envisage covering the costs of protracted, at times life-long, expensive treatments. The globally leading public health perspective focuses on the "empty glass", that is the roughly 30 million unmet needs for NCD treatments that could save unnecessarily wasted lives in LMICs every year[18]. In 2014, WHO calculated that preventing those deaths would save LMICs an estimated cumulative $7 trillion in economic loses between 2011 and 2025[19] and pave numerous countries' way out of poverty. However, given the global scarcity of resources for health, solving the problem from this angle becomes an extremely complex and long-fetched endeavor left to the responsibility of weak or disrupted (in the case of FCAS) health systems. The market perspective, on the other hand, concentrates on the assets ("full glass") of the growing NCD epidemic in LMICs, that is the same 30 million of alive future consumers of a large spectrum of valuable products that is sufficient to cater for the business appetite of many different (in variety and volume) actors worldwide. This statement is not meant to suggest judgmental conclusions on who, between the public (labeled "rights based") and the private (labeled "profit oriented") approaches, has the best arguments and intentions to engage. The point lies in valuing the ability to shift perspective around the same problem to generate opportunities for innovative paths to solutions. While many Sub-Saharan States experience the paralyzing effect of the double burden of disease they have to address in the face of resource scarcity and remain conditioned by the unacceptability of painful choices prioritizing PHC/CDs over NCDs, the shift of perspective described above is a key starting point for the following reality, characteristic at least of the Horn of Africa: the fight against NCDs is largely led by the private sector.

The preferred modality of engagement is a bilateral agreement with host governments, whereby high-tech products and trainings of renowned quality standards are sold to Ministries of Health at exceptionally low rates freed from intermediation costs or offered as complimentary capital investments in exchange of commitment to social returns in line with SDG 3.4[20], co-funding of service utilization by patients and, dulcis in fundo, almost exclusive access to an emerging market. The latter is the main incentive justifying certain levels of risk-taking and compromises on temporary missed returns on investments from the side of the multinationals, even when the much coveted market space is a scene for open conflict and prone to frequent disasters[21]. For both parties involved, the arrangement generates a classic win-win situation, hence its appeal. The commercial nature of these transactions between host governments and prominent multinationals rejects the interference of inputs with a potential for market distortion (such as aid grants) in the design of the contract agreements. This largely explains why bilateral donors, such as SDC and numerous others active in the health sector in the Horn, are kept (or keep themselves) at cautious distance. At the same time, the brokering power of traditionally supportive governments (via their respective Embassies and economic development/promotion departments) is an eagerly sought asset.

17 Tuckler D, Yach D. Long-term impacts of leading chronic diseases in low- and middle-income countries. In: Gatti A, Boggio A, editors. Health and Development: Toward a Matrix Approach. New York: Palgrave MacMillan; 2009.

18 www.ethicalcorp.com/sdg3-big-pharmas-blueprint-bring-health-access-all

19 HO . Global status report on non-communicable diseases 2014. Geneva: WHO; 2015.

20 Health target 3.4 within SDG 3 aims at « [reducing] by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being" by 2030.

21 As an example of this statement, Syria is currently one of the biggest (in terms of volumes of products and services sold) business partners of the Roche Group worldwide.

Kenya and, partly, Ethiopia represent fertile contexts for promising initiatives such as the ones described. The latter are mostly launched by pharmaceutical multinationals and both their volume and scope of investment overshadows any recount of isolated aid interventions (limited to selected refugee camps) experimenting the PEN in the same countries. The two most prominent programmes successfully adopted by both the Kenyan and the Ethiopian governments in 2015 and 2017, respectively, are Novartis Access initiative[22] and Access Accelerated[23] implemented by an umbrella consortium of 23 pharmaceutical companies with established branches in these two countries. It is not the scope of the present article to analyze and comment the specific results of these initiatives in the Horn of Africa, none the least because country-specific detailed reports are not available to non-members of the partnerships and overall results feed official national statistics. The key observation made by SDC in relation to these strategies to address NCDs in LMICs is that their implementation and penetration capacity is equally dependent from the level of functionality of the existing health system and, even more than for humanitarian organization, from the political will of the host government. This partly explains the lack of expansion of similar initiatives in fragile and conflict-affected settings (with very few exceptions) and their limited impact in contexts, where planned and largely government owned economies limit the development of market dynamics (this concerns Ethiopia to a certain extent). It is common to assume, although thorough documentation in this matter is lacking, that the features of "complex operating environments" represents a similar deterrent for private investors, than for actors of the aid industry. Besides the weak entry point embodied by a distressed government, such features would include physical insecurity, poor infrastructure, lacking reliable mechanisms for financial tracking and below standard human resource capacity. However, initial findings emerging from a recent SDC large-scale advocacy initiative[24] implemented in the Horn of Africa are suggesting that this might not be the case. Reasons for poor foreign private investments in extreme and traditionally ignored frontier economies are not solely linked with the complexity of the environment and the lack of guarantees of returns on investments. If this were the case, China, Turkey and Middle-East business models would fail in Somalia or avoid this market space altogether. Other considerations, such as lack of knowledge about existing business partnership opportunities with local markets, assumptions that FCAS markets are distorted (and basically occupied) by excess of aid contributions and overlook of not immediately obvious business incentives deserve further exploration. This indicates that certain business partners and models are better equipped to navigate the complexity of frontier economies, than others. High readability of unusual situations, willingness to consider unlikely non-traditional partnerships and tolerance for informal transactions might be the new skills required from business managers to explore market expansion in chronic emergencies. The growing visibility of the NCDs agenda and the increasing volume of data purposely collected to address target 3.4 of SDGs are extremely likely to pro-

22 https://www.novartis.com/our-company/corporate-responsibility/expanding-access-healthcare/novartis-social-business/novartis-access.

23 https://accessaccelerated.org/

24 In November 2018, SDC started convening an informal group of prominent private actors in the Kenyan and larger Horn of Africa health sector to develop an agenda for promoting documentation and understanding of the role of the private sector in health in FCAS, with Somalia as initial case study. The group expands constantly by voluntary affiliation of new members as likeminded stakeholders identify with the topic and decide to contribute their specific comparative advantage to the discussions and actions organized by the group. At the time of writing this article, the main activity of this group consists in ensuring mainstreaming of discussions about the role of private sector (non NCD-specific) in FCAS in existing prominent policy-making platforms and business gatherings. This aims at raising awareness and prompt action for creating new models of healthcare delivery and health systems governance that would take into account the multiplicity of actors and their roles involved in delivering health in FCAS. The group commits to organize, feed with contents and experts as well as to fund dedicated sessions on this topic with particular attention given to participation of concerned Sub-Saharan stakeholders. According to the action plan 2019-2020 of this group, discussions on the role of the private sector in FCAS have already been launched at the Sankalp Africa Summit 2019 in Nairobi (February 2019) and at the Africa Health Agenda for International Cooperation 2019 in Kigali (March 2019). The next endeavor will be the Africa Health Business Conference due to take place in Addis Abeba in October 2019. New avenues are constantly explored. The current members of the group are: SDC, Amref Health Africa, AHB/Kenya Healthcare Federation, Caafinet Somalia, Roche, Intellecap, Managing Sciences for Health.

gressively become a pull factor for big private sector investors to acquire the necessary skills to operate in chronic emergency situations in the near future.

Message 3: Looking below the radar. Recognition of the role of indigenous businesses, community-based and informal initiatives in addressing NCDs in emergencies

Private (formal and less formal) healthcare providers in Mogadishu, Somalia. Source: Caafi-net (2018)

Crises, despite the catastrophic consequences they bring about for entire population, also generate opportunities, if a shift in perspective is operated. Besides creating business opportunities that arise from collapsing structures and increasing needs, emergencies often reveal pre-existing dysfunctionalities and provide opportunities for operating conscious and radical changes to the way a country's health system is conceived, organized and managed. In most disrupted settings, reality tends to escape neat mental models: tertiary hospitals might be absent, or inaccessible, a large proportion of 'tertiary' capacity may be absorbed in delivering first-contact care, the secondary level may shrink, due to war destruction or abandonment for other causes. In many situations, atypical health facilities, in physical or functional terms, exist. They tend to multiply as the crisis persists. Official counts of the primary level may include ghost facilities, or derelict ones. As a result, the traditional model of health system headed by mandated government authorities shifts rapidly from a public clearly defined system to a chaotic arena populated by multiple actors (armies, NGOs, private firms, faith-based facilities), with often ill-defined and overlapping roles. Given the mix of providers, few facilities belong exclusively to the private or the public sector. In any case, both types tend to respond to similar commercial imperatives and often thrive in isolation.

In these contexts it is a common fallacy to plan interventions assuming that the healthcare network is a homogeneous set. In reality, relationships among these stakeholders tend to be transactional (negotiated around ad hoc situations and patients cases), rather than responding to established referral and regulatory frameworks. This, regardless of the existence of national and/or subnational protocols and institutions tasked to enforce and monitor their implementation. Constant adaptation to shocks, including political instability, and readjustment to ever-changing power dynamics generate a very much organic development of paths to treatment, where informal networks of individual committed professionals (qualified as well as questionable) become the default backbone of health service provision even in the most challenging environments (refugee camps, slums, inaccessible war-torn rural areas. These dynamics generate micro ecosystems that have the ability to operate simultaneously and in parallel to what is considered the formal system, both during crises and during reconstruction. They "blend" with or

separate from it in creative and opportunistic manners. The situation in Somalia is rather extreme in this perspective, given that no single health facility is currently operated nor funded by the government. How does this link with addressing NCDs effectively or at all?

In Somalia and predominantly Somali territories of Kenya and Ethiopia, chronic patients in protracted situations of absence of clear and stable reference mechanisms and structures have reinvented their own paths to prevention and treatment. These cases are not systematically captured by standardized data collection mechanisms on NCDs causing major flaws to patients' monitoring and obstacles to management of complications both in times of relative stability and during emergency response. A closer anthropological look at these dynamics would reveal that ethnic bonds, extended family networks, religious or clan affiliations, and ultimately commercial transactions guided by trusted recommendations represent the current spectrum of choices available to access NCDs services from the perspective of the patients. The actual location and level of the facilities habilitated to provide these services is secondary and not a key determinant of access and utilization. Somalis being a resilient population group with large extraterritorial networks (thanks to a strong diaspora) within and beyond the historically defined linkages with the rest of the Horn, it is fair to say that Kenya-based NCD programmes significantly backstop the neighbor's void and cater for more Somali NCD patients, than what is formally recognized by the concerned governments. This phenomenon of trans-border health-seeking behaviour is common in the whole of East Africa, and Kenya is an important regional healthcare hub thanks to its vibrant startups culture and its high potential innovation market that already attracts numerous technologies and international investors, but also an important share of African health tourism.

However, below the spotlights of renowned top-class private service providers concentrated in Nairobi, individual professionals struggling to find competitive employment opportunities in the public sector benefit from the overall market development spirit and find in it sufficient incentives to venture into small-medium health businesses in other urban settings across the country. These health professionals are often but not always doctors; lower-end facilities that cater for the "last mile" patients tend to also be run by nurses, midwives, lab technicians, pharmacists, self-taught community workers or even medical students. A not well-documented number of them become the key entry point to health services for many underserved communities across Kenya provinces where the government doesn't reach despite the decentralization process. This includes Nairobi slums and villages in proximity of refugee camps, such as Kakuma. These facilities can be assumed to spontaneously absorb large amounts of patients during rural-urban, as well as cross-border displacements at times of crises, although no tracking system is in place, simply because of their convenient locations and the fact that, unlike public facilities, they are decently operational without discontinuation. Although not fully self-sustainable, these small-scale private facilities usually manage to avoid stock-outs thanks to their creative informal procurement practices. They also tend to employ locally whatever skills are available and don't experience the scenario of patients turning up to an empty building. Besides emergencies, however, some of them have established informal lasting partnerships (based on health personnel's own networks) with similar facilities elsewhere in the country or across borders. Social capital as a coping mechanism to respond to dysfunctional formal health systems is equally valued and largely utilized by service providers to share profits, volume of patients, access to procurement channels or information networks, and ultimately offer as good as it can be a referral mechanism to severe cases. If the fairly well regulated Kenyan market is conducive to the mushrooming of small semi-formal health businesses across the country, the fully unregulated Somali environment is exponentially more attractive to indigenous startups. Often launched by diaspora returnees during large emergencies, "multitasking pharmacies" and other outlets offering anything from lab tests to TB treatments and NCD counselling are inherited and run as family businesses for generations and don't subside in the face of a progressively growing and more organized public (aid-supported) sector.

As a result of this logic and very ironically, Mogadishu today is at the same time one of the most dangerous and inhospitable fragile setting in the world while hosting high-tech specialized hospitals, that build their sustainability by serving (among others) the expatriate community of humanitarian workers tasked with rebuilding derelict primary health care units in neighborhoods crowded by more popular

"one stop shops". These hospitals are successfully attracting funds from non-traditional donors such as Turkey, Qatar and China to equip themselves with modern infrastructure and trained human resources from abroad[25] to address, primarily, NCDs. Nevertheless, the lack of alternative quality primary healthcare makes them also the main referral (at times entry) point from "one stop shops" for all kind of patients. In a recent initiative supported by SDC regional office Horn of Africa, a few of these Mogadishu-based hospitals joined forces with smaller private business to create a franchised self-regulating network known under the brand of "Caafinet"[26]. Together, the network creates a reliable path to treatment to patients while ensuring the survival and strengthening of the "below the radar health market". The franchise model sets the basis for a quality control mechanism rooted in mutual commitment and, above all, avoidance of reputational risk and exclusion from the market. Spontaneous accounts of activity (in the absence of a proper data management mechanisms capturing private sector initiatives) suggest that this group, now composed by over 230 providers, has absorbed (and treated, whenever possible) 80% of the victims of the October 2017 attacks in Mogadishu that generated over 500 casualties. It also attends over 900'000 patients per year across medical conditions and holds the main emergency line in Mogadishu that provides reliable referral advice to users.

This entire chapter could not provide documented recounts of how NCDs are addressed in the protracted emergencies featured in the Horn of Africa, and particularly in Somalia, without informal indigenous networks and initiatives. The majority of healthcare providers with the potential to play an important role in this agenda are forced to multitask in response to conflicting priorities and are currently not linked to channels of systematic surveillance on specific diseases, if any other at all. It is therefore important to factor and engage unusual healthcare providers, mainly non-governmental, often informal in the elaboration of strategies to address NCDs in protracted emergencies, since reality shows that these actors are the only reasonably stable resource available in FCAS to ensure frontline response during emergencies, while at the same time building long-term, sustainable services trusted and preferred by the patients in times of relative quiet and latent turmoil. It is equally key to ensure that global standardized frameworks, prescriptive guidelines and pre-designed well-intention interventions of the aid industry do not prevent good contextual analysis to overlook, subside or even undermine the very ground from which effective and sustainable solutions to the growing NCD burden could be grown, if appropriately fertilized.

CONCLUSION: So what does it take to effectively address NCDs in protracted emergencies and fragile and conflict-affected settings?

The global fight against a number of communicable diseases has so far taught the international aid community that unquestionable impact can be achieved through disease-oriented vertical programmes built alongside existing health systems and until recently not intersecting with them. Nevertheless, even when not effectively integrating existing structures, vertical programmes are tributary to functional and "traditionally-looking" health systems being in place, with a strong government as the main interlocutor and executor. In fragile and conflict-affected settings, where the protracted or cyclical nature of shocks and the underlying instability constantly challenge norms, setups and programmatic decisions, governance arrangements tend to be fluid and submitted to unpredictable power dynamics. In these environments, the success of disease-focused programmes remains limited. Consequently, implementation of international NCDs guidelines in most of Subsaharan Africa, where the burden of NCDs is disproportionately the highest in the world, cannot begin from importing blueprinted approaches and assumptions without this leading to dramatic consequences by 2030.

Effectively addressing NCDs in emergencies implies beginning the journey with an important distinction between (1) contexts with pre-existing capacity to respond to NCD-related needs before the onset of a crisis and (2) those for whom the absence of reliable NCD services due to weak formal health systems is the norm. In the latter cases, the rapid onset shock

25 Despite the complex environment, Somalia is an attractive developing market for professionals seeking employment and having at the same time the skills to navigate transactional, chaotic and unpredictable contexts. Iraqi doctors, for example, are in steady increase, as well as returning Somali diaspora among the managers and employees of high-profile health facilities in Mogadishu, Hargeisa, Kismayo and other towns.

26 The website of this company is currently under complete reconstruction. Details about this initiative can be requested from the author of this article directly.

factor is usually not the main cause of a disruption in services, although it might create additional risks in acute cases and complications; emergencies in most LMICs (the 2014 West African Ebola epidemics has become emblematic) exacerbate pre-existing flaws across all WHO building blocks of national health systems. An additional category of settings emerges from scenario 2, and illustrates the healthcare situation during periods of relative stability in between two crises. In these environments, when a shock occurs it is common to begin the design of humanitarian responses from the perspective of a collapsing health system. A more accurate look at the reality, nevertheless, shows that what really breaks down is the assumption of a previously efficient system. Other dynamics, often led by non-governmental and unusual actors are the ones catering for the most immediate health needs of entire populations before, during and after the emergencies in countries, where patients have developed coping strategies to adapt to a chronically non-responsive formal health sector. The scenario determines the appropriateness of the emergency response. This article has argued that measures such as the Package of Essential Non-Communicable Disease Interventions for Primary Health Care in Low-Resource Settings focus on temporary disruptions and rely on the existence within given emergency-affected health system of recovery mechanisms. The contexts with these favourable characteristics are not the ones that, according to WHO predictions, deserve global priority in the fight against NCDs.

SDC experience with contexts affected by protracted emergencies suggests that effective NCD programming should avoid "best practices" and artificial targeting of conveniently identifiable patients (refugees and IDPs in encampments situations), if impact is to be achieved. Instead, context analysis with a complexity lens (thoroughly applied CSPM tools can be useful to uncover non-obvious dynamics) should inform a bold exploration of opportunities for producing "best fit" interventions. This will inevitably imply redefining the nature of a functional health system and readiness to engage with unusual partners in innovative forms. Three key messages emerge from these considerations:

1. In FCAS, emergencies are the norm for the majority of the population. The latter has usually found ways to cope with its health needs that are worth incorporating in the search for adequate and sustainable solutions;

2. NCDs response in many LMICs and particularly in FCAS (where the public sector is disrupted) is currently led by the private sector. This is valid in terms of volume of services delivered, but also of influence in policy-making. Strategic, rather than merely programmatic engagement with the private sector should be sought.

3. Environments that are considered difficult to operate by the aid community are permanently navigated with reasonable success by other actors, with indigenous (often informal) businesses championing this skill and usually covering for "last mile" (marginalized, extremely poor, most vulnerable) patients. Contexts might be labelled as fragile or failed, but they host key assets, capacity (unorthodox for the external eye) and resources that should not be overlooked. Patients' choices are reflected in the way local markets develop. The observation of the latter provide useful hints of promising acceptable and sustainable solutions to addressing health needs.

Politorbis Register

Folgende Ausgaben können unter politorbis@eda.admin.ch bestellt werden.
Onlineversionen: www.eda.admin.ch/politorbis

Nr.	Titel	Themen
22	**La Politique étrangère de la Suisse: Bilan et perspectives (I)** (1/2000)	• Die Beziehungen der Schweiz zu den Vereinten Nationen (UNO): Vom Beobachter zum „Beitrittskandidaten" und weiter • Les relations de la Suisse avec l'Europe intégrée, 21 juin 1999: une date historique • Les relations de la Suisse avec les Etats-Unis • La Suisse et l'OTAN: bilan et perspectives • La politique humanitaire • Les droits de l'homme: le cas de la défense des droits de l'enfant
23	**La Politique étrangère de la Suisse: Bilan et perspectives (II)** (2/2000)	• L'implication de la Suisse dans les Balkans • Une politique méditerranéenne pour la Suisse • Droits de l'homme au Moyen Orient • La Suisse et l'Asie de l'Est • La Suisse, modèle pour Singapour? • La Suisse et l'Amérique latine • La Suisse et l'Afrique des conflits
24	**La sécurité humaine** (3/2000)	• «Menschlichen Sicherheit» • Kleinwaffen • Nicht-staatliche Akteure (NSA) • Aussenpolitischer Ausblick • Perspectives de la politique extérieure • Der Beitritt der Schweiz zur UNO • L'adhésion de la Suisse à l'ONU
25	**La Suisse et la Chine** (4/2000)	• La Reconnaissance de la Chine populaire par la Suisse et l'établissement des relations diplomatiques • Aspekte der Beziehungen Schweiz – China vor 1950 • Überblick über die bilateralen Beziehungen zwischen der Schweiz und der Volksrepublik China ab 1950 • Von der Chinamode des Spätbarock zur heutigen Menschenrechtsdiskussion mit der Volksrepublik China - ein Beitrag zum mangelnden Verständnis zwischen West und Ost • L'économie chinoise - Vers les prochaines étapes • Zur Verteidigungspolitik der Volksrepublik China • L'évolution de la Chine: tentative de prévision • China in the 21st Century: Reflections on the past, and projections into the future Republic of China
26	**Die Schweiz und die UNO** (1/2001)	• Die Schweiz: Abseits der Welt oder in der Welt? • Völkerbund und UNO • Die Beziehungen der Schweiz zur UNO • La Genève internationale et l'ONU • Die jüngsten Reformen der UNO • Wieviel Macht braucht die UNO ? • Universalismus der UNO und Regionalorganisationen • Neutrale Staaten in der UNO am Beispiel Österreichs • Kodifizierung des Völkerrechts im Rahmen der UNO • UNO, Entwicklung und humanitäre Hilfe • Jüngste und künftige Entwicklungen der UNO
27	**Afrika / Afrique** (2/2001)	• Afro-pessimisme, afro-euphorie ou afro-lucidité ? • H.E. Deiss's Opening Address to the Accra Conference • Sichtweisen auf, Diskurse über und Visionen für Afrika • Afrika: Gedanken zur Lage des Kontinents • Données de base sur l'Afrique sub-saharienne • La Suisse et la prévention des conflits en Afrique • Die humanitäre Hilfe und Katastrophenhilfe des Bundes in Afrika • La Coopération suisse en Afrique de l'Ouest • La Francophonie et l'Afrique • Die kulturellen Beziehungen zwischen der Schweiz und Afrika • Die Umwelt in Afrika • L'Afrique dans le multilateralisme onusien • L'Afrique est-elle « autre » ? • Eteindre la lumière, fermer la porte et revenir dans un siècle?

28	**Suisse – Maghreb – Machrek** (3/2001)	• Aussenpolitische Strategie der Schweiz gegenüber den Ländern des südlichen und östlichen Mittelmeerraums • Stratégie de politique extérieure de la Suisse pour le bassin sud et est de la Méditerranée
29	**Beziehungen zwischen der Schweiz und Deutschland in der Nachkriegszeit (1945 – 1961)** (Kolloquium 27.-29. September 2001, Bern) (4/2001)	• „Beziehungen zwischen der Schweiz und Deutschland: eine historische Partnerschaft auf dem Weg in die Zukunft" • Die Schweiz und Deutschland: Gedanken und Einschätzungen aus der Perspektive eines Politikers und Zeitzeugen • Les relations entre l'Allemagne et la Suisse: und perspective historique • „Nicht die ersten sein, aber vor den letzten handeln – Grundsätze und Praxis der Anerkennung von Staaten und Regierungen durch die Schweiz (1945-1961)"
30	**Suisse – Europe du Sud-Est** (1/2002)	• Stratégie de politique extérieure de la Suisse pour l'Europe du Sud-Est • Aussenpolitische Stüdosteuropa-Strategie der Schweiz
31	**La Suisse et les accords d'Evian** (2/2002)	• La politique de la Confédération à la fin de la guerre d'Algérie (1959-1962) • Aperçu des ralations de la Suisse avec l'Algérie • Les premiers entretiens (1960-1961) • La première phase des négociations • La seconde phase des négociations • L'année 1962: drames et espoirs
32	**Federalism** (1/2003)	• Föderalismus in der schweizerischen Aussenpolitik • La pertinence de l'idée fédérale dans le monde contemporain • Federalism and Foreign Relations • Federalism, Decentralization and Conflict Management in Multicultural Societies • Assignment of Responsibilities and Fiscal Federalism
33	**Iran – Wirklichkeiten in Bewegung** (2/2003)	• Helvetiens guter Draht zum Pfauenthrom - Die Beziehungen der Schweiz zu Iran (1946-1978) • Islamische Republik Iran: Innen und Aussenpolitik • Political Cartoons in Iran • Etat actuel des relations bilatérales vues de l'Ambassade suisse à Téhéran • Situation économique de l'Iran • Verhandlung statt Verurteilung: Die Schweiz beginnt in diesem Jahr einen Menschenrechtsdialog mit Iran • Iran, quo vadis? Eine Rück- und Vorschau • Iran als Objekt – Kurzbibliografie zur Iranforschung in der Schweiz • Iran – einige Daten
34	**Sommet mondial sur la Société de l'Information** (3/2003)	• Die Schweiz und der Weltgipfel zur Informationsgesellschaft • Le Sommet Mondial sur la Société de l'Information : Un somet sur un projet sociétal global • The World Summit on the Information Society: Overview of the process • Des resultants mi-figue mi-raisin • Entre concepts flous et illusion techniciste • Informations- und Kommunikationstechnologien: Instrumente für Entwicklung und Armutsminderung • La fracture médiatique • The Council of Europe and the Information Society: Some key issues • OECD and the Information Society: New challenges
35	**Suisse – Proche-Orient** Perspectives historiques et politique actuelle (1/2004)	• Les articles du Dictionnaire historique de la Suisse sur les pays du Proche-Orient • Die Artikel des Historischen Lexikons der Schweiz über die Nahost-Länder • Une saison en arabie • La Méditerranée arabe: un axe prioritaire pour la politique étrangère suisse • La neutralité suisse à l'épreuve des deux guerres en Irak (1991 et 2003)
36	**Das schweizerische Konsularwesen im 19. Jahrhundert** (2/2004)	• Das schweizerische Konsularwesen von 1798 bis 1895 • Die heutige Situation im konsularischen Bereich • Répartition géographigue des postes consularies
37	**L'Asie** **Quelles évolutions et quelles conséquences pour la Suisse?** (1/2005)	• Etat des lieux, une perspective régionale • L'Asie du Sud • L'Asie du Sud-Est • L'Extrême-Orient • Politique asiatique de la Suisse, une approche thématique • Politique économique extérieure de la Suisse: Priorités en Asie • Entwicklungszusammenarbeit und Armutsbekämpfung in Asien

		• La politique de coopération économique au développement en Asie • Frieden, Menschenrechte und Migration – das Engagement des EDA in Asien • Politique culturelle du DFAE en Asie • Herausforderungen für die schweizerische Umweltaussenpolitik am Beispiel der Region Asien
38	**Processus de Barcelone** (2/2005)	• La Méditerranée comme espace invente • Die Bedeutung des Mittelmeerraumes und des Barcelona-Prozesses aus Schweizer Perspektive • 10 ans après Barcelone, où en est le partenariat euro-méditerranéen? • The Euro-Mediterranean Partnership in the run-up to the 10th anniversary of the Barcelona Declaration • Partenariat Euro-méditerranéen ou Partenariat euro-arabe? • Promoting Political and Economic Reform in the Mediterranean and Middle East • L'avenir politique du partenariat euro-méditerranéen: l'Erope face aux dilemmas démocratiques • Barcelone +10: l'immigration comme risque transnational
39	**Globale öffentliche Güter – die Globalisierung gestalten** (3/2005)	• Through the lens of global public goods: Managing global risks in the national interest • Gesundheit als globales öffentliches Gut: eine politische Herausforderung im 21. Jahrhundert • Internationale Finanzstabilität: Nutzen und Beitrag aus der Sicht der Schweiz • Globale öffentliche Güter und das internationale Umweltregime • Globale Gemeinschaftsgüter aus entwicklungspolitischer Sicht • Globale öffentliche Güter und die multilaterale Reformagenda des Millennium +5-Gipfels • The International Task Force on Global Public Goods • Globale öffentliche Güter und die Schweizer Aussenpolitik
40	**Die Schweiz als Schutzmacht** (01/2006)	• Protecting powers in a changing world • Die Vertretung fremder Interessen als Ausgangspunkt für weitergehende Friedensinitiativen • Kleine Schritte, langer Atem Handlungsspielräume und Strategien der Schutzmachttätigkeit im Zweiten Weltkrieg am Beispiel der „Fesselungsaffäre" • Une occasion risquée pour la diplomatie suissen Protection des intérêts étrangers et bons offices en Inde et au Pakistan (1971-1976) • Annexe: Liste des intérêts étrangers représentés par la Suisse depuis la fin de la Seconde Guerre mondiale
41	**Südamerika – Teil des Westens, Teil des Südens** (02/2006)	• Der Linksruck in Südamerika • Die soziale Problematik Lateinamerikas: Ihre Entwicklungsrelevanz • Brésil-Amérique du Sud – partenariat ou Leadership? • Die Schweiz und Südamerika: Herausforderungen, Interessen und Instrumente • Brasilien – Partner für die nachhaltige Entwicklung, Perspektiven für brasilianisches Bio-Ethanol in der Schweiz • La décentralisation dans les Andes ou l'art d'accompagner un processus • Vers une politique scientifique et technologique bilatérale • Coopération scientifique et développement: Diversité et disparités-l'Amérique du Sud à l'aube du XXIe siècle • Argentinienschweizer in der Krise – ein kritischer Rückblick • Stagnierende Entwicklung – zunehmende Auswanderung: Migration als Überlebensstrategie in Südamerika
42	**The Fragile States Debate –** Considering ways and means to achieve stronger statehood (01/2007)	• The International Debate • Seeking out the State: Fragile States and International Governance • Assessing Fragility: Theory, Evidence and Policy • Failed state or failed debate? Multiple Somali political orders within and beyond the nationstate • Sharing the spoils: the reinvigoration of Congo's political system • Administering Babylon – on the crooked ways of state building and state formation • Since when has Afghanistan been a "Failed State"? • Switzerland and Fragile Contexts • Fragile Statehood – Current Situation and Guidelines for Switzerland's Involvement

43	**Islam et politique dans les Balkans occidentaux** **(**02/2007)	• Entre nationalisme laïc et instrumentalisation des institutions religieuses islamiques • Fin de l'hégémonie du S.D.A. et ancrage institutionnel du néo-salafisme • Bibliographie sélective
44	**La politique étrangère de la Suisse : permanences, ruptures et défis 1945 – 1964** (01/2008)	• De la neutralité «fictive» à la politique de neutralité comme atout dans la conduite de la politique étrangère • Partizipation oder Alleingang?Die UNO-Beitrittsfrage aus der Sicht Max Petitpierres (1945-1961) • La Suisse et la conférence des Nations Unies sur les relations diplomatiques • Die Guten Dienste als Kompensationsstrategie zur Nicht-Mitgliedschaft bei der UNO • L'accord italo-suisse de 1964: une rupture dans la politique migratoire suisse • Die Diplomatischen Dokumente der Schweiz (DDS) und die Datenbank DoDiS
45	**Power sharing** **The Swiss experience** (02/2008)	• Sharing History • Sharing State and Identity • Sharing Territory • Sharing Rule • Sharing Democracy • Sharing Language and Religion • Sharing Justice • Sharing Wealth and Income • Sharing Security • Sharing the Future
46	**Efficacité de l'aide:** **Bilan et perspective** (01/2009)	• Efficacité de l'aide et querelles de méthodes: l'émergence de la 'Déclaration de Paris' et ses conséquences • Wirksamkeit: Aktualität und Herausforderungen eines alten Anspruchs der Entwicklungspolitik • Country Ownership and Aid Effectiveness: why we all talk about it and mean different things • Die Wirkung der Entwicklungszusammenarbeit im ultilateralen System • Public Private Partnerships und Wirksamkeit der Entwicklungszusammenarbeit • Der Bedeutungszuwachs von Public Private Development Partnerships • Can Coherent, Coordinated and Complementary Approaches to Dealing with Fragile State Yield Better Outcomes? • The Prospects of Colombia and Latin America concerning the Paris Declaration • Coopération au développement triangulaire et politique étrangère: simple avatar de la coopération bilatérale ou nouvel instrument pour une coopération publique «globale»? • Von Paris nach Accra – und darüber hinaus Lehren aus der Aid Effectiveness Debatte aus der Sicht der Zivilgesellschaft • Opportunities and Challenges for EU Development Cooperation after the Accra High-Level Forum • Aid Effectiveness after Accra: What's next?
47	**Genocide Prevention** (02/2009)	• Today's conversation about Genocide Prevention • Emerging paradigms in Genocide Prevention • Genocide Prevention in Historical Perspective • What is Genocide? • What are the Gaps in the Convention? • How to Prevent Genocide? • Options for the Prevention and Mitigation of Genocide: Strategies and Examples for Policy-Makers • Why the Responsibility to Protect (R2P) as a Doctrine or (Emerging) Norm to Prevent Genocide and Other Massive Human Rights Violations is on the Decline: The Role of Principles, Pragmatism and the Shifting Patterns of International Relations • Risks, Early Warning and Management of Atrocities and Genocide: Lessons from Statistical Research • How to Use Global Risk Assessments to Anticipate and Prevent Genocide • Prevention of Genocide: De-mystifying an Awesome Mandate • Prevention of Genocide: The role of the International Criminal Court • Transitional Justice and Prevention • Seeding the Forest: The Role of Transnational Action in the Development of Meaningful International Cooperation and Leadership to Prevent Genocide • Religion and the Prevention of Genocide and Mass Atrocity • The Systematic Violations of Human Rights in Latin America: The need to consider the concepts of genocide and crimes against humanity from the "Latin American margin"

		• Genocide Prevention and Cambodian Civil Society • A Reflection from the United States: Advancing Genocide Prevention Through a High-Level Task Force • The construction of a global architecture for the prevention of genocide and mass atrocities • The regional fora: a contribution to genocide prevention from a decentralized perspective
48	**La situation des femmes dans le monde arabe** (01/2010)	« La situation des femmes dans le monde arabe » • La violence domestique à l'égard des femmes dans la société palestinienne • Les femmes dans les professions de la santé en Jordanie • « Dernier voyage à Marrakech » ou Comment moraliser le genre dans une chronique judiciaire • « Féminisme d'État Tunisien »: 50 ans plus tard, la situation des Tunisiennes • La longue marche des femmes marocaines. De Akhawât as-safâ' à la Caravane des droits • Le parcours militant d'une femme kurde de Syrie. De la cause kurde à la défense des droits des femmes • Les représentations des femmes dans le discours nationaliste palestinien autour de la commémoration du cinquantenaire de la Nakba • Représentations de la place des femmes musulmanes dans l'Islam en Suisse romande
49	**Swiss Science Diplomacy** (02/2010)	• Genèse et première croissance du réseau des conseillers scientifiques suisses (1958-1990) • Le réseau suisse des conseillers scientifiques et technologiques de 1990 à la création de swissnex • Gedanken eines Zeitzeugen zum Start des Wissenschaftsrates von 1958 • Douze années japonaises: 1986-1998 • La nouvelle diplomatie scientifique de la Suisse et le modèle swissnex: l'exemple de Boston après 10 ans • La Suisse scientifique dans le monde du 21ème siècle: maintenir le cap ! • Science Diplomacy Networks
50	**Dealing with the Past** (03/2010)	• A Conceptual Framework for Dealing with the Past • A normative conception of Transitional Justice • The right to know: a key factor in combating impunity • Rule of law and international, national justice mechanisms • Reparation programs: Patterns, Tendencies, and Challenges • The role of Security Sector Reform in Dealing with the Past • Dealing with the Past in peace mediation • Pursuing Peace in an Era of International Justice • Transitional Justice and Conflict Transformation in Conversation • Reflection on the role of the victims during transitional justice processes in Latin America • Archives against Amnesia • Business in armed conflict zones: how to avoid complicity and comply with international standards • Masculinity and Transitional Justice: An Exploratory Essay • The application of Forensic anthropology to the investigation into cases of political violence • Dealing with the past: The forensic-led approach to the missing persons issue in Kosovo • A Holistic Approach to Dealing with the Past in the Balkans • West and Central Africa : an African voice on Dealing with the Past • Dealing with the Past in DRC: the path followed? • Challenges in implementing the peace agreement in Nepal: Dealing with the Impasse • Switzerland, the Third Reich, Apartheid, Remembrance and Historical Research. Certainties, Questions, Controversies and Work on the Past
51	**Un Kosovo unitaire divisé** (01/2011)	• Définitions constitutionnelles du Kosovo • Les prérogatives de l'Etat au Kosovo dans la pratique • Approche • Environnement humain au Nord du Kosovo • Grille d'analyse, hypothèses et concepts • Géographie • Populations : descriptions et chiffres • La division au quotidien

51	**Un Kosovo unitaire divisé** (01/2011)	• Economie • Niveaux de vie • Perceptions • Institutions • Trois niveaux de blocages • Etat de droit : quel droit ? • Institutions locales • Efficacité des institutions ? • Les institutions vues par les citoyens • Organisations internationales • MINUK, OSCE, KFOR • EULEX • ICO / EUSR • Le facilitateur de l'UE pour le Nord du Kosovo • Stratégies et discours • Absence de dialogue – politique du fait accompli • Discours inachevés • Stratégie de Belgrade • Stratégie de Pristina • Du partage à la partition ? • Implications d'une partition pour le Kosovo • Dialogue et coopération régionale
52	**Religion in Conflict Transformation** (02/2011)	• Religion in Conflict Transformation in a Nutshell • When Religions and Worldviews Meet: Swiss Experiences and Contributions • Introduction to the Conference "When Religions and Worldviews Meet" • Competing Political Science Perspectives on the Role of Religion in Conflict • Transforming Conflicts with Religious Dimensions: Using the Cultural-Linguistic Model • Culture-sensitive Process Design: Overcoming Ethical and Methodological Dilemmas • Transforming Religious-Political Conflicts: Decoding-Recoding Positions and Goals • Creating Shifts: Using Arts in Conflicts with Religious Dimensions • Diapraxis: Towards Joint Ownership and Co-citizenship interviewed by Damiano A Sguaitamatti • Diapraxis in Different Contexts: a Brief Discussion with Rasmussen • Bridging Worlds: Culturally Balanced Co-Mediation • Connecting Evangelical Christians and Conservative Muslims • Tajikistan: Diapraxis between the Secular Government and Political Islamic Actors • Swiss Egyptian NGO Dialogue as an Example of "Dialogue through Practice" (Diapraxis) • Communities Defeat Terrorism–Counter-Terrorism Defeats Communities, The Experience of an Islamic Center in London after 9/11
53	**« Révoltes arabes : regards croisés sur le Moyen-Orient »** (01/2012)	• Révoltes arabes : Regards croisés sur le Moyen-Orient • La position géopolitique de l'Asie antérieure • Les révoltes arabes : réflexions et perspectives après un an de mobilisation • Printemps arabe et droit public • Le cas syrien • The Arab Gulf Monarchies: A Region spared by the 'Arab Spring'? • La France dans le piège du printemps arabe
54	**Tenth Anniversary of the International Criminal Court: the Challenges of Complementarity** (02/2012)	• Ten Years after the Birth of the International Criminal Court, the Challenges of Complementarity • We built the greatest Monument. Our Monument is not made of Stone. It is the Verdict itself. • Looking Toward a Universal International Criminal Court: a Comprehensive Approach • What does complementarity commit us to? • Justice and Peace, the Role of the ICC • Towards a Stronger Commitment by the UN Security Council to the International Criminal Court • Where do we stand on universal jurisdiction? Proposed points for further reflexion and debate • Challenges in prosecuting under universal jurisdiction • Commissions of Inquiry : Lessons Learned and Good Practices • Towards the Creation of a New Political Community • The Fate of the Truth and Reconciliation Commission in the Federal Republic of Yugoslavia-Serbia

		• When Politics Hinder Truth: Reflecting on the Legacy of the Commission for Truth and Friendship • On Writing History and Forging Identity • Colombia and the Victims of Violence and Armed Conflict • Historical Memory as a Means of Community Resistance • How We Perceive the Past : Bosnia and Herzegovina, 17 Years On • Regional Approach to Healing the Wounds of the Past • Challenges in Dealing with the Past in Kosovo : From Territorial Administration to Supervised Independence and Beyond • Setting up Mechanisms for Transitional Justice in Burundi : Between Hope and Fear • « My Papa Is There » • Transitional Justice Mechanisms to Address Impunity in Nepal • Nepal: Better no Truth Commission than a Truth Commission Manipulated • Spain and the Basque Conflict : From one Model of Transition to Another • Moving to a new Social Truth • Peace and Coexistence • EUSKAL MEMORIA : Recovering the Memories of a Rejected People • France and the Resolution of the Basque Conflict • Democracy and the Past
55	**L'eau – ça ne coule pas toujours de source** **Complexité des enjeux et diversité des situations** **(01/2013)**	• L'Eau douce est au centre du développement de l'humanité, la Suisse est concernée • Empreinte hydrique: la Suisse et la crise globale de l'eau • S'engager sur le front de la crise globale de l'eau au service des plus pauvres: un défi que doivent relever les entrepreneurs des Greentec suisses • Le partenariat innovant de la Haute Ecole de l'Arc Jurassien dans l'acquisition des données pour l'eau et l'agriculture : les nouvelles technologies participatives au service du développement • Se laver les mains avec du savon, une des clés de la santé publique mondiale • De l'or bleu en Asie Centrale • Ukraine: quand la décentralisation passe par l'eau • Noël à Mindanao • La contribution de la coopération économique du SECO au défi de la Gestion des réseaux d'eau urbains • Diplomatie de l'eau: l'exemple du Moyen-Orient • Le centime de l'eau: la solidarité de toute une ville !
	La diplomatie suisse en action pour protéger des intérêts étrangers (01/2014)	• Swiss Diplomacy in Action: Protective Power Mandates • Aperçu historique sur la représentation des intérêts étrangers par la Suisse et sur les activités de Walter Stucki en France • Du mandat suisse de puissance protectrice des Etats-Unis en Iran • Le mandat suisse de puissance protectrice Russie-Géorgie : négociations avec la Russie et établissement de la section des intérêts géorgiens à Moscou • Questions et réponses lors du débat du 15 décembre 2011 • Documents et photographies
57	**Switzerland and** **Internet governance:** **Issues, actors, and challenges** (02/2014)	• The evolution of Internet governance • WHY is Internet governance important for Switzerland? • What are the Internet governance issues? • What are the seven Internet governance baskets? • WHO are the main players? • HOW is Internet governance debated? • WHERE is Internet governance currently debated? • Foreseeable scenarios • Recommendations
58	**Bei Not und Krise im Ausland** Konsularischer Schutz und Krisenmanagement der Schweiz im 21. Jahrhundert **En cas de détresse et de crise à l'étranger** La protection consulaire et la gestiondes crises de la Suisse au 21ème siècle (03/2014)	• „Plane Gut. Reise gut" Der konsularische Schutz der Schweiz • « Départ réfléchi. Voyage réussi » La protection consulaire de la Suisse • Das Krisenmanagement-Zentrum des EDA – Heute und in Zukunft • Le Centre de gestion des crises du DFAE – Aujourd'hui et demain • « Responsable moi ? » La perception de la notion de responsabilité individuelle chez le citoyen suisse se rendant à l'étranger • « Un indien averti en vaut deux » Le point sur l'aventure psychologique des voyageurs

58	**Bei Not und Krise im Ausland** Konsularischer Schutz und Krisenmanagement der Schweiz im 21. Jahrhundert **En cas de détresse et de crise à l'étranger** La protection consulaire et la gestion des crises de la Suisse au 21ème siècle (03/2014)	• „Ich denke immer wieder daran!» Langfristige Verarbeitung von schwerwiegenden Ereignissen • Abseits der Normalrouten Reisealltag eines Afrikakorrespondenten • Konfrontiert mit dem Ungewissen Zwischen institutioneller Pflicht und Eigenverantwortung am Beispiel einer Mitarbeiterin von Mission 21 in der Republik Südsudan • Das kollektive Gedenken zur Bewältigung von Katastrophen • Luxor – 1997 • Drei Tage, die eine Ewigkeit waren • Halifax – 1998 • SR 111 • Thailand – 2004 • Tsunami im indischen Ozean / Tsunami dans l'océan indien • Rückblick vom damaligen Missionschef der Schweizer Botschaft in Bangkok • Rückschau eines Detachierten der Schweizer Botschaft zur Situation im Unglücksgebiet in Thailand • Détachement pour la coordination des interventions dans la zone de Phuket • Learing by doing an der Tsunami-Hotline • Liban – 2006 • « Evacuez ! » • Guerre Hezbollah / Israël • Haiti - 2010 • Im Kriseneinsatz nach dem Erdbeben in Haiti • À la recherche de concitoyens • Evakuation von Kindern • Fukushima - 2011 • Erdbeben, Tsunami, nukleare Verstrahlung • Organisation der Verwaltung / Organisation administrative • Das Krisenmanagement des EDA im Zeitraum 2002 bis 2006 • Das Krisenmanagement des EDA, die Entwicklung bis 2010 • Création du Centre de gestion des crises Multiplication des crises et des défis • Die Konsularische Direktion Konsequente Weiterführung eines Erfolgsmodells • Umsetzungsinstrumente / Instruments de mise en oeuvre • Im Büro fühle ich mich am sichersten Reisehinweise des EDA • Es ist wahrscheinlich, dass das Unwahrscheinliche geschieht Die Entwicklung der Hotline und Helpline EDA • Missions KEP : un témoignage Synergies d'actions Collaboration entre l'Aide humanitaire et le Centre de gestion des crise (KMZ) • Zusammenarbeit in Krisen, eine Notwendigkeit Zusammenarbeit des Eidgenössischen Departements für auswärtige Angelegenheiten mit dem Bundesamt für Bevölkerungsschutz • Protection consulaire : le dynamisme indispensable d'une institution millénaire
59	**Réflexions autour du pétrole au Moyen-Orient** (01/2015)	• A Middle Eastern "Rubik's Cube": Solution Problems Reflections on the First Stage of the Arab Spring • What the Drop in oil prices holds for the Middle East, Russia and beyond? • Pétrole - Moyen-Orient, Irak et Kurdistan irakien : état des lieux et évolution • Petrole et geopolitique au Kurdistan irakien • Vers une indépendance kurde en Irak ? Le Kurdistan et l'évolution de ses relations avec la Turquie • Rente, fédéralisme et transition en Irak : démocratie ou nouvel ordre autoritaire ? • Le Moyen-Orient au cœur des enjeux énergétiques de la Chine • Avec le négoce des matières premières, la Suisse joue sa réputation
60	**The Caucasus Conflicts: Frozen and Shelved ?** (02/2015)	• Abkhazia: Regulations for Trade with Disputed Statehood • Conflict and Peace in South Ossetia – from a Local Perspective • History Dialogue between Georgians and Abkhaz: How Can Working with the Past Pave New Ways? • Bridging Gaps in Civilian Peacebuilding in the Nagorny Karabakh Context • Armenia: An Interior View • Stability without Peace in Chechnya • The Role of the Chairmanship in the OSCE Engagement in the South Caucasus • The Work of the OSCE High-Level Planning Group

		• Mediating Ambiguity – Contrasting the Mediation Perspectives of the Belgrade-Pristina Dialogue and the Geneva International Discussions • Neither War Nor Peace in Georgia: Geneva Discussions Seen from a UN Angle • The EUMM's Work in Georgia
61	**Schweizer Partnerschaft mit der NATO** 20 Jahre Schweizer Teilnahme an der Partnerschaft für den Frieden (01/2016)	• 20 Jahre PfP: Geschichte und Rückblick der Schweizer Erfahrungen • Adolf Ogi: „Die Partnerschaft für den Frieden ist vielleicht der beste Deal, den wir je erhalten haben" • 20 Jahre Schweizer Beteiligung an der Partnerschaft für den Frieden mit der NATO • Behutsame Schritte in die Partnerschaft für den Frieden - Überlegungen eines aussenstehenden Beobachters • Die Schweiz und die NATO vor der Partnerschaft für den Frieden,1949-1995 • Aktueller Stand der Beziehungen • Partnerschaft für den Frieden: sicherheitspolitische Einbettung • Aussenpolitische Bedeutung der Partnerschaft für den Frieden • Le rôle de la Mission suisse auprès de l'OTAN • Der Beitrag der Genfer Zentren zur Partnerschaft für den Frieden • Praktische Aspekte der Schweizer Teilnahme an der PfP und die Rolle der PfP angesichts aktueller Herausforderungen • Entwicklung der Partnerschaft und ihre Bedeutung für die Schweizer Armee • Le Partenariat pour la Paix: tout bénéfice pour les Forces aériennes • Praktischer Nutzen der Partnerschaft für die Schweizer Armee • Utilité de l'interopérabilité • Nutzen der Partnerschaft für die einsatzorientierte Ausbildung in der Friedensförderung • armasuisse und die Partnerschaft für den Frieden • Einsatz der SOG im Rahmen von «Partnership for Peace» • Les défis du PPP • Die PfP aus Sicht anderer europäischer Staaten • 20 Years of Austrian Partnership with NATO – Record and Outlook • Finnish view of NATO Partnership • Ausblick: Wie entwickelt sich die PfP in der Zukunft? • Rethinking NATO's Partnerships for the new security environment • PfP, Multipolarity and the Challenges in the Middle East and North Africa • Die Schweiz und der Wandel der NATO-Partnerschaftspolitik, 1996-2016
62	**Der Bund und die Auslandschweizerinnen und -schweizer** La Confédération et les Suissesses et Suisses de l'étranger (02/2016)	• Die Tätigkeit des Bundes für eine starke Verbindung der Auslandschweizerinnen und Auslandschweizer zur Heimat • Invitation à la decouverte des Suissesses et Suisses de l'étranger • Mobility to and from Switzerland • La construction de la Cinquième Suisse au cœur de l'internationalisation de l'économie • Aktuelle Entwicklungstendenzen des Profils der Auswanderinnen und Auswanderer aus der Schweiz • Die Aus- und Rückwanderungsberatung des EDA • Stagiaires: Auslandschweizerinnen und Auslandschweizer auf Zeit • Gelebte Mobilität in der beruflichen Grundbildung im Technologiekonzern Bühler • Schweizer (Berufs-)Bildung im Kontext internationaler Mobilität • Neue Wege für das Studium im Ausland • Que fait concrètement le SECO pour aider les Suisses de l'étranger ? • Les 50 ans de l'article constitutionnel sur les Suisses de l'étranger • Immatriculation hier, annonce aujourd'hui – un exemple de lien entre le citoyen à l'étranger et les autorités de la patrie • eVERA – à l'heure des services consulaires en ligne • La Cinquième Suisse, maillon important du réseau de contacts de notre diplomatie • Lyon - Depuis 2010 • Sydney - Zweimal Nationalfeiertag 2015 • Kairo - „Revolution" 2011 • Los Angeles - 2010 bis 2013 • Bangkok - 2009 bis 2015 • New York - de 2010 à 2014 • Mailand-Abidjan-Wellington - 2005 bis 2016 • Seoul - 2012 bis 2016 • Hong Kong - 2014 bis 2015 • Die Schweizer Revue zwischen Leistungsauftrag und Sparvorgaben • Swissinfo.ch – der Link zur Heimat • Der Bund und die Ausübung der politischen Rechte aus dem Ausland • Die Sozialhilfe für Auslandschweizer und Auslandschweizerinnen

62	**Der Bund und die Auslandschweizerinnen und -schweizer** La Confédération et les Suissesses et Suisses de l'étranger (02/2016)	• Der Zugang zur Sozialvorsorge des Bundes für Auslandschweizerinnen und Auslandschweizer • Haben Schweizer Banken etwas gegen Auslandschweizerinnen und Auslandschweizer als Kunden? • Der Schweizerverein Helvetia: Ein Stück Heimat in Hamburg • Die Plattform in einer Region ausserhalb der Metropolen: Der Schweizerverein Jütland und Fünen • Das Swiss Institute, New York • Pro Ticino, l'associazione che riunisce i ticiniesi fuori cantone … in rete • Vous avez dit OSE? • Die ASO und die Jugend • Schweizerschulen im Ausland • Erinnerungen an die Schweizer Schule Rom • Portrait d'une école suisse à l'étranger : le Colegio Helvetia de Bogota • Mit zwei Kulturen aufzuwachsen bringt viele Erfahrungen und erweitert den Horizont • Die Schweizerschule Bangkok und ihr Patronatskanton Luzern • Von der Schweiz nach Mexiko und wieder zurück
63	**Die Auslandschweizergemeinschaft: Profil – Netze – Partnerschaften** **La communauté des Suisses de l'étranger : profil – réseaux – partenariats** (03/2016)	• Internationale Wanderungen von Schweizer Staatsangehörigen • Schweizerinnen und Schweizer in der Volksrepublik China: jung, mobil und auf der Suche nach Herausforderung • Les habitants suisses des régions françaises limitrophes de la Suisse • Südbaden und die Schweizer – einkaufen ja, wohnen nein? • Zuwanderung von Schweizerinnen und Schweizern: eine deutsche • Perspektive • Auslandschweizer sind mehrheitlich Doppelbürger – Grund und mögliche Folgen • Chancen und Schwierigkeiten der Doppelbürgerschaft in Frankreich • Wenn Statistiken an ihre Grenzen stossen – das Beispiel der Schweizerinnen und Schweizer in Israel • Integration und Assimilation in fremden Ländern • Kästen und Interview: Beispiel Thailand • «Migration in den Herkunftsstaat der Vorfahren»: Das Beispiel von Personen schweizerischer Abstammung aus Argentinien • La Cinquième Suisse, maillon important du réseau de contacts de notre diplomatie • Die Partnerschaften des Bundes
64	**In Support of Federalism Debates** (01/2017)	• What is federalism, what are federations? • What are origins, rationales and determinants of federal systems? • What are 'alternatives' to federalism? • Federalism in contexts of peace-statebuilding and democratic transitions • Federalism debates as part of peace negotiations, national dialogue and constitutionk making • Common issue: who shall participate? • On dynamics of debates on substance and possibilities to manage them • How to demarcate federal units? • How to distribute powers and resources? • What to consider when establishing the second chamber of parliament? • How much importance shall federalism give to ethnic diversity? • Shall federal units have their own Constitution? • Do federal units have a right to self-determination? • When do federations fail? • What aspects of the federal design determine how centralized or non-centralized a federation is? • Selected literature • List of tables and figures • Questions on Federalism
65	**Ne tirez pas sur l'ambulance : Protégez la mission médicale** (01/2018)	• The ICRC at the Heart of Medical Protection • The Role of the World Health Organization (WHO) in protecting the Medical Mission • MSF on Attacks on Hospitals and the Protection of Health Care in Time of Conflict • The Role of Permanent Missions in Promoting the Protection of the Medical Mission • De l'utilisation des armes explosives en zones urbaines : le cas de la Syrie • La protection juridique de la mission médicale • Humanity: Military Doctors' Ethical Obligations in the midst of Armed Conflicts • International Humanitarian Law and State Responses to Terrorism

66	**La lutte contre la famine : un mythe de Sisyphe?** (02/2018)	• The Re-emergence of Famine in the 21st Century • Éradiquer la faim et la malnutrition au Sahel et en Afrique de l'Ouest : «Marchons ensemble si l'on veut aller loin… » • Hunger on the Rise: a Call for a Multidimensional Approach to address Complexity • Conflict and Hunger: Breaking a Vicious Circle. A joint initiative by Switzerland and the Kingdom of the Netherlands • A glimpse into Hunger, Malnutrition and Conflict from the Human Right to Food and Nutrition Perspective • War-Related Hunger and the Risk of Famine in Today's Armed Conflicts: Next Steps for Policy Makers • Conflict, Hunger and System Change: the 'Grand Bargain' and beyond • WHO Perspectives - Famine and Hunger: Addressing Food Security and Health • Removed, but not disconnected: the Role of Multilateral Processes in the Fight against Hunger • Hunger in Äthiopien: Ernährungssicherheit im dürregeplagten Land und der Beitrag der Schweiz • Wie Caritas Schweiz den Hunger bekämpft • From Famine Relief to Resilient Food Systems