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## **Medical and Psychological Impact of the 2013 Flood Disaster in Germany and Longitudinal Evaluation of a Psycho-Social Support Program for the Health Status of Affected Individuals**

### Introduction

Flood disasters pose severe challenges for affected societies and climate models predict an increase in frequency and intensity in future decades. Mental disorders are the most frequently studied health consequences of floods with significant increases of depressive and post-traumatic disorders. However, meta-analyses document a lack of longitudinal data and of the inclusion of an interventional perspective. The study aims to explore the long-term mental and physical health status in flood victims and to evaluate the efficacy of individualized psycho-social support interventions.

### Methods

In cooperation with the Malteser Relief Service that had established a psycho-social support network in the affected regions of South-Eastern Germany a longitudinal field study with three measurements covering a time span of 12 months was conducted two years after the flood disaster. The support program comprised both instrumental and psycho-social elements. A battery including socio-demography, mental and physical health parameters as well as health-related quality of life was sent to all beneficiaries of the program. A Multi-Level Random Coefficient Model was used to analyze changes over time.

### Results

345, 172 and 163 participants responded at time points 1 – 3 and exhibited elevated depressive and post-traumatic stress symptoms with a reduced health-related quality of life and an increased rate of health care utilization compared to their reference population. Multi-Level Modeling revealed that obstacles to financial aid as a secondary stressor predicted depressive symptoms whereas financial assistance and supportive talks counteracted that influence. Furthermore, the procurement of further assistance was associated with improved health-related quality of life.

### Conclusion

The long-term longitudinal and multimodal design has shown that low-threshold psycho-social interventions can positively affect mental health parameters after a flood disaster. Core competencies for post-disaster support are identified and implications for further education of volunteer staff as well as the gatekeeper function of low-threshold psycho-social support programs in structurally weak regions are discussed.

Ilan Cerna-Turoff, Hanna-Tina Fischer

## How do natural disasters lead to violence against children? A systematic review of pathways

### Introduction

Little is understood about how natural disasters lead to protection risks, including violence against children. An understanding of how and why violence may occur is essential in creating effective programmatic responses for children. We systematically reviewed academic and humanitarian grey literature to identify how affected communities described the pathways between natural disasters and violence against children.

### Methods

We searched 15 academic databases and six grey literature repositories from the earliest date of publication to May 16, 2018. In addition, we engaged focal points within global humanitarian agencies for additional recommendations on materials. All literature that applied a qualitative methodology and presented original findings was included in this review.

### Results

A total of 3064 unduplicated articles and reports were identified in the search. Five peer-reviewed articles and twelve reports met the final inclusion criteria. Within these articles, we identified five possible pathways between natural disasters and violence, including: (i) environmentally-induced changes in supervision, accompaniment, and child separation; (ii) transgression of past social norms in post-disaster behavior; (iii) economic stress; (iv) negative coping with stress; and (v) insecure shelter and living conditions. A limited number of sources described the emergence of positive coping strategies which protected children from violence.

### Conclusion

Humanitarian agencies should target the identified pathways in creating effective violence prevention and response after natural disasters. The quality of the evidence could be greatly improved. We propose five recommendations for practitioners to better document these pathways in evidence generation and reporting—(i) strengthen assessment capacity within humanitarian agencies; (ii) improve the methodological design of evidence collection; (iii) collect more detailed primary data; (iv) standardize the presentation of information in reporting; and (v) share information in a more systematic way.

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## The Emergency Support Instrument in Greece and Its Implications for the Humanitarian System

### Introduction

Responding to the humanitarian needs of refugees after the closure of the Balkan route and the EU-Turkey deal in Greece DG ECHO implemented the Emergency Support Instrument (ESI) in 2016 as a novelty to carry out EU humanitarian aid operations within the EU's own territory. From 2016-2019 DG ECHO provided €643.6 million to support the Greek government, UN organizations as well as implementing (I)NGOs with the provision for refugees (shelter, WASH, medical, PSS...). Furthermore €180 million were spend in 2018 for urban accommodation projects and cash activities.

### Methods

35 expert interviews (among others with DG ECHO, DG HOME, UNHCR, IOM, Greek authorities, ASB, DRC, NRC, MSF, MDM, Oxfam, IRC, ICRC) in Northern Greece, on Lesbos and in Athens in Aug/Sep 2017 and Jan/Feb 2019.

### Results

The specific situation in Greece revealed a missing experience of international humanitarian staff with the establishment of humanitarian projects in highly regulated Western contexts and conflicting legal and value systems of the donor, EU regulations, Greek national law as well as humanitarian standards and principles. As a result, multiple frictions and challenges emerged that limited the provision humanitarian aid, caused "identity crises" and "reputational damage" for DG ECHO and INGOs, but also lock-in effects for UN organizations and INGOs.

### Conclusion

The research shows the difficulties and frictions of implementing humanitarian projects within highly regulated Western contexts such as the EU. At the same ESI might be a game changer for the humanitarian systems, since ESI is also intended for other (transborder) humanitarian emergencies than Greece. As a result, fundamental shifts of actors, institutions and instruments in humanitarian aid can be expected.

Florence Rodgers, Aula Abbara, Maryam Omar

## **A qualitative study of cash transfer programmes for refugees in Greece with a focus on protection**

### Introduction

With cash assistance growing in popularity in humanitarian programming, consideration of protection is important as it can improve the health, safety and dignity of beneficiaries.

This qualitative study provides insight into challenges encountered by implementers of cash transfer programmes (CTPs) in Greece, and the potential protection issues faced. Specifically looking at the changing climate of the cash programme in Greece, which has adopted a Greece Cash Alliance led by UNHCR.

### Methods

A literature review of academic and grey literature and qualitative semi-structured interviews with stakeholders from Non-Governmental Organisations and United Nations agencies were performed. Informants were either programme developers or implementors. Key informants were identified through purposive sampling. An inductive thematic approach was taken in analysis.

### Results

Main emerging themes were: 1. Protection needs of beneficiaries 2. Benefits of cash assistance on protection 3. Consideration of protection in programme design and 4. Protection monitoring. Women, young men, minors and those with health needs were identified as requiring additional consideration. Cash assistance was seen to offer choice and reduce negative coping strategies. Protection was not consistently considered in design or monitoring of CTPs in Greece.

### Conclusion

In Greece there was no standardised integration of protection in CTPs, informants flagged the need for this but critiqued that there is not enough monitoring to feedback to program design. CTPs offer chances to identify protection risks and allow people to meet their basic needs, giving them space and funds to prioritise other needs such as health and education, inherently improving their protection status. Therefore, all CTPs have the ability to influence protection needs and outcomes, in Greece this was not capitalised on due to minimal staff training in protection and integration of protection in CTP design.

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## **Contributing to a greener response – Reducing CO2 emissions by substituting airdrops with amphibious all-terrain vehicles**

### Introduction

Because of poor infrastructure, tough terrain and flooded roads, humanitarian logisticians often rely on airdrops and airlifts to reach beneficiaries in remote destinations. Air transportation results in significantly higher environmental impact compared to overland transportation and it is oftentimes the last-mile that poses the most difficulties. Hence, WFP looked for innovative solutions to overcome the barriers of last-mile road transportation in harsh environments to reach their beneficiaries.

### Methods

In 2017, WFP's Global Fleet unit identified that all-terrain vehicles would be the most suitable solution. Of several technologies available, SHERP was determined as the only vehicle that would satisfy WFP's needs.

SHERPs can float on water, cross rivers, climb obstacles and pass swamp lands. First tests were carried out in Kampala, Uganda, in mid-2018, while two 3-month-trials were started towards end of the year with a total of six vehicles.

### Results

Within the first five weeks of operation in South Sudan, 800MT of food were delivered using SHERPs on the last-mile to Ganyiel (which used to be a destination for airdrops). By this, 25 rotations of IL76 aircrafts could be substituted, resulting in a savings of 95% or 600 MT in CO2 emissions. This equals to a reduction of CO2 emissions per MT food delivered of 754kg/MT (from 790 to 36 kg/MT). Considering the fact that 60,667 MT have been airdropped in South Sudan in 2018, there is a substantial potential for decreasing the carbon emissions.

### Conclusion

SHERPs are valuable assets for the humanitarian sector to reach more beneficiaries with less damage to the environment. WFP as a logistics service provider is constantly looking for more areas of operation and cooperation with other humanitarian actors to facilitate a more effective, efficient and green response.

Mason Huffine  
Little Sun

## Solar Lights: A Brighter Future for Refugees and IDPs

### Introduction

Most displacement sites and refugee camps are located in remote areas with no access to the power grid. Kerosene, candles and disposable batteries are the main energy and lighting sources for refugees and IDPs. These non-sustainable, dangerous and costly solutions keep communities in energy poverty. Personal portable solar lamps offer modern lighting empower communities sustainably.

### Methods

Advocating solar lights to be considered as Core Relief Items has enabled us to provide portable Little Sun Solar Lights to Refugees and IDPs in cooperation with partners such as UNHCR, IOM, Save the Children and PLAN. Portable lamps are considered the most useful relief item by many refugees. They offer a feeling of safety, dignity and a brighter future. Portability is a key factor as returning refugees and IDPs can keep their lights, which are designed to have a 5-year live span.

### Results

Based on internal M&E and published reports, access to a personal, portable light impacts Refugee Communities in multiple regards. It reduces violence against women at night in refugee camps, while also being safer and healthier than open flame lamps. Solar lights enhance children's education by extending hours of study, and they save households money, which they can spend elsewhere.

### Conclusion

Energy access (SDG 7) for displaced communities is increasingly recognized regarding its impact on Education (SDG 4), Health (SDG 3), and Climate Change (SDG 13). Based on the powerful impact energy has on refugee communities, Little Sun seeks to expand its humanitarian engagement in cooperation with various qualified partners.

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## Outcomes of the Diabetes Care Program for Syrian refugees in Lebanon

### Introduction

More than three quarters of Syrian refugees in Lebanon live in poverty making purchasing medications for chronic conditions like diabetes expensive. We report the experience of a collaboration between the Syrian American Medical Society, the International Diabetes Federation and Multi Aid Programs where a free Diabetes Care Program (DCP) was offered to Syrian refugees in Lebanon.

### Methods

This retrospective cohort study uses routinely collected clinical from the DCP. 7 mobile health clinics were founded throughout Lebanon in areas where there was a high density of diabetic patients. Clinical and demographic information was recorded.

### Results

4033 patients between September 2016 and March 2019; 59% female; mean age: 52 years. 14% lived in tents. 40% had a Body Mass Index (BMI) of 30-39 and 20% had a BMI of >39. 11% were on insulin, 57% on oral hypoglycemics. 42% were hypertensive, 18% had dyslipidemia and 12% had cardiovascular disease. 76% had a first HbA1c of >7% including 45% with HbA1c of >9%; this fell to 61% and 26% respectively after treatment. 87% had complications: neuropathy (19%), retinopathy (6.5%), nephropathy (5.5%) 250 of the dropped out of the project were followed up by a call: 3.2% had died, 10% lacked transport, 12.8% because of comorbidities and 18% had relocated.

### Conclusion

Diabetes is challenging to manage in refugee situations. Our data shows some improvement in hyperglycemic control but high rates of obesity, comorbidities and complications. This collaboration led by refugee physicians shows a model with success in addressing a key health issue among refugees.

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## Implementation of a Sustainable Low Budget Service for Cervical Cancer Screening in Rural Tanzania

### Introduction

Often, development aid accounts for a resource shift from a high to a low income country, which leads to dependence, non-economical transportation routes and few incentives for further development.

Endamarariiek Health Center in rural Tanzania provides general health care and strives for an independent economy. Cervical cancer is a common disease with an easily detectable pre-clinical stage, and suitable for screening in a resource restricted setting. We aimed to build a sustainable screening service with the best diagnostic quality and low expenses as possible. Staff should be enabled to become self-reliant and financially independent. The service should be accessible to all eligible women, regardless of education or financial situation.

### Methods

Methods: A screen and treat-approach with visual inspection with acetic acid (VIA) and Lugol's iodine (VILI) and thermo-coagulation was chosen after a) interviews with providers of other medical health projects, and b) research of available literature. The core team consisted of a gynecologist, a trained nurse and supporting hospital staff visited 5 villages for outreach activity. Apart from investigation and treatment, medical history was recorded using structured questionnaires.

### Results

Results: 480 women were received within the first 5 weeks. Among them, 38 (3,8%) were VIA and/or VILI positive and underwent thermo-coagulation. No invasive carcinomas or lesions suspicious for malignancy were detected.

### Conclusion

Conclusion: With minimal financial resources, a functioning service including examination, single-visit-treatment and education could be implemented. Furthermore, a trend is leading to the direction of cervical cancer mass screenings all over the country, although the coverage is far from complete. As the restricted budget accounts for some trade-offs, the process needs to be kept under constant reevaluation, including observation of the political situation as well as detailed analysis of the generated data and follow up

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## **Migrants' social determinants of health: living conditions, violence exposure, access to healthcare**

### Introduction

WHO consider migration as a social determinant of health. MdM identifies it being composed of different factors such as living conditions, exposure to violence and access to healthcare.

### Methods

DOTW organised a multi-centric study (Niger, Morocco and Tunisia) conducted by DOTW national staff during four month based on mixed methodologies. Quantitative data collection was based on questionnaires and qualitative data's were collected through 18 discussion 'groups'. A basic statistical analysis was carried out, supported by qualitative analysis.

### Results

461 migrants were interviewed, 59% women, median age 28 year, 98.5% sub-Saharan African origin, 63% with no legal documents.

46% travelled for more than 6 months, 47% stayed in the country of interview for more than 12 months, even if most of them wanted to go on.

83.8% faced violence during their life, 61% during migration.

58% of violence was psychological in nature, confiscation of money and/or documents, or violence by police or army. The types of violence's vary according to gender and localization.

Only 39% did not face barriers to access to healthcare. The three main barriers are financial, lack of understanding of the health system and discrimination.

50% of migrants considered their health status as medium, bad or very bad, what is insufficient for such a young population.

### Conclusion

Some events are always part of migration: long duration, violence, barriers to access healthcare, with an overall negative impact on health.

DOTW made some recommendations: 1/Authorities should address the structural factors of violence against migrants 2/The health needs of migrants should be taken into account in policies at all levels 3/Health services should always consider migrants' needs with regard to determinants of health, mental health, consequences of violence and difficult access to healthcare 4/ Research is needed: What are the specific social determinants of health in migration?.

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## **Contributions of civil society to improve health – from humanitarian assistance to development cooperation**

### Introduction

On 25 April 2015, an earthquake struck the Himalayas. Nepal was hit worst. According to the United Nations, more than 8,000 people died and thousands were injured. Health infrastructure was badly damaged.

### Methods

Various methods ensuring adequate health care illustrate possible approaches in different phases of assistance taken by civil society organisations.

### Results

Following an international request for assistance from the Nepalese government, Johanniter sent an emergency medical team to provide basic health care. In addition, a relief flight delivering medicine and consumables was organised in coordination with the Ministry of Health in Nepal. This ensured basic medical care for 10,000 people for three months.

At the end of 2016, two health stations had been rebuilt in order to stabilise health care. After equipping the stations, they were handed over to the Ministry of Health.

In the longer term, Johanniter supported its partner organization Nyaya Health Nepal to train local employees to be deployed as mobile health workers in mountainous areas to improve access to health care by carrying out regular home visits, referrals and community based prevention measures.

An innovative aspect was introduced helping in patient follow up and improvement of health care: The health workers were equipped with a smartphone including a secure health app to collect patient data during their home visits. Data was entered offline and transmitted online when a network was reached. Back at the health post, health staff discussed patients and initiated adequate assistance. This improved the quality of health care and provided a continuous training of the health workers.

### Conclusion

States are responsible for their citizens. If they cannot fulfil their right to health, civil society can step in. The use of innovative approaches, piloted by civil society, can lead to improved access to the health system for marginalised groups.