Women’s, children’s, and adolescents’ health in humanitarian and other crises

The rates of preventable mortality and morbidity among women, adolescents, and children occur in humanitarian and other crises. Sarah Zeid and colleagues discuss the specific attention that is needed for women, adolescents, and children in crises and fragile settings.

The millennium development goals highlighted women’s and children’s health and galvanised unprecedented efforts by and between governments, civil society, the private sector, and development organisations to meet the needs of the world’s poorest people. However, as global, national, and local partners work to build on the momentum of the goals with an ambitious post-2015 development agenda, crises and fragile settings have devastating effects on individuals’ and families’ well-being, physical security, and future prospects. Urgent attention is needed to ensure that sexual and reproductive health interventions—vital for the health and dignity of women, children, and adolescents—are available and accessible to those in emergency settings.

This paper highlights the critical needs for reproductive, maternal, newborn, child, and adolescent health in emergency settings and, based on evidence, offers key recommendations to effectively tackle these needs.

Methods
This paper is based on a desk review of evidence and inputs from public consultations and expert meetings organised as part of the new Global Strategy for Women’s, Children’s and Adolescents’ Health. UNFPA organised an expert meeting in Abu Dhabi on 10-11 February 2015, hosted by the government of the United Arab Emirates. This meeting, chaired by Princess Sarah Zeid, focused on sexual, reproductive, maternal, newborn, and adolescent health in humanitarian and fragile settings, with the purpose of formulating policy recommendations for incorporation into the revised Global Strategy of the United Nations secretary general’s Every Woman Every Child initiative. A draft of this paper was circulated for public comment through a consultation process and finalised based on the responses received.

Women, children, and adolescents are adversely affected in humanitarian crises
The worst mortality and morbidity rates for women and children occur in chaotic environments that are caused by, and create, breakdowns in governance, rule of law, and support systems. They are characterised by destruction of public infrastructure including health facilities, massive population displacement, insecurity, and a collapse of the social contract. Hostilities may be actively directed at stigmatised populations, and governments may become hostile to displaced populations.

More than 80% of the 25 and 44 countries classified as making either “no progress” or “insufficient progress” towards millennium development goals 5 (to improve maternal health) and 4 (to reduce child mortality rates), respectively, have suffered a recent conflict, recurring natural disasters, or both. Worldwide, women and children are up to 14 times more likely than men to die in a disaster.1 Over 75% of 84 million people in need of humanitarian assistance in 2014 were women and children, the majority of whom were impoverished.2 3 Poor people suffer most from natural disasters—95% of disaster fatalities occur in low and middle income countries.4

In the 50 most fragile states (based on OECD data),5 60% of preventable maternal deaths6 and 53% of preventable under 5 deaths7 take place in settings of conflict, displacement, and natural disasters. Neonatal mortality is highest in these circumstances. In 2012 99% of the 2.9 million newborns and 2.6 million stillbirths occurred in low and middle income countries, many of which had been affected by complex humanitarian emergencies.8 9 More than 250 million children under the age of 5 live in countries affected by armed conflicts.10

At any given time 4% of disaster affected populations are pregnant, about 15% of whom will experience an obstetric complication.11 Risks associated with childbirth are compounded for girls who are exposed to forced or transactional sex.12 Without access to emergency obstetric services, many women and girls will die during pregnancy or childbirth, and many more suffer preventable long term health consequences.13

Women and adolescent girls, especially those in fragile or hostile settings, face gender based exclusion, marginalisation, and exploitation, including sex and gender based violence. Gender inequality is a barrier to accessing essential services, and contributes to harmful practices such as early and forced marriage. These can increase during emergencies, resulting in early pregnancies that further threaten girls’ lives.14 15 Older women and women and girls with disabilities or HIV are at heightened risk and require special measures.16 17

In countries emerging from conflict continued lack of access to healthcare, psychological and social support, and justice, coupled with ongoing sex and gender based violence, impedes recovery and development. Often countries’ longer term development planning processes fail to include preparedness, response, and recovery. Globally, many sustainable development goal targets will not be reached without tailored attention to sustainable, inclusive development for women and children in humanitarian and other crises.18

Broadening the scope of Global Strategy
Rising numbers of young people combined with declining fertility and the right investments can lead to a “demographic dividend,” which is a boost in economic productivity owing to more people in the workforce with fewer dependants.19 In this context the importance of women’s, children’s, and ado-
lescents’ health needs in crises and fragile settings is the most fundamental step on the pathway to both sustain the gains of the millennium development goals and achieve the sustainable development goals.

The next Every Woman Every Child Global Strategy must be people centred and guided by both human rights norms and humanitarian principles. It must fully integrate humanitarian and sustainable development action through a “contiguity approach,” which means tackling relief, recovery, and development simultaneously rather than consecutively.19

Efforts must be driven by demand, owned by and accountable to local communities, and aimed at reinforcing social networks at the household and community levels that enhance quality of life. Young people and women must be empowered as they are the true “first responders” to a crisis.20 Boys and men should also be engaged to support better sexual and reproductive health outcomes—their positive contributions to these are largely unexplored. We propose five recommendations for achieving more sustainable development for women, children, and adolescents in crises.

Firstly, health sector interventions should be more agile. Planning resilience with communities is important so that their capability and capacity to respond to humanitarian shocks is enhanced, and the severity and duration of any deviation from the path to sustainable development is reduced.21 To this end, health sector planning and intervention should be shaped by population data, respond to health sector risk assessments and local hazards, and be tailored to specific needs. To address inequities, health services (including commodities, supplies, and human resources) and

| BOX 1 RECOMMENDED INTERVENTIONS FOR NEWBORNs AND CHILDREN |
| Key health matters to be tackled |
| • Newborns: preterm, low birth weight, sepsis, intrapartum complications |
| • Children: malaria, pneumonia, diarrhoea, measles, malnutrition, and mental health and wellbeing |
| Health interventions |
| **Newborns** |
| • Preventive care: Thermal care, protection and promotion of immediate and exclusive breast feeding, prevention and care of low birth weight, chlorhexidine for umbilical cord care, vaccination, dexamethasone, toxocotics, hygiene, prevention of mother to child transmission of HIV |
| • Treatment: kangaroo care, antibiotics, newborn resuscitation and intensive care, intrapartum care, emergency obstetrics care, oxygen, antiretroviral treatment |
| **Children** |
| • Preventive care: Longlasting insecticide treated bed nets and indoor residual spraying of insecticides, measles vaccination, infant and young child feeding interventions, adequate complementary feeding, psychosocial health |
| • Treatment: Antibiotics, artemisinin based combination therapy, oral rehydration salts, zinc, vitamin A, ready to use therapeutic foods, mental health support |
| • Delivery models: transit site clinics, community based care such as integrated community case management and community based management of acute malnutrition, home based care |
| • Campaigns: mass measles vaccinations, distribution of insecticide treated bed nets, child health days, mass malaria care, chemotherapy |
| Non-health interventions |
| • Water, sanitation, and hygiene |
| • Nutritional status screening of infant and growth monitoring |
| • Communication and education on child and maternal nutrition in emergencies |
| • Micronutrients distribution for children 6-59 months |
| • Early childhood development |
| • Child friendly spaces |
| • Basic education |
| • Child protection |
| • Psychosocial support |
| • Birth certificates and registration |
| • Early stimulation |
| • Cause of death surveillance |
| Health system enablers |
| **Resilience** |
| • Age and sex disaggregated data to assess populations in need and reached |
| • Integrate risk assessment and analysis into resilient systems and services |
| • Develop capacity of health systems to have flexible and adaptable financing and service delivery, trained and available staff, priority drugs available when needed, reliable information systems, and leadership and governance that take into account emergency risk |
| • Newborn cause of death notification and audit |
| • Include children in the design, planning, and implementation of health policies and programmes from preparedness to the onset of an emergency |
| • Re-establishment of or repairs to healthcare infrastructure, support of referral system |
| • Strengthen routinely used laboratories and disease surveillance systems |
| **Innovation** |
| • Pneumococcal vaccine, rotavirus, *Haemophilus influenzae* type B vaccine, dispersible tablets, single dose vaccines, single dose antibiotics, vaccines that don’t need to be kept cold, remote monitoring and teaching, m-health |
| • Micronutrient powder |
| • Newborns: Prefilled, single use injection device filled with gentamicin, cycloheximid for cord care, Doppler technology, gestational age estimate methods, aspartate aminotransferase AST for preterm labour at home, simplified antibiotic therapy for sepsis in young infants |
Women's, Children's, and Adolescents' Health

Box 2: Recommended Interventions for Adolescents

Key health matters to be tackled
- Early pregnancy, HIV/AIDS and other sexually transmitted infections, unsafe abortion, sexual and gender based violence (including child early forced marriage and female genital mutilation), menstrual hygiene, nutritional deficiencies, traumas

Health interventions
- Preventive care: Contraception, condoms, emergency contraception, prevention of sexual and gender based violence, mental health, sexuality education, life skills, maternal healthcare including family planning counselling, voluntary counselling and testing for HIV, iron and folic acid supplements
- Treatment: Treatment of traumas and orthopaedic surgery, emergency obstetric and neonatal care services, contraception, nutrition, comprehensive abortion care, clinical care for survivors of sexual violence, treatment of sexually transmitted infections, emergency skilled birth attendance, postnatal care including for postpartum depression, antiretroviral treatment
- Delivery models: Flexible and integrated adolescent friendly health services, temporary clinics that are community based and mobile, provision of comprehensive sexual and reproductive health services for adolescents at a single site, home based care, education and outreach through non-health facilities, safe spaces, adolescent adaptation of minimum initial services package and assessment
- Kits: Menstrual hygiene kits (dignity kits), post-rape kits, sexually transmitted infection kits, contraception kits

Non-health interventions
- Ensure schooling options through targeted support (safe passage, financial support to families) and vocational training
- Access to life skills and comprehensive sexuality education in and out of schools
- Protection of girls from child marriage
- Systems for adolescent participation in decision making (especially for girls) at community, provincial, and national levels
- Strengthen links between programmes and referral pathways and coordination between sectors, including protection, education and livelihoods, for a holistic, multisectoral response
- Safe spaces, especially for girls

Health system enablers

Resilience
- Data disaggregated for age, sex, and disability
- Qualified and dedicated adolescent sexual and reproductive health staff, including clinical staff (community health workers, nurses, midwives, doctors, paramedics, nationals and international volunteers)
- Surveillance of priority illnesses including malnutrition and mortality
- Include adolescents in the design, planning, and implementation from the onset of an emergency, as well as in monitoring and evaluating projects
- Community and parental involvement

Innovation
- Use of social media to promote access to quality health information and information sharing
- Flexible outreach strategies, including transportation budgets in view of reaching adolescents in insecure environments and otherwise hard to reach areas
- Focusing on adolescent and youth specific potential for, and actual contributions to, community resilience, response, and recovery as part of sustainable development

Box 3: Recommended Interventions for Women

Key health matters to be tackled
- Pregnancy and childbirth, sexual and gender based violence, family planning, tuberculosis, HIV/AIDS, sexually transmitted infections, situation specific diseases (for example, Ebola virus disease and cholera), mental health (including post-traumatic stress, trauma) and malnutrition

Health interventions
- In the event of a humanitarian emergency, ensure that the minimum initial services package is implemented and coordinated
- Preventive care: Sex education, prevention of sexual and gender based violence, contraception (with a focus on long acting, emergency contraceptives), post-exposure prophylaxis, menstrual hygiene management, HIV prevention, micronutrients, antenatal care
- Treatment: Skilled birth attendance, emergency obstetric and neonatal care services, caesarean section, comprehensive abortion care, treatment of sexually transmitted infections, postnatal care including for postpartum depression, treatment of traumas and orthopaedic surgery, clinical management of rape including post-exposure prophylaxis, antiretroviral treatment
- Delivery models: minimum initial services package, efficient referral, mobile clinics, community based service delivery
- Medical devices and kits: Manual vacuum aspiration, vacuum extraction, Doppler for fetal monitoring, prefilled single use injection device for Depo-Provera

Non-health interventions
- Water, sanitation, and hygiene: hygiene education, ensure functioning in health facilities for staff and patients, and manage medical care waste
- Safe spaces for women
- Baby friendly spaces
- Psychosocial care including for post-traumatic stress
- Conflict sensitive programmes that promote women's and young people’s engagement in peace building
- Reparations and justice mechanisms (for example, for sexual and gender based violence); documenting evidence of human rights abuses
- Promote women’s and young people’s participation in decision making and all levels of humanitarian response

Health system enablers

Resilience
- Foster stewardship and ownership of local health authorities
- Human resources strategies: task sharing, protection and retention of health workers, increasing numbers of female service providers including community
based health workers and midwives, capacity building in multi-hazard risk assessment, disaster preparedness, surveillance, infection prevention and control,

- Promotion of policies that enable sexual and reproductive health and associated commodities for all phases of the emergency
- Service delivery, logistics, and supply chain: re-establishment and repairs of infrastructure, supportive referral system
- Suspend user fees where these apply and may be a barrier to access
- Open source database with health management information system, disaggregated data for sex, age, and disability of populations affected by the emergency to monitor equity of access
- Accountability and quality strategies

**Innovation**

- Use social media and mobile technologies for communications, data management, cash transfers, programming, crowd sourcing, and monitoring
- Non-pneumatic anti-shock garments for postpartum haemorrhage
- Telemedicine and new methods of rapid diagnostics and new vaccines

Interventions must be available, accessible, acceptable, accountable, and of high quality. Some populations may be outside the reach of governments but will be accessible nonetheless by humanitarian organisations. Of central importance are adequately trained, resourced, and secure healthcare workers, requiring mechanisms to ensure security and safety.

Secondly, investment in stronger, more resilient healthcare and support systems is required for more reliable and secure access to essential health services and to life saving commodities, such as those necessary to protect women and adolescent girls from unwanted pregnancies to reduce the burden of sexually transmitted infections and HIV/AIDS. The ability to respond during times of crisis should be built into health systems, to absorb shocks, adapt to changed circumstances, and return to optimal levels of functionality as soon as possible. Multisector engagement of national and local stakeholders, such as ministries of health and education and local communities, in disaster risk assessment and emergency preparedness must be prioritised. The police and military should understand health is an essential part of human security.

Thirdly, communications technology, including social media, should be used more effectively. It offers opportunities to better influence health seeking behaviour, to support health workers, to help adapt health systems to local contexts, and to ensure greater accountability of all stakeholders. If communities and individuals are better connected they are able to support each other, share knowledge, and demand accountability of systems.

Fourthly, accountability should be at the centre of strategy. There should be a new emphasis on “rolling down” accountability to local communities and individuals who live with the effects of decisions taken elsewhere. This can be reinforced through adherence to principles of good governance and supported by systems that enable participation of all stakeholders in civil society, especially at local levels.

Finally, reliable, flexible financial flows are needed outside of state led mechanisms. This is critical in humanitarian contexts where crises result in the collapse of government capacity to finance, manage, and deliver services. However, funding of risk assessment, preparedness, and recovery is also critical, and requires stronger alignment between development and humanitarian financial flows, which is best achieved by sustainable development planning over several years by countries.

**Critical interventions throughout life**

Tailored intervention packages are recommended for greater effectiveness in humanitarian and fragile settings. Reliable and timely funding to support these interventions is critical, and governments of affected countries and international donors must prioritise these interventions. Based on guidelines set by UN agencies and major governmental and civil society organisations in emergency response, we recommend the critical interventions for children and newborns (box 1), adolescents (box 2), and adult women (box 3). A full list of the sources used to make these recommendations are available in the data supplement on bmj.com.

**Conclusion**

Humanitarian needs are increasing, and we must ensure that essential healthcare services and lifesaving interventions are available in even the worst of times. Strategic action to tackle and prioritise support for reproductive, maternal, newborn, child, and adolescent health is fundamental to human dignity. Such action must be more context sensitive, adapted to and for changing circumstances and across the life course. The health interventions and overall response to crises in humanitarian and fragile settings must be better anticipated, planned, and resourced.

More than ever we need the Every Woman Every Child and humanitarian communities to come together, to support each other's efforts, and to work in more complementary ways. We need cooperation between and across humanitarian and development stakeholders not only to bridge gaps but also to maximise the opportunities for sustained impact on the health and wellbeing of women, children, and young people.

**Contributors and sources**

The Every Settings working group for the Global Strategy for Women’s, Children’s and Adolescents’ Health devised the article. SZ, KG, DE, RK, and HD wrote the first draft. The Every Settings working group members HF, NR, AS, and NF contributed to subsequent drafts. RK and DE ensured relevant feedback from the consultations for the UN secretary general’s Global Strategy for Women’s, Children’s and Adolescents’ Health, and the online consultation were incorporated into the draft. All have read and agreed to the final version. KG is guarantor.

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Sarah Zeld, adviser1
Kate Gilmore, deputy executive director2
Rajat Kholia, human rights adviser3
Heather Papowitz, senior adviser4
Daniele Engel, technical specialist5
Henia Dakhkak, programme adviser6
Nijoki Rahab, senior gender adviser7
Anita Sharma, senior director8
Mollie Fair humanitarian programme specialist9
1Partnership for Maternal, Newborn and Child Health, World Health Organization, Geneva, Switzerland
2United Nations Population Fund, New York, USA
3Department of Reproductive Health and Research, World Health Organization, Geneva 2211, Switzerland
4Unicef, New York, USA
5United Nations Office for Coordination of Humanitarian Affairs, New York, USA
6United Nations Foundation, Washington, DC, USA
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Sarah Zeld, adviser1
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Henia Dakhkak, programme adviser6
Nijoki Rahab, senior gender adviser7
Anita Sharma, senior director8
Mollie Fair humanitarian programme specialist9
1Partnership for Maternal, Newborn and Child Health, World Health Organization, Geneva, Switzerland
2United Nations Population Fund, New York, USA
3Department of Reproductive Health and Research, World Health Organization, Geneva 2211, Switzerland
4Unicef, New York, USA
5United Nations Office for Coordination of Humanitarian Affairs, New York, USA
6United Nations Foundation, Washington, DC, USA

**Correspondence to.** K Gilmore gilmore@unfpa.org

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