### Gaza, armed conflict and child health

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Gaza, part of the occupied Palestinian territory and home to almost 2.3 million people, has been under Israeli blockade for the past 16 years and under occupation for decades. On 7 October 2023, Palestinian armed groups launched an assault on Israel killing 1200 Israelis and foreign nationals, mostly civilians and including 36 children, and abducting hostages, at least 30 of whom are children. Following this, Israeli forces launched aerial bombardments and ground operations in Gaza. A humanitarian pause to the hostilities came into force on 24 November 2023 and ended on 1 December 2023. As of 22nd January 2024, 25295 people have been killed in Gaza, 70% of whom are children and women, and thousands of children have been reported missing.<sup>2 3</sup> A further 91 children have been killed in the West Bank by Israeli forces or settlers.<sup>2</sup> During the humanitarian pause, 86 Israeli and 24 foreign national hostages were released, over 30 of whom were children, in exchange for the release of 240 Palestinians held in Israeli prisons, all of whom were children and women.4

The international community has a responsibility to protect children from the effects of armed conflict. Under international humanitarian law, the parties to the conflict are obliged to take all feasible steps to protect children and all civilians, and to allow and facilitate rapid and unfettered passage of humanitarian relief. Children also have the right to be protected in conflict and the right to survival under the UN Convention on the Rights of the Child (UNCRC). Children are more vulnerable

in periods of armed conflict and their rights are routinely violated, as has been seen in conflicts in Ukraine, Yemen and Syria.<sup>6-8</sup> Emerging data suggests that the rate of child deaths in this recent escalation of the conflict in Gaza when compared with other conflicts may be disproportionately high. The collective punishment of Gaza's extremely young population amounts to a child health catastrophe, with lifelong and intergenerational consequences. Furthermore, according to the UN Commission of Inquiry, which has been collecting and preserving evidence of war crimes committed by parties to the conflict since 7 October 2023, 'there is already clear evidence that war crimes may have been committed in the latest explosion of violence in Israel and Gaza". 10

Recognising the vulnerability of children in conflict, the UN has determined six specific grave violations committed by parties to conflict as especially egregious and deserving of priority attention, which are listed in box 1.11 Monitoring of the six grave violations against children in war is led by the UN Special Representative on Children and Armed Conflict. 11 12 In this ongoing escalation of violence, four of the six grave violations have been observed and reported (although not yet independently verified by an appropriately mandated entity) against children in Gaza, the West Bank and Israel: the killing and maiming of children; the abduction of children; attacks against schools and health facilities; and the denial of humanitarian access. We condemn all violations committed against children in this conflict as the rights of all children are universal, unambiguous and indivisible. In this article we focus on the violations of rights that have been observed and we discuss the

current and future impacts of these violations on the health of children. We also make recommendations to stop immediate harms to children, and suggest means for the child health community to advocate for children's rights in this conflict and beyond.

# THE KILLING AND MAIMING OF CHILDREN

As of 11 January 2024, at least 10,000 children in Gaza had been killed. 13 Additionally, 91 children were killed by Israeli forces and settlers in the West Bank as of 22nd January 2024, and 36 children were killed by Palestinian armed groups in Israel.<sup>2</sup> Nearly 1.7 million people in Gaza are internally displaced due to the conflict.<sup>2</sup> On 3 December 2023, the Israeli military issued immediate evacuation orders for 20% of Khan Younis city; the area was home to nearly 117 000 people before hostilities, and is currently hosting at least 50 000 persons displaced from the north in 21 shelters.<sup>4</sup> The entire population of children in Gaza have nowhere safe to go, nor adequate provision of food, water, toilets and shelter. 14 15

Amnesty International has reported the use of large bombs likely weighing up to 2000 lbs. 16 This method of combat in a densely populated area inevitably results in staggeringly high civilian casualties.<sup>16</sup> Additionally, the alleged use of white phosphorus by Israeli forces in densely populated urban areas in Gaza has been reported by Human Rights Watch in the current offensive and also reported in previous attacks. 17 18 White phosphorus exposure results in deep thermal and chemical burns, and can cause multiple organ system failure, with survivors facing extensive scarring, physical disabilities, painful treatment, psychological harm and social exclusion. Children are considered more susceptible to harm from chemical weapons due to their physiology and body mass.<sup>19</sup> These assaults on the lives, health and well-being of children and young people who have no place in the origins of the conflict is a moral outrage.

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### Box 1: The six grave violations against children during armed conflict

- 1. The killing and maiming of children.
- 2. The recruitment and use of children.
- 3. Sexual violence against children.
- 4. The abduction of children.
- 5. Attacks on schools and hospitals.
- 6. Denial of humanitarian access.



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The UNCRC Article 6 elucidates a child's inherent right to life and binds all parties to ensure to the 'maximum extent possible the survival and development of the child'. 20 UNCRC Article 19 also requires that states ensure the protection of children from violence, injury and abuse. International humanitarian law stipulates that 'parties to a conflict must take all feasible precautions to avoid, and in any event to minimise, civilian harm. This can entail evacuating civilians or giving effective advance warning of attacks, which provides civilians enough time to leave, as well as a safe route and place to go'. 15

#### **ABDUCTION OF CHILDREN**

During the humanitarian pause, more than 30 children who were taken as hostages by Palestinian armed groups during their attack on 7 October 2023 were released and there is uncertainty over how many children remain as hostages. Human Rights Watch have reported the use of children in 'hostage videos', which they highlight is an 'outrage on personal dignity'. <sup>21</sup> News articles on the child hostages report that the children were subjected to inadequate food, sanitation and hygiene conditions, and to psychological trauma. <sup>22</sup>

Since 7 October 2023, the UN Human Rights Office has reported a dramatic increase in the arrest and detention of Palestinians, with no evidence of committing an offence in the majority of cases.23 Children are not immune to this; it is estimated that the Israeli military arrests and detains 500-700 Palestinian children yearly through military courts without basic safeguards for a fair trial and often via a process of administrative detention in which no charge is ever presented.<sup>24 25</sup> Additionally, on 7 December 2023, dozens to hundreds of Palestinians sheltering in a school, including boys aged as young at 15 years were detained, stripped, tied up and transferred to an unknown location. 15 The abduction and detention of children is known to be harmful to children's physical and mental health, oftentimes with lifelong consequences for survivors. 19

# ATTACKS AGAINST SCHOOLS AND HEALTHCARE FACILITIES

UNICEF reported attacks on 352 educational facilities between 7 October 2023 and 8 December 2023. As of 20 January 2024, 151 UN Relief and Works Agency (UNRWA) workers

had been killed.<sup>27</sup> Mass displacement of the civilian population has necessitated the use of schools as emergency shelters and therefore resulted in an even greater number of deaths when they are attacked. One example was the attack on the UNRWA Al Fakhoora School in the Jabalia refugee camp where approximately 20 000 individuals were sheltering.<sup>28</sup> Healthcare facilities have similarly been attacked, with the WHO documenting more than 300 attacks on healthcare facilities as of 22nd January 2024.<sup>2</sup> affecting 56 facilities and 59 ambulances. Médecins Sans Frontières has also reported the targeting of their vehicles by Israeli forces.<sup>29</sup> The UNCRC highlights that all children have the right to the highest attainable standard of health and healthcare (Article 24) and the right to education (Article 28)<sup>20</sup>; the current attacks being inflicted on Gaza expose violations of these rights.

#### **DENIAL OF HUMANITARIAN ACCESS**

The Gaza Strip has been under blockade for 16 years, during which time Israeli authorities have controlled the movement of individuals and imposed import restrictions on essential items such as food, construction materials, critical medical equipment and fuel.30 During the most recent offensive, Israel has cut fuel, electricity and aid supplies to Gaza under a 'complete siege', as described by Israeli defence minister, Yoav Gallant, and has also attacked telecommunications infrastructure, further exacerbating an already dire humanitarian crisis. 31 On 21 October 2023, the first 20 aid trucks since 7 October 2023 were allowed into Gaza through the Rafah crossing carrying limited emergency supplies, which according to UN officials, was 'a drop in the ocean of need'. 32 Before the start of the humanitarian pause on 24 November 2023, a total of 1723 aid trucks had entered, with Israel allowing small amounts of fuel from 18 November 2023 for essential humanitarian operations.<sup>33</sup> The restrictions on fuel and aid into Gaza have created a desperate situation for hospitals affecting children of all ages, including newborn infants requiring incubators that rely on electricity from fuel-dependent generators. Due to the lack of electricity at Al Shifa hospital, 37 premature babies were relocated to an operating room without their incubators over the weekend of 11 and 12 November 2023, 6 of whom

had reportedly died by Monday, 13 November 2023.<sup>34</sup> It also means the limited aid arriving in Gaza cannot reach all those who need it across the Gaza Strip.<sup>35</sup>

## WHAT DO THESE VIOLATIONS MEAN FOR CHILDREN?

Armed conflict is a major negative determinant of health that has short-term and long-term effects on children. Direct child health effects include the experience of multiple forms of violence, injury, disability and death from bombing, shooting, explosions and collapsing of buildings. Texposure to conflict can cause harm prenatally and 50 000 pregnant women in Gaza are at risk of adverse birth outcomes from maternal stress, physical harm, malnutrition and damage to health-care infrastructure. Texposure of the short of

Substantial and pervasive indirect effects of exposure to armed conflict include communicable diseases, a range of non-communicable illnesses that are both the result of and exacerbated by inadequate living conditions and environmental exposures, displacement, family separation, being orphaned and limited access to basic needs such as safety, shelter, food, clean water, sanitation, healthcare and education.<sup>36</sup> The WHO and Save the Children have warned that disease could kill more people than the war itself and since the resumption of hostilities following the short-lived ceasefire, there have been further increases in infectious diseases.<sup>39 40</sup> The current hostilities have caused disruption to childhood vaccination programmes, hampered the functioning of disease surveillance systems, damaged water and sanitation systems and reduced access to treatment, which together exacerbate the child population's vulnerability to communicable diseases.<sup>40</sup> The significant damage to Gaza's health infrastructure will contribute to increased child morbidity and mortality beyond this period of active hostilities. The impact of conflict affects children throughout their lives. 19 There is also decades of research establishing a connection between adverse childhood experiences such as the exposure to child abuse and violence and lifelong health outcomes, including chronic diseases and psychological disorders.<sup>41</sup>

The effects of conflict on children are heavily influenced by the vulnerability of the population prior to the conflict. For example, prior to the current offensive, there was a high prevalence of malnutrition in Gaza, with approximately 90% of preschool



children consuming less than 75% of the recommended daily energy intake.<sup>44</sup> With the current food shortages and inadequate living conditions malnutrition rates can be expected to increase.<sup>4</sup> Acute and chronic malnutrition have adverse impacts on children's future physical and psychological health, neurological development and future opportunities. 42 45 Studies have found high levels of psychological trauma and impaired health-related quality of life including emotional functioning and psychosocial health in Gaza's children, which are compounded by intergenerational effects of the long-standing conflict. 46-49 The current escalation in violence against civilians in Gaza will further exacerbate the mental health situation and there is likely to be psychological trauma in the surviving child hostages; thus, highlighting the critical importance of long-term interventions and support for all affected children.

# A CALL TO ACTION TO PROTECT CHILDREN AND THEIR HEALTH

Further harm to children is preventable if urgent steps are taken. Governments and non-governmental actors must demonstrate in action that the lives of children in Gaza are worth no less than any other life. We support the calls made by multiple organisations, such as the United Nations agencies, including the WHO, non-governmental organisations and fellow health workers for the following:

- 1. An immediate and permanent ceasefire.
- 2. The release of all civilian hostages in Gaza.
- 3. Urgent provision of water, food, fuel, medical supplies, non-food items and shelter to Gaza.
- 4. An immediate reversal of the evacuation orders for all affected areas of Gaza.
- 5. Unrestricted, safe and sustained humanitarian access.
- 6. Immediate and absolute protection from attack for civilians, health workers, hospitals and schools.
- 7. Adherence and accountability to international law of all parties involved in the conflict.
- 8. Medical evacuation of severely injured, ill and pregnant citizens of Gaza to a safe country.

9. Resumption of the peace process and an end to the occupation in order to bring long-term safety to all children in the region.

Actions for the child health community:

- 1. Call for the formal implementation of the United Nations Special Representative on Children and Armed Conflict Monitoring and Reporting Mechanism to hold parties accountable for committing grave violations against children.
- 2. Demand objective, needs-based humanitarian aid for children in all conflicts, regardless of scale, political or strategic importance.
- 3. Continue to highlight evidence of the egregious impact of war on children through formal (eg, publication, news media) and informal channels (eg, social-media), especially where coordinated, collective actions are possible or where the voices of advocacy, human rights and humanitarian organisations can be amplified.
- Join or develop a coalition of child health advocates in your country or region to work specifically on protecting child health in conflict.
- 5. Stand in solidarity with affected children and young people by joining peace and humanitarian organisations working towards preventing and ending conflict.
- Stand in solidarity with health workers in Gaza who are facing intolerable circumstances and enormous workloads.
- 7. Push to embed data on the adverse effects of conflict on child health into policy recommendations and for use in the international legal system to hold responsible parties to account.

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#### **REFERENCES**

- 1 UNICEF. Statement by UNICEF Executive Director Catherine Russell on the resumption of fighting in Gaza, Available: https://reliefweb.int/report/occupiedpalestinian-territory/statement-unicefexecutive-director-catherine-russellresumption-fighting-gaza [Accessed 02 Dec 2023].
- 2 United Nations Office for the Coordination of Humanitarian Affairs. Hostilities in the Gaza strip and Israel - flash update #99. Available: https://reliefweb.int/report/ occupied-palestinian-territory/hostilitiesgaza-strip-and-israel-flash-update-99enhear#: [Accessed 23 Jan 2024]
- 3 UNICEF state of Palestine humanitarian situation report no. 15 (escalation), 11-17 January 2024. ReliefWeb. Available:



- https://reliefweb.int/report/occupied-palestinian-territory/unicef-state-palestine-humanitarian-situation-report-no-15-escalation-11-17-january-2024#:~: text=More%20than%2061%2C830% 20Palestinians%20were,the%20rubble% 20of%20destroyed%20buildings. [Accessed 23 Jan 2024].
- 4 United Nations Office for the Coordination of Humanitarian Affairs. Hostilities in the Gaza strip and Israel flash update #58. Available: https://www.unocha.org/publications/report/occupied-palestinianterritory/hostilities-gaza-strip-and-israel-flash-update-58 [Accessed 08 Dec 2023].
- 5 European Commission. International humanitarian law. Available: https://civilprotection-humanitarian-aid.ec.europa. eu/what/humanitarian-aid/internationalhumanitarian-law\_en [Accessed 02 Nov 2023].
- 6 UNICEF. Twelve years on, Syrian children endure one brutal crisis after another. Available: https://www.unicef.org/syria/ stories/twelve-years-syrian-childrenendure-one-brutal-crisis-after-another [Accessed 05 Dec 2023].
- 7 UNICEF. War in Ukraine pushes generation of children to the brink, WARNS UNICEF. Available: https://www.unicef.org/pressreleases/war-ukraine-pushes-generationchildren-brink-warns-unicef [Accessed 05 Dec 2023].
- 8 Save the Children. Will I see my children again?: A brief on attacks on education in Yemen. Available: https://resourcecentre. savethechildren.net/document/will-i-seemy-children-again-a-brief-on-attacks-oneducation-in-yemen/ [Accessed 05 Dec 2023].
- 9 Save the Children International. GAZA: 3,195 children killed in three weeks surpasses annual number of children killed in conflict zones since 2019. Save the Children International; 2023. Available: https://www.savethechildren.net/news/ gaza-3195-children-killed-three-weekssurpasses-annual-number-children-killedconflict-zones [Accessed 18 Dec 2023].
- 10 Office of the United Nations High Commissioner for Human Rights. Commission of inquiry collecting evidence of war crimes committed by all sides in Israel and occupied Palestinian territories since 7 October 2023. Available: https:// www.ohchr.org/en/press-releases/2023/10/ commission-inquiry-collecting-evidencewar-crimes-committed-all-sides-israel [Accessed 01 Nov 2023].
- Office of the Special Representative of the Secretary-General for Children and Armed Conflict. The six grave violations against children during armed conflict: the legal foundation. 2009. Available: https://chil drenandarmedconflict.un.org/publications/ WorkingPaper-1\_SixGraveViolationsLegalF oundation.pdf [Accessed 27 Oct 2023].
- 12 Office of the Special Representative of the Secretary-General for Children and Armed Conflict (OSRSG-CAAC), United Nations Children's Fund (UNICEF), United Nations Department of Peacekeeping Operations (DPKO. Monitoring and reporting mechanism (MRM) on grave violations against children in situations of armed conflict. Available: https://childrenanda rmedconflict.un.org/wp-content/uploads/ 2016/04/MRM\_Field\_5\_June\_2014.pdf [Accessed 01 Nov 2023].

- 13 Relief Web, Gaza: 10,000 Children killed in nearly 100 days of war. 2024. Available: https://reliefweb.int/report/occupied-palestinian-territory/gaza-10000-children-killed-nearly-100-days-war#:~:text=% 5B1%5D%20In%20the%20Ministry% 200f,been%20killed%20since%207% 20October. [Accessed 23 Jan 2024].
- 14 Save the Children International. Nowhere to go over one million children in Gaza at risk of being killed. Save the Children International; 2023. Available: https://www.savethechildren.net/news/nowhere-go-over-one-million-children-gaza-risk-being-killed [Accessed 08 Dec 2023].
- 15 United Nations Office for the Coordination of Humanitarian Affairs. Hostilities in the Gaza strip and Israel - flash update #62. Available: https://www.ochaopt.org/ content/hostilities-gaza-strip-and-israelflash-update-62 [Accessed 08 Dec 2023].
- 16 Amnesty International. Israel/OPT: US-made munitions killed 43 civilians in two documented Israeli air strikes in Gaza new investigation. 2023. Available: 2023. https://www.amnesty.org/en/latest/news/2023/12/israel-opt-us-made-munitions-killed-43-civilians-in-two-documented-israeli-air-strikes-in-gaza-new-investigation/ [Accessed 18 Dec 2023].
- 17 Human Rights Watch. Israel: white phosphorus used in Gaza, Lebanon. 2023. Available: https://www.hrw.org/news/2023/ 10/12/israel-white-phosphorus-used-gazalebanon [Accessed 27 Oct 2023].
- 18 Amnesty International. Israel used white phosphorus in Gaza civilian areas. 2009. Available: https://www.amnesty.org/en/ latest/news/2009/01/israel-used-whitephosphorus-gaza-civilian-areas-20090119/ [Accessed 29 Oct 2023].
- 19 Shenoda S, Kadir A, Pitterman S, et al. The effects of armed conflict on children. Pediatrics 2018;142:e20182585.
- 20 United Nations Children's Fund. The United Nations convention on the rights of the child. 1989. Available: https://www.unicef. org.uk/wp-content/uploads/2016/08/ unicef-convention-rights-child-uncrc.pdf [Accessed 27 Oct 2023].
- 21 Human Rights Watch. Gaza: hostage videos an 'outrage on personal dignity. 2023. Available: https://www.hrw.org/news/ 2023/11/10/gaza-hostage-videos-outragepersonal-dignity [Accessed 14 Nov 2023].
- 22 Minsberg T. Relatives describe the trauma of child hostages freed by Hamas. The New York Times; 2023. Available: https://www.nytimes.com/2023/11/29/world/middleeast/relatives-describe-the-trauma-of-child-hostages-freed-by-hamas.html [Accessed 08 Dec 2023].
- 23 UN Office of the High Commissioner for Human Rights. Dramatic rise in detention of Palestinians across occupied West Bank. Available: https://reliefweb.int/report/occupied-palestinian-territory/un-human-rights-office-opt-dramatic-rise-detention-palestinians-across-occupied-west-bank [Accessed 05 Dec 2023].
- 24 Defence for Children. Childhood in captivity: Palestinian children arbitrarily detained in Israeli prisons. Available: https://defenceforchildren.org/hrc53-sideevent-childhood-in-captivity-palestinianchildren-arbitrarily-detained-in-israeliprisons/ [Accessed 05 Dec 2023].
- 25 Defence for Children International-Palestine. Number of Palestinian children (12-17) in Israeli military detention.

- Available: https://www.dci-palestine.org/children\_in\_israeli\_detention [Accessed 05 Dec 2023].
- 26 UNICEF. Damaged Schools Dashboard - Gaza 2023 (Updated on 8 December), Available: https://gis.unicef.org/portal/ apps/dashboards/c6e0bfd744164b2f8427 6071b1a83e78 [Accessed 08 Dec 2023].
- 27 UNRWA. UNRWA situation report #67 on the situation in the Gaza strip and the West Bank, including East Jerusalem. Available: https://www.unrwa.org/resources/reports/unrwa-situation-report-67-situation-gaza-strip-and-west-bank-including-east-Jerusalem#:~:text=As%20of%2020%20January%202024,for%20the%20past%20seven%20days. [Accessed 23 Jan 2024].
- 28 Education Above All Foundation. Education above all: schools are off-limits cease attacks now. Available: https://reliefweb.int/report/occupied-palestinian-territory/education-above-all-schools-are-limits-cease-attacks-now [Accessed 09 Nov 2023].
- 29 Médecins Sans Frontières (MSF) International. MSF convoy attacked in Gaza: all elements point to Israeli army responsibility. Available: https://www. msf.org/msf-convoy-attacked-gaza-allelements-point-israeli-army-responsibility [Accessed 05 Dec 2023].
- 30 Save the Children International. I can't run, play, or get treatment two children a day in Gaza unable to access medical treatment due to 16 year blockade. Save the Children International; 2023. Available: https://www.savethechildren.net/news/i-can-t-run-play-or-get-treatment-two-children-day-gaza-unable-access-medical-treatment-due-16 (accessed 1 Nov 2023) [Accessed 01 Nov 2023].
- 31 United Nations. Amid increasingly dire humanitarian situation in Gaza, Secretary-general tells Security Council Hamas attacks cannot justify collective punishment of Palestinian people. Available: https://press.un.org/en/2023/sc15462.doc.htm [Accessed 01 Nov 2023].
- 32 United Nations. Interview: UNICEF has 'every hope' for more Gaza convoys. 2023. Available: https://news.un.org/en/story/ 2023/10/1142667 [Accessed 18 Dec 2023].
- 33 United Nations Office for the Coordination of Humanitarian Affairs. Hostilities in the Gaza strip and Israel flash update #48. Available: https://reliefweb.int/report/occupied-palestinian-territory/hostilities-gaza-strip-and-israel-flash-update-48-enarhe [Accessed 02 Dec 2023].
- 34 United Nations. Gaza city: babies dying in hospital amid scenes of devastation. 2023. Available: https://news.un.org/en/ story/2023/11/1143497 [Accessed 18 Dec 2023].
- 35 Save the Children International. How far can we travel with aid on our shoulders? A warning on Gaza from a humanitarian worker. 2023. Available: https://www.savethechildren.net/blog/how-far-can-we-travel-aid-our-shoulders-warning-gaza-humanitarian-worker [Accessed 01 Nov 2023].
- 36 Kadir A, Shenoda S, Goldhagen J. Effects of armed conflict on child health and development: a systematic review. PLoS One 2019;14:e0210071.
- 37 Keasley J, Blickwedel J, Quenby S. Adverse effects of exposure to armed conflict on pregnancy: a



- systematic review. *BMJ Glob Health* 2017;2:e000377.
- 38 United Nations Population Fund. Crisis in Gaza. Available: https://www.unfpa.org/crisis-gaza [Accessed 30 Oct 2023].
- 39 Save the Children International. Deaths by starvation and disease may top deaths by bombs as families squeezed into deadly 'safe zones', two months into Gaza crisis. 2023. Available: https:// www.savethechildren.net/news/deathsstarvation-and-disease-may-top-deathsbombs-families-squeezed-deadly-safezones-two [Accessed 18 Dec 2023].
- 40 World Health Organization-Regional Office for the Eastern Mediterranean. Risk of disease spread SOARS in Gaza as health facilities, water and sanitation systems disrupted. Available: https://www.emro.who.int/media/news/risk-of-disease-spread-soars-in-gaza-as-health-facilities-

- water-and-sanitation-systems-disrupted. html [Accessed 08 Dec 2023].
- 41 Oral R, Ramirez M, Coohey C, et al. Adverse childhood experiences and trauma informed care: the future of health care. Pediatr Res 2016;79:227–33.
- 42 Garry S, Checchi F. Armed conflict and public health: into the 21st century. J Public Health (Oxf) 2020;42:e287–98.
- 43 Najjar SA, Shaer TA. Risk factors for the double burden of malnutrition in children younger than 5 years in the Gaza strip: a systematic review. *Lancet* 2022;399:S42.
- 44 Radi S. Nutrient intakes and adequacy among preschool children under blockade in Gaza city, Palestine. East Mediterr Health J 2021;27:467–73.
- 45 Bendavid E, Boerma T, Akseer N, et al. The effects of armed conflict on the health of women and children. Lancet 2021;397:522–32.

- 46 Massad SG, Nieto FJ, Palta M, et al. Health-related quality of life of Palestinian preschoolers in the Gaza strip: a crosssectional study. BMC Public Health 2011;11:253.
- 47 Altawil MAS, El-Asam A, Khadaroo A. Impact of chronic war trauma exposure on PTSD diagnosis from 2006 -2021: a longitudinal study in Palestine. *Middle East Curr Psychiatry* 2023;30:1–8.
  48 Save the Children. Trapped: the impact
- 8 Save the Children. Trapped: the impact of 15 years of blockade on the mental health of Gaza's children. 2022. Available: https://resourcecentre.savethechildren.net/pdf/gaza\_blockade\_mental\_health\_palestinian\_children\_2022.pdf/ [Accessed 27 Oct 2023].
- 49 Devakumar D, Birch M, Osrin D, et al. The Intergenerational effects of war on the health of children. BMC Med 2014;12:57.