

BRIEFING PAPER



THE IMPACT OF WAR ON MENTAL HEALTH IN YEMEN: A NEGLECTED CRISIS



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EXECUTIVE SUMMARY

Much of the Yemeni population faces frequent exposure to serious stressors, harm and trauma, whether from food insecurity, unemployment, cholera, arbitrary detention, torture, indiscriminate attacks, air strikes, or weak to non-existent basic public services. The ongoing conflict in Yemen thus has immediate implications for the mental health and well-being of Yemenis. Despite the known long-term adverse effects of poor mental health – including on physical health, family cohesion, education, participation in the workforce, and peace and reconciliation efforts – mental health issues in Yemen have largely been neglected by both domestic authorities and the international community.

The challenges to addressing the psychological needs of Yemenis are daunting. The ongoing conflict is continually increasing the breadth and depth of exposure to trauma, and the minimal level of pre-existing public health resources have been further devastated by the country's current full-scale institutional collapse. There is a profound lack of funding and interest from national and international stakeholders for mental health issues, as well as deeply entrenched social stigma around mental illness. Crucially, the extreme paucity of research and analysis regarding mental health and psychosocial well-being in Yemen – including the risks, services, opportunities, and needs among the population – inhibits understanding of the issue and the building of evidence-based recommendations and action.

This briefing paper provides background on mental health and the armed conflict in Yemen, explaining the need for dedicated research and advocacy on this neglected issue. It details the limited development of, and access to, mental health and psychosocial services in Yemen pre-conflict, the devastating impact of the current conflict upon service provision, and the basis for serious and far-reaching concerns about the physical, social, and psychological well-being of millions of Yemenis, while also illuminating the crucial gaps in current knowledge and analysis. The briefing paper concludes with a research and advocacy agenda to chart a path forward – combining locally-owned interdisciplinary research of the mental health situation in Yemen with evidence-based policy recommendations and advocacy – to promote the fulfilment of the right to mental health in Yemen.

I. INTRODUCTION

The ongoing war in Yemen has spurred the world's largest food security emergency and the largest cholera epidemic ever recorded. Millions have been sent into abject poverty, the nation's economy has been destroyed, and basic public services have evaporated. Over a million public servants have gone without a salary for almost a year. Thousands of civilians have been killed and injured during the conflict, with the belligerent parties committing a litany of war crimes and violations of humanitarian law against the civilian population, including arbitrary detention, torture, indiscriminate attacks, and murder^[1].

The current conflict in Yemen has lasted more than two years, and has effectively fragmented the country. In the north, the Houthi fighters and forces allied to former President Ali Abdullah Saleh hold the capital, Sana'a, and most of the country's largest population centers. In the south, the internationally recognized government of President Abdo Rabbu Mansour Hadi and allied forces have established a de facto capital in the city of Aden from which — with the backing of a Saudi-led military coalition — they have been attempting to retake the north.

Although the frontlines have moved little over the course of the last two years, the country has been devastated. The war has exposed the civilian population of Yemen to extreme and continuous stressors, many forms of harm, and direct and vicarious trauma. Although largely unstudied, the war has likely had a devastating impact on the mental health of a significant proportion of the Yemeni population.

According to the World Health Organization (WHO), in armed conflict generally, an estimated 17% and 15% of the population will suffer from depression and post-traumatic stress disorder (PTSD), respectively.^[2] Several other major studies in post-conflict, low-income countries have reported even higher rates of mental health challenges among the population.^[3] Indeed, a 2010 study covering a region of Liberia revealed that some 45% of the population exhibited symptoms of PTSD nearly 20 years after the end of the conflict.^[4] Importantly, some studies have also shown a link between trauma exposure and views regarding conflict resolution, with one study on northern Uganda finding that PTSD was correlated with support for violence as a means of conflict resolution.^[5]

Despite the likely significant immediate and long-term mental health implications of the current conflict in Yemen, research on the issue is minimal, with the specific causes, dynamics, and effects largely unexplored. There are few assessments of the forms and prevalence of

1) UN Security Council, *Letter dated 27 January 2017 from the Panel of Experts on Yemen addressed to the President of the Security Council*, U.N. Doc. S/2017/81, at pp.47-60 (Jan. 31, 2017); Human Rights Council, Rep. of the United Nations High Commissioner for Human Rights: *The situation of human rights in Yemen, including violations and abuses since September 2014*, U.N. Doc. A/HRC/36/33. (Sep. 5, 2017).

2) World Health Organization [WHO], Rep. by the Secretariat on Global Burden of Mental Disorders and the Need for a Comprehensive, Coordinated Response from Health and Social Sectors at a Country Level, 3, E.B. 130/9 (Dec. 1, 2011), http://apps.who.int/gb/ebwha/pdf_files/EB130/B130_9-en.pdf.

3) Joop T. V. M. de Jong et al., *Lifetime Events and Posttraumatic Stress Disorder in 4 Postconflict Settings*, 286 JAMA 555 (2001); see also Ronald C. Kessler et al., *Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Mental Health Survey Initiative*, 6 WORLD PSYCHIATRY 168 (2007).

4) Sandro Galea et al., *Persistent Psychopathology in the Wake of Civil War: Long-Term Posttraumatic Stress Disorder in Nimba County, Liberia*, 100 AM. J. PUB. HEALTH 1745 (2010).

5) Theresa S. Betancourt et al., *Psychosocial Problems of War-Affected Youth in Northern Uganda: A Qualitative Study*, 46 TRANSCULTURAL PSYCHIATRY 238 (2009).

trauma exposure, the adverse mental health impacts of the conflict on the population, or the types of local coping and resilience strategies being used. The WHO has noted that there is a “paucity of epidemiological data on mental illness in Yemen in internationally accessible literature.”^[6] Therefore, it is extremely difficult at the current time to assess the general state of mental health in Yemen. Furthermore, there is little ongoing advocacy to improve conditions and mental health services — at a time when Yemenis are in dire need of support.

To begin to address these problems, the Sana’a Center for Strategic Studies (SCSS), the Columbia Law School Human Rights Clinic (HRC), and the Mailman School of Public Health (MSPH) have jointly conceptualized a new project: Mental Health and the Psychological Impact of War on Individuals, Families, and Communities in Yemen: A Project to Advance Research, Services, and Advocacy. This partnership brings together the public policy, foreign policy, international relations, and public health experts at the SCSS, with international law, human rights, and fact-finding experts from the HRC, and mental health and public health experts at the MSPH. Beginning in April 2017, the project partners began a study on mental health and psychosocial well-being in Yemen, with the aim of developing evidence-based policy recommendations to advance and realize the right to mental health in Yemen.

This briefing paper first provides an overview of the history of mental health services in Yemen, the persistent lack of legislative interest or engagement that has left these services underdeveloped, and the pervasive social stigma that exists regarding mental illness. It then highlights the lack of specific data on the impact of the conflict on mental health services, notwithstanding the WHO’s documentation of the conflict’s devastating impact on health care services generally. While little research has been done regarding the current state of psychosocial well-being in the country, this paper lays out why the available evidence creates strong cause for concern that the impact has been severe and widespread. Next, in reviewing the literature regarding the many long-term negative implications of war on the mental health of individuals and communities, this paper sets out the likely risks facing millions of Yemenis. Finally, this paper emphasizes the importance of mental health issues in the country being properly assessed, appropriately mitigated as much as is possible while the conflict is ongoing, and that preparations be made for broader psychosocial efforts and advocacy in post-conflict reconstruction and reconciliation.

6) World Health Organization [WHO], MENTAL HEALTH ATLAS 2005: YEMEN (2005), http://apps.who.int/globalatlas/predefinedReports/MentalHealth/Files/YE_Mental_Health_Profile.pdf. In the English language literature, studies are often pre-conflict and focused on specific issues like khat or specific regions. See, e.g., Nageeb A. Hassan et al., *The Effect of Chewing Khat Leaves on Human Mood*, 23 SAUDI MED. J. 850 (2002); Nabil Numan, *Exploration of Adverse Psychological Symptoms in Yemeni Khat Users by the Symptoms Checklist-90 (SCL-90)*, 101 ADDICTION 616 (2004); Abdullah Alyahri & Robert Goodman, *The Prevalence of DSM-IV Psychiatric Disorders Among 7–10 Year Old Yemeni Schoolchildren*, 43 SOC’Y PSYCHIATRY & PSYCHIATRIC EPIDEMIOLOGY 224 (2008).

II. THE HISTORY AND DEVELOPMENT OF MENTAL HEALTH SERVICES IN YEMEN

In 1966, the British authorities inaugurated the first psychiatric sanatorium in Aden which, until South Yemen's independence in 1967, employed just one foreign doctor, one pharmaceutical technician, and seventeen nurses.^[7] The sanatorium, under the jurisdiction of the Ministry of the Interior and built with rooms that resembled jail cells, received its patients from the nearby Mansoura prison. The administration of the facility did not shift to the Ministry of Health until the early 1970s.^[8] In North Yemen,^[9] al-Salaam Sanatorium was built in Hudaydah in 1976, where it served as a basic shelter for those deemed mentally ill, and did not carry out treatment.^[10] The first institutional mental health treatment services were introduced in North Yemen in 1978, when a Bulgarian psychiatrist was brought in to staff a specialized clinic in the Republican Hospital in Sana'a; shortly after, the neurology clinic at the Military Hospital hired another European doctor to treat severe cases of mental illness.^[11]

A move to establish national foundations for psychiatric practice in Yemen came in 1980, when the WHO commissioned a study to assess the status of mental health in the country. At the time, Dr. Taha Baashar, who ran the study, described how "patients suffering from mental health issues could be seen wandering or begging in crowded streets."^[12] Following the study, the WHO helped establish psychiatry sections in three hospitals (in the cities of Sana'a, Taiz, and Hudaydah), trained local doctors, and provided basic equipment, including electric shock therapy machines. In 1981, Dr. Ahmed Makki became the first Yemeni doctor specialized in mental illnesses to oversee the psychiatry section at the Al Thawra Hospital in Sana'a. This coincided with the work of Dr. Abdullah Al Kathiri in Aden, who, in turn, was bringing in the first contributions by Yemenis to the field of mental health in southern Yemen.

In 1986, there were three practicing psychiatrists in North Yemen,^[13] which had a population at the time of 9 million people. In South Yemen, mental health services were officially added to primary health care services in the early 1980s, with the WHO's mental health program. This program attempted to expand psychological services across the southern governorates

7) Bilqees Jubari, "Psychological Health in Yemen (Past, Present and Future)," July 2008, <http://sfd.sfd-yemen.org/ar/uploads/issues/psychological%20health%20in%20Yemen-20121111-130627.pdf>, citing Yemen Ministry of Health and Population, (2004, October) in *Second Symposium on the Current Status and Future of Mental Health in Yemen* conducted with the co-sponsorship of The International Committee of the Red Cross (ICRC) (Editor's note: This publication is written in Arabic)

8) Ibid.

9) Yemen remained divided between a northern state and southern state until May 1990, when the current Republic of Yemen was formed after the reunification of the country.

10) The clinic functioned as a holding station for detainees who were subject to forced disappearance by the security services; many were sent to al-Salaam Sanatorium following mental collapse due to torture.

11) Jubari, *supra* note 7.

12) Jubari, *supra* note 7.

13) There were no universities in either North or South Yemen until the establishment of the University of Sana'a in 1970 in the north, and then the University of Aden in the south in 1977. In 1983, the Faculty of Arts at Sana'a University started offering a major in psychology and graduated its first class in 1987. The Faculty of Medicine was established in 1981-82, with psychiatry first taught in the 1987-88 school year. Enrollment, however, has remained persistently low, with the annual number of program applicants typically in the low single digits. See Jubari, *supra* note 7. Interview by Fawziah Al-Ammar with Dr. Ali Al-Tarq, Head, Edu. and Psychological Counseling Ctr. at Sana'a Univ (Mar. 2017); Interview by Fawziah Al-Ammar with Dr. Mohammed al-Khulaidi, Dir., Nat'l Program of Mental Health (Mar. 8, 2017); Interview by Tawfeek Ganad with Dr. Mohammad al-Ashul, Consulting Psychiatrist and Graduate Studies Supervisor, Arab Bd. of Medical Specialties program within the Faculty of Med. in Sana'a Univ (Jan. 6, 2017).

through training workshops for doctors from Lahij, Hadramawt, Shabwah, and Abyan. Training was conducted under the supervision of the Ministry of Health, and later of the University of Aden Hospital for Nervous and Mental Disorders following its inauguration in 1984. Between 1986 and 1990, patient cells were decommissioned at the old Aden sanatorium and patients were transferred to the new hospital clinic. ^[14]

After the unification of North and South Yemen in 1990, administrative and supervisory bodies were developed within the organizational structure of the unified Ministry of Health, based in Sana'a. The High Council for Mental Health was jointly established by the Ministry of Health, the Ministry of Interior, and the General Prosecutor's Office. A Mental Health Program was launched by the Ministry of Health to take over planning and development in the mental health field in Yemen. This included a round table conference and national seminar — held with the support of the International Committee of the Red Cross (ICRC) — to discuss the present reality and the future of mental health, followed by a National Mental Health Strategy drafted with the assistance of the WHO in 2004. ^[15]

Among its key objectives, the National Mental Health Strategy sought to promote mental health awareness among the Yemeni population and enhance access to mental health care services. Additionally, it aimed to integrate mental health into primary health services, and increase inter-sectoral support from various stakeholders for mental health and well-being. The stakeholders identified included the health system, the education system, the criminal justice system, development and social justice agencies, human rights agencies, Islamic charities, and the media. ^[16]

These steps did not, however, translate into a sustained institutional effort, with the necessary financial and human resources failing to materialize. Despite work done to draft a Mental Health Act in 2004, it was not approved by the Yemeni Parliament. Revisions and amendments to the law were subsequently made, resulting in a draft Mental Health Bill of 2007 for regulating mental health services provision in Yemen. However, this also was not approved by Parliament.^[17] Yemeni doctors have often lobbied to secure funds for their own clinics, but there has been little organized national advocacy on behalf of mental health issues and institutional reform.

Concurrently, there is also widespread social stigma around mental illness,^[18] with many Yemenis reluctant to discuss their concerns or seek professional services for conditions they may be suffering.^[19] Reports suggest that Yemenis suffering from mental health conditions have been “detained in family homes” or abandoned and left homeless.^[20] It has also been reported that some groups within Yemeni society — women, for example — face particular

14) Jubari, *supra* note 7.

15) Jubari, *supra* note 7.

16) YEMEN MINISTRY OF HEALTH AND POPULATION, NATIONAL MENTAL HEALTH STRATEGY: 2011-2015, at 5 (Mar., 2010) [hereinafter YEMEN NATIONAL MENTAL HEALTH STRATEGY], <http://sfd.sfd-yemen.org/uploads/issues/health%20english-20121015-132757.pdf>.

17) Interview by Fawziah Al-Ammar with a member of the social worker's union, December 2016.

18) Marwa Najmaldeen, *Lost in Yemen's Streets*, YEMEN TIMES (Feb. 20, 2012), <http://www.yementimes.com/en/1543/report/278/Lost-in-Yemen's-streets.htm>; Maan A. Bari Qasem Saleh, *Psychology in Yemen*, 19 PSYCHOL. INT'L 10 (2008).

19) Alzubaidi & Ghanem, *infra* note 28, at 365.

20) MAAN A. BARI QASEM SALEH & AHMED MOHAMED MAKKI, INTERNATIONAL PERSPECTIVES ON MENTAL HEALTH 236-37 (Hamid Ghodse ed., 2011) (Yemen).

challenges in accessing treatment.^[21] Some medical professionals have also suggested that general stigma may help explain the persistent limited enrollment in university psychiatry degree programs.^[22]

III. MENTAL HEALTH SERVICES BEFORE THE CURRENT CONFLICT

It is difficult to find detailed information on mental health services in Yemen, but what is available suggests that there are few relevant institutions and those that exist are generally of poor quality. According to the most recent Yemen National Health Strategy from 2010, of the 8,500 specialist doctors in the country, there were only 44 psychiatrists.^[23] Statistics compiled for the WHO's 2011 Mental Health Atlas indicated that there were four mental health hospitals in Yemen, and just 0.21 psychiatrists and 0.17 psychologists per 100,000 people.^[24] This compares to 12.40 psychiatrists and 29.03 psychologists per 100,000 in the United States, and 29.68 psychiatrists and 54.28 psychologists per 100,000 people in Norway. ^[25]The WHO's most recent Mental Health Atlas from 2014 did not include data on the number of mental health professionals in Yemen, and identified just three mental health hospitals and one psychiatric unit in a general hospital. ^[26] Yemen's National Mental Health Strategy, however, noted that there were 19 mental health facilities in the country, including hospitals, clinics, and health facilities in prisons.^[27] This appears to conflict with WHO data, again demonstrating the challenges in collecting reliable information regarding mental health services in Yemen.

It is also difficult to find detailed publications on the roles of traditional healers, sheikhs, and other community leaders in providing mental healthcare and psychosocial support to Yemenis. Traditional and Quranic healers serve as the primary carers for many Yemenis who suffer from mental health conditions.^[28] Formal psychiatric treatment is often only sought when conditions have seriously deteriorated, such as severe cases of schizophrenia and psychosis. ^[29]

In addition to limited facilities and a lack of trained professionals, the quality of available mental health care in Yemen has been a concern. Yemeni mental health professionals have cited a number of factors impacting existing quality of care. There is a lack of specialized care for specific groups such as women, children, teenagers, and older persons, as well as for those suffering from chronic conditions or addiction.^[30] Mental health is not integrated

21) Ibid.

22) Interview by Fawziah Al-Ammar with Dr. Al Ashul, *supra* note 13. Ibid.

23) YEMEN NATIONAL MENTAL HEALTH STRATEGY, *supra* note 16, at 53.

24) World Health Organization [WHO], MENTAL HEALTH ATLAS 2011: YEMEN (2011), http://www.who.int/mental_health/evidence/atlas/profiles/yem_mh_profile.pdf

25) World Health Organization [WHO], GLOBAL HEALTH OBSERVATORY DATA REPOSITORY (2015), <http://apps.who.int/gho/data/node.main.MHHR?lang=en>

26) World Health Organization [WHO], MENTAL HEALTH ATLAS COUNTRY PROFILE 2014: YEMEN (2014), http://www.who.int/mental_health/evidence/atlas/profiles-2014/yem.pdf?ua=1.

27) YEMEN NATIONAL MENTAL HEALTH STRATEGY, *supra* note 16, at 56.

28) See also Abdulgawi Salim Alzubaidi & Azza Ghanem, *Perspectives on Psychology in Yemen*, 32 INT'L J. PSYCHOL. 363, 365 (1997).

29) Interview by Fawziah Al-Ammar with Dr. Mohammed al-Khulaidi, *supra* note 13.

30) YEMEN NATIONAL MENTAL HEALTH STRATEGY, *supra* note 16, at 58.

into the primary health care system, and many Yemenis are unable to access treatment when they first make contact with the healthcare system.^[31] While a group of Yemeni psychiatry professors drew up an official protocol document in 2009 to standardize mental health diagnosis, assessment, and treatment, it is not widely consulted or applied among mental health professionals in the country.^[32] In addition, the cost of medication is prohibitive for many Yemenis, and the use of electroconvulsive therapy remains common.^[33]

The Ministry of Health and Population adopted a National Mental Health Strategy for 2011-2015, which included steps to promote mental health, improve treatment of disorders, and address stigma and discrimination through community mobilization.^[34] However, economic conditions and the disruption of public services following the 2011 uprising, the subsequent political crisis and the onset of full-scale war in 2015 led to the strategy being discontinued.^[35] Since 2011, mental health has been viewed as a non-priority compared to other public health issues, such as the spread of infectious diseases and vaccination campaigns, among others.^[36]

IV. IMPACTS OF THE WAR ON MENTAL HEALTH SERVICES

The ongoing conflict has severely affected access to healthcare in Yemen, through damage to health facilities; shortages of clinical supplies,^[37] fuel, electricity, and essential goods;^[38] and risks to the physical safety of healthcare professionals.^[39] On February 23, 2017, Dr. Nevio Zagaria, WHO Acting Representative in Yemen stated that the Yemeni health system had collapsed, leaving 14.8 million people — more than half the population — lacking access to basic health care.^[40] The WHO's Health Resources Availability Mapping System (HeRAMS) surveyed health facilities in 16 out of 22 governorates in Yemen and found that out of 3,507 surveyed facilities, only 1,579 (45%) are fully functional and accessible, 1,343 (38%) are partially functional and 504 (17%) are non-functional.^[41] The survey also found that 274

31) YEMEN NATIONAL MENTAL HEALTH STRATEGY, *supra* note 16, at 5.

32) The Directory of General Psychiatry and Pediatric Psychiatry for Primary Health Care Physicians was drawn up under the financing and supervision of the Social Fund for Development, in collaboration with the Ministry of Public Health and Population of Yemen (Primary Health Care Sector); Maan A.Bari Qasem Saleh, *Mental Health in Yemen Obstacles & Challenges* 14 (2013) (slideshow presentation), <http://slideplayer.com/slide/679600>.

33) Maan A.Bari Qasem Saleh & Ahmed Mohamed Makki, *Mental Health in Yemen: Obstacles & Challenges*, 5 INT'L PSYCHIATRY 90, 91 (2008).

34) YEMEN NATIONAL MENTAL HEALTH STRATEGY, *supra* note 16, at 5.

35) Interview by Fawziah Al-Ammar with officials at the Nat'l Program of Mental Health (Mar. 2017).

36) Interview by Fawziah Al-Ammar with Dr. Mohammed al-Khulaidi, *supra* note 13.

37) Ali al-Mujahed & Hugh Naylor, *Yemen Conflict: Doctors Warn of Crisis as Medical Supplies Run Low*, GUARDIAN (June 2, 2015), <https://www.theguardian.com/world/2015/jun/02/yemen-conflict-healthcare-crisis-medicalsupplies-run-low>.

38) *Urgent Support Needed to Provide Health Services for 15 million People in Yemen*, WORLD HEALTH ORGANIZATION [WHO] (Dec. 15, 2015), <http://www.emro.who.int/media/news/support-needed-to-provide-health-services-in-yemen.html>.

39) Anne Gulland, *WHO Condemns Attacks on Healthcare Workers in Yemen*, BMJ (May 28, 2015), <http://www.bmj.com/content/bmj/350/bmj.h2914.full.pdf>; see also United Nations Population Fund [UNFPA], UNFPA RESPONSE IN YEMEN: MONTHLY SITUATION REPORT #6 - JUNE 2017 (June 30, 2017), <http://www.unfpa.org/resources/unfpa-response-yemen-monthly-situation-report-6-june-2017>.

40) WORLD HEALTH ORGANIZATION [WHO], *Yemeni Health System Crumbles as Millions Risk Malnutrition and Diseases* (Feb. 23, 2017), <http://www.emro.who.int/yem/yemen-news/yemeni-health-system-crumbles-as-millions-risk-malnutrition-and-diseases.html>.

41) *Survey Reveals Extent of Damage to Yemen's Health System*, WORLD HEALTH ORGANIZATION [WHO] (Nov. 6, 2016), <http://www.emro.who.int/media/news/survey-reveals-extent-of-damage-to-yemens-health-system.html>.

facilities have been damaged as a result of the conflict, including 69 facilities totally damaged and 205 facilities partially damaged. ^[42]

To date, there has not been a detailed breakdown of the conflict's impact specifically on mental health care facilities and access to services. The WHO HeRAMS survey found that among 3,507 health facilities, "services for noncommunicable diseases and mental health conditions are only fully available in 21% of health facilities."^[43] There has also been a shortage of psychiatric specialists in Yemen since the start of the conflict. In January 2016, the WHO estimated that there were 40 psychiatric specialists in Yemen, most of whom were based in Sana'a.^[44] In December 2016, the director of the mental health program at the Ministry of Health suggested there were just 36. ^[45]

The WHO stated in early 2016 that it was engaged in training health and community workers outside of Sana'a using the WHO's Mental Health Gap Action Programme intervention guide to help increase access to mental health services.^[46] Amid the international medical and humanitarian response to the crisis in Yemen, however, the overwhelming focus of aid agencies has been on immediate needs responses, with mental health needs being of low priority and receiving scant attention and funding. ^[47]

V. THE YEMENI WAR, MENTAL HEALTH AND PSYCHOSOCIAL WELL-BEING

The many serious implications of the war in Yemen, ranging from the population's frequent exposure to violence to widespread insecurity, food shortages, disease, rampant and accelerating poverty, fractured social ties, and a lack of basic social services have been immense stressors on the population that significantly heighten the threat of widespread deterioration of mental health.

A person who is 25 years of age today in Yemen has already lived through 14 other major armed conflicts in his or her lifetime. Many Yemenis have directly or vicariously experienced serious harm and trauma — threats to their lives from armed groups, the disappearance of relatives, airstrikes, arbitrary detainment or tortured, and attacks by non-state actors and militias.

As of July 2017, the total number of persons classified as internally displaced people (IDPs) was approximately 3 million — roughly 11% of the total Yemeni population of 27.8 million.^[48] Of these, some 52% are women. The largest number of displaced people (840,000) are located in Hajjah governorate, followed by Taiz (551,124), Sa'ada (442,200), and Sana'a (285,084).

42) Ibid.

43) Ibid.

44) S Al-Wesabi, *Insecurity Drives Health Workers Out of Yemen*, WORLD HEALTH ORGANIZATION [WHO] (Jan. 2016), <http://www.who.int/features/2016/yemen-health-insecurity/en>

45) Interview by Fawziah Al-Ammar with Dr. Mohammed al-Khulaidi, *supra* note 13.

46) Al-Wesabi, *supra* note 44.

47) N Al-Sakkaf, *The Psychological Cost of Yemen's War*, AL JAZEERA (June 25, 2015), <http://www.aljazeera.com/news/2015/06/psychological-cost-yemen-war-150618112244630.html>.

48) YEMEN MINISTRY OF HEALTH AND POPULATION & CENTRAL STATISTICAL ORGANIZATION, NATIONAL HEALTH AND DEMOGRAPHIC SURVEY 2013 (July 2015), <https://dhsprogram.com/pubs/pdf/FR296/FR296.pdf>.

An estimated 20.7 million people are currently in need of humanitarian and/or protection assistance.^[49] Over 14.5 million people lack access to safe drinking water, 14.8 million lack access to basic healthcare, 4.5 million need emergency shelter, and 8 million have lost their livelihoods.^[50] The conflict has also pushed Yemen to the brink of famine: approximately 17 million people do not have enough food to eat, of which 6.8 million are in a “state of emergency,” entirely dependent on external assistance for their food.^[51] The cholera epidemic that broke out in the spring of 2017 had, as of the end of September 2017, resulted in excess of 750,000 suspected cases.^[52]

While there is currently a lack of adequate data on the general status of mental health in Yemen, the available information suggests that many in the population are likely suffering adverse psychosocial and emotional well-being consequences. For instance, the manager of the Al-Amal Psychiatric Hospital in Sana’a reported a significant increase in the number of patients relative to the pre-war period.^[53] Sources at the Ministry of Interior and other mental health experts in Sana’a also reported that suicide rates in the capital rose some 40.5% from 2014 to 2015.^[54]

Given that children under the age of 14 represent some 44% of the total population in Yemen, their well-being is of particular concern, especially given the heightened vulnerability of children. Currently 2 million school-aged children are out of school, 462,000 children under the age of five are suffering from severe acute malnutrition,^[55] and nearly 1,500 children have been forcibly recruited as child soldiers.^[56] A study by Yemen Children Relief (YCR) on children in Sana’a, Aden, Taiz, and Abyan revealed a dramatic increase in feelings of fear, insecurity, anxiety, and anger, with 31% of the children in their study exhibiting physical symptoms — including headaches, chest pain, abdominal pain, and fatigue — that the researchers saw as consistent with psychological distress.^[57] YCR noted a clear differentiation in the severity of psychological symptoms between governorates, roughly corresponding to the intensity of the conflict in the various areas. According to the study: “when assessing the state of their children, parents reported that 5% of the kids are suffering from bedwetting, 2% started stuttering again, 47% suffer from sleep disorders, 24% have a difficulty concentrating, and 17% suffer from panic attacks.”

49) U.N. OCHA, YEMEN HUMANITARIAN BULLETIN ISSUE 25, (July 16, 2017), <https://reliefweb.int/report/yemen/yemen-humanitarian-bulletin-issue-25-16-july-2017-enar>.

50) U.N. OCHA, *Yemen: Humanitarian Response Plan – January-December 2017*, at pp. 6-7 (Feb. 7, 2017), https://www.humanitarianresponse.info/system/files/documents/files/yemen_2017_hrp_final.pdf; see also UNICEF, *Statement from UNICEF Executive Director Anthony Lake and WHO Director-General Margaret Chan on the cholera outbreak in Yemen as suspected cases exceed 200,000* (June 24, 2017), https://www.unicef.org/media/media_96544.html.

51) INTEGRATED FOOD SECURITY PHASE CLASSIFICATION [IPC], *Yemen: Projected Acute Food Insecurity Situation – March – July 2017 1* (Mar. 1, 2017), http://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Yemen_AcuteFI_Situation_MarchJuly2017_ENversion.pdf.

52) *Yemen cholera outbreak could hit one million by 2018*, ALJAZEERA (Sept. 29), <http://www.aljazeera.com/news/2017/09/yemen-cholera-outbreak-hit-million-2018-170929140409261.html>.

53) Interview by Fawziah Al-Ammar with Dr. Mohammad al-Ashul, *supra* note 13.

54) Interview by Tawfeek Al-Ganad with an anonymous official from the Yemen Ministry of Interior (January 5, 2017).

55) U.N. OCHA, *Yemen: Humanitarian Snapshot – Two years into the escalation of violence (Mar 2015 – Mar 2017)*, (Mar. 16, 2017),

56) *Yemen: U.N. Verifies Nearly 1,500 Boys Recruited for Use in Armed Conflict*, U.N. NEWS CTR. (Feb. 28, 2017), <http://www.un.org/apps/news/story.asp?NewsID=56255#.WNdHJBIrJn4>.

57) *Summary of the results of the study of psychological effects of war on children in Yemen*, YEMEN CHILDREN RELIEF [YCR] (Feb. 14, 2015), <http://www.ycr.org.com>.

VI. THE IMPLICATIONS OF LARGE-SCALE WAR TRAUMA

Ample research demonstrates the links between trauma exposure, including war-related trauma exposure, and the emergence of psychological distress. The 2015 Global Burden of Disease study found a positive association between conflict and depression and anxiety disorders.^[58] While most of those exposed to emergencies suffer some form of psychological distress, accumulated evidence shows that 15-20% of crisis-affected populations develop mild-to moderate mental disorders such as depression, anxiety, and post-traumatic stress. And, 3-4% develop severe mental disorders, such as psychosis or debilitating depression and anxiety, which affect their ability to function and survive.

For instance, a study conducted with mothers at the end of the Lebanese Civil War found that the “level of perceived negative impact of war-related events was found to be strongly associated with higher levels of depressive symptomatology,” and that “the level of a mother’s depressive symptomatology was found to be the best predictor of her child’s reported morbidity, with higher levels of symptoms associated with higher levels of morbidity.”^[59]

Children can be especially affected. A study of 1,137 Palestinian children in the Gaza Strip between the ages of 10 and 18 found that, in terms of conflict-related trauma, 99% had suffered humiliation, either to themselves or a family member, 97% had heard explosions, and 84% had seen shelling from tanks, artillery, and/or warplanes.^[60] Some 41% exhibited symptoms of PTSD: of these, 20% suffered acute PTSD symptoms, 22% moderate symptoms, and 58% low-level symptoms. The types of symptoms exhibited ranged from cognitive, emotional, and somatic to social and academic behavioral disorders. Other studies have shown that exposure to war and violence in early childhood has negative implications for a child’s personality and psychological well-being later in life.^[61]

A study of Sudanese refugees in northern Uganda found correlations between exposure to conflict, the prevalence of PTSD, and depressive and behavioral problems. It further found that the day-to-day hassles of life the children experienced were higher, relative to children in the same area who had not experienced conflict.^[62] PTSD is also associated with comorbidity of wide-ranging symptoms, from attempted suicide, to bronchial asthma, hypertension, peptic ulcer, among others.^[63]

Given available research correlating conflict with poor mental health outcomes, and the severity and length of the conflict in Yemen, large portions of the population are almost

58) Global Burden of Disease Study 2013 Collaborators, *Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013*, 386 LANCET. 743-800 (2015).

59) J.W. Bryce et al., *Life Experiences, Response Styles and Mental Health Among Mothers and Children in Beirut, Lebanon*, 28 SOC. SCI. & MED. 685 (1989).

60) Mohamed Altawil et al., *The Effects of Chronic War Trauma Among Palestinian Children*, MARTIN PARSONS, CHILDREN: THE INVISIBLE VICTIMS OF WAR: AN INTERDISCIPLINARY STUDY (Jan 2008), at <http://gbclinic.com/wp-content/uploads/2012/04/Chapter-in-Book1-The-effects-of-Chronic-Trauma-in-Palestine.pdf>.

61) S. Werkman & P. S. Jensen, *Resolved: Military Family Life is Hazardous to the Mental Health of Children*, 31 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 984 (1992).

62) B. Paardekooper et al., *The Psychological Impact of War and the Refugee Situation on South Sudanese Children in Refugee Camps in Northern Uganda: An Exploratory Study*, 40 J. CHILD PSYCHIATRY 529 (1999).

63) J. R. Davidson et al., *Post-traumatic Stress Disorder in the Community: An Epidemiological Study*, 21 PSYCHOL. MED. 713 (1991).

certainly suffering adverse mental health effects. Left unaddressed, this will have grave implications for post-conflict recovery, and for subsequent generations of Yemenis.

VII. LOOKING AHEAD: TOWARD A RESEARCH AND ADVOCACY AGENDA

It is extremely difficult to begin to address concerns about mental health in Yemen without rigorous research and analysis of the type and frequency of adverse effects among the population, the specific causes, risks, and opportunities for reform. Research is critically needed to study the mental health and psychosocial well-being of Yemenis, as well as to study government and local actor capacities, and potential opportunities to improve support and services. It is imperative that the depth and the scope of mental health issues in Yemen be assessed, appropriately mitigated through evidence-based interventions as much as is possible during the ongoing conflict, while preparing for broader efforts and advocacy in the transition post-conflict reconstruction and reconciliation.

The project initiated between the SCSS, HRC, and MSPH aims to improve the understanding of and responses to mental health concerns in Yemen through locally-owned research and evidence-based advocacy. The broad objectives of the project are to conduct interdisciplinary research to better understand the mental health situation in Yemen, including how it varies across experience, gender, and age, as well as the capacities of and gaps in mental health services in the country. This will enable assessments of the impact of the conflict on mental health in Yemen and the extent to which the right to mental health has been realized.

These findings will then inform policy recommendations for local civil society, national and international stakeholders, and aid agencies on issues related to mental health, and promote the rights of those psychologically affected by the conflict in Yemen. The project will conduct advocacy to governments, non-governmental organizations, and UN bodies to increase attention to mental health issues, and foster improved government policies, laws, and services. Additionally, the project will use media outreach strategies to the Yemeni public to raise awareness of mental health issues in order to counter the associated social stigma. In so doing, the project seeks to encourage greater community support for persons psychologically affected by conflict. Lastly, this project aims to help bring mental health issues to the table during the peace and reconciliation processes, and to push for psychosocial interventions wherever possible during conflict and in post-conflict recovery efforts, in order to ensure that the role of mental health in peace promotion is taken into account.

In doing so, the SCSS, HRC and MSPH seek to advance the right to mental health and to improve conditions for those psychologically affected by the Yemeni conflict, and to help strengthen the right to mental health globally.

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About SCSS

The Sana'a Center for Strategic Studies (SCSS) is an independent policy and research think-tank that provides new approaches to understanding Yemen and the surrounding region, through balanced perspectives, in-depth studies and expert analysis. Founded in 2014, the SCSS conducts research and consultations in the fields of political, economic, civil and social development, in addition to providing technical and analytical advice regarding key issues of local, regional and international concern.

About the Columbia Law School Human Rights Clinic

The Columbia Law School Human Rights Clinic works to advance human rights, and to train the next generation of strategic, creative, and reflective advocates for social justice. Working around the world with communities, civil society, and the UN, the Clinic addresses urgent and marginalized issues through fact-finding and research, reporting, advocacy, litigation, and technical support and training.

About MSPH

Since 1922, Columbia University's Mailman School of Public Health (MSPH) has been at the forefront of public health research, education, and community collaboration. Addressing everything from chronic disease to HIV/AIDS to healthcare policy, the School tackles today's pressing public health issues, translating research into action. Within MSPH, the Program on Forced Migration and Health is one of the world's leading centers on humanitarian research and teaching, and has helped to build a knowledge base that is improving humanitarian action and health during global disasters and conflicts.