

Integrating Psychiatry and Primary Care
Series Editors: Dinesh Bhugra · Michelle B. Riba

Christina W. Hoven
Lawrence V. Amsel
Sam Tyano *Editors*

An International Perspective on Disasters and Children's Mental Health



WORLD PSYCHIATRIC ASSOCIATION



Springer

Integrating Psychiatry and Primary Care

Series Editors

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This series of books will serve to provide models of clinical care; transfer research advances and evidence-based practices into practical applications for mental health providers and primary care providers; and increase knowledge about this field. Both editors are strongly associated with the World Psychiatry Association, one of the world's largest medical organizations, which together with its partners provides services to help bring new information and findings to clinicians in many disciplines, who are caring for patients and families. This series brings together well known editors and authors to develop important topics in primary care psychiatry.

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ISSN 2522-5693 ISSN 2522-5707 (electronic)
Integrating Psychiatry and Primary Care
ISBN 978-3-030-15871-2 ISBN 978-3-030-15872-9 (eBook)
<https://doi.org/10.1007/978-3-030-15872-9>

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This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

I dedicate this book to the love of my life, Donald Jay Mandell, who was a quintessential scientist and educator. He immediately understood the potential impact of the World Trade Center Attack of 9/11/2001 on the developing minds of children and adolescents and was the chief architect of our internationally renowned New York City Board of Education School Study, conducted 6 months after that event on a large representative sample (N = 8,236) of students. That farsighted research was the first post-disaster study to include a more expansive view of disaster-related consequences, by looking beyond PTSD and depression and assessing eight psychiatric disorders, as well as familial and contextual factors. That study, which had a profound impact on understanding post-disaster psychopathology and resilience, facilitated many subsequent investigations, notably those on transmission of trauma. Donald's intellectual leadership in that investigation was but one example of his profound impact on research to improve understanding of psychosocial development in young people, a legacy that endures in the many minds he influenced.

Christina W. Hoven

I would like to dedicate this book to the most resilient person I have ever known, my mother, Pearl Grunzweig-Amsel, of blessed memory. She was 16 years old when the Nazis marched her and six other members of her immediate family into Auschwitz. When the Red Army liberated the camp, only she and one sister had survived the gas chamber and crematorium. The Russian soldiers lined the concentration camp guards up against the wall, handed her a rifle, and said, "Take your revenge, or you will always regret it." Pearl said, "No, I will not become like them." Instead she moved to New York, raised a family, obtained two degrees in Fine Arts, and became a prolific sculptor. Her works are now owned by museums, institutions, and private collectors throughout the world. She was also one of the mostly widely read people I have ever known, had the sharpest wit and, interestingly, the best sense of humor I have ever come across. She was fast to laugh and slow to cry, but always authentic. When an interviewer asked her why she sculpted, she said, "I am trying to leave the world a bit more beautiful than the way I found it." Indeed, she did just that.

I would also like to acknowledge my wife, Diane Dreher, and our son, Noah Amsel, who make everything in my life possible and wonderful.

Lawrence V. Amsel

Foreword

When aspiring to understand the health of populations, there are two core conceptual perspectives that together provide the scaffolding for our thinking, which can help point the way for the science and practice of population health.

First, an eco-social perspective suggests that our health is a product of a nested set of “levels” that include our biology, our behaviors, our social networks, our families, our communities, and the places and countries we live in. This perspective suggests that we must reckon with the characteristics of all these levels in order to understand the production of health. Second, a lifecourse perspective suggests that health is produced throughout life, extending to the pre- and perinatal period. Therefore, our health as adults is a product of our in utero exposure, our environments and exposures as infants, and our exposure and behaviors as adolescents leading into adulthood. Taken together, both frameworks create a picture of a multicausal production of health where we, as individuals, are nested within our multiple environments and our histories, and as such, our health is a product of the complex set of causal factors that produce health as experienced from early on in childhood.

Large-scale traumatic events—typically referred to as disasters—are becoming increasingly common human experiences. The combined influence of global environmental climate change, resulting in more extreme weather phenomena, and increasing global urbanization—concentrating more people into relatively small places—are contributing to more and more people experiencing the effects of disasters. The influence of disasters extends well beyond the individual to affect all levels—within an eco-social framework—that produce health. Disasters affect whole communities, changing social and economic function and disrupting family life and social networks. When seen through this lens, disasters therefore stand to influence population health profoundly, shaping the health of all who live in or are exposed to affected areas.

This effect is perhaps most pronounced when we consider the effect of disasters on children. Disaster exposures coming early in the lifecourse contribute not only to the health of children in the short term but also throughout their lives. Hence, when seen in this way, disasters—large-scale traumatic events that occasion perturbation at multiple levels which influence health—are important drivers of the health of populations, particularly through their impact on children, and the subsequent health of these children as they go on to become adults.

Therefore, this book's focus on the intersection of disasters and children addresses an important concern indeed. In addition to these two intersecting elements, the book's relevance to population health is heightened by its focus on mental health.

Mental health matters in this context for three reasons. First, mental health itself is responsible for an extraordinary burden of morbidity worldwide. Unipolar major depression, for example, is the leading cause of disease burden globally. In the United States, mental disorders account for a higher cost to the health system than do all other disorders. Therefore, mental health represents an important focus of inquiry in and of itself, accounting for a substantial burden of morbidity, with heightened risk of mortality worldwide. Second, mental health is highly comorbid with physical health. It is now well-recognized that the dichotomy of "mental health" vs. "physical health" is an artifact of disciplinary evolutions and does not represent the physiologic processes that maintain health or that, when disrupted, adversely affect health. For example, there are substantial biological similarities in the physiologic disruption that accompanies post-traumatic stress disorder and a range of immunological dysfunctions. Our understanding of these shared pathways remains nascent, but the observation that mental health and physical health are intertwined is not and suggests that the study of mental health is ineluctably linked to the study of physical health. Third, mental health is more directly linked to the influence of social exposures than in any other dimensions of health. Thus, mental health and illness change depending on social circumstance and at the large scale can be influenced by the same in near real time. This makes the study of mental health in the context of disasters particularly apposite. Disasters can plausibly influence mental health in the short term, and mental health can serve, in some respects, as a bellwether of health overall in the aftermath of these mass traumatic events.

This book then brings us an update on the state of the science around disasters and mental health of children at an important time. We now understand that the health of populations is determined over the lifecourse and influenced by forces around us. We also recognize that mental illness is responsible for a substantial burden of disease worldwide, is influenced by changing social conditions, and, in particular, is sensitive to perturbations early in life. An understanding of how disasters influence the mental health of children stands therefore to highlight what we know about this important intersection and, just as importantly, what we do not know. Both observations are critical to inform our science and practice, toward creating healthier populations.

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Sandro Galea

Preface

Throughout the world, with increasing frequency, natural and person-made disasters wreak havoc on the physical and mental health of our fellow human beings. Too often, the smallest and weakest amongst us are disproportionately affected by these events. Children are too young to fully comprehend the unspeakable violence of terrorism or the omnipotent natural forces of atmospheric, nuclear, or seismic energy. However, their lack of understanding provides little in the way of protection from the potential impact of such trauma. We have come to appreciate that children exposed to violence, including natural and person-made disasters, are particularly vulnerable, as the successful outcome of their fragile development hangs in the balance in those crucial moments before, during, and after a disaster. There is evidence that adults have the capacity to “grow” from difficult experiences, whereas children are generally unable to make a conscious decision about how to positively process such occurrences. Children will necessarily grow up, whether the earth shakes beneath them, flood waters carry away everything including their parents, or a terrorist attack is carried out before their eyes. Most children will eventually become adults, and most frequently, parents, no matter what atrocities they have witnessed. But after exposure to such a catastrophic event, we must ask, what kind of adult and what kind of parent? Thanks to the work of the authors of this book, and many others, the emotional and behavioral consequences that emerge in children exposed to disaster are beginning to be understood and addressed. This book, for the first time from a global perspective, brings together descriptions of selected research and interventions being conducted in an effort to restore some degree of normalcy to a child’s life once their sense of safety has been catastrophically shattered.

The inspiration for this book was, without question, the extraordinary resilience that children and their families have shown in response to a litany of the most appalling atrocities in human history. Although some children never fully recover, the majority, fortunately, thrive, regardless of exposure to these untoward events. In addition to the immediate response, it is the potential longitudinal impact that we must be concerned with. Unfortunately, we currently have limited ability to predict negative, long-term mental health sequelae in children exposed to trauma. Because response to a disaster will necessarily vary by age, gender, cultural norms, parental support, individual exposure, etc., the topics covered here are deliberately broad. Each author possesses expertise on the specific event or topic they report on, and by design, in most cases, we have included local authorities as authors. Many authors

were on the front lines of the disasters that struck their communities, and others were subsequently heavily involved in the response or in pivotal research in the aftermath. It was extremely important to us as editors that, wherever possible, local voices are at the forefront.

Two regrettable themes emerged here regarding limitations in response to disaster mental health preparedness for children and their families. First, as might be expected, not enough is being done in terms of prevention, and second, what is done, either before or after an event, is often haphazardly put together and not adequately based on evidence readily available in the literature. Too often, shortsightedness and reliance on the status quo prevails. We hope that this book will be a catalyst for changing the way policymakers and responders approach future disasters. These chapters demonstrate that there are many strategies that could be employed beforehand to mitigate the potential impact of a disaster. We cannot always predict when and where disaster will strike; however, as climate change escalates the intensity of atmospheric events and the established order of societies is threatened by food and water scarcity, poverty, international conflict, and terrorism, the inevitability of future disasters is the only certainty. The chapters in this book are intended to help inform improved preparedness pre-disaster and intervention for children's mental health post-disaster.

Regarding war and terrorism, we continue to be sickened by what some are capable of doing to other human beings. Sexual violence, genocide, and terrorism, especially that which is perpetrated on children, need to be the top public health priorities, so that the victims can be heard and healed. This book is replete with examples of individuals who have done just that. Thus, we necessarily stand in awe of the interventions detailed in these chapters. We hope this book can contribute to the normalization of such important public health efforts.

New York, NY, USA

Christina W. Hoven

Acknowledgments

This book is the culmination of thoughtful input from many individuals. The driving concept was to include chapters that reflect the invaluable contributions to children's mental health being made by local researchers, clinicians, and policy makers throughout the world. Each chapter was elicited to give a voice to their work. Hopefully, the end-product does justice to these heroes who lead important research and intervention efforts, especially to children's mental health post-disaster, frequently with little or no recognition.

Although no specific chapter addresses the role of mothers, we would like to add a special note of recognition and gratitude for their contribution to the field of children's post-disaster mental health research. Throughout the world, and often without resources, mothers are the first responders and guardians of children's physical and mental health. In times of calamity, regardless of type, location, or socioeconomic circumstance, mothers are the primary source of post-disaster intervention and comfort for children. Although there is perhaps no way to fully recognize their individual sacrifices, the editors nevertheless want to take this opportunity to collectively acknowledge the powerful contribution and impact of mothers in post-disaster response and recovery.

No manuscript is exclusively the result of *de novo* thinking. The work presented here has been significantly influenced, directly and indirectly, by the leadership of two outstanding individuals: Ahmed Okasha, MD, PhD, FRCP, FRCPsych, FACP, who, as President of the World Psychiatric Association (WPA: 2002-2005), for the first time in the organization's history, boldly devoted his tenure to children's mental health; and Norman Sartorius, MD, PhD, DPM, FRCPsych, who, as Director of the World Health Organization's (WHO) Division of Mental Health, former President of the World Psychiatric Association (WPA: 1996-1999), and former President of the European Psychiatric Association (1999-2000), collaborated on that effort, thus simultaneously making children's mental health a top priority at WHO for the first time.

The idea for this book was initially suggested by the current President of the World Psychiatric Association, Helen E. Herrman, AO, MD, MBBS, BMedSc, FRANZCP, FAFPHM, FFPH, Hon D Med Sci, who has made women and children of marginalized populations the focus of her presidency. The editors appreciate her confidence in our team. Hopefully, this book is worthy of her support and will be of value to the field.

As each of the authors know, and the editors experienced daily, this book could not have been completed without the tenacious, thoughtful efforts of our Publishing Assistant, Mr. Brian Brutzman. The editors are particularly appreciative of his ability to generate and maintain cooperation, collaboration, and helpful correspondence with the authors and publisher, as well as provide thorough initial reviews and editing, truly making this book possible.

The editors would also like to recognize the meaningful contributions of Ms. Emily Kluver, who greatly assisted in the editorial process. In addition to her time as a research and editorial assistant with the Global Psychiatric Epidemiology Group at Columbia University/New York State Psychiatric Institute, she spent several years working on other publications around the world as a writer and editor, thus bringing an important perspective to this work. She has gone on to pursue a career in disaster response and recovery for The American Red Cross of San Diego/Imperial Counties, California, hopefully, at least in part, as a result of her work on this book.

Finally, we would also like to recognize Ms. Judith Wicks and Mr. JiaWie Zhu for their much-appreciated expertise and assistance throughout the proofreading process, as well as the faculty, staff, and interns in the Global Psychiatric Epidemiology Group who work tirelessly every day to improve understanding of children's mental health, especially those exposed to disaster and trauma.

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Lawrence V. Amsel, MD, MPH is a clinical and research psychiatrist on the Faculty of Columbia University, where he also completed an MPH, which gives him a strong background in psychiatric epidemiology. In the Global Psychiatric Epidemiology Group (GPEG) at Columbia, he serves as associate director and is involved with longitudinal cohort studies of children and adolescents who have faced trauma and severe stress, including one of the largest cohorts of individuals directly exposed to the WTC attack as children. Using his mathematics background, he has worked to introduce decision science concepts, such as game theory and delay discounting, into psychiatric research and was instrumental in designing a study of the decision-making processes and subsequent consequences for children exposed to the WTC attack. He practices psychiatry at New York-Presbyterian Hospital, teaches at Columbia's Mailman School of Public Health, and, with the REACH organization, trains primary care physicians to manage psychiatric issues in their practices.

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Andrea Araneda is professor on the Faculty of Psychology at the University of Talca in Chile. She teaches courses in health psychology, nutrition and psychology, as well as the history of psychology. Her main research interests are the conceptualization, diagnosis, and treatment of post-traumatic stress. She also has been trained in evidence-based psychotherapy for the treatment of PTSD (trauma-focused cognitive behavior therapy and EMDR) and has a diploma in Forensic Psychology. She received her bachelor's degree in psychology from the University of Santiago, Chile.

Judite Blanc, PhD obtained her doctoral degree in psychology at the University of Paris 13 and specializes in psychopathology and psychology of health and developmental psychology of children and adolescents. Her studies focus on the psychopathological consequences of the seismic event of January 12, 2010, in Haiti, including the subsequent psychological development of young children exposed in utero to the disaster. The primary objective of her research program is to advance knowledge about the links between psychotraumas experienced by ancestors and the subsequent biological, cognitive, intellectual, emotional, and social development of their descendants from a race, gender, and class perspective. She is the coauthor of the book, *Afro-Caribbean Thought and (Psycho)Trauma of Slavery and Colonization*, and is currently a member of the Haitian National Committee of the STEM and Gender Advancement (SAGA) Project.

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Rachel Calam, PhD, AFBPS is professor of Child and Family Psychology at the University of Manchester, UK. She leads the Parenting and Families Research Group and studies parenting skills training, sometimes alongside other interventions, in different formats to maximize applicability. She works with families that include a parent with significant mental health difficulties, including bipolar disorder and psychosis. She has a particular interest in testing approaches for very low-resource contexts and works with UNODC on this topic in several different countries. In Panama, she has investigated parent skills training in low-resource communities and is currently examining implementation through a large-scale MRC-funded study. Her group is addressing parenting and intervention needs of families displaced by the Syrian conflict using novel, low-cost forms of information sharing, such as distributing written study materials via bread delivery into conflict zones.

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Peter Dixon has worked in the development sector since 1983, including country and regional director positions for several international NGOs in both Africa and Asia. His primary focus since 1994 has been on children's rights and the development and application of human rights-based approaches to development programming—directing programs for Save the Children in Sri Lanka and Nepal through a period where many of their child rights programming tools were developed. Since 2002, Peter worked as an independent trainer and consultant with many development practitioners in diverse settings to help them understand and apply rights-based principles and concepts. Since 2014, he has been project consultant for a Child to Child/OAK Foundation collaboration, supporting 60 OAK partners working in the field of child abuse in Eastern Europe and East Africa to strengthen child rights orientated principles in their work.

Aala El-Khani, PhD develops and researches innovative ways to reach families that have experienced conflict with parenting support and training. She has conducted prize-winning field research with families in refugee contexts and conflict zones, exploring parenting challenges and the positive impact that parenting support can provide. Her work has contributed to materials for psychological first aid for families affected by conflict and displacement. She is a humanitarian psychologist and works as a consultant for the United Nations Office on Drugs and Crime, as well as a researcher at The University of Manchester, Division of Psychology and Mental Health. Her current work collaborates the efforts of the UNODC in developing and evaluating family skills programs in countries such as Afghanistan, Palestine, Serbia, and Lebanon. She is passionate about protecting children during conflict and displacement and has trained NGO workers, school teachers, and affected families internationally on family skills and research methods.

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Shintaro Kikuchi, MD, PhD is a pediatrician trained in Keio University, Japan, who joined the mental health clinic in Koriyama when the Great East Japan Earthquake and Tsunami (GEJET) occurred. With local child professionals, he established the Koriyama City Post-disaster Childcare Project and PEP Kids Koriyama, the largest quality indoor playground in the Tohoku region (Northeast Japan). Kikuchi conducted a rigorous longitudinal survey of children of Koriyama and petitioned the government to place a greater focus on the well-being of children.

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Khalid A. Mufti, MBBS is a practicing psychiatrist. After obtaining his MBBS, he earned membership in the Royal College of Psychiatrists, UK, later earned a fellowship, and went on to serve the college as an elected chair of the Southeast Asia Division. He is the former dean/principal of Khyber Medical College, Peshawar, Pakistan, an international distinguished fellow of the American Psychiatric Association, chairman and founder of Horizon NGO Peshawar, Pakistan, and regional representative of the Central and Western Asia Zone of the World Psychiatric Association. After the 9/11 attack, he tirelessly delivered psychiatric services across Afghanistan in collaboration with international NGOs while successfully delivering several training courses to health workers within the country. He, along with his own NGO, mobilized communities for the rehabilitation and treatment of drug addiction and for persons affected by natural and man-made disasters (post-9/11 Afghan Refugees, earthquake and flood victims, IDPs affected by terrorism, and affected children and families of the Army Public School Massacre).

George J. Musa, PhD serves as the deputy director of the Global Psychiatric Epidemiology Group ([GPEG], C. W. Hoven Director) in the Division of Child and Adolescent Psychiatry, Columbia University/New York State Psychiatric Institute, where he has worked since 1995 and developed a broad expertise in domestic and international epidemiologic research, including large-scale longitudinal studies. His scientific approach represents a marriage of medical geography, public health, and informatics to obtain a deeper understanding of how health issues impact populations. Since the 1990s, this type of approach has become an ever-increasing, valued, and progressive discipline to analyze epidemiological phenomena. As a faculty member in the Departments of Psychiatry and Epidemiology at Columbia University, he brings a medical geographer/GIScience lens to the psychiatric epidemiological research questions of today. His research has three interrelated foci: (1) effects of traumatic exposure on child and adolescent mental health, (2) environmental and social determinants of health, and (3) mental health literacy and psycho-education. He has advocated for the use of GIScience in public health with numerous national and international presentations and publications.

Kanae Narui, MA serves as president of the Fukushima Branch of the Japanese Association of Clinical Psychologists and has created early intervention programs for a wide range of victims of the GEJET in Fukushima, Japan, including infants, children, and senior citizens. As the president of NPO Heartful Family Care Society in Fukushima, she sits on the Board of the Fukushima Prefecture Health Survey as the only mental health professional to represent the post-disaster mental health needs of the children of Fukushima.

Louise K. Newman, PhD is the director of the Centre for Women's Mental Health at the Royal Women's Hospital and professor of Psychiatry at the University of Melbourne, Australia. She has qualifications in psychology, medicine, and psychiatry and was the founding chair of Perinatal and Infant Psychiatry at the University of Newcastle. She is a practicing infant psychiatrist with expertise in disorders of early parenting and attachment difficulties in infants. Her current research focuses on the evaluation of infant-parent interventions in high-risk populations, parental reflective functioning in mothers with borderline personality disorder, and neurobiology of parenting disturbance. She has published works on infant mental health, attachment disorders trauma, and prevention of child abuse, and is coauthor of the textbooks *Clinical Skills in Infant Mental Health: The First Three Years* and *Contemporary Approaches to Infant and Child Mental Health*. She convened the Asylum Seeker Advocacy Group and served as a former advisor to the Australian Department of Immigration on the mental health needs of traumatized asylum seekers.

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Howard J. Osofsky, MD, PhD is the Kathleen and John Bricker Chair and head of the Department of Psychiatry at Louisiana State University School of Medicine in New Orleans, USA. He has published widely and has played an important role in developing community, state, and national psychosocial preparedness programs for first responders and mental health professionals to improve responses to disasters and terrorism. He was clinical director for Louisiana Spirit following Hurricane Katrina and co-director of the Mental and Behavioral Health Capacity Project following the Gulf Oil Spill. He is co-PI for the NCTSN Category II Center, Terrorism and Disaster Coalition for Child and Family Resilience.

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Trauma: Intervention and Treatment (2004), and *Children in a Violent Society* (1997). She is a past president of Zero to Three: National Center for Infants, Toddlers, and Families and the World Association for Infant Mental Health, was co-director of the Louisiana Rural Trauma Services Center in the National Child Traumatic Stress Network (NCTSN), and was clinical director for Child and Adolescent Initiatives for Louisiana Spirit following Hurricane Katrina. She serves as co-director of the Mental and Behavioral Health Capacity Project, part of the Gulf Region Health Outreach Program following the Gulf Oil Spill, and co-PI for the NCTSN Category II Center, Terrorism and Disaster Coalition for Child and Family Resilience.

Ruth Pat-Horenczyk, PhD is an associate professor at the School of Social Work and Social Welfare at the Hebrew University of Jerusalem, Israel, and a clinical psychologist who received her PhD from the same university. She completed her postdoctoral training at the University of California in San Diego. Her current research topics focus on risk and protective factors for childhood PTSD, relational trauma, emotion regulation, and post-traumatic growth. She has published extensively in the field of child trauma, and her recent books are *Treating Traumatized Children: Risk, Resilience and Recovery* (2009) and *Helping Children Cope with Trauma: Individual, Family and Community Perspectives* (2014).

Vsevolod A. Rozanov, PhD received his doctorate in neurochemistry in the Kiev Bogomolets Medical Institute and his doctor of sciences degree in the People's Friendship University of Russia (Moscow). As a clinical neurochemist, he has studied ionizing irradiation effects on neurotransmitter systems, designed and approbated several nootropic drugs, and developed experimental rehabilitation approaches to severe stress, brain trauma, and radiation-induced lesions. He is also interested in the neurological, behavioral, and psychological effects of wide ecological stressors and neurobiological correlates of suicidal behavior. Results of his work in one of the largest studies of genetics and suicidality have contributed to the modern understanding of the role of stress vulnerability in suicidal behavior. Currently, he is a professor at the Department of Psychology of the Saint Petersburg State University, Russia, is the author of more than 300 published papers and a dozen book chapters, and serves on the editorial boards of several journals on mental health and suicide research.

Michiko Sakai, MA is an experienced clinical psychologist at the Department of Pediatrics, Keio University School of Medicine, Japan. She treats children with a wide range of severe problems, including autistic spectrum disorders and anorexia nervosa, and supervises on complex child and family cases that involve trauma caused by the GEJET.

John Saroyan, EdD is a psychologist at the Pepperdine University Counseling Center in Malibu, CA, USA. He recently served as a Fulbright Scholar Specialist and visiting professor at Yerevan State Medical University, Armenia, lecturing on trauma with children. He also serves as a military and family life consultant for the US Military.

Sherry Shenoda, MD, FAAP graduated from Morehouse School of Medicine. She completed her residency training in pediatrics at the Children's Hospital at Dartmouth and her fellowship in community and societal pediatrics at the University of Florida, College of Medicine—Jacksonville. She then stayed on as junior faculty and later became the medical director of the UF Pediatric Wellness Center, a primary care medical home for youth with complex mental health issues. She is a clinician, researcher, and child advocate with respect to children affected by armed conflict. She is currently a community pediatrician at a federally-qualified health center in California, USA.

Alana Siegel, PsyD is a psychologist who specializes in trauma and a longtime collaborator of Prof. Pat-Horenczyk and the Israel Center for the Treatment of Psychotrauma. She completed her undergraduate degree with honors in human development at Cornell University and graduated with a master's degree in international affairs from the Institut d'Etudes Politiques (Sciences Po) in Paris. She earned her doctorate in clinical and school child psychology at Yeshiva University and completed a first postdoctoral fellowship at Bar-Ilan University. She is currently a postdoctoral fellow and an instructor in the International Crisis and Trauma Program at Tel Aviv University, Israel.

Zahava Solomon, PhD is a professor of Social Work at Tel Aviv University, Israel, and the head of the Multidisciplinary Center of Excellence for Mass Trauma Research, which is one of the Israeli Centers of Research Excellence (I-CORE). Her research focuses on traumatic stress with emphasis on combat stress reactions, war captivity, and ongoing terror. She has published nearly 400 peer-reviewed papers, 6 books, and numerous book chapters in the field and has earned numerous awards including the Laufer Award for Outstanding Scientific Achievement in the field of PTSD, the Prize of Israel in Social Work, and the Emet Prize in Social Sciences, Social Work.

Anthony H. Speier, PhD is an associate professor of Clinical Psychiatry in the Department of Psychiatry at Louisiana State University Health Sciences Center New Orleans, USA (LSUHSC). He is the former assistant secretary of the Louisiana Office of Behavioral Health, served as state-wide director for Disaster Behavioral Health in Louisiana, and was responsible for directing the public sector behavioral health response to Hurricane Katrina.

Rosario Spencer, PhD is an assistant professor on the Faculty of Psychology at the University of Talca, Chile. She teaches child psychopathology, infant clinical psychology, and domestic violence. She has conducted research in the field of attachment and parenting in foster families and in institutional contexts, financed by the National Fund for Scientific and Technological Development (FONDECYT, Government of Chile). Her main interests are the study of early socioemotional development and the impact of early traumatic experiences on infant mental health from the attachment theory perspective. She received her bachelor's degree in psychology from the Pontifical Catholic University of Chile and her master's and

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Jacob Y. Stein, PhD is a research fellow at the multidisciplinary Israeli Centers of Research Excellence (I-CORE) for the investigation of mass trauma at the Bob Shapell School of Social Work at Tel Aviv University, Israel, under Prof. Zahava Solomon. He is a postdoctoral fellow at the Traumatology Institute at Tulane University, LA, USA, under the supervision of Prof. Charles R. Figley. He has published numerous research papers and several book chapters in the traumatology field. His studies are interdisciplinary and include both quantitative and qualitative investigations of trauma and its aftermath, while his research focuses primarily on the ramifications of war-induced trauma, loneliness, and interpersonal relationships in the aftermath of war and war captivity.

Hiroko Suzuki, MD is one of the few child psychiatrists in Tohoku, Japan, and runs Hiroko Suzuki Institute of Psychotherapy in Morioka, Iwate. As the leader of infant mental health in the Tohoku region, she hosted the annual congress of the Japanese Association for Infant Mental Health (an affiliate of World Association for Infant Mental Health) in 1999 and collaborated with local obstetricians to prevent postnatal depression and sexual abuse. She has been treating families with multiple complex trauma from the GEJET in the cities of Miyako and Rikuzentakata.

Natsuko Tokita, MD is the director of the Division of Mental Health in Keio University Hospital, Tokyo, Japan. She works with children and families suffering from unresolved, complex trauma in postwar industrialized Japan by applying culturally appropriate attachment approaches, originally developed by Hisako Watanabe. She conducts treatment in the inpatient pediatric ward where children benefit from healthy interpersonal experiences with peers. She worked alongside several other mental health first responders in the aftermath of GEJET.

Kimiko Toyoshima, MD is a pediatrician who practices in Miyako City, Iwate, Japan, where many lives were lost in the giant tsunami in March 2011. As one of only two pediatricians in Miyako, she tirelessly cares for her local patients and contains the grief of the bereft families. With her team of local infant mental health workers, she has facilitated the recovery of many infants and young children from the impact of the tsunami.

Sam Tyano, MD is a professor emeritus in Psychiatry at the Tel Aviv University School of Medicine, Israel. He is the coauthor of four textbooks on adult, child, and adolescent psychiatry, honorary president of the Israeli Child and Adolescent Psychiatric Association, and previous president of the Israeli Medical Council. He has also chaired the National Board of Mental Health, served for 20 years as the director of the Geha Psychiatric Hospital, and is fellow of the RCPsych, WPA, IMA, APA, and Doctor Honoris Causa at the Bekhterev Psychoneurological Institute

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Ingrid van Balkom, MD, PhD currently works as senior (child and adolescent) psychiatrist and medical director at Jonx, the Department of (Youth) Mental Health and Autism of Lentis Psychiatric Institute, where she is also the head of research at the Autism Team Northern Netherlands. In addition, she is affiliated with the Rob Giel Research Centre, Department of Psychiatry, University of Groningen. She does research in developmental disabilities, autism, and behavioral phenotypes of (rare) genetic syndromes. Current projects include investigating child mental health effects of earthquakes caused by gas extraction in the Province of Groningen in the Netherlands.

Musa Abba Wakil, MBBS, FWACP is a professor of Psychiatry and pioneering medical director of the Federal Neuropsychiatric Hospital in Maiduguri, Nigeria. He has pioneered the development of mental health services and is actively involved in the policy planning and implementation of services for the affected populace of Northeastern Nigeria, which has been ravaged by the Boko Haram insurgency.

Hisako Watanabe, MD, PhD was trained in the late 1980s in pediatrics, neurology, and lifespan developmental research before moving to London in the early 1990s to undergo psychoanalytic and infant observation training. Upon her return to Japan, she did intensive work in the pediatric ward of Keio University Hospital and served as director of the Pediatric Mental Health Division and assistant professor of the Department of Pediatrics at the Keio University School of Medicine. She has trained more than 330 pediatricians in basic child psychiatry and formed the FOUR WINDS, a national forum for infant mental health in 1997 with infant professionals from across Japan, which promotes relationship-based, culturally sensitive scientific practice. In 2014, she received the WAIMH Award in recognition of significant contributions to the World Association for Infant Mental Health and is currently on its executive board. She has lectured across Japan and internationally and has dedicated her life to supporting communities that have experienced trauma. Recently, she has been focusing on transforming the Japanese Family Court system into a more child-centered institution and cultivating specialized trauma therapists for children with complex trauma in early life, including sexual abuse, domestic violence, and evacuation from the Fukushima Daiichi Nuclear Power Plant disaster in March 2011.

Charles H. Zeanah, MD graduated from Tulane University with a bachelor of arts degree in English and then from the Tulane University School of Medicine. He trained in pediatrics at the University of Virginia, general psychiatry at Duke University, and child and adolescent psychiatry at Stanford University. He is Mary Peters Sellars-Polchow Chair in Psychiatry, vice chair of Child and Adolescent