

WHO recommendations on management of serious bacterial infection in young infants aged 0-59 days Guideline development group (GDG) meetings 30 October to 3 November 2023 GDG biographies v28Sept2023

GDG	Organisation	Country	Biography
Bogale Worku	Ethiopian Pediatric Society, Addis Ababa, Ethiopia	Ethiopia	Dr Worku is a professor of paediatrics and child at Addis Ababa University. Dr Worku is a paediatrician by training with more than twenty-five years of experience in teaching both undergraduate and post graduate students on child health. My teaching mainly focuses on neonatal health. Dr Worku has been working as an executive director for the Ethiopian Paediatrics society for the last ten years, the function of which encompass child health issues. Dr Worku's main focus is in capacity building of health workers to be able to give the quality care for the new born care across the country. Dr Worku has more than 55 per reviewed publications. Dr Worku is serving on several national TWG and advisory committee as a member.
Gary Darmstadt	Stanford University, USA	USA	Dr Darmstadt, is Associate Dean for Maternal and Child Health, Professor and Co-Director of Global Pediatric Research in the Department of Pediatrics at the Stanford University School of Medicine. He is on the WHO Strategic and Technical Advisory Group of Experts (STAGE) Committee on Maternal, Newborn, Child, Adolescent Health, and Nutrition and is Co-Chair of the STAGE Kangaroo Mother Care Working Group and the STAGE Evidence and Guidelines for Impact Workstream. He was co-chair of the WHO Guidelines Development Groups on Care of Preterm or Low Birthweight Infants and on Antenatal Corticosteroids and Tocolytic Agents for Women at Risk of Preterm Birth. He also led the Steering Committee for The Lancet Series on Gender Equality, Norms and Health, and is a Commissioner on The Lancet Commission on Gender and Global Health, a member of the Elsevier/Lancet Inclusion and Diversity Advisory Board, and Chair of the Coalition of Centres in Global Child Health. Previously Dr. Darmstadt was Senior Fellow at the Bill & Melinda Gates Foundation (BMGF) and Director of Family Health, leading strategy development and implementation across nutrition, family planning and maternal, newborn and child health. Darmstadt was formerly Associate Professor and Founding Director of the International Center for Advancing Neonatal Health at the Johns Hopkins Bloomberg School of Public Health, and Senior Research Advisor for the Saving Newborn Lives Program of Save the Children. He has trained in Pediatrics at Johns Hopkins, in Dermatology at Stanford, and in Pediatric Infectious Disease as a fellow at the University of Washington.
Haroon Saloojee	University of Witwatersrand, Johannesburg, South Africa	South Africa	Dr Saloojee is a personal professor and head of the Division of Community Paediatrics at the University of the Witwatersrand, Johannesburg, South Africa and a neonatal clinical unit head at the Chris Hani Baragwanath Academic Hospital in Soweto. More recently, he is the curriculum head of the university's undergraduate medical programme. He serves on the WHO Department of Reproductive Health and Research RHR Research Project (RP2) Review Panel, is a member of various data and safety monitoring boards including that for the WHO-led "Optimizing place of treatment and antibiotic regimens for young infants presenting with signs of possible serious bacterial infection" study and has previously chaired a WHO Technical Advisory Group for neonatal sepsis studies in Africa. Areas of expertise include child public health, neonatal health, vaccinology, child nutrition, and health systems organisation and programme management.
Hoang Tran	Da Nang Hospital for Women and Children, Da Nang, Viet Nam	Vietnam	Dr Hoang Thi Tran is a neonatologist at Da Nang Hospital for Women and Children, Viet Nam. She gained her paediatric Master and PhD degrees at the University of Melbourne, Australia, following her undergraduate medical doctor degree at the University of Medicine and Pharmacy in Ho Chi Minh City. Dr Tran has held a dual role as the Deputy Director of Da Nang Hospital for Women and Children as well as the Head of Paediatrics Department at the School of Medicine and Pharmacy, University of Da Nang. She is also the vice-president of Vietnam perinatal and neonatal association and a member of the Independent Review Group for WHO-Western Pacific region on monitoring implementation of the Action Plan for Healthy Newborns. Her passion is improving maternal and child health based on low-cost and effective interventions such as breast feeding, early essential newborn care, and kangaroo mother care.
Jacqueline Ho	Cochrane Malaysia, Kuala Lumpur, Malaysia	Malaysia	Dr Ho has been working in Malaysia for over 40 years. She is currently a Professor of Paediatrics and Neonatologist at RCSI & UCD Malaysia Campus (formerly Penang Medical College). Dr Ho was the Founding Director of Cochrane Malaysia, started in 2013 and is now Co-Director. Dr Ho is also a Cochrane Trainer and is on the Advisory Group for Cochrane Training Support. She a Senior Editor for Cochrane Neonatal and a Proposal Editor for the Cochrane Central Editorial Service. She is also on editor for PLOS ONE. She has published 100 peer-reviewed articles. Jackie's research interests are in breastfeeding, care of preterm infants and implementation science (knowledge translation), particularly in the field of breastfeeding and kangaroo mother care.
Jeeva Shankar	All India Institute of Medical Sciences, New Delhi, India	India	Dr Sankar is working as an Additional Professor in the Division of Neonatology, Department of Pediatrics, All India Institute of Medical Sciences (AIIMS), New Delhi. Earlier, he worked as a Medical Officer in the Department of Child and Adolescent Health and Development, World Health Organization (WHO), Geneva (2010). Dr. Sankar is an avid researcher who has published more than 100 original articles in reputed journals, including The Lancet, BMJ, and Lancet Global Health. His name features in the global database of the top 2% of scientists across all scientific fields based on the ranking of a composite indicator (using the data for citations in a single calendar year, 2021). His primary area of research interest is neonatal sepsis. He coordinated the multicenter study on sepsis involving around 15000 neonates in four tertiary care hospitals of Delhi (DeNIS collaboration). He is the Principal Investigator of two ongoing multi-site studies on neonatal sepsis – a multi-institutional research

			program on understanding the biology of neonatal sepsis (funded by the Department of Biotechnology, Government of India) and another on the epidemiology of sepsis in level-2 units in the district hospitals of India (funded by the Bill & Melinda Gates Foundation). He has conducted around 40 systematic reviews and synthesized the evidence for eight global WHO guidelines, including "Postnatal care of neonates and mothers." Dr. Sankar is one of the global and national collaborators of the Global Burden of Diseases (GBD) at the Institute for Health Metrics and Evaluation, Seattle. He is also a member of the Guideline Development Group (GDG) of the WHO, Geneva, in 'Maternal and Perinatal Health' and a member of the 'Technical Advisory Group (TAG)' of the WHO ACTION-III trial on the use of low-dose antenatal steroids in women with preterm labor.
Karen Walker	Council of International Neonatal Nurses, Australia	USA	Dr Walker is a Neonatal Clinical Nurse Consultant at the Royal Prince Alfred Hospital in Sydney and a Clinical Professor, Faculty of Medicine and Health at the University of Sydney. A neonatal nurse, with extensive experience in clinical research and policy, she was awarded her PhD through the University of Sydney in 2011, investigating neonatal outcomes following early major infant surgery. Committed to advocating for nurses and the speciality of neonatal nursing, she is the current President of the Council of International Neonatal Nurses, the global organisation representing neonatal nurses on the international arena. From a global research and policy perspective, she represents neonatal nursing on many committees. Along with the other Presidents or CEO's of the global health care organisations (ICN, IPA, ICM and FIGO), she sits on the Health Care Practitioner Constituency committee with a key purpose to advocate and publish on global issues using the combined voice of health care organisations. She is the Vice Chair of the Knowledge and Evidence Working Group, for the World Health Organisation Partnership for Maternal Newborn and Adolescent health (PMNCH), where she co-leads the maternal, newborn and child health stream. A key outcome from the stream has been the recently published Born too Soon Decade of Action on Preterm Birth launched in May this year. Professor Walker serves on many global Expert Advisory and WHO committees including with NEST 360, the WHO and collaborators Improving Quality and use of Newborn Indicators (IMPULSE) program and the WHO/UNICEF Technical Advisory Group undertaking a project to address knowledge gaps about the 'norms' for essential components of 'level-2' care of small and sick newborns. She was integral in writing a successful grant from the Bill and Melinda Gates Foundation for a COINN Community of Neonatal Nursing Practice in Africa of which she is a Director, which aims to improve outcomes for small and sick newborns through education, training and mentorship. Karen co-s
Kristina Keitel	University Hospital, Bern, Switzerland	Switzerla nd	Dr Keitel is Head of the Pediatric Emergency Medicine at the University Hospital of Bern, Switzerland, and Honorary Lecturer at the Swiss Tropical and Public Health Institute. Dr Keitel graduated with a MD from the Charité Medical Faculty in Berlin, Germany. She completed her clinical training in Pediatrics, Pediatric Infectious Diseases, and Pediatric Emergency Medicine at the University Hospital in Geneva, Switzerland, and Boston Children's Hospital/ Harvard Medical School, USA. Dr Keitel received training in Public Health (MPH) at Columbia University, New York, USA, followed by a PhD in Epidemiology at the Swiss Tropical and Public Health Institute in Basel, Switzerland. During her PhD she was based in Tanzania. Dr Keitel's primary research interest lies in the outcome-based evaluation of diagnostic and treatment strategies for common pediatric infections. This includes the development and validation of electronic decision algorithms (e.g. ePOCT, an IMCI-based tool now undergoing implementation research in several countries), and pragmatic clinical trials.
Lulu Bravo	National Institutes of Health, University of the Philippines, Manila, Phillipines	Phillipin es	Dr Bravo is a Professor Emeritus at the College of Medicine, University of the Philippines Manila. She is the former Vice Chancellor for Research and Executive Director of the National Institutes of Health, University of the Philippines Manila (2005 – 2011) and current head of the Vaccine Study Group of the NIH – UPM. She is the President of the Immunization Partners in Asia Pacific (IPAP), current Executive Director and past President of the International Society of Tropical Pediatrics (ISTP) 2008 – 2011, past Chair and Founder of the Asian Strategic Alliance for Pneumococcal Disease Prevention (ASAP) 2007 – 2011, and Executive Director, Sec-General (1998 – 2006) & past President of the Asian Society for Pediatric Infectious Disease (ASPID) 2006 – 2008. She has served in various capacities in many other Asian medical and professional societies and as WHO Technical Advisor. She has served as well in national medical organizations such as PMA, PPS, PIDPS, PSMID and the Philippine Foundation for Vaccination (PFV) of which she is the founding President and current Executive Director. In the international scene, she is a member of the Rota Council, Pneumococcal Awareness Council of Experts (PACE) and member of the Dengue Vaccine Initiative (DVI). Her work has earned for her various national and international honors and awards in the professional, academic and research fields, including the Outstanding Physician (2009) and the prestigious Dr. Jose P. Rizal Memorial Award for Academe (2011) given by Philippine Medical Association, the 2012 Asian Outstanding Pediatrician Award given by the Asia Pacific Pediatric Association and 2018 Outstanding Professional in Medicine given by the Professional Regulation Commission of the Philippines. In 2008, she presented both written and oral evidence to the UK's House of Commons to justify the \$ 2.5 Billion vaccination advance market commitment to provide needed vaccines for the developing world. She was named Pneumonia Fighter in 2018 by the JustActions Organization, a US-based
Michael Sharland	King's College Hospital, London, United Kingdom	UK	The Centre for Neonatal Infection at St George's University London is jointly lead by Professor Mike Sharland who runs a global program of neonatal and pediatric strategic AMR focussed trials and policy interventions, with major studies in severe pneumonia (CAP-IT, PediCAP), neonatal sepsis (NeoMero, NeoVanc, NeoOBS, NeoSep1), neonatal Infection Prevention and Control (NeoCHG, NeoVT-AMR, NeoDeco), Surveillance (ARPEC, GARPEC, PediBSI), and Global Data to inform policy projects (ADILA, APC-PPS). These projects are funded by the HTA, MRC, UKRI, FP7, H2020, EDCTP, WHO, Wellcome Trust and other funders. The Centre has recently been funded by the EU to lead SNIP-AFRICA as a network to conduct future adaptive platform trials in neonatal sepsis. MS has led the development of novel tools for the surveillance of antimicrobial use and resistance in neonates and children, developing the first globally relevant metrics for the optimal use of antibiotics in the community and hospital setting, published in LID and LGH. MS is leading strategic trials focussed on informing future WHO Guidance in the management of severe pneumonia, neonatal sepsis and the prevention of nosocomial infection, including the global NeoSep1 trial, sponsored by GARDP studying the impact of novel

			combinations of older generic antibiotics on mortality outcomes of hospitalised neonates with sepsis. In the policy area, since 2017, MS has chaired the WHO EML Antibiotic Working Group which developed the AWaRe system (Access/Watch/Reserve) and produced the WHO Antibiotic AWaRe book, published in 2022, providing evidence based guidance on the choice of antibiotic, dose, route of administration and duration of treatment for more than 30 of the most common clinical infections in neonates, children and adults in both primary healthcare and hospital settings. MS leads the WT funded ADILA project which is a data re-use project, developing an
Narendra	Executive Director	India	evidence-based approach to the optimal use of antibiotics at a local level. Dr Narendra Kumar Arora is the current Executive Director of The INCLEN Trust International since 2005. Prof Arora was a faculty member (Paediatric Gastroenterology,
Arora	INCLEN International, New Delhi, India		Hepatology, & Nutrition) of AlIMS between 1983 and 2007. In 2018, he was appointed as President of AlIMS Deoghar. Prof Arora has been involved in numerous national scientific, research, and academic committees constituted under the MoHFW, DBT, BIRAC, DST, ICMR, and UGC for Maternal and Child Health in India. He is currently serving as a Chair – Covid-19 Working Group of National Technical Advisory Group on Immunization (NTAGI India) and Chair on various COVID-19 vaccine, drugs and diagnostic activities in India. He was the lead author for determining the Indian research priorities for MNCAH&N these are adopted by ICMR for its investment agenda. Prof Arora served as a Vice-Chair/Member of the WHO- Strategic Advisory Group of Experts on Immunization (SAGE) from 2010 to 2016 and South-East Asia Regional Immunization Technical Advisory Group (SEAR-ITAG). He served on three SAGE working groups which undertook GDG work. Currently, Prof Arora serving as a member of the WHO's Global Advisory Committee on Vaccine Safety (GACVS); and WHO's Scientific and Technical Advisory Group for Maternal, New-born, Child and Adolescent health and Nutrition (STAGE). He has also participated in GDG groups for GACVS for management of TTS post COVID 19 vaccination.
Patricia Fernandez	Ministry of Health, Buenos Aires, Argentina	Argentin a	Dr Fernandez is a neonatologist from Buenos Aires University (UBA), who graduated in 1990 who has a Master of Social Epidemiology, Health Policy and Management. Dr Fernandez has worked in the Argentina Ministry of Health, Maternal and Children Department: as Neonatology leader, Preterm New Born Follow up Program, and in the Buenos Aires British Hospital: NICU and follow up program leader, University Buenos Aires Hospital. Dr Fernandez is also a Coordinator Subcommittee High Risk Newborn, 2006-2008, Member of High Risk Network Buenos Aires, Argentina.
Patricia Hibberd	Head of Department, Centre for Global Health, Boston University, USA	USA	Dr Hibberd is Chair and Professor in the Department of Global Health at Boston University's School of Public Health, as well as a board certified infectious diseases physician with expertise in epidemiology, translational research and clinical trials/ implementation science studies. She is also Professor of Medicine and Pediatrics at the Boston University School of Medicine. Her major research interest is in global health, particularly improving prevention and treatment of childhood pneumonia/neonatal sepsis in the rural communities, where the majority of the childhood deaths still occur. She has been continuously funded by the National Institutes of Health in the US, as well as by the Bill and Melinda Gates Foundation over the last 20 years
Robert Black (chair)	Johns Hopkins University, Baltimore, USA	USA	Dr Black is Professor and Director of the Institute for International Programs of the Johns Hopkins Bloomberg School of Public Health in Baltimore, Maryland. From 1985-2013 he was Chair of the Department of International Health at the Bloomberg School. Dr Black is trained in medicine, infectious diseases and epidemiology. He served as a medical epidemiologist at the Centers for Disease Control and worked at institutions in Bangladesh and Peru on research related to childhood infectious diseases and nutritional problems. Dr Black's current research includes field trials of micronutrients and other interventions and evaluation of preventive and curative health service programs in low- and middle-income countries. In the last 25 years he led work that demonstrated the benefits of zinc supplements in prevention and treatment of childhood diarrhea and pneumonia and on child growth. His other interests are related to the use of evidence in policy and programs, including estimates of the causes of child mortality, the development of research capacity and the strengthening of public health training. He is a member of the US National Academy of Medicine, and advisory bodies of the World Health Organization, UNICEF, icddr,b and other international organizations. He chaired the Child Health and Nutrition Research Initiative and serves on the governing board of Vitamin Angels. He has published more than 800 scientific journal papers and is co-editor of the textbook "Global Health." Dr. Black is the recipient of the Programme for Global Paediatric Research Award for Outstanding Contributions to Global Child Health in 2010, the Prince Mahidol Award for Public Health in 2010, the Canada Gairdner Global Health Award in 2011, the Nutrition Leadership Award from Sight and Life in 2013, the Jimmy and Rosalynn Carter Humanitarian Award in 2016 and the Pediatric Nutrition Lifetime Achievement Award from the American Society of Nutrition in 2018.
Shabina Ariff	Aga Khan University, Karachi, Pakistan	Pakistan	Dr Ariff is an Associate Professor in the Department of Paediatrics and Child Health at Aga Khan University, Pakistan, where she holds the distinguished Husein Lalji Dewarj endowed professorship. With over 15 years of experience as a neonatologist, she is an expert in the care of critically ill newborns and a researcher. Dr Ariff has actively engaged with national and international organizations to promote global maternal, neonatal, and child health. She is a member of the WHO Guideline Development Group, the Child Health Task Force, and the Sindh Technical Working Group for the development of the National Newborn Survival Strategy, providing her expertise and insights to help shape policies and strategies on neonatal and child health. Dr. Ariff's primary research interests include nutrition, KMC, breastfeeding, and innovation in service delivery. She has received research support from WHO, Bill and Malinda Gates Foundation, International Atomic Energy Agency, and Swiss Red Cross. Currently, Dr. Ariff is serving as the principal investigator from Pakistan for the WHO ACTION III trial, a multi-country study aimed at improving the outcomes of preterm newborns. She has published on maternal and newborn health and has more than 100 publications in peer review journals and several book chapters.
Shams El Arifeen	International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh	Banglad esh	Dr. Arifeen is the Senior Director of the Maternal and Child Health Division at icddr,b. He is also a Professor at the James P. Grant School of Public Health at the BRAC University in Bangladesh. He has worked over 35 years in the fields of maternal, newborn and child health, and health policy and systems, with a focus on health interventions that address common causes of illness and death. In recent years, his particular interest has been in implementation research, and programme monitoring and evaluation. Dr. Arifeen actively participates in national efforts in Bangladesh to scale up and monitor evidence-based maternal, neonatal and child health interventions and has served on a number of national and global technical and advisory groups and panels. He is trained in medicine, public health, nutrition and epidemiology and holds an MBBS from Dhaka Medical College and an MPH and DrPH from Johns Hopkins University. He has published over 430 scientific papers in peer-reviewed journals

Siddarth	Maulana Azad	India	Dr Ramji was former Dean and Director-Professor of Pediatrics and Neonatology, Maulana Azad Medical College, New Delhi, India. He is currently Co-Chair, Technical
Ramji	Medical College, New Delhi, India		Advisory Group for Indian Newborn Action Plan, Ministry of Health, Govt. of India. He has over 35 years of teaching, clinical and Research experience with almost 150 research publications in per reviewed journals. Research engagement has included multi-site and multi-country studies which have had both national and international relevance. Some of these have resulted in changes in policy at National level and change in newborn care practice guidelines at the global level. Has been actively involved in the development, implementation and monitoring of public health systems for neonatal health and childcare in India. Has been temporary Advisor to the WHO on several occasions for newborn health, DSMB member of WHO multicentric trials and member of GDG (Chair, Newborn health) for postnatal care (2022).
Simon Cousens	London School of Hygiene and Tropical Medicine, United Kingdom	UK	Prof Cousens trained as a mathematician and statistician. He worked at the London School of Hygiene and Tropical Medicine for 36 years before officially retiring in September 2021. During his time at LSHTM Prof Cousens worked mostly on issues related to neonatal and child health in low income settings, including work in various countries in Africa and Asia. In particular he was closely involved in the SATT trials in Pakistan and Bangladesh and in the Afrinest trial in Africa.
Sushma Nangia	Lady Hardinge Medical College & Kalawati Saran Children's Hospital, New Delhi, India	India	Dr Nangia is currently heading the Department of Neonatology at Lady Hardinge Medical College and associated Kalawati Saran Children's Hospital which is among the largest children's hospitals in Northern India. She completed her Doctorate in Medicine (DM) in Neonatology from AIIMS, New Delhi in 2007 and has over thirty years 'of experience in managing both pediatric and neonatal cases including small and sick neonates. Her special areas of interest include Neonatal resuscitation, Breastfeeding, Early total enteral nutrition among very low birth weight infants, promoting intake of mother's own milk in NICU in addition to judicious use of antibiotics and blood products along with non –invasive respiratory support. She is a researcher par excellence with many in journals of both national and international repute. One of the biggest studies on routine endotracheal intubation in non-vigorous meconium-stained infants, which contributed to change in the delivery room management of neonates born through meconium stained amniotic fluid, has been conducted by her. She has been actively involved in training and mentoring doctors and staff nurses across India and those from SAARC countries in IMNCI and Facility Based Newborn Care (FBNC). She is member of technical expert group for Maternal and Child health division of Ministry of Health & Family Welfare (MoHFW), Government of India and has actively participated in framing national guidelines for the country on Facility based newborn care (FBNC), Navjaat Shishu Suraksha Karyakram (NSSK), Newborn Stabilization units (NBSU) and guidelines on comprehensive lactation management centers (CLMC) and human milk banking in India. She is also the convener of National Collaborative Centre for Facility Based Newborn Care for Government of India, wherein doctors and nurses working in district and sub-district hospitals are trained in managing small and sick babies.
Trevor Duke	Royal Children's Hospital, Melbourne, Australia	Australia	Dr Duke is a paediatrician, clinical director of the General Intensive Care Unit at the Royal Children's Hospital in Melbourne, professor in the University of Melbourne Department of Paediatrics. Professor of Child Health at the School of Medicine and Health Sciences, University of Papua New Guinea
Victoria Nakibuuka Kirabira	Nsambya Hospital, Entebbe, Uganda	Uganda	Dr Nakibukka is a paediatrician by training with experience of 15 years with subspecialization in neonatology which Dr Nakibukka has practiced for the last 8 years in a tertiary hospital in Uganda. Dr Nakibukka's proffessional interest lies in improving quality of lives of newborn particularly in health the facilities in all areas of Uganda. Dr Nakibukka has spear headed in the setting up of the first neonatal Intensive care unit in Uganda at Nsambya Hospital and new born units in the country. Dr Nakibukka has spear headed in setting up the first Human milk Bank in Uganda. Dr Nakibukka has spear headed working together with stop infant blindenss in Africa (SIBA) setting up the one of the few centers for screening and treatment of Retinopathy of Prematurity center in Uganda. Areas of interest include; improving preterm outcomes, nutrition among the preterms, asphyxia and neonatal infections. Dr Nakibukka has conducted implementation Research to improve the quality of life of newborns. Other aptitude includes: clinical protocol /guideline curriculum and training material development, and preservice training for different health cadres (Neonatal fellows and Nurses, Post graduates, Midwives, intern doctors,)
Waldemar Carlo	University of Alabama, Alabama, USA	USA	Dr Carlo is a Distinguished Professor and the Dixon Professor of Pediatrics at the University of Alabama at Birmingham. He is Director of Nurseries at the University of Alabama Hospital and the Children's Hospital of Alabama and co-Director of Neonatology. He is the recipient of several awards including the Virginia Apgar Award from the American Academy of Pediatrics and the Douglas Richardson Award for Perinatal and Pediatric Healthcare Research Award from the Society for Pediatric Research. In addition to being an active clinician, Wally conducts clinical research in the US and in developing countries. He has led major studies including the SUPPORT Trial, the First Breath trials, and the BRAIN-HIT Trial. He recently completed the A-PLUS Trial, the first large scale trial that reduced maternal sepsis, the third cause of maternal mortality worldwide. His research is focused on reducing mortality and major morbidities during early childhood in the US and developing countries and improving guidelines for perinatal care.
Zelee Hill	University College London, London, UK	UK	Dr Hill's research spans several areas of maternal, child and neonatal health including early child development, quality improvement, understanding and improving the performance of community health workers, and community newborn care. At its core her research has focused on interventions that can be implemented in real life settings, that explore cutting edge issues and that have direct policy implications. She has a grounding in both qualitative and quantitative methods, and a sound theoretical knowledge of behaviour change theories, as well as practical experience of what it takes to get an intervention off the ground. She has significant experience working in Africa (Ethiopia, Ghana, Mozambique, Nigeria, South Africa, Tanzania, Uganda, Zambia), Latin America (Brazil, Peru), and Asia (India, Pakistan, Vietnam).
Zulifqar Bhutta	Aga Khan University, Karachi, Pakistan	Pakistan	Dr. Bhutta is the Distinguished University Professor and Founding Director of the Institute for Global Health and Development and the Centre of Excellence in Women and Child Health, at the Aga Khan University. He also holds the Robert Harding Inaugural Chair in Global Child Health at the Hospital for Sick Children, Toronto, Co-Director of the SickKids Centre for Global Child Health, unique joint appointments. He also holds adjunct professorships at several leading Universities globally including the Schools of Public Health at Johns Hopkins (Baltimore), George Washington University (DC), Boston University School of Public Health, University of Alberta as well as the London School of Hygiene & Tropical Medicine. He is a designated Distinguished National Professor of the Government of Pakistan and was the Founding Chair of the National Research Ethics Committee of the Government of Pakistan from 2003-2014. Dr. Bhutta's research interests include newborn and child survival, maternal

and child undernutrition and micronutrient deficiencies, especially covering the first thousand days. He leads large research groups based in Canada, Pakistan & Central
Asia with a special interest in research synthesis, scaling up evidence-based interventions in community settings and implementation research in fragile health systems.
His work with community health workers and outreach services has influenced integrated maternal and newborn outreach programs for marginalized populations all
over the world. His group's work with the WHO and PMNCH in developing consensus based essential interventions for women, children and adolescents is the
dominant set of agreed interventions guiding global policy. Presently Professor Bhutta is leading three global academic consortia; one working on integrated
investments to improve child and adolescent health and nutrition across the sustainable development goals, an academic working group on addressing women and
children's health in humanitarian and conflict settings and a multi-disciplinary work to help find strategies to address the challenges of climate change and health for
women and children in populations at-risk in South Asia.