HHS Public Access

Author manuscript

Infant Ment Health J. Author manuscript; available in PMC 2016 July 14.

Published in final edited form as:

Infant Ment Health J. 2015 ; 36(6): 538–541. doi:10.1002/imhj.21537.

Infant mental health in the next decade: A call for action

Mark Tomlinson

Department of Psychology, Stellenbosch University, South Africa

Introduction

Neuroscientific, biological, genetic and social science research in the last two decades is unequivocal that the first 1000 days (the antenatal period and the first two years of life) and the period to the end of the 3rd year life, are foundational in terms of brain development (Fox, Levitt, & Nelson, 2010; McEwen, 2008). Brain development and the neural connections formed in this early period are central to later social, emotional and cognitive development (Sameroff, 2010). We are also becoming acutely aware of the negative impact of early nutritional deficits on cognitive development, and of the impact of toxic stress (as a result of poverty, abuse and trauma) on how children develop the capacity to regulate their behaviour and emotions as well as on the development of attention (Shonkoff et al., 2012). All of these are essential skills if children are to succeed at school. Delivering interventions in the early years has been shown to be cost effective (Heckman, 2006), to reduce health inequities (Marmot et al., 2008), and there is an increasing evidence base for how early childhood investments can substantially improve adult health (Campbell et al., 2014). While the scientific data have been accumulating, until quite recently the donor and policy neglect of infancy and the early childhood period has been striking. The Sustainable Development Goals (SDGs) will be unveiled in September 2015 and the inclusion of specific infant and early child development indicators is far from certain. While there has been a relative global neglect of infancy and early child development, there are numerous non-governmental organisations and agencies that have for decades been delivering quality and innovative infant and early childhood services to infants and children, as well as advocating on their behalf. The World Association of Infant Mental Health, its members and affiliates, not least of which the Michigan Association for Infant Mental Health (formed in 1977), have been central role-players in this regard.

Despite this, it was a politician – Hilary Clinton – who coined the phrase ‘first 1000 days’ (the period from conception to the end of the second year). This ‘sound bite’ has proven highly effective as a rallying call for increased donor and policy interest in this foundational phase of development. How is it that a politician provided the impetus for donors and global health agencies such as UNICEF and WHO to begin lobbying for a focus on early development, rather than infant mental health practitioners and advocates? In this short editorial I will suggest that part of the failure of the infant mental health field to be at the forefront is due in part to an overemphasis on the proximal aspects of infant and child

No conflicts of interest

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript
Author Manuscript
Author Manuscript
Author Manuscript

development, and a neglect of the distal influences and public health imperatives of work with infants and caregivers.

The proximal and the distal

'Upstream and downstream factors', and 'proximal and distal influences' are core concepts within public health (Krieger, 2008, 2015). Upstream determinants are defined as features of the environment, such as socio-economic status, levels of discrimination in a society and political inequality (Gehlert et al., 2008). Downstream determinants on the other hand are physical health, parenting and disease. Alternatively, these processes can be conceptualised as proximal and distal factors. Proximal factors are those that act directly to cause disease or to act on the body, while distal factors occur further back and impact by way of other causes along a causal chain (World Health Organization, 2002). In debates about proximal and distal causes, proximal factors are often considered to have the greatest effect because they are closer, while distal factors are often relegated to having less impact because of 'their distance' (Krieger, 2008). The problem with this however, is that this leads to a 'studied agnosticism' about the range of toxic elements to which infants and children may be exposed (Krieger, 2008). It has been argued that the behavioural or proximate risk factors are simply the mechanism through which the more fundamental societal and contextual factors operate (Link & Phelan, 1995). While extreme inequality is undoubtedly a distal (or upstream influence) its impact on health and disease is clear (Piketty & Saez, 2014). One of the tasks is to determine how upstream (or distal) determinants "get under the skin" and affect downstream (proximal) variables such as parenting (Gehlert et al., 2008). An example of this would be understanding how poverty (which appears to be such a global variable) comes to influence specific processes in the lives of infants and children (Halpern, 1993). Of course the infant cannot know poverty, inequity, racism in a proximal way, but the distal impact may be profound.

Why has infant mental health not been at the forefront of advocacy attempts?

I would suggest that there are two main reasons why infant mental has not gained global attention and why infant mental health experts have not been at the forefront of global advocacy for the first 1000 days. Infant mental health practitioners and researchers have had notable successes in providing the clinical and research evidence for the primacy of the social and emotional world of infants. This has been achieved through meticulous research on the abilities and capacities of infants (Meltzoff & Moore, 1979), on the role of maternal mental health on infant and child development (Tomlinson, Cooper, & Murray, 2005), painstaking examination of the interactional capacities of infants (Trevarthen & Aitken, 2001), and the frame by frame micro-analysis of mother infant interaction (Beebe et al., 2010). The clinical insights of people such as Daniel Stern have also provided substantial insights into the interpersonal world of the infant and the motherhood constellation (Stern, 1998, 2000). However, it is this focus on the individual infant or dyad that is both the greatest strength and weakness of the infant mental health field. The focus on the dyad, and on the primacy of the mother-infant relationship has come at the expense of an equally

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

meticulous focus and understanding of the social determinants of well-being (Commission on Social Determinants of Health, 2008). Parenting, for example, is particularly sensitive to perturbations in the psychosocial context. Behavioural or proximate risk factors are simply the mechanism through which the more fundamental societal and contextual factors operate (Link & Phelan, 1995). Poor living conditions (context) and a violent community will affect the choices parents make in order to protect their children. This might for instance result in harsh and intrusive parenting as a protective mechanism in a gang ridden context (Tomlinson, Dawes, & Flisher, 2012). Poverty may also contribute to familial stress and maternal depression which in turn affects parenting. Infant mental health research needs to devote as much attention to the distal factors and how our interventions can impact at the structural level, and not simply at the individual level where the proximal influence of (for example) maternal depression can be measured.

The second reason is not unique to infant mental health but rather speaks to why some global health initiatives are more successful in generating funding and political priority than others (Tomlinson & Lund, 2012). At the most crude level infants and young children are not a constituency that can speak for themselves or mobilise resources. In the context of scarce financial resources and where prioritization of resources is essential, it is often the case that "she who shouts loudest" gets heard. Allocation of resources is often only partially related to disease burden or to what may yield the greatest societal benefits in the future. Democratic governments that have a four or five year cycle before possible re-election may be inclined to focus on health concerns with a more immediate outcome (neonatal survival), rather than delivering infant and child services where the greatest impact is likely to be only seen decades in the future. The early development landscape has also been characterised by a number of internal divisions (one could even say conflicts) over issues such as terminology (early child development or early child education or early childhood care and development); the age period (antenatal to age two or birth to 3 years or birth to 9 years; infancy is to the end of the first year or year 3); and importantly where services should be delivered (home or clinic or community). This makes it difficult for a common construct to be promoted.

Call for action

Clinical and research findings on infant and child development in the last half century has profoundly changed how we conceptualise infants, and how we understand the formative importance of their relationships with their caregivers. The fine grained meticulous examination of the moment by moment interaction between and infant and their caregiver is revolutionary. The origin of social interaction, pro-social behaviour, the repair of misattunement, and the socialising out of early aggressive behaviour in toddlers could be seen as the very foundations of any peaceful nation (Christie et al., 2014; Tremblay, 2006; Weinberg & Tronick, 1996). However, while these are absolutely necessary they are not a sufficient condition for global action and policy change. Infant mental health and early child development is a cross cutting phenomenon that has the potential to bring together health ministries and diverse actors in a synergistic way that is essential in the global health landscape in the next decade. The progress that has been made in the Millennium Development Goals on improving child survival has not been matched by an equivalent focus on ensuring that those that survive also thrive. Similarly, the progress that has been

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

made by the field of infant mental health in understanding brain development and the development of infants and children across time, has not been matched by advocacy for greater funding and political priority.

To make this happen research needs to consider and account for distal influences in the comprehensive way that proximal influences have been studied and described. Linked to this is the release of substantive funding to ensure more research from low and middle income countries that will address current publishing imbalances (Tomlinson, Bornstein, Marlow, & Swartz, 2014). In addition, the ongoing and stellar research and clinical work that is already taking place in high income countries must be expanded to better detail the structural and distal influences on infant and child development. Broadening the scope of the clinical and research inquiry of infant mental health to more explicitly and rigorously examine the upstream/distal aspects of the first 1000 days is essential to ensuring that infants are able to meet their developmental potential (Grantham-McGregor et al., 2007). Placing infant mental health at the core of such an agenda will build the foundations for sustainable, equitable and prosperous societies.

Acknowledgements

Mark Tomlinson is supported by the National Research Foundation, South Africa, and is a lead investigator with the Centre of Excellence in Human Development, University of Witwatersrand, South Africa

References

Beebe B, Jaffe J, Markese S, Buck K, Chen H, Cohen P, Feldstein S. The origins of 12-month attachment: a microanalysis of 4-month mother-infant interaction. Attach Hum Dev. 2010; 12(1-2): 3–141. doi: 10.1080/14616730903338985. [PubMed: 20390524]

Campbell F, Conti G, Heckman JJ, Moon SH, Pinto R, Pungello E, Pan Y. Early childhood investments substantially boost adult health. Science. 2014; 343(6178):1478–1485. doi: 10.1126/science.1248429. [PubMed: 24675955]

Christie, D.; Panter-Brick, C.; Behrman, JR.; Cochrane, JR.; Dawes, A.; Goth, K.; Tomlinson, M. Healthy Human Development as a Path to Peace. In: Salah, R.; Panter-Brick, C.; Leckman, JF., editors. Pathways to Peace The Transformative Power of Children and Families. MIT Press; Cambridge, MA: 2014.

Commission on Social Determinants of Health. Final Report of the Commission on Social Determinants of Health. World Health Organization; Geneva: 2008. Closing the gap in a generation: health equity through action on the social determinants of health.. 2008

Fox SE, Levitt P, Nelson CA. How the timing and quality of early experiences influence the development of brain architecture. Child Dev. 2010; 81(1):28–40. doi: 10.1111/j.1467-8624.2009.01380.x. [PubMed: 20331653]

Gehlert S, Sohmer D, Sacks T, Mininger C, McClintock M, Olopade O. Targeting health disparities: a model linking upstream determinants to downstream interventions. Health Aff (Millwood). 2008; 27(2):339–349. doi: 10.1377/hlthaff.27.2.339. [PubMed: 18332488]

Grantham-McGregor S, Cheung YB, Cueto S, Glewwe P, Richter L, Strupp B, International Child Development Steering, G. Developmental potential in the first 5 years for children in developing countries. Lancet. 2007; 369(9555):60–70. doi: 10.1016/S0140-6736(07)60032-4. [PubMed: 17208643]

Halpern, R. Poverty and infant development.. In: Zeanah, CH., editor. Handbook of Infant Mental Health. Guiford Press; New York: 1993. p. 73-86.

Heckman JJ. Skill formation and the economics of investing in disadvantaged children. Science. 2006; 312(5782):1900–1902. doi: 10.1126/science.1128898. [PubMed: 16809525]

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Krieger N. Proximal, distal, and the politics of causation: what's level got to do with it? Am J Public Health. 2008; 98(2):221–230. doi: 10.2105/AJPH.2007.111278. [PubMed: 18172144]

Krieger N. Public Health, Embodied History, and Social Justice: Looking Forward. Int J Health Serv. 2015 doi: 10.1177/0020731415595549.

Link BG, Phelan J. Social conditions as fundamental causes of disease. J Health Soc Behav. 1995 Spec No, 80-94.

Marmot M, Friel S, Bell R, Houweling TA, Taylor S, Commission on Social Determinants of, H. Closing the gap in a generation: health equity through action on the social determinants of health. Lancet. 2008; 372(9650):1661–1669. doi: 10.1016/S0140-6736(08)61690-6. [PubMed: 18994664]

McEwen BS. Understanding the potency of stressful early life experiences on brain and body function. Metabolism. 2008; 57(Suppl 2):S11–15. doi: 10.1016/j.metabol.2008.07.006. [PubMed: 18803958]

Meltzoff AN, Moore MK. Interpreting "imitative" responses in early infancy. Science. 1979; 205(4402):217–219. [PubMed: 451596]

Piketty T, Saez E. Inequality in the long run. Science. 2014; 344(6186):838–843. doi: 10.1126/science.1251936. [PubMed: 24855258]

Sameroff A. A unified theory of development: a dialectic integration of nature and nurture. Child Dev. 2010; 81(1):6–22. doi: 10.1111/j.1467-8624.2009.01378.x. [PubMed: 20331651]

Shonkoff JP, Garner AS, Committee on Psychosocial Aspects of, C., Family, H., Committee on Early Childhood, A., Dependent, C., . . . Behavioral, P. The lifelong effects of early childhood adversity and toxic stress. Pediatrics. 2012; 129(1):e232–246. doi: 10.1542/peds.2011-2663. [PubMed: 22201156]

Stern, DN. The motherhood constellation: A unified view of parent-infant psychotherapy. Basic Books; New York: 1998.

Stern, DN. The Interpersonal World Of The Infant A View From Psychoanalysis And Developmental Psychology. Basic Books; New York: 2000.

Tomlinson M, Bornstein MH, Marlow M, Swartz L. Imbalances in the knowledge about infant mental health in rich and poor countries: Too little progress in bridging the gap. Infant Mental Health Journal. 2014; 35(6):624–629. [PubMed: 25798511]

Tomlinson M, Cooper P, Murray L. The mother-infant relationship and infant attachment in a South African peri-urban settlement. Child Dev. 2005; 76(5):1044–1054. doi: 10.1111/j.1467-8624.2005.00896.x. [PubMed: 16150001]

Tomlinson, M.; Dawes, A.; Flisher, A. Preventing the development of youth violence in the early years: Implications for South African practice.. In: Dawes, A.; Ward, C., editors. Youth violence: Sources and solutions in South Africa. University of Cape Town Press; Cape Town: 2012. p. 141-174.

Tomlinson M, Lund C. Why does mental health not get the attention it deserves? An application of the Shiffman and Smith framework. PLoS Med. 2012; 9(2):e1001178. doi: 10.1371/journal.pmed.1001178. [PubMed: 22389632]

Tremblay RE. Prevention of youth violence: why not start at the beginning? J Abnorm Child Psychol. 2006; 34(4):481–487. doi: 10.1007/s10802-006-9038-7. [PubMed: 16865544]

Trevarthen C, Aitken KJ. Infant intersubjectivity: research, theory, and clinical applications. J Child Psychol Psychiatry. 2001; 42(1):3–48. [PubMed: 11205623]

Weinberg MK, Tronick EZ. Infant affective reactions to the resumption of maternal interaction after the still-face. Child Dev. 1996; 67(3):905–914. [PubMed: 8706534]

World Health Organization. Reducing Risks, Promoting Healthy Life. World Health Organization; Geneva: 2002.