

Beyond pledges: academic journals in high-income countries can do more to decolonise global health

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The endemic discrimination in global health has attracted unprecedented attention since the killing of George Floyd and other black people in the USA in 2020. Several academic journals mostly in high-income countries (HICs) have responded by pledging editorial reforms to eradicate racism and other forms of discrimination in research publications.^{1–3} It is pertinent to mention that the call for equity, equality, diversity and inclusiveness (EEDI) in global health has been long-standing before the renewed antiracism campaign.^{4–6} In the past, the focus was on the need to ensure equitable research undertakings by institutions from HICs in low-income and middle-income countries (LMICs). This included efforts to build local research capacity and to ensure researchers from LMICs who are involved in multi-institutional research actively contribute to the resultant manuscripts as authors.⁶

Some journals even pledged not to publish studies that used data, infrastructure, or personnel in an LMIC that do not involve at least one scientist from that country as an author.⁷ Additionally, some journals have gone further to address the racial imbalance in the order of authorship between first or last author and discourage the unfair exclusion of contributors to local research in LMICs as authors because their involvement was not considered as substantial.^{5,8}

Lately, a growing number of journals have pledged actions to (further) diversify the composition of editorial boards and the selection of peer-reviewers.^{9,10} Some journals have openly admitted complicity in systemic racism by inadvertently fostering bias in research and scholarship; and pledged to strive harder to correct those injustices and amplify marginalised voices.³ They also promised to monitor research that may perpetuate racism and now invite readers to assess their progress and hold them accountable for broken promises.³

Summary

- In the aftermath of the Black Lives Movement, there has been a growing call to decolonise global health towards equity, equality, diversity and inclusiveness (EEDI), especially for black people and other marginalised populations.
- Global health still manifests its colonial heritage of white supremacy in the conceptualisation of policies and programmes aimed at reducing health inequalities between high-income countries and low-income and middle-income countries.
- The academic community and other actors have pledged reforms towards improved EEDI principles with particular focus on under-representation by black people and other marginalised populations in global health initiatives.
- Academic journals should establish internal and collaborative mechanisms to detect and discourage submissions whose authorship and content violate EEDI principles if the relevant editorial pledges to decolonise global health are to be realised.

Academics from the region are also now encouraged to openly tell their own story.⁹

The principles of EEDI in the context of global health need clarification. Equity is about treating the target beneficiaries fairly and respectfully, while equality is the recognition that all men and women are created equal with unique and complementary endowments. Equity also embodies a commitment to closing health gaps by actions to reduce or eradicate social disadvantage and injustice. Equality confers full opportunity to serve and be served regardless of race, gender, nationality, socio-economic status, and disability. Diversity is about representativeness to ensure that those affected by a policy are enlisted into the decision-making panel. Inclusiveness is ensuring that the decision-making process does not deliberately exclude a group that is likely to be impacted by a planned policy. In essence, diversity is about getting a balanced mix and composition while inclusion is about

getting the mix to work together constructively to achieve a desired objective. Inclusiveness also assures that diversity is comprehensive. These principles are enshrined in the United Nations (UN) Charter and reflected in the Sustainable Development Goals (SDGs) agreed by all Member States.^{11 12} They provide the global moral compass for policy initiatives and should ideally govern the distribution of power and privilege. For instance, the UN Charter reaffirms faith in fundamental human rights, in the dignity and worth of all human beings, in the equal rights of men and women and of nations, both large and small,¹¹ while the SDGs prohibit any form of discrimination and seeks to 'leave no one behind'.¹² Hence, global health research and policies that violate EEDI principles are unlikely to reflect the legitimate aspirations of populations in LMICs.

While global health conceptually seeks to promote health for all without borders, it is still driven largely from the lens of its colonial heritage where experts in HICs exclusively design policies and programmes to help the disadvantaged and vulnerable people in LMICs. It is, therefore, not surprising that underrepresentation or outright exclusion of authors from sub-Saharan Africa contributing to articles focusing on LMICs persists. A good example is the paper on nurturing care framework (NCF) recently published in *BMJ Global Health*.¹³ The NCF is the flagship global programme on early childhood development in LMICs promoted jointly by the WHO, the UNICEF and the World Bank Group.¹⁴

The entire NCF enterprise is predicated on a series of publications by an apparently racially and geographically biased group between 2007 and 2016 (see online supplemental appendix 1), which estimated that in LMICs, 250 million children under 5 years of age were at risk of poor development due solely to stunting or extreme poverty.¹⁵ In 2016, 34 countries were reported to have a prevalence of 60% or higher of children at risk of stunting; 30 of which were low-income countries, and 28 in sub-Saharan Africa. The top ten countries with the largest number of children at risk were India, China, Nigeria, Bangladesh, Indonesia, Pakistan, Ethiopia, Democratic Republic of Congo, Tanzania and the Philippines and together accounted for 64% of all children at risk globally.¹⁵

However, just like most previous publications and reports on NCF, none of the authors of the recent *BMJ Global Health* article included indigenous experts from sub-Saharan Africa (see online supplemental appendix 1). More disturbing is the apparent indifference for the groundswell movement and momentum for racial diversity in global health and the public displeasure towards racial discrimination. Additionally, the publication is incongruent with prior commitment in *BMJ Global Health* towards transforming the global health landscape to genuinely reflect the ethos of EEDI.¹ This practice is likely to continue unabated if academic journals do not establish internal and collaborative mechanisms to

detect and discourage submissions whose authorship and content violate EEDI principles.

How do we ensure that these well-intentioned editorial pledges translate to the desired changes for true diversity and inclusion? More crucially, how do we curb what has been termed as 'safari research' referring to the publication of data from sub-Saharan Africa without a single indigenous author from this region?^{5 8} How do we stem the tide of white supremacy in global health that persistently disregard local and indigenous knowledge, refuse to learn from places and people often considered as 'inferior', and failure to acknowledge that there are many ways of being and doing?^{9 16}

The emerging new order in global health research is to support individuals in LMICs to become leaders in their fields. There is also a widespread acknowledgement that African researchers are best placed to ask questions that are relevant to African issues, and this has resulted in substantial funding being channelled to sub-Saharan Africa to train a new generation of global health leaders through various funding mechanisms like those administered through the African Academy of Sciences. In fact, some donor organisations only fund research projects if the principal investigator is from the country where the research is conducted. It is ironic that the beneficiaries of these investments are rarely recognised for their local knowledge, experience and expertise that could serve to optimise the benefits from global policy interventions. The apparent notion that global health policies, especially in maternal, newborn, child health and nutrition must or can only be led by experts from HICs or white people resident in LMICs needs to be dispelled. The culture in global health that has allowed a few influential scholars in HICs who have established their careers based on what may be regarded as exploitative research published in prestigious journals to continue to dominate the agenda for LMICs must be addressed.⁸ It is against this backdrop that we make the following recommendations.

First, journals should make specific EEDI provisions in the submission guidelines for authors, with a declaration that articles which fail to comply will not be considered for publication. This prerequisite should form part of the checklist for reviewers like the requirements for patient consent and institutional ethical approval. Policy-oriented papers targeting populations in LMICs in particular must reflect relevant intellectual contributions from experts in LMICs, especially indigenous people who are typically the target of these policies. Second, tokenism and superficial diversity must be discouraged. Diversity is not simply about skin colour but respect for the intellectual endowments of the target population. Enlisted contributors from LMICs must have demonstrable knowledge of the subject matter and the selection criteria and process must be transparent. Third, employees within the UN network should lead by example and not be allowed to co-author policy papers that violate EEDI principles in line with UN Charter and relevant mission statements of their respective organisations. Fourth, journals should

avoid being unwittingly blindsided by submissions from highly cited authors or authors from prominent organisations, and freely encourage open feedback on articles that clearly violate EEDI principles. Fifth, to serve as a deterrent, violations of EEDI principles should be formally recognised as an ethical research misconduct.

To be clear, this commentary is not an analysis of the merits and demerits of the NCF which has been addressed previously,^{17 18} nor of the proposed application of NCF beyond early childhood years to adolescence, which will be addressed elsewhere. It is about honouring the pledges and commitments of the global health community to EEDI and treating target beneficiaries, especially in sub-Saharan Africa with dignity and respect. We recognise the unique challenges posed by the lack of effective governance systems in global health due to the plethora of actors, identities and interests. However, academic journals have a unique leverage in ensuring that pledges to decolonise global health are not mere rhetoric but are backed by zero-tolerance for EEDI violations in their various manifestations.

As others have opined, respect and humility are vaccines against supremacy.¹⁶ Promoters of global health research and policies need a good dose of this regimen if tangible, credible and sustainable progress towards the decolonisation of global health is to be realised in 2021 and beyond.

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REFERENCES

- 1 Khan M, Abimbola S, Aloudat T, *et al*. Decolonising global health in 2021: a roadmap to move from rhetoric to reform. *BMJ Glob Health* 2021;6:e005604.
- 2 Das P, Aujla M, GRacE. Racial and ethnic equality-time for concrete action. *Lancet* 2020;396:1055–6.
- 3 Ending systemic racism in medicine. *Nat Med* 2020;26:985.
- 4 Costello A, Zumla A. Moving to research partnerships in developing countries. *BMJ* 2000;321:827–9.
- 5 Sumathipala A, Siribaddana S, Patel V. Under-Representation of developing countries in the research literature: ethical issues arising from a survey of five leading medical journals. *BMC Med Ethics* 2004;5:E5.
- 6 Beran D, Byass P, Gbakima A, *et al*. Research capacity building-obligations for global health partners. *Lancet Glob Health* 2017;5:e567–8.
- 7 Rees CA, Keating EM, Dearden KA, *et al*. Importance of authorship and inappropriate authorship assignment in paediatric research in low- and middle-income countries. *Trop Med Int Health* 2019;24:1229–42.
- 8 Closing the door on parachutes and parasites. *Lancet Glob Health* 2018;6:e593.
- 9 Global health 2021: who tells the story? *Lancet Glob Health* 2021;9:e99.
- 10 Abraham S, Hodgins S, Saad A, *et al*. What Is *Global Health: Science and Practice* Doing to Address Power Imbalances in Publishing? *Glob Health Sci Pract* 2020;8:325–6.
- 11 UN. United nations charter. Available: <https://www.un.org/en/about-us/un-charter/full-text> [Accessed 25 Apr 2021].
- 12 UN. Sustainable development goals. un, New York, NY: United nations, 2015. Available: <http://www.un.org/sustainabledevelopment/sustainable-development-goals> [Accessed 25 Apr 2021].
- 13 Black MM, Behrman JR, Daelmans B, *et al*. The principles of nurturing care promote human capital and mitigate adversities from preconception through adolescence. *BMJ Glob Health* 2021;6:e004436.
- 14 World Health Organisation, UNICEF, The World Bank Group. Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential. Geneva: World Health organization, 2018. Available: <http://apps.who.int/iris/bitstream/handle/10665/272603/9789241514064-eng.pdf?ua=1> [Accessed 25 Apr 2021].
- 15 Lu C, Black MM, Richter LM. Risk of poor development in young children in low-income and middle-income countries: an estimation and analysis at the global, regional, and country level. *Lancet Glob Health* 2016;4:e916–22.
- 16 Abimbola S, Pai M. Will global health survive its decolonisation? *Lancet* 2020;396:1627–8.
- 17 Olusanya BO, de Vries PJ. African Consortium of the global research on developmental disabilities Collaborators. nurturing care for children with developmental disabilities: a moral imperative for sub-Saharan Africa. *Lancet Child Adolesc Health* 2018;2:772–4.
- 18 Olusanya BO. Dismantling structural racism in global health. *JAMA Pediatr (in press)* 2021

Appendix 1.

Nurturing Care Framework (NCF) and Nurturing Care Handbook (NCH): Authors and contributors

Pre-NCF publications (2007-2016)

1. **International Child Development Steering Group—LANCET 2007 SERIES**

<https://www.thelancet.com/series/early-child-development-in-developing-countries-2007>

Child development in developing countries 1

Developmental potential in the first 5 years for children in developing countries

Sally Grantham-McGregor, Yin Bun Cheung, Santiago Cueto, Paul Glewwe, Linda Richter, Barbara Strupp, and the International Child Development Steering Group†

Child development in developing countries 2

Child development: risk factors for adverse outcomes in developing countries

Susan P Walker, Theodore D Wachs, Julie Meeks Gardner, Betsy Lozoff, Gail A Wasserman, Ernesto Pollitt, Julie A Carter, and the International Child Development Steering Group

Child development in developing countries 3

Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world.

Patrice L Engle, Maureen M Black, Jere R Behrman, Meena Cabral de Mello, Paul J Gertler, Lydia Kapiriri, Reynaldo Martorell, Mary Eming Young, and the International Child Development Steering Group†

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2. **International Child Development Steering Group—LANCET 2011 SERIES**

<https://www.thelancet.com/series/child-development-in-developing-countries-2>

Child Development 1. Inequality in early childhood: risk and protective factors for early child development

Susan P Walker, Theodore D Wachs, Sally Grantham-McGregor, Maureen M Black, Charles A Nelson, Sandra L Huffman, Helen Baker-Henningham, Susan M Chang, Jena D Hamadani, Betsy Lozoff, Julie M Meeks Gardner, Christine A Powell, Atif Rahman, Linda Richter

Child Development 2. Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries.

Patrice L Engle, Lia C H Fernald, Harold Alderman, Jere Behrman, Chloe O'Gara, Aisha Yousafzai, Meena Cabral de Mello, Melissa Hidrobo, Nurper Ulkuer, Ilgi Ertem, Selim Iltus, and the Global Child Development Steering Group.

3. **Early Childhood Development Series Steering Committee- LANCET 2016 SERIES**

<https://www.thelancet.com/series/ECD2016>

Advancing Early Childhood Development: from Science to Scale 1

Early childhood development coming of age: science through the life course.

Maureen M Black, Susan P Walker, Lia C H Fernald, Christopher T Andersen, Ann M DiGirolamo, Chunling Lu, Dana C McCoy, Günther Fink, Yusra R Shawar, Jeremy Shiffman, Amanda E

Devercelli, Quentin T Wodon, Emily Vargas-Baron, Sally Grantham-McGregor*, for the Lancet Early Childhood Development Series Steering Committee†

Advancing Early Childhood Development: from Science to Scale 2

Nurturing care: promoting early childhood development.

Pia R Britto, Stephen J Lye, Kerrie Proulx, Aisha K Yousafzai, Stephen G Matthews, Tyler Vaivada, Rafael Perez-Escamilla, Nirmala Rao, Patrick Ip, Lia C H Fernald, Harriet MacMillan, Mark Hanson, Theodore D Wachs, Haogen Yao, Hirokazu Yoshikawa, Adrian Cerezo, James F Leckman, Zulfiqar A Bhutta, and the Early Childhood Development Interventions Review Group, for the Lancet Early Childhood Development Series Steering Committee†

Advancing Early Childhood Development: from Science to Scale 3

Investing in the foundation of sustainable development: pathways to scale up for early childhood development.

Linda M Richter, Bernadette Daelmans, Joan Lombardi, Jody Heymann, Florencia Lopez Boo, Jere R Behrman, Chunling Lu, Jane E Lucas, Rafael Perez-Escamilla, Tarun Dua, Zulfiqar A Bhutta, Karin Stenberg, Paul Gertler, Gary L Darmstadt, with the Paper 3 Working Group and the Lancet Early Childhood Development Series Steering Committee†

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4. **Effective interventions and strategies for improving early child development.** BMJ. 2015 Sep 14;351:h4029. <https://www.bmj.com/content/bmj/351/bmj.h4029.full.pdf>
Daelmans B, Black MM, Lombardi J, Lucas J, Richter L, Silver K, Britto P, Yoshikawa H, Perez-Escamilla R, MacMillan H, Dua T, Bouhouch RR, Bhutta Z, Darmstadt GL, Rao N; steering committee of a new scientific series on early child development. We thank Mark Tomlinson for a careful review of the draft manuscript.
5. **Global research priorities to accelerate early child development in the sustainable development era.** Lancet Glob Health 2016 Dec;4(12): e887-e889. <https://www.thelancet.com/action/showPdf?pii=S2214-109X%2816%2930218-2>
Tarun Dua, Mark Tomlinson, Elizabeth Tablante, Pia Britto, Aisha Yousfzai, Bernadette Daelmans, Gary L Darmstadt.
6. **Early childhood development: the foundation of sustainable Development** Lancet. 2017 Jan 7;389(10064):9-11. <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2816%2931659-2>
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7. **Risk of poor development in young children in low-income and middle-income countries: an estimation and analysis at the global, regional, and country level.** Lancet Glob Health. 2016 Dec;4(12):e916-e922. <https://www.thelancet.com/action/showPdf?pii=S2214-109X%2816%2930266-2>
Lu C, Black MM, Richter LM.

Nurturing Care Framework (NCF) 2018

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Post-NCF Publications (2018 to date)

8. **G20's Initiative for Early Childhood Development.** Lancet 2018 Dec 22 -Jan 4 2019;392(10165):2695-2696. <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2933058-7>
Linda M Richter, Chris Desmond, Jere Behrman, Pia Britto, Bernadette Daelmans, Amanda E Devercelli, Paul Gertler, John Hoddinott, Wafaie Fawzi, Günther Fink, Joan Lombardi, Florencia Lopez Boo, Chunling Lu, Stephen Lye, Milagros Nores, Aisha Yousafzai
9. **Early childhood development: an imperative for action and measurement at scale.** BMJ Glob Health. 2019 Jun 24;4(Suppl 4):e001302. https://gh.bmj.com/content/bmjgh/4/Suppl_4/e001302.full.pdf
Richter L, Black M, Britto P, Daelmans B, Desmond C, Devercelli A, Dua T, Fink G, Heymann J, Lombardi J, Lu C, Naicker S, Vargas-Barón E.
10. **Global research priorities to accelerate programming to improve early childhood development in the sustainable development era: a CHNRI exercise.** J Glob Health. 2019 Dec;9(3):020703. <http://jogh.org/documents/issue201902/jogh-09-020703.pdf>
Tomlinson M, Darmstadt GL, Yousafzai AK, Daelmans B, Britto P, Gordon SL, Tablante E, Dua T.
11. **Scaling early child development: what are the barriers and enablers?** Arch Dis Child. 2019 Apr;104(Suppl 1):S43-S50. https://adc.bmj.com/content/archdischild/104/Suppl_1/S43.full.pdf
Cavallera V, Tomlinson M, Radner J, Coetzee B, Daelmans B, Hughes R, Pérez-Escamilla R, Silver KL, Dua T.
12. **Inequalities in early childhood care and development in low/middle-income countries: 2010-2018.** BMJ Glob Health. 2020 Feb 4;5(2):e002314. <https://gh.bmj.com/content/bmjgh/5/2/e002314.full.pdf>
Lu C, Cuartas J, Fink G, McCoy D, Liu K, Li Z, Daelmans B, Richter L.
13. **Data for action on early childhood development**
Lancet 2020 Dec 5;396(10265):1784-1786. <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2932482-X>
Linda M Richter, Claudia Cappa, Ghassan Issa, Chunling Lu, Nicole Petrowski, Sara N Naicker.
14. **Optimising child and adolescent health and development through an integrated ecological life course approach.** BMJ. 2021 Mar 17;372:m4784. <https://www.bmj.com/content/bmj/372/bmj.m4784.full.pdf>
Tomlinson M, Hunt X, Daelmans B, Rollins N, Ross D, Oberklaid F.
15. **The principles of Nurturing Care promote human capital and mitigate adversities from preconception through adolescence.** BMJ Glob Health. 2021 Apr;6(4):e004436. <https://gh.bmj.com/content/bmjgh/6/4/e004436.full.pdf>
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Appendix 1.

Nurturing Care Framework (NCF) and Nurturing Care Handbook (NCH): Authors and contributors

Pre-NCF publications (2007-2016)

1. **International Child Development Steering Group—LANCET 2007 SERIES**

<https://www.thelancet.com/series/early-child-development-in-developing-countries-2007>

Child development in developing countries 1

Developmental potential in the first 5 years for children in developing countries

Sally Grantham-McGregor, Yin Bun Cheung, Santiago Cueto, Paul Glewwe, Linda Richter, Barbara Strupp, and the International Child Development Steering Group†

Child development in developing countries 2

Child development: risk factors for adverse outcomes in developing countries

Susan P Walker, Theodore D Wachs, Julie Meeks Gardner, Betsy Lozoff, Gail A Wasserman, Ernesto Pollitt, Julie A Carter, and the International Child Development Steering Group

Child development in developing countries 3

Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world.

Patrice L Engle, Maureen M Black, Jere R Behrman, Meena Cabral de Mello, Paul J Gertler, Lydia Kapiriri, Reynaldo Martorell, Mary Eming Young, and the International Child Development Steering Group†

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2. **International Child Development Steering Group—LANCET 2011 SERIES**

<https://www.thelancet.com/series/child-development-in-developing-countries-2>

Child Development 1. Inequality in early childhood: risk and protective factors for early child development

Susan P Walker, Theodore D Wachs, Sally Grantham-McGregor, Maureen M Black, Charles A Nelson, Sandra L Huffman, Helen Baker-Henningham, Susan M Chang, Jena D Hamadani, Betsy Lozoff, Julie M Meeks Gardner, Christine A Powell, Atif Rahman, Linda Richter

Child Development 2. Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries.

Patrice L Engle, Lia C H Fernald, Harold Alderman, Jere Behrman, Chloe O'Gara, Aisha Yousafzai, Meena Cabral de Mello, Melissa Hidrobo, Nurper Ulkuer, Ilgi Ertem, Selim Iltus, and the Global Child Development Steering Group.

3. **Early Childhood Development Series Steering Committee- LANCET 2016 SERIES**

<https://www.thelancet.com/series/ECD2016>

Advancing Early Childhood Development: from Science to Scale 1

Early childhood development coming of age: science through the life course.

Maureen M Black, Susan P Walker, Lia C H Fernald, Christopher T Andersen, Ann M DiGirolamo, Chunling Lu, Dana C McCoy, Günther Fink, Yusra R Shawar, Jeremy Shiffman, Amanda E

Devercelli, Quentin T Wodon, Emily Vargas-Baron, Sally Grantham-McGregor*, for the Lancet Early Childhood Development Series Steering Committee†

Advancing Early Childhood Development: from Science to Scale 2

Nurturing care: promoting early childhood development.

Pia R Britto, Stephen J Lye, Kerrie Proulx, Aisha K Yousafzai, Stephen G Matthews, Tyler Vaivada, Rafael Perez-Escamilla, Nirmala Rao, Patrick Ip, Lia C H Fernald, Harriet MacMillan, Mark Hanson, Theodore D Wachs, Haogen Yao, Hirokazu Yoshikawa, Adrian Cerezo, James F Leckman, Zulfiqar A Bhutta, and the Early Childhood Development Interventions Review Group, for the Lancet Early Childhood Development Series Steering Committee†

Advancing Early Childhood Development: from Science to Scale 3

Investing in the foundation of sustainable development: pathways to scale up for early childhood development.

Linda M Richter, Bernadette Daelmans, Joan Lombardi, Jody Heymann, Florencia Lopez Boo, Jere R Behrman, Chunling Lu, Jane E Lucas, Rafael Perez-Escamilla, Tarun Dua, Zulfiqar A Bhutta, Karin Stenberg, Paul Gertler, Gary L Darmstadt, with the Paper 3 Working Group and the Lancet Early Childhood Development Series Steering Committee†

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4. **Effective interventions and strategies for improving early child development.** BMJ. 2015 Sep 14;351:h4029. <https://www.bmj.com/content/bmj/351/bmj.h4029.full.pdf>
Daelmans B, Black MM, Lombardi J, Lucas J, Richter L, Silver K, Britto P, Yoshikawa H, Perez-Escamilla R, MacMillan H, Dua T, Bouhouch RR, Bhutta Z, Darmstadt GL, Rao N; steering committee of a new scientific series on early child development. We thank Mark Tomlinson for a careful review of the draft manuscript.
5. **Global research priorities to accelerate early child development in the sustainable development era.** Lancet Glob Health 2016 Dec;4(12): e887-e889. <https://www.thelancet.com/action/showPdf?pii=S2214-109X%2816%2930218-2>
Tarun Dua, Mark Tomlinson, Elizabeth Tablante, Pia Britto, Aisha Yousfzai, Bernadette Daelmans, Gary L Darmstadt.
6. **Early childhood development: the foundation of sustainable Development** Lancet. 2017 Jan 7;389(10064):9-11. <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2816%2931659-2>
Bernadette Daelmans, Gary L Darmstadt, Joan Lombardi, Maureen M Black, Pia R Britto, Stephen Lye, Tarun Dua, Zulfiqar A Bhutta, Linda M Richter, on behalf of the Lancet Early Childhood Development Series Steering Committee.
7. **Risk of poor development in young children in low-income and middle-income countries: an estimation and analysis at the global, regional, and country level.** Lancet Glob Health. 2016 Dec;4(12):e916-e922. <https://www.thelancet.com/action/showPdf?pii=S2214-109X%2816%2930266-2>
Lu C, Black MM, Richter LM.

Nurturing Care Framework (NCF) 2018

<http://apps.who.int/iris/bitstream/handle/10665/272603/9789241514064-eng.pdf?ua=1>

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Post-NCF Publications (2018 to date)

8. **G20's Initiative for Early Childhood Development.** Lancet 2018 Dec 22 -Jan 4 2019;392(10165):2695-2696. <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2933058-7>
Linda M Richter, Chris Desmond, Jere Behrman, Pia Britto, Bernadette Daelmans, Amanda E Devercelli, Paul Gertler, John Hoddinott, Wafaie Fawzi, Günther Fink, Joan Lombardi, Florencia Lopez Boo, Chunling Lu, Stephen Lye, Milagros Nores, Aisha Yousafzai
9. **Early childhood development: an imperative for action and measurement at scale.** BMJ Glob Health. 2019 Jun 24;4(Suppl 4):e001302. https://gh.bmj.com/content/bmjgh/4/Suppl_4/e001302.full.pdf
Richter L, Black M, Britto P, Daelmans B, Desmond C, Devercelli A, Dua T, Fink G, Heymann J, Lombardi J, Lu C, Naicker S, Vargas-Barón E.
10. **Global research priorities to accelerate programming to improve early childhood development in the sustainable development era: a CHNRI exercise.** J Glob Health. 2019 Dec;9(3):020703. <http://jogh.org/documents/issue201902/jogh-09-020703.pdf>
Tomlinson M, Darmstadt GL, Yousafzai AK, Daelmans B, Britto P, Gordon SL, Tablante E, Dua T.
11. **Scaling early child development: what are the barriers and enablers?** Arch Dis Child. 2019 Apr;104(Suppl 1):S43-S50. https://adc.bmj.com/content/archdischild/104/Suppl_1/S43.full.pdf
Cavallera V, Tomlinson M, Radner J, Coetzee B, Daelmans B, Hughes R, Pérez-Escamilla R, Silver KL, Dua T.
12. **Inequalities in early childhood care and development in low/middle-income countries: 2010-2018.** BMJ Glob Health. 2020 Feb 4;5(2):e002314. <https://gh.bmj.com/content/bmjgh/5/2/e002314.full.pdf>
Lu C, Cuartas J, Fink G, McCoy D, Liu K, Li Z, Daelmans B, Richter L.
13. **Data for action on early childhood development**
Lancet 2020 Dec 5;396(10265):1784-1786. <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2932482-X>
Linda M Richter, Claudia Cappa, Ghassan Issa, Chunling Lu, Nicole Petrowski, Sara N Naicker.
14. **Optimising child and adolescent health and development through an integrated ecological life course approach.** BMJ. 2021 Mar 17;372:m4784. <https://www.bmj.com/content/bmj/372/bmj.m4784.full.pdf>
Tomlinson M, Hunt X, Daelmans B, Rollins N, Ross D, Oberklaid F.
15. **The principles of Nurturing Care promote human capital and mitigate adversities from preconception through adolescence.** BMJ Glob Health. 2021 Apr;6(4):e004436. <https://gh.bmj.com/content/bmjgh/6/4/e004436.full.pdf>
Black MM, Behrman JR, Daelmans B, Prado EL, Richter L, Tomlinson M, Trude ACB, Wertlieb D, Wuermler AJ, Yoshikawa H.

Draft Nurturing Care Handbook (NCH) 2021

https://nurturing-care.org/wp-content/uploads/2021/01/Nurturing_Care_Handbook_01.pdf

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