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1 **Equitable partnerships in global health research**

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25 **To the editor,**

26 Equitable partnerships are essential for global health research. However, the field is
27 dominated by researchers from the Global North and this imbalance results from
28 entrenched power asymmetries (often linked to source of funds) that can undermine the
29 contributions and knowledge of local experts. Some funders promote equity in the way
30 resources are distributed across the partner organisations - the spend to be weighted
31 towards the Global South, and the appointment of Principal Investigators from the Global
32 South. These efforts are not enough, however, and academics from low and middle-income
33 countries are still underrepresented in the global health literature¹. Therefore, it is
34 important for researchers to take the initiative to ensure that equitable, mutually
35 supportive partnerships are developed from the generation of the initial research concept
36 through to the project delivery and final dissemination of the research outcomes.

37 Based on a growing literature on the principles of developing equitable partnerships^{2,3,4} we
38 present a framework comprised of four pillars: co-creation, communication, commitment,
39 and continuous review (Figure 1), which also includes the principles of the Global Code of
40 Conduct² – fairness, respect, care and honesty. We have formally adopted these principles
41 in our own collaboration between the UK and Pakistan over the last fifteen years on
42 micronutrient deficiencies^{5,6} and we would encourage colleagues to establish a similar
43 framework to foster such a mindset when embarking upon collaborations wherever there is
44 the potential for inequity, whether this be in international, or within sub-national contexts.

45

46 **Co-creation**

47 Equity is not just about creating a level playing field for partners to work together, but also
48 means understanding and compensating for inherent inequalities to enable all partners to

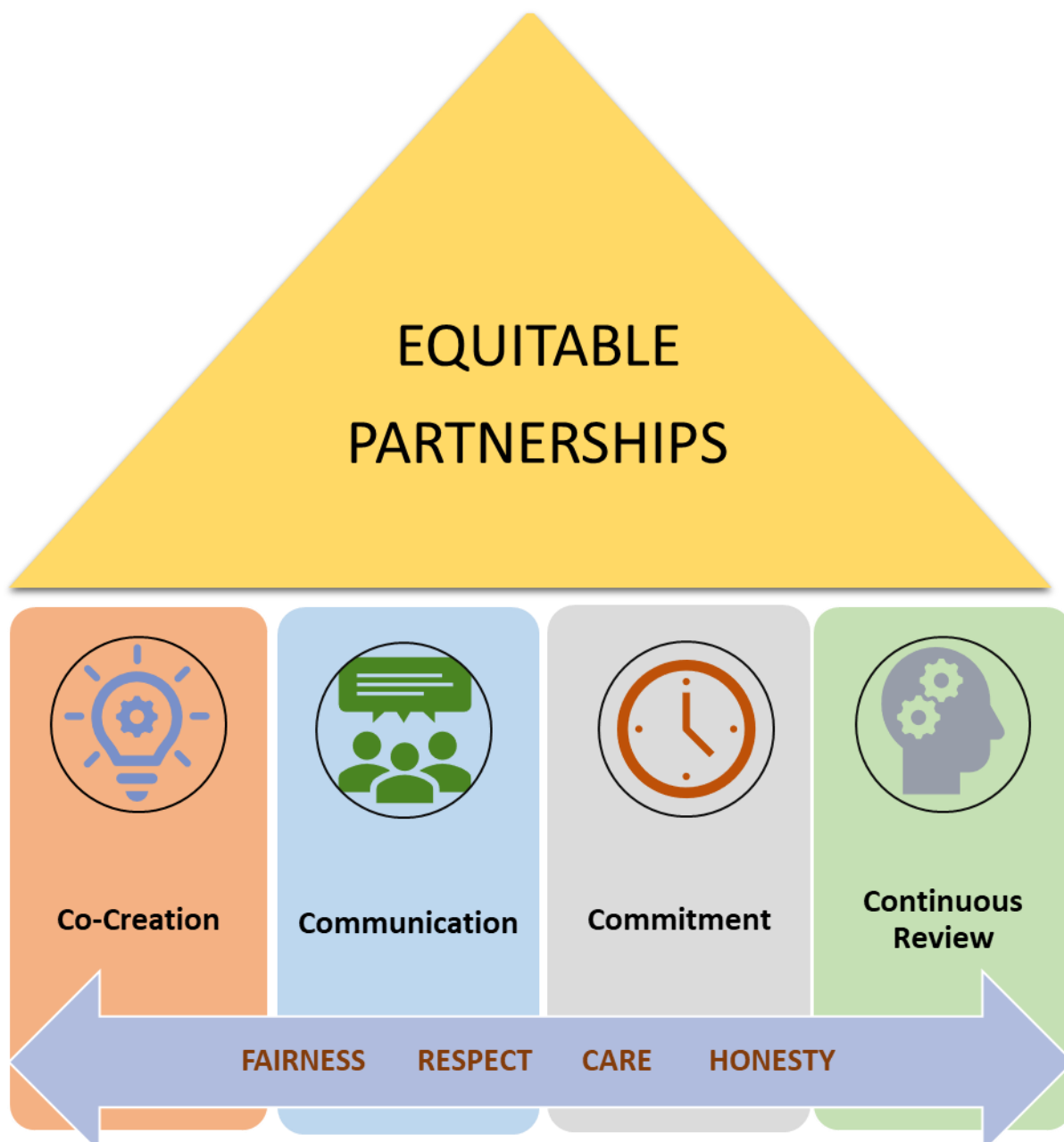
49 fully participate and benefit from interactions. This applies to the co-creation of the
50 research questions to ensure local challenges are addressed. Involving beneficiaries of
51 research as both participants and partners in the research project encourages equitability
52 and engagement. Fairness is key to the distribution of financial resources, and the
53 contribution to and credit for research outputs. Many funding organisations look for
54 evidence of co-creation of the research question by all partners. It is critical that all funders
55 look for evidence of co-creation, and where possible, to facilitate opportunities for potential
56 partners to refine the research questions together, as part of the funding process.

57

58 *Co-creation of research question:* Research questions should be developed in response to
59 the local needs as expressed by the community. In one of our first collaborative projects
60 exploring the barriers that mothers face in providing nutritious meals for their infants and
61 children, interviews and focus group discussions with health visitors and mothers attending
62 antenatal services at a rural emergency satellite hospital inspired the idea of setting up a
63 demonstration kitchen at the hospital - a space where mothers could come to receive basic
64 education around safe food preparation, weaning practices and the benefits of diversifying
65 the diet; share and prepare food together, socialise together, while facilitating research ⁷.

66 We seek to ensure that infrastructure resources are used in a way that both serves the
67 community and serves the research. The combination of quantitative and qualitative
68 approaches places equity at the heart of the relationship between researcher and research
69 participant, ensuring that all voices contribute to identification and solution of the research
70 question.

71 Figure 1.



72

73 *Co-creation of study implementation:* As partners and stakeholders in the research project,
74 community members can also be instrumental in the development and operationalisation of
75 the data collection protocol. Some examples of this we have found in the area of
76 community nutrition interventions include identification of eligible households for
77 participation in the study, recruitment of local women to join the field team to assist with
78 data collection, logistics around appropriate gender segregation and access to the schools to

79 interview the participating adolescent girls. This concept of community involvement is well
80 established in medical research⁸.

81

82 *Co-creation of research outputs:* For fairness in representation in the literature, norms and
83 expectations around academic authorship need to be clarified early in the partnership.

84 There are a number of different rubrics that are used for deciding on the inclusion criteria
85 for authors and the order in which the authors are listed; we recommend the guidance on
86 authorship provided by the International Committee of Medical Journal Editors⁹ with all the
87 options for the order as stated by Tscharncke et al¹⁰ to devise a transparent and adjustable
88 plan, including an agreement to explicitly state which approach has been adopted within
89 the acknowledgements section of each publication.

90 Dissemination research findings to communities and stakeholders is a keystone of equitable
91 partnerships. Laying the ground in advance with a communications plan feeds into the
92 virtuous cycle of trust between project partners.

93

94 **Communication**

95 Equitable partnerships are built upon mutual understanding and respect for cultural norms,
96 including religious, cultural and societal boundaries. One way to develop a greater cultural
97 awareness in the study location is to create a map of local power structures and
98 communication pathways within and out-with the local communities. Our work, for
99 example, near Peshawar was formerly part of the is a tribal society with traditional and
100 conservative values. Decisions are made on behalf of the community by Jirga, groups of
101 male elders from each village who are trusted and respected by the community and whose
102 decisions filter down to household level. Likewise, problems or concerns at the household

103 level are escalated, discussed and resolved by the Jirga. Involving the Jirga at regular
104 intervals during the development of our work ensured our methods were feasible and
105 culturally acceptable¹¹.

106

107 **Commitment**

108 There is often very little time between the announcement of research funding calls and
109 their deadlines, and there is a temptation is to seek partners rapidly. Some funding
110 organisations provide partner finding websites to facilitate the rapid identification of
111 relevant and willing research partners in a given field. We favour an incremental approach,
112 where developing equitable partnerships requires patience, building trust and long-term
113 commitment. Beginning with the co-creation of the research needs between partners, small
114 amounts of local funding may enable some formative work to be undertaken such that
115 when larger funding opportunities arise an established track record can be evidenced.
116 Partnerships then develop in line with the complexity of the research projects undertaken,
117 and new partners can join the consortium to broaden the expertise base and enable
118 interdisciplinary and transdisciplinary research. Introducing new partners required careful
119 management to ensure that the central ethos of a community-led approach is maintained as
120 the projects became more complex and the budgets greater.
121 Long term commitment to the partnership involves building and investing in research
122 capacity for the future – including training. The training received by community field
123 workers, postgraduate and postdoctoral research assistants and the opportunity to learn
124 from national and international experts has enabled all staff to broaden their skill base and
125 improve future opportunities.

126

127 **Continuous review**

128 A continuous process of review and consultation is necessary to develop and refine the
129 equitable partnerships research model. Successful long-term partnerships are not static,
130 they evolve and flex in response to changes in the funding landscape and research priorities.
131 Furthermore, shocks such as the COVID-19 pandemic present additional challenges:
132 emphasised social inequalities between project partner countries, ethical considerations of
133 how and when to re-start laboratory and field work from different partner perspectives,
134 consensus on the way forward for the wellbeing of researchers and communities must all be
135 navigated. Honesty in reflection and evaluation of successes and failure is part of this
136 process. Many projects have monitoring and evaluation formally built in to the study
137 protocol a priori - but many do not. Irrespective of this, it is good practise to consult
138 regularly with all partners regarding the research process, not just at the end of the project,
139 but also while the research is underway so that adjustments can be made, and hazards
140 averted. Like any relationship, an equitable partnership requires continuous attention to
141 flourish and grow.

142

143 Malnutrition, in whatever form, affects every nation of the globe, and our food systems are
144 interdependent. In this, the decade of action on nutrition, greater cooperation between
145 researchers and institutions the Global North and Global South on food systems is
146 paramount. It is crucial that an incremental approach to building research consortia, with
147 pillars of co-creation, communication, commitment and continuous review, sets equity and
148 an ethos of fairness in stone for research, and for researchers.

149 There is an important role for funders too, in stipulating that equitable partnerships
150 are embedded in programmes they fund. They too must review their own processes and
151 procedures to ensure that their own organisations model this way of working.

152

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160

161 **Author Contributions**

162 We have followed the “First-Last” author emphasis approach for the order of the authors
163 listed ¹⁰. This approach highlights the importance of the first and last authors. MZ and NML
164 have led the development of research partnerships since 2003. MZ and GA play a central
165 role in stakeholder engagement and community liaison. HJM and HO are members of the
166 BIZIFED research consortium. All authors have contributed to the drafting of this document.

167

168 **Competing Interests Statement**

169 The authors declare that they have no competing interests

170

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207

208 **Figure Legend**

209 Figure 1. Framework for the development of Equitable Partnerships

210