

Published online ahead of print: November 1, 2019

<https://doi.org/10.1123/jpah.2019-0450>

<https://journals.humankinetics.com/view/journals/jpah/16/11/article-p940.xml?tab=fullHtml>

Early career professionals (researchers, practitioners and policy-makers)' role in advocating, disseminating and implementing The Global Action Plan on Physical Activity: ISPAH Early Career Network view

Artur Direito*¹, Joseph J Murphy², Matthew Mclaughlin³, Jacqueline Mair⁴, Kelly Mackenzie⁵, Masamitsu Kamada⁶, Rachel Sutherland³, Shannon Montgomery⁷, Trevor Shilton⁸

¹ Yong Loo Lin School of Medicine, National University of Singapore, Singapore

² Department of Physical Education and Sport Sciences, University of Limerick, Ireland

³ Matthew Mclaughlin, Hunter New England Population Health, The University of Newcastle, Australia

⁴ Jacqueline Mair, School of Applied Sciences, Edinburgh Napier University, Edinburgh, UK

⁵ Kelly Mackenzie, School of Health and Related Research, University of Sheffield, UK

⁶ Masamitsu Kamada, School of Public Health, The University of Tokyo, Japan

⁷ Shannon Montgomery, School of Medicine, Dentistry and Biomedical Sciences, Queen's University Belfast, UK

⁸ Trevor Shilton, Cardiovascular Health, National Heart Foundation of Australia, Australia

*corresponding author:

Email: artur.direito@nus.edu.sg

Address: National University of Singapore, Yong Loo Lin School of Medicine, NUHS Tower Block Level 10, 1E Kent Ridge Road, Department of Medicine, Division of Endocrinology, Singapore 119228

TEL: +65 6772 4371

1 Abstract

2 Increasing population levels of physical activity (PA) can assist in achieving the United Nations
3 Sustainable Development Goals, benefiting multiple sectors and contributing to global prosperity.
4 Practices and policies to increase PA levels exist at sub-national, national and international levels. In
5 2018, the World Health Organization launched the first Global Action Plan on Physical Activity
6 (GAPPA). The GAPPA provides guidance, through a framework of effective and feasible policy
7 actions, for increasing PA, and requires engagement and advocacy from a wide spectrum of
8 stakeholders for successful implementation of the proposed actions. Early career professionals
9 (ECPs), including researchers, practitioners and policy-makers, can play a major role with helping
10 “*all people being regularly active*” by contributing to four overarching areas: a) generation - of
11 evidence; b) dissemination - of key messages and evidence; c) implementation - of the evidence-based
12 actions proposed in the GAPPA; and d) contributing to advocacy for robust national action plans on
13 PA. The contribution of ECPs can be achieved through five pathways: (1) research; (2)
14 workplace/practice; (3) business; (4) policy; and (5) professional and public opinion.
15 Recommendations of how ECPs can contribute to the generation, dissemination and implementation
16 of the evidence and actions proposed by the GAPPA are provided.

17

18 Keywords

19 policy, public health, public health practice, advocacy

20

21

22 Introduction

23 Insufficient physical activity (PA) is a key risk factor for non-communicable diseases
24 (NCDs), morbidity and mortality globally ¹, leading to large healthcare costs and productivity losses ².
25 Despite the wealth of research on effective interventions (e.g. mass media campaigns, urban design,
26 social support (for PA) in workplaces and communities) ³, and existing PA policies and plans ⁴, global
27 PA levels are not improving ⁵. Furthermore, the prevalence of insufficient PA is estimated to be twice
28 as high in high-income countries compared to low-income (36.8% vs. 16.2%), which is important

29 given the fast transitions of the latter onto middle/high income economies, and its associated
30 urbanisation and sedentary occupations, leading to possible declines in PA ^{6,7}.

31 Although an abundance of information regarding the benefits, recommendations and
32 promotion of PA are available, global efforts to increase PA have been unsatisfactory ⁵. There is a
33 clear need to make better use of the available evidence and mobilise advocacy to successfully
34 translate knowledge into practice and policy ⁸, avoiding research waste and ultimately improving
35 health ⁹. Practices and policies to increase population levels of PA exist but need to be prioritised and
36 scaled up in order to achieve the World Health Organization's (WHO) and United Nations' (UN)
37 target to reduce physical inactivity levels by 15% by 2030 ¹⁰ and assist in achieving the 2030
38 Sustainable Development Goals (SDGs, Figure 1) ¹¹.

39 Years of concerted advocacy and key documents - The Toronto Charter for Physical Activity
40 ¹², Investments that work for Physical Activity ¹³, the Lancet Physical Activity Series of 2012 and
41 2016, and the Bangkok Declaration on Physical Activity for Global Health and Sustainable
42 Development ¹⁴ – led to widespread recognition of the inactivity problem. In response to requests
43 from countries for updated guidance, the WHO launched the Global Action Plan on Physical Activity
44 (GAPPA) 2018-2030 ¹⁵. The GAPPA provides a framework of 20 effective and feasible policy
45 actions, within four strategic objectives, to increase PA levels. Importantly, the recommended actions
46 can contribute towards 13 of the SDGs (Figure 1). The GAPPA requires engagement from multiple
47 stakeholders (e.g. health agencies, local and national governments, non-governmental agencies, city
48 officials and planners, professional bodies, the media, academia, and civil society) ¹⁶ for successful
49 implementation.

50

51 Figure 1 – Links between action on physical activity and 13 United Nations sustainable development
52 goals (SDGs). Adapted from World Health Organization (WHO).¹⁵



53

54 Early career professionals (ECPs), including researchers, practitioners and policy-makers, can
 55 play a vital role in advocacy for the GAPPA and with aspects of the implementation of the 20
 56 recommended actions. There are four overarching areas where ECPs can play a major role to help
 57 with “*all people being regularly active*”¹⁵. These include a) generation – of evidence, (i.e. by
 58 supplying possible solutions for decision makers to consider); b) dissemination – of information,
 59 materials, and GAPPA resources¹⁵; c) implementation - by using strategies to adopt the evidence-
 60 based actions proposed in the GAPPA and change current practices; and d) contributing to advocacy
 61 for robust and funded national action plans on PA.

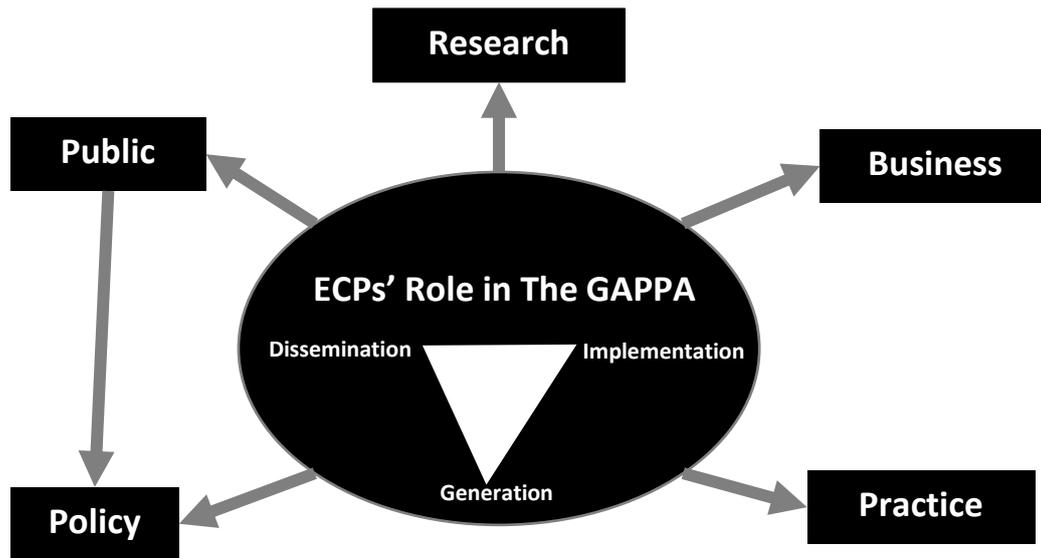
62 The actions within GAPPA each target different stakeholders and audiences, and make use of
 63 a variety of strategies and communication materials. As ECPs in this area, a starting point is to
 64 become familiar with the GAPPA and understanding the actions and pathways that are available. To

65 aid this understanding, this commentary offers suggestions and provides recommendations and
66 examples of how ECPs can generate, disseminate, and implement the evidence and actions proposed
67 by the GAPPA. Recommendations and examples are organised under five areas of focus: 1) Research,
68 2) Practice/Workforce, 3) Business, 4) Policy, and 5) Public, Professional, and Media Opinion (Figure
69 2). These areas of focus originate from the recent work of Sallis, who put forward a *Model of the*
70 *Pathways to Research Translation*¹⁷ and are informed by Shilton's model for noncommunicable
71 disease (NCD) advocacy^{18,19}. These models propose a variety of ways to mobilise political, media,
72 professional, community and organisational dimensions of advocacy to achieve the ultimate goal of
73 translating research to practice and policy while providing options for different actors becoming
74 involved in research translation activities¹⁷. From Sallis' model our commentary provides
75 recommendations and examples of how ECPs can generate, disseminate, and implement the evidence
76 and actions proposed by the GAPPA. Shilton¹⁹ outlines six imperatives for effective advocacy and
77 presents these in a model to inform advocacy practice. These are, 1) Evidence – translating and
78 presenting evidence as urgent, 2) Policy relevance – presenting PA as relevant to health and across
79 sectors, 3) Solutions – mobilise global consensus around the key best investments, 4)
80 Partnerships/Coalitions – mobilise agencies with common objectives, 5) Advocacy strategy – across
81 political, media, professional, community and organizational dimensions and 6) Messaging - provide
82 persuasive messages that capture the issue.

83 We suggest that ECPs choose their own generation, dissemination, advocacy and
84 implementation efforts based on the suitability of these recommendations to their role, interests, skills,
85 career aspirations and focus, and the timely political circumstances and opportunities in their
86 jurisdiction.

87

88 Figure 2 – Early career professionals' (ECPs) role in the Global Action Plan on Physical Activity
89 (GAPPA). Adapted from the model of the pathways for research translation.¹⁷



100 Focus Area 1 - Research

101 Research findings can be used to inform decision making for key stakeholders. While not all research
 102 should be translated to practice and/or policy, relevant evidence-based solutions to help “*all people*
 103 *being regularly active*” for decision makers to consider are compiled in the GAPPA. Research thus
 104 plays a key role in generating, updating and supplying feasible evidence-based solutions to aid the
 105 reduction in physical inactivity levels. The recommendations presented in this sub-section would
 106 resonate primarily with early career researchers. However, the list contains references to “decision-
 107 makers” and “stakeholders”, deeming some of the recommendations relevant to early career
 108 practitioners and policy-makers. Ways for ECPs to contribute to the research focus include:

- 109
- 110
- 111
- 112
- 113
- 114
- 115
- Publishing research in the basic, clinical and applied sciences of PA and health.
 - Conducting trans-disciplinary research with transport, education, urban planners and other professionals (i.e. linking to the UN SDGs and making findings more relevant to decision markers).
 - Evaluating interventions comprehensively (i.e. including formative, process and summative evaluation), along with examining the barriers and facilitators to implementation, thereby identifying effective interventions and a clear understanding of scalability ²⁰.

- 116 • Disseminating research through national and international conferences, generating awareness
117 and building research networks. Consider alternative avenues to traditional academic journals
118 to communicate with stakeholders, decision makers and practitioners, such as presentations,
119 blogs or public engagement events.
- 120 • Consider consumer research to demonstrate public support for PA advocacy objectives.

121

122 Focus Area 2 - Practice/ Workforce

123 There is a clear need to work with and inform practice across multiple sectors. PA promotion can
124 inform *and* be informed by a variety of other sectors, such as transportation, education, urban
125 planning, tourism, architecture, climate, and academia. Moreover, there is a need to cover a range of
126 levels of the workforce, from government to grassroots delivery. Early Career Professionals can
127 contribute to the practice focus in multiple ways, such as:

- 128 • Joining and contributing to the work of professional societies from the behavioural
129 medicine and/or PA and health related fields (i.e. encouraging a cross-pollination of
130 knowledge).
- 131 • Mobilizing consensus across sectors and a common voice around priority GAPPA
132 actions.
- 133 • Being open to informing and being informed by practice “beyond health professionals”,
134 such as transportation, education, urban planning, tourism, architecture, politics and
135 climate professionals.
- 136 • Promoting and advocating PA for specific groups with low levels of PA, with the aim of
137 reducing inequalities.
- 138 • Helping to organise training for professional bodies, practitioners, and programme
139 delivery personnel involved with the promotion of PA.
- 140 • Collaborating with key stakeholders for the development of audience specific
141 communication and dissemination products that summarise relevant PA evidence and
142 actions in a suitable manner (i.e. briefs).

- 143 • Supporting the translation of the GAPPA and/or other advocacy resources and products
144 into the language(s) appropriate for different countries or regions.

145

146 Focus Area 3 - Business

147 In some instances, it can be useful for ECPs to have a business focus in order to generate, disseminate
148 and implement important evidence and actions. Consider the actions provided and how they may help
149 with the advocacy of the GAPPA in the area of research, practice or policy. Ways for ECPs to
150 contribute to PA promotion within the business focus include:

- 151 • Assisting in changing business practices, promoting PA and increasing health awareness.
152 For example, advocate for business policies that promote safe and affordable
153 opportunities to be physically active, regardless of sex, age, socio-economic status or
154 beliefs (SDG 10 “reduced inequalities”). Involving industry partners in PA promotion,
155 especially where the opportunities (e.g. programmes, training/education, capital
156 investment) are provided in business settings and the outcomes are relevant to the
157 companies involved.
- 158 • Developing and using entrepreneurial skills to contribute to organisations where PA
159 evidence drives effective PA promotion methods to populations.
- 160 • Seeking and applying for leadership training and roles in PA-related companies.
- 161 • Being alert to small business innovation research or knowledge transfer grants and
162 opportunities for training, research and evaluation within companies.

163

164 Focus Area 4 - Policy

165 ECPs can play a role in the translation of evidence, knowledge, actions and goals of the GAPPA at the
166 policy level in their localities, regions or countries. Early Career Professionals can aid and engage
167 with the policy level through the following examples:

- 168 • Supporting the production of policy briefs that summarise evidence for policy actions and
169 provide information for decision makers. Multiple levels and agents need to be

- 170 considered, including governments (e.g. local councils, regional, national), professional
171 organisations, and corporations.
- 172 • Acknowledging policies published by a range of government sectors (e.g. education,
173 health, urban planning, and transport) and supporting other sectors to develop policies
174 that support PA. For instance, developing urban and transport planning policies to provide
175 equitable access to open spaces and places, recreational facilities, and safe infrastructure
176 to walking and cycling. This can contribute towards sustainable transport systems for all,
177 achieving universal access to green and public spaces, and reducing the environmental
178 impact of cities; which in turn contributes towards SDG 11 “sustainable cities and
179 communities”
 - 180 • Ensuring to specify the policy relevance of your work, highlighting the important and
181 politically relevant co-benefits of actions to increase PA. Examples of this are the
182 inclusion of cost effectiveness evaluations of relevant work to inform policy or the
183 advocacy of the GAPPA actions, which can directly contribute to the UN 2030 SDGs).
 - 184 • Seeking opportunities to present findings, products and tools of your work to the relevant
185 stakeholders at the policy level. This could be through government led academic
186 engagement seminars or attendance and contribution at public health conferences.
 - 187 • Working collectively and engaging policy makers when selecting and designing research
188 questions (i.e. co-creation) to ensure the relevance and feasibility for real world
189 application.

190

191 Focus Area 5 - Public, Professional and Media Opinion

192 It is important to disseminate findings of relevant work and advocate for the promotion of PA among
193 the general public, through our professional allies and through key influencers in the media.

194 Mobilising engagement with the public can help promote PA engagement through another pathway,
195 while previous focus operates at more distal levels (e.g. policy, business). There are a number of ways
196 for achieving this, such as:

- 197
- Communicating findings or general information directly to the public through press releases, media events, social media platforms with the goal of indirectly affecting future policy decisions. Public opinion may have a powerful impact on policy decisions.
- 198
- 199
- 200
- Mobilizing professional consensus for advocacy actions through conferences, webinars, electronic direct mail, journals, websites and other ‘owned media’, Twitter, LinkedIn and other relevant platforms.
- 201
- 202
- 203
- Undertaking training to enhance the communication and media skills for disseminating your work via widely viewed media/press outlets.
- 204
- 205
- Building relationships with media/PR/communication experts (e.g. health journalists and writers, commentators and marketing departments within organisations) to help communicate your findings in ways that the media and public find compelling.
- 206
- 207
- 208
- Communicating findings, outputs and tools in “layman’s terms” through alternative methods (e.g. social media, news outlets, blogs) with the goal of building support for specific policies.
- 209
- 210
- 211
- Seeking partnership with advocacy organisations and individuals that have expertise in communicating research-based or health promotion messages across diverse channels (e.g. NCD Alliance, IUHPE, Sustrans).
- 212
- 213
- 214
- Mobilizing the public to advocate for programs, supportive environments and environmental changes in their communities through petitions, Facebook, mass participation events and meetings with their local political representatives.
- 215
- 216
- 217

218 What are the next steps?

219 It is advised that ECPs use available professional development opportunities to help understand the
220 GAPPA and how best to advocate it through multiple areas of focus. This might include identifying
221 an advocacy mentor through relevant societies, such as the International Society for Physical Activity
222 and Health (ISPAH). The suggestions provided in this commentary can be utilised by ECPs,

223 depending on their role, experience and area of focus, to support effective advocacy, dissemination,
224 and implementation of the GAPPA actions. There is a role for everyone in advocacy processes.
225 To support this professional community development, the Early Career Network of ISPAH will
226 undertake an assessment of ECPs needs to better understand the GAPPA and what support and
227 models may be necessary to facilitate its advocacy. This will be followed by a workshop that will
228 address the queries derived from the needs assessment. As a network with the capacity to provide
229 professional community development, we aim for these future activities to increase understanding, in
230 turn leading to effective advocacy, dissemination and implementation of the GAPPA actions in robust
231 and funded national PA action plans across the world. Our collective advocacy can deliver substantial
232 return on investment in achieving the goal of “*more active people for a healthier world*”.

233

234 Conclusions

235 Action is needed from multiple stakeholders operating at multiple levels; with ECPs having a critical
236 role in supporting the implementation of the GAPPA at the national and local level. The actions
237 highlighted in this commentary can support ECPs in advocating for PA and translating the GAPPA
238 into practice. Through our collective action, let’s ensure ECPs play their role in contributing to the
239 achievement of the WHO target for reducing physical inactivity by 15% by 2030.

240

241 Acknowledgments

242 Our thanks to Dr Fiona Bull and Dr Karen Milton for their input on earlier drafts of this commentary.

243 Funding source

244 The open access publication fee of this commentary was supported by the International Society for
245 Physical Activity and Health.

246 References

- 247 1. Lee IM, Shiroma EJ, Lobelo F, et al. Effect of physical inactivity on major non-communicable
248 diseases worldwide: an analysis of burden of disease and life expectancy. *Lancet*.
249 2012;380(9838):219-229.

- 250 2. Ding D, Lawson KD, Kolbe-Alexander TL, et al. The economic burden of physical inactivity: a
251 global analysis of major non-communicable diseases. *Lancet*. 2016;388(10051):1311-1324.
- 252 3. Heath GW, Parra DC, Sarmiento OL, et al. Evidence-based intervention in physical activity:
253 lessons from around the world. *Lancet*. 2012;380(9838):272-281.
- 254 4. Klepac Pogrmilovic B, O'Sullivan G, Milton K, et al. A global systematic scoping review of
255 studies analysing indicators, development, and content of national-level physical activity and
256 sedentary behaviour policies. *Int J Behav Nutr Phys Act*. 2018;15(1):123.
- 257 5. Sallis JF, Bull F, Guthold R, et al. Progress in physical activity over the Olympic quadrennium.
258 *Lancet*. 2016;388(10051):1325-1336.
- 259 6. Guthold R, Stevens GA, Riley LM, Bull FC. Worldwide trends in insufficient physical activity
260 from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million
261 participants. *Lancet Glob Health*. 2018;6(10):E1077-E1086.
- 262 7. Ng SW, Popkin BM. Time use and physical activity: a shift away from movement across the
263 globe. *Obes Rev*. 2012;13(8):659-680.
- 264 8. Brownson RC, Royer C, Ewing R, McBride TD. Researchers and policymakers: travelers in
265 parallel universes. *American Journal of Preventive Medicine*. 2006;30(2):164-172.
- 266 9. Chalmers I, Bracken MB, Djulbegovic B, et al. How to increase value and reduce waste when
267 research priorities are set. *The Lancet*. 2014;383(9912):156-165.
- 268 10. Foster C, Shilton T, Westerman L, Varney J, Bull F. World Health Organisation to develop
269 global action plan to promote physical activity: time for action. *Br J Sports Med*.
270 2018;52(8):484-485.
- 271 11. United Nations. Transforming our World: The 2030 Agenda for Sustainable Development.
272 2015; A/RES/70/71. Available at:
273 [https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%](https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf)
274 [20Sustainable%20Development%20web.pdf](https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf).

- 275 12. Global Advocacy Council for Physical Activity, International Society for Physical Activity and
276 Health. The Toronto Charter for Physical Activity: A Global Call to Action. 2010;
277 <http://www.webcitation.org/6mWsgnY8k>. Accessed 01/12/2016, 2016.
- 278 13. Global Advocacy for Physical Activity (GAPA) the Advocacy Council of the International
279 Society for Physical Activity and Health (ISPAH). NCD Prevention: Investments that Work for
280 Physical Activity. 2012; <http://www.webcitation.org/6mWsmXldP>. Accessed 01/12/2016,
281 2016.
- 282 14. International Society for Physical Activity and Health. The Bangkok Declaration on Physical
283 Activity for Global Health and Sustainable Development. 2016;
284 <http://www.webcitation.org/6mWsbWh5W>. Accessed 02/12/2016, 2016.
- 285 15. World Health Organisation (WHO). Global Action Plan for Physical Activity: More Active
286 People for a Healthier World. 2018.
- 287 16. Murray A, Foster C, Stamatakis E. Let's share, help deliver and sustain the WHO global action
288 plan on physical activity. *Br J Sports Med*. 2019;bjsports-2018-100099.
- 289 17. Sallis JF. Pathways for translating behavioral medicine research to practice and policy. *Transl*
290 *Behav Med*. 2018:iby103-iby103.
- 291 18. Shilton T. Creating and making the case: global advocacy for physical activity. *J Phys Act*
292 *Health*. 2008;5(6):765-776.
- 293 19. Shilton T. Advocacy for non-communicable disease prevention - Building capacity in Japan.
294 *Japanese Journal of Health Education and Promotion*. 2016;24(2):102-117.
- 295 20. Indig D, Lee K, Grunseit A, Milat A, Bauman A. Pathways for scaling up public health
296 interventions. *BMC Public Health*. 2017;18(1):68.