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# Promoting physical activity to disabled people: messengers, messages, guidelines and communication formats

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## ABSTRACT

**Aim:** The purpose of this paper is to share insights from an ongoing project that seeks to promote physical activity to disabled people.

**Method:** Narrative commentary.

**Results:** An overlooked yet important group of messengers for promoting physical activity is first highlighted. These are social workers. Second, the process of developing guidelines for these messengers is described and the guide signposted. Third, an infographic to communicate physical activity is highlighted and insights offered on some of the messages co-produced in it. These messages include a focus on pleasure, amounts of physical activity, strength, sedentariness, visual images, language, and different impairments.

**Conclusion:** The paper contributes to knowledge by offering new insights into how to promote physical activity to disabled people.

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## KEYWORDS

Disability; physical activity; health promotion; messengers; messages; infographics

## ► IMPLICATIONS FOR REHABILITATION

- A new group of messengers – social workers – for promoting physical activity to people with disabilities is highlighted.
- A guide for social workers to promote physical activity is described and offered.
- Insights for health promotion is offered on the co-production of physical activity messages.

## Introduction

The case for the need to promote physical activity to disabled people is well established. It traditionally begins with a script that has at least two parts to it. One part states the **health benefits** of physical activity for disabled people and the **economic costs** of **inactivity** for society. Another part highlights that despite the benefits and costs disabled people are largely inactive. At times a third part is added that notes disabled people face multiple barriers, some of which are unique to this population, and these barriers need tackling. With the case made, it is then common for researchers to suggest strategies to promote physical activity among disabled people or, to use language that some people, cultures, and countries prefer people with disabilities.

Physical activity promotion strategies suggested in the literature includes addressing who communicates and how to communicate the results of physical activity research into disability communities [1–7]. A key rationale for addressing these “who” and “how” strategies is found in a primary barrier to physical activity. That is, a lack of availability of disability-specific physical activity information. A complementary rationale is also evident in the evidence-based principles of effective knowledge translation, or what has also been referred to as pathways to impact [2,3]. These principles or pathways for systematically translating health-related research findings into action and impact include the identification of credible messengers (i.e., who communicates) to deliver the knowledge. Effective messengers are people who are

deemed trustworthy by individuals to deliver information about how to get physically active.

Another important principle of knowledge translation and creating effective pathways to impact is the use of strategic messages. Addressing partly the strategy of how to communicate the results of physical activity research into communities, strategic messages are called for that are tailored to capture the interest and attention of the specific audience. Effective messages for promoting physical activity should also be relevant and believable to that audience. For example, research involving people with spinal cord injury on messages that either emphasized the benefits of engaging in physical activity (gain frame) or the losses associated with not engaging in that behavior (loss frame) suggested that the latter framed message elicited greater cognitive processing of health information [2]. Work has also highlighted various formats to deliver physical activity messages. These include brochures, video, stories, and written guides [2,3].

Against this backdrop, in this paper, we share insights from an ongoing project in the UK that seeks to promote physical activity to disabled people. The purposes are to: (1) highlight an overlooked yet important group of messengers for promoting physical activity; (2) briefly describe how a communication format for these messengers was developed; and (3) present some learning about messages co-produced for promoting physical activity to disabled people. Before turning to these purposes, in an effort to avoid inappropriate judgments about what follows it must be noted that in this paper we don't detail the methods of the

research in-depth or offer traditional data. It is not our purpose here to do this. What we hope to do is offer insights from ongoing research in a modest effort to expand understandings regarding the promotion of physical activity to disabled people.

### Untapped messengers of physical activity: the case for social workers

For over three years we have been involved in an ongoing program of research entitled “Get Yourself Active.” The aim is to work with disabled people, disabled people’s organizations, and the health and sport sector to promote physical activity for disabled people. Given the importance of who communicates physical activity knowledge, during the initial stages of this work we wanted to know who are the key messengers that disabled people would prefer to deliver physical activity information.

Disabled people highlighted four key groups of messengers. As also found in the literature [6], three key messenger groups they identified were health professionals (e.g., physiotherapists and general practitioners), community-based organizations, and peers with disabilities [7,8]. Significantly, however, disabled people also identified another credible and desirable messenger, that is, social workers [7,8]. Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. Social workers aim to improve people’s lives by helping with social and interpersonal difficulties, addressing life challenges, promoting human rights, and enhancing wellbeing.

The identification of social workers was significant as they had not been highlighted as a key messenger group before by disabled people in the physical activity literature. Not only was this the first study in which social workers had been identified by disabled people as key physical activity messengers, but disabled people also often viewed social workers as “better” messengers than health professionals and community-based organizations. One rationale given by disabled people as to why social workers were considered good messengers was that they were viewed as credible, empathetic, and knowledgeable about the needs of disabled people, and concerned about human rights and wellbeing. Connecting with the ethos of United Kingdom (UK) public health, another reason why disabled people believed that social workers were good messengers was that they could have great reach. In the UK, like in some other countries, social workers engage with large amounts of the disabled public frequently. They are a necessary and regular point of contact for disabled people over their lifecourse. For example, social workers not only regularly assess the needs of disabled people and provide face-to-face support to help enhance their wellbeing, health, independence, and human rights. They moreover often deliver community based care services to people with disabilities that can provide multiple opportunities to communicate physical activity information to them.

Finally, after social workers were identified as key messengers, we discussed with 43 social workers how they perceived the role of this care work profession in promoting physical activity to disabled people. Whilst they had concerns about the time they had to do “another job,” the social workers agreed they would be good physical activity messengers. They also said they had a strong desire to be messengers, believed physical activity to be important for health and wellbeing reasons, and would like create a work culture in which physical activity promotion was common. Moreover, they said that given their limited knowledge and skills on physical activity promotion, they wanted advice on how to support and encourage disabled people to be more active, more often.

### Communicating physical activity information: social worker guidelines

With the rationale for social workers as key messengers of physical activity established, we worked with social workers and disabled people adults to create guidelines for the former group to support and encourage the latter group to be more active, more often. The guidelines were guided by the Appraisal of Guidelines, Research and Evaluation (AGREE II instrument [9]. The AGREE II instrument provides a framework to systematically develop and report on guidelines. It is comprised of 23 items grouped in 6 quality-related domains: scope and purpose, stakeholder involvement, rigor of development, clarity of presentation, applicability, and editorial independence. The steps we took to developing the guidelines were as follows.

1. *Determine the scope the guidelines:* For example, the scope of the work was determined by an expert group made up of social workers, disabled adults, organizations who have a mission to promote physical activity, and researchers with a long history of collaborative work on physical activity and disability.
2. *Conduct a literature search of relevant literature:* Only one paper, which was a commentary in the social work literature that advocated promoting sport and physical activity as part of the role of the social work sector, was found [10].
3. *Conduct interviews with social workers:* To develop an evidence-base for the guidelines, and ensure stakeholder involvement, interviews were conducted with 30 social workers. To help assist us to translate research into action, the interview guide was informed by the Reach Effectiveness Adoption Implementation Maintenance (RE-AIM) model [11]. Examples of questions included in the guide were: “What do you think about guidelines for social workers to promote physical activity to disabled people?”, “To promote physical activity, what information should be in the guidelines?”, and “How can we ensure that these guidelines are effectively used?”.
4. *Hold consensus panel meetings and meetings with experts and stakeholders to formulate the guidelines:* After constructing the initial draft of the guidelines, to maximize stakeholders’ involvement and bolster confidence in the rigor and scrutiny of the guideline development process, three separate panel meetings were held to review the evidence, discuss the draft guidelines and offer feedback on how to improve it, and produce an agreed final guideline.

The panels comprised social workers, researchers with expertise in disability and physical activity guideline development, user-led organizations, and people with disabilities.

The result of this process, that is the guidelines, can be found here <http://www.getyourselfactive.org/wp-content/uploads/2016/05/17169-Social-Worker-Guidelines-AW-Low-Res.pdf> Much work is still however needed. For example, in a very recent evaluation to test how practically useful the guidelines might be for social workers many responded that it had made a positive difference to their practice. This included increased awareness about the importance of physical activity and a cultural shift towards an increased focus on physical activity among social work teams. Yet, the success of guidelines was constrained by various factors. For instance, social workers said that for the guidelines to have the widest reach and be most effective they required training. They also said that training should in the future be embedded in social work education and be part of their continued professional development. We are currently working on developing these initiatives.

## How to communicate physical activity information: infographics and messages

As part of the “Get Yourself Active” project funded by Sport England, we asked ourselves what physical activity guidelines might be available to help promote physical activity to people with disabilities. In 2011 the UK Chief Medical Officers’ physical activity guidelines were produced for four age groups, from under 5s to older adults. However, with sparse evidence on physical activity for those with disability available, the guidelines omitted guidance for this group. In 2018 Public Health England tasked us to review the evidence and, if sufficient, co-produce evidence-based recommendations about physical activity and disability in an appropriate format and with suitable messages. The review established sufficient evidence to make recommendations about the health benefits of physical activity for disabled adults along with the frequency, intensity, and duration of physical activity necessary for substantial health benefits [12]. It also highlighted the importance of muscle strengthening [12]. The review informed the new UK Chief Medical Officers’ physical activity guidelines, which was published in 2019 [13].

With sufficient evidence established by Public Health England, and the recommendations embedded in the new UK Chief Medical Officers’ guidelines, we engaged in the process of co-producing an appropriate format and messages to communicate the research. Co-production refers to the process in which academics work alongside other stakeholders whose lives are affected by research. It means that not only research evidence is used to inform research and make decisions but also the lived experiences of stakeholders are foregrounded in the research and decision making. To co-produce an appropriate format and messages to communicate the research we worked with over 350 disabled people, 10 disability organizations, and 50 health professionals (HPs).

During the co-production process the disabled people, organizations, and HPs identified the following formats to communicate physical activity knowledge: an evidence-based media campaign that used video, web/digital-based resources for mobile health like an app, and an infographic tailored to target the disabled public. Due to financial costs a media campaign and an app was not possible, at this stage. We are currently seeking funding to co-produce these. It must though be noted that whilst web/digital-based resources were considered useful for communicating physical activity knowledge, the disabled adults, organizations, and HPs believed that digital practices like e or m-health are not a panacea for low levels of physical activity. They were quick to stress that mobile phones, an internet service, and computers, for example, are an economic commodity that many disabled people cannot afford, especially in times of austerity. They further noted that web-based resources can be inaccessible and unappealing to some groups. People were also concerned about how such resources could result in the medicalization of health and disability, individualizing of disability, and stigmatization of certain bodies. In light of such points, there was consensus during the co-production process that rather than having one format to communicate physical activity, multiple formats that had the same messages would be most beneficial for promoting physical activity to disabled people.

Given the relatively low cost of infographics, and the belief that this format could communicate complex information in an understandable, persuasive, and engaging manner to large numbers of people, it was agreed by the disabled adults, organizations, and HPs that an infographic should be the initial resource to co-produce [8]. The agreed infographic to be finally produced can be



Figure 1. Disability and physical activity infographic.

seen in Figure 1. It is the first evidence-based and co-produced infographic to communicate physical activity recommendations for a range of experiences of disability. It has also been approved by Public Health England and endorsed by the Chief Medical Officers’, with it now embedded in the new UK physical activity guidelines [13]. At the request of people in different countries, the infographic is currently being translated into various languages, with Finnish and Spanish translations already completed.

In order to create messages for the infographic that were deemed credible and relevant for disabled people we not only drew on the physical activity evidence-base but also co-produced the messages through a series of iterations. In an effort to share learning, here we highlight seven key points that frequently were brought up and discussed through the co-production messaging process.

First, the disabled people, organizations and HPs involved during co-production workshops raised and discussed the importance of pleasure when choosing, starting, doing, and sustaining physical activity. They unanimously recommended that a message promoting the potential enjoyment and positive feelings of being active should be at the core of the infographic. In line with research, the rationale given for this was that pleasure or fun is fundamental to getting physically active and staying active. This might sound an obvious message to embed in a public health resource or physical activity promotion campaigns to get people active. However, the pleasure or fun message is mostly absent in these [14,15]. In other words, rarely are messages about affect incorporated in how physical activity knowledge is communicated in public health resources. This trend was thus overturned in this

research by co-producing core messages that reflect the feelings of pleasure and fun that can go with physical activity – when for an individual done at the right intensity, duration, and so on. The messages finally agreed on were “Physical activity makes you feel good” and “Give things a go and enjoy what you do.”

Second, following discussions about sedentary behavior the disabled people, organizations and HPs during workshops unanimously recommended that a message about sedentariness should be included in the infographic. However, not any message would do. They emphasized that all messages about sedentary behavior should avoid ableism [8]. Although often unintentional, ableism denotes the prejudice in favor of able-bodied people and the discrimination against disabled people. Examples of messages infused with ableism include, “Stand up, sit less,” “Sit less, move more,” “Chairs are killers,” “Time to take a stand against inactivity” and “Get Britain standing.” Such messages are ableist, even if unintentionally so, as they favor certain bodies (e.g., those that can stand or easily avoid sitting) whilst discriminating against others (e.g., wheelchair users or those in chronic pain who find sitting or lying beneficial for their wellbeing). Given the need to avoid ableism in physical activity communication formats, whilst also needing a suitable sedentary message in such formats, the disabled people, organizations and HPs agreed on the following message to counter sedentariness: “Don’t be still for too long.” The discussions and recommendations also fed into the development of UK Chief Medical Officers’ physical activity guidelines [13].

Third, the evidence review highlighted that some physical activity is better than nothing, but it was recommended that for substantial health gains disabled adults should ideally aim to accumulate 150 min each week of moderate-intensity activity. When discussing this latter recommendation with the disabled adults, organizations, and HPs it was agreed that it was necessary to have it as a message. It was considered vital not only for communicating the substantial health gains that can go with doing more physical activity, that is, the more time spent being physically active, the greater the health benefits. It was moreover deemed a motivating target or threshold for those that might wish to accumulate activity over a week or build up gradually from current levels.

This said, some people also said that having the 150 min per week of activity and moderate-intensity message could put inactive disabled people off from starting physical activity. One solution suggested was to create a dose-response relationship messaging strategy in which lower frequencies (e.g., 60 min per week) would be included. However, that was rejected for being too complicated. It was felt that at the present it would create confusion among the disabled public about how much activity should be done for substantial health benefits. As such, another strategy was proposed and, after much discussion, accepted. This was to not only include the message “For substantial health gains aim for at least 150 min each week of moderate-intensity activity.” Based on recommendations, the infographic also needed to include another message at its core, which was “Even a little movement is better than nothing.” This message that there is no minimum amount of physical activity required to achieve some health benefits is also embedded in the new UK Chief Medical Officers’ physical activity guidelines [13].

Fourth, the evidence review highlighted the importance of doing strength activities at least two days per week. But, as many people during the co-production said, muscle strengthening is too often overlooked in their lives. The disabled people, organizations and HPs also believed it was under-appreciated or ignored altogether in health promotion. Thus, they were clear that in

order to help reverse the “forgotten guideline of strength,” strengthening activities also need to be encouraged.

Fifth, the disabled people, organizations and HPs recommended that messages should often be accompanied by a visual image. One challenge here was how to effectively communicate the intensity of physical activity. A visual icon of a battery, a thermometer, and the talk test were suggested to do this. The consensus was for the latter.

Participants unanimously also expressed the view that any image in the infographic should not be one of a disabled adult (e.g., a person in a wheelchair or a visually impaired person holding a white stick). The reasons given for this were that too many visual images would clutter the infographic. It was deemed impossible in one infographic to be visually inclusive by including all types of impairment visually. The disabled people and organizations were further fearful that some images of disabled people could unintentionally engender negative responses in audiences. They suggested that some images could, for example, paint a tragic image of disability and reinforce negative stereotypes about living with impairment.

Sixth, there was strong consensus that the term “disabled adults” should be used in the infographic and future UK communication strategies. We do recognize that not everyone wants to call themselves a “disabled person,” especially in other countries. For example, people may prefer to only use “person-first” language (e.g., person with a disability), whilst others utilize “disability first” on some occasions and “person-first” language on other occasions (e.g., depending on who they are communicating with, and when). Moreover, some people prefer language that foregrounds neither the “person” or “disability” first but other aspects of their self (e.g., female or athlete first language; see [16]).

That difference in language use recognized, the term “disabled adult or person” was agreed upon for the following reasons. Culturally, the term reflects the dominance in the UK of the social model and disability politics, which emphasize “disability first” language. In terms of identity and the well-rehearsed point that language is constitutive/makes realities, “disability first” language was deemed an important resource that acts for disabled people by positioning them as proud about disability and affirmative about their lives. That language was also considered an act of resistance against medical model understandings of disability and those in society that view disability as inherently negative, horrible, and something to be overcome.

The emphasis on language is also important to note when it comes to publishing in journals. For example, if the editor or a reviewer demands the use of “people with disabilities” in a paper (which this happens from our experience and listening to others in the UK), then they could be imposing a certain cultural view on the research. If they demand the use of “people with disabilities” (or for that matter “disabled people”) they could be failing ethically to meet how participants in a study wish to be represented in a paper. In so doing, they end up (unintentionally) committing a form of symbolic violence. Symbolic violence describes a type of nonphysical violence manifested in the power differential between social groups [17]. In this case, symbolic violence is manifested when disabled adults in a study request that they want to be called “disabled adults” in any publication or communication format but the editor or reviewer demands that the author changes this to “people with disabilities” if the paper is to be published.

Seventh, there was consensus that any format for communicating physical activity knowledge in a public health capacity should not focus on one impairment group (e.g., just people with a hearing impairment). Rather, a format like the infographic should

promote inclusivity, connectivity, and strength in difference by including all impairment groups. It was also suggested that the reach of an infographic would be much larger when addressing disabled adults rather than one impairment group, thereby making the work more impactful.

## Conclusions

Sharing insights from an ongoing project, it has been argued that social workers are an overlooked yet important group of messengers for promoting physical activity to disabled people. This group of careworkers should, therefore, be seriously considered in future health promotion research. How a tailored physical activity guide for social workers to use was briefly described. The first evidence-based and co-produced infographic to communicate physical activity recommendations for a range of experiences of disability was presented. We also discussed various messages and strategies behind these for promoting physical activity to disabled people.

We do not, of course, have all the answers for the successful promotion of physical activity. Much work is still needed. As part of this, whilst social workers should be seriously considered in future health promotion research for disabled people, they may not be a valued group of messengers or best equipped to promote physical activity in every country. We would thus encourage more research on identifying who are the culturally appropriate preferred and ideal professions in different countries or settings, rather than assuming that work from one country can be simply transported into another country. It is also important to engage with identified messengers in order to, for example, appreciate how they themselves view physical activity, their role in promoting it, and what needs they have to maximize the promotion of physical activity, if they deem this as part of their role. Such issues are especially important as research is now identifying that certain groups (e.g., health care professionals) in some countries may be deemed key messengers by the public yet such groups may not have the desire, knowledge, skills and/or confidence to offer physical activity advice [4,18].

We hope that in this paper some useful insights are offered for researchers, disability organizations, and people in the community to consider when developing strategies, public health policies, and laboratory or community-based interventions to promote physical activity to disabled people. We look forward to continued work on the topic and an openness to explore different possibilities.

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