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Getting Australia more active: challenges and opportunities for health promotion

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Abstract

A growing body of evidence demonstrates that regular physical activity promotes health and assists in the prevention of non-communicable diseases but this is presently curtailed by low and unhealthy participation rates in Australia and comparable industrialised countries. Compounding the problem is knowledge that physical inactivity is independently associated with poor health outcomes. Despite physical activity being described as public health's 'best bet' or 'best buy', motivating individuals and groups to adopt and maintain physical activity continues to be a major challenge for health professionals. Global advocacy for prevention efforts must be operationalised through national to local strategies to promote and support physical activity in multiple settings including the home, schools and workplace. The Australian health promotion community has and continues to play a leadership role in physical activity promotion. However, there is an urgent need to continue to promote the importance of physical activity, along with its pivotal role in the prevention of non-communicable diseases, alongside related agendas including healthy diets, tobacco control and environmental sustainability. This commentary overviews the contemporary status of physical activity promotion in Australia and identifies key challenges and opportunities moving forward.

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Introduction and background to physical activity promotion in Australia

Physical activity is an essential ingredient of a healthy lifestyle for individuals of all ages yet a significant proportion of the Australian population are not sufficiently active.[1] Physical activity promotes healthy growth and development in the young, assists in the prevention of unhealthy weight gain in adults, and is important for healthy ageing, including the maintenance of skeletal health, quality of life and independence.[2] The numerous potential benefits from increasing levels of physical activity also extend beyond improvements to the health and wellbeing of individuals to reduced healthcare costs and improvements in a raft of social, environmental, economic and community indicators.[3]

Physical inactivity is a major contributor to the burden of non-communicable diseases (NCD), including cardiovascular disease and diabetes, and also a significant factor in overweight and obesity and some cancers.[4] Recent estimates suggest that physical inactivity accounts for more than 3 million deaths globally[5] and is the fourth leading risk factor for the prevention of NCD.[6] Blair has suggested that physical inactivity is the biggest (global) public health problem of the 21st century.[7] Sadly, physical inactivity in Australia is highly prevalent and reversing this trend is a long-term challenge.[1]

The importance of physical activity to health is not a new notion with many historical medical references to the pivotal role of physical activity and exercise. Similarly, in the context of public health, Morris suggested that physical activity is public health's 'best buy' or 'best bet.'[8] However, the challenge of promoting physical activity in a modern society such as Australia is complicated by an increasingly overweight and obese population with a predisposition for inactive and sedentary behaviours living in a highly obesogenic environment. If physical activity is indeed public health's best bet, the recently published seven 'best investments' to realise the goal of physical activity for all encapsulate the multiple concurrent strategies required for an effective and comprehensive population health approach.[2] This work extends from the World Health Organization Global Recommendations on Physical Activity[9] guidelines based on the dose–response relationship between inactivity and risk of disease. In short, 'doing something is better than nothing', greater benefits are possible with higher levels of physical activity and greatest benefits are seen in those who transition from being inactive to active.[10]

Many Australians have played leadership roles in advocacy for physical activity promotion globally, including significant contributions to the International Society for Physical Activity and Health and initiatives referenced above. Without resorting to a

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comprehensive exposé of local and international contributions, it is important to reference some key developments from the recent past. For example, the Strategic Inter-Governmental forum on Physical Activity and Health of the National Public Health Partnership was responsible for the Be Active Australia framework for health sector action for physical activity.[3] Similarly, the National Heart Foundation's blueprint for an active Australia[11] espouses key government and community actions to increase population levels of physical activity. The National Partnership Agreement on Preventive Health was agreed to by the Council of Australian Governments in 2008 and contains 11 settings-based initiatives to support long-term behaviour change including increasing physical activity. The Australian National Preventive Health Agency's recent publication on preventive health[12] documents the current state of play in relation to key risk factors for chronic disease, including obesity and physical inactivity, tobacco use and the harmful use of alcohol.

Much is being done in the physical activity promotion space in Australia from policy through to interventions. Yet, data presented in the most recent *Australia's Health 2012* report indicates overall participation in physical activity is in decline, with a noted decline among 25–34 year olds (75% in 2005–06 to 69% in 2009–10). In addition, a significant proportion of Australia's population is overweight or obese – over 60% of adults – with a total of nearly 3 million adults and children being obese.[13] Interestingly, there is more information being disseminated through the media about health including the benefits of physical activity and consequences of being overweight than ever before. Indeed, a growing number of Australians report an understanding of the health benefits of being physically active and similarly, recognise that their health status improves by being more physically active. Despite these trends, it is evident that physical inactivity represents an intractable problem. The following sections discuss five features of physical activity promotion in Australia that are seen as offering the means to orient action to facilitate the needed increases in physical activity levels to contribute to improved population health outcomes.

Progressing physical activity promotion in Australia

Clarity of message – noise in the marketplace

There is broad agreement that physical activity has direct and indirect short to long-term health benefits for the individual.[14,15] Based on this agreement, over the past few decades there has been an extensive discourse around the relative and absolute importance of characteristics of physical activity, such as type, amount, frequency and intensity for the association with health benefits.[16,17] This discourse has much merit in better understanding the relationship and has been widely addressed in the academic literature and articulated through numerous government and industry-related outputs such as physical activity discussion papers, recommendations, advice and guidelines.[9]

As with other lifestyle behaviours, such as nutrition, alcohol consumption and smoking, there has been a commensurate growth in the level of noise around physical activity requirements and related benefits. As Bull and Bauman[6] suggest, it can be broadly stated that 'doing something is better than nothing.' Yet, as with other lifestyle behaviours, diversity of well-intentioned messages and advice coupled with agenda-driven misinformation in the marketplace leads to uncertainty and ultimately inertia by stakeholders, including government and the public.[18] Hence, clarity of messages around physical activity promotion, including requirements and benefits, is significant.

Windows of opportunity for action

Patterns of physical activity vary across the life span and between genders. Australian population statistics show a decline in physical activity with increasing age in both males and females, although a larger proportion of males are physically active at virtually all ages.[19] In general, boys are physically active for longer than girls during growth and development, especially in adolescence.[20] This difference tends to be modest across the literature and may depend on how age is measured, particularly in longitudinal studies. For example, physical activity patterns between 5 and 15 years of age were more stable and predictable for girls than boys in a recent study that operationalised age according to biological maturation rather than chronological age.[21] Nonetheless, childhood and adolescent physical activity is positively associated with physical activity during young adulthood[22] and the breadth and extent of sporting experience during adolescence has been associated with increased physical activity in middle age.[23] Taken together, the literature suggests that maintaining a physically active lifestyle from childhood into adolescence is associated with increased levels of physical activity in adulthood.[24]

An interpretation of the evidence is that childhood and adolescence are windows of opportunity within which a long-term physical activity or sedentary habit is cultivated. This interpretation needs to be balanced against evidence of complexity that emerges from the research that characterises a multidimensional and interactive network of bio-psychosocial factors contributing to the formation of a physical activity habit. Nevertheless, it is apparent that participation in more and multiple forms of physical activity during developmental windows of opportunity increases the likelihood of continued physical activity in adulthood. Greater equity and accessibility to opportunities for physical activity, particularly before and during late childhood, and clearer prescriptions for physical activity need to be incorporated into targeted interventions. This targeted approach needs to be guided by an understanding of multiple aetiologies, such as socioeconomic status, education and gender, to creatively exploit opportunities for positive movement experiences that increase the probability of physical activity habit formation at developmentally opportune time points.

Targeting of interventions

Current public health advice regarding physical activity largely uses a 'shotgun' approach to marketing and interventions. Although developmentally appropriate evidence-based advice is widely available, this advice tends to be generic and lacks specificity or relevance for focal groups within and between developmental stages. Such generic advice is also inconsistent with the recognised bio-psychosocial aetiology of physical activity and sedentary behaviour.[25] Interventions that are able to incorporate evidence-based practice in focussed, directed and palatable programs are more likely to succeed where generic advice and interventions fail. Appropriately tailoring interventions to match the socioeconomic status, developmental and geographic context, in addition to being sensitive to political, cultural, gender and activity preferences, is required if the health benefits of increased physical activity are to be realised in an increasingly crowded market place of ideas.

Lessons learned from research and programs using frameworks such as social marketing can be drawn on to inform targeted interventions that reach specific population or market segments. Rather than providing homogeneous physical activity advice designed for broad consumer uptake, interventions with greater inclusiveness that tap into the specific needs and wants of heterogeneous consumer groups will have a greater chance of success.[4] In addition, appealing to some consumer groups using traditional forms of physical activity could marginalise individuals for whom such activities are culturally inappropriate, cost-prohibitive, unfamiliar or intimidating.[26] Approaches exploiting non-traditional or unconventional forms of movement such as break-dancing,[27,28] culturally acceptable aerobic dancing,[29] tai chi or active commuting[30] have sustainably increased moderate to vigorous-intensity physical activity levels across various age groups in international contexts. A challenge that remains is translating successful targeted intervention programs into more widespread practice.

Evidencing practice and practising the evidence

There is an accepted body of evidence linking physical activity and inactivity with short- to long-term health risks and outcomes.[6] Acceptance of this link, together with the rising societal levels of overweight and obesity, have supported a very substantial growth in activities around physical activity promotion. Consistent with the broader field of health promotion, as physical activity promotion has matured so there has been an associated growing emphasis on building an evidence base around practice.[31–33] As the funds and resources available for health promotion generally have decreased, so the importance of evidence around the effectiveness of population-based physical activity interventions becomes paramount to influencing decisions around the prioritisation of physical activity promotion and ultimately allocation of funding.

The focus on evaluation of practice represents one part of a continuous improvement loop between evidence and practice. As a starting point, it is acknowledged that creating the conditions that lead to the adoption of a 'physical activity norm' within a specific social context is dependent on numerous and dynamic interactions. Theoretically driven and evidence-based approaches to the implementation of physical activity interventions are needed to support enduring changes in behaviour across social and age groups. The process also needs the time and flexibility to evolve as adoption rates increase and social contexts change. Fig. 1 provides a schematic representation of evidence to practice and practice to evidence in physical activity promotion that emphasises the need for iterative and recurrent approaches. Numerous evidence-based practice models have been presented elsewhere; however, this model includes an additional dimension that specifies the tailoring of messages and interventions according to consumer values, preferences, enablers and barriers. In short, the tailoring of messages and the evaluation of interventions needs to be mindful of both social context and technology.

We are not suggesting that the baby should be thrown out with the bath water; health promotion strategies with wide ambits clearly have a role to play. On the contrary, adaptation of current intervention models to suit the needs of different ethnic, cultural, and social groups will save time and money but require a creative and consultative approach to ensure buy-in from consumer groups. Constant evaluation and re-evaluation is an essential component of physical activity promotion practice and central to the application of both evidence-based practice and practice-based evidence. That is, a continuous improvement process through which evidence informs the development of interventions. They are also opportunities to collect data that informs the evolution of the intervention and, more broadly, builds the evidence base around physical activity promotion.

Individual responsibility within a supportive environment

The public debate around the determinants and solutions to the obesity epidemic, most notably orienting on physical activity and dietary choices, places the responsibility for action squarely on the shoulders of the individual. At the core of this understanding is the scientific basis and logic of the energy consumption–energy expenditure equation. Considered in isolation, this equation positions the individual as being responsible for energy (food) consumed and energy (physical activity) expended thereby encouraging a victim-blaming approach to overweight and obesity. This focus on the individual is consistent with the broader societal emphasis on individual utility, risk and responsibility inherent in a capitalist economic system.[34]

Although the focus on individualism underpins the dominance of behavioural risk factor approaches in physical activity promotion, there is increasing recognition of the role of the environment in shaping behavioural choices.[35,36] The social, cultural, economic and, perhaps most importantly, the physical environment collectively contextualise the physical activity opportunities and choices of

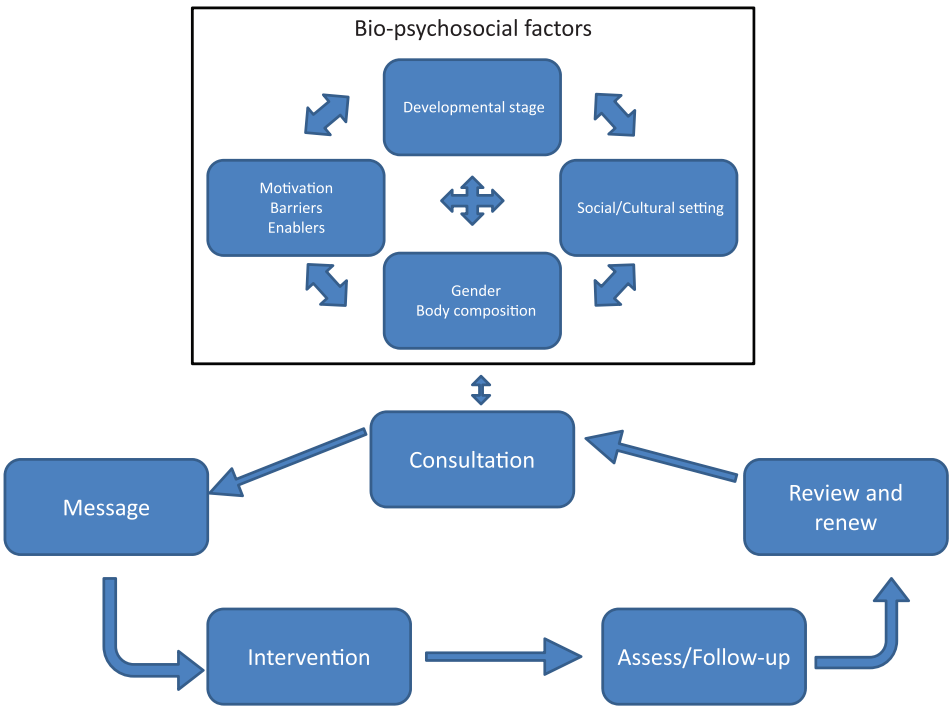

Fig. 1. Two levels are presented that incorporate the need to target physical activity promotion efforts. Bio-psychosocial factors provide market characteristics. The response begins with consultation followed by appropriate messages, interventions and assessment/follow up. In this way, evidence informs practice. Assessment and follow-up data can then be used in a way that allows practice to inform evidence.

individuals, groups and communities.[36] For example, being part of a social group that undertakes physical activity regularly, proximity to green space such as a park, access to recreational facilities such as a scooter or skate park and workplaces, schools and other settings that support physical activity.[37] Given the economic system we are part of, it is apparent that the individual, as the proximal decision maker regarding the energy balance equation, will continue to be the primary focus of attention in physical activity promotion. Nevertheless, there is an imperative to create supportive environments that will scaffold the decision making process around physical activity to make the healthy choices the easy choices.

Conclusion

Physical activity imparts health benefits across the lifespan. However, engagement in physical activity at a population level in Australia is insufficient, a situation that is having adverse health consequences. The reasons for low engagement in physical activity are complex and dynamic. Examination of the bio-psychosocial foundations of the problem provides insight into shared and common elements that are population-specific. However, it also reveals idiosyncratic components of the problem that are unique to specific developmental epochs, social strata and cultural groups. In addition, transmitting clear messages that are underpinned by evidence in the current highly saturated media environment risks simply adding to the noise rather than cutting through with effective interventions. Furthermore, reviews of adult physical activity interventions in 2004[38] and again in 2011[39] found that most interventions were short in duration, and social marketing together with environmental supports are more likely to facilitate sustainable physical activity interventions.

Physical activity promotion must increasingly move beyond broad catch-all interventions to be population-of-interest-specific in content, format and delivery. Physical activity promotion practice should apply the lessons learned from successful programs to create opportunities that capitalise on the specific characteristics and context of different communities in order to normalise physical activity within those communities. Health promotion practitioners must continue to advocate for relevant policy, economic and environmental measures that support and encourage physical activity in all settings. A cornerstone of this approach should be increasing actual and perceived equity and access to physical activity for individuals who feel marginalised or excluded from traditional forms of activity. Incorporating alternative forms of movement into physical activity guidelines and interventions is one way the goal of increasing uptake of physically active pursuits can be achieved. Adapting and responding to changes that are identified through regular assessment of trends in physical activity is also needed if increased physical activity participation is to be sustained.

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