Do first time mothers need a guideline for maximum periods of sitting or being sedentary?

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Public health guidelines and recommendations are developed to provide information for health professionals and the public about specific behaviours or practices to maximise individual and/or population health. They are based on the best available evidence of the known benefits or dangers. Obvious examples include eating two serves of fruit and five serves of vegetables per day, exclusive breastfeeding until six months, limiting alcohol consumption, and 30 minutes of physical activity a day on most days.

To achieve public health recommendations, it is assumed that these recommendations need to be adequately recognised and understood by the target population.1 For example, first-time mothers in south-western Sydney who were aware of the breastfeeding recommendation were 5.6 times more likely to intend to meet the recommendation,2 26% more likely to initiate breastfeeding and 34% less likely to have stopped breastfeeding at 12 months than those who were not (unpublished data).

Mothers of young children represent a population group known to be at high risk of being physically inactive,3,4 despite a high level of knowledge of physical activity guidelines shows a ceiling effect in understanding of the national physical activity guidelines.5 Further, research on the health impact of insufficient physical activity has diverged somewhat to differentiate prolonged sitting from insufficient physical activity. It is now suggested that there may be unique physiological processes associated with prolonged sitting (e.g. occupational computer use, television viewing), which possibly even negate the positive effects of physical activity accumulated throughout the day.6,7

Using data from the Healthy Beginnings Trial8 we sought to explore the relationship between understanding of the Australian physical activity guidelines and their actual physical activity or screen time (see Table 1).

Table 1: The relationships between understanding of physical activity messages, physical activity time and screen time (n=526).

<table>
<thead>
<tr>
<th>Agreement with physical activity messages</th>
<th>PA time per week (minutes)</th>
<th>p*</th>
<th>Screen time per day (hours)</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;150</td>
<td>≥150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement to all</td>
<td>146 (59)</td>
<td>125 (54)</td>
<td>251 (49)</td>
<td>0.13</td>
</tr>
<tr>
<td>Others</td>
<td>105 (41)</td>
<td>106 (46)</td>
<td>181 (42)</td>
<td>0.32</td>
</tr>
</tbody>
</table>

* χ²-test

The lack of associations found in this analysis may, on one hand, be due to the fact that current physical activity guidelines do not yet explicitly address sedentary behaviour. On the other hand, knowledge of physical activity guidelines shows a ceiling effect in achieving physical activity outcomes. Many other mediating factors influence behaviours, including social support, and economic and environmental conditions. These factors need to be addressed to promote physical activity. While guidelines represent a useful summary of health recommendations, a focus on guidelines alone is likely to be misplaced.

References


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