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Using evidence to inform practice to tackle child obesity

Kiara Lewis



Inspiring tomorrow's professionals



Kiara Lewis



- Head of Division of Health and Wellbeing
- PhD children's adherence to physical activity
- Empirical research through evaluation of a community scheme for overweight and obese children and young people.

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4 Key Questions

1. Are obese children less active than non obese?
2. Does it matter if they are less active?
3. If they are less active why?
4. How can we increase activity levels?

1. Are obese children less active than non obese?



- Yes – majority of obese children in lowest fitness categories¹
- Globally fitness in children < 4.3% per decade²
- Inactivity and obesity interrelated



By how much?

- Obese boys were found to be 15% less active on schooldays and 29% less active on weekends compared to non-obese boys³
- Obese and non-obese girls' activity levels were even greater, obese girls were 20% less active on schooldays and 36% less active on weekends³

2. Does it matter if they are less active?

- Yes
- For health CRF more important than obesity⁴
- CRF linked:
 - Total adiposity and abdominal adiposity
 - CV risk factors
 - Mental well-being

3. If they are less active why?

- Children participate⁵:
 - Enjoy
 - Feel competent
 - Not forced to compete
 - Feel supported by others

Overweight and obese young people:

'This is not fun'

'I'm not good
enough'

'I will let
the team
down'

'This will hurt'

'It will make my
asthma worse'

3. If they are less active why?

- Overweight and obese^{6,7}:
- Some similar and some distinct barriers
 - May find activity harder – tire easily
 - May have potential physical/skill limitations
 - May have lower confidence, poor body image
 - May have fewer social networks

4. How can we increase activity levels?



- Cochrane Review of school based initiatives⁸ – no evidence for adolescence
- Many studies whole school approach – so as not to stigmatise obesity – BUT different barriers
- My evidence!

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What Evidence?

- Evaluation of a community programme to increase physical activity in obese and overweight young people⁹
- 2 year evaluation
- 325 young people
- 60% BMI \geq 98 centile

What happened to weight?

- Sub sample (90 children before and after weight)
- **97%** same or better weight category



How did they feel?

➤ 72% Increase self esteem



What about physical activity levels?

- 60% increase activity levels
- 46% tried new activities
- More active outside of sessions



Great - But why?

- Interviews/focus groups involving 50 children and young people
- Thematic analysis of why they were more active

What these children and young people said:



'The more times I came the more confident I got'

'I feel fitter and happier'

'I like people what come to the sessions '

'It's fun, energetic, it tires you out and it's healthy'

'I've made lots of new friends'

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What is the difference¹⁰?

- Choice of activities
- Wear their own clothes
- Personal goals
- Age and ability appropriate
- No embarrassing PE skirt
- Not comparative, no fear of letting others down

What is the difference?

- Activity intensity controlled by the child
- Other children at a similar level
- Feel good about themselves
- No fear of exhaustion/pain
- Don't feel bottom of the class
- Supportive feedback from instructors

Key Messages

- Promote participation not excellence
- Promote social skills not just physical skills
- Show respect and compassion for children not strict discipline
- Emphasise fun not weight loss or health
- Provide appropriate choice of clothing and changing facilities
- Positive experience during activity
parents/instructors/teachers influence this

What to know more?



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References

1. Dumith SC, Ramires VV, Souza MA, Moraes DS, Petry FG, Oliveira ES, Ramires AV, Hallal PC. Overweight/obesity and physical fitness among children and adolescents. *Journal of Physical Activity*. 2010;7:641-648
2. Tomkinson G, Global changes in anaerobic fitness test performance of children and adolescents (1958-2003). *Scand J Med.Sci.Sports* 2007; **17**(5);497-507
3. Page A, Cooper AR, Stamatakis E, et al. Physical activity patterns in nonobese and obese children assessed using minute-by-minute accelerometry. *International Journal of Obesity* 2005; **29**: 1070-1076.
4. Ortega FB, Ruiz JR, Castillo MJ, Sjostrom M. Physical fitness in childhood and adolescence: a powerful marker of health. *International Journal of Obesity* 2008;**32**:1-11
5. National Institute of Clinical Excellence. Review 3: The views of children on the barriers and facilitators to participation in physical activity; a review of qualitative studies. 2007; Available from <http://www.nice.org.uk/PH17>
6. Peeters C, Marchland H, Tulloch H, Sigal RJ, Goldfield GS, Hadiyannakis S, Kenny GP. Perceived facilitators, barriers and changes in a randomized exercise trial for obese youth: a qualitative inquiry. *Journal of physical activity and health* 2012;9:650-60
7. Murtagh J, Dixey R, Rudolf M. A qualitative investigation into the levers and barriers to weight loss in children: the opinions of obese children. *Arch Dis Child*. 2006;91:920-923.
8. Dobbins M, DeCorby K, Robeson P, Husson H, La Roche RL. School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6-18. *Cochrane Database of Systematic Reviews* 2013;Issue 2
9. Fraser C, Lewis K, Manby M. Steps in the Right Direction, Against the Odds: An Evaluation of a Community-Based Programme Aiming to Reduce Inactivity and Improve Health and Morale in Overweight and Obese School-Age Children. *Children and Society*. 2012; 26; 124-137. doi:10.1111/j.1099-0860.2010.00329.
10. Lewis K, Fraser, C. and Manby M. (2013 In Press) Is it worth it? A Qualitative study of the beliefs of overweight and obese physically active children. *Journal of Physical Activity and Health*.