5 October 2016

Ms Sarah Dunn
Inquiry into Childhood Overweight and Obesity
Legislative Council Standing Committee on Social Issues
Parliament House
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Sydney NSW 2000

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Dear Ms Dunn,

Re: Response to Questions on Notice and correction to transcript

The Heart Foundation appreciates the opportunity to present evidence to the Legislative Council Inquiry into Childhood Overweight and Obesity.

At the hearing on Monday 12 September Ms Julie-Anne Mitchell and myself took 3 questions from the Committee members on notice. Please find attached our answers to those questions.

We have also reviewed the uncorrected transcript of the hearing and would like to correct 2 typographical errors on page 33. I have attached a copy of the relevant page with corrections marked in red pen.

We would be happy to provide any further information if required.

Yours sincerely

Kerry Doyle PSM
Chief Executive
Heart Foundation NSW

Question from The Hon. Dr Peter Phelps: Page 33

The Hon. Dr Peter Phelps: Are you aware of the 2008 study by van Baal and others which indicated that the lifetime cost in euros of most people going through NHS was, for healthy people, 281,000; obese 250,000; and smokers, 220,000? This was on the basis that obese and smokers tended to die before healthy people did, and thus the exceedingly high cost of gerontological services meant that obese people and smokers were less of a drain on the healthy system than healthy people.

Answer

The Heart Foundation has reviewed the article by Van Baal et al [1] estimating that the lifetime medical costs associated with non-obese people are higher than those for obese people and smokers.

The article presents the results of a simulation model, built upon assumptions and data specific to the Netherlands. The Heart Foundation would like to highlight that the paper has been critiqued [2] by other researchers who have pointed out the limitations of the model. Several of these critiques are nuanced and complex, but highlight the validity of the results is dependent on assumptions that are not demonstrated.

Technicalities aside, the key reason that results of this single paper should be interpreted cautiously is because of the limited scope of the analysis. As noted by the authors within the article itself, the modelled cost associated with obesity (and smoking) is based on direct healthcare costs only. When developing public policy, or assessing the costs and benefits of a proposed population level, publicly funded intervention, it is necessary to take into account the full economic cost (and benefit) associated with intervention.

The authors themselves state: "It is important to stress that we have focussed solely on health-care costs related to smoking and obesity, ignoring broader cost categories and consequences of these risk factors to society. It is likely, however, that these impacts will be substantial. For instance, reduced morbidity in people of working age may improve productivity and this result in sizeable productivity gains in society. In the case of smoking and obesity, these indirect costs could well be higher than the direct medical costs."

The authors make it clear they are not intending their analysis to make a case for not doing prevention. They pose the question whether prevention needs to be cost-saving in order to be attractive and answer in the negative – that it " 'merely' needs to be cost effective". And go on to say:

"It is interesting to note that in the area of smoking cessation and weight loss, favourable cost-effectiveness results have been shown even if the medical costs in the life-years gained are taken into account."

As the authors have stated, assessing the true cost of a disease for the purposes of good public policy requires a more complex and complete consideration than just one set of costs. For this reason, the Heart Foundation recommends that public policy decisions be guided by Burden of Disease modelling such as that undertaken by the Australian Institute of Health and Welfare [3] which allows a variety of complex and interacting factors to compare the true costs of different diseases so that the most cost-effective use of available funds can be assessed.

We concur with the authors' final statement: "Prevention may therefore not be a cure for increasing expenditures – instead it may well be a cost-effective cure for much morbidity and mortality and, importantly, contribute to the health of nations."

It is unlikely that NSW' – or Australia's – health expenditure is going to see any 'savings' in the coming years, in the sense of reduced expenditure. With the future population growth in Sydney alone projected to be 9.9 million by 2036[4] any reduced expenditure gained by reduced prevalence of one disease will soon be outweighed by the increased numbers of people (of all ages) requiring a wide range of health care. However, logic and good policy would suggest that spending money on illnesses and disabilities which could have been prevented is not a cost-effective use of funds.

The Heart Foundation notes that even with its limited cost inclusions, the paper in fact demonstrated the increased healthcare costs associated with smoking and obesity.

The authors state: "At all ages, smokers and obese people incur more costs than do healthy living persons. Until age 56, average annual health care costs are highest for an obese person. In higher age groups smokers are more expensive."

This is particularly pertinent to the costs of diabetes and heart disease, 2 chronic illnesses strongly associated with obesity and smoking. Table 1 in the paper in fact shows that the lifetime health costs associated with coronary heart disease and diabetes is lowest in the "healthy living" than in the "obese" and "smoking" cohorts even when their increased lifespan is factored into the calculation. The increased lifetime costs of the healthy living cohort are due overwhelmingly to the costs of what the authors categorise as 'other diseases' - diseases not related to smoking or obesity.

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Ms Doyle: ***Food is one part of the equation, but it is only one part. We are not talking about nothing that is enjoyable. We are actually talking about balance, with the balance being healthy eating. But it is really important that we understand also that this is about energy in and energy expended so that the physical activity side is a place where governments can make a massive amount of difference from the built environment through to transport infrastructure and through to programs such as those Sturt Eastwood mentioned and that Shelley Fohl, when she came over, talked about. That is a really critical piece of the equation as well and it is something that we are losing. I can send you the stat—I do not have it off the top of my head—but when I was a kid watching the Coca-Cola advertising, not quite in the 1900s, I was doing that after spending probably from 3.20 in the afternoon until whatever time sunset was running up and down the street or riding a bike or a scooter, or whatever it was, and then coming in and seeing that advertisements and being told by my parents we could not afford Coke.***

The *National Physical Activity Guidelines for Australians* [5] recommends that children accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day. Children and young people who are sufficiently active are less likely to be overweight or obese, are at reduced risk of developing Type 2 diabetes and metabolic syndrome, experience positive mental health benefits and are more likely to see improvements in aerobic fitness and bone health [6].

In addition to the recommendations for physical activity, there are also recommendations that children reduce sedentary time, which is a separate and additional risk factor for poor health. In previous generations sedentary leisure activity was predominantly TV viewing but there is now concern about the growing use of computers, tablets and smartphones by even very young children, which has led to recommendations to limit all leisure 'screen time'. It is currently recommended that leisure screen time does not exceed 2 hours per day for children 5 to 17 years, that children aged 2 to 4 years be limited to 1 hour and children aged under 2 years have no screen time [7]. Replacing 'screen time' (TV, computer, iPad etc) with active play is one way to both increase physical activity and reduce sedentary activity.

According to data from the NSW Population Health Survey [8] only 28.2% of children aged 5 to 15 years achieved adequate levels of physical activity in 2014-2015 (31.9% males; 24.0% females). In the same year it was estimated that 41.5% of NSW children aged 5 to 15 spent more than 2 hours on sedentary leisure. In 2015, the median sitting time for NSW children aged 5-16 was 3 hours 43 minutes (outside school hours) and 6 hours 40 minutes on a weekend day[9]

National trend data highlights the changes in children's lives which are impacting on their physical activity compared to previous generations. There has been a reduction of 42% in young people's use of active travel over 40 years (from 1971 to 2013). [10] In NSW for example, 50% of children walked to and from school in 1971 but this had dropped to 33% by 2003. For a number of reasons, children's transport has moved from mostly active travel (walking, cycling etc) and public transport to private car.

Data on the trends for increased screen time is more limited, especially very young children's use of computers and tablets which has increased significantly in recent years. For example, as yet there is no Australian data on screen time exposure for children aged under 2 although it is increasingly common. Data from a US survey conducted in 2005 [11]

indicated that 79% of babies aged 6 to 23 months had watched TV and 65% had watched DVDs/videos. The survey did not ask specifically about tablets or smartphones (which were not common consumer products in 2005) but 5% of the under 23 month olds had used a computer.

Increasing children's physical activity and reducing their sedentary behaviours requires a multi-faceted approach which takes into consideration social, environmental and cultural norms which are causing the behaviours we see in children. For example, being driven to school rather than walking, cycling or taking the bus, is generally a parental decision reflecting time pressure and parental concerns about safety. Enabling children to switch to active travel to school, therefore, needs local programs driven by engaged parents, schools and communities which address those concerns.

Shellie Pfohl, Executive Director of the US President's Council on Fitness Sport and Nutirition, was recently brought to Australia for FitNSW by the NSW Premiers Council for Active Living (PCAL) to discuss the *Let's Move!* initiative. *Let's Move!* is a comprehensive initiative, launched by First Lady Michelle Obama, dedicated to solving the problem of childhood obesity within a generation. It has multiple programs across the many environments which impact on children's activity, including schools, cities, towns and counties, churches and faith communities, child care, museums and gardens, and food service in schools.

Ms Pfohl's presentation is available on
http://www.pcal.nsw.gov.au/__data/assets/pdf_file/0005/179555/02_Shellie_Pfohl.pdf

A video of her presentation is available on http://www.pcal.nsw.gov.au/fitnsw/fitnsw_2016

More information is available on the Let's Move! Website: http://www.fitness.gov/resource-center/lets-move/

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Ms Doyle: I would be happy to send you information about a range of positive program ways that the Heart Foundation is either delivering or actually partnering on that are making a difference at a grassroots level in local communities.

Heart Foundation Programs

Jump Rope for Heart: Established in 1983, Heart Foundation Jump Rope for Heart is a physical activity and fundraising program for schools. It is a great way to keep our kids' hearts healthy while raising vital funds for the Heart Foundation.

Each year, more than 300,000 students participate from more than 1500 schools — with funds pledged by more than 500,000 sponsors, including families, friends, and local community groups.

https://heartfoundation.org.au/jump-rope-for-heart

Jump Rope Outreach: This is a school-based physical activity and heart health program for selected schools in NSW based on the Heart Foundation's long standing Jump Rope for Heart Program but without the fund raising component. Typically offered in schools located in smaller, rural, remote, and disadvantaged communities where the risk of developing heart

disease is higher, Jump Rope for Heart Outreach teaches students the importance of keeping their hearts healthy through physical activity participation, healthy eating and living smoke-free.

The program is easy to access and readily integrated into the NSW curriculum and school timetable. It comprises a school visit and skipping workshop, free resources to support school lead activities, and ongoing support from the Heart Foundation.

Delivery of the program is flexible and is typically run over a four to eight-week period that best suits the school's needs. The program encourages regular skipping sessions and classroom activities to communicate the key health messages within the program.

Additional support is provided by the outreach Project Officer, including the school skipping workshop.

https://heartfoundation.org.au/programs/jump-rope-for-heart-outreach-program

HF Local Government Awards: The Heart Foundation Local Government Awards recognise and showcase councils working to improve heart health through building a sense of community, encouraging people to be physically active, be smoke-free and make healthy food choices.

Local councils submit applications which are reviewed by the judging panel for council activity with important healthy community elements which include:

- Opportunities for recreational and incidental physical activity.
- Safe, connected, 'walkable' neighbourhoods.
- Accessible, safe and appealing environments and facilities that encourage healthy lifestyles.
- Access to affordable, healthy and/or sustainable foods.
- Building the community's capacity and knowledge to choose and prepare healthy foods.
- Smoke-free environments.
- Opportunities for community members to lead interactive and socially connected lives.
- Appropriate, well designed and maintained infrastructure that supports recreation, social interaction and active transport options.

There are national and state level awards with cash awards, commemorative frames and profiling of council's efforts through promotional material, presentation events, local media and case studies.

https://heartfoundation.org.au/programs/heart-foundation-local-government-awards

Koori Cook Off he Koori Cook Off Program is an initiative of the Heart Foundation, which works in collaboration with Aboriginal and Torres Strait Islander communities in New South Wales (NSW) to improve heart health outcomes via nutrition education.

The program, which has hosted an event in the communities of Illawarra, Shoalhaven and Tamworth, is based on the MasterChef model, where participants are grouped into teams and have to cook a number of meals for a panel of judges (local Elders). The program aims to bring together Aboriginal and Torres Strait Islander members of the community who wish to hone their culinary skills and demonstrate how healthy meals could be delicious.

The program promotes the use of fresh vegetables, lean meats, healthy fats, using less salt, and drinking water.

The Heart Foundation collaborates with a number of local community organisations to host the program in each of the regions.

https://www.youtube.com/watch?v=V6e2cgAuVk0

Healthier Oils Program: Healthier Oils Program encourages small to medium-sized independent food outlets such as take-away shops, cafés, pubs and clubs to use cooking oils that are lower in saturated and trans fats to help reduce the risk of heart disease in Australia.

A new phase of the Program begun in 2016 is now working with large catering providers to swap unhealthy cooking oils for healthier versions. The Program has been adopted by Penrith Panthers, a large sporting club and function venue which prepares over 300,000 meals a year.

The program is recognised in the NSW Government's Healthy Eating Active Living Strategy as a specific action plan. A range of practical resources are available to inform councils and catering providers that may be considering the program.

https://heartfoundation.org.au/programs/healthier-oils-program/

Partnership programs

PCAL – web site, resources and IP&R events - The NSW Premier's Council for Active Living (PCAL) aims to build and strengthen the physical and social environments in which communities engage in active living. It comprises senior representatives from across government, industry and the community sectors. The Heart Foundation NSW has been a member since 2005 and currently hosts the PCAL secretariat on behalf of the NSW Government. It is the principal site for Active Living resources, information and strategies in NSW and is the national exemplar on cross government action for active living in Australia.

http://www.pcal.nsw.gov.au/home

Healthy Kids website: The Healthy Kids website is a joint initiative between the NSW Ministry of Health; NSW Department of Education; Sport and Recreation, Office of Sport, and the National Heart Foundation of Australia (N.S.W. Division) with the purpose of being a 'one stop shop' for parents, teachers and health professionals who want information about healthy eating and physical activity.

First developed in 2005 it is the primary information portal in NSW for current, accurate and useful information regarding healthy eating, physical activity and obesity prevention to support informed choices.

This is achieved through ongoing website maintenance and development/integration of key website components, improving and supporting the delivery of practical and tailored information to Healthy Kids website users from various population groups, and promotion of healthy eating and active living programs, initiatives and campaigns.

Website metrics indicate it is one of the most popular health sites in NSW with a significant number of interstate and international visitors.

http://www.healthykids.nsw.gov.au/

The Healthy Towns Challenge: The NSW Healthy Town Challenge is a joint initiative of NSW Health and the Heart Foundation to highlight the important role local communities can play in helping residents eat well, move more and sit less.

The Challenge runs for 6 months and is open to towns outside the greater Sydney metropolitan area with populations between 1000 and 15,000. Based on an application process five towns are selected, they are each provided with a grant of $15,000 to implement their healthy town initiatives competing against each other for $5,000 prize money.

http://www.preventivehealth.net.au/nsw-healthy-towns-challenge.html

Question from The Chair: Page 37

The CHAIR: Ms Doyle or Ms Mitchell, one of the points in your submission says:

Interventions to help children who are already overweight or obese have low success rates so there is a need to focus on primary prevention.

I think we all agree that prevention is better than cure. Where do we fail to intervene? The Committee has heard evidence about the 0 to 2 and 0 to 5 age groups. At what level do you see intervention becoming less effective?

Ms DOYLE: We can provide studies with much more detailed information than I am able to give off the top of my head. When we take a whole-of-life approach we know that physical activity begins to reduce considerably, irrespective of health literacy, in the tweens and teenage years. We are seeing substantial drop-off rates for both boys and girls. I can provide the specific figures on notice. Despite the fact that we might be laying down good behaviours early on in some sections of the population, they lose the benefit as they get older, which is when they need it more. I will provide data on what the trajectory looks like.

Interventions can be effective for some individuals at all ages. However, from a population health and public policy perspective there is evidence that population level programs appropriately targeted for the needs of particular age groups may deliver better population level outcomes.

The focus of many current interventions to address childhood overweight and obesity is on primary prevention – helping children to maintain a healthy weight throughout their life rather than 'treating' overweight or obese children with the objective of weight reduction. The NHMRC *Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Adolescents and Children in Australia 2013* recommends weight maintenance rather than weight loss as the goal for interventions for most overweight and obese children and adolescents, with the exception of severely obese post-pubescent adolescents with obesity related medical conditions.

The recommended clinical management of overweight and obese children and adolescents[12] is:

1. Use percentile charts to monitor growth
2. Promote physical activity, dietary modification and healthy behaviours to families
3. Encourage healthy behaviours such as drinking water and reducing screen time

4. Aim for weight maintenance — this is an acceptable goal
5. Know when to refer

These objectives are also the key aims of primary prevention strategies which help children in a healthy weight range to grow while maintaining a healthy weight. It is important to note that each of the risk factors for overweight and obesity is also a risk factor for other poor health outcomes. So, for example, sedentary behaviour caused by too much screen time is an independent and additional risk factor to low levels of physical activity for chronic disease. It is not always possible to 'trade off' high levels of one risk factor by reducing another. So, for example, eating too few vegetables cannot be 'traded off' by eating more fruit.

There is strong evidence that interventions work best during a child's earlier years, probably because of the power of parental influence, reduced personal spending power and children's more limited exposure to product marketing. Children's behaviours are strongly controlled by their parents in their early years but parental control becomes increasingly defused by other influences as children age when they become increasingly influenced by their peers and by the media and marketing environment.

We know from other health promotion activities (smoking, sun smart etc) that changing health behaviours of adolescents is more difficult and this is probably also the case with food and physical activity related behaviours. However, there are considerable gaps in the evidence and we have seen from concerted healthy promotion of other risks (sun exposure and smoking) that effective health promotion can even change attitudes and behaviours of adolescents. One important learning from smoking campaigns is the importance of consistency of messages aimed at adolescents and adults. Adolescents aspire to be treated as adults and quickly recognise the hypocrisy of a message which tells them how to behave but implies adults can make up their own mind. Health messages intended for adolescents are more effective if they form part of a broader adult campaign repeating the same message.

Submissions from researchers at Sydney University and the Charles Perkins Centre have highlighted the growing research which indicates that very early intervention – assisting women to achieve and maintain healthy weight prior to conception and during pregnancy – may be an important factor in their children maintaining a healthy weight. This may be mediated through epigenetic 'set points' which regulate appetite and fat accumulation for the child's life [13] . Further research will be needed to clarify this mechanism but the research highlights the importance of life span strategies, which support and assist people of all ages to achieve and maintain a healthy weight.

Strategies which can achieve that need to include regulation of food supply to ensure that healthy food is a cheaper and easier choice than energy dense and nutritionally poor foods, urban environments which make active living enjoyable and easy both for recreation and day-day travel, information (both social marketing and product information) so that people know which foods to choose and what physical activity to do to regulate their own weight.

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[1] Van Ball PHM, Polder JJ, deWit GA, Hoogenveen RT, Feenstra TL, et al(2008) Lifetime medical costs of obesity:prevention no cure for increasing health expenditure. PLoS Med 5(2): e29 http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0050029 Accessed 14 September 2016

[2] http://journals.plos.org/plosmedicine/article/comments?id=10.1371/journal.pmed.0050029 Accessed 14 September 2016

[3] http://www.aihw.gov.au/burden-of-disease/ Accessed 30 September 2016

[4] NSW Department of Planning and Environment website: http://www.planning.nsw.gov.au/projections Accessed 30 September 2016

[5] Department of Health and Ageing 2014. National Physical Activity Guidelines for Australians. Commonwealth of Australia: Canberra

[6] Active Healthy Kids Australia. 2015. The Road Less travelled. The 2015 Active Healthy Kids Australia Progress Report Card on Active Transport for Children and Young People. Adelaide, South Australia: Active Healthy Kids Australia.

[7] Department of Health. 2014 Australia's Physical Activity and Sedentary Behaviour Guidelines. http://www.health.gov.au/internet/main/publishing.nsf/content/health-pubhlth-strateg-phys-act-guidelines Accessed 30 September 2016

[8] NSW Ministry of Health. Centre for Epidemiology and Evidence. NSW Population Health Survey. http://www.healthstats.nsw.gov.au/Indicator/beh_physkid_age/beh_physkid_age_trend Accessed 30 Sept 2016

[9] Centre for Population Health. 2016. NSW Childhood Overweight and Obesity Premier's Priority: Annual Data Report 2016. Sydney: NSW Ministry of Health. 2016

[10] Active Healthy Kids Australia (2014). Is Sport Enough? The 2014 Active Healthy Kids Australia Report Card on Physical Activity for Children and Young People. Adelaide, South Australia: Active Healthy Kids Australia. http://www.activehealthykidsaustralia.com.au/siteassets/documents/ahka_reportcard_longform_web.pdf Accessed 30 Sept 2016

[11] Rideout V, Hammel E. (2006) The Media Family: Electronic media in the lives of infants, toddlers, preschoolers and their parents. Menlo Park, CA: Kaiser Family Foundation https://kaiserfamilyfoundation.files.wordpress.com/2013/01/7500.pdf Accessed 30 Sept 2016

[12] National Health and Medical Research Council (2013) Summary Guide for the Management of Overweight and Obesity in Primary Care. Melbourne: National Health and Medical Research Council.

[13] Obesity Australia 2014. No Time To Weight