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Community perspectives on the use of regulation and law for obesity prevention in children: a citizens' jury

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Highlights

- Globally government action on obesity prevention focuses on parental and individual responsibility
- Legislative and fiscal approaches could address obesity but policy-makers fear public backlash
- This citizens' jury demonstrates public support for targeted legislative and fiscal approaches
- Jurors supported educational approaches in schools, mandatory food-labelling laws and sugar taxes

Abstract

Introduction: Childhood obesity is a significant challenge for public health internationally. Regulatory and fiscal measures propagated by governments offer a potentially effective response to this issue. Fearing public criticism, governments are often reluctant to use such measures. In this study we asked a descriptively representative and informed group of Australians their views on the use of legislation and fiscal measures by governments to address childhood obesity

Methods: A citizens' jury, held in South Australia in April 2015, was asked to consider the question: What laws, if any, should we have in Australia to address childhood obesity?

Results: The jury agreed that prevention of obesity was complex requiring multifaceted government intervention. Recommendations fell into the areas of health promotion and education (n=4), regulation of food marketing (n=3), taxation/subsidies (n=2) and a parliamentary inquiry. School-based nutrition education and health promotion and mandatory front-of-pack interpretive labelling of food and drink were ranked 1 and 2 with taxation of high fat, high sugar food and drink third.

Conclusion: The recommendations were similar to findings from other citizens' juries held in Australia suggesting that the reticence of decision makers in Australia, and potentially elsewhere, to use legislative and fiscal measures to address childhood obesity is misguided. Supporting relevant informed public discussion could facilitate a politically acceptable legislative approach.

Introduction

Childhood obesity, and its long term consequences, are a significant challenge for public health internationally,[1] and within Australia.[2, 3] There is widespread recognition that addressing childhood obesity requires multi-sectoral responses, using “incentives and disincentives, regulatory and fiscal measures, laws and other policy options, and health education”.[4] Regulatory measures, in particular, can be powerful tools for changing health behaviour, protecting vulnerable groups and improving environmental and occupational safety: they have been used effectively in tobacco control, injury prevention and infectious disease control.

Despite success in a number of public health domains through the use of regulation and policy (for example in tobacco control and immunisation) globally the use of regulatory measures to address childhood obesity has been patchy.[5-7] However, outside Australia, a number of relevant population-based regulatory measures have been implemented. These include, but are not limited to, planning restrictions on fast-food outlets in California [8]; taxes on soft drinks in France, Hungary, Finland, Mexico and some cities in the USA [9, 10]; taxes on high fat high sugar foods in Hungary [11]; state taxes on fast food restaurants in some US states [9]; healthy food subsidies in USA [9]; restrictions on marketing of high fat/high sugar foods to children in the UK and France [12]; mandatory warning labels on high fat-high sugar foods in Chile [13]; and menu labelling in chain restaurants in the USA [14]. In contrast, Australian governments’ responses have been characterised by a focus on school, parental and individual responsibility including healthy eating guidelines, school-based education, school canteen policies and child health checks. [15, 16] Population-wide initiatives, such as the front of pack star rating on food and drink and menu labeling in fast food chains, are voluntary and subject to criticism.[17, 18]

Ambivalence about the use of regulatory measures to prevent childhood obesity in Australia relates in part to concern amongst policy makers that such measures will not be acceptable to the community.[19, 20] This is key in the area of population nutrition where public health concerns intersect with the business interests of a powerful industry that holds considerable sway over public debates and research priorities.[21, 22] Understanding informed community views is therefore crucial as regulatory measures are more likely to be politically palatable if they reflect community preferences.

Citizens' juries bring together diverse groups of citizens, to deliberate equitably and respectfully on an issue of societal importance with the goal of reaching consensus for the common good. [23] In receipt of that consensus (or majority and minority recommendations), decision-makers are empowered to select, develop and implement interventions that have public support and which therefore offer the best translational opportunity. In Australia, citizens' juries have been used by state and local governments to inform or decide contentious policy making including legislation to protect cyclists,[24] city planning,[25], local governance models,[26] and development of a nuclear waste policy.[27] This paper reports findings from a deliberative inclusive citizens' jury which considered regulatory approaches to address childhood obesity in Australia.

Methods

A citizens' jury was conducted in Adelaide, South Australia, in April 2015 to consider the following question:

What laws, if any, should we have in Australia to address childhood obesity?

The jury was conducted under direction from a multidisciplinary research team with expertise in law, ethics, community engagement, economics, anthropology, child health, epidemiology and health technology assessment. An Advisory Group, drawn from Government (health, education), Non-Government Organisations (NGOs), allied disciplines (urban planning, nutrition) and a consumer advocacy organisation, provided oversight. The jury was told that, decision-makers were included in the Advisory Group and the jury recommendations would be presented to State Government and the Commonwealth Department of Health but there was no guarantee that the governments would act. The Human Research Ethics Committee, University of Adelaide approved this study (H-2012-142).

The jury was the final component of the sequential mixed-methods research program, HealthyLaws.[28] Evidence generated through systematic reviews and local empirical studies [7, 15, 29-31] was presented to the jury but also used to identify common public beliefs and concerns regarding obesity, nutrition and the use of regulations to address obesity. These concerns were discussed by the jury in the light of the collected evidence.

Twenty South Australians participated in the jury. Seventeen (16 urban, one rural) were selected using stratified random sampling, such that they met the criteria shown in Table 1. Recruitment was conducted by a social research company (Harrison Research, Kent Town, South Australia) drawing on those who had responded positively to a question included in the representative cross-sectional 2014 South Australian Health Omnibus Survey[32] namely: “The University of Adelaide is carrying out research into what people think about healthy eating and physical activity. This might include a survey, a focus group, or a weekend workshop. Would you be willing to be contacted to talk more about participating in this research?” Three additional rural participants were independently recruited by the social research company. No further exclusion or inclusion criteria were applied. Participants received an honoraria (\$350AUS) and travel expenses.

The overall aim of the deliberative process was for the facilitator to help the jury reach consensus while recording minority dissenting opinion as required. The jury members were neither told the specific question to be addressed nor provided with any materials before the jury commencement. On day 1, the participants were briefed about the jury process during a relaxed dinner and participated in an ‘icebreaker’ exercise. Over the following weekend (15 hours), the jury was facilitated by an independent consultant with deliberative community jury expertise. Participants were provided with brief written evidence summaries.

On day 2, participants interacted at a single table with expert presenters and in one hour-long session small groups worked with single experts rotating across groups. As far as possible, in the time available, the jury was provided with a range of evidence and viewpoints. In particular, the research team recognised that public health decision-making does not occur in a vacuum free of competing political priorities and therefore perspectives which were not public health derived were also represented (for example, industry perspectives). (Table 2) Proceedings were recorded verbatim by a court reporter and small group discussion audio-recorded and transcribed. (Please refer to the Jury Program provided in the online appendix) Additional material, requested by participants, was discussed on day 3. (Table 2)

On day 3, the jury members brainstormed in small groups to develop proposals to bring to the whole jury. Proposals were grouped thematically by the researchers with jury input. After deliberation, participants were provided with 3 gold stickers (high priority choices) and 3 blue stickers (lower priority choices) to vote for those government actions which they considered priority areas. The participants were instructed to vote as they wished but encouraged to support approaches they had previously identified as important. Findings were collated on an overhead slide. In discussion, some participants expressed dissatisfaction with the priority order and, as a consequence, gold votes were weighted as double the value of blue votes. This led to a reordering of priorities which met with general approval.

Two authors independently coded the jury deliberations using realist thematic analysis.[38]

The two sets of codes demonstrated high inter-coder agreement. Individual codes were grouped thematically to describe patterns of views that account for the final policy recommendations.

In reporting the logistics of the jury, we drew on CJCheck, a framework for reporting citizens' juries.[39]

The jury's recommendations were presented to a roundtable of experts including Advisory Committee members. The expert forum discussed the recommendations and developed five short to medium-term solutions, which aligned with the jury's recommendations, for immediate attention by the Government of South Australia. Both sets of recommendations were forwarded to the State Premier and relevant Ministers in State Government. The jury recommendations were also provided to the Department of Health, Australian Government.

Results

The jury agreed that prevention of overweight and obesity was complex and that government intervention was required. Jury members, conscious of the limitations of any one intervention being pursued in isolation, advocated for a multi-faceted approach.

Overall, the jury's choice and prioritization of interventions was closely aligned with the drivers of obesity that the citizens identified individually and collectively. These included poor access to healthy foods, industry interests that conflict with public health, and lack of knowledge of nutrition and healthy eating.

In reaching their recommendations jury members attempted to balance idealism and pragmatism in terms of the feasibility and likely political palatability or public acceptance of

particular recommendations. The jury discussed the potential political complexities which may arise because of the business impact of obesity interventions, resistance from well-funded industry lobbyists and the difficulties of implementing policies given the fragmented Australian policy environment. They sought to formulate recommendations that not only furthered public health, but also aligned with assumed public and industry preferences.

“We’re saying we don’t want you to eat it. Industry are never going to like that.”

These political considerations determined the prioritization of the jury’s preferred interventions:

“We thought about what was most likely to be acceptable and what was most likely to have results. That was the whole reasoning behind our choices that we made.”

Participants reflected on their experience with other areas of public health legislation to highlight the potential social impact of the proposed interventions. For example, one participant described the strong but transient resistance provoked by public health interventions which aim to change social norms through targeted legislation.

“When they brought the seatbelt law in did you like it? I didn’t like it. Now I’m used to it, but I hated it. When they brought bicycle helmet law in. I hated it. Now I don’t care.”

The jury expressed the view that measures aimed at incremental improvements in diet were more feasible and politically viable than fundamental far-reaching measures which may more effectively reduce obesity prevalence. There was consensus regarding the types of law they would not recommend for adoption:

“You shouldn’t be able to say “No, you can’t have that”, because that is the freedom of choice. You just can’t. Unless something was proven to physically kill you on-the-spot

like cyanide or asbestos, you cannot take it away from people. It is their right. It is their choice.”

Jury recommendations

The jury made 10 recommendations which fell into three distinct categories of public health action: health promotion and education (n=4); regulation of food marketing (n=3); and taxation/subsidies (n=2). One recommendation, for a parliamentary inquiry, lay outside these categories. The recommendations and their assigned priority are summarised in Table 3.

There was some dissension amongst participants over the ordering of the priorities but this was resolved by the reweighting of votes described above. There was also some disquiet in a minority of the jury about the need for a recommendation for a parliamentary inquiry but this was strongly supported by a small group of jurors and, after some discussion, it was retained as a minor recommendation.

Health promotion and education

Proposals in the area of health education included school-based nutrition education and health promotion (ranked 1), mandatory front-of-pack interpretive labelling (ranked 2), nutrition education aimed at the general population (ranked 4) and education for new parents (ranked 8). These recommendations were primarily motivated by a particular concern about consumers' lack of knowledge about nutrition and lack of support to improve that knowledge. Examples illustrating the problem were drawn from both personal experience and assumed behaviour of average consumers:

“When I go to the supermarket and [...] I’m looking for a muesli bar, it takes me half an hour and in the end I go, “None of them are any good.” You know, so I want something on the front that’s easy to read and I know how much fat, how much sugar.”

In addition to the lack of knowledge about nutrition, participants noted poor information provision within commonly-accessed services, the low visibility of some useful services and financial barriers to access:

“I think the problem there is not enough knowledge [...] of knowing where you can go and who you can talk to about it. Because I see a dietitian for my children and that’s where I get my knowledge from, yeah, and the dietitian is private so I pay for the dietitian.”

In suggesting education targeting particular population groups, the jury implicitly adopted a life course perspective and considered the familial context of health behaviour. Accordingly, jury recommendations were based on starting interventions at an early age and on reaching parents, grandparents, and other caretakers through children and vice versa:

“In terms of school education, our group resolved that it was more effective [...] to target any actions towards younger people because of this carry- over and we might get a tobacco-type effect.”

While jury members put a premium on targeted education, they also made it clear that they viewed education as a complementary intervention intended to enhance parallel action aimed at changing the food environment.

“Pairing education and nutrition standards [in schools] or [interpretive] labelling because we have been talking a lot about food in schools, and how it's one thing to

teach children but it's another thing to make sure that that teaching is paired with action.”

Regulation of food marketing

The jury recommended regulation of nutrition and physical activity in schools (including zoning fast food outlets around schools) (ranked 5), advertising bans (ranked 6) and bans on food company sponsorship of sporting events (ranked 9, but with no high priority votes).

Participants questioned where responsibility should lie in making healthy choices. In doing so, they indicated support for preservation of individual choice but questioned industry behaviour in marketing products in such a way that individuals did not know what they were buying. As a consequence, participants favoured interventions which would enable individual consumer decision-making.

“It’s not our job to tell people we don’t want you to eat it, it’s our job to make sure that they know what it’s in it, and they make their own decisions as an individual.”

Accordingly, suggested changes to food environments in terms of information provision were designed to facilitate individual choice and intersect with the direct delivery of education.

With regard to an interpretive nutrition labelling scheme, modelled on the UK’s traffic light system, a juror highlighted the difference between directly constraining choice and influencing choice:

“We’re allowing them to buy it. If it’s there, and it’s got a red light on it. They can buy it if they want to“

Recommendations that could be perceived to disadvantage the food industry were carefully considered and found to be mostly corrective of questionable industry behaviour (i.e. deceptive advertising and misleading disclosure of nutritional information) rather than inappropriately disruptive to commercial activity. Maintaining business viability was seen as important by many of the participants.

“I think at the same time we need to also understand that we do live in a liberal economy. You can't just go you want to shut down big business.”

This position extended to both interpretive labelling and regulation of advertising. In both cases, the jury emphasized the opportunities for business to benefit from regulation and explored ways for government to nudge companies towards desired change without imposing restrictions that participants feared would impact on businesses' economic viability. These considerations included working with industry to manage trade-offs between public health concerns and continued economic growth and employment.

“The reformulation of food might be a positive outcome that could perhaps happen if we had say, for example, the traffic light system and then companies would be given a red traffic light they might think ‘We don't want that maybe we should reformulate’.”

“We could compensate industry. There's a million ways, but they could have tax incentives that suited them, if they produce better quality stuff. Maybe not impose a tax on the bad stuff, but maybe give them a tax incentive on the good stuff. ‘Cause if you do something like that, you're actually not telling them they can't make their foods. You're actually saying, if you make good stuff, we'll help you.”

More restrictive actions were advocated only where industry was seen as acting unethically, such as chain restaurants sponsoring sporting events or youth leagues:

“- Somebody said eating McDonalds after exercising is like having a shower and putting your dirty clothes back on.

- Yeah, exactly.

- Yeah, it's ... but worse. So ban junk food companies like Macca's from sponsoring [sport events and recreational leagues]”

Taxation and subsidies

Taxation (ranked 3) and farm subsidies (ranked 10 with no high priority votes) were two strategies which aimed to improve community access to affordable healthy food options.

The jury incorporated concerns about the socioeconomic gradient in obesity prevalence into their reasoning. While an assumed lack of knowledge among the general population underpinned the priority recommendations, these considerations also reveal a consensus that the ability to act on knowledge is mediated by personal circumstances and socioeconomic environments.

“Because a single mum on [welfare] will buy a packet of 12 [small bags of] chips for \$4.50 rather than three bananas for \$4.50.”

Participants considered perceived market failures, primarily price differentials between healthy and unhealthy foods, in formulating recommendations. In particular, they highlighted as objectionable the clash between economic incentives to consume high calorie foods and public health concerns:

“Fruit and veg[etables] is better for you, but for \$5 you can get a couple of bananas or you could get an entire meal at Maccas. It's really annoying.”

Changes to the food environment through increased taxation of unhealthy foods and beverages coupled with subsidies for healthy foods, were regarded as a measure that would at least partially right this economic wrong and enhance people's ability to put knowledge into practice.

A parliamentary enquiry into diet and nutrition

One recommendation did not align with any of the three themes – the need for a parliamentary enquiry (ranked 7). This recommendation arose from an identified need for an operational definition of unhealthy foods and beverages:

“We are all talking about legislation; we don't even know what we are legislating against. We don't have a definition we are talking about.”

The jurors saw no difficulty identifying clearly healthy foods, for example, fruit and vegetables, or clearly unhealthy foods, for example, chocolate and high-fat fast food. Rather this recommendation reflects their difficulties in negotiating foods with hidden sugar, for example, some yoghurts, and or in using the star labelling where foods with apparently healthy star ratings included, for example, chocolate additives for milk. A solution to this dilemma – a parliamentary enquiry - was offered by a juror who had worked in government.

State Government Response to the Recommendations

A detailed response from the South Australian Government acknowledged the recommendations from the jury but also described a range of relevant Government policies. The response indicated that the recommendations were particularly relevant in light of the

decision made at the Council of Australian Governments meeting, April 2016, to investigate options to limit the impact of unhealthy food and drinks on children.

Discussion

This study aimed to examine the extent to which an informed group of citizens would support regulatory approaches to address childhood obesity in Australia. Overall, the jury's recommendations support both the use of regulation and laws to prevent childhood obesity and a targeted approach to education. The jury was motivated by a range of beliefs and shared values. In particular, the jury wished to correct a perceived lack of knowledge in the community in terms of the skills needed to choose and prepare healthy foods and in the capacity to access reliable information and support to develop and maintain a healthy lifestyle. In addition, the participants were concerned by the socioeconomic gradient in obesity prevalence and the failure of the market to address that differential. Finally, the jury wished, as far as possible, to preserve individual choice while recognising that such choices are influenced by industry behaviour in the marketing of foods. In all these endeavours the participants recognised that it was important that there was a shared community understanding of what constituted unhealthy food.

These findings are similar to the findings from other citizens' juries held in Australia on the topic of obesity prevention. A citizens' jury^[40] asked to consider whether taxation on food and drinks was an acceptable strategy for obesity prevention was strongly supportive of taxing soft drinks but less supportive of increased taxes on other snack and fast foods. This level of detail was not possible in the jury described in this paper. However, both juries recognised that food taxes would disproportionately impact on low socioeconomic groups and indicated that a multi-faceted approach was needed including strategies supporting informed consumer choices.

A VicHealth (Melbourne) citizens' jury, held in 2015[41] was asked a broader question similar to the question considered in the jury described in this paper. The VicHealth jury was much larger with more time to consider the options and participants were not required to prioritise the policy proposals. Despite these differences, the VicHealth jury delivered a similar, albeit broader, set of recommendations including school- based and community educational programs, mandatory health star labelling, taxes on high fat high sugar foods and advertising controls. The VicHealth jury did not include calls for a clear definition of unhealthy food but rather referred policy makers to the Food Standards Australia and New Zealand (FSAANZ) standards. The FSAANZ nutrient profiling criteria could potentially be used to provide an independent assessment of foods.[42] We note that the 2016 Budget decision by the UK government to tax sugary soft drinks and use the money raised to support school sport and breakfast clubs[43] is similar to the type of action advocated in all three of the Australian citizens' juries (i.e. HealthyLaws and those described in references [40] and [41])

Comprehensive and targeted regulatory measures for obesity prevention are a relatively new global phenomenon. Past discourses have focused on 'personal responsibility' and this is reflected in the findings of all three juries described above. However, there is also recognition of the responsibility of governments to address the drivers for obesity rates particularly in the case of children. Changing public attitudes towards smoking and tobacco control measures was a key component for reducing smoking rates. The findings from the Australian citizens' juries along with survey findings in other developed nations, for example Germany[44], the passage of fiscal measures by popular vote in the USA[45] and the implementation of some far-reaching regulatory measures in a number of nations, suggest that attitudes in obesity prevention are shifting towards increased use of regulation and law.

The jury findings demonstrate that deliberative juries can provide an important vehicle for policy-makers to tap into public sentiment on public policy formation outside the electoral cycle. For public health policy-makers, the jury findings emphasise the value of informing the public fairly and comprehensively on complex policy issues. Rather than discounting or fearing public opinion, decision-makers should see informed citizens as potential allies prepared to weigh the pros and cons of a proposal if given the opportunity to do so. Given the boldness of Australian policy on tobacco control through fiscal and legislative measures, it is somewhat surprising that Australian legislators have failed to act more extensively on obesity prevention such as through the introduction of measures like those suggested by our jury.

The limitations of the citizens' jury process as practiced in this research have been extensively discussed elsewhere.[23] They include: the small number of participants involved and the short duration of the jury which both limits the ability of the participants to understand and engage with the evidence and the opportunity for in-depth deliberation. However, these limitations are somewhat assuaged by the knowledge that two juries conducted by independent groups in Australia had similar findings.[40, 41]

Conclusions

All three citizens' juries in the area of obesity prevention in children, held in different Australian states, recommended a package of measures that incorporated health promotion and education (i.e. individual behaviour change) alongside policy responses that included regulation and law to impact on the social determinants of health. The lesson for Australian governments is that the suite of soft policy responses could be broadened to include more regulatory measures. Should governments adopt this route our research suggests that they can expect general community support provided regulatory approaches are situated within a wellness and empowerment framework that pays attention to self-efficacy and equity. Such an approach would reposition Australia's response to obesity, bringing it into line with

regulatory approaches adopted in some other countries. In an era of falling trust in governments around the world, the findings reported here should encourage policy makers globally to use deliberative methods such as citizens' juries to explore and act on community perspectives on the use of regulatory measures in contentious public policy.

Table 1: Recruitment framework for citizens' jury participants: South Australia, April 2015.

- Gender: 50% female
- Age: One third from each age range 18-34; 35-54; and 55+ years
- Employment: 50% in paid work
- Household income: 50% below \$1,000 per week (<\$52,000 annual income)
- Postcodes: Range of postcodes from Metropolitan and Country areas. Two participants each from far and near country areas (at least 300 km and 100km respectively from Adelaide, South Australia).

Table 2: Expert information and modules provided to Citizens' Jury on Day 2: South Australia, April 2015. (additional material requested by the jury for day 3 is shown in italics)

Expertise	Expert area	Information module/data provided
Nutrition	Healthy weight and nutrition	Healthy body weight; <i>Trends in overweight and obesity in children</i> [33]; <i>Evidence of the relative contribution of excess energy intake versus reduced physical activity</i> [34]
Public health law	Use of public health law	Laws/policies in Australia which support children and adults to eat healthy and be active (review of Acts and Bills)[15] <i>Lancet Infographic: "How can governments support healthy food preferences?"</i> [35]
Public health	Individual interventions	What's the evidence? What works? (Review of Acts and Bills in US and EU[7]; New York Case Study[31] <i>Evidence of effectiveness of front of pack labelling systems</i> [36]
Public health policy	School settings and local government	Review (Expert opinion and review of Acts and Bills in Australia)[15] <i>Health and Physical Education, Australian School Curriculum Version 8.1 F-10</i>
Law	Marketing	Review (Expert opinion)
Public health policy	Relevant overseas legislation	Legislation and regulation proposed, implemented and retracted overseas[7]
Social sciences	Public perspectives	SA Aboriginal community views (unpublished findings from focus groups, interviews, community forum) from the HealthyViews Study [28] and broader public views (survey, focus groups, discussion forum analysis) [29, 30]
Health economics	Economic aspects of obesity, obesity law and resource allocation	Economic aspects of policies for healthy weight (Expert opinion) <i>Cost Effectiveness of primary prevention versus treatment</i> [37]
Food Industry	Industry perspectives	Expert opinion
Public health and government	Political environment	Expert opinion
Ethics	Ethical aspects	Expert analysis

Table 3. Final recommendations from Citizens' Jury held Adelaide, South Australia, April 2015.

Counts of high (gold sticker) and low (blue sticker) priority votes by jury members. In deliberation, the jury designated that a high priority vote be weighted twice that of a low priority vote. This gave rise to a weighted total and the final priority order of interventions.

Priorty order	Intervention	High priority (score x 2)	Low priority (score x 1)	Total	Weighted total
1	School-based education and health promotion (e.g. kitchen gardens and cooking skills)	12	7	19	31
2	Labelling laws	11	4	15	26
3	Taxation	8	9	17	25
4	General education about nutrition	6	7	13	19
5	Regulation of physical activity and nutrition in schools, incl. zoning of fast food outlets around schools	5	9	14	19
6	Advertising bans	7	3	10	17
7	Senate inquiry to define unhealthy food	7	3	10	17
8	Education for new parents	2	6	8	10
9	Ban food company sponsorship	0	6	6	6
10	Farm subsidies	0	3	3	3

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