

POLICY AND PRACTICE

Barriers, facilitators and capacities for childhood obesity prevention in 12 European Union Member States: results of a policy-maker survey

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ABSTRACT

Background: Calls are increasing internationally for the development of policies to combat childhood obesity. From a social science perspective, the development and implementation of such policies are poorly understood. In particular, international data on the perceptions of policy-makers and stakeholders acting in the field of childhood obesity prevention are very limited.

Methods: An online survey of 187 policy-makers and stakeholders from different policy sectors was conducted in 12 European Union (EU) Member States. The survey assessed respondents' perception of existing facilitators and barriers for the prevention of childhood obesity. The theoretical Analysis of Determinants of Policy Impact (ADEPT) model was also used to map existing capacities for childhood obesity prevention across the dimensions of goals, obligations, resources and opportunities. The data were gathered as part of the Joint Action on Nutrition and Physical Activity (JANPA), which received funding from the EU Health Programme 2014–2020.

Results: Policy-makers across different policy sectors, such as health, education, nutrition and sports, perceived physical activity-friendly environments and parental support as important facilitators for childhood obesity prevention. The commercial marketing of foods and a lack of funding were seen as the most important barriers. Regarding capacities, policy-makers reported that their organizations felt obliged to act on the issue and saw opportunities to increase their efforts in the future. Nevertheless, the vast majority of respondents reported that their organizations did not have enough staff and financial resources to carry out childhood obesity prevention activities.

Conclusions: The survey results highlight the difficulties of developing and implementing policies for the prevention of childhood obesity. Policy-makers and stakeholders reported that organizations were willing to act but lacked the resources to do so. The results have implications for the development of sectoral and intersectoral policies on this issue.

Keywords: PUBLIC HEALTH, OBESITY, PHYSICAL ACTIVITY, NUTRITION, POLICY-MAKER

INTRODUCTION

From a political science perspective, the prevention of childhood obesity can be described as a “wicked” societal problem and a “chronic” policy problem. Applying the criteria laid out by Rittel & Webber (1), childhood obesity is a wicked issue since its cause(s) can be explained in more

than one way, there are no immediate solutions in sight and all potential available solutions could still be improved. Peters (2) describes chronic policy problems as having, among other criteria, a high level of complexity – requiring actions from more than one policy sector – and a low degree of “monetarization”, indicating that money alone cannot solve the issue.

Despite these rather sober prospects, development and implementation of policies for the prevention of childhood obesity have been made a high priority internationally. The WHO has asked its Member States to develop a Health in All Policies approach that spans policy sectors (such as health, nutrition, sport/physical activity and education) and geographical levels (for example, supranational, national or local) and includes ongoing monitoring to prevent childhood obesity (3). In Europe, the European Commission agreed on an EU Action Plan on Childhood Obesity 2014–2020, which mandates the cooperation of different policy sectors and all policy levels to implement actions to combat the issue (4). The actions proposed include focus on altering school food environments and encouraging physical activity.

The success of such initiatives depends primarily on the capacities of organizations and institutions to develop, implement and evaluate actions. For example, policy decisions at the federal or regional level might require organizations to implement actions to combat childhood obesity. Their capacities to do so include the ability to deliver such actions with the required structures, organization, skills and resources; the ability to do so in a sustainable way; and the ability to identify and solve problems independently of support from other organizations (5). Beyond these internal organizational capacities, external environmental factors such as partnerships or the political context can either improve or limit the ability of organizations and institutions to develop, implement and evaluate actions. Such external environmental factors can function either as facilitators or barriers for action (6).

A number of studies have explored the perceptions of policy-makers regarding facilitators and barriers for childhood obesity prevention. Using qualitative interviews, Dodson et al. (7) identified a favourable political climate, media exposure and the support of key stakeholders as important external facilitators for the adoption of relevant legislation among policy-makers in the United States of America (USA). The study showed that high programme costs and lobbying by the food and beverage industry were the main barriers to policy-making. Also for the USA, Jones et al. (8) demonstrated that policy-makers at the state level have differing views on the role that legislation plays in the prevention of childhood obesity. Among this group, there was no consensus that policy approaches would affect obesity rates. More recently, Rutkow et al. (9) demonstrated that a lack of financial resources and institutional barriers are seen as impeding organizations from focusing on childhood obesity prevention, and in a review of qualitative studies, Clarke et al. (10) identified a lack of adequate funding and

government coordination/regulation as the important barriers named by stakeholders.

Regarding capacities for the prevention of childhood obesity, an Australian study reported that professionals working in the area of healthy nutrition perceived lack of staff, lack of financial resources, and organizational and management issues as limiting their ability to deliver adequate services (11). Loureiro & Freudenberg (12) showed that intersectoral networks are an important determinant of capacities at the community level.

To the authors' knowledge, only a limited number of studies have explored the potential facilitators, barriers and capacities for childhood obesity prevention as perceived by policy-makers and stakeholders cross-nationally. Their study used a theoretical model that maps capacities across the dimensions of goals, obligations, resources and opportunities of organizations and policy sectors in the field (13). Data were gathered via a web-based survey of policy-makers selected through purposive sampling, as part of the Joint Action on Nutrition and Physical Activity (JANPA), which received funding from the EU Health Programme 2014–2020. In particular, the results allow investigation of perceived barriers, facilitators and capacities at different geographical levels and in various policy sectors.

METHODS

THEORETICAL MODEL

The Analysis of Determinants of Policy Impact (ADEPT) model to map perceptions of capacities for the prevention of childhood obesity among policy-makers was derived from a theory on the determinants of human action developed by von Wright (14). According to this theory, wants, duties, abilities and opportunities serve as important determinants of human action.

The theory was adapted for the investigation of determinants of organizational actions, and subsequently of policy outputs and outcomes, in an empirical study (15). According to this model, policy outputs and outcomes are determined by organizational goals, obligations, resources and opportunities. For example, an organization might act to promote healthy diets if it has clearly spelt out targets to do so (goals), has the staff and budget to engage in such activities (resources), is required to do so by government regulations (obligations) and has partnerships and public support to do so (opportunities). Being able to promote healthy diets might produce a policy output (such as running an awareness-raising campaign) or

might even produce an outcome that can be related to the policy (for example, the campaign changes people's knowledge of what constitutes a healthy diet).

An empirical study by Rütten et al. (15) conducted a statistical test of the model based on a survey of 719 policy-makers from six European countries. The results indicated that strongly felt obligations towards population health and perceived organizational opportunities for cooperation are linked to policy output. Policy outcome (or impact) is related to organizations having concrete goals, sufficient resources, and perceived opportunities for support by the population and the media. In the meantime, the model has also been used to map capacities of policy-makers for the promotion of physical activity among sedentary older people (15, 16). A more detailed description of the model can be found in Rütten et al. (13).

SURVEY

The online survey included 19 statements about perceptions of facilitators and barriers for the prevention of childhood obesity in respondents' countries. These statements were formulated at a workshop meeting of the experts involved in the project, and were based in part on the results of other studies; some were formulated by experts in order to provide respondents with a broad range of potential barriers and facilitators. Respondents were asked to rate their agreement with the different statements on a five-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree). Nine statements assessed potential facilitators for childhood obesity prevention (for example, "parental support for the promotion of healthy eating and physical activity is a facilitator for childhood obesity prevention in my country"), while 10 listed potential barriers (for example, "the lack of physical activity-friendly environments is a barrier for childhood obesity prevention in my country").

Determinants of organizational action were assessed via five statements that also required respondents to agree or disagree on a five-point Likert scale (for example, "my organization has specific goals regarding the prevention of childhood obesity") according to the different dimensions of the ADEPT model. For organizational resources, one statement set out information about perceived financial resources and one about perceived human resources. At the beginning of the survey, respondents gave information about the policy sector and geographical level in which they worked. The survey was drafted in English. Researchers engaged in the project translated the survey into different languages to increase compliance and the response rate.

SAMPLING MATRIX

A sampling matrix was developed to ensure that policy-makers and stakeholders from different policy sectors (such as health, nutrition, sport/physical activity and education) and at various geographical levels (for example, supranational, national or local) were contacted. Policy-makers were defined as members of government, legislative or other organizations who are in charge of making new rules or laws. Stakeholders were defined as individuals who work for organizations that are involved in political decision-making processes. The policy sectors included in the sampling matrix were sport/physical activity, nutrition, health care and education – chosen for their apparent high relevance for childhood obesity prevention.

The sampling matrix also gave the option for web links to be sent to respondents from the sectors of media, industry and science. Researchers engaged in the project in the different countries were asked to contact respondents from each sector who were engaged in action at the EU, national, supranational or local levels. Researchers were requested to recruit at least one respondent from each cell of the sampling matrix. Policy-makers and stakeholders were identified by expert rating, or through a snowball referral system.

DATA COLLECTION AND ANALYSIS

Data were collected in the countries that took part in this particular work package of the JANPA project. The online survey was administered by the university of one research partner. The researchers engaged in the project were provided with standardized guidelines on how to contact and follow up policy-makers and stakeholders. A standard accompanying email was developed in English and was translated by all research partners into their native languages. Data were collected in May/June 2016 over a period of five weeks, by sending out a web link to respondents by email. Respondents were informed that taking part in the survey was voluntary and that no names would be reported. In order to increase the response rate, all research partners received a weekly update regarding the number of completed questionnaires and were asked to send a reminder to those policy-makers who had not yet responded via email and phone.

The analysis is descriptive; it reports mean values and the percentage of respondents who agreed/disagreed with the various statements, in line with the exploratory nature of the study.

RESULTS

In total, 187 questionnaires were completed. While in some countries the response rate was quite high (at around 70% in Germany, for example), it may have been lower in other countries. The respondents' organizations were located in 12 EU Member States, and three described themselves as EU-level institutes. The number of respondents varied widely by country, ranging from four (Bulgaria) to 29 (Slovakia). The majority of organizations operated at the national level (61.5%); those operating at the supranational level (19.3%), the EU level and the local level (9.6% each) were underrepresented.

Many respondents reported that their organization operated in more than one policy sector. Almost two thirds of respondents stated that their organization was part of the health sector (64.7%), followed by education (54.5%), nutrition (42.8%) and sports and physical activity (31.0%). Regarding the different stages of the policy cycle, the organizations were mainly involved in the development of new policies (40.6%), influencing decision-making (50.8%), and the implementation of policies (44.4%) for childhood obesity prevention (Table 1). The respondents mainly worked in ministries (12.3%) or public health institutions outside ministries (25.1%).

Policy-makers and stakeholders perceived the main external facilitators for the prevention of childhood obesity to be presence of physical activity-friendly environments (67.3%), parental support for the promotion of healthy eating and physical activity (66.5%) and restricted marketing in the school setting (61.5%) (Table 2).

The strongest barriers for the prevention of childhood obesity were perceived as commercial marketing of foods (68.7%), lack of public funding and resources (67.9%), and lack of parental support (67.6%) (Table 3).

The majority of policy-makers reported that their organizations had specific goals for the prevention of childhood obesity (59.6%), felt obliged to act on this issue (75.4%), and saw opportunities to increase their efforts (64.6%). But only a few reported that their organizations had sufficient human resources (21.0%) and financial resources (9.4%) (Fig. 1).

TABLE 1. BACKGROUND OF RESPONDENT POLICY-MAKERS AND STAKEHOLDERS IN THE FIELD OF CHILDHOOD OBESITY PREVENTION (N=187)

Category	Number of respondents	Proportion (%)
Location		
EU	3	1.6
Bulgaria	4	2.1
Estonia	10	5.3
Germany	24	12.8
Greece	23	12.3
Hungary	15	8.0
Italy	17	9.1
Latvia	10	5.3
Poland	11	5.9
Romania	12	6.4
Slovakia	29	15.5
Slovenia	12	6.4
Spain	16	8.6
Other	1	0.7
Policy level		
EU	18	9.6
National	115	61.5
Supranational	36	19.3
Local	18	9.6
Policy sector (multiple answers possible)		
Health	121	64.7
Education	102	54.5
Nutrition	80	42.8
Sports & physical activity	58	31.0
Other	25	13.4
Policy involvement (multiple answers possible)		
Development of new policies	76	40.6
Decision-making	24	12.8
Influencing decision-making	95	50.8
Implementing policies	83	44.4
Evaluating policies	55	29.4
Not involved in policy-making	26	13.9
Other	25	13.4

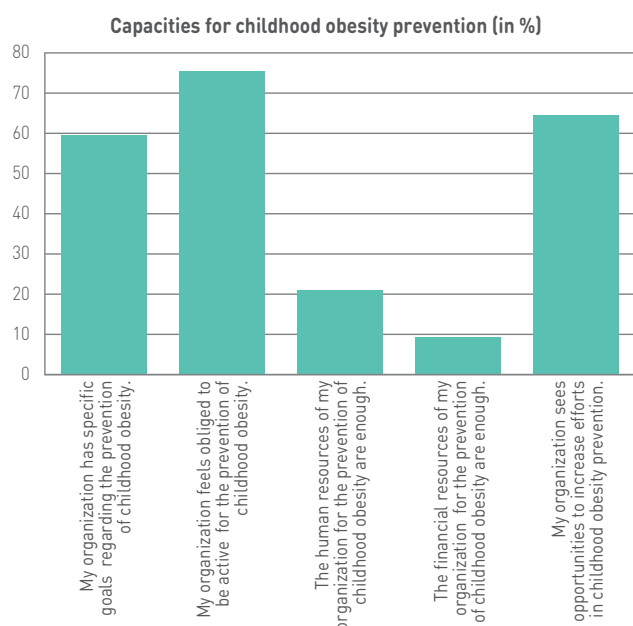
TABLE 2. PERCEIVED FACILITATORS FOR THE PREVENTION OF CHILDHOOD OBESITY (MULTIPLE ANSWERS POSSIBLE) (N=187)

Facilitators	Frequency (n)	Proportion of respondents who strongly agreed/agreed (%)
Physical activity-friendly environments are a facilitator for childhood obesity prevention in my country.	115	67.3
Parental support for the promotion of healthy eating and physical activity is a facilitator for childhood obesity prevention in my country.	115	66.5
Restricted marketing in the school setting is a facilitator for childhood obesity prevention in my country.	104	61.5
Availability of healthy food choices is a facilitator for childhood obesity prevention in my country.	105	61.4
Motivation/support of school staff is a facilitator for childhood obesity prevention in my country.	105	60.7
Adequate funding and resources is a facilitator for childhood obesity prevention in my country.	96	55.5
Government regulation and guidance is a facilitator for childhood obesity prevention in my country.	89	51.8
Subsidies for healthy foods are a facilitator for childhood obesity prevention in my country.	79	47.6

TABLE 3. PERCEIVED BARRIERS FOR THE PREVENTION OF CHILDHOOD OBESITY (MULTIPLE ANSWERS POSSIBLE) (N=187)

Barriers	Frequency	Proportion of respondents who strongly agreed/agreed (%)
Commercial marketing of foods is a barrier for childhood obesity prevention in my country.	114	68.7
Lack of public funding and resources is a barrier for childhood obesity prevention in my country.	118	67.9
Lack of parental support for the promotion of healthy eating and physical activity is a barrier for childhood obesity prevention in my country.	119	67.6
Lack of understanding and acceptance as a public health problem by society/the general public is a barrier for childhood obesity prevention in my country.	116	66.3
Lack of physical activity-friendly environments is a barrier for childhood obesity prevention in my country.	112	64.4
The high relative price of "healthy foods" compared to "unhealthy foods" is a barrier for childhood obesity prevention in my country.	99	58.9
Undermotivation and lack of support of school staff is a barrier for childhood obesity prevention in my country.	97	55.1
Lack of government regulation and guidance is a barrier for childhood obesity prevention in my country.	92	52.3
Lack of healthy food choices is a barrier for childhood obesity prevention in my country.	89	50.6

FIG. 1. PROPORTIONS OF RESPONDENTS WHO STRONGLY AGREED/AGREED WITH PERCEIVED GOALS, OBLIGATIONS, RESOURCES AND OPPORTUNITIES FOR THE PREVENTION OF CHILDHOOD OBESITY (N =187)



Policy-makers in organizations operating at the local level were less likely to report having goals for the prevention of childhood obesity (35.5%) compared to the other geographical levels (60.5% at the national and 69.4% at the supranational level, for example). Sufficient financial resources to work on the prevention of childhood obesity were reported by policy-makers from organizations operating at the local or national level less often (5.9%) than at the EU level (25%). No major differences by policy sector were reported regarding the perceived capacities of policy-makers.

DISCUSSION

STUDY FINDINGS

The study reported on the results of a survey of policy-makers and stakeholders from different policy sectors and geographical levels regarding facilitators, barriers and capacities for the prevention of childhood obesity in 12 EU Member States. Across the different policy sectors, physical activity-friendly environments were most often perceived as a facilitator for childhood obesity prevention. Furthermore, receiving parental support and restrictions on the commercial marketing of food in school settings were seen as facilitators by policy-makers and stakeholders. Lack of parental support was seen as a barrier, as was the commercial marketing of foods in general.

Respondents' perceptions of facilitators and barriers were largely in line with the results of other studies. For example, Clarke et al. (10) reported in their systematic review that parents, school staff and students perceive a physical activity-friendly school environment as important for health promotion in schools. The importance of partnerships with parents as a facilitator for the promotion of healthy eating and physical activity was also named in that review, and one other study reported that stakeholders see parental support as important in the process of policy development to combat childhood obesity (7).

The assessment of organizational capacities with the ADEPT model (15) yielded important insights. Policy-makers perceived a lack of financial and human resources for childhood obesity prevention in their organizations: only one in five felt they had enough human resources and only one in 10 felt they had enough financial resources. In particular, policy-makers in organizations operating at the local level reported a lack of resources. According to the ADEPT model, this will seriously limit positive policy outcomes. Policy-makers were much more optimistic about their capacities regarding the goals, obligations and opportunities of their organizations: no large differences were found for these across the different policy sectors.

As in this study, other stakeholder surveys have shown a lack of financial and human resources for childhood obesity prevention at schools (10), among health managers and practitioners (11) and among officials in local government (17). Also, at the national level, the potential high costs of school and community programmes for childhood obesity prevention were reported to be a barrier for the introduction of legislation (7). While these results might not come as a surprise, their consequences for the prevention of childhood obesity are difficult to dispute, since financial and human resources are an important factor for the widespread dissemination of obesity prevention programmes (18). A lack of financial resources might result in organizations not being able to hire staff to implement actions, and as such might magnify an overall lack of capacities. The survey questions did not, however, immediately enquire into such potential linkages between the lack of financial and human resources.

IMPLICATIONS FOR POLICY DEVELOPMENT

Policy-makers indicated in the survey that developing physical activity-friendly environments and establishing restrictions on commercial marketing of food were seen as important facilitators for childhood obesity prevention. From a social science perspective, both pose unique – and

partly overlapping – “wicked” issues for policy-makers (1). Other studies have shown that policy-makers perceive infrastructural changes and the promotion of active transport to be effective in combating obesity among children (19), but it has also been shown that physical activity promotion is itself a “chronic” policy problem. This is partly caused by the interdependencies of different sectors in creating physical activity-friendly environments (20), which require the health sector to cooperate with the education (responsible for school environments) and transport/urban planning (responsible for community-level infrastructure) sectors. Such intersectoral collaboration could be challenging, since the sectors might not share policy goals (17). Further, the issue of which sector finances potential actions might need to be resolved, since up-front investments in infrastructure for physical activity are considered costly, although cost-effective in the long run (21). Grant et al. (22) also identified, among other things, perceived financial and governance barriers for policy-makers when discussing investments in the built environment. On top of such governance issues, parental support for actions to promote, for example, active transport to schools may not be guaranteed, since safety issues might give rise to debate. In the light of such potential issues, it is understandable that stakeholders might rather endorse mandatory daily physical education classes (23) or other changes to the curriculum (24) to promote physical activity among children.

Various stakeholder surveys have demonstrated the complexity of commercial marketing of food. In one other study, at the local level, parents, school staff and pupils perceived a lack of government regulation as a barrier for obesity prevention among children (10), but the same study reported that marketing restrictions that might include regulations on food served at schools (or brought to school by pupils) could be highly contested by parents. Such restrictions are also highly unpopular among the food industry and could face stiff resistance from its lobbyists (7).

Thus, it might be not surprising that practitioners and policy-makers perceive the impact of a ban on advertising unhealthy foods in schools and school venues as high, but rate the feasibility of such a policy as rather low (25). Raine et al. (23) also report that policy-makers were only in moderate support of restrictions on sugar-sweetened drinks and other unhealthy foods from vending machines in schools. These kinds of legislation are already in place in many EU countries (such as Hungary, Latvia and France).

From a cross-national perspective, the results of this survey may suggest that more political effort is needed to secure additional financial and human resources for childhood obesity prevention. To achieve this, the benefits of investing in childhood obesity prevention may need to be stressed. The current lack of resources may make it necessary to focus on the development and scale-up of low-cost interventions that have been demonstrated to be effective.

STUDY LIMITATIONS

The authors acknowledge that the data presented are explorative. The ADEPT model from which the statements were derived has been used in a number of studies (15), but those used in this survey were derived by project partners and not tested for reliability. Further, in some instances it might have been useful to ask additional open-ended questions of respondents. In general, questionnaires assessing perceptions of capacities might have low validity, since they only assess perceptions rather than actual capacities. In the data analysis, results were not weighted by country or policy sector and level, and thus could be skewed towards countries from which a higher number of policy-makers responded. Despite such limitations, however, the data provide valuable insights. Relatively few surveys have collected cross-national data on this issue.

CONCLUSION

The results presented could be used to reflect on future strategies for the prevention of obesity among children. Crisp et al. (26) have outlined some approaches that can be used by organizations to overcome a lack of capacities. The intersectoral challenges presented for policy development on the issue of obesity prevention may, however, remain an important issue that will need to be addressed in the future.

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¹ All references were accessed on 7 August 2018.