



Prevention of overweight and obesity undertaken by local government units in Poland

Anna Augustynowicz^{a,*}, Aleksandra Czerw^a, Mariola Borowska^a, Andrzej Deptała^b, Grażyna Dykowska^a, Adam Fronczak^c

^a Department of Economics of Health and Medical Law, Medical University of Warsaw, Poland

^b Department of Cancer Prevention, Medical University of Warsaw, Poland

^c Department of Public Health, Medical University of Warsaw, Poland

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ABSTRACT

Background: Based on the estimates of World Health Organization (WHO), in European Union countries overweight or obesity affects more than 60% of men and over 50% of women. According to the nationwide European Health Interview Survey (EHIS) survey conducted in 2014, in Poland over 62% of men and nearly 46% of women carried excess weight in 2014.

Objective: The objective of the paper is to present health policy programmes aimed at prevention of overweight and obesity developed, implemented and funded by local government units (self-governments of voivodeships, counties, municipalities) in Poland in 2010–2016.

Methods: The study was based on a desk research. It covered data from two sources, i.e. data included in annual reports formulated by voivodes and submitted to Minister of Health concerning all health policy programmes implemented by local government units and data published online as part of reviews of draft programmes by the Agency for Health Technology Assessment and Tariff System (AOTMiT).

Results: In the period under review local government units implemented a total of 333 overweight and obesity prevention programmes. 18 programmes were reviewed by AOTMiT. Most programmes have been implemented in the Zachodniopomorskie and Mazowieckie Voivodeships, whereas the least in the Podlaskie, Lubelskie and Kujawsko-Pomorskie Voivodeships. Around 99% of municipalities, 97% of counties and 86% of self-governments of voivodeships did not complete any overweight and obesity prevention programmes in the period under review.

Conclusion: Insufficient engagement of local government units in the prevention of overweight and obesity – one of the primary objectives of the National Health Programme for 2007–2015 and 2016–2020. Differences in terms of the number of programmes implemented by particular types of local government units and the financial resources employed in the implementation of the programmes. Failure to fulfil the statutory obligation to obtain a review from AOTMiT. Failure to address the actual health needs of local communities related to overweight and obesity prevention by some of the voivodeships.

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1. Background

Overweight and obesity are among the most common lifestyle-related health problems. Obesity might be viewed as a separate disease class or as a risk factor for chronic cardiovascular diseases, certain types of cancer, type 2 diabetes, degenerative joint diseases and many others [1]. The detrimental effect of overweight on human health has been confirmed by the results of the Global Burden of Disease Study [2] which ranked it as the third most seri-

ous risk factor of global disease burden in 2013, both in Poland and in the countries of Central and Western Europe.

Based on the estimates of World Health Organization (WHO), in European Union countries overweight or obesity affects more than 60% of men and over 50% of women [3]. According to the nationwide European Health Interview Survey (EHIS) survey conducted in 2014, in Poland over 62% of adult men (of whom 44% were overweight and 18% obese) and nearly 46% of adult women (of whom 30% were overweight and 16% obese) carried excess weight [4]. The percentage rates for both men and women increased by 1% compared to 2009 [5]. According to the 2009 EHIS survey, the population of adult men with overweight or obesity and the population of women with overweight or obesity increased by 9% and 5% respectively compared to 2004 [6].

* Corresponding author at: Department of Economics of Health and Medical Law, Medical University of Warsaw, ul. Banacha 1a, 02-097, Warszawa, Poland.

E-mail address: aaugustynowicz@poczta.onet.pl (A. Augustynowicz).

The prevention of overweight and obesity is one of the primary objectives of public health. It results from the strategy papers related to public health, namely the National Health Programme for 2007–2015 [7] and the National Health Programme for 2016–2020 [8]. The above-mentioned documents highlight the need to undertake actions aimed at improving nutrition, nourishment and reducing the prevalence of obesity. In Poland organised overweight and obesity prevention initiatives on a nationwide scale were held as part of a programmed titled “National Programme for Prevention of Overweight and Obesity and Chronic Non-Communicable Diseases through Better Nutrition and Physical Activity for 2007–2011”. On a regional and local scale local government units implement health policy programmes. The implementation of such programmes is not obligatory.

2. Objective

The objective of the paper is to present health policy programmes aimed at prevention of overweight and obesity developed, implemented and funded by local government units in Poland in 2010–2016.

3. Methods

The study was based on a desk research. It covered data from two sources, i.e. data included in annual reports formulated by voivodes and submitted to Minister of Health concerning all health policy programmes implemented by local government units and data published online as part of reviews of draft programmes by the Agency for Health Technology Assessment and Tariff System. The analysis covered overweight and obesity prevention programmes submitted for review by AOTMiT and implemented by local government units in 2010–2016. The analysis covered programmes completed by local government units of all ranks, i.e. by the largest administrative units (i.e. self-governments of voivodeships), by second-degree administrative units that rank below voivodeships (i.e. counties) and by primary administrative units (i.e. municipalities). The class of counties also includes county towns.

The number and substance of programmes reviewed by AOTMiT and programmes completed by particular types of local government units in 2010–2016 were subject to an analysis. The analysis also covered the costs of implementation of the programmes depending on the type of a local government unit.

4. Results

In 2010–2016 local government units of all ranks completed a total of 333 health policy programmes aimed at the prevention of overweight and obesity. The greatest number of programmes, i.e. 267, focused on the prevention of overweight and obesity among children and teenagers. Some of the programmes were addressed to both children and teenagers as well as adults. In 2010–2016 the health policy programmes covered a population of 255,000 people, 176,000 out of whom were children. The prevention activities undertaken under the programmes addressed to children and adults involved mainly training and workshops that promoted a healthy diet and physical activity. Education materials such as posters, brochures and reference books were distributed amongst various social groups. In addition, promotional campaigns were conducted through the media.

During the period under review AOTMiT reviewed 18 overweight and obesity prevention programmes, out of which 7 were approved, 3 were approved conditionally and 8 did not receive approval. The reservations expressed by AOTMiT concerned: insuf-

Table 1

The number of draft programmes reviewed by AOTMiT and the number of programmes completed by local government units in 2010–2016.

	2010	2011	2012	2013	2014	2015	2016
The number of programmes submitted for review	1	5	3	1	1	0	7
The number of programmes implemented	38	58	50	50	46	4	87

Table 2

The number of programmes implemented in particular voivodeships in successive years.

Voivodeship	Year						
	2010	2011	2012	2013	2014	2015	2016
Dolnośląskie	4	1	3	3	3	0	2
Kujawsko-Pomorskie	4	2	0	1	1	0	1
Lubelskie	1	1	0	1	2	0	4
Łódzkie	2	1	1	1	1	0	12
Małopolskie	2	6	1	1	1	1	1
Mazowieckie	7	11	7	5	6	0	7
Opolskie	1	1	1	1	1	1	9
Podkarpackie	1	1	8	8	5	0	3
Podlaskie	1	0	1	0	1	0	3
Pomorskie	3	2	2	4	2	1	4
Śląskie	6	11	7	6	3	1	3
Świętokrzyskie	1	2	2	2	2	0	14
Warmińsko-Mazurskie	2	5	5	5	6	0	2
Wielkopolskie	1	3	1	1	1	0	8
Zachodniopomorskie	2	10	10	10	10	0	3
Lubuskie	0	1	1	1	1	0	11

ficient reasons for undertaking the programme, including selective use of epidemiological data; purpose of the programme (the purpose of the programme was too extensive and difficult to achieve during the anticipated time of implementation of the programme, the primary purpose of the programme failed to meet the S.M.A.R.T. criteria: specific, measurable, achievable, relevant, time-bound); planned activities (no description of planned activities, the description of activities was not specific enough, the range of proposed activities was too broad, no information about the efficacy and safety of planned activities); population to be covered by the programme (a lack of clear specification of the population to which the programme was addressed, lack of eligibility criteria for the programme); costs (the cost of planned activities was overestimated, the programme was not cost-effective, no detailed budget for the programme was provided); monitoring and evaluation (no monitoring and clinical efficacy evaluation system was defined, no monitoring and evaluation indicators were defined).

The number of draft programmes reviewed by AOTMiT and the number of programmes completed by local government units in particular years (Table 1) as well as the differences in terms of the number of programmes implemented in particular voivodeships were analysed (Table 2).

The greatest number of overweight and obesity prevention programmes were implemented in 2016, the smallest – the year before.

The greatest number of programmes were implemented in Zachodniopomorskie and Mazowieckie Voivodeships. Podlaskie, Lubelskie and Kujawsko-Pomorskie Voivodeships completed the fewest programmes. In 2015 the vast majority of voivodeships did not complete any health policy programme aimed at the prevention of overweight and obesity.

Another aspect covered by the analysis were the differences in the number of programmes completed by particular local government units (Table 3).

In the years 2010–2016, the highest number of programmes was implemented by municipalities – 198. Among the municipalities, most programmes (104) were implemented by municipalities that

Table 3

The number of programmes implemented by particular local government units in successive years.

Local government unit	Year						
	2010	2011	2012	2013	2014	2015	2016
Municipality	22	35	32	33	32	0	44
County	13	21	16	16	13	4	33
Self-government of voivodeship	3	2	2	1	1	0	10

are cities (so-called municipalities), less by urban and rural municipalities (55), and least by rural municipalities (39). Counties have implemented 116 programmes, whereas 19 programmes have been implemented by self-governing voivodeships. In 2015, counties were the only ones to implement health policy programmes in the field of overweight and obesity prevention (Table 4).

Although municipalities have implemented the largest number of programmes concerning the prevention of overweight and obesity, they belong to local government units with the least commitment to implementing such programmes because during the studied period approx. 99% of municipalities have not implemented any programmes concerning the prevention of overweight and obesity. In the case of counties and self-governing voivodeships, this was 97% and 86% percent, respectively. When it comes to self-governing voivodeships, 2016 was an exception because that year, according to verified data, half of the self-governing voivodeships have implemented health policy programmes.

Another aspect subject to consideration were the total and average costs incurred by local government units on health policy programmes related to the prevention of overweight and obesity. The total costs incurred by local government units were the highest in 2016 – over PLN 1 million. The smallest sum was spent in 2015 – around PLN 300,000. In the remaining years local government units expended around PLN 700,000. On average, municipalities spent PLN 61,000, counties spent PLN 23,000 and self-governments of voivodeships spent PLN 87,000. The sums spent by municipalities and counties were significantly lower in spite of the fact that they implemented more health policy programmes than self-governments of voivodeships. The available data suggests that municipalities and counties funded only part of the activities involved in the programmes. The programmes were co-financed by foundations or other public benefit organisations involved in organisation and implementation of overweight and obesity prevention.

5. Discussion

The research conducted in recent years in Poland demonstrates that the incidence of overweight and obesity has been increasing [4–6,9,10]. The need to launch and continue activities aimed at

fighting overweight and obesity is reflected in the strategy papers related to public health, namely the National Health Programme for 2007–2015 and the National Health Programme for 2016–2020. Similar activities should be promoted by regional and local initiatives, scientific societies and non-governmental organisations. The local government units that developed, implemented and funded overweight and obesity prevention programmes followed the guidelines set out in the strategy papers. Considering the fact that 99% of the municipalities, 97% of the counties and 86% of the self-governments of voivodeships did not complete any overweight and obesity prevention programme and that the programmes involved less than 0.70% of the population, the engagement of local government units in fulfilment of that aim of the National Health Programme must be deemed insufficient.

It was found that the number of overweight and obesity prevention programmes submitted for review by AOTMiT and the number of programmes implemented by the local government units were different. The obligation to submit programmes developed by the local government units for review by AOTMiT was introduced by the amendment of the Act on Publicly Funded Healthcare Services of 25 June 2009 [11]. Each programme had to be reviewed by AOTMiT, however, the conclusion of the review was not binding upon the programme organiser [12]. In consequence, organisers could proceed with implementation of programmes that had not been approved [13]. The fact that there were nearly twenty times more programmes completed than programmes reviewed is a proof that local government units failed to comply with their statutory obligation to obtain a review. The above conclusion coincides with the findings from the inspection conducted by the Supreme Audit Office concerned with the implementation of health policy programmes by local government units [14]. Failure to submit a draft programme for review is probably the result of insufficient knowledge of the applicable regulations. Perhaps local government units did not comply with their statutory obligation due to the low quality of draft health policy programmes and thus exposed themselves to the risk of being accused of a breach of public finance discipline. The failure to obtain a review from AOTMiT increases the likelihood of implementation of programmes of low quality. In consequence, it is probable that planned activities will not produce the desired outcome and public funds will be spent ineffectively. For the foregoing reasons, the amendment of the Act on Publicly Funded Healthcare Services of 29 September 2017 that introduces an approval or conditional approval by AOTMiT as a prerequisite for implementation, completion and funding of health policy programmes [15], should be evaluated positively.

It was found that the number of programmes implemented by particular local government units and the financial resources employed in the implementation of the programmes were different. With regard to the number of programmes per a given type of local government unit, municipalities proved to be the least efficient. Considering the number of programmes per one local

Table 4

The number of local government units that did not implement any programmes or implemented one or two or more programmes in 2010–2016.

Local government unit	Number of programmes	Number of units implementing programmes in particular years						
		2010	2011	2012	2013	2014	2015	2016
Municipality	0	2,465	2,459	2,463	2,462	2,460	2,479	2,452
	1	7	10	5	7	10	0	15
	2 or more	7	10	11	10	9	0	12
County	0	371	366	369	368	370	378	358
	1	6	10	7	8	7	0	13
	2 or more	3	4	4	4	3	2	9
Self-government of voivodeship	0	14	14	15	15	15	16	8
	1	1	2	0	1	1	0	6
	2 or more	1	0	1	0	0	0	2

government unit of a specific type, the situation of rural municipalities appears to be the least favourable. On average, in the years 2010–2016, there was one overweight and obesity prevention programme per 39 municipalities. The situation of urban municipalities as well as urban-rural municipalities seems to be more favourable in this respect. On average, there was one programme per 3 rural municipalities and per 12 urban-rural municipalities. In the case of counties and cities with county rights, statistically, on average, there was one programme per 3 counties. In terms of the budget allocated for all health policy programmes in 2010–2016 [16–19], the greatest budget allocation (around 1.7% of the budget) was made by municipalities that were followed by self-governments of voivodeships (around 1.1% of the budget). The percentage share of expenditure on programmes concerned with the prevention of overweight and obesity in counties and county towns was 0.3%. The analysis of the expenditure structure in local government units shows that they expended the funds, first and foremost, on fulfilment of their statutory obligations. The insignificant number of programmes plus a relatively modest allocation of funds could be a sign that local government units underestimate the significance of overweight and obesity prevention. This might also serve as evidence of unequal access to health policy programmes. The access to a programme could depend on the place of residence and be limited to people resident in a particular area with low income. This conclusion coincides with the findings from the inspection conducted by the Supreme Audit Office [14].

It was found that the level of engagement of local government units in implementation of secondary prevention programmes varied in particular voivodeships. The difference should be a consequence of identified health needs and health condition of residents. The analysis of distribution of weight in particular regions conducted as part of the 2009 EHIS study showed that the highest weight was recorded among residents of Śląskie, Opolskie, Małopolskie, Mazowieckie and Wielkopolskie Voivodeships. The weight of over 52% of the adult population in those voivodeships exceeded the normal weight and in many instances it approached the obesity level. The incidence of overweight and obesity was the lowest among residents of Świętokrzyskie, Lubelskie, Pomorskie and Warmińsko-Mazurskie Voivodeships – they affected one out of two people aged 15 or more [5]. In 2014 the heaviest populations were those of Łódzkie, Opolskie and Śląskie Voivodeships – the weight of 56% of the populations exceeded the normal weight. The incidence of overweight was the lowest in Mazowieckie, Dolnośląskie, Zachodniopomorskie and Podkarpackie Voivodeships [4]. Considering the number of programmes implemented in particular voivodeships, the problem of overweight and obesity was addressed most adequately in Śląskie and Mazowieckie Voivodeships. The opposite can be said for Opolskie, Łódzkie, Lubuskie and Małopolskie Voivodeships. In spite of the large percentage of overweight and obese residents, only 15 overweight and obesity programmes were completed in Opolskie Voivodeship during the seven years under review. Łódzkie Voivodeship completed only 18 programmes in 2010–2016 and recorded the highest increase in the percentage of overweight and obese residents over those years (i.e. by around 5%). The situation in Lubuskie Voivodeship must be evaluated critically as well (15 programmes and over 3% rise in overweight population). This means that at least some of the local government units did not factor in the health needs and health condition of residents in the process of making decisions about development, financing and implementation of health policy programmes. This is contrary to Art. 7 Sec. 1 Clause 1, Art. 8 Clause 1 and Art. 9 Clause 1 of the Act on Publicly Funded Healthcare Services.

The information included in the reports of voivodes is insufficient to evaluate the effectiveness of overweight and obesity

prevention programmes and the efficacy of actions undertaken as part of such programmes.

6. Conclusions

- 1 Insufficient engagement of local government units in the prevention of overweight and obesity – one of the primary objectives of the National Health Programme.
- 2 Differences in terms of the number of programmes implemented by particular types of local government units and the financial resources employed in the implementation of the programmes.
- 3 Local government units' failure to fulfil their statutory obligation to obtain a review from AOTMiT, which increases the likelihood of implementation of programmes of low quality.
- 4 Failure to address the actual health needs of local communities related to overweight and obesity prevention by some of the voivodeships.
- 5 Local government units should be subject to research to identify the determinants of development and implementation of health policy programmes and to present the outcomes of the implemented programmes.

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