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DETERMINING THE USE OF HEALTH CARE SERVICES BY OBESE INHABITANTS OF WARSAW. A PRELIMINARY STUDY

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ABSTRACT

Background. The excessive use of health care services by obese people constitutes a serious financial burden to all highly developed countries. As yet however, this has not been recognised to be a problem in Poland.

Objective. To provide a preliminary analysis of Warsaw inhabitants in their use of and quality of received health care by comparing obese subjects with those of normal weight.

Materials and methods. Study subjects were fifty three obese (BMI>30) and one hundred eighty one normal weight (18.5<BMI<25) inhabitants of Warsaw, who had taken part in a study on social participation in health care reforms. The use of health care services covered: visits to public health care physicians, hospitalisation and visiting private physicians. Assessing health care quality was by evaluating overall the health care system and the family doctor as well as out-of-pocket treatment expenses and any difficulties in accessing physicians.

Results. Obese subjects perceived their health to be significantly worse than those of normal weight and significantly more of them never attended private practice. Consultation with public health physicians was also frequently, but not significantly, higher in the former whilst hospital admissions were the same in both groups. Obese subjects gave considerably lower general assessments of the quality of the health care system and more often perceived their medical expenses as being very high, nevertheless, both these differences were statistically insignificant.

Conclusions. The obtained findings have allowed us to formulate new recommendations for future research. These will examine various uses of health care services by the obese, i.e. family doctors and other specialists of public primary health care, out-patient clinic physicians and private physicians (according to their defined specialisations), hospitals according to location and rehabilitation centres. Account will be taken of visiting frequency, admission waiting time for physicians, length of visits, amounts of prescribed medication, out-of-pocket payment for treatment and medication, frequency of surgical interventions, satisfaction with given treatments and physician attitudes towards obese patients. Moreover, the socio-economic status of the obese will be investigated as a potential obstacle to using health care services.

Key words: *overweight, obese, health care utilisation, health care quality*

STRESZCZENIE

Wprowadzenie. Częstsze korzystanie przez osoby otyłe z usług opieki zdrowotnej stwarza poważne koszty we wszystkich wysoko rozwiniętych państwach. W Polsce problem ten nie został dotychczas rozpoznany.

Cel badań. Przedstawiona praca ma na celu dokonanie wstępnej analizy korzystania z opieki zdrowotnej i oceny jej jakości przez otyłych mieszkańców Warszawy w porównaniu do osób ważących prawidłowo.

Materiał i metody. Do analizy włączono 53 otyłych (BMI>30) i 181 prawidłowo ważących (18,5<BMI<25) mieszkańców Warszawy, którzy wzięli udział w badaniu uczestniczenia społeczeństwa w reformowaniu opieki zdrowotnej. Korzystanie z usług opieki zdrowotnej obejmowało: wizyty u lekarzy publicznej opieki zdrowotnej, hospitalizację i wizyty u lekarzy prywatnych. Na jakość opieki zdrowotnej składały się: ogólna ocena systemu zdrowia, ocena lekarza rodzinnego, własne wydatki na leczenie i trudności w dostaniu się do lekarza.

Wyniki. W porównaniu do respondentów ważących prawidłowo otyli znacząco gorzej postrzegali własne zdrowie i znacząco większy ich odsetek nigdy nie odwiedził prywatnych lekarzy. Oni częściej (ale nieistotnie statystycznie) konsultowali się z lekarzami publicznej opieki zdrowotnej, natomiast przyjęcia do szpitala były takie same w przypadku obu grup. Jeśli chodzi o jakość systemu opieki zdrowotnej, otyli respondenci zauważalnie niżej oceniali ogólnie system i częściej postrzegali własne wydatki na leczenie jako bardzo wysokie, jednak obie różnice były nieistotne statystycznie.

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Wnioski. Uzyskane wyniki pozwoliły nam na sformułowanie zaleceń dla naszych przyszłych badań. Sprawdzą one korzystanie z różnych usług opieki zdrowotnej przez otyłych (lekarze rodzinni i inni specjaliści publicznej podstawowej opieki zdrowotnej, lekarze poradni o różnych specjalnościach, szpitale ze względu na położenie, ośrodki rehabilitacyjne, lekarze prywatni o różnych specjalnościach), uwzględniając częstość wizyt, czas oczekiwania na przyjęcie do lekarza, długość wizyt, ilość przepisywanych leków, koszty własne leczenia i leków, częstość zabiegów chirurgicznych, zadowolenie z danego leczenia, a także postawa lekarza wobec pacjenta. Ponadto, badaniu poddany będzie status społeczno-ekonomiczny otyłych jako potencjalna przeszkoda korzystania z usług opieki zdrowotnej.

Słowa kluczowe: *nadwaga, otyłość, korzystanie z opieki zdrowotnej, jakość opieki zdrowotnej*

INTRODUCTION

Obesity is generally regarded as a growing financial burden to the public purse. Costs are estimated as being 1.3% – 2.7% of total health care spending or 0.1% – 0.7% of GDP in European countries [5, 6], whilst costs in the United States are as much as 4.8% - 9.1% and 1.2 – 1.4% respectively [3, 14]. These increased costs of obesity arise from the greater risk of suffering from chronic disease compared to persons without this condition and which thereby require the more frequent use of health care services. As yet however, there have been no such cost assessments of obesity carried out in Poland.

In a previous article by the authors, the risk of overweight and obesity in chronic diseases amongst Warsaw inhabitants was analysed using information collected by the survey method [12]. The aim of the presented paper is use the self-report method for measuring the differences between obese and normal weight Warsaw inhabitants in their use of health care services and perceived quality of health care.

MATERIAL AND METHODS

The presented study forms part of a wider research project on social participation in health care reforms, whose general aim was to examine the usefulness of information gathered by the survey method for creating and implementing health care policy. It was expected that a number of important public health problems, as perceived by citizens themselves, would be thus become recognised and that recommendations for future research could be formulated. The initial survey was performed in 2011 in Warsaw, whose purpose was to develop a tool that would gather as much information as possible using the shortest questionnaire. Four hundred and two subjects expressed their willingness to participate in the study and returned completed questionnaires, previously provided. The presented analysis included fifty three obese and one hundred eighty one normal weight subjects. Obesity was defined as a BMI>30, and normal weight as being 18.5<BMI<25. A more detailed description of the sample and questionnaire design was described in our previous article [11].

Self-rated health was treated as being a global health measure. The use of health care services covered; visits made to public health care physicians (primary health care providers and specialists), hospitalisation and visiting private physicians. Assessing health care quality was by evaluating the health care system overall and the family doctor as well as out-of-pocket treatment expenses and any difficulties in accessing physicians.

Data for each parameter was subjected to statistical analysis by the *Chi*-squared test (using the Epi Info programme) to test the differences between obese and normal weight respondents in the use of and assessment of health care. A $p<0.05$ level was taken as being significant.

RESULTS

Obese subjects perceived their health to be significantly worse than normal weight respondents (Table 1). There were only minor and insignificant differences between the number of public health care visits made between groups; with obese subjects being the more frequent. Both groups did not differ in hospitalisation rates. Significantly fewer obese subjects made visits to private physicians within the last year.

Table 1. Self-ratings for health and the use of healthcare services in the preceding year made by normal weight and obese subjects living in Warsaw

Use of the health care services	Normal weight (n=181) %	Obese (n=53) %	p[1]
Self-rated health very good/good	48.3	29.4	0.016
Visits to public health care physicians twice or more	50.3	59.6	0.235
Hospitalisation once or more	23.3	23.1	0.969
Visits to private physicians never	22.7	38.5	0.022

[1]*Chi*-square test

No statistically significant differences were found between groups for evaluating health care quality (Table 2). Nevertheless, it is worth noting that obese subjects were more likely to adversely evaluate their health care and to assess their medical expenses as being very high, while fewer of them negatively evaluated their family doctor or perceived any difficulties in getting access to the physicians.

Table 2. Evaluation of health care quality by normal weight and obese subjects living in Warsaw

Health care quality	Normal weight (n=181) %	Obese (n=53) %	p[1]
General evaluation of health care system adverse	34.1	42.8	0.083
Evaluation of family doctor adverse	24.3	17.3	0.288
Out-of-pocket payment for treatment very high	13.9	22.6	0.125
Difficulties in getting to physicians very common	25.0	18.9	0.355

[1]*Chi*-square test

DISCUSSION

It should first be stated that the presented research is preliminary and thus even if there are strong underlying differences in statistical significance between groups, they may not be necessarily apparent.

The current study showed that health as perceived by the obese was worse compared to those of normal weight. Additionally, it was found from the previous studies that the obese have a much higher risk of contracting chronic disease [12]. They are therefore expected to use health care services more frequently than normal weight people; our findings however did not confirm this. There were also minimal differences in visits made to public health care physicians between groups. Unexpectedly, it was found that the obese were admitted to hospital as often as those of the control group. Contrary to our findings, obesity in all high-developed countries was found to increase the frequency of consultations with the primary health care physicians (general practitioners), as well as with out-patient clinic specialists; the frequency however being greater in Western European countries [15, 16, 18] than in the United States [7, 9, 10]. The large differences between the obese and normal weight people admitted to hospital and length of hospital stay were also confirmed [1, 4, 9, 10, 16].

Several previous studies indicated that factors such as the quality of a health care system, society attitudes towards obesity, a given country's financial status and the socio-economic status of the obese appear to influence how health care is utilised by the obese. In countries that rank highest in patient-friendly health care [2], the frequency of consultations with physicians by all citizens was very high, nevertheless, obese persons seem to consult physicians significantly more frequently [15, 18]. Furthermore, in such countries the obese were also twice more frequently provided with information on healthy lifestyles and encouraged to be more physically active [8]. In contrast, health care in the USA is much less favourably assessed by WHO [19], where general practitioners do not reserve more time for treating the obese [7]. Moreover, obese persons issue more claims related to their treatments [10]. A good example of the relationship between a country's economic climate and how health care is utilised is provided by Estonia. It was found that obese Estonians only slightly more sought medical practioners compared to normal weight persons during the economic crisis of 1990-1994. However in the most successful year for the economy in 2004, these differences were considerably increased [13]. It thus seems likely that the Polish health care crisis may cause the obese not to receive the appropriate healthcare that is their due. This could explain the lower ratings for evaluating the health care system by the obese as noted in the presented study. It is also well known that a low socio-economic status amongst the obese is associated with worse health and therefore this group can be expected to use health care more often. A German study has shown that obese persons with a high socio-economic status were those who more frequently used all types of medical services, although they were rarely ill, compared to those obese of low socio-economic status [17]. The presented study demonstrates that the obese were more unlikely to visit private physicians and they more often perceived their medical expenses as being very high. This finding may indicate that the lower socio-economic status in obese inhabitants of Warsaw may be a factor that partially limits their use of health care services.

CONCLUSIONS

Unquestionably, obese people suffer from worse health and they are more likely to suffer from chronic disease so arising. As a discrete risk group, they should be provided with appropriate health care, as well as being encouraged by physicians to adopt a healthy lifestyle. It is therefore obvious that they will more often use health

care services. Despite this, our preliminary analysis did not confirm these assumptions. The presented findings however have allowed recommendations to formulate for future research in order to more precisely identify how often the various health care services are taken advantage of by obese Poles, together with any barriers that prevent this from happening. Our future research will thus consist of the following:

1. A more detailed investigations in the use of the various health care services by the obese (i.e. family doctors and other specialists of public primary health care, specialist physicians in out-patient clinics, hospitals according to location, rehabilitation centres and specialist private physicians). In this, due consideration will be given to the frequency of visits, visit waiting time, length of visits, amounts of proscribed medication, out-of-pocket expenses for treatment and medicines, frequency of surgical interventions, patient satisfaction with particular treatments and the attitudes of physicians towards obese patients.
2. To determine whether socio-economic status of the obese constitutes a barrier for using health care services; in particular focusing on factors such as gender, age, education, marital status, occupation, place of residence, level of wealth, disability and mental well-being.

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Conflict of interest

The authors declare no conflict of interests.

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