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Economic burden of obesity and its comorbidities in Switzerland

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Abstract

Objectives: To estimate the total annual economic costs caused by overweight and obesity in Switzerland.
Methods: Top-down estimation of direct treatment costs for obesity including medication, nutritional counselling, and surgical interventions was carried out. Using Swiss prevalence data (2002) and literature-based estimates of the relative risks the population attributable fraction (PAF) was calculated for 18 overweight- and obesity-related diseases. PAF was then used in combination with estimates of the total (direct and indirect) health care costs of these diseases to estimate the economic burden of obesity for Switzerland.
Results: The estimated total costs in Switzerland amounted to CHF 2 691 million per year (on cost basis 2001). Allowance for uncertainty in parameter assumptions and values in the published literature used applying a sensitivity range of ±20% gave a cost range of between CHF 2153 and 3 229 millions, representing approx. 2.3–3.5% of total health care expenditures. Overweight and obesity contribute each approx. 50 % to these costs.
Conclusion: Overweight and obesity represent a considerable financial burden to the Swiss society. According to their present trends, this economic burden is expected to grow over the coming years.

Keywords: Overweight – Obesity – Burden of illness – Cost of disease.

Overweight and obesity have become the health problem of the 21st century. According to crude estimates there are at present approximately half a billion people world wide affected by either one of these conditions with increasing tendency (Rossner 2002). According to a WHO report (Chopra et al. 2002) non-communicable chronic diseases will become the predominant cause for morbidity and mortality in a few years time. Such diseases will probably be responsible for about two-thirds of all disease costs by the year 2020. Besides tobacco smoking, nutritional factors and an inactive, mainly sedentary, lifestyle are seen as the main risk factors. In the United States more than half of the population, i.e. 55 %, show a BMI of ≥25 and 31 % one of ≥30 (Wolf 2001). In Germany, the obesity prevalence was found to be 20.3% in 1998 (Sander & Bergemann 2003). Prevalence rates for Switzerland (Bundesamt für Statistik 2003c) are also considerable although the obesity prevalence has not yet reached comparable proportions. Of the Swiss population over the age of 15 years 29.4 % are overweight and additional 7.7 % are obese giving a total of 37.1 %. Together these figures correspond to 2.2 million individuals which represent more than one-third of the adult population in Switzerland. As reported in the study of Zimmermann et al. (2000), the problem is not restricted to adults but also inflicts children and adolescents in increasing numbers. However, society in general, most politicians, and many other interest groups are either not aware of the problem or tend to underestimate its significant impact on the country's population. Unfortunately, overweight and obesity do not represent aesthetic or isolated health problems as it often is assumed, but represent forerunners for a series of comorbidities and an overall increased mortality. Overweight and obesity increase the risk of developing diabetes mellitus type II, hypertension, coronary heart diseases, cancer, orthopaedic problems, and other diseases (Bray 1985; Keller 2002; Wirth 2003). This causal relationship may turn overweight/obesity into a condition with a considerable health economic impact that has to be

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taken seriously. With steadily rising costs in the provision of public health services there is increased interest in evidence-based health economic information. This information is often helpful in identifying potential areas where some form of action is required and suggests possible approaches that are also justifiable from an economical point of view. The annual costs of obesity have been estimated to amount to US$ 117 billion in the US (Wolf 2001), to £ 3.3–3.7 billion in the UK (House of Commons Health Committee 2004), and to € 2.7–5.7 billion in Germany (Sander & Bergemann 2003). Based on these estimates it is generally accepted that obesity and its comorbidities generate high medical and social costs. However there exists no estimate of the actual economic burden of obesity for Switzerland. Therefore, the aim of the present study was to estimate this burden of illness caused by obesity and its comorbidities for the Swiss adult population in the year 2001, thereby filling this knowledge gap.

Methods and material

All estimates in this study are based upon prevalence data from the "Schweizerische Gesundheitsbefragung" 2002 (Bundesamt für Statistik 2003c). Overweight was defined as BMI (body mass index) ≥25 and <30 kg/m^2 and obesity as BMI of 30 kg/m^2 or greater. The data used from the year 2002 show a prevalence of 29.4% for overweight and 7.7% for obesity in the Swiss population, yielding a total of 37.1%. Absolute numbers were based on the actual population in the year 2001 without children and adolescents below the age of 15.

Cost estimates were separated from those covering actual treatment costs of overweight and obesity per se and from estimates of costs related to comorbodities attributable to obesity including both direct and indirect costs. Direct costs comprise all the costs that incur directly by treatment, prevention, etc. of overweight and obesity, e.g. medication, physician visits, hospital stays etc. Indirect costs are productivity losses (lost wages) caused by the disease through work absenteeism, early retirement, and premature death. However, work absenteeism, invalidity, or death that occur in the course of obesity are predominantly linked to the comorbidities. Therefore, all indirect costs were handled in the context of the comorbidities whereas for obesity and overweight only direct treatment costs were estimated.

Obesity costs

Obesity-related direct costs were assessed by a top-down approach as it was not possible to exactly assign a certain resource use to an overweight person. The usual approach for treating overweight – diet modification and increased physical activity – cannot be linked to a certain monetary value and was therefore omitted. Visits to a physician occur mostly in the context of a comorbidity and are therefore included in this evaluation. For this reason, direct obesity-related costs are restricted to prescribed medication, to consultations with nutritionists, and to bariatric surgical interventions. To estimate the total costs of drugs used in the treatment of obesity (Reductil®, Xenical®, and others) the market price of the total volume sold in the year 2001 in Switzerland was used. To calculate the annual costs for nutritional consultations associated to overweight, the number of these consultations in the year 2001 (provided by the Schweizerische Verband diplomierter Ernährungsberaterinnen, SVDE) was multiplied with the monetary value according to the tariff contract between SVDE and Santésuisse dated 1.1.2002. This value was CHF 99.– for a first consultation and CHF 77.– for follow-up consultations. The costs of bariatric surgical interventions were estimated by multiplying the number of obesity-related operations (evaluation register 2001/2002 obesity surgery in Switzerland of the BSV) in the year 2001 with the costs for surgery, the length of stay in hospital and the number of follow-up visits. For surgery costs and expenditures for follow-up visits official Swiss tariffs (Spitalleistungskatalog 2001) were used. Average length of hospital stay for the specific operations extracted from the medical statistic for hospitals (Bundesamt für Statistik 2001) and multiplied with mean hospital costs per day (CHF 906.–; Bundesamt für Statistik 2003b). For total direct costs of obesity in Switzerland, the costs of medication, consultation, and surgery were aggregated.

Cost of comorbidities

All data used for cost estimates related to comorbidities attributable to obesity, were extracted from current literature and official national statistics. The following complications of obesity were included in the analysis: hypertension; hypercholesterolemia; non-insulin-dependent diabetes mellitus (NIDDM); stroke; coronary heart disease (CHD); cancers – breast, colorectal, oesophageal, pancreatic, stomach, liver, prostate, corpus and uterus; gallstones; osteoarthritis; depression; gout; road traffic accidents (due to sleep apnea). Additional comorbidities partly attributable to obesity such as edemas or gastric reflux were not included because of missing cost data. To estimate the extent to which a disease and its management costs can be attributed to overweight and obesity the population attributable fraction (PAF) was employed. PAF includes the relative risk of obese persons of developing a disease as well as the prevalence of obesity in the population and yields the percentage of patients with a given comorbidity that is attributable directly to overweight

and obesity. It is calculated using the following expression: $P(RR-1)/[P(RR-1)+1] = AF_P$. Where P = probability of being obese in a given population; RR = relative risk of an obese person developing a disease and AF_P = population attributable fraction. Relative risks for the various diseases were taken from recently published literature (Calle et al. 2003; Field et al. 2001; Wendelboe et al. 2003; Roberts et al. 2003; Lévy et al. 1995), concentrating on specific, new, and evidence-based findings and generally favouring a conservative approach. It was hypothesised that the relationship between obesity and a given comorbidity disease is comparable in Western countries. The population attributable fractions for Switzerland are shown in Table 1. The calculated PAF was applied to annual total costs (direct and indirect costs) of the above mentioned obesity-related diseases. Information about disease costs were also taken from existing literature using Swiss-specific cost data whenever available. Cost data were adjusted to the price level of 2001. This cost adaptation was made based on the consumer price (inflation) index in the health care sector (Bundesamt für Statistik 2003a). Where no Swiss cost data were available, data from industrial countries with comparable health care levels (mainly from Germany) were substituted. Such cost data were adapted to Swiss conditions by using OECD purchasing power parities (PPPs) and by converting costs according to actual population number. PPPs are currency conversion rates that both convert to a common currency and equalise the purchasing power of different currencies. In other words, they eliminate the differences in price levels between countries in the process of conversion. Finally, costs were also adjusted to price levels of 2001. Table 2 shows the basic disease costs used and their adaptation to Swiss conditions for the year 2001. Included in these total cost estimates of the various diseases were always direct as well as indirect costs.

Costs are given in Swiss currency unless otherwise stated and based on the year 2001. Estimates for both overweight and obesity were calculated separately.

Sensitivity analysis

The relative risks of developing various diseases in the published literature show wide variability. Possible explanations for these variations are different population groups (age, gender), definition of obesity and country-specific differences. To account for these variations minimum and maximum values were defined and evaluated in sensitivity analysis (specifically within a ±20% range of base case values). Comorbidity-related costs and possible variations in obesity and overweight prevalence were also examined by sensitivity analysis.

Table 1 Population attributable fraction for Switzerland of presently known diseases linked to overweight and obesity

	PAF for BMI 25–30	PAF for BMI >30
Hypertension	17.0	9.7
Hypercholesterolemia	6.1	0.4
Diabetes Type 2	46.2	42.5
Ischemic stroke	5.6	3.7
Coronary heart disease	11.9	5.5
Breast cancer	9.5	6.2
Colon cancer	4.6	3.0
Esophagus cancer	15.9	8.8
Pancreas cancer	5.3	2.3
Stomach cancer	1.1	1.0
Liver cancer	2.5	4.8
Gall bladder cancer	6.9	6.7
Prostate cancer	2.9	1.6
Urinary tract cancer	0.8	1.8
Kidney cancer	6.5	3.7
Non-Hodgkin's lymphoma	3.7	2.9
Leukemia	3.0	1.9
Cancer of the cervix	7.7	1.0
Cancer of the uterus	9.8	10.3
Cancer of the ovaries	3.2	1.2
Gall bladder disease	14.7	9.7
Osteoarthritis-hip	12.3	9.1
Osteoarthritis-knee	34.2	26.3
Depression	–	5.7
Sleep apnoe	41.6	21.2
Thrombosis	7.6	8.8
Gout	–	10.4
PCOS (polycystic ovary syndrome)	3.4	3.6
Misscarriage	5.4	2.7

Results

Direct treatment costs for obesity in Switzerland were estimated at CHF 42 million for the year 2001. Included in this sum are drug costs of CHF 30 million, counselling costs (nutritionists) of CHF 3 million and costs for surgical interventions of CHF 9.5 million.

The total costs, direct and indirect, caused by comorbidities attributable to overweight and obesity are given in detail in Table 3. Of the total of CHF 2648 million, CHF 1 374 million are assigned to overweight and CHF 1273 million to obesity. In a recent study on the economic burden of obesity in Germany direct and indirect costs accounted each for approx. 50% of the total costs (Sander & Bergemann 2003). A similar proportional sharing of the total costs may be assumed for Switzerland.

Adding the actual treatment costs for obesity to the comorbidity costs, a total burden of illness of CHF 2691 million is estimated for Switzerland for the year 2001. Proportionally, overweight and obesity have equivalent costs (51.1 vs 48.9%). As the prevalence of overweight is much higher than the one of obesity (1.8 million vs 0.5 million persons)

Table 2 Basic costs of obesity associated disease, adaptation to Switzerland for the year 2001 (costs in million)

Disease	Source	Cost[1]	Currency	Country	Year	Cost in Euro	with PPP adapted to CHF	Adapted to population number[2]	Cost increases to the year 2001	Disease costs in Switzerland 2001[1]
Hypertension	BMG 1994	7553	DM	Germany	1990	3862	7724	824	16.1%	957 Mio CHF
Dyslipidaemia	BMG 1994	1380	DM	Germany	1990	706	1411	151	16.1%	175 Mio CHF
NIDDM	Smala et al. 2001	1644	CHF	Switzerland	2000	–	–	–	0.6%	1654 Mio CHF
Stroke	BMG 1994	5980	DM	Germany	1990	3058	6115	653	16.1%	758 Mio CHF
CHD	Sagmeister et al. 1997	2163	CHF[3]	Switzerland	1993	–	–	–	8.5%	2347 Mio CHF
Breast cancer	BMG 1994	1492	DM	Germany	1990	763	1526	163	16.1%	189 Mio CHF
Colorectal cancer	BMG 1994	1541	DM	Germany	1990	788	1576	168	16.1%	195 Mio CHF
Esophageal cancer	BMG 1994	449	DM	Germany	1990	230	459	49	16.1%	57 Mio CHF
Pancreatic cancer	BMG 1994	434	DM	Germany	1990	222	444	47	16.1%	55 Mio CHF
Stomach cancer	BMG 1994	862	DM	Germany	1990	441	881	94	16.1%	109 Mio CHF
Liver cancer	BMG 1994	208	DM	Germany	1990	106	213	23	16.1%	26 Mio CHF
Prostate cancer	BMG 1994	343	DM	Germany	1990	175	351	37	16.1%	43 Mio CHF
Cancer of corpus and uterus	BMG 1994	62	DM	Germany	1990	32	63	7	16.1 %	8 Mio CHF
Gall bladder disease	BMG 1994	1082	DM	Germany	1990	553	1106	118	16.1%	137 Mio CHF
Osteoarthritis (total)	Hunsche et al. 2001	6280	FF	France	1991	957	1997	261	11.0%	289 Mio CHF
Depression	Greenberg et al. 2003	83100	US$	US	2000	–	161214	4127	0.6%	4152 Mio CHF
Gout	BMG 1994	522	DM	Germany	1990	267	534	57	16.1%	66 Mio CHF
Traffic accidents	KSUV 2003	461	CHF	Switzerland	2001	–	–	–	–	461 Mio CHF

[1] Comprises direct and indirect costs
[2] Population numbers in million: West Germany 1990: 63.2, France 1991: 52.4, US 2000: 281.4, Switzerland 1990, 1991, 2000: 6.7, 6.8, 7.2
[3] Costs originally given in US$, currency exchange rate 1993: 1.478

Table 3 Basic disease costs, PAF, and overweight and obesity attributed costs

Disease	Disease costs Switzerland 2001 (million CHF)	PAF in %		Costs based on PAF (million CHF)		
		BMI 25–30	BMI >30	BMI 25–30	BMI >30	Total BMI ≥25
Hypertension	957	17.0	9.7	163	93	256
Hypercholesterolemia	175	6.1	0.4	11	1	11
NIDDM	1654	46.2	42.5	764	703	1467
Stroke	758	5.6	3.7	42	28	70
CHD	2347	11.9	5.5	279	129	408
Breast cancer	189	9.5	6.2	18	12	30
Colorectal cancer	195	4.6	3.0	9	6	15
Espophageal cancer	57	15.9	8.8	9	5	14
Pancreatic cancer	55	5.3	2.3	3	1	4
Stomach cancer	109	1.1	1.0	1	1	2
Liver cancer	26	2.5	4.8	1	1	2
Prostate cancer	43	2.9	1.6	1	1	2
Cancer of the corpus and uterus	8	9.8	10.3	1	1	2
Gallstones	137	14.7	9.7	20	13	33
Osteoarthritis	289	12.3	9.1	36	26	62
Depression	4152	0	5.7	0	237	237
Gout	66	0	10.4	0	7	7
Traffic accidents (related to sleep apnoe)	461	3.6	1.9	17	9	25
Total cost of comorbidities (million CHF)				**1374**	**1273**	**2648**

the per person costs are considerably higher for obesity (CHF 2857 vs CHF 777). The direct treatment costs for obesity represent only 1.6% of the total cost estimate for the burden of obesity. The majority of the costs (98.4%) are caused by the comorbidities associated with overweight and obesity.

Sensitivity analysis showed that prevalence of overweight and obesity, relative risks for comorbidities, and basic costs for these associated diseases have the highest impact on total cost. Taking the highest relative risks published will increase total costs by 7%. A 10% higher prevalence would increase total costs by 7% and a 20% increased prevalence

raises total costs by 13%. Observed variations in all parameters tested in our sensitivity analysis affect the final results (total costs) by maximum ±20%. Thus, the burden of disease for overweight and obesity (including complications) in Switzerland lies within a range of CHF 2153 to 3229 million per year.

Discussion

The present study is a population-based prevalence burden-of-illness study, that identifies the costs of overweight and obesity incurring in Switzerland during the year 2001. Prevalence-based estimates are well suited for analysing the magnitude of disease costs on an annual basis but do not allow quantification of long-term consequences. The results described represent the monetary burden on society of overweight and obesity in Switzerland and are given in terms of direct and indirect costs. Since obesity is associated with an increased risk for several other diseases (Bray 1985; Keller 2002; Wirth 2003), the monetary effects of these associations also have to be taken into account by estimating the costs for the portion of these comorbidities that is attributable to the underlying obesity.

The study is based on prevalence data from the "Schweizerische Gesundheitsbefragung 2002" (Bundesamt für Statistik 2003c). This survey was based on interviews by telephone and letter, a method which is known to underestimate results than when prevalence data are based on actual measurements (Schutz & Woringer 2002). Thus, the actual prevalence of overweight and obesity in Switzerland might well be higher than reported which was taken into account in our sensitivity analysis. The same problems apply for the selection of relative risks for the associated comorbidities as well as the cost estimates for these diseases. Increasing or decreasing these parameters result in a substantial increase or decrease in the economic burden of obesity. In particular, the relative risks associated with obesity are subject to uncertainty since various literature sources cite considerable differences in their findings. Again, we addressed this uncertainty in our sensitivity analysis. In this respect it is worth mentioning that direct treatment costs of obesity are too low to have any impact on total costs. Since we generally followed a conservative approach by adopting relative risks and disease cost on the low side, it can be stated that the reported economic burden of obesity in Switzerland represents an underestimation rather than an overestimation. Additional expenditures of a private nature such as costs for special dietary products or meal replacers (low calorie products), very low calorie diets or OTC products for weight control were also not taken into account and may represent a substantial cost factor directly related to overweight and obesity.

In addition, had the total costs for the "entire" Swiss population been included (i.e. including the costs associated with childhood obesity – in the present study, children and adolescents below the age of 15 are not included), the costs would certainly be even higher. Therefore, from this perspective also, the results in the present study probably underestimate the "true" population impact in Switzerland.

We considered 18 diseases as comorbidities associated with obesity. Many previous studies from other countries did include a smaller number of comorbidities indicative of the fact, that more information on the relationship between obesity and yet other diseases is reported every year. Nevertheless, four diseases contribute to a large part to the final result: diabetes mellitus type 2 (54.5%), coronary heart disease (15.8%), hypertension (9.5%), and depression (8.8%). With the exception of depression, which inclusion is based on recent findings, the other three comorbidities are also incorporated in most other cost studies on obesity (Wolf 2001, Sander & Bergemann 2003). In the United States – probably the country with the highest obesity prevalence reported – the total costs in the year 2000 amounted to US$ 117 billions (Wolf 2001). As was found in our study, half of the costs were related to direct costs and the other half to indirect costs (US$ 61 vs. 56 billion). Adapted to the Swiss population using a currency exchange rate of 1.25 would result in total costs of CHF 3656 million. The noticeable difference may be explained by the higher prevalence of overweight and obesity in the US compared to Switzerland. A recently published study regarding the cost of obesity in Germany in 2001 (Sander & Bergemann 2003) described cost estimates between € 2709 million and € 5682 million. Estimated were only costs for people with BMI ≥30 (20.3% of population). Adapted to the Swiss population and using a currency exchange rate of 1.55 yields lower costs for this specific subgroup of the population compared to our findings (CHF 359–752 million vs. CHF 1018–1528 million). However, in the study from Germany only four comorbidities were included and the relative risks selected for these diseases were lower than what we considered realistic and used in our study. Another study from Scotland (cost basis 2002; population 5.1 million) reported total direct costs of £ 170 million for the population segment with a BMI ≥ 30 kg/m^2 (prevalence of 21%) (Walker 2003). Adaptation to the Swiss situation using a currency exchange rate of 2.35, a cost estimate of about CHF 402 million was reported. Assuming that direct costs represent half of the total costs (see US), the latter comes to about CHF 800 million, a sum considerably below our cost estimate for Switzerland. It appears that this

discrepancy again comes from assigning lower relative risks to most of the obesity-associated comorbidities.

Generally it is assumed that direct healthcare costs of obesity and its complications amount to between 2% and 5% of total healthcare costs in industrialized countries (Lévy et al. 1995). If we assume direct costs (direct costs of the comorbidities included) to be half of our calculated total costs (i.e. CHF 1077–1615 million) this means that between 2.3%–3.5% of the total healthcare expenses (CHF 46.1 billions in 2003; Bundesamt für Statistik 2003b) in Switzerland are spent on the treatment of overweight and its comorbidities falling in line with the generally observed obesity-related health care expenditures. Evidently, this price is too high to accept obesity as a lifestyle issue rather than a disease. There is a widespread ignorance of the fact that obesity has all features of a disease, similar to other diseases such as type 2 diabetes and hypertension. This fact becomes obvious when compared with cost estimates for alcohol abuse of CHF 460–672 million representing 1.0–1.5% of the Swiss healthcare expenses (Frei 2001). Furthermore, these costs represent an underestimation of the true costs for the Swiss society since obesity is linked to additional problems such as increased postoperative complications, prolonged rehabilitation, increased incidence of invalidity and unemployment not taken into account in this report.

Taking into account that prevalence of obesity is on the rise (Eichholzer et al. 1999; Eichholzer et al. 2000; Bundesamt für Statistik 2003c), a comorbidity-related cost explosion can be expected in the course of the coming years as only a small part of the cost is spent on treating obesity directly. For this reason overweight constitutes a financial time bomb for the healthcare system if awareness is not increased considerably and classification of obesity is shifted from lifestyle to serious disease. Due to treatment of various comorbidities, overweight and obesity themselves are serious, complex and cost intensive diseases that may have to be battled by a multidisciplinary approach to reach a substantial and continued improvement of the health situation of the Swiss population. Such an approach shall not only aim at improving the treatment of existing obesity but, most importantly, at preventing overweight. Clearly, governmental agencies, food and pharmaceutical industries, physicians, and health insurance companies are required to collaborate in order to achieve a considerable improvement of the situation within the next few years.

In summary, in Switzerland more than one third of the adult population is overweight or obese. The total burden of illness estimate for overweight, obesity, and associated diseases amounts to CHF 2153–3229 million per year (cost basis year 2001) from the societal point of view. Both, overweight and obesity, contribute to equally to these costs. As these costs are caused by the primary onset of overweight itself, leading to obesity and diseases attributable to these two conditions, both need to be recognised as serious medical conditions, not just as lifestyle issues.

In conclusion, overweight and obesity represent a considerable financial burden for the Swiss society and is expected to increase in the years to come due to an increasing prevalence. A comprehensive program is needed to tackle this serious "present time" health issue, a nationwide obesity management strategy is required based on clearly specified targets involving health promotion, disease prevention and treatment guidelines.

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Zusammenfassung

Ökonomische Belastung durch Fettleibigkeit und deren Komorbiditäten in der Schweiz

Fragestellung: Die vorliegende ökonomische Studie hatte zur Aufgabe, eine systematische Analyse der durch Übergewicht bzw. Adipositas verursachten direkten medizinischen Kosten in der Schweiz durchzuführen und den von dieser Krankheit und ihren Folgeerkrankungen insgesamt verursachten volkswirtschaftlichen Schaden (direkte und indirekte Kosten) abzuschätzen.

Methoden: Die direkten Kosten der Adipositas wurden über einen „top-down" Ansatz geschätzt. Als Hauptkostenverursacher wurden Medikamente, Ernährungsberatung und chirurgische Interventionen identifiziert. Adipositas und Übergewicht wurden als Auslöser für weitere 18 Krankheiten eruiert und deren direkte und indirekte Kosten wurden anteilsmässig in die Kalkulation der Krankheitskosten von Adipositas und Übergewicht einbezogen werden. Zur Berechnung/Schätzung dieser Kosten wurde der auch in anderen Studien verwendete Ansatz über den bevölkerungsbezogenen beizumessenden Anteil (population attributable fraction) eingesetzt. Die Addition der direkten Kosten und der von den Folgekrankheiten stammenden Kosten ergab schlussendlich die gesamten durch Adipositas und Übergewicht verursachten Kosten in der Schweiz im Jahr 2001.

Ergebnisse: Die von Übergewicht und Adipositas und deren Folgekrankheiten insgesamt verursachten Kosten in der Schweiz im Jahr 2001 wurden auf CHF 2 691 Millionen berechnet, wobei von einer Schwankungsbreite in der Grössenordnung von maximal ±20 % auszugehen ist. Die tatsächlichen Kosten liegen demzufolge zwischen CHF 2 153 und 3 229 Mio pro Jahr. Diese Kosten für medizinische Leistungen in der Grössenordnung von CHF 1 076 bis 1 615 Mio entsprechen einem Anteil von 2,3–3,5 % der Gesamtausgaben von CHF 46,1 Mia des schweizerischen Gesundheitswesens in 2003. Diese Kosten stellen eine Unterschätzung der gesamten Kosten für die Gesellschaft (Gesundheits- und Sozialkosten) dar, da Übergewicht gehäuft mit weiteren Problemen (z.B. vermehrte postoperative Komplikationen, verlängerte Rehabilitation, Invalidität und Arbeitslosigkeit) einhergeht.

Schlussfolgerung: Dieser durch Übergewicht und Adipositas bedingte Anteil an den gesamten Gesundheitskosten wird, bedingt durch die zunehmende Prävalenz, in absehbarer Zeit massiv zunehmen, falls keine entsprechenden Gegenmassnahmen eingeleitet werden.

Résumé

Charge économique de l'obésité et de ses comorbidités en Suisse

Objectifs: Estimer les coûts annuels engendrés par le surpoids et l'obésité.

Méthodes: Pour estimer les coûts directs de l'obésité (médicaments, conseils nutritionnels et interventions chirurgicales), nous avons utilisé des données de prévalence suisse (2002) et de la littérature sur les risques relatifs attribuables dans la population (RAP) pour 18 maladies en lien avec l'obésité et le surpoids. Le RAP a ensuite été utilisé en combinaison avec les coûts totaux (direct et indirect) de ces maladies pour estimer l'impact économique de l'obésité en Suisse.

Résultats: L'estimation des coûts totaux de l'obésité en Suisse est d'environ 2 691 millions par année (valeur 2001). En tenant compte de l'incertitude de certains paramètres et en se référant à la littérature publiée, nous avons appliqué un intervalle de sensibilité de plus ou moins 20 %. Ainsi, les coûts peuvent être évalués entre 2 153 et 3 229 millions, ce qui représente environ 2,3 % à 3,5 % des coûts totaux pour la santé en Suisse. L'excès de poids et l'obésité contribuent chacun à 50 % des coûts.

Conclusions: Le surpoids et l'obésité représentent un coût considérable pour la société suisse. Si leur progression se confirme, ce fardeau économique risque d'augmenter considérablement ces prochaines années.

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