Steps to a Leaner Europe – An Initiative of the European Union

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The EU is ready to tackle obesity. Robert Madelin, general director of the public health department of the EU commission, wants to take on the obesity epidemic by supporting community-driven prevention programs. 'If you get mayors and teachers as well as doctors, parents, and people who sell fruit and vegetables together, the question is, can we deliver a culturally appropriate intervention at primary school level and does it work on children and their families? The data show that you can halt the rise in obesity. We are now trying to take that experiment and apply it elsewhere' [1]. This sounds straight forward, the evidence for such an approach is seemingly solid.

The EU has discussed obesity policies at length; many papers and documents have been compiled. The foundations of platforms with a focus on 'nutrition', 'physical activity' and/or 'alcohol' represent attempts to bring together all interest groups including the food industry to devise solutions via the 'multi-stakeholder approach'. But at the same time the EU is searching for coherent and definitive strategies. Thus, a financial and structural basis for creating an EPODE European network – based on the French pioneering program EPODE ('Ensemble, Prévenons l'Obésité des Enfants' – Together, Let's Prevent Obesity in Children) – to foster community-based programs has been established to combat the obesity epidemic.

EPODE was launched in January 2004 in 10 towns in different regions of France after completion of a similar campaign between 1992 and 1997 in two towns in the region of Nord Pas de Calais: Fleurbaix and Laventie. EPODE aims to improve dietary knowledge and eating habits of children (see www.epode.fr). In addition to teachers and schools, the private sector, commerce, food industry, local physicians and nutritional specialists are involved. EPODE has subsequently grown rapidly: A total of 113 French communities in addition to further communities in Belgium and Spain have joined the program; these communities have over 1 million inhabitants.

EPODE is run as a large-scaled and extensive community-based program, which generates considerable enthusiasm among those involved. However, the results of the program have not become available to the international scientific community. Thus, we are not aware of peer-reviewed scientific publications in English pertaining to the processes or results of EPODE or the prior intervention programs in Fleurbaix and Laventie; a PubMed search revealed no results for the term EPODE. The websites www.epode.fr and www.flvs.fr list many press communications, but no articles other than in French journals, some of which are termed as specialist journals.

Results have however been reported in oral communications; these were somewhat sobering. Successful results were merely reported for the initial intervention program in Fleurbaix, a community which has a long tradition as a center of health programs and health studies and which can be considered as the French pendant to the Framingham Heart Study. Eight years after the initial intervention, the prevalence of childhood and adolescent overweight was nearly 50% lower than in the control region. These promising results were presented at the 2006 International Congress of Obesity (ICO) in Sydney [3] and at a satellite meeting in Geelong, Australia, and were met with appraisal by experts some of whom nevertheless regarded the Fleurbaix results to be 'too good to be true'. In different oral communications partially divergent results have been presented. At a meeting of the German Platform of Nutrition and Physical Activity (Plattform für Ernährung und Bewegung) in the summer of 2007 in Berlin, Sandrine Raffin stated in her talk that, with the exception of Fleurbaix, obesity prevalence rates had not decreased as a result of the intervention in other French communities.

Nevertheless, despite the lack of empirical evidence for the prevention program, EPODE was recently viewed favorably by Hannah Westley in her report titled 'Thin living' in the

British Medical Journal [2]. The report refers to successful results obtained in the communities Vitré, Royan, and Saint Jean: Vitré: 'In 2004, 10% of the target group children were overweight. Two years later the weight of boys in the target group had stagnated, while there was a slight increase in the number of overweight girls'. Royan: 'In 2004, 17% of children were overweight. Little change was seen in the following year, but in 2007, only 15% of children were categorised as overweight.' St. Jean: 'In 2004, 19% of children were overweight. One year later this figure was down to 13.5%.' The EPODE investigators can regard the BMJ report as a breakthrough and an acknowledgement of their successful program. The EU has picked up this topic (see above) and is now enabling an extension and implementation of this program throughout Europe.

As a consequence a strange situation has emerged for scientists, decision makers, and politicians because we can only judge and decide in the light of scientific evidence. In fact, this evidence is scant for the EPODE program. According to expert rules, EPODE would receive the lowest level of evidence. 'The organisers are keen to stress that EPODE is not a scientific study but a community initiative. The official results will be published in 2009, and until that date it is up to the discretion of each town to release results as and when they see fit' [2]. Accordingly, the investigators would not have to subject themselves to the established criteria for evaluation of scientific studies, but nevertheless promise results by at the latest 2009.

It is not a matter of paying respect to the EPODE investigators and their program – we wholeheartedly favor community-based prevention programs, which can make us live healthier lives and reduce costs of the health care system. We would definitely welcome deriving at ways and means to reduce the obesity epidemic. Do we however wish to pursue the path to a 'healthy Europe' by initiating large-scaled European programs of the lowest level of evidence? How do we position ourselves? Is it justified to formally support such a project without a scientific debate on its merits? As experts we are uncertain. Plausible projects and initiatives should be supported in light of the dire obesity epidemic and its consequences. Furthermore, we do not really have alternatives that have achieved a higher level of evidence. A thorough analysis of EPODE nevertheless leaves us with unanswered questions:

For example, we do not know if EPODE results in an increased stigmatization of obese children and their families. Other potential side effects (e.g. 'How does the program affect individuals of low socioeconomic status?'; 'Do rates of disordered eating behavior increase?') cannot be excluded.

The European network EPODE can be viewed as an example of the increasing political pressure to 'combat' the obesity epidemic. EPODE is reminiscent of former campaigns to curtail smoking and drinking, which initially also began by targeting individual behavior via provision of information and education. The results of this strategy were not convincing; only individuals of a higher socioeconomic status were able to pick up the message and change their behaviors accordingly. With due time the responsible experts and politicians more and more endorsed structural prevention measures such as reducing access or increased taxation. The Istanbul Charta of the WHO dated November 2006 and last but not least national action plans (for example that of the German Obesity Society dated March 2007) have paved the way for hopefully successful social and political solutions of the obesity epidemic, which include measures of structural prevention. With respect to prevention measures in general, it seems almost a rule that campaigns targeted at individual behavior precede the more successful measures aimed at structural prevention. As such, we can view the EPODE network as a step forward in the political attempts to address the obesity problem. Scientists should nevertheless accompany EPODE critically. It is our duty to call for systematic evaluations of prevention programs. The respective results need to be made public and conveyed to politicians. Looking back at the early efforts to reduce smoking and drinking, it took hard work to show that prevention measures targeting individual behavior had very limited success only. If we seriously want to tackle the obesity epidemic, we again and again need to point out the necessity to follow evidence-based rules, and not to succumb to wishful thinking.

References

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Alcácer et al. [1] report on the large SUN study based on university graduates. Even among such graduates the educational level predicted BMI, suggesting that we cannot study long enough: Those individuals with a 3-year college or a 5-year university degree had a higher BMI than those with a doctorate degree which requires at least 8 years of university education.

Annesi [2] examined the relationship between depressed mood and tension and BMI change during a 6-month intervention program focusing both on physical exercise and cognitive behavior therapy. The underlying hypothesis was that physical activity may affect weight reduction outcomes through associated mood improvements. Annesi included only females with grade 3 obesity. Depression scores improved over the 6 months; positive mood changes were associated with greater weight loss. Attendance averaged 46% of the 3-weekly sessions and was positively correlated with BMI change. The mean BMI dropped from 43.75 ± 2.89 to 42.47 ± 3.99 kg/m².

Herwig et al. [3] review novel findings related to the thyroid system including T3, T4, the three deiodinase enzymes and the seven thyroid hormone receptors. The action of thyroid hormones in the hypothalamus in the central regulation of energy balance is the major focus. The known connections to anorexigenic and orexigenic pathways are delineated, thus providing the reader with an excellent insight into the central thyroid system and its contribution to weight regulation.

Clozapine is an atypical neuroleptic frequently used to treat patients with refractory schizophrenia; a major side effect is substantial weight gain, which can in single cases exceed 30 kg. Unraveling the mechanisms underlying this pharmacologically induced obesity would allow insight into the respective pathways and potentially provide a leverage for effective treatment of this side effect and perhaps obesi-

ty in general. Myslobodsky [4] used the novel Ingenuity Pathway Analysis in an effort to identify potential pathways involved in clozapine-induced weight gain. The data led to the hypothesis that clozapine unmasks the functional and morphological phenotype of microvascular deficit that facilitates shunting nutrients from utilization toward storage.

Ugur et al. [5] present the first case report to be published in *OBESITY FACTS*; we encourage our readers to submit further interesting reports. Surprisingly, case reports in the field of obesity do not have a strong tradition. We wish to change this as we believe that specific problems can very well be illustrated and discussed in such reports. Ugur et al. report on a patient with a history of schizophrenia who, presumably as a result of antipsychotic medication, developed overweight which was subsequently treated with rimonabant. The patient experienced symptoms of depression, presumably as a side effect of this medication which in turn possibly entailed a relapse of schizophrenia. As a consequence, it appears prudent to exert particular caution upon initiation of rimonabant treatment in patients with a history of schizophrenia. If treatment is initiated at all, a close psychiatric monitoring appears mandatory.

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