

Promoting physical activity as an aid for smoking cessation

International Symposium, Lausanne University Outpatient clinic

October 29th 2004
Summary report

J.-P. Zellweger – J. Cornuz

1. B Marti: "Epidemiology of physical activity – or inactivity"

The data from international comparison are inconsistent (e.g. Sweden first rank in 1999, but last one in 2004!). Questionnaire surveys tend to correctly report moderate activity, but to over report intensive activity. Changing behaviour of people is difficult, but retired people seem to increase their level of physical activity. Are people active because they do not smoke or refrain from smoking because they are active? Do smokers who stop smoking become more active? Men stop smoking and increase their level of activity at about the same age. An association seems possible because there is usually a slight improvement in lung function and exercise tolerance after smoking cessation but there are no hard data.

2. R West: "Rationale of the use of physical activity as an aid for smoking cessation"

Smoking is regarded by smokers as an activity, frequently performed in moments of inactivity. Why do smokers smoke? Desire to smoke and restraint to do it seem to be the main factors determining the decision to smoke or not to smoke and are influenced by many factors. The aims of treatment should be to decrease the desire and increase the restraint to smoke. How far does physical activity contribute to these aims? The improvement in depression associated with physical activity may contribute to cessation success, as well as the improvement in self-efficacy and weight control (controversial). Adolescents who start exercising are less likely to start smoking. The critical issue is which level of activity is necessary to improve the long-term cessation success?

3. M. Napolitano : "US Experience"

Among women, smoking and smoking cessation are clearly associated with concerns about weight control and/or gain. Several studies from the same group addressed the impact of exercise on rate of cessation. Women who take part in an exercise programme are more successful in quitting and increase less their weight. The main questions are: how much physical activity is useful? Is walking enough? The data on the efficacy of moderate activity are very sparse. There is a correlation between duration of activity and success. Participants who did not comply with the requirements had lower success rate. Women tend to regard walking as the easiest physical activity but there are no studies on the specific effect of

walking, particularly outdoors walking, on cessation success and/or weight gain. Among other problems is the cessation of physical activity after 4-6 weeks or at the end of a study. Another problem is the possible involvement of partners for physical activity and smoking cessation. Finally, all published studies have offered the physical activity program for free, which may be not the case in real life.

4. M. Ussher: "UK experience"

An acute effect of moderate exercise on withdrawal symptoms and desire to smoke has been demonstrated in short-term abstainers. The effect is stronger on smokers who are less active at the start and is related to the intensity and duration of exercise (very light exercise and less than 10 min seem ineffective). Walking at own pace for 18 min is equally effective. Isometric exercise for 5 min (which can be performed at a desk or in an airplane without other people noticing it!) is also moderately effective. Just waiting for 5, 10 or 20 min does not influence the desire for smoking. This would mean that the advice "just wait until the desire disappears" might be useless. Advising smokers to exercise does not improve the rate of cessation and does not influence the weight gain, probably because the intensity of exercise is too low.

5. T. Mustonen: "Consequences of smoking for women"

Cardiovascular diseases kill much more women than breast cancer and are associated with smoking. Why is it harder for women than for men to stop smoking? Weight control problems, depression, lower level of education, reluctance to use medication during pregnancy, and social problems are some of the obstacles. In smoking women, medication and exercise have an influence on mood, weight control, depression and risk of cardiovascular diseases. A study compared aerobic exercise (walking), NRT and counselling with wellness education and standard care in a group of hard-core women unable to stop by themselves (many of them on psychiatric treatment). The main problem was the poor adherence of participants to the intended program and to the scheduled dose of NRT: only 59 participants among 268 completed the study! Depressed, overweight, and uneducated women tend to drop out. Exercise and wellness education seem to improve equally well the quit rate compared with usual care. Level of depression decreases among abstainers in the exercise group, not in the others, but weight concern does not seem to influence the success rate. Future studies should identify the obstacles specific to women.

6. B. Kayser: "Physical activity, health and genes : an evolutionary perspective"

The increase of obesity level (and diabetes) in the US over time seems to be linked more to decrease in physical activity than to an increase in caloric intake. A similar trend is present in Switzerland, where 11% of the population is obese, 32% is overweight. Developing countries seem to evolve even faster than western countries towards a progressive increase in BMI. What has changed? Food intake or energy expenditure? The energy expenditure of modern human being is much lower than 1-2 million years before (or in population groups living the same way of life with the same level of activity). Physical activity level of a sedentary person is too low to control body weight. Genes have not changed, but human behaviour! Genetic factors partially regulate food intake and physical activity. Physical activity does not necessarily mean doing sport (owners of dogs live longer, maybe because they walk the dog!). How to change the "inborn laziness" of humans? Through education? By changing the environment? More attractive stairs and safer streets? The conclusion : "Genes load the gun, environment triggers the shot".

7. M. Kleiner : United Nations Office for the International Year of Sport and Physical Education 2005 "

The United Nations organize during next year the International Year of Sports and Physical education (IYSPE 2005). Sport (as well as regular physical activity) is regarded by UN as a means of promoting education, health, development and peace and contributes to the Millenium Development Goals. Every \$ 1.- invested in physical activity saves \$ 3.- on health costs. Physical Education at schools should therefore be considered as an integrated part of the normal education. Simultaneously, the European Community had decided to devote a special budget to the same issue.

8. J. Cornuz: "Swiss experience"

A recent population based survey has shown that Swiss smokers are less active than non smokers. Furthermore, among smokers, more they smoke more they are likely to be inactive. Will an intervention on physical activity increase the success rate of smoking cessation? The ongoing among 560 smokers from the local population includes a programme of regular, moderate physical activity vs. health education. However, heavy smokers seem to have a higher BMI and a higher risk for cardiovascular disease.

9. B. Martin/ R.Bize: "Health care professionals – GPs as an agent to promote physical activity counselling"

A qualitative study is currently assessing the following points: is physician advice effective? How to make counselling in primary practice more effective? How to involve doctors in promotion of physical activity? Physically active physicians promote physical activity better than inactive physicians. Proposals for topic-specific tools for continuous medical education are necessary and acquisition of motivational interviewing skills. A next step might even be to promote physical activity among health themselves care professionals?