Lifestyle Changes in Cardiac Patients: Five-Year Follow-up

The method of "Breath Relaxation" that I have developed was tested in a randomized clinical trial on myocardial infarction patients. The trial was conducted in the early eighties and has been already reported (Van Dixhoorn, 1990). In this chapter changes in lifestyle in the long term will be described. All patients participated in an exercise training, half of them followed in addition six individual one hour sessions of relaxation and breathing instruction. The intervention did not urge the patients to make any changes in lifestyle. Thus, it differs sharply from the usual perspective of health psychology that tries to motivate patients to engage in healthy behaviour: stop smoking, exercise regularly, eat sensibly. Patients were only asked to try the instructions at home or in daily life and to report their experiences.

Directly after rehabilitation, the relaxation intervention resulted in higher levels of wellbeing, less exercise-induced ischaemia, less training failure and more pleasant awareness of the body during rest. At three months follow-up, return to work was higher, respiration rate was a little lower, resting heart rate was lower, heart rate variability during rest was higher (Van Dixhoorn, 1998), pleasant awareness of the body was still increased. Less patients judged their subjective age to be more than 5 years below their actual age. Their was no effect on smoking, betablocking medication usage, anginal complaints or level of physical activity.

At one year follow-up, there was no effect of relaxation on smoking, anginal complaints or betablocking medication. About two-thirds of patients in both treatments said they were doing fine. However, more patients in the relaxation group said they had had a difficult time (65% versus 44%) and that they had changed (72% versus 49%). This demonstrated that they had become more realistic about the impact of the events and that they had felt the consequences in themselves more.

At five years follow-up, there was no effect of relaxation on smoking, anginal complaints or betablocking medication, but there were less cardiac recurrences (Van Dixhoorn & Duivenvoorden, 1999). Cardiac death, reinfarction or cardiac surgery happened in 20% of the relaxation group versus 32,5% in the control group (odds ratio: 0.52, 95% confidence intervals: 0.28-0.99). Thus, objectively, they were doing substantially better, as a group.

Table 1. Five year follow-up of cardiac patients with and without breath relaxation

	With Breath Relaxation	Without Breath Relaxation	Odds Ratio (95% CI)
Major cardiac events	15 (20%)	26 (32.5%)	0.52 (0.28-0.99)
No cardiological control	19 (30%)	9 (13%)	2.88 (1.12-6.9)
Doing well, lately	36 (57%)	46 (81%)	0.31 (0.14-0.68)
Being active, whole day	37 (58%)	46 (68%)	0.68 (0.33-1.39)
Much physical effort per week	46 (75%)	44 (67%)	1.44 (0.67-3.1)
Mid-day rest	38 (60%)	36 (52%)	1.18 (0.52-2.4)
Able to concentrate	41 (65%)	46 (70%)	0.81 (0.39-1.7)
Practice relaxation	44 (70%)	25 (38%)	3.8 (1.8-7.9)

CI=Confidence Interval

Table 1 shows that in regard to lifestyle, there was no effect on the ability to sustain much physical effort per week, the ability to be active whole day, the ability to concentrate, nor on the habit to take mid-day rest. Patients in the relaxation group, however, managed themselves better, because they were significantly less under control of the cardiologist (O.R.: 2.88, 95% CI: 1.12-6.9). Nevertheless, they also reported less often (O.R.: 0.31, 95% C.I.: 0.14-0.68) to be doing well!

It seems that, although they were doing better in the physical sense, they did not feel better. In order to understand the meaning of this, the correlations between the item "doing well, lately" and the other items were calculated. Table 2 shows that patients in the relaxation group "doing well" correlated higher with the other items. When they reported to feel good or very good, instead of reasonably well, they meant concretely that they could be active whole day, sustain much physical effort per week, had no angina pectoris and were able to concentrate. When these four items were added into a sumscore, the mean scores were almost identical for the two groups: 6.27 versus 6.29. Thus, patients in the relaxation group were not doing worse at all, but they reported more honestly how they were doing. This idea was confirmed by the correlations between the item "doing well, lately" and the sumscores, which were 0.73 and 0.40 respectively. This implies that about 50% of the variance of the answers to the question "how are you doing, lately?" was explained by the sumscore of four concrete items in the relaxation group, whereas only 16% of the variance was explained by the sumscore of these four items.

Table 2. Correlations of individual items with "doing well, lately"

	With Breath Relaxation	Without Breath Relaxation
Being active whole day	0.71	0.44
Much physical effort per week	0.43	0.10
No Angina Pectoris	0.38	0.35
Able to concentrate	0.42	0.15
Sumscore of the above items	0.73	0.40

Table 3. Correlations of items with the habit to "take mid-day rest"

	With Breath Relaxation	Without Breath Relaxation
Physical effort per week	- 0.32	
Practice relaxation	0.31	
Being active whole day	- 0.50	
Able to concentrate	- 0.42	
Doing well, lately	- 0.33	

In the same way, the meaning of the habit of mid-day rest was investigated further. Contrary to our expectation that relaxation practice would increase the amount of rest that patients take, about equal numbers of patients went to lie down after lunch. Table 3 shows the reasons why patients did this, for the two treatments separately. It appeared that in the relaxation group patients took a rest when they could not

sustain much physical effort per week and when they practised relaxation. This seems to be a sensible habit. In the control group, however, patients went to lie down when they could not go on. They were forced to take a rest because of their inability to be active whole day, their inability to remain concentrated and because they did not feel well. Thus, although the habit of taking an afternoon rest did not differ between the two treatments, it was more of a healthy coping style to balance the amount of effort and rest in the relaxation group. In short, breath relaxation improves patients objective medical condition and at the same time increases a realistic perception of their functioning.

Conclusion

Passive attention is deeply relaxing, promotes natural easy breathing, gives a sense of inner quiet, trust and safety and facilitates restorative processes. Although it is a perfectly natural state, its occurrence depends on conditions that are less common and need special attention in our society. This causes alienation of conscious awareness from one's self, a disturbed relationship between the conscious subject and the living body, which is at the root of disturbed sense of wellbeing, fear and psychosomatic symptoms. There is a need for somatic reeducation in addition to symptom directed therapies.

Note

1. The word "Panic" is derived from the Greek God Pan, who was unpredictable, unreliable, living in the wild and often malicious. However, when Pan was paid proper respect, the individual would receive benefit (Campbell, 1949).

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