

Health promotion – a matter of life style

Ladies and gentlemen, dear colleagues,

Indeed it is a great pleasure for me to get the opportunity to address you during this congress on a specific Health Promotion Study, we have been carrying out in the Danish Armed Forces.

My name is Erik Darre and I am originally educated as an orthopaedic surgeon, but has since the year 1988 been full time employed in The Danish Defence. I am now working in The Danish Armed Forces Health Services, where my daily duty is being Director Army Medical Services and Deputy Surgeon General. Beside my work in The Danish Armed Forces Health Services I have for many years been very much engaged in the field of sports medicine. On the organisational site I have been the president of the Danish Association of Sports Medicine and in practice I have been the responsible physician for the Danish track and field team.

But now back to my lecture, which has been named **Health Promotion – a matter of life style**.

In the civilian society in Denmark there is an increasing demand for an active health policy on the different places of work. Indeed the employees expect the company to take an active responsibility for their health.

In different firms we see different kinds of solutions to satisfy the employees. Sometimes the firm has made a contract with a private hospital and offer very cheap and quick health care. Inside other companies you may find full time working physiotherapists, nurses and other kind of health personnel.

In my opinion, if we shall succeed in the health promotion on the working place, there are some very important key areas, which we have to focus on:

- **High quality of life:** We have to support the employee in getting a high quality of life – indeed it will be important to address
- **Preventive or Prophylactic measures** and
- **Actions to obtain a better state of health** – thus we are heading to obtain a
- **Changes in life style** – and the initiatives to do this should be a content of
- **The health policy of the company** – in other words it should be integrated in the Health Policy of the Danish Defence.

Exactly these key areas are a very important part of the life style project, which I am going to share with you for a couple of minutes:

In Danish we call the project “**SUND KASERNE**”. If we make a direct translation into English the wording will be: “**HEALTHY BARRACKS**”. On the slide you see the official logo of the project in the middle, the

project title above this and below the important sentence “**Din sundhed dit ansvar**”, which in English will be “**Your Health Your Responsibility**”.

Within the medical field to day a very important concept is the so called **Evidence based Medicine**. In popular speaking this means, that our therapy, prophylactic measures and so on should be based on a solid basis, in other words documentations for the effects have to exist.

Is the project “Healthy Barracks” then evidence based – in the following I will try to prove, that this in fact is the case.

In fact a couple of years ago in the year 1994 the Danish Armed Forces Health Services decided to plan and carry out “Healthy Barracks” as a life style project locally on Jaegersborg Barracks just outside Copenhagen. Jaegersborg Barracks houses the Defence Medical Training Centre and all together about 130 people have their daily work on this location.

The objectives of the project were to show that voluntary changes in life style are able to increase the quality of life of the individual person.

Within the project we tried to work with the participants attitudes to a couple of life style areas, such as:

- Physical exercise
- Foods
- Smoking and
- Alcohol

All together with the overall objective to create a better health and a greater job satisfaction among the participants in the project.

The project had a duration of 6 months and when starting in the project we offered

- **A primary health examination.** Following this and a couple of tests, which I will return to later, a personal health action plan was handed to the participant.
- Then the participant had a **life style working period** of 3 months, then
- **The halfway test after 3 months** and then
- The second **Life style working period**, again with the duration of 3 months and then
- **The last health examination** after 6 months and the
- **The final talk with the physician and the last recommendations.**

In connection with the health examination we measured a couple of parameters and carried out quite many tests on the employee. The data was recorded on this **coloured health sheet**. You find a very clear signal on this sheet, if a value is normal it will be placed in the **green or healthy area**, but if it is abnormal it will be

placed in the **yellow or even red area**. The participant then has a solid understanding of where to focus during his work with life style up to the next control in three months.

Just to give you some examples – we measured blood pressure, pulse rate, bodymass-index, electrocardiogram, aerobic capacity, cholesterol, Carbon mono oxide in expiration and a couple of other things.

Based on the health examination, the test results and the talk with the employee it is possible to make a personal health profile. Again we have used the colours green, yellow and red to indicate increasing risks. The employee is advised in his work with the profile up to the next test in three months. The following areas were indicated as part of the health profile:

- Alcohol consumption
- Smoking
- Fat% and body weight
- Cholesterol
- Blood pressure
- Aerobic Capacity
- Family story of diabetes
- Family story of heart diseases

In the last two aspects you cannot change your risk. All together the higher score you obtain, the more healthy you will be.

The individual plan of action was supplemented by a couple of offers within the barrack, just to give you some examples, I can mention:

- **Help to stop smoking** – in fact we supported the employee with talks, nicotine plaster and chewing gum .
- **Physical activities** – the employees were allowed to participate in planned activities during the daily working hours, and activities were also made just after the end of the working day. The most popular activities were jogging, wogging and aerobics. Additionally we offered:
- **Guidance concerning diet** – in this aspect we focused on individual plans and also promoted healthy foods in the cafeteria. Another aspect were:
- **Consulting about alcohol** and for all the participants we arranged:
- **Lectures and**
- **Social evenings** with topics related to life style. F.ex we had an evening with wine testing, another one concerning healthy foods and one with a lecture by life style scientist. To these arrangements the

relatives to the employees were also invited. The topics of the arrangements were mostly proposed by the employees themselves.

Then what about the participation – who participated?

As previously mentioned all the employees on Jaegersborg Barracks had the offer to participate. Additionally we offered a group of military VIP-drivers to participate.

All together **108 persons wanted to participate**, out of these **88 fulfilled (58 men and 30 women)**.

Then mean age was nearly 41 years.

From Jaegersborg Barracks 67 persons participated (both civilian and military) and additionally 21 military drivers participated.

Conscripts did not take part in the project.

And then to the results:

Let us first have a look on some of the **subjective data**. These results indicate that, within 6 months, it has been possible to produce voluntary changes in life style: All together 67% had changed their life style in a more healthy direction within one of the areas:

- Physical activity
- Foods
- Cigarette and alcohol consumption

We found the greatest changes in life style within physical exercise and foods. In both areas 50% of the participants had changed life style in a more healthy direction.

Concerning the **Non Smoking** we were very proud of the result after 6 months: nearly 37% of those who started had stopped smoking at that time. But unfortunately it has not been possible to keep the success – to day many has taking up smoking again.

Further indications of changes in life style we could find in some of the more **objective measurements**.

By the end of the project we thus found both among the Jaegersborg group and the drivers group a:

- Significant reduction in bodyweight in those with a too high bodymass index.
- Significant decrease in fat% and a
- Significant increase in aerobic capacity

Additionally we found a significant reduction in the cholesterol figure among the people from Jaegersborg Barracks, but not in the group of drivers.

In connection with the health examinations we recognized that **26 persons (30%)** had **abnormal measurements** in such a degree that we had to refer the persons to further examinations at their own general practitioner. In Denmark we are only allowed to give the full medical support to the conscript, other groups of personnel have to be referred to the civilian health care system.

As you can see the abnormal measurements were:

- Primarily **too high blood pressure in 10 persons**
- **Suspicion of diabetes** in 5 persons and last but not least
- **6 persons with increased liver enzymes**

It is remarkable that none of these persons have had subjective symptoms.

At last we asked the participants about their **opinion of the project**. As you can see they were indeed very satisfied. Al together nearly 98% regarded the project as “very good” or “good” and 92% wanted the project to be continued.

In the Danish Armed Forces we had no doubt – with very few resources rather good results were obtained. About 65% of the participants have during the halfyear period changed their life style in a more healthy direction and 38% were able to feel a positive change in well-being.

On that background the Danish Armed Forces Health Services decided to **recommend the implementation of the program** as a general health promotion in the Danish Armed Forces.

In **December 1996 The Danish Defence Command** then decided to permit the implementation of “Healthy Barracks” as a general program in the Danish armed forces. In the implementation the command gave some guidelines:

- The participation in the program shall in every aspect be voluntary
- The program has to be adjusted to the local facilities
- The Danish Armed Forces Health Services can be used as an advisor for the different authorities in the Danish Defence who want to adopt the project.
- You can locally design your own project from the guidelines – f.ex it depends on your manpower within the medical field, but also on the wishes from the employees.
- If you adopt the project you have to report to the Danish Armed Forces Health Services indicating the amount of participants and the degree of satisfaction.

We have in the **recent years seen an implementation** of the health promotion programme in many units within in the Danish armed forces. You may easily recognize the local touch from the name, f.ex. **“Healthy Castle”** in The Army Officers School, which is located in a very famous castle in the centre of Copenhagen.

The wording “**Healthy on the Moor**” indicates the implementation in some headquarters situated in a very huge moor area in Denmark – here you will find The Army Operational Command and The Air Tactical Command.

In order to support the local initiatives The Danish Armed Forces has issued quite a lot of information material. Here you will find:

- Information folders for the public
- Information material for the joint councils in the unit. According to Danish law every military facility have to have a joint council with representative from the employees and the leaders of the unit.
- Information for the chief of the unit
- Information for the test personnel
- Data books for the participants – including a book with training programs and a book to write your results.
- And some more things like t-shirts with logos and things like that.

A couple of years have passed since the Danish Defence Command permitted to implement the project and of course we have gathered some valuable experiences or **lessons learned** – first of all:

- **It is very important to have the support from the local joint councils** on the barracks, naval base or wherever you are placed. And at least of the same importance you have to find a person in the organization who has a great interest and can be **dedicated** to the health project.
- **Visible management** is very important. The best results are seen, if the chief and other leaders give visible support and take part themselves.
- **Ethical rules** also very important. You have to handle the health information with care and stress to the participant, that the results are confident and will have no influence on the personnel career.
- **The employee has a home base** – you have to take this into consideration and try to integrate the relatives in the health promotion. F.ex. it is very difficult to change the food habits of a participant, if he/she does not get the support when at home.
- **The local initiatives** are the most important, if you want to have a long living project. In a way it is the same with the next lessons learned:
- **Servicing is better than managing the project**
- It is very important **to decide when the project has come to an end** and should be adopted as a natural part of the daily working life in the unit.
- And last but not least it is very important to listen to the evaluation from the participants and adjust the program from that.

In Denmark the government in late 90ties launched a **Public Health Promotion Plan**. In the overall objective of the plan it is stated: **Health promotion has to be integrated as an important part of the place of work.**

And in one of the goals it says: **You have to strengthen the establishment of health promotion politics and encourage to a healthy life style.**

Indeed I find many similarities from the Public Health Promotion Plan to our socalled “Healthy Barracks”.

In fact I dare to say:

“Healthy Barracks” is an implementation of a Public Health Promotion Plan.

These words will conclude my presentation.

Indeed thank you for your attention – and I will now be ready to answer questions.

