

REHABILITATION AFTER BREAST CANCER,
COLORECTAL CANCER AND PROSTATE CANCER
– a health technology assessment
Summary

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Rehabilitation after breast cancer, colorectal cancer and prostate cancer – a health technology assessment; Summary

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For further information please contact:

National Board of Health

Monitoring & Health Technology Assessment

Danish Centre of Health Technology Assessment (DACEHTA)

Islands Brygge 67

DK-2300 Copenhagen

Denmark

Phone: +45 72 22 74 00

E-mail: dacehta@sst.dk

Home page: www.dacehta.dk

The English summary can be downloaded at www.dacehta.dk

What is HTA?

Health technology assessment contributes to decision making in the health care sector. A HTA collects and assess existing knowledge about a given health technology. A health technology is defined broadly as procedures and methods for prevention, diagnostics, treatment, care and rehabilitation including devices and medicine. An example could be a new method to treat patients. Focus is on healthcare, patient, organisational and economical aspects. New research can be conducted if the number of sufficient studies is limited to elucidate one or more of these aspects.

The HTA results in a report that can contribute to better planning, quality enhancement and prioritizing in the health care sector. The target group is decision-makers in the health political field. The primary users are therefore administrations and politicians and other decision-makers in the health political field. The HTA contributes to decisions within administration as well as political management as to which services should be offered in the health care sector and how they should be organized.

Health technology assessment is defined as:

- HTA is a comprehensive systematic assessment of the prerequisites and consequences of applying a health technology
- HTA is a research-based, application-oriented assessment of relevant existing knowledge about problem areas applying a technology within the field of health and illness.

The project is funded by a HTA-fund that was terminated in 2007. The purpose of the fund was to spread out knowledge and use of HTA locally. The funded HTA-reports are prepared in collaboration with an external interdisciplinary project group. The project group systematically reviews the existing literature, contributes with data collection and produces the chapters and conclusions of the report. The project management is placed at the National Board of Health who is also responsible for the editing of the final report. The report has been submitted to an external reference group and is also externally peer-reviewed.

Find more information about HTA at www.sst.dk/mtv under HTA toolbox:
“Handbook of Methods for Health Technology Assessment”
“Health Technology Assessment – Why? What? When? How?”

Summary

This HTA report focuses on rehabilitation after breast cancer, colorectal cancer and prostate cancer. Rehabilitation after cancer is a relatively new concept, first introduced in American legislation in the 1970s. The concept rehabilitation is not used in Danish legislation which mentions the concept of physical training. However, rehabilitation is a broader concept than physical training, and in this report the concept follows the definition in the Danish white book on rehabilitation. Cancer rehabilitation is aimed at enabling cancer patients with or at risk of a lower physical, psychological and social functional level to attain a self-determined and meaningful life.

The proportion of citizens under treatment and surviving cancer is increasing due to demographics and better survival rates. At this moment more than 200,000 Danes are under treatment for cancer or are cancer survivors, and the need for rehabilitation is increasing due to the fact, that a considerable proportion of cancer survivors have problems and late effects.

This report evaluates the scientific evidence on cancer rehabilitation for the three cancer sites based on literature reviews. During the work on the report, the scientific literature and data were found to be much more limited than anticipated. A number of different end points are used in the studies, and it is not possible to make a meta-analysis. The experiences of systematic cancer rehabilitation are rather limited in Denmark. In the report experiences from RehabilitationCenter Dallund are included. The Center is the first Danish cancer rehabilitation initiative with overnight rehabilitation stays. Other Danish cancer rehabilitation experiences at hospital and community level are also included in the assessment. Cancer rehabilitation covers a wide range of topics, and therefore some issues are excluded in this report, e.g. pharmacological interventions and technical devices.

Technology and patient perspective

Breast cancer

A number of high quality studies have investigated the effects of physical activity in rehabilitating women with breast cancer. Based on the collected evidence, the project group concludes that physical activity has a positive effect on physical functioning and wellbeing as well as on reducing fatigue. The evidence supports that psychosocial support as well as cognitive behavioural therapy can reduce anxiety and depression among women treated for breast cancer. A number of different interventions have been tried. A few studies indicate that early intervention may be important and that patients with a high level of anxiety and depression will benefit the most.

From the patient perspective there are some indications that physical activity and group sessions with psychoeducation may increase psychological wellbeing, coping and quality of life. Some studies indicate that patients experience a positive effect on coping, wellbeing and quality of life from a rehabilitation stay or retreat for cancer survivors.

The systematic literature review in this HTA report found a number of studies of different interventions against lymfoedema, but the studies were of low quality and no recommendations concerning interventions against lymfoedema can be made. Due to a low number of studies no recommendations concerning non-pharmacological interventions against hot flushes can be made.

Colorectal cancer

The few studies on physical activity intervention among patients with colorectal cancer indicate that physical activity can reduce anxiety and fatigue and increase quality of life. From studies on psychosocial interventions there are some indications that relaxation techniques may reduce anxiety in colorectal cancer patients. Very few studies have elucidated the effect of cancer rehabilitation among colorectal survivors from the patient perspective. There is a weak indication that physical activity in group sessions can increase quality of life and reduce stress.

Prostate cancer

Only a few high quality studies have examined psychosocial interventions to reduce anxiety and depression among prostate cancer patients. The studies showed no effect. Studies on pelvic muscle exercise and psychosocial interventions against urinary incontinence showed no convincing effect. However, early intervention seems to promote earlier continence, and it may therefore be relevant to include pelvic muscle exercise after treatment for prostate cancer. From the literature study it is not possible to conclude concerning psychosocial interventions against sexual problems. From the patient perspective weak evidence from the literature indicate that physical activity and psychoeducative interventions in groups can increase knowledge, self-esteem and quality of life and possibly stabilise workplace relations.

Needs assessment

The project group concludes, that all cancer patients should be assessed for rehabilitation needs during treatment and follow-up and that rehabilitation interventions should be initiated according to needs. Based on the literature review it is concluded that development of tools and programs for needs assessment are required.

Organisation and economic aspects of cancer rehabilitation in Denmark

The assessment of organizational aspects of cancer rehabilitation in Denmark is based on interviews among professionals with insight in cancer rehabilitation as well as literature and document studies. The assessment shows cancer rehabilitation in Denmark to be in a state of development these years. The regions and their hospitals and not least the municipality health services are in a phase of planning and development in the field of cancer rehabilitation. Based on the analysis there is a need for bridging and coordination between different sectors to ensure coherence. Thus processes, tools, and collaborative efforts must support an extensive assessment and rehabilitation of cancer patients.

At the moment only a minor proportion of cancer patients in Denmark are offered a rehabilitation program. This could be due to insufficient assessment of rehabilitation needs. Thus rather big differences in assessment of needs were identified between hospitals as well as between municipality health services. Needs assessment can be supported by the use of systematic assessment tools, but at the moment different tools for needs assessment are in use. The report thus shows that assessment of rehabilitation needs is managed very differently in Denmark at the moment.

The HTA report proposes a model for organising cancer rehabilitation for the three cancer sites. The model indicates how cancer rehabilitation can be organised overall and how the needs of the individual patient can be met. The model presupposes systematic assessment of rehabilitation needs at relevant times during the clinical path-

way, e.g. at diagnosis, at discharge, at follow-up visits, at contacts to the municipality health service and other relevant situations.

For breast cancer the average costs for a rehabilitation program are estimated to about 28,000 DDK, but the costs for the individual patient may vary considerably, depending on rehabilitation needs. The total costs for breast cancer rehabilitation in Denmark are estimated to 111 mill. DDK per year. For colorectal cancer the average costs for a rehabilitation program are estimated to about 17,000 DDK. The total costs for colorectal cancer rehabilitation in Denmark are estimated to 67 mill. DDK per year. For prostate cancer the average costs for a rehabilitation program are estimated to about 15,000 DDK. The total costs for prostate cancer rehabilitation in Denmark are estimated to 50 mill. DDK per year. However, the estimates are based on a number of assumptions and possible gains are not included.

No studies have quantified the effects of cancer rehabilitation as e.g. QALYs and it is therefore not possible to assess the cost-effectiveness of rehabilitation for the three cancer sites.

Conclusions

This report concludes that scientific evidence supports the benefit of a cancer rehabilitation program for breast cancer, colorectal cancer, and prostate cancer patients identified to have a need for rehabilitation after systematic assessment. The program should include physical training and psychosocial interventions. For women operated for breast cancer lymphoedema treatment should be applied according to clinical guidelines and for men operated for prostate cancer, pelvic muscle exercise may be applied. The benefits of the interventions cannot be quantified and more research is highly needed.

The organisational analysis showed that a limited number of cancer patients in Denmark receives rehabilitation. The target group for cancer rehabilitation is cancer patients with a need for rehabilitation. The assessment tools for identifying the target group are insufficient, and more research is needed to develop such tools.

This HTA can not specify the optimal moment for rehabilitation in the clinical pathway. With new treatments, shorter admissions, and a longer survival rehabilitation interventions will possibly take place several times during the pathway from diagnosis depending on the disease, needs, psychological and social factors etc. Cancer rehabilitation will take place at the hospital as well as in the municipality health service and the family doctor will have an important role in evaluating rehabilitation needs, referral etc.

This HTA identifies a need for large well designed controlled studies to elucidate the effect of specific rehabilitation programs for specific target groups.

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National Board of Health
Monitoring & Health Technology Assessment
Danish Centre for Health Technology Assessment (DACEHTA)
Islands Brygge 67
2300 København S
Tlf. 72 22 74 00

dacehta@sst.dk
www.dacehta.dk/mtv