Progress of Research in the Field of Rehabilitation*

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Research and Pension Insurance

As the principal provider of resources for medical rehabilitation the State Pension Scheme has a clear interest to ensure that rehabilitation reflects up to date standards and advances in scientific knowledge. Consequently, the organisation has been funding specific rehabilitation research projects since the mid seventies of the last century. Research and teaching in universities tended (and partly tend) to neglect rehabilitation. Therefore funding by the pension insurance was necessary. There is an explicit legal basis in social law and we spend about 8-10 million euros every year, partly in cooperation with the federal ministry for research and with the German health insurance.

Research Themes

Rehabilitation Science still is a young field, with many open questions. Some of them are listed here:

How do chronic diseases evolve, and what are their prognoses? Which diseases tend to become chronic and which social and working life conditions lead to such a development?

Diagnostic methods specific for rehabilitation have been developed which allow early identification of insured individuals in need of rehabilitation and estimation of the extent to which these persons can readjust to working life. How efficient are these methods?

What results would a more flexible timing of rehabilitation bring?

Which concepts would be likely to induce permanent changes of behaviour? What are the effects of patient training courses, health education and prolonged intensified patient after-care?

The main goal of medical rehabilitation financed by the German Pension Insurance is to sustain or regain participation in working life. Are work-orientated elements of rehabilitation treatment effective in this regard? For example, some research projects are investigating the effectiveness of work hardening and work motivation programs.

As rehabilitation can only be successful if the patients are motivated we are interested in the patient's perspective in rehabilitation.

Communication and cooperation in rehabilitation centres and teams are central for adequate medical and vocational rehabilitation – how to improve them?

And as medical rehabilitation is part of the health care system we need rehabilitation and health care system research.

Research Findings

Let me shortly summarize some central research findings:

Patient Education

- does work
- with excellent cost-benefit-ratio
- implies organizational change.

Work-Related Medical Rehabilitation

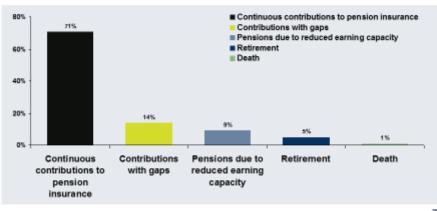
- does work for patients with special work problems
- needs more resources (time and money)
- implies organizational change as well.

We can distinguish between internal and external patient orientation. Internal means communication and cooperation within the rehab team, whereas external deals with communication and cooperation with the patient. We learned from research that both orientations are important and that they are linked to each other. Rehab centres high in internal patient orientation tend to be high in external patient orientation as well.

Our own data let us know how well we achieve our central goal, vocational reintegration (instead of early retirement due to disability). In the rehabilitation-statistics-database (RSD) containing contributions to the pension insurance we can analyze process generated data of the German Pension Insurance for all compulsorily insured patients, who finished medical rehabilitation in 2010.



Results – Compulsorily insured, who finished medical rehabilitation in 2010 – two Years-Follow up



Source: rehabilitation-statistics-database (RSD), 2013, period from 2005 to 2012

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Within two years after medical rehabilitation only 9% of the patients get a pension due to disability and reduced earning capacity, 5% retire because of age, 1% die, whereas the vast majority (85%) pay contributions to the pension insurance, continuously or with gaps. Contributions to the pension insurance can be paid due to employment, due to unemployment or due to sick leave benefit.

Implementation of Research Results

The German pension insurance is responsible not just for financing medical and vocational rehabilitation, but also for developing rehabilitation concepts, for decisions about form, duration and site of rehabilitation measures and for quality management. We define implementation of research findings as our own task, too and spend part of our funding for special projects in the field of transfer and implementation.

- 1) Publication and dissemination:
- 2) Models of best practice:
- 3) Introduction into concepts and guidelines:

In addition to integrate rehabilitation into clinical guidelines we developed our rehab therapy standards. In this way we are going to assure that relevant and convincing research results will find their way into the clinic concepts and – as we hope – the practice of rehabilitation.

4) Monitoring by quality management programme:

Every German rehabilitation facility is obliged to join a quality management program, mostly that of the German pension insurance. By a thorough peer review of the medical discharge report including the individual therapy plan of the patient and analysing the detailed routine documentation of used therapeutic measures we can look at the degree of implementation of important research results, recommendations, and guidelines – cf. the paper of Susanne Weinbrenner.

Let me give a comment on implementation of research results, especially within the field of rehabilitation. Compared to research results about special medical interventions and their efficacy resp. effectiveness, implementing rehab research findings often is much more difficult because several actors with conflicting interests and traditions must join in a common effort. And persons not only have to change to another drug or technical device, but will have to alter their attitudes and concepts, will have to practice other behaviour styles. Introducing more patient orientation e. g. means organizational development. It is a form of social innovation, not just a technical one.

Trends and Perspectives

As the German society as a whole the rehabilitation system has to deal successfuly with actual and upcoming demographic changes. Part of them will be the shortage of skilled professionals in national economy and in rehabilitation as well.

People, patients and society expect

- evidence-based rehabilitation
- cost-effective rehabilitation
- individualized rehabilitation and patient-orientation
- more coordination and cooperation between health care sectors and within the rehabilitation centres.

In order to be useful for evereyday rehabilitation we need more funding for transfer and implementation of reasearch results. And better international cooperation should help to learn form research results and experiences in other countries.

In addition to research about single interventions we should do and fund more research about communication and cooperation. And finally we should try to improve patients' participation in rehabilitation research.