

Need for Rehabilitation Teamwork Training in Europe

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Teamwork is the cornerstone of rehabilitation medicine. Rehabilitation workers in European countries are well educated in their own disciplines and attain appropriate professional knowledge; however, they lack educational opportunities for acquiring skills and attitudes necessary for effective teamwork, mainly communication, cooperation, and leadership. Consequently, teamwork is compromised and rehabilitation effectiveness reduced. Therefore, training in these components of professional competence needs scaling up in order to increase their impact on rehabilitation care.

Rehabilitation medicine seeks to maximize the functional and psychosocial abilities of patients with disability and improve their quality of life. It is concerned with the three dimensions of disability – impairment, activity limitation, and restriction in participation – and aims to reduce impairment and prevent or minimize the resulting activity limitation. For this purpose, it requires appropriately staffed and equipped inpatient facilities. To reduce activity limitation that may remain on completion of inpatient care, rehabilitation medicine needs services in the community for the maintenance of achieved improvement and prevention of complications. Minimization of restricted participation needs assistive technology, home adaptation, and psychosocial support for reintegration in society.

Teamwork in rehabilitation

Disability may relate to several body systems and affect many aspects of life. Therefore, rehabilitation should ad-

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Table 1. Rehabilitation professionals and their responsibilities*

Professional	Primary responsibility
Rehabilitation physician	Examines, orders ancillary tests, diagnoses, recommends treatment for functional disorders. Helps the patient to adjust to the disability and learn problem solving to minimize the functional loss. Leads the team, coordinates, and interprets reports from other team members.
Rehabilitation nurse	Prepares nursing care plans, provides preventive and restorative care (positioning in bed, care of skin, and prevention of skin breakdown), trains bowel and bladder function, educates patient and family in self-care.
Physiotherapist	Evaluates, prevents, and manages disorders of human motion using passive and active exercises, applies physical modalities in treatment, trains in performing function activities, especially gait with assistance of orthoses, prosthesis, canes, crutches, and wheelchairs.
Occupational therapist	Helps patient improve basic self-care skills (dressing, eating, and personal hygiene), recommends adaptive equipment, teaches homemaking skills, energy conservation, and work simplification, helps improving communication skills, redirects vocational, recreational, and social activities.
Speech/language therapist	Evaluates and treats dysfunction in reception, perception, decoding, encoding motor planning, and production of language. Helps improve communication, reading, and writing. Assesses and treats difficulties in swallowing.
Social worker	Assesses family support services, serves as liaison between patients, family, and community resources; leads group discussions for patients and families in coping with severe disability.
Clinical psychologist	Assesses intellectual dysfunction, psychological impact of disability and motivation. Recognizes and treats reactive depression, designs behavioral therapy and social skills training programs, practices marital and sexual counseling.
Prosthetist	Designs, fabricates, and fits functional and cosmetic devices to replace amputated body parts and restore function, in accordance with patients' vocational and recreational needs.

*Listed here are only main rehabilitation professionals, most commonly included in patient-care teams. There are additional professionals – dietitians, art or music therapists, sports therapists, sexologists, and others – who are sometimes involved according to needs of particular patients.

dress all needs of the patient. It is beyond the possibility of a single individual, the physician, to be thoroughly competent in all aspects or have time to provide all required services. Hence, it is necessary to include other rehabilitation professionals educated and trained to treat and teach patients new skills and how to cope with emotional stress (Table 1). The delivery of care should be tailored to the patient's needs through the integrated and coordinated activity of various professions (1-8). Functional improvement is reported to be greater in patients with stroke treated by stroke specialists than by other professionals (9). The composition and size of the team are determined largely by the type of patient under the team's care. The team should act as a single unit and see the patient as an integral entity, inseparable among professionals. Members of the team should be loyal and problem-oriented rather than status-minded, cooperative and mutually supportive, and aware of each other's roles. They should identify with their own profession, cultivate the professional image that adds to their self-confidence, and at the same time understand professional boundaries, have mutual respect for the skills of other professionals, recognize their personal and professional

limitations, and be ready to learn from other team members.

In rehabilitation medicine, patients are encouraged to be active and informed members of the team; they have to adjust physically and emotionally to the disability and, therefore, need to know what to expect and have sufficient information to assist in problem identification and resolution. Hence, professional team members should know how to communicate and collaborate with patients in goal setting and treatment planning, as well as during its implementation, constantly providing appropriate information.

There are two main models in rehabilitation teamwork – the multidisciplinary and the interdisciplinary approach. In both models, different professionals work toward a common goal. However, in the multidisciplinary model each member of the team conducts assessment and treatment individually and communicates with one person – the team leader; the approach results in the sum of each profession providing its own unique activity and contribution. The interdisciplinary model emphasizes the joint problem formulation and solution; there is frequent mutual consultation, which creates a unified viewpoint of the

patient and his or her family; common treatment goals are designed, coordinated, and integrated into each professional's activity. This approach leads to a mutual reinforcement and synergic effort that produces more than what each profession could accomplish alone. It is the preferred model of rehabilitation team activities (2,4,10). In a series of Cochrane reviews, clear evidence of the effectiveness of interdisciplinary teamwork has been reported in low back pain (11,12).

Education of rehabilitation professionals

In most European countries, rehabilitation workers are well-educated and trained in their professions, their employment is secured by available positions, and the described interdisciplinary approach is practiced, particularly in inpatient institutions in the cities. In some countries, there are sufficient numbers of nurses and physiotherapists, but only few occupational and speech therapists are employed in rehabilitation settings, whereas social workers and psychologists are completely absent. Consequently, therapeutic activities are largely carried out by nurses and physiotherapists, the interdisciplinary approach is not practiced, and training in extended activities of daily living and cognitive therapy is not provided (13). In remote areas of some countries, there is a short-

age of rehabilitation professionals and those available should practice the transdisciplinary teamwork approach in which one profession is able to take over tasks of another when the latter is not available. Thus, nurses may be required to assume the role of therapists and physiotherapists may be requested to function as occupational therapists or vice versa.

In all countries of Europe, rehabilitation professionals have the appropriate professional knowledge, but problems in teamwork may arise because of inappropriate attitudes and lack of skills. Petty jealousies, ignorance, perceived loss of authority, and fear of threat to professional status have been described (14), as well as difficulties in communication, cooperation, and leadership, which are the skills needed for effective teamwork. Team members are usually educated to communicate differently (15) and, therefore, problems may arise (16,17). The level of rehabilitation professionals varies across both professions and countries (Table 2). Consequently, various rehabilitation professions may look at collaboration from different perspectives of care, different level of the status hierarchy, and different sides of the gender gap and have different perceptions of the role of other professionals as the team members (10,18,19). A recent study reports that nurses perceived the role of physiotherapists correctly and valued their knowledge and skills, but felt that the

Table 2. Education of rehabilitation professionals in Croatia, Hungary, and Slovenia

Education	Years of training			Education level			Academic degree		
	Croatia	Hungary	Slovenia	Croatia	Hungary	Slovenia	Croatia	Hungary	Slovenia
Physician	4*	5*	5*	university	university	university	PRM	PRM	PRM specialist
Nurse	3 [†]	3-4 [†]	3	college	college	college	BNS	BA	BA [‡]
Physiotherapist	3	4	3	college	college	college	BPT	BA	BA
Occupational therapist	3	2-3 [§]	3	college	college	college	BOT	BA	BA
Speech/language therapist	4	4	4	university	college	university	BA	BA	BA
Social worker	4	4	4	university	college	university	BA	BA	BA
Psychologist	5	5	4	university	university	university	BA	BA	BA
Prosthetist	0 [¶]	2	3	university	courses	college	none	none	BA

*Abbreviations: PRM – postgraduate specialization in physical and rehabilitation medicine; BNS – Bachelor of Nursing; BA – Bachelor of Arts; BOT – Bachelor of Occupational Therapy; BPT – Bachelor of Physical Therapy.

[†]Some nurses in Croatia and Hungary may have a high-school level education, but they are not licensed to work in teaching hospitals; however, some are still employed in such institutions in Hungary because of nursing staff shortages.

[‡]Majority of nursing students do not have courses in rehabilitation nursing and acquire it on the job.

[§]After 4 years of physiotherapy education.

^{||}Specialization in clinical psychology or neuropsychology is possible.

[¶]No education is available for prosthetists in Croatia, so they are trained on the job (courses) and some of them are educated abroad, mainly in Slovenia.

latter have insufficient understanding of nurses' practice and lacked recognition of nurses' professional autonomy; consequently, barriers existed to effective teamwork (20). Directing, motivating, and influencing team members in the performance of their activities greatly help to achieve the objective. Physicians have the ultimate responsibility for the patient, the broadest training, often the longest practical experience, and are concerned with the whole process of rehabilitation; hence, specialists in rehabilitation medicine are best suited to act as team leaders. In 2006, the *White Book on Physical and Rehabilitation Medicine (PRM) in Europe* was published by the European Union of Medical Specialists (Section of PRM), the European Board of PRM, and the European Academy of PRM (21). The book, describes the training required by PRM specialists in Europe, acknowledges that medical rehabilitation is a multiprofessional activity and that PRM specialists' role includes directing a team. The book suggests that PRM specialists have to acquire leadership and communication skills. However, to the best of our knowledge, PRM specialists during their training are rarely given educational opportunities aimed at acquisition of these skills.

Training for rehabilitation teamwork

As a consequence of all the mentioned problems, effective teamwork, particularly the interdisciplinary approach, may be compromised (22).

Formal training for effective teamwork of rehabilitation professionals in Europe has been largely absent (17) or sporadic, following local initiatives rather than a national policy. Results of patient-centered clinical programs for teams of students, preceptors, and faculty members from six disciplines who provided care in a rehabilitation setting indicated that the task-oriented patient care favored the learning of teamwork skills (23). Some physiotherapy and occupational therapy students

share courses with each other but do not have joint clinical experience and no opportunity to practice teamwork that will become essential when they enter their respective professions (24). Interprofessional training wards for patients who can be rehabilitated provide students of various disciplines with insight into other professional roles and competencies (25-28), leave a long-lasting impression, and may promote teamwork (28). It was reported that various educational efforts, which include students from different health care professions, provided learners with an opportunity to develop their own professional roles, improved their communication and teamwork skills, and enhanced their knowledge of the different roles each profession plays in the system (29). A recent survey of graduates in nursing, social work, physiotherapy, and occupational therapy showed that the majority of them engaged in multidisciplinary team work with other professionals (30). They reported positive experience related to teamwork and pointed out that they had shared teaching with other professional groups before starting their work, thus suggesting a possible link between educational input and positive experience in teamwork (30). In order to improve teamwork skills, the method based on aviation crew training is now advocated in health care in Denmark (31), and the simulation for team training has been applied both in the UK (32) and the USA (33), mainly in areas where time is an important factor, such as surgery, anesthesiology, emergency medicine, and intensive care. These methods could also be used for non-urgent situations that are encountered in rehabilitation.

Discussion

We argue that in Europe, the competence of rehabilitation professionals is appropriate with respect to their knowledge, but their

skills and attitudes necessary for teamwork have to be improved. In these countries, teaching teamwork attitudes and skills, the training of team leaders, the ability of team members to follow, the process of team development, and understanding of various teamwork approaches should be incorporated in the basic and graduate educational programs of rehabilitation professionals on the undergraduate as well as graduate level. On both levels, different rehabilitation professionals should take common courses, share clinical experiences, and take theoretical and practical courses in communication, cooperation, and leadership. The World Health Organization International Classification of Functioning, Disability, and Health has been found to aid communication (34) and clarify team roles (35); its constant use in clinical practice could enhance effective teamwork and, therefore, its study and implementation in practice should also be part of this education.

The reform of education has to be designed and required on the national level rather than left to local initiatives. The Bologna Agreement on European Higher Education is compelling educational institutions to engage in radical reforms. Academic setting as a place for learners to see teamwork in action and to learn about the competencies of other team members and collaboration needs to be examined.

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