

ADAPTED PHYSICAL ACTIVITY IN REHABILITATION

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This manuscript reports the outcome of a project entitled “European Standards in Adapted Physical Activities” (EUSAPA). The purpose of this project was to define the purpose and the added value of an Adapted Physical Activity program as a part of the rehabilitation program. Furthermore, pointing out the goals and the benefits of adapted physical activities, and defining the key activities of an Adapted Physical Activity program in rehabilitation, will result in the specification of a number of competences required to successfully fulfill such a program. From these competencies, suggestions will be made for the optimization of current curriculum requirements in order to enhance the formation of professionals. Finally, recommendations will be outlined to define, develop and safeguard a legislative professional status for the Adapted Physical Activity program and its therapists, specialists, instructors, etc..., i.e. those who are coordinating the Adapted Physical Activity program.

KEYWORDS: Disability, rehabilitation, active lifestyle, Adapted Physical Activity

INTRODUCTION

Rehabilitation is a health care profession that provides treatment to individuals to develop, maintain and/or restore maximum movement and function throughout life. This includes providing treatment in circumstances where movement and function are threatened by aging, injury, disease or environmental factors. Rehabilitation is concerned with identifying and maximizing quality of life and movement potential within the spheres of promotion, prevention, treatment / intervention, habilitation and rehabilitation. This encompasses physical, psychological, emotional, and social well being. Rehabilitation therefore requires a multidisciplinary approach. Depending on the target group, contributing disciplines to the rehabilitation program include among others medicine and nursing, physiotherapy, occupational and physical therapy, psychological therapy and social therapy. (Noreau and Shephard, 1995; Yohannes, Doherty, Bundy and Yalfani, 2010).

Rehabilitation programs can comprise both in and outpatient settings. Often, a distinction can be made between *formal rehabilitation settings* such as rehabilitation centres and rehabilitation units or departments in local hospitals, as well as *informal settings* such as service-homes and departments for patients/clients with particular needs (e.g. persons with physical, physiological, intellectual or psychiatric impairments, elderly, war veterans, abuse victims, etc...). However, both the relative contribution of the various aforementioned disciplines in rehabilitation and the definition of the rehabilitation setting (formal and/or informal) is largely varying between different European countries. As a consequence, although rehabilitation across European countries has a number of similarities, the interpretation of rehabilitation with respect to program content and program environment is dependent of each country's policies and legislation. Nonetheless, the suggestions and recommendations stated in the further course of this manuscript can be applied to all countries.

In the last decades, Adapted Physical Activity (APA) has been acknowledged as a valuable addition to the aforementioned disciplines within the rehabilitation program (e.g. Heath and Fentem, 1997; Keeton and Kennedy, 2009; Motl, Goldman and Benedict, 2010; Valent, Dallmeijer, Houdijk, Slootman, Janssen and van der Woude, 2010). Similar to rehabilitation, the definition, the purpose and evolution, the setting and the character of the APA programs is largely varying between different European countries. Indeed, in some countries, APA is not included in the rehabilitation program. Other countries have a modest sports program, which is mostly optional for patients / clients, and should therefore not be considered a significant part of the rehabilitation program. At present, more and more countries have a fully developed physical activity program. However, these programs are also often optional for patients/clients. As well, in most countries the APA program is not considered as a separate entity within the multidisciplinary character of rehabilitation. APA is mostly embedded within the physiotherapy program, possibly due to the fact that there is no legislative nomenclature for the inclusion, and the application of an APA program as a separate discipline in rehabilitation in any European country. In addition, there is no legislative professional status for APA therapists, specialists, instructors, etc..., i.e. those who are responsible for the APA program within the rehabilitation program. Consequently, it can be concluded that although most countries have done many efforts to implement APA within the rehabilitation programs, there are still a number of steps that can be taken with respect to the formation and legislative protection of therapists, instructors, specialists, and all those who are involved in the rehabilitation programs, and the legislative structure and nomenclature of APA as a fully acknowledged part of the rehabilitation program.

The meaningfulness of an APA program as an additional discipline to the

rehabilitation programs is situated on three echelons. The first is directly related to the rehabilitation program, and is associated with the complementary character of physical activity and sports participation to the classical physiotherapy programs. Previous investigations in scientific research have already suggested that physiotherapy programs often have an insufficient attention for the patient's/client's general physical fitness level, their functionality and functional potential, and the adaptation and optimization of potential aids, taking into consideration the patient's/client's functionality, and the activities of daily living to be performed. Nonetheless, it has already been demonstrated that physical activities during, but also after the rehabilitation phase have a beneficial effect on these indications. As such, implementing APA within the rehabilitation program may result in an enhanced quality and successfulness of the rehabilitation program, and prevent for patients/clients to relapse. (Hayden, van Tulder and Tomlinson, 2005).

Secondly, physical activities have a beneficial effect on the patient's/client's psychosocial well-being. Patients/clients with irreversible impairments /disorders often slide into a downward spiral of social isolation due to a sedentary lifestyle. As such, APA programs in a non-disability oriented approach may enhance personal contacts during sports participation, therefore creating opportunities to share experiences and to learn how to accept or come to terms with an impairment, disorder, etc... (Buman, Hekler, Haskell, Pruitt, Conway, Cain, Sallis et al., 2010; Katzmarzyk, Church, Craig and Bouchard, 2009)

A third major purpose of physical activities in rehabilitation applies to educational and health related issues. Through physical activity and sports patients/clients experience how their body responds to exercise in a variety of circumstances with respect to intensity (both maximal and submaximal efforts) and external conditions (weather, environment, etc...). As well, through physical activities in rehabilitation,

patients/clients learn how to interpret these responses, how to recognize symptoms that contra-indicate physical activity and sport, and how to counteract or treat these symptoms. In addition, patients/clients experience the benefits of physical activity and sports with respect to their quality of life, and the execution of activities of daily living. Consequently, APA has the potential to convince patients/clients about its usefulness, to ensure a continuation of an active lifestyle after rehabilitation. (Brawley, Rejeski and King, 2003).

Due to the arguments and benefits discussed previously, the strategy to realize an APA program in rehabilitation is from the upmost importance. It is necessary to offer a wide range of sports disciplines to get acquainted, and be initiated with, allowing for patients/clients to select a proper sports discipline for post-rehabilitation continuation. Moreover, through the inclusion of a wide variety of physical activities in the program, the functionality of the patients/clients is optimally stimulated, therefore maximizing the potential of each patient/client. As well, the extreme characteristics of certain sports disciplines allow an optimal adjustment and fine-tuning of the aid to the patient's/client's physical abilities. Finally, the APA program is preferably organized in an integrated setting, including recreational and competitive athletes, i.e. hands-on experts, to maximize the transfer of knowledge and experience from hands-on experts to patients/clients in rehabilitation, optimize the social reintegration into society.

OCCUPATIONAL STATUS

Jochheim (1990) provided an interesting perspective and summary regarding the occupational efficacy in APA, presenting a number of examples of APA programs in the rehabilitation of clients with physical and sensory disabilities, intellectual disabilities, emotionally disturbed and mentally ill patients, and individuals with multiple disabilities. Nonetheless, only in a few rehabilitation centers across Europe, APA is considered as a separate entity within the

rehabilitation program, and coordinated by professionals (physiotherapists or physical educators) with a specialization in APA. The APA program however, is often considered as a part of the physiotherapy program, and is therefore mostly coordinated by physiotherapists. As mentioned previously, currently there is no legislative professional status for APA therapists, specialists, instructors, etc..., i.e. those who are responsible for the APA program within the rehabilitation program (in future references the term "APA program coordinator" will be used). The development and safeguarding of such a professional status for the APA program coordinator is therefore warranted to optimize the implementation and quality of an APA program in rehabilitation.

KEY ACTIVITIES

This section describes the key activities associated with the APA program coordinator. These key activities constitute a set of tasks and duties that correspond with the responsibilities of coordinating an APA program. They are subdivided in a number of key areas, consisting of various key roles with a number of specific key functions. The key activities of APA comprehend 4 major responsibilities: planning, information and education, assessment and evaluation, and implementation.

Planning

Implementing a qualitative and successful APA program requires careful planning and cooperating with the other disciplines within the rehabilitation program. APA program coordinators need to realistically assess the values, the benefits and the responsibilities of adapted physical activities within the multidisciplinary character of rehabilitation, taking into consideration the patient's/client's well-being both during and after the rehabilitation phase. This also demands a profound understanding of the patient's/client's condition, functional abilities and potential, and the impact of APA here on. This includes the possible benefits as well as potential contraindications, health risks and

risk factors to participate in physical activities.

The planning activities of the APA program coordinator can be summarized as follows:

- Assess the role and added value of an APA within the multidisciplinary character of the rehabilitation program.
 - Identify the responsibilities of the APA program as a complementary part of the rehabilitation program.
 - Identify the strengths and weaknesses of the currently used rehabilitation and APA program.
 - Identify the available and required resources (facilities, equipment) to implement the APA program.
 - Develop a structured APA program in collaboration with rehabilitation team.
 - Identify the short and long term aims of the APA program.

Information and education

As mentioned previously, the benefits of physical activities and sports during and after rehabilitation are countless. In order to ensure a continuation of an active lifestyle after being discharged from rehabilitation, patients/clients need to be provided with sufficient information regarding possible physical activities and sports disciplines, and the existing community based physical activity programs and sports organizations in the patient's/client's home region.

As well, patients/clients are often unaware of the consequences of an impairment or disorder on their physical abilities. Moreover, an impairment or disorder often results in an altered response to exercise and sports, and may even lead to hazardous health situations if not taken into consideration. Patients/clients need to be educated about the benefits of physical activities and sports, and the potential risks of a sedentary lifestyle on their well-being. Therefore it is important for a program coordinator to educate patients/clients about the consequences of an impairment or disorder on the patient's/client's functional potential, how the body responds to exercise, how to interpret

these responses, how to recognize symptoms that contra-indicate physical activity and sport, and how to counteract or treat these symptoms. (Bhambhani, Mactavish, Warren, Thompson, Webborn, Bressan et al., 2010)

The information and education responsibilities of the APA program coordinator can be summarized as follows:

- Provide the appropriate information to guarantee a continuation of an active lifestyle post rehabilitation.
 - Inform the patient/client about community based physical activity programs and the short and long term benefits of physical activity.
 - Provide a database with information regarding companies and community based organizations to ensure a continuation of an active life style post rehabilitation.
 - Provide information regarding legislation about possible benefits from national, regional and local governing bodies with respect to physical activity and sports post rehabilitation.
- Educate patients/clients about their (dis)abilities and potential through physical activity.
 - Educate the patient / client about his/her functional (dis)abilities, response to exercise, potential health risks, risk factors and contraindications with regards to physical activity.
 - Educate the patient / client about the recognition and remediation of symptoms that potentially lead to health risks, injuries, etc...
 - Educate patients / clients about the APA program and its benefits during rehabilitation.

Assessment and Evaluation

A qualitative and successful APA program requires quality control, including structure and process assessment, as well as outcome assessment, based on a regular monitoring of the program outcomes, and regular program refinements in dialogue with the other coordinators in the rehabilitation program.

In addition, to ensure a maximal participation and optimal result of all patients/clients, the

progress of the patient/client needs to be assessed on a regular basis as well. This includes evaluating the physical fitness level, the psychological well-being, and the social status of the patient/client, and adapting the program content to these evaluations if necessary.

The evaluation activities of the APA program coordinator can be summarized as follows:

- Evaluate the effects of the APA program as a part of the rehabilitation and post-rehabilitation process.
 - Monitor the long term health related outcomes of APA program.
 - Determine the effects of the APA program on functional ability of the patients/clients in collaboration with rehabilitation team.
- Assess the (dis)abilities, risk factors, needs and potential of the patient / client.
- Assess the condition of the patients / clients and its consequences in terms of functional (dis)abilities, health conditions, etc...
- Interpret clinical investigation data (e.g. X-rays, gait analyses, cardiorespiratory tests) and the conclusions and recommendations of rehabilitation specialists.
- Assess the patient's / client's current and potential level of functioning.
- Assess the patient's / client's response to physical activity; identify and remediate potential contraindications, health risks and risk factors.
- Evaluate the patient's/client's response to physical activity, his/her progress, and compare with the preset goals.
 - Assess and evaluate the patient's / client's physical and psychological well being and its progress, and remediate if necessary.
 - Assess the motivation of the patient/client toward the APA program, and remediate if necessary.
 - Monitor and assess the responses to physical activity to ensure safe and successful participation.
 - Document individual development and progress according to the aims of the rehabilitation and the APA program.

- Identify tools, methods, etc... to optimize the patient's / client's physical abilities in daily life and in physical activity.

Implementation

The main key activity of the APA program coordinator is the implementation, coordination and application of the APA program. This includes the development of an individualized program, fine-tuned to the specific needs of each patient/client, and yet applicable in a group setting within the total schedule of the rehabilitation program. The implementation of a successful APA program also comprises optimal participation of patients / clients in rehabilitation through the implementation of a wide variety of physical activities and sports in the program, and through the adaptation of the instructions, encouragements, rules and settings when appropriate. Finally, it is recommended to organize part of the APA program in a community based setting to ensure an active lifestyle post rehabilitation, to guarantee a maximal transfer of experience from athletes and hands-on experts to patients/clients in rehabilitation, and to optimize the patient's/client's reintegration process into society.

The implementation activities of the APA program coordinator can be summarized as follows:

- Implement an individualized APA program complementary to the other disciplines within the rehabilitation program.
 - Develop a structured and individualized APA program in collaboration with the multidisciplinary team.
 - Facilitate and optimize participation through adaptation of the instructions, encouragements, rules and settings when appropriate.
 - Initiate community based physical activity.

COMPETENCES

Mastering the aforementioned key activities to run a qualitative, safe and successful APA program in rehabilitation requires the development of various competences interwoven within those key activities. These

competences comprehend specific background knowledge in combination with a variety of skills, and can be subdivided in a number of therapeutic, pedagogical, educational and management aspects.

Therapeutic competences

Competences regarding the therapeutic aspects in APA programs are mainly associated with the characteristics of the target population, and the impact of physical activity and sports on the target population's potential and well-being. Coordinating an APA program in rehabilitation demands a profound knowledge of the consequences of an impairment or disorder on the patient's/client's functional status and general well-being, and its consequences with respect to the patient's/client's response to physical activity and sports. This includes an understanding of the pathology of the patients/clients and its consequences in terms of functional (dis)abilities, health conditions, etc...; an understanding of clinical investigation data (e.g. X-rays, gait analyses, cardiorespiratory tests, psychological evaluations) and the conclusions and recommendations of rehabilitation specialists from other disciplines; the assessment of the patient's/client's current and potential level of functioning; and an understanding of the patient's/client's response to physical activity; identify and remediate potential contraindications, health risks and risk factors. The main goal of these competences is to guarantee a qualitative and successful APA program, and to ensure a safe environment for the implementation of and participation to the program.

In addition, in order to match the patient's/client's functional status to the pre-set program goals and targets, it is necessary to develop, conduct and interpret regular progress evaluations through direct assessments such as field and laboratory tests, questionnaires, etc..., and indirect assessments such as team meetings, observations, etc... furthermore, it is important to understand these progress evaluations according to the aims of the

program and the potential of the patient/client, and adjust the individualized schedule if necessary.

Therapeutic knowledge and skills further include:

- Understand the general recreation and sport adaptation model for patients/clients including their personal profile, the related implications on human functioning, the specific activity requirements, and the aim of participation.
- Understand and evaluate the interrelation between determinants of human functioning.
- Understand and evaluate the impact of impairment on human functioning.
- Estimate and assess the activity potential of a patient/client through tests, observations, etc... and describe the resulting functional profile.
- Understand the pathophysiological basis of chronic disease, disability and disorder.
- To understand the impact and risks of physical activity.
- To know the impact of medication on exercise performance
- Understand indications and contraindications of sports and physical activities in the rehabilitation of specific populations.
- Master the ability to safely apply APA programs, including regular evaluations, using risk stratification and pre-program screening.

Pedagogical and educational competences

Pedagogical aspects in APA programs mainly include skills regarding working with groups, teaching strategies, and principles of adapting physical activities and sports. Due to specific target population characteristics, the instructions, encouragements, rules and settings of the physical activity or sport often need adaptations to maximally motivate patients/clients, and ensure optimal and successful participation. Educational aspects in APA programs refer to transferring that information to patients/clients that ensures a

safe and injury preventive participation, body awareness and care, and a continuation of an active lifestyle post rehabilitation. Educational competences come down to the ability of changing the attitude and lifestyle of patients/clients through physical activities and sports. Pedagogical and educational aspects are often neglected in rehabilitation settings, but nonetheless, they constitute a key determinant in the quality and successfulness of the APA program. Pedagogical and educational knowledge and skills further include:

- Understand the theory of program development.
- Master teaching, training and coaching skills (didactical skills), needed for a well-balanced approach in a therapeutic environment.
- Understand the principles of adapting activities, games and sports.
- Master a comprehensive overview on disability sports.
- Understand the sport-specific equipment – user – interfaces.
- Be able to adapt activities to the functional potential of the participants.
- Understand the major components influencing the process of adapting activity situations.
- Master the professional skill to initiate and effectively process adaptation.

Management competences

Optimizing the quality of both the APA program and the entire rehabilitation program as a whole requires an understanding of the multidisciplinary character of rehabilitation, and the content and relative contribution of the different disciplines within the program. As such, program coordinators need to be able to offer the best suitable APA program taking into consideration the various disciplines in rehabilitation, and the value of the relative contribution of the APA program to the rehabilitation program. Management knowledge and skills further include:

- Master management strategies including a planning model approach in providing sport and physical

activities for patients/clients in rehabilitation

- Master those skills which are necessary in the preparation of a strategic policy for management and integration of APA programs within the multidisciplinary character of rehabilitation.
- Understand the various community based physical activity and sports organizations eligible for patients/clients in the APA program.

CURRICULUM REQUIREMENTS

Current status: APA related courses and orientations in academic curriculums

Most European countries have implemented APA related courses in the academic curriculums of Physiotherapy, Physical Education and Human Movement Sciences. However, these are often introductory course aiming at offering a brief overview of APA as a domain. As a consequence, the course often dissolves within the curriculum as it offers only little practical tools or none whatsoever for future professionals encountering APA. In addition, with respect to the development of the aforementioned competences for APA program coordinators, the strengths of the physiotherapy programs are often the weaknesses of the physical education and kinesiology programs, and vice versa. Screenings of the content of the physiotherapy, physical education and kinesiology programs related to the required competences for APA program coordinators indicate that physiotherapy programs pay maximal attention to the therapeutic context, whereas pedagogical aspects of APA are often neglected. On the other hand, the main focus in physical education and kinesiology programs is mostly pedagogical, with less attention for adapted physical activities in a therapeutic context. In addition, the implementation of APA related courses in the physical education and kinesiology programs across Europe is organized less universally. Some programs exclusively pay attention to

pedagogical aspects of APA, whereas others mainly focus on active lifestyles and recreational sports in specific populations. Consequently it can be stated that the existing programs are not optimal to deliver professionals capable of coordinating a qualitative APA program as a part of the rehabilitation program.

Many European universities and colleges have a special orientation “Adapted Physical Activity” on a Master level within the curriculums of Physical Education or Kinesiology besides other orientations such as “Fitness and Health”, “Training and Coaching”, “Sports Management”, “Sports Psychology”, “Sports Pedagogies”, etc... However, all the existing APA orientations across Europe include all target populations (e.g. persons with physical, physiological, intellectual or psychiatric impairments, elderly, war veterans, abuse victims, etc...), all target levels (from health related physical activities to recreational and elite sports), and all professional disciplines (education, fitness and health, training and coaching, management, sports psychology, etc...). The currently existing programs are therefore only able to offer an extensive but still limited overview of the entire domain, rather than specializing professionals in a specific professional discipline. As a consequence, students graduating from APA orientations are discipline wise often insufficiently armed to compete with peers graduating from other specialized orientations.

Future recommendations

Because of the aforementioned arguments, the existing APA related courses need to be expanded, optimized and integrated in the curriculums to alleviate the shortcomings of the existing programs. This can be realized with complementary obligatory courses such as “Indications and contra-indications of sports and adapted physical activities in rehabilitation” and “Pedagogical aspects in Adapted Physical Activities” in the existing curriculums for medical and paramedical professionals as well as physical educators and kinesiologists.

As well, with respect to academic orientations, it is recommended to develop an orientation Adapted Physical Activity consisting of a firm introductory *truncus communis* covering all areas of APA, with specializations using a discipline based rather than a population based subdivision. For future references however, it is recommended to strive to an implementation of sufficient APA related courses in the curriculums of Physiotherapy, Physical Education and Kinesiology and its special orientations, rather than organizing a separate orientation “Adapted Physical Activity”.

In the end, the aim of all courses and curriculums should be to deliver professionals (physiotherapists, fitness and health instructors, trainers and coaches, managers, sports psychologists, etc...), all with sufficient competences, background knowledge and skills (cf. supra) to master the key activities (cf. supra) necessary to develop, organize and coordinate a valuable, qualitative and successful APA program within the multidisciplinary character of rehabilitation.

PERSPECTIVES

The surveys and partnership meetings conducted throughout the course of the EUSAPA project have revealed a number of new insights with respect to the implementation of APA in rehabilitation programs, the professional status of the APA program coordinator, and the education of professionals in rehabilitation. The following future recommendations to optimize the quality of the APA program within the multidisciplinary character of rehabilitation can be summarized as follows:

- Develop a legislative structure and nomenclature of adapted physical activities, so that the APA program can be considered as a fully acknowledged discipline in rehabilitation.
- Fragmentation of medical and paramedical care in various small rehabilitation units results in reduced expertise and funding per unit. A centralization of rehabilitation programs in

only a few specialized centers is therefore warranted to ensure an optimal and qualitative rehabilitation program.

- Initiate and facilitate co-operations between rehabilitation centers and community based sports and physical activity organizations through a subsidized regional sports and physical activity administration.
- Create governmentally acknowledged and subsidized mandates for the employment of a program coordinator in all rehabilitation centers, responsible for the development, organization and coordination of the APA program complementary to the other disciplines within the rehabilitation program.
- Provide the means to allow academic APA experts to define, inventory, develop, optimize, add and/or expand, implement and evaluate the necessary APA related courses in the existing curriculums for medical and paramedical professionals as well as physical educators and kinesiologists.
- Integrate complementary obligatory courses such as “Indications and contra-indications of sports and adapted physical activities in rehabilitation” and “Pedagogical and educational aspects in Adapted Physical Activities” in the existing curriculums for medical and paramedical professionals as well as physical educators and kinesiologists to deliver professionals with sufficient competences to develop, organize and coordinate a valuable, qualitative and successful APA program within the multidisciplinary character of rehabilitation.
- Enhance the attitude of medical and paramedical professionals regarding the role of sports and physical activities as a complementary discipline in the existing rehabilitation programs through the integration of APA related courses in the respective curriculums.

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(Abstract)

ADAPTED PHYSICAL ACTIVITY IN REHABILITATION

Dieser Beitrag berichtet über das Ergebnis des Projekts "European Standards in Adapted Physical Activities" (EUSAPA). Die Absicht dieses Projekts war es, Zweck und Mehrwert eines Adapted Physical Activity (APA) Programms als Teil eines Rehabilitationsprogramms zu definieren. Außerdem wird das Aufzeigen der Ziele und Vorteile von APA-Aktivitäten sowie die Definierung der Schlüsselaktivitäten eines APA-Programms in der Rehabilitation darin resultieren, eine Spezifikation einiger erforderlicher Kompetenzen für die erfolgreiche Umsetzung eines solchen Programms zu geben. Ausgehend von diesen Kompetenzen werden Vorschläge für eine Optimierung der derzeitigen Curriculum-Anforderungen gemacht, um die Aus- und Weiterbildung der Fachleute zu verbessern. Schließlich werden Empfehlungen skizziert, um einen gesetzlich festgelegten Status der APA-Programme und der darin tätigen Therapeuten, Spezialisten, Instruktor/innen, etc. (z.B. diejenigen, die die APA-Programme koordinieren) zu definieren, weiterzuentwickeln und abzusichern.

SCHLÜSSELWÖRTER: Behinderung; Rehabilitation; Aktiver Lebensstil; Adapted Physical Activity

(Résumé)

L'ACTIVITE PHYSIQUE ADAPTEE DANS LE CADRE DE LA REEDUCATION

Ce manuscrit fait état des résultats du projet intitulé « Normes Européennes en Activité Physique Adaptée » (EUSAPA). Le but de ce projet était de définir les objectifs et l'importance d'un programme d'activité physique adaptée dans la cadre de la rééducation. De plus, mettre en exergue les objectifs et les bénéfices des activités physiques adaptées ainsi que définir les activités clés d'un programme de rééducation à base d'activité physique adaptée aboutira à spécifier les compétences nécessaires et requises permettant la mise en place avec succès d'un tel programme. A partir de ces compétences, des propositions seront faites afin d'optimiser les conditions actuelles dans le but d'améliorer la formation des professionnels. Enfin, des recommandations seront établies quant au développement et à la sauvegarde d'un statut législatif professionnel de l'Activité Physique Adaptée

ainsi que des personnels de santé (thérapeutes, spécialistes, enseignants, etc.) autrement dit ceux qui coordonneront un programme d'Activité Physique Adaptée.

MOTS CLES : handicap, Rééducation, Vie active, Activité Physique Adaptée

(Аннотация)

АДАПТИВНАЯ ФИЗИЧЕСКАЯ КУЛЬТУРА КАК СРЕДСТВО РЕАБИЛИТАЦИИ

Эта рукописные доклады являются результатом проекта под названием "Европейские стандарты в адаптивной физической культуре". Идея этого проекта заключалась в определении целей и ценности программы по адаптивной физической культуре в рамках реабилитации. Кроме того, выявление целей, преимуществ и ключевых направлений программы по адаптивной физической культуре в сфере реабилитации, приведет к спецификации ряда компетенций, необходимых для успешного выполнения такой программы. Из этих компетенций будут сделаны предложения для оптимизации текущих требований учебной программы в целях повышения образования специалистов. Наконец, будут изложены рекомендации как определить, разработать и защитить законодательной профессиональный статус программы по адаптивной физической культуре и ее специалистов.

КЛЮЧЕВЫЕ СЛОВА: инвалидность; реабилитация; активный образ жизни; адаптивная физическая культура.

(Resumen)

ACTIVIDAD FÍSICA ADAPTADA EN REHABILITACIÓN

Este manuscrito informa del resultado de un proyecto titulado "Estándares Europeos en la Actividad Física Adaptada" (EUSAPA). El propósito de este proyecto es definir el propósito y el valor añadido de un programa de actividad física adaptada como parte del programa de rehabilitación. Por otra parte, señalando los objetivos y los beneficios de la actividad física adaptada, y la definición de las actividades clave de un programa de actividad física adaptada en la rehabilitación, dará lugar a la especificación de una serie de competencias necesarias para cumplir con éxito este programa. A partir de estas competencias, se harán sugerencias para la optimización de los requisitos del currículo actual con el fin de mejorar la formación de profesionales. Finalmente, se indican recomendaciones para definir, desarrollar y garantizar un estatuto profesional legislativo para el programa de Actividad Física Adaptada y sus terapeutas, especialistas, instructores, etc..., aquellos que están coordinando el programa de Actividad Física Adaptada.

PALABRAS CLAVE: Discapacidad, Rehabilitación, Estilo de vida activo, Actividad Física Adaptada

(Resumo)

ATIVIDADE FÍSICA ADAPTADA EM REABILITAÇÃO

Este manuscrito relata o resultado de um projeto intitulado "Normas Europeias em Atividades Físicas Adaptadas" (EUSAPA). O objetivo deste projeto é definir a finalidade e o valor acrescentado de um plano de Atividade Física Adaptada como parte do programa de reabilitação. Além disso, aponta os objetivos e os benefícios de atividades físicas adaptadas, e define as principais atividades de um plano de Atividade Física Adaptada na reabilitação, que terá como resultado a especificação de uma série de competências necessárias para conseguir cumprir com sucesso essa programação. A partir dessas competências, serão feitas sugestões para a otimização dos requisitos dos currículos atuais, a fim de melhorar a formação dos profissionais. Finalmente, serão esboçadas as recomendações para definir, desenvolver e salvaguardar um estatuto profissional para o programa de Atividade Física Adaptada e respetivos terapeutas, especialistas, instrutores, etc., ou seja, aqueles que estão a coordenar o programa de Atividade Física Adaptada.

PALAVRAS CHAVE: *Deficiência; Reabilitação; Estilo de vida ativo; Atividade Física Adaptada*
