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Editorial office:

Correspondence concerning manuscripts and all editorial matters should be addressed to:

Managing Editor, SHS
Tomas Faresjö
Dept. of Medicine and Care
Faculty of Health Sciences
Linköpings universitet
S-581 83 Linköping
SWEDEN
e-mail: shs@hul.liu.se
telephone: +46 13 22 20 00

Editorial Board:

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inger.rosdahl@hud.liu.se
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Medical Biology Programme: Magnus Grenegård, lecturer

- Abstract section –

Evaluation of Pressure Pain Thresholds Before and After Physical Activity in Healthy Women of Fertile Age

Authors: **Börgeson A, Karlsson E**, Physiotherapy Programme, Faculty of Health Sciences, Linköpings universitet, Sweden

Tutor: Gerdle B, Prof, Dept. of Neuroscience and Locomotion: Rehabilitation Medicine, Faculty of Health Sciences, Linköpings universitet, Sweden.

Pain arises from various causes and can be modulated at different levels of the nervous system. It is clear that differences exist between men and women concerning the genesis of pain, the modulation and the experience of pain. The variations in the female menstrual cycle effects the sense of pain. Physical activity has previously been shown to have an effect on the experience of pain, although most of these studies have been carried out on male athletes. The pressure pain threshold can be measured with an algometer, an instrument that is both reliable and valid.

The aim of the study was to evaluate whether physical activity affects the pressure pain threshold in healthy women of fertile age.

Twenty four healthy women that participated in a "Friskis & Svettis" gymnastic programme were included. The pressure pain threshold was measured with an algometer on four points, before and after the training session.

Data analysis of the measurements of the pressure pain thresholds before and after the physical activity showed no significant changes. There was a positive correlation between age and pressure pain thresholds after physical exercise. We established that the menstrual cycle influenced the result of the pressure pain thresholds. No significant change of the pressure pain thresholds was noticeable after the physical activity. The participants' degree of exertion was difficult to standardize, which may have had an effect on the result. There is a possibility that physical activity influences other dimensions of pain than the experimentally induced pain in this study. The results should be interpreted with caution since the number of participants in this study was relatively small.

Key words: analgesia, physical activity, pressure pain threshold

Postural Steadiness in One-Legged Stance – Validation of a Kinetic Measuring Instrument (footscan®)

Authors: **Fabianson G, Hägglund M**, Physiotherapy Programme, Faculty of Health Sciences, Linköpings universitet, Sweden

Tutor: Öberg, U, PhD Dept. of Neuroscience and Locomotion: Physiotherapy, Faculty of Health Sciences, Linköpings universitet, Sweden.

Footscan® sst is a new transportable force platform for evaluation of postural steadiness. It may be used to evaluate clinical progress in patients with balance deficits. The force platform measures the vertical ground reaction force and thus provides a means of computing the centre of pressure. Different measures are used to describe the excursion of the centre of pressure.

The objectives of the present study were: (I) to determine the relationship between footscan® version 6.1 and EquiTest (concurrent validity of footscan®), and (II) to determine the relationship between the different measures used to evaluate postural steadiness on footscan®.

Thirty healthy subjects (19-31 y.) participated in the study. Postural steadiness was evaluated in one-legged stance. The subjects performed three tests on each leg on both equipments. Each test lasted 30 seconds. Pearson product-moment correlation coefficient was used in the statistical analyses with a probability of 0.05.

Only two significant correlations ($p < 0.05$) were found between footscan® and EquiTest . There was a significant relationship ($p < 0.001$) between the measures on footscan®. The average of three tests was used in the above analyses. No considerable relationship was found between footscan® and EquiTest . The different measures on footscan® showed a strong to excellent relationship. The present study does not support the use of footscan® version 6.1 in a clinical setting or for research purposes. The results cannot be generalized to patient populations.

Key words: center of pressure, force platform, kinetics, postural control, postural steadiness, validity

Intra- and Inter-observer Reliability on the Portable Forceplate footscan® ver 6.1 sst in One-leg Standing

Authors: **Carlsson H, Palmkvist E**, Physiotherapy Programme, Faculty of Health Sciences, Linköpings universitet, Sweden.

Tutor:: Skargren E, PhD Dept. of Neuroscience and Locomotion: Physiotherapy. Faculty of Health Sciences, Linköpings universitet, Sweden.

Improvement of the postural stability is a common aim in physiotherapeutic rehabilitation. Earlier studies have proved that measurements of postural stability is a significant factor in predicting injuries and in monitoring the rehabilitation process. To be able to measure postural stability it is necessary to have instruments that are sensitive and reliable. There are many objective methods used today. Most of the methods demand complicated, expensive and non-portable equipment. The usefulness is therefore limited. footscan® ver 6.1 is a new, portable forceplate that might be useful for measuring postural stability. However the reliability has not yet been tested. The aim of the present study was to estimate the intra- and inter-observer reliability of the instrument footscan® ver 6.1 during one-leg standing.

The study included 28 subjects aged 20 to 28 years. Three measurements on each leg were accomplished by two independent observers. One week later they were measured three times more, on each leg, by one of the observers. Variables registered were sway- area and maximal sway-amplitude. The analyses of the results were made with ANOVA, ICC in Statview 4.02.

The result, regarding sway-area, of the intra-observer reliability showed 0.240-0.468 ("fair" to "moderate"), calculated on mean values from two different occasions, and the inter-observer reliability was 0.715-0.842 ("substantial" to "almost perfect").

Due to the poor intra-observer reliability, footscan® ver 6.1 sst is not to be relied on. In order to use footscan® in clinical work further development of the program and additional studies are required on the force plate.

Key words: balance, footscan, force plate, physiotherapy, postural stability, portable, reliability.

Mouse Cursors Speeds Effect on Muscle Activity in Upper Extremity - The Connection between Different Cursor Speeds, Wrist Angle and Muscle Activity

Authors: **Hobro K, Persson K**, Physiotherapy Programme, Faculty of Health Sciences, Linköpings universitet, Sweden

Tutor: Öberg T, Professor, Department of Rehabilitation, University College of Health Sciences, Jönköping, Sweden

In modern society the number of employees involved in computer work increases and there are indications that musculoskeletal disorders, especially in shoulder and arm are associated with computer work. The increase of computer work also has increased the use of computer mouse.

The aim was to investigate how the cursor speed effect the muscular activity in the upper extremity and if the wrist angle changes with changed cursor speed.

Twelve experienced computer mouse users, all women, participated in the study. They clicked through a standardized program performing different tasks. During the tasks the muscle activity was recorded for M. Trapezius, M. Carpi radialis longus and brevis with electromyography (EMG). An electrogoniometer was used to register the wrist movements. Subjective ratings with Borgs scale, were used to register muscular load.

The results of the EMG activity was not significant, but the tendency was that high cursor speed gave high muscle activity and less muscular rest compared to normal speed. The results of the electro-goniometer showed a strong trend towards that the wrist moves less with high cursor speed. The perceived ratings showed small differences between the speeds. This study shows no support for the recommendation that increased cursor speed should give decreased muscle activity. Instead there was a tendency that the muscular activity increased with increased cursor speed. The wrist angle decreases with increased cursor speed.

Key words: computer work, cursor speed, electro-goniometer, electro-myography, muscle activity, upper extremities

What are the Effects of Physical Exercise on Individuals 75 Years or Older?- a Review Study

Author: **Bengtsson M**, Physiotherapy Programme, Faculty of Health Sciences, Linköpings universitet, Sweden

Tutor: Öberg U, PhD, Dept. of Neuroscience and Locomotion: Physiotherapy. Faculty of Health Sciences, Linköpings universitet, Sweden

People aged 75 and above is a growing group of the Swedish population. With age the aerobic capacity decreases, the skeleton becomes more fragile, the muscle force decreases and the balance deteriorates. However, old people have good capacity to be active in high age and physical exercise has for example proven to be a source of functioning ability and independence in high age.

The main purpose of this review was to determine the efficacy of physical exercise in individuals 75 years and older, healthy or ill.

Article search was performed in the databases Medline and Cinahl and in the end 15 papers were found. The methodological quality was examined using a methodological guideline (Fowkes & Fulton, 1991; SBU, 1997b).

The outcome of this review showed that the articles varied in methodological quality, only five articles were judged as "very good". In addition, there were significant improvements in strength, functional status and lowered risk of injuries and falling. No conclusions could be made regarding balance, flexibility or aerobic capacity. The physiotherapist has an important role in this field, as physical exercise of the elderly can give a positive effect on countless areas. Further review articles should be made in the field of aerobic capacity, balance and flexibility.

Key words: aged, exercise, exercise therapy, physiotherapy.

Experiences of Occupational Therapy in the Home - Seen from the Perspective of the Relative

Authors: **Karlsson M, Lindquist M**, Occupational Therapy Programme, Faculty of Health Sciences, Linköpings universitet, Sweden.

Tutor: Larsson Å, OT, lecturer, Faculty of Health Sciences, Linköpings universitet, Sweden

Home rehabilitation was developed as a result of increasing demands for a more effective healthcare. Relatives often lack knowledge and experience of caregiving in the home, which can lead to a sense of uncertainty and helplessness. The role of the occupational therapist is to cooperate with the patient and the caregiver to create a safe and effective treatment.

The aim of this study was to describe relatives' experiences of occupational therapy in the home-care setting. Seven qualitative interviews were made with relatives of patients originally treated at Rehab LAH (hospital-based home rehabilitation) in Linköping.

The interviews were analysed and processed using a qualitative approach inspired by phenomenography.

The results show that almost all of the caregivers had only positive experiences of occupational therapy intervention and that they had received advice and support enabling them to assist their family member. Rehabilitation in the home environment created a relaxed and secure relationship. Several respondents thought that an extended rehabilitation period could have provided them with extended knowledge about how to activate the patient.

The conclusion reached in this study is that occupational therapy intervention is valuable and necessary to master caregiving in the home.

Key words: occupational therapy, caregiving in the home care setting, home rehabilitation, relative, qualitative method.

County Council as a Collaborative Partner - An Interview Study of How Case Managers Experience Joint Care Planning

Author: **Andersson E**, Social Care Programme, Faculty of Health Sciences, Linköpings universitet, Sweden

Tutor: Fried K, lecturer, Faculty of Health Sciences, Linköpings universitet, Sweden.

Through the law on municipal liability for payment, the municipalities received total responsibility for the care of long-term patients. When the county council reports that medical treatment for a patient has been completed, responsibility for that individual then becomes that of the municipality. Before a patient is discharged from the hospital, joint care planning by the municipality and the county council must first take place.

The aim of this study was to obtain a picture of how case managers experience collaboration with county council staff with respect to joint care planning.

The study is qualitative and based on five interviews with case managers working within elderly care. An interview guide was used during the interviews.

The way in which joint care planning is experienced is governed by factors that occur before, during and after the meeting. The particular unit at the hospital and the particular hospital staff working at the time of the care planning meeting are two factors that influence how the collaboration is experienced. The results also show that county council staff have poor insight into municipal activities and that the municipality does not feel like an integral part of the county council organisation. The study was conducted from the perspective of the case manager.

Key words: care planning, collaboration, case manager, municipality, social care

The Setting of Individual Wages - A Qualitative Study of what Unit Managers Think About the Setting of Individual Wages

Authors: **Gullemo C, Thunberg A**, Social Care Programme, Faculty of Health Sciences, Linköpings universitet, Sweden

Tutor: Öberg B-M, PhD, Faculty of Health Sciences, Linköpings universitet, Sweden.

In 1994 the Swedish Municipal Workers' Union reached a national agreement with the Swedish Association of Local Authorities and the Swedish Federation of County Councils involving a change in wage policies for the Union.

The aim of the study was to describe the impact of the agreement concerning the setting of individual wages as it is applied at the local level by unit managers in two municipalities. One of these municipalities had already implemented individual wage setting while the other had not, although preparations were underway. A second aim of the study was to describe what the unit managers considered to be the pros and cons of setting individual wages.

Data collection was done through qualitative interviews with unit managers and through examination of relevant documents.

The results indicate that all the unit managers think it is important to have knowledge about what is involved with individual wage setting and how it should be implemented. It was also found that the unit managers have different prerequisites for being able to carry out individual wage setting. Guidelines and forms differ in the two municipalities, as does support from colleagues when it comes to evaluating staff members. It was found that all unit managers feel it is important to be knowledgeable about their staff. All unit managers are positive about the setting of individual wages. They see it as a means of rewarding capable staff members, influencing staff to fulfil the goals of the unit, and giving staff members fairer wages. To enable unit managers to set individual wages, it is important that they receive training in what is involved and that documents are available with clear and unambiguous guidelines.

Key words: leadership, individual wage setting, co-workers, policies, evaluation

Old Age With Two Cultures - A Qualitative Study of Elderly Chileans and Yugoslavs and Their Expectations Concerning Growing Old in Sweden

Authors: **Pontvik Refsbäck S, Stigh L**, Social Care Programme, Faculty of Health Sciences, Linköpings universitet, Sweden

Tutor: Anbäckén E-M, PhD, Faculty of Health Sciences, Linköpings universitet, Sweden.

The Swedish National Statistics Office predicts that in 2010 there will be more than 200,000 foreign-born individuals in Sweden over the age of 65 years. Since the mid 1980s a debate has been underway concerning whether immigrants have a need for special care, and if so, who should meet this need.

The aim of this study was to investigate what elderly Chileans and Yugoslavs think about growing old in Sweden. We also wanted to study what they think about their needs for care when they become older and how they would like these needs to be met.

We conducted a qualitative study including a focus group interview of four Chileans and individual interviews with four Yugoslavs and three Chileans. In the theoretical frame of reference the modernisation theory and the role theory are considered.

The results show that both the Chilean and the Yugoslav respondents define the need for care as purely physical and medical care. Their expectations about growing old in Sweden are governed by many different factors including traditions in their native countries and family relationships. Special ethnic solutions are only requested by respondents with poor Swedish language skills. In the final discussion we point out three factors we think influence the way in which elderly immigrants want and need to have their needs for assistance met. These factors are: 1) the reason for immigrating to Sweden, 2) number of years in Sweden, 3) the command they have of the Swedish language.

Key words: elderly immigrants, ethnicity, care needs, elderly care, special solutions

The Professional Role of the Social Pedagogue

Authors: **Arnberg C, Hawborn-Espander C**, Social Care Programme, Faculty of Health Sciences, Linköpings universitet, Sweden

Tutor: **Münger A-C**, PhD, Faculty of Health Sciences, Linköpings universitet, Sweden.

The aim of the study was to determine what it is that is specific to social pedagogy as compared to other similar professions.

We conducted a qualitative study comprising interviews with four social pedagogues and three employers to obtain their perspectives concerning this professional role.

The results show that the study programmes for social pedagogues and social workers are relatively similar, and many of the informants even said that social workers and social pedagogues can work with the same type of issues. At the same time, we could also distinguish differences, such as that social pedagogues focus more on direct interaction with clients while social workers are more knowledgeable concerning legal issues and documentation. Furthermore, our results indicate the importance of an academic education, by means of which professionalism is developed. In the case of the social pedagogue, this involves utilising the ability to carry out change together with the client by using theories and oneself as an instrument. According to the results, what is specific to social pedagogues is their approach, through which they strive to make themselves “unnecessary”, meaning that their starting point is the client and that they try to strengthen that person’s inherent resources. The goal is finally to trust in the client being able to manage things himself/herself. According to the employers, social pedagogues have the ability to collaborate and their personality has developed during their education.

Key words: social pedagogue, professionalism, relationships, power, social work

"We Live in the Periphery of the System" - A Qualitative Study of How Four Persons Experience Working Life

Author: **Malko A**, Social Care Programme, Faculty of Health Sciences, Linköpings universitet.
Tutor: Norrbacka-Landsberg R, PhD student, Faculty of Health Sciences, Linköpings universitet, Sweden.

This is a qualitative study of how four persons who completed their high school or university education in their native country, Bosnia and Hercegovina, and who then moved to Sweden during the 1990s, have experienced working life.

The method used in the study consists of unstructured interviews. The interviews were unstructured in that I did not have any questions prepared in advance for these persons to answer. Instead, at the time of the interview they were initially given four articles to read. These articles describe the same complex of problems, the future need for manpower on the Swedish labour market.

The aims of the study are to elucidate these problems from the working life perspective of the four interviewees, as well as to obtain an increased understanding of how these persons have experienced the migration process. Elucidation of these aims is done by interpreting empiricism from three perspectives; migration, social constructionism and the power of the media.

The fact that those interviewed look upon themselves as belonging to a fabricated social group in society, i.e. immigrants, contributes to the feeling of not belonging to the fellowship represented by Swedish society. They feel the media possess great power, as they are responsible for spreading "untrue" information that contributes to reinforcing different ascribed characteristics, which in turn results in destructive consequences for this "foreign" group. One of these consequences is exclusion from the Swedish labour market. To enable the reader to gain greater knowledge and understanding concerning this group's present situation with respect to working life, the interviewees tell about how they have experienced the process of change resulting from the move to Sweden.

Key words: working life, migration, social constructionism, media power, qualitative method

Single Mothers in Need of Help and Support - An Interview Study from a Client Perspective Concerning the Background to Contact with Social Services and how this Contact is Experienced

Authors: **Johansson L, Walfredsson J**, Social Care Programme, Faculty of Health Sciences, Linköpings universitet, Sweden

Tutor: Karlsson K, PhD student, Faculty of Health Sciences, Linköpings universitet, Sweden.

The aim of the study was to shed light, from a client perspective, on why six single mothers sought help at the Social Services Individual and Family Care Centre. Another aim was to study what it is like to be single in this situation and how the mothers felt about the way the professional staff treated them. We chose to focus on single mothers who received some assistance in addition to income support.

The study is based on six qualitative interviews with single mothers who contacted Social Services on their own initiative.

The results show that trouble or worries concerning their children was the main reason for seeking help. The problems were expressed in different ways. Those interviewed had a feeling of being alone in varying respects. In addition, most of them reported financial difficulties. Without exception, the women's experiences of being well treated at the Social Services Individual and Family Care Centre included being listened to, feeling that they were understood, and being respected. Feeling dissatisfied with the helper's way of acting and with how they were treated was more common, however, and was expressed in different ways. For example, the women talked about not being listened to, feelings of being misunderstood, insulted and opposed. Further, it was contended that the social workers lacked competence concerning laws and regulations and that they were governed by the economic restrictions of the municipality.

The value of taking the client's whole life situation into account in social work is clearly evident in this study.

Key words: single mothers, client perspective, client, helper, system theory