

International Journal of Basic and Clinical Studies (IJBCS) 2018; 7(2): 74-91





## International Journal of Basic and Clinical Studies (IJBCS) 2018; 7(2): 74-91

## **OP-1.** The Relation Between the Exercise Capacity of the Elders and Kinesiophobia

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**Purpose:** To examine the relationship between the kinesiophobia, exercise capacity, falling frequency and fears and anxiety-depression of the individuals over the age of 65.

**Methods:** Fifty volunteer elders who were dwelling in a nursing home (Istanbul Nursing Home, Asude Nursing Home, and Silivri Nursing Home) or with their family were included in the study. Sociodemographic and clinical characteristics of the participants were recorded. Physical activity assessed with Physical Activity Scale for the Elderly (PASE), Kinesiophobia assessed with Tampa Scale for Kinesiophobia (TSK). Cognitive State assessed with Mini-Mental State Examination (MMSE). Anxiety-depression assessed with The Hospital Anxiety and Depression Scale (HADS). Exercise capacity assessed with Six-Minute Walking Test (SMWT). Fear of falling assessed with Fall Efficacy Scale (FES-I).

**Results:** Exercise capacity were found related with kinesiophobia (p=0.007, r=-0.42), level of physical activity (p=0.003, r=0.38) and fear of fall (p=0.002, r=-0.42). Kinesiophobia were significantly related with fear of falling (p<0.0001, r=0.60) and anxiety (p=0.01, r=0.35). There was not a relationship between kinesiophobia and physical activity level (p>0.05).

**Conclusion:** The results of our study showed that exercise capacity and the kinesiophobia can affect each other. Kinesiophobia has no influence on the level of physical activity. Future studies should evaluate the elders who are living in different places.

Key words: Elderly, kinesiophobia, exercise capacity.



# **OP-2.** After Mastectomy, Examination of the Effect of Pneumatic Compression Therapy on the Patients with Lymphedema

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**Purpose:** Some of the complications which occur after mastectomy are the lymphedema and accordingly the limitation of the range of motion (ROM) of the arm joint. The aim of this study is to investigate the efficacy of a pneumatic compression device combined with multi lamellar lymphedema bandage the treatment of lymphedema after mastectomy.

**Methods:** Twenty female patients who were led to the Department of Cardiovascular Surgery of Istanbul University, Istanbul Medicine Faculty due to lymphedema after breast cancer treatment, were included in this study. Patients were randomized into two groups. All patients had been applied lymphedema bandage for 14 sessions. In addition, pneumatic compression device treatment was applied to the second group. Measurements of shoulder and elbow joint ROM and circumference measurements were performed at the beginning of treatment, 5th, 10th, and 14th sessions.

**Results:** The mean age of the bandage group was  $52\pm11.11$  and the bandage+pneumatic compression device group was  $56.8\pm11.32$ . Body mass indexes were  $29.52\pm5.37$  in the bandage group  $28.05\pm3.96$  in the bandage + compression device group. In both groups, there was a significant decrease in shoulder ROM, upper limb circumference measurements at 5th, 10th and 14th sessions, compared to the treatment initiation (p<0.05). There was no significant difference between both groups in terms of response to treatment at all sessions (p>0.05).

**Conclusion**: Significant evidence wasn't found that adding intermittent pneumatic compression therapy to the multilevel lymphedema bandage treatment provided additional benefit.

Key words: Mastectomy, lymphoedema, intermittent pneumatic compression, bandage



# **OP-3.** The Effect of Physical Activity on Sleep Quality and Depression in Young Adult Individuals

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**Purpose:** The aim of this study was to evaluate the relationship between physical activity level and sleep quality, depression in young adults.

**Methods:** Healthy young people between ages of 18–25 years were included in the study. Physical activity level, sleep quality, depression levels were performed with the International Physical Activity Questionnaire-Short Form (IPAQ-SF), the Pittsburgh Sleep Quality Scale and Beck Depression Questionnaire, respectively. Interviews were done face to face. Data analysis was performed with SPSS.16.

**Results:** A total of of136 participants (103 female and 33 male) were included in the study. The average age of participants was  $20.9\pm2.1$  years. Males had significantly higher levels of IPAQ-SF scores (p=0.008). When correlation analysis was performed between variables, significant positive correlations were found between sleep quality and Beck depression scores (p=0.001). There was also a positive correlation between the age and physical activity levels of participants (p = 0.002).

**Conclusion:** According to the responses of the participants, it was observed that men were physically more active than women. We could not find any relationship between physical activity and sleep quality and depression. However, our results showed that good sleep quality increases the status of 'well being'. Similarly, our findings, a positive correlation between the sleep quality and depression was reported in Turkish university students in the literature.

Key words: Physical activity, depression, well-being, sleep quality.



## International Journal of Basic and Clinical Studies (IJBCS) 2018; 7(2): 74-91

# OP-4. Comparison of Physical Activity Level, Fatigue, Sleep, Sedentary Behavior and Quality of Life in Healthy Individuals of Different Age Groups

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**Purpose:** Nowadays, parallel to the development in technological fields, the place of movement in daily living activities is gradually decreasing. In addition, in various problems such as deterioration of sleep quality and fatigue brings serious limitations to individuals' ability to maintain their daily activities. Therefore, it is important to determine the factors that cause limitations in the daily lives of individuals and to compare their effects. The aim of our study was to compare physical activity level, fatigue, sleep, sedentary behavior and quality of life in healthy individuals of different age groups.

**Methods:** Three-hundred eighty-five healthy individuals between the ages of 25-65 (mean age 43.28±12.09 years) were included in the study and divided into 4 groups according to their age ranges. Individuals were assessed by "socio-demographic data form" for the demographic data, "International Physical Activity Questionnaire (IPAQ-short form)" for physical activity level, "Fatigue Severity Scale (FSS)" for fatigue, and "Pittsburg Sleep Quality Index (PSQI)" for sleep, "Sedentary Behaviour Questionnaire (SBQ)" for sedentary behavior and "World Health Organization Quality of Life Scale (WHOQOL-Bref) for quality of life.

**Results:** Significant differences were found between the groups in FSS, PSQI, and SBQ values. (p<0.05). There was no significant difference in IPAQ-short form and WHOQOL-Bref instrument between the groups (p>0.05).

**Conclusion:** Sedentary behavior is greater in young people than in the elderly, however, the body mass index increases with age. For a more active life, all age groups should be directed to programs that increase the level of physical activity.

Key words: Physical activity, fatigue, sleep, sedentary behavior, quality of life



# **OP-5.** The effects of rehabilitation participation on depression, anxiety, and hopelessness in community-dwelling elderly people

#### Begum Kara Kaya, Ayse Arsen Kecer, Elif Burcu Yilmaz, Muhammed Bilal Yuce, Betul Karayel, Burat Mert Gumus, Mustafa Dogan, Gizem Sancak, Ali Eren Ercan

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**Purpose:** Depression, anxiety and hopelessness affects aged over 65 years' people who live in community centers by 14-42%. Regular exercise has an important role in the maintenance and improvement of social and psychological well-being. The aim of the study is determining the effects of rehabilitation participation on depression, anxiety, hopelessness in community-dwelling elderly people.

**Methods**: Thirty subjects aged over 65 years who have been living in a community center for at least 6 months were divided into two groups according to rehabilitation participation; participants (P, 5 females-10 males, mean age 71.60±6.91/years) and non-participants (NP, 7 female, 8 males, mean age 74.40±9.03/years). Cognitive functions, depression, anxiety, and hopelessness were assessed with respectively Standardized Mini-Mental Test (SMMT educated/uneducated), Geriatric Depression Scale-Short Form (GDSSF), Beck Anxiety Inventory (BAI) and Beck Hopelessness Scale (BHS).

**Results:** The mean SMMT scores of P and NP were respectively  $23.33\pm3.54$ ,  $21.67\pm3.18$  and there was no significant difference (p>0.05). A significant difference was found between the groups in terms of WBS, GDFI and BAI (p<0.05). There was positive correlation between cognitive function-hopelessness and cognitive function-depression (respectively, r=0.65, r=0.62, p<0.05) in the NP.

**Conclusions**: P have lower hopelessness, depression, and anxiety than NP. According to SMMT scores, subjects had mild dementia, P' scores were higher, even though it was not significant. Our findings confirm the positive effects of rehabilitation on psychological factors. The relationship in NP suggests that more objective assessments may be used in clinics rather than self-report scales in those with dementia.

Key words: Rehabilitation, geriatrics, depression, anxiety



## International Journal of Basic and Clinical Studies (IJBCS) 2018; 7(2): 74-91

## **OP-6.** Examination of physical activity, posture, motor development and

physical fitness characteristics of healthy children aged 7-12 years-pilot

study

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**Purpose:** The aim of this study was to examine the physical activity, posture, motor development and physical fitness of the health of children between the ages of 7-12; to identify the problems in the early period and to contribute to the presentation of the solution proposals.

**Methods:** A study included 30 healthy children aged 7-12 years. The demographic characteristics of the children were recorded with the assessment form. Physical activity levels were assessed with the Physical Activity Questionnaire (PAQ-C). Posture with 'New York Posture Scale'. 'Eurofit Test Battery' was used for the physical fitness evaluation, 'Beighton Score' for evaluation of hypermobility, and '6 minutes walking test' for aerobic capacity assessment. SPSS 22.0 program was used for data analysis.

**Results:** A significant relationship was found between physical activity level and some motor performance test components (p<0.05); and physical activity level and physical fitness test (right-hand disk touch component) (p<0.05). There was no significant relationship between posture and physical activity level (p>0.05). Long jump and endurance shuttle run parameters were significantly higher in the male participants and the hypermobility score was significantly higher in females (p<0.05).

**Conclusions:** Significant results were found in some parameters of physical activity and motor performance and physical fitness tests. As these parameters can be used to increase the level of physical activity, such activities can be emphasized in the game and sporting participation of children.

Key words: Physical activity, posture, motor development, healthy children



# OP-7. Assessment of the Effect of Foot Posture, Function and Physical Activity Level on Balance in Young People

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**Purpose:** The aim of this study was to investigate foot posture and function to examine the effects of these factors on balance by examining the foot pressure distributions and physical activity levels in young individuals.

**Methods:** 56 university students participated in the study. The pain was examined with a visual analog scale (VAS). The balance was determined with single leg stance test. International Physical Activity Questionnaire (IPAQ) was used to identify participants'physical activity. Foot Ankle Ability Measure (FAAM) was used to specify foot and ankle functions. To determine foot posture, Foot Posture Index-6 (FPI-6) was used. Pedobarography was used to examine static and dynamic balance. The SPSS 20.0 statistical program was used in the data analysis of the study and the level of significance was accepted as p<0.05.

**Results:** 28 of the participants (50%) were female, 28 of them (50%) are male. The pain during activity was 17.9% higher in women than in men. We found that foot pain negatively affects balance (p=0.007). In the postural evaluation, the frequency of genu valgus (p=0.018) and protraction (p=0.033) was higher in women. There was a correlation between foot posture index and dynamic surface balance (p=0.026). Right foot sole static load and IPAQ are correlated to each other (p=0.017). The level of physical activity was lower in women than in men (p=0.012).

**Conclusion:** The results of the study indicate that pedobarography is an effective evaluation method for early detection of foot and balance problems that may occur in young healthy individuals who have no complaints.

Key words: Pedobarography, physical activity, foot pain





# **OP-8.** The Effect Of Core Muscles And Upper Limb Muscles Strength On Shot Performance In Paralympic Archers: A Pilot Study

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**Purpose:** The aim of this study is to investigate the effect of core muscles and upper limb muscle strength on shot performance in Paralympic archers with different classification scores and point out the importance of physiotherapy in terms of rehabilitation of disabled athletes.

**Methods:** Six adult disabled athletes (mean age:29.66±9.66/years) who were the team members of Bağcılar Municipality Disabled People Rehabilitation Center Archery Team were included in the study. Demographic characteristics of the participants were recorded. Physical assessments such as posture analysis, trunk, lower and upper limb muscle strength assessment, muscle shortness, anthropometric measurements, and flexibility tests were performed. Performance evaluation was performed with 6 minutes mobility test (modified 6 minutes walking test), shot hit test, modified dynamic trunk flexion test, modified static trunk flexure endurance test, modified reach test, and modified lateral reach test. Then, the participants were included in an exercise program for a total of 8 weeks for 1 day a week to increase posture and muscle strength.

**Results:** At the end of the study, 6 minutes distance during mobility was found positively correlated with 1st target left, 6th hiking distance, 2nd target, and 4th target lower (p<0.05).

**Conclusion:** When compared pre and post exercise, a significant increase in shoulder flexor, abductor, forearm flexor, wrist flexor, and extensor muscle strengths were found statistically significant after exercise. Also, static body flexion endurance improved significantly (p<0.05).

Key words: Core stabilization, paralympic archery, shooting hit



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## International Journal of Basic and Clinical Studies (IJBCS) 2018; 7(2): 74-91

# **OP-9. Effects of Core Stabilization Exercises on Balance, Explosive Power, and Endurance in Amateur Taekwondo Athletes**

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**Purpose:** The literature on the effect of core stabilization exercises (CSE) on physical fitness parameters in taekwondo athletes is limited. The purpose of this study is to show the effects of CSE on explosive power, balance and muscular endurance in amateur Taekwondo athletes.

**Methods:** 40 volunteer athletes (20 from Yavuzhan Taekwondo Sports Club and 20 from Hasan Doğan Sports Complex) were included in the study, divided into study and control group. Demographic information was recorded. Stork Standing Test" was used for static balance, "Y Balance Test" was used for dynamic balance. To evaluate muscle endurance, the stopping time was recorded in plank, superman and crunch positions, also the number of push-ups and paldeungs made per minute were recorded. Explosive force evaluated with "Vertical Bounce Test". The groups continued with general taekwondo training programs which are 3 days a week. In addition to the workouts of the study group, CSE was added. The CSE program consists of 2 phases, which lasts for 3 weeks in total for 6 weeks. The evaluations were applied both before and after the 6-weeks training programme.

**Results:** In both groups, performance improvement was recorded in balance, endurance, explosive power after 6 weeks (p<0.05). There was a significant difference in balance and endurance performances in the study group compared to the control group (p<0.05), however, no significant difference was found in explosive power performance (p>0.05).

**Conclusion:** The results of this study show that CSE has a positive effect on balance and endurance performance for amateur taekwondo athletes.

**Key words:** Core stabilization exercises, taekwondo, muscular endurance, static balance, dynamic balance



## International Journal of Basic and Clinical Studies (IJBCS) 2018; 7(2): 74-91

# OP-10. The Relationship Between Balance Aerobic Power And Agility In Amateur Football Players

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**Purpose:** Football is a high degree of effort required game in which more than one action is carried out at the same time. There is a limited number of studies which find a place in literature that fitness parameters are evaluated together, especially compared between the football players who play different positions. The purposes of our study are examining the relationship between balance-coordination, flexibility, aerobic power, and agility of footballers by considering their positions.

**Methods**: 50 amateur footballers who have a license for at least 6 months between aged 15-18 years were included in the study. Exclusion criteria were not being able to cooperate adequately, using sedative drugs, having cardiopulmonary and vascular diseases, having musculoskeletal injuries at lower limbs and being a goalkeeper. Participant's age, height, sex, weight, playing positions were recorded and their balance-coordination, flexibility, agility, aerobic power were measured. The sit-up test used for the evaluation of flexibility, star-excursion balance test used for balance, T-agility test and 505-agility test used for agility and Cooper test used for aerobic power.

**Results:** There was a correlation between 505-agility test and anterior right and left balance and T-agility test and posterolateral balance and aerobic power (p<0.05). Flexibility was not related with balance, agility or aerobic power. Back players had significantly better balance (p=0.041) and flexibility (p=0.010) compared with the other playing positions.

**Conclusion:** Our study showed that the balance of the midfielders is better then the striker players and fullback players had the best flexibility while strikers had the worst.

Key words: Amateur players, football, balance, position



# **OP-11. Relationship Between Lower Extremity Muscle Strength And Sprint Performance In Young And Star Volleyball Players**

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**Purpose:** In volleyball, there is a relationship between performance measures and agility depending on game characteristics. For this reason, athletes must be analyzed in detail to maximize their physical performance. No studies were found in the literature that examining the effect of lower extremity muscle strength on sprint performance in volleyball players. The aim of our study was to investigate the relationship between lower extremity muscle strength and sprint performance of the volleyball players who were playing in young and star categories.

**Methods:** Twenty professional volleyball players between the ages of 16-19 (mean age  $17.45\pm0.88$  years) were included in the study. Players were evaluated with "athlete evaluation form" for the demographic data, "MicroFET hand dynamometer" for lower extremity muscle strength and "Smart Speed Photocell" for 0-20 meter sprint performance.

Results: There were positive correlations between; left quadriceps femoris muscle strength and 10-meter sprint performance of the right leg (r=0.509, p=0.022), left and right hamstring muscle strength and 10-meter sprint performance of the left leg (respectively, r=0.582, p=0.007; r=0.716, p=0.000) and left hamstring muscle strength and 20-meter sprint performance of the left leg (r=0.614, p=0.004).

**Conclusion:** Quadriceps femoris and hamstring muscle forces may affect sprint performance in volleyball players. In the acceleration phase (0-10 m) which was the first phase of the sprint performance test, the hamstring muscle strength effect is in the foreground. By increasing the strength of these muscle groups, sprint performance can be positively affected but further research is needed.

Key words: Volleyball players, muscle strength, sprint performance, lower extremity



# **OP-12.** The determination of joint mobility levels of young male basketball players and its effect on performance

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**Purpose:** Hypermobility in athletes is known as a risk factor for balance and musculoskeletal problems, sports injuries due to altered neuromuscular reflexes and decreased proprioception. The purpose of this study is to determine the joint mobility of young male basketball players and its effect on performance.

**Methods:** Forty male basketball players (mean age  $17.07\pm6.85$  years, mean training duration  $1.76\pm0.54$  hours/day) were included in the study. Joint mobility was assessed with Beighton Score (BS). According to Beighton, participants were categorized as hypomobile n=14, normal mobile n=11, hypermobile n=15. As different performance areas dynamic balance, static balance, vertical jumping performance, speed, and agility were assessed with respectively Y-Balance, Flamingo Balance, Vertical Jump, and T Drill Tests. SPSS 24.0 was used for analysis of data and p<0.05 was considered as statistically significant.

**Results:** The mean BS of the basketball players was  $3.53\pm2.40$ . There was no significant difference between the three mobility categories in terms of Y-Balance, Flamingo Balance, Vertical Jump and T Drill Tests (p>0.05). Also, no significant relationship was found between BS and performance tests (p>0.05). A positive significant correlation was stated between training durations and BS (p=0.001, r=0.510).

**Conclusions:** This study suggests that high BS in basketball players may result from the long training programs. Different levels of joint mobility do not affect the performance of young male basketball players. Further studies should investigate the effects of training programmes on joint mobility.

Key words: Joint hypermobility, basketball, performance, laxity



## International Journal of Basic and Clinical Studies (IJBCS) 2018; 7(2): 74-91

# **OP-13.** The Therapeutic Approaches of Physiotherapist in Turkey in Phase **2** Frozen Shoulder

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**Purpose:** The aim of this study is to identify therapeutic perspectives and approaches of physiotherapists in Turkey in patients who have been diagnosed as phase 2 frozen shoulder.

**Material and Methods:** Three-hundred and twenty-eight physiotherapists who have at least one year experience in the field were included in the study. A questionnaire was sent to the physiotherapists via google forms which consisted of the clinical features of a fictive 45 years old phase2 frozen shoulder patient. The participants were asked to fill the form according to their clinical experiences and presciences regarding the given case.

**Results**: Most physiotherapists prefer to evaluate pain in this case. The most evaluated muscles are the rotator cuff muscles (%). Manuel techniques are the most used among treatment methods. Wand exercises are the most used therapeutic exercises (%). TENS is the most used electrotherapy agent. In addition, the duration of electrotherapy is generally 15-20 minutes (%). The physiotherapists prefer hot pack against the cold (%). Most of the physiotherapists prefer posterior capsule stretching. Scapula mobilization and glenohumeral joint mobilization were reported as the most used manual therapy technique (%). Physiotherapists think that taping, especially inhibition method is efficient for the treatment of pain and activity limitation (%).

**Conclusion:** The physiotherapists in Turkey prefer to use different therapeutic approaches in the treatment of stage 2 frozen shoulder and it is common to evaluate pain in these patients. Future studies need to investigate the relationship between therapeutic approaches and improvement in the complaints such as pain and activity limitation.

Key words: Frozen shoulder, pain, physiotherapist, manuel techniques



### International Journal of Basic and Clinical Studies (IJBCS) 2018; 7(2): 74-91

## OP-14. The Relationship with Scapular Dyskinesis and Myofascial Trigger Points

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**Purpose:** The aim of the study is to detect scapular dyskinesis in healthy participants and to investigate the relationship between scapular dyskinesis and myofascial trigger points (MTrPs).

**Methods:** 105 participants (56 women, mean age:21.48±1.89/years) with no previous shoulder surgery between the ages of 18-25 were included in the study. Scapular dyskinesis was assessed with the validated and reliable videotape method. Participants stood 2-3 m from the camera and were videotaped from both superior and posterior views. Each participant performed 5 repetitions of bilateral, active, weighted shoulder flexion and abduction from the posterior and superior views. Then the movements for each shoulder rated as normal (no) or dyskinesis (yes). The MTrPs of the upper, middle and lower trapezius and serratus anterior were manually evaluated by using "yes" and "no" method in the related muscles.

**Results:** The scapular dyskinesia rate on right and left were 86.4% and 78.6%. Trigger point presence of upper, middle and lower trapezius and serratus side were 68.9%, 43.7%, 42.7%, and 33.0% respectively. Trigger point presence on the right side was 72.8%, 35.9%, 29.1% and 38.8% for upper, middle and lower trapezius and serratus anterior. A significant relationship was found between the presence of MTrPs and scapular dyskinesis on the right side (p=0.01)

**Conclusion:** The incidence of scapular dyskinesis is high in the healthy population. Although there is no strong relationship between scapular dyskinesis and MTrPs in this study, we believe that this relationship should be re-assessed with a more objective evaluation of the MTrPs.

Key words: Scapular dyskinesis, myofascial trigger points, shoulder



## **OP-15. Effect Of Activity On Hallux Valgus Deformity**

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**Purpose**: To investigate the effects of occupational therapy intervention with the focus on hallux valgus deformity activity which is very common in the community.

**Materials and Methods**: Patients' deformity angles were measured with a goniometer. Age, goniometric, measurements, and other foot problems were recorded in our evaluation form. Visual Analog Scale was used for the pain. In addition, Activities-Specific Balance Confidence Scale was used to measure the balance of the patients, Dynamic Walking Index for the dynamic walking pattern, and Foot Function Index to measure the difficulties of the foot problems in daily life.

**Results**: The mean age of 20 female patients participating in our study was  $26.05\pm14.07$ . As a result of our study, there was a significant decrease in right and left foot deformities and foot pain (p<0.05). No statistically significant difference was found in the results of the Foot Function Index and the Dynamic Walking Index. There was also a significant increase in The Activities-specific Balance Confidence Scale (p<0.05).

**Discussion**: In the literature, there was no study of Hallux Valgus with occupational therapy intervention. This study is the first. The short duration of the intervention is our disadvantage. In other studies, the effect of exercise and taping on the angle and pain was found significant. For this reason, the health personnel should show a multidisciplinary stance with the occupational therapist in the treatment.

Key words: Hallux valgus, Occupational therapy, Activity, Activity-focused intervention.



# OP-16. Effects Of The Chin Exercise And Isometric Neck Exercise Compared In Patients with Chronic Neck Pain

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**Purpose:** Cervical muscles contract statically and dynamically all day. These continuous contractions cause chronic pain in the neck muscles. Neck pain that persists for three months or longer is defined as chronic neck pain (CNP). Neck muscles provide transmission and integrity between head and body, therefore problems in the trunk and chin muscles can cause pain in the neck muscles. The aim of this study was to compare the effects of neck isometric exercise (NIE) and chin muscles exercise (CME) on pain, the range of motion (ROM), disability and quality of life for CNP.

**Methods**: 40 adult volunteers were included in the study between the ages of 25 and 60 who complained of CNP. Before the evaluation two groups, Group A (NIE) and Group B (CME) were separated using volunteer computer-assisted randomization table (GraphPad). Assessment of cervical ROM, measurement of temporomandibular ROM, mandibular protrusion, lateral deviation, manual muscle strength of masticatory muscles, the presence of spasm were performed. Neck pain (visual analog score) and disability and quality of life (Short Form-36) were evaluated.

**Results**: Both groups showed improved pain, disability, SF-36, cervical and temporal ROM after 3 weeks. In particular, a significantly improved the mandibular protrusion was found in group B (p<0,05).

**Discussions**: This study is the first study compared the effect of CME in CNP. The results of our study revealed the preference of chin exercises in individuals with temporomandibular joint limitation. In addition, future studies may be more useful to confirm the long-term effects of CME.

Key words: Temporomandibular joint, chronic neck pain, neck isometric exercise, chin exercise.



## International Journal of Basic and Clinical Studies (IJBCS) 2018; 7(2): 74-91 OP-17. Presentation Of Scales Used In The Field Of Rheumatology In An Easily Accessible Online Platform: "FIZYOOLCEK"

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**Purpose:** Outcome scales enable standardized outcomes assessing the impact of illness and treatment on health and function by the patient or by the practitioner. In the literature, our aim is to categorize result scales used in the field of rheumatology according to diseases and symptoms and presented on an online platform.

**Method:** "http://www.romatizmahastaliklari.com" website was used to determine diseases in the field of rheumatology. To investigate the scales related to the diseases, 13 people from the project team who were involved in the project were randomized using the website www.random.org. While one investigator took the task of standardization and control, one was prepared the website-"www.fizyolcek.com". PubMed, the "Toolbox of Patient Reported Outcomes", "Outcome Measure in Rheumatology" and Consensus-based Standards for the Selection of Health Measurement Instruments were screened as related with the rheumatologic diseases.

**Results:** There were 184 scales used for evaluating physiotherapy and rehabilitation for 27 rheumatic diseases. Rheumatoid Arthritis, Scleroderma, Juvenile Idiopathic Arthritis were the most common scales. In addition to specific scales, Visual Analogue Scale, Short Form-12, Short Form-36, and Beck Depression Scale were selected as appropriate for the rheumatologic diseases. The 184 scales were categorized according to the diseases and symptoms in the website www.fizyolcek.com and made available to the users and investigators.

**Discussion:** The website-www.fizyolcek.com- is the first Turkish website where health professionals and students can easily access rheumatology scales. We believe that similar work will be a pioneer in other fields.

Key words: Rheumatology scale, rheumatoid arthritis, arthritis