

Table 1. Numerical summary of patients' support needs and corresponding content of self-management interventions

Topics on patients' support needs	n	Content		
		Theory/theoretical approaches (n)	Mode of Delivery (n)	Duration & Frequency (n)
1 Disease impact and pharmacological treatment	24	Patient-centered, SM, self-efficacy, self-care behavior and patient education (14; no clear theory)	Face-to-face: Group meetings (14)	1-32 hours in total
2 Care continuity and relations with health professionals	8	Cognitive behavioral theory (8)	Group plus one-to-one meetings (6)	Delivered during 3 weeks to 9 months, or as a single assessment
3 The importance of non-pharmacological treatment	31	Cognitive restructuring techniques (5)	Remote: Individual, online	Unknown (6)
4 The need for support from family and friends	11	Self-efficacy theory and autonomous motivation (3)	Group sessions, online (2)	On-line access anytime (3)
5 Support needs related to work issues	2	Problem focused and action-oriented (1)	By mail, single intervention (3)	
6 Contextual preferences for SM support (single/multiple mode of delivering SM support)	21 (single) 12 (multiple)	The Social Learning Theory (1) The Transtheoretical Model of Behavior Change (1) The social cognition theory (1) Behavioral change theory (1)		

n= number of articles; SM= self-management

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POS0803-HPR **DEVELOPMENT OF A PATIENT-CENTERED MULTIMODAL DISEASE MANAGEMENT PLATFORM FOR THE FIBROMYALGIA-LIKE POST-COVID19 SYNDROME**

Keywords: Fibromyalgia, COVID, Patient reported outcomes

M. Blanchard¹, T. Hügler¹, P. Ming Azevedo¹. ¹Lausanne University Hospital, Rheumatology, Lausanne, Switzerland

Background: About 30% of patients with post-COVID19 syndrome satisfy the ACR survey criteria for fibromyalgia. The most common symptoms are chronic fatigue, generalized pain, sleep impairment, anxiety and depression. A substantial part of the patients already suffered from similar symptoms before infection. Digital health solutions have shown efficiency for fibromyalgia, offering specific disease monitoring and multimodal interventions and thus may work in patients with post-Covid19 syndrome. **Objectives:** To develop a multimodal, multi-interventional self-management platform for post-COVID19 and potentially other post-viral syndromes patients. To ensure a patient-centric development and evaluate the usability of this solution by performing qualitative user experience research. **Methods:** We developed a web-based user interface with a horizontal basic navigation menu consisting of patient reported outcomes, symptoms evolution and interventions. The therapeutic content was created by rheumatologists, psychiatrists, physiotherapists and occupational therapists and included educational content, physical-, respiratory- and olfactory exercises, cognitive behavioral therapy, mindfulness, relaxation training, therapeutic stories and art therapy. Usability and satisfaction surveys have been conducted among 53 post-COVID19 patients and qualitative interviews have been performed. **Results:** The frontend design of the platform is shown in Figure 1. 90% of the patients preferred a regular symptoms list questionnaire over a chatbot to collect patient reported outcomes. Longitudinal symptom evaluation is shown in the 'my results' section. 81% of patients expressed their wish that their symptoms are displayed with a benchmark of all other patients and to learn what has helped other patients with similar symptoms. A majority of them were also interested in links to patient communities (63%), so an anonymized discussion forum has been added. Patients preferred active training programs (63%) and information (59%) over interactive and gamified content like quizzes (15%). Interactivity on

the web-app was created by accordion function and horizontal navigation within each treatment module. An administrator content management dashboard has been implemented to ensure a flexible and reactive supervision of the platform.

Conclusion: We present a functioning, patient-centered app tailored for patients with post-COVID19 syndrome. Further clinical studies on user experience, adherence, adoption driving factors and efficacy are ongoing.

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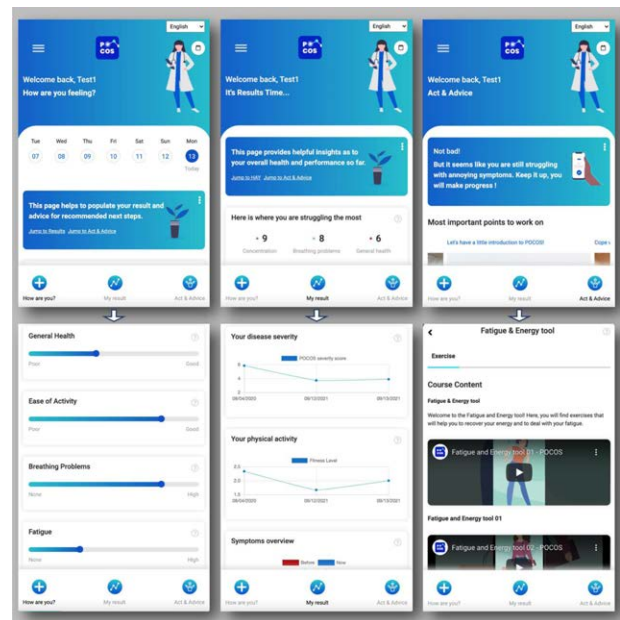


Figure 1. POCOS user interface (app): Left side: 'How are you?', with electronic patient reported outcomes and activity. Middle: 'My result', with monitoring of symptom's activity and health conditions. Right side: 'Act & Advice', with personalized training program, adapted to the user's symptoms.

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HPR Measuring health (development and measurement properties of PROs, tests, devices)

POS0804-HPR **INVESTIGATION OF THE VALIDITY AND RELIABILITY OF THE STEP UP AND DOWN TEST IN PATIENTS WITH TOTAL KNEE ARTHROPLASTY SURGERY**

Keywords: Physical therapy/physiotherapy, Outcome measures, Osteoarthritis

S. Tarkan¹, B. Unver², V. Karatosun³. ¹Dokuz Eylul University, Faculty of Physical Therapy and Rehabilitation, İzmir, Turkey; ²Dokuz Eylul University, Faculty of Physical Therapy and Rehabilitation, İzmir, Turkey; ³Dokuz Eylul University, School of Medicine Department of Orthopedics and Traumatology, İzmir, Turkey

Background: Stair climbing has been showed as the first changing activity in patients with knee osteoarthritis (KOA) [1]. Stair climbing and step tests of patients with KOA are used as measurement tools to determine the functional level of patients and to determine the effectiveness of treatment. Patients with KOA undergoing total knee arthroplasty (TKA) show asymmetrical patterns and slower climbing stairs when the affected limb is compared to the healthy limb [2]. Therefore, unilateral evaluation of the extremity undergoing TKA is important. There are many tests that evaluate stair climbing function in patients with TKA. However, the Step Up and Down (StUD) test, which was previously found to be valid and reliable in knee osteoarthritis, is a 15-second test that can evaluate the affected limb unilaterally, requires only one stair, and is similar to the daily living activities of the patients [3]. For this reason, it would be useful to use it as a criterion in the evaluation of the physical functions of individuals with TKA. However, there is no study on the validity and reliability of the StUD test in patients with TKA.

Objectives: The aim of the study is to measure the validity and reliability of the StUD test in patients with TKA.

Methods: Forty patients (Mean age; $6,87 \pm 8,01$) with primary TKA included in this study. The test-retest reliability of the StUD test was measured with a 1-hour interval to prevent fatigue. Validity was assessed by testing predefined hypotheses. Therefore, the 30s Chair Stand Test (30sCS), the Hospital for Special Surgery score (HSS) and Short Form-12 Quality Life Questionnaire (SF-12) were used as comparator instruments.

Results: The StUD test showed good correlation with 30sCS test ($r=0,706$, $p<0,001$), moderate to low correlation with HSS score ($r=0,4$, $p<0,001$), moderate correlation with SF12 score ($r=0,508$, $p<0,001$). Test-retest reliability was excellent ($ICC=0,93$, $\%95\text{ CI}=0,87-0,96$). Standard error of measurement and smallest real difference at the 95% confidence level for StUD test were respectively 0,34 and 0,94. There was no significant difference in the mean VAS scores measured after the tests or between the first and the second trials ($p>0,05$).

Conclusion: According to the results of our study the StUD test excellent reliability, good validity and high sensitivity in patients with TKA. Additionally, there was no significant increase in pain levels at the end of the test. This result suggests that StUD test can be used safely without increasing pain levels, and this test can also be tolerated by patients with TKA. The SRD_{95} of StUD test was 0,94. According this, it can be interpreted that the StUD test can be used reliably to monitor small changes in patients' function.

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POS0805-HPR FACE VALIDITY AND RELIABILITY TEST OF THE DANISH VERSION OF THE COMPLIANCE QUESTIONNAIRE RHEUMATOLOGY

Keywords: Validation, Outcome measures, Patient reported outcomes

L. Raunsbæk Knudsen^{1,2}, A. De Thurah^{1,2}. ¹Aarhus University Hospital, Department of Rheumatology, Aarhus, Denmark; ²Aarhus University, Department of Clinical Medicine, Aarhus, Denmark

Background: Medication adherence in inflammatory arthritis has been reported to vary from 30% to 80%, despite the fact that non-adherence may cause worsening of symptoms and disease severity [1]. Hence, supporting adherence to medication is an essential part of the treatment and care of patients with rheumatic and musculoskeletal diseases [1]. The Compliance Questionnaire Rheumatology (CQR) measures adherence in rheumatic diseases through 19 items covering drug-taking behaviour to identify the factors that contribute to suboptimal adherence [2].

Objectives: To present the translation of the CQR into Danish and the face validity and reliability test.

Methods: The CQR was translated into Danish according to the International Quality of Life Assessment method (3), which involved forward and backward translations by four independent translators, followed by a face validity test among 10 patients with rheumatoid arthritis. The test-retest reliability of the Danish CQR was evaluated in 49 patients with rheumatoid arthritis using the standard error of the measurement (SEM) converted into the minimally detectable change (MDC) and the intraclass correlation coefficient (ICC). Questionnaires were administered with a minimum of 10 days between assessments.

Results: The face validity test did not lead to substantial corrections. The participants in the reliability test had a mean age of 57.4 years (SD 16.1) and a mean disease duration of 1.13 years (range 2 months–2 years). The mean CQR score in the test and retest was 62.69 (confidence interval (CI) 58.76; 66.63) and 62.51 (CI 58.91; 66.12), respectively, with a SEM of 8.59 (7.16; 10.73) and a MDC of 16.83. A satisfactory test-retest reliability was confirmed by an ICC value of 0.79 (CI 0.68; 0.89) (Table 1).

Conclusion: The Danish CQR has satisfactory test-retest reliability in patients newly diagnosed with rheumatoid arthritis and is thus considered a reliable tool to measure adherence in this group.

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Table 1. Reliability and agreement parameters for the Compliance Questionnaire Rheumatology (CQR) in 49 patients with rheumatoid arthritis

	Mean (95% CI) test Mean (95% CI) retest	Difference (95% CI)	LOA	SEM (95% CI)	ICC (95% CI)	MDC
CQR19	62.69 (58.76; 66.63) 62.51 (58.91; 66.12)	0.18 (-2.29; 2.65)	-16.66–17.01	8.59 (7.16; 10.73)	0.79 (0.68; 0.89)	16.83

LOA = limits of agreement, SEM = standard error of measurements, MDC = minimal detectable change, ICC = intraclass correlation coefficient model 2.1

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