Clinical Research Results Abstract

Abstract ID = 11535

Presented by Mark Orme on Saturday 16 May 2020

Global RECHARGE: establishing a standard international dataset for pulmonary rehabilitation in low- and middle- income countries

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Aim: With growing interest in pulmonary rehabilitation (PR) in low- and middle-income countries (LMICs), the aim of this project was to develop an international dataset permitting comparison of PR interventions and outcomes between countries and to facilitate future research.

Method: Experts from India, Kyrgyzstan, Sri Lanka, Uganda and the United Kingdom (clinicians, researchers, health psychologists, research methodologists and data scientists) were involved in establishing a common set of measures, here referred to as the 'Global RECHARGE Core Dataset'. With consideration to the trade-off between breadth and depth of data collection and practicalities on the ground, consensus meetings informed by international guidelines and quality standards were used to develop a core set of variables to include in all PR studies as a minimum. The dataset is housed by a user-friendly web-based data capture tool as a central resource for LMIC groups interested in PR.

Results: The Global RECHARGE Core Dataset (see Table) includes demographic variables (e.g. age, sex, ethnicity) and information about lung health, comorbidities and treatment, all captured at baseline before PR begins. Lung health risk factors, common comorbidities and treatments are collected. Outcome measures, collected before and after PR, comprise self-reported measures of health status (e.g. symptom burden and psychological well-being), field-based tests of exercise capacity and functional status, and economic impact. PR completion includes details about the frequency, duration and attendance of PR sessions. Adverse event logging will allow for safety reporting.

Conclusion: A core dataset was created that could be used across diverse settings. This will support the expansion of quality PR services in partner countries. By collecting the same baseline data we can describe and compare populations and by using common outcomes, any change in delivery or settings can be compared to show what works and what does not. Enquires can be made to recharge@le.ac.uk.

Declaration of Interest: This research was funded by the National Institute for Health Research (NIHR) (17/63/20) using UK aid from the UK Government to support global health research. The views expressed in this publication are those of the author(s) and not necessarily those of the NIHR or the UK Department of Health and Social Care.

Table 1 Visit schedule for the Global RECHARGE Core Dataset

Data collection	Baseline	Assessment	Discharge	Completion	Unscheduled
Demographics	x				
Lung health	x				
Comorbidities	x				
Treatment	x				
Health status		x	x		
Physical measures		x	x		
Economic impact		x	x		
PR completion				x	
Adverse events					x