

illness or accident (OR 1.98, 95% CI 1.52 to 2.59). Group B membership, compared to Group A, was associated with reduced quality of life (coefficient -1.89 , 95% CI -2.62 to -1.15), psychological disorders (OR 1.73, 95% CI 1.34 to 2.23), social detachment (OR 2.60, 95% CI 1.68 to 4.04) and the perceived long-term effect of ill health (OR 1.42, 95% CI 1.10 to 1.84).

Conclusion We have identified four broad groups of older people; those with few life events, those with many life events, those with an emotionally cold mother and those who have experienced violence in combat. Compared to the group with few life events, all other groups had adverse health and wellbeing in later life, especially those with an emotionally cold mother or many life events. Policies to improve health and wellbeing in later life should have a life course perspective focusing on at risk groups.

RF14 A SYSTEMATIC REVIEW OF 30-DAY READMISSIONS IN ADULTS HOSPITALISED WITH COMMUNITY-ACQUIRED PNEUMONIA

¹AM Klukowska*, ²WS Lim, ¹T McKeever, ^{1,2}H Pick, ²D Ashton. ¹Division of Epidemiology and Public Health, University of Nottingham, Nottingham, UK; ²Division of Respiratory Medicine, University of Nottingham, Nottingham, UK

10.1136/jech-2018-SSMabstracts.103

Background Community-acquired pneumonia (CAP) is one of the most common communicable diseases worldwide associated with significant levels of morbidity and mortality causing a substantial economic burden. 30-day hospital readmission rate is often used as a secondary outcome in studies of CAP. This data can be used to define the burden of disease and the reasons for readmissions potentially amenable to intervention.

A systematic review and random meta-analysis were conducted to estimate the pooled 30-day readmission rate of adult patients with CAP and 30-day pneumonia-related/non-pneumonia-related and cardiovascular-related readmission rates of such patients.

Methods MEDLINE, EMBASE, AMED (until October 2017) and reference lists of papers were searched to identify studies of CAP including 30-day hospital readmission rate of adult patients. Each step of the study selection process was conducted by two independent reviewers. The quality was assessed using a pre-tested form based on the Newcastle-Ottawa Scale. Pooled proportions of patients readmitted within 30 days with 95% confidence intervals (CI), were estimated. Additional subgroup analyses were conducted.

Results A total of 63 studies were included in the statistical analysis, covering the period from 1994 to 2017. The pooled 30-day readmission rate estimate was 0.10 (CI 0.08–0.11). High levels of heterogeneity were identified, $I^2=98.95\%$. Only two subgroups analysis reported statistically significant differences (p -value <0.05). Retrospective studies had a higher readmission rate of 0.12 (95% CI 0.10 to 0.14, $I^2=99.39\%$) compared to prospective studies, 0.07 (95% CI 0.06 to 0.09, $I^2=93.35\%$). Europe had significantly lower 30-day readmission rate, 0.08 (95% CI 0.07 to 0.10, $I^2=94.98\%$) than North America, which reported 0.11 (95% CI 0.09 to 0.14, $I^2=99.50\%$). Non-pneumonia-related readmissions accounted for 0.60 (95% CI 0.48 to 0.72, $I^2=89.00\%$) of all 30-day readmissions. Additionally, 0.31 (95% CI 0.25 to 0.37, $I^2=79.74\%$) of 30-day readmissions were pneumonia-related,

while 0.20 (95% CI 0.14 to 0.26, $I^2=33.55\%$) were cardiovascular-related. The studied populations were mostly composed of elderly patients. High levels of heterogeneity may have been due to different selection criteria of included studies and variations among health-care systems and treatment practices.

Conclusion Among all adult patients with CAP, 10% are readmitted to the hospital within 30 days. The majority of all-cause readmissions are non-pneumonia-related, specifically 20% are cardiovascular related. Only one third of 30-day readmissions are due to pneumonia.

RF15 PARTICIPANTS' PERSPECTIVES AND PREFERENCES ON CLINICAL TRIAL RESULT DISSEMINATION: THE TRUST THYROID TRIAL EXPERIENCE

¹E Racine*, ¹C Hurley, ¹A Cheung, ²C Sinnott, ¹K Matvienko-Sikar, ³WH Smithson, ¹PM Kearney. ¹School of Public Health, University College Cork, Cork, Ireland; ²The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, Cambridge, UK; ³Department of General Practice, University College Cork, Cork, Ireland

10.1136/jech-2018-SSMabstracts.104

Background While there is an increasing consensus that clinical trial results should be shared with trial participants, there is a lack of evidence on the most appropriate methods. The aim of this study is to use a patient and public involvement (PPI) approach to identify, develop and evaluate a patient-preferred method of receiving results of the Thyroid Hormone Replacement for Subclinical Hypo-Thyroidism Trial (TRUST).

Methods This is a mixed methods study with three consecutive phases. Phase 1 iteratively developed a patient-preferred result method using semi-structured focus groups and a consensus-orientated-decision model to achieve consensus, a PPI group to refine the method and adult literacy review for plain English assessment. Phase 2 was a single-blind parallel group trial. Irish TRUST participants were randomised to the intervention (patient-preferred method) and control group (standard dissemination method as developed by lead study site in Glasgow, Scotland). Phase 3 used a patient understanding questionnaire to compare patient understanding of results between the two dissemination methods.

Results Patients want to receive results of clinical trials, with qualitative findings of perspectives and preferences indicating three key themes including 'acknowledgement of individual contribution', 'contributing for a collective benefit' and 'receiving accessible and easy to understand results'. Building on these findings, a patient-preferred method of receiving results was developed by researchers, trial participants and adult literacy experts. One hundred and one TRUST participants were then randomised to receive the patient-preferred result method or the standard dissemination method. The questionnaire response rate was 74% for the intervention group and 62% for the control group. There were no differences in patient understanding between the two dissemination methods.

Conclusion Patient and Public Involvement (PPI) is advocated for every step of the trial process. We have demonstrated that it is feasible to do this with regard to the dissemination of results. The study identified and developed a patient-preferred method of receiving clinical trial results for older adults over 65 years. Although, in this study PPI did not influence patients' final understanding of results, it provides a record of the process of conducting PPI within the clinical trial setting.