**Clinical Librarian Service Search Results**

**Request:** Coronavirus outbreak and the relationship between lockdown and incidence of new fractures or falls.

**Summary**

I have searched the databases listed at the end of this document. There does not appear to be anything which specifically relates to the current pandemic. However, there is considerable evidence which demonstrates the complex relationship concerning social isolation and falls.

A letter from Heckman et al. (2020)1 states that *“…Social distancing decelerates viral transmission but could have substantial adverse effects on older Canadians living with frailty and multimorbidity…Social distancing is likely to affect both formal and informal care and lead to loneliness, depression, anxiety, accelerated functional and cognitive decline, and falls and fractures.”*

A lack of physical activity as a result is also a possibility, as it is known that *“…Physical exercise also plays a part in falls prevention”* (Palmer 2020)3.

A cross-sectional study by Hayashi et al. (2020)2 considered the ‘Combined Impact of Physical Frailty and Social Isolation on Rate of Falls in Older Adults’. The authors report that *“…Our findings support the assertion that coexistence with physical frailty and social isolation were associated with falling in the older adults.”*

Hajek & König (2017)14 report on cross-sectional data from the DEAS German Ageing Survey, concerning the association of falls with loneliness and social exclusion. The authors remark that *“…It remains an open question whether falls are related with social relations…subjective (e.g. perceived loneliness) and more objective dimensions (e.g. number of important individuals in regular contact).”* They later remark that *“…The causal direction of this relationship (falls and social relationships) could be argued to be reciprocal…Findings stress the relation between falls and feelings of loneliness and social exclusion, whereas falls were unrelated to the more objective measure of number of important people in regular contact, suggesting that falls are particularly related to subjective measures of social ties and relations.”*

A study by Ožić et al. (2020)4 states the following:

*“…previous studies established that physical frailty is associated with consequences such as falls, dependency, hospitalization, institutionalization, and death…elderly frail persons should practice physical activity…frail subjects are at a higher risk of falls. Frequent falls are associated with lower quality of life and interventions including physical exercise alone or combined with various interventions has shown to lower the risk of injurious falls… social frailty is associated with adverse outcomes and disability in community-dwelling elderly…social frailty was independently associated with both physical and mental health-related quality of life…social frailty was associated with more than twice the odds for muscle weakness…socially prefrail and frail had significantly higher risks for incident disability and mortality.”*

I hope that I have interpreted your request correctly. Please let me know if you would like me to search further.

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**Accessing Articles**

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**Feedback**

Once you have read this report, I would appreciate it if you would complete our online literature search feedback form at:

<https://www.smartsurvey.co.uk/s/LiteratureSearchFeedback20202021/>

This relates to this specific search and will help us to monitor and improve our service. Many Thanks.

Suzanne Toft

Training Librarian (Chartered)

[suzanne.toft@nhs.net](mailto:suzanne.toft@nhs.net)

Ext. 88148

**Current at:** 24 April 2020

**Time taken for search:** 5 hours.

**Please acknowledge this work in any resulting paper or presentation as:**

Evidence Search: Coronavirus outbreak and the relationship between lockdown and incidence of new fractures or falls. Suzanne Toft. (24 April 2020). Derby, UK: University Hospitals of Derby & Burton NHS Foundation Trust Library and Knowledge Service.

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**Results**

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1. **Covid-19 outbreak measures may indirectly lead to greater burden on hospitals**

**Author(s):** Heckman G.A.; Saari M.; McArthur C.; Wellens N.I.H.; Hirdes J.P.

**Source:** CMAJ; Apr 2020; vol. 192 (no. 14)

**Publication Date:** Apr 2020

**Publication Type(s):** Letter

Available at [Canadian Medical Association Journal](https://auth.elsevier.com/ShibAuth/institutionLogin?entityID=https://idp.eng.nhs.uk/openathens&appReturnURL=https%3A%2F%2Fwww.clinicalkey.com%2Fcontent%2FplayBy%2Fdoi%2F%3Fv%3D10.1503%2Fcmaj.75230) - from ClinicalKey

Available at [Canadian Medical Association Journal](http://europepmc.org/search?query=(DOI:10.1503/cmaj.75230)) - from Europe PubMed Central - Open Access

Available at [Canadian Medical Association Journal](http://openurl.ebscohost.com/linksvc/linking.aspx?genre=article&issn=1488-2329&volume=192&issue=14&spage=E384&title=Canadian%20Medical%20Association%20Journal) - from EBSCO (MEDLINE Complete)

Available at [Canadian Medical Association Journal](http://gateway.proquest.com/openurl?ctx_ver=Z39.88-2004&res_id=xri:pqm&req_dat=xri:pqil:pq_clntid=145298&rft_val_fmt=ori/fmt:kev:mtx:journal&genre=article&issn=0820-3946&volume=192&issue=14&spage=E384) - from ProQuest (Health Research Premium) - NHS Version

Available at [Canadian Medical Association Journal](https://www.cmaj.ca/content/cmaj/192/14/E384.full.pdf) - from Unpaywall

**Extract:** Social distancing decelerates viral transmission but could have substantial adverse effects on older Canadians living with frailty and multimorbidity. Many health care providers are prioritizing “urgent” conditions, downsizing access for frail older individuals whose conditions are considered “nonurgent.” Social distancing is likely to affect both formal and informal care and lead to loneliness, depression, anxiety, accelerated functional and cognitive decline, and falls and fractures.

**Database:** EMBASE

1. **Combined Impact of Physical Frailty and Social Isolation on Rate of Falls in Older Adults.**

**Author(s):** Hayashi, T.; Umegaki, Hiroyuki; Makino, T.; Huang, C.H.; Inoue, A.; Shimada, H.; Kuzuya, M.

**Source:** Journal of Nutrition, Health & Aging; Mar 2020; vol. 24 (no. 3); p. 312-318

**Publication Date:** Mar 2020

**Publication Type(s):** Academic Journal

**Abstract:** Objectives: The aim of this study was to examine the impact of the combination of physical frailty and social isolation on falling in community-dwelling older adults. Design: A cross-sectional study of data obtained at registration in a randomized control trial. Setting: Community-based study of participants recruited from Toyota, Japan. Participants: 380 community-dwelling older adults (47.9% women, mean age = 72.3 ± 4.6 years). Measurements: Participants were categorized as non-frail or pre-frail/frail based on the Fried frailty criteria (slowness, weakness, exhaustion, low activity, and weight loss). Social isolation was examined using the Lubben Social Network Scale (LSNS-6), and scores lower than 12 points indicated social isolation. Participants were divided into four groups depending on pre-frail/frail status and social isolation, and experiences of multiple falls over the past year were compared between the groups. Results: Participants were classified into robust (n = 193), physical frailty (PF; n = 108), social isolation (SI; n = 43), and PF with SI (PF+SI; n = 36) groups. A total of 38 (10.0%) participants reported multiple falls. Logistic regression analysis showed that PF and SI groups were not independently associated with falling (PF: OR 1.64, 95% CI 0.65–4.16, SI: OR 2.25, 95% CI 0.77–6.58), while PF+SI group was significantly associated with falling compared with the robust group (OR 3.06, 95% CI 1.00–9.34, p = 0.049) after controlling for confounding factors. Conclusion: Our findings support the assertion that coexistence with physical frailty and social isolation were associated with falling in the older adults.

**Database:** CINAHL

1. **Encouraging exercise in older adults: advice for nurses.**

**Author(s):** Palmer, Sarah Jane

**Source:** British Journal of Community Nursing; Feb 2020; vol. 25 (no. 2); p. 95-97

**Publication Date:** Feb 2020

**Publication Type(s):** Academic Journal

**Abstract:** Physical activity is well documented to contribute to better mental and physical wellbeing in older adults. Physical exercise also plays a part in falls prevention, thus reducing fear of injury when exercising. Motivational interviewing to encourage exercise among older adults should be assertive yet kind, with the provision of an appropriately trained staff member, convenient fitness facilities to access and consideration of cost. Facilitators and barriers affect an older person's motivation to engage in physical exercise. Barriers include cost, physical barriers, fear of injury, low motivation, dislike of exercise, locality of the service and more. In this article, the available evidence is examined to discuss the subjects of motivational interviewing, facilitators and barriers to exercise and ways to overcome the latter.

**Database:** CINAHL

1. **Interventions aimed at loneliness and fall prevention reduce frailty in elderly urban population.**

**Author(s):** Ožić, Sanja; Vasiljev, Vanja; Ivković, Vanja; Bilajac, Lovorka; Rukavina, Tomislav

**Source:** Medicine; Feb 2020; vol. 99 (no. 8); p. e19145

**Publication Date:** Feb 2020

**Publication Type(s):** Journal Article Observational Study

**PubMedID:** 32080091

Available at [Medicine](http://europepmc.org/search?query=(DOI:10.1097/MD.0000000000019145)) - from Europe PubMed Central - Open Access

Available at [Medicine](https://doi.org/10.1097/md.0000000000019145) - from Unpaywall

**Abstract:** Frailty is a pronounced symptom of aging associated with multiple comorbid states and adverse outcomes. The aim of this study was to evaluate the impact of 2 interventions, one based on prevention of falls and the other on prevention of loneliness, on total frailty and dimensions of frailty in urban community-dwelling elderly as well as associations with independent living. This prospective interventional study followed up 410 persons aged 75 to 95. The participants of the control and intervention groups were monitored through a public health intervention programme. The level of frailty was measured by the Tilburg Frailty Indicator (TFI) questionnaire and the factors of independent living were analyzed using validated questionnaires. After 1 year, physical frailty measured in the control group showed a statistically significant increase (r = -0.11), while in the intervention groups physical frailty did not increase (both P > .05). Psychological frailty measured after 1 year in the control group was significantly higher (r = -0.19), as well as in the group where the public health interventions to reduce loneliness were carried out (r = -0.19). Psychological frailty did not increase in the group in which public health interventions to prevent falls were carried out, and social frailty did not increase at all in the study period. The total level of frailty in the control group after 1 year was significantly increased (r = -0.19), while no increase was seen in the overall frailty in the intervention group. Multivariate analysis has shown that both interventions where independently associated with lower end frailty. Additionally, higher baseline frailty and visit to a physician in the last year were positively associated with higher end-study frailty level, while higher number of subjects in the household and higher total psychological quality of life (SF-12) were independently associated with lower end-study frailty. Only in the prevention of falls group there was no increase in restriction in the activities of daily living throughout study follow-up. Public health interventions to prevent falls and to prevent loneliness have a positive effect on the frailty and independent living of the elderly living in their own homes in an urban community.

**Database:** Medline

1. **Relationship of vitamin D with bone mineral density, fracture type and social deprivation in neck of femur fractures**

**Author(s):** Formoy E.; Ekpo E.; Thomas T.; Kocialkowski C.; Pillai A.

**Source:** Journal of Orthopaedics; 2020; vol. 17; p. 110-112

**Publication Date:** 2020

**Publication Type(s):** Article

Available at [Journal of Orthopaedics](https://auth.elsevier.com/ShibAuth/institutionLogin?entityID=https://idp.eng.nhs.uk/openathens&appReturnURL=https%3A%2F%2Fwww.clinicalkey.com%2Fcontent%2FplayBy%2Fdoi%2F%3Fv%3D10.1016%2Fj.jor.2019.08.020) - from ClinicalKey

Available at [Journal of Orthopaedics](https://doi.org/10.1016/j.jor.2019.08.020) - from Unpaywall

**First Lines:** Hip fractures occur in over 70,000 people each year in the United Kingdom (UK), a figure predicted to rise to over 100,000 by 2020. 1 Hip fractures are increasingly becoming an important public health issue, as they incur a large cost. Approximately £2 billion each year is spent on both medical and social care for those with hip fractures. 2 Some of this cost can be attributed to the fact that hip fractures are often ‘fragility fractures’, occurring in those who need more support in their recovery. The frailty of the patients that get these type of fractures is reflected in a 30-day mortality, of approximately 8%. 3 Identifying predictive factors for neck of femur fractures may, therefore, help to reduce their incidence.

**Database:** EMCARE

1. **Mobility in community-dwelling adults with chronic conditions: the contribution of age and sex.**

**Author(s):** Xu, Ying; Richardson, Julie; MacDermid, Joy; Dal Bello-Haas, Vanina

**Source:** European Journal of Physiotherapy; Sep 2019; vol. 21 (no. 3); p. 124-133

**Publication Date:** Sep 2019

**Publication Type(s):** Academic Journal

**Abstract:** Objectives: The study aimed to determine whether age and sex predict self-reported and performance-based mobility-related outcomes in community-dwelling middle and older aged adults with chronic conditions; and if sociodemographic factors and comorbidity influence this relationship. Methods: Data from a previous randomised controlled trial where the intervention had no clinical effect was analysed (n = 271). Unadjusted regression models and multivariate regression analyses including linear, median, logistic and ordered logistic regression were performed examining the relationship between participant characteristics at baseline and 9 months. Independent variables were: age, sex, comorbidity, education level, income level, marital status and age and sex interaction term. The dependent variables were: self-reported outcomes: fall history, Late Life Function and Disability Instrument function component score, Short Form 36 Health Survey Questionnaire physical component score and performance-based mobility outcomes: 2-minute walk distance, [Short Physical Performance Battery (SPPB)] balance, chair stands, eight-foot walk and SPPB total score. Results: Older age and female sex predicted poorer self-reported mobility, but only older age predicted performance-based mobility outcomes. Participants with more comorbidity, low income and lived alone had poorer mobility. Conclusion: The differences of the self-reported mobility outcomes but not the performance measures between males and females may be implicated by gender differences, more than sex differences. Our findings support the need for more mechanistic studies on the impacts of sex and gender on mobility.

**Database:** CINAHL

1. **Challenges and opportunities to improve fracture liaison service attendance: fracture registration and patient characteristics and motivations.**

**Author(s):** van den Berg, P.; van Haard, P.M.M.; Geusens, P.P.; van den Bergh, J.P.; Schweitzer, D.H.

**Source:** Osteoporosis International; Aug 2019; vol. 30 (no. 8); p. 1597-1606

**Publication Date:** Aug 2019

**Publication Type(s):** Academic Journal

**Abstract:** Summary: This questionnaire-based study evaluated the reasons for attendance or non-attendance at the fracture liaison service in patients with a recent fracture. Frailty, male sex, living alone, and low education were associated with non-attendance, and the information perceived by the patient was associated with attendance. Introduction: The purpose of this study was to evaluate hospital registration- and patient-related factors associated with attendance or non-attendance to the Fracture Liaison Service (FLS). Methods: Out of 1728 consecutive patients registered with a recent fracture at hospital entry, and after exclusion of 440 patients because of death, residence in a nursing home, already on osteoporosis treatment, or recent DXA, 1288 received an FLS invitation. We evaluated the hospital registration of fractures at entry and exit of the hospital. A questionnaire was sent to all invited patients to evaluate factors related to non-attendance (including age, gender, frailty, living alone, income, education, extrinsic motivations (impact of perceived information) and intrinsic motivations (patient's own perceived views and opinions) and to attendance (personal impact of clinical professionals' advice). Results: There were 278 more hospital exit codes than entry codes. Of the 1288 invited patients, 745 returned analyzable questionnaires (537 attenders and 208 non-attenders). Non-attendance was associated with male gender (OR: 2.08, 95% CI: 1.35, 3.21), frailty (OR: 1.62, CI: 1.08, 2.45), living alone (OR:2.05, CI: 1.48, 2.85), low education (OR: 1.82, CI: 1.27, 2.63), not interested in bone strength (OR: 1.85, CI: 1.33, 2.63), and being unaware of increased subsequent fracture risk (OR: 1.75, CI: 1.08, 2.86). Information perceived by the patient was significantly associated with attendance (OR: 3.32, CI: 1.75, 6.27). Conclusion: Fracture entry registration inaccuracies, male gender, frailty, living alone, having low general education, or low interest in bone health and subsequent fracture risk were independently associated with FLS non-attendance. Adequately perceived advice (to have a bone densitometry and attend the FLS) was strongly associated with FLS attendance.

**Database:** CINAHL

1. **The effect of social deprivation on fragility fracture of the distal radius**

**Author(s):** Johnson N.A.; Dias J.J.

**Source:** Injury; Jun 2019; vol. 50 (no. 6); p. 1232-1236

**Publication Date:** Jun 2019

**Publication Type(s):** Article

Available at [Injury](https://auth.elsevier.com/ShibAuth/institutionLogin?entityID=https://idp.eng.nhs.uk/openathens&appReturnURL=https%3A%2F%2Fwww.clinicalkey.com%2Fcontent%2FplayBy%2Fdoi%2F%3Fv%3D10.1016%2Fj.injury.2019.04.025) - from ClinicalKey

**Abstract:** Introduction: Social deprivation is associated with many adult fractures including distal radius fractures but the mechanisms for this are unclear. The aim of this study was to identify if social deprivation was associated with falls risk, mechanism of injury or osteoporosis in patients with a fragility fracture of the distal radius. Method(s): Details of all patients aged 50 years and over presenting with a radiographically confirmed fracture of the distal radius over a one year period, were prospectively recorded. Patients were sent a questionnaire pack including questions regarding place and mechanism of injury, comorbidity assessment, falls risk assessment tool and FRAX assessment of bone health and fracture risk. Result(s): 333 out of 521 eligible patients completed the questionnaire (279 female; 54 male, response rate = 64%). There was no difference between characteristics of responders and non-responders (p = 0.58). DRF rate was higher in socially deprived quintiles (p = 0.040). Less falls occurred in the home in socially deprived patients (Q1/2: 35%: Q3-5: 48%, p = 0.037) with more falls outdoors (Q1/2: 39%: Q3-5: 24%, p = 0.001). There was no difference in height from which falls took place with most occurring from standing height (Q1/2: 81%: Q3-5: 86%, p = 0.336). Linear regression analysis found no relationship between social deprivation rank and FRAX scores (major fracture risk: p = 0.274, hip fracture risk: p = 0.283) but demonstrated a significant relationship between social deprivation and increased number of falls risk factors (p = 0.002). Mean number of falls risk factors was higher in the two most socially deprived quintiles (Q1/2: 3.62: Q3-5: 2.79, p = 0.028). Conclusion(s): We have identified increased falls risk as an important reason for DRF in socially deprived patients. Knowing which patients are at highest risk allows interventions to be efficiently targeted. We would recommend resources should be targeted towards patients from socially deprived areas and focused on specific falls prevention strategies. Copyright © 2019 Elsevier Ltd

**Database:** EMCARE

1. **Falls and Social Isolation of Older Adults in the National Health and Aging Trends Study.**

**Author(s):** Pohl, Janet S; Cochrane, Barbara B; Schepp, Karen G; Woods, Nancy F

**Source:** Research in Gerontological Nursing; Mar 2018; vol. 11 (no. 2); p. 61-70

**Publication Date:** Mar 2018

**Publication Type(s):** Research Support, Non-U.S. Gov't Journal Article

**PubMedID:** 29498749

Available at [Research in Gerontological Nursing](http://gateway.proquest.com/openurl?ctx_ver=Z39.88-2004&res_id=xri:pqm&req_dat=xri:pqil:pq_clntid=145298&rft_val_fmt=ori/fmt:kev:mtx:journal&genre=article&issn=1940-4921&volume=11&issue=2&spage=61) - from ProQuest (Health Research Premium) - NHS Version

Available at [Research in Gerontological Nursing](https://digital.lib.washington.edu:443/researchworks/bitstream/1773/37198/1/Pohl_washington_0250E_16523.pdf) - from Unpaywall

**Abstract:** A longitudinal secondary analysis of 2 years of data from the National Health and Aging Trends Study was undertaken to determine the extent to which social isolation predicts falls in older adults. Social isolation during Year 1 (baseline) was operationalized as a multiple-indicator measure based on Social Network Index participation domains. Falling during the previous year was self-reported using Year 2 data. Logistic regression models revealed social isolation significantly predicted falls (odds ratio [OR] = 1.11; 95% confidence interval [CI] [1.05, 1.17]). The relationship remained significant after adjusting for age, gender, and education (OR = 1.08; 95% CI [1.02, 1.14]). The relationship weakened after adjusting for self-reported general health, depression risk, and worry about falling (OR = 1.02; 95% CI [0.96, 1.08]). Adjusting for Short Physical Performance Battery (SPPB), assistive mobility device, and activities of daily living further weakened the relationship (OR = 0.99; 95% CI [0.94, 1.04]). SPPB demonstrated the strongest correlation with social isolation (r = -0.42; p < 0.01). Fall prevention intervention studies specifically targeting social isolation may incorporate physical performance as a shorter-term and cost-effective proxy outcome for falls.

**Database:** Medline

1. **Trajectory of social isolation following hip fracture: an analysis of the English Longitudinal Study of Ageing (ELSA) cohort.**

**Author(s):** Smith, Toby O.; Dainty, Jack R.; Macgregor, Alex

**Source:** Age & Ageing; Jan 2018; vol. 47 (no. 1); p. 107-112

**Publication Date:** Jan 2018

**Publication Type(s):** Academic Journal

Available at [Age and Ageing](http://academic.oup.com/ageing/article/47/1/107/3979404) - from HighWire - Free Full Text

Available at [Age and Ageing](http://ovidsp.ovid.com/athens/ovidweb.cgi?T=JS&PAGE=fulltext&D=ovft&CSC=Y&NEWS=N&SEARCH=0002-0729.is+and+%2247%22.vo+and+%221%22.ip+and+%22107%22.pg+or+%2210.1093/ageing/afx129%22.di) - from Ovid (Journals @ Ovid) - Remote Access

Available at [Age and Ageing](http://search.ebscohost.com/login.aspx?direct=true&scope=site&site=ehost-live&db=mdc&AN=28985246) - from EBSCO (MEDLINE Complete)

Available at [Age and Ageing](https://academic.oup.com/ageing/article-pdf/47/1/107/22772571/afx129.pdf) - from Unpaywall

**Abstract:** Background: social isolation is defined as a lack of meaningful and sustained communication or interactions with social networks. There is limited understanding on the prevalence of social isolation and loneliness in people following hip fracture and no previous understanding of how this changes over time. Objective: to determine the prevalence and trajectory of social isolation and loneliness before a hip fracture, during the recovery phase and a minimum of 2 years post-hip fracture in an English population. Methods: data were from the English Longitudinal Study of Ageing (ELSA) cohort (2004/5-2014/15). The sample comprised of 215 participants who had sustained a hip fracture. Measures of social isolation and loneliness were analysed through multilevel modelling to determine their trajectories during three-time intervals (pre-fracture; interval at hip fracture and recovery; minimum 2 years post-fracture). The prevalence of social isolation and loneliness were determined pre- and post-fracture. Results: prevalence of social isolation was 19% post-hip fracture and loneliness 13% post-hip fracture. There was no statistically significant change in social isolation pre-fracture compared to a minimum of 2 years post-fracture (P = 0.78). Similarly, there was no statistically significant change in loneliness pre-fracture compared to a minimum of 2 years postfracture (P = 0.12). Conclusion: this analysis has determined that whilst social isolation and loneliness do not change over time following hip fracture, these remain a significant problem for this population. Interventions are required to address these physical and psychological health needs. This is important as they may have short and longer term health benefits for people post-hip fracture.

**Database:** CINAHL

1. **The association between physical activity and social isolation in community-dwelling older adults.**

**Author(s):** Robins, Lauren M; Hill, Keith D; Finch, Caroline F; Clemson, Lindy; Haines, Terry

**Source:** Aging & Mental Health; Feb 2018; vol. 22 (no. 2); p. 175-182

**Publication Date:** Feb 2018

**Publication Type(s):** Journal Article

**PubMedID:** 27736192

Available at [Aging & Mental Health](http://openurl.ebscohost.com/linksvc/linking.aspx?genre=article&issn=1364-6915&volume=22&issue=2&spage=175&title=Aging%20&%20Mental%20Health) - from EBSCO (MEDLINE Complete)

Available at [Aging & Mental Health](http://openurl.ebscohost.com/linksvc/linking.aspx?authtype=athens&genre=article&issn=1360-7863&volume=22&issue=2&spage=175&date=2018) - from EBSCO (Psychology and Behavioral Sciences Collection)

**Abstract:** OBJECTIVES: Social isolation is an increasing concern in older community-dwelling adults. There is growing need to determine effective interventions addressing social isolation. This study aimed to determine whether a relationship exists between physical activity (recreational and/or household-based) and social isolation. An examination was conducted for whether group- or home-based falls prevention exercise was associated with social isolation. METHODS: Cross-sectional analysis of telephone survey data was used to investigate relationships between physical activity, health, age, gender, living arrangements, ethnicity and participation in group- or home-based falls prevention exercise on social isolation. Univariable and multivariable ordered logistic regression analyses were conducted. RESULTS: Factors found to be significantly associated with reduced social isolation in multivariable analysis included living with a partner/spouse, reporting better general health, higher levels of household-based physical activity (OR = 1.03, CI = 1.01-1.05) and feeling less downhearted/depressed. Being more socially isolated was associated with symptoms of depression and a diagnosis of congestive heart failure (pseudo R2 = 0.104). DISCUSSION: Findings suggest that household-based physical activity is related to social isolation in community-dwelling older adults. Further research is required to determine the nature of this relationship and to investigate the impact of group physical activity interventions on social isolation.

**Database:** Medline

1. **The effect of social deprivation on hip fracture incidence in England has not changed over 14 years: an analysis of the English Hospital Episodes Statistics (2001-2015)**

**Author(s):** Bhimjiyani A.; Gregson C.L.; Neuburger J.; Jones T.; Ben-Shlomo Y.

**Source:** Osteoporosis International; Jan 2018; vol. 29 (no. 1); p. 115-124

**Publication Date:** Jan 2018

**Publication Type(s):** Article

Available at [Osteoporosis International](http://openurl.ebscohost.com/linksvc/linking.aspx?genre=article&issn=1433-2965&volume=29&issue=1&spage=115&title=Osteoporosis%20International) - from EBSCO (MEDLINE Complete)

Available at [Osteoporosis International](http://gateway.proquest.com/openurl?ctx_ver=Z39.88-2004&res_id=xri:pqm&req_dat=xri:pqil:pq_clntid=145298&rft_val_fmt=ori/fmt:kev:mtx:journal&genre=article&issn=0937-941X&volume=29&issue=1&spage=115) - from ProQuest (Health Research Premium) - NHS Version

Available at [Osteoporosis International](https://research-information.bris.ac.uk/files/145143850/Hip_fracture_incidence_manuscript_Pure.pdf) - from Unpaywall

**Abstract:** Summary: Deprivation predicts increased hip fracture risk. Over 14 years, hip fracture incidence increased among men with persisting inequalities. Among women, inequalities in incidence were less pronounced; whilst incidence decreased overall, this improvement was seen marginally less in women from the most deprived areas. Hip fracture prevention programmes have not reduced inequalities. Purpose(s): Deprivation is associated with increased hip fracture risk. We examined the effect of area-level deprivation on hip fracture incidence in England over 14 years to determine whether inequalities have changed over time. Method(s): We used English Hospital Episodes Statistics (2001/2002-2014/2015) to identify hip fractures in adults aged 50+ years and mid-year population estimates (2001-2014) from the Office for National Statistics. The Index of Multiple Deprivation measured local area deprivation. We calculated age-adjusted incidence rate ratios (IRR) for hip fracture, stratified by gender and deprivation quintiles. Result(s): Over 14 years, we identified 747,369 hospital admissions with an index hip fracture; the number increased from 50,640 in 2001 to 55,092 in 2014; the proportion of men increased from 22.2% to 29.6%. Whereas incidence rates decreased in women (annual reduction 1.1%), they increased in men (annual increase 0.6%) (interaction p < 0.001). Incidence was higher in more deprived areas, particularly among men: IRR most vs. least deprived quintile 1.50 [95% CI 1.48, 1.52] in men, 1.17 [1.16, 1.18] in women. Age-standardised incidence increased for men across all deprivation quintiles from 2001 to 2014. Among women, incidence fell more among those least compared to most deprived (year by deprivation interaction p < 0.001). Conclusion(s): Deprivation is a stronger relative predictor of hip fracture incidence in men than in women. However, given their higher hip fracture incidence, the absolute burden of deprivation on hip fractures is greater in women. Despite public health efforts to prevent hip fractures, the health inequality gap for hip fracture incidence has not narrowed for men, and marginally widened among women. Copyright © 2017, International Osteoporosis Foundation and National Osteoporosis Foundation.

**Database:** EMCARE

1. **Inequalities in hip fracture incidence are greatest in the North of England: regional analysis of the effects of social deprivation on hip fracture incidence across England**

**Author(s):** Bhimjiyani A.; Gregson C.L.; Neuburger J.; Jones T.; Ben-Shlomo Y.

**Source:** Public Health; Sep 2018; vol. 162; p. 25-31

**Publication Date:** Sep 2018

**Publication Type(s):** Article

Available at [Public health](https://auth.elsevier.com/ShibAuth/institutionLogin?entityID=https://idp.eng.nhs.uk/openathens&appReturnURL=https%3A%2F%2Fwww.clinicalkey.com%2Fcontent%2FplayBy%2Fdoi%2F%3Fv%3D10.1016%2Fj.puhe.2018.05.002) - from ClinicalKey

Available at [Public health](https://research-information.bris.ac.uk/files/164457679/PH_Region_Manuscript_Pure.pdf) - from Unpaywall

**Abstract:** Objectives: Hip fracture risk varies by geography and by levels of deprivation. We examined the effect of local area-level deprivation on hip fracture incidence across nine regions in England, using 14 years of hospital data, to determine whether inequalities in hip fracture incidence rates vary across geographic regions in England. Study design: Sequential annual cross-sectional studies over 14 years. Method(s): We used English Hospital Episodes Statistics (2001/02-2014/15) to identify hip fractures in adults aged 50+ years and mid-year population estimates (2001-2014) from the Office for National Statistics. The Index of Multiple Deprivation was used to measure local area deprivation. We calculated age-standardised hip fracture incidence rates per 100,000 population, stratified by gender, geographic region, deprivation quintiles and time-period, using the 2001 English population as the reference population. Using Poisson regression, we calculated age-adjusted incidence rate ratios (IRRs) for hip fracture, stratified as above. Result(s): Over 14 years, we identified 747,369 hospital admissions with an index hip fracture. Age-standardised hip fracture incidence was highest in the North East for both men and women. In North England (North East, North West and Yorkshire and the Humber), hip fracture incidence was relatively higher in more deprived areas, particularly among men: IRR most vs least deprived quintile 2.06 (95% confidence interval [CI] = 2.00-2.12) in men, 1.62 (95% CI 1.60-1.65) in women. A relationship, albeit less marked, between deprivation and hip fracture incidence was observed among men in the Midlands and South, but with no clear pattern among women. Conclusion(s): Regional variation in hip fracture incidence exists across England, with the greatest absolute burden of incident hip fractures observed in the North East for both men and women. Across local areas in North England, absolute and relative inequalities in hip fracture incidence were greater than in other regions. Our findings highlight the need for improved fracture prevention programmes that aim to reduce regional and social inequalities in hip fracture incidence. Copyright © 2018 The Royal Society for Public Health

**Database:** EMCARE

1. **The association of falls with loneliness and social exclusion: evidence from the DEAS German Ageing Survey.**

**Author(s):** Hajek, André; König, Hans-Helmut

**Source:** BMC Geriatrics; Sep 2017; vol. 17 (no. 1); p. 204

**Publication Date:** Sep 2017

**Publication Type(s):** Journal Article

**PubMedID:** 28874139

Available at [BMC Geriatrics](http://bmcgeriatr.biomedcentral.com/articles/10.1186/s12877-017-0602-5) - from BioMed Central

Available at [BMC Geriatrics](http://europepmc.org/search?query=(DOI:10.1186/s12877-017-0602-5)) - from Europe PubMed Central - Open Access

Available at [BMC Geriatrics](http://search.ebscohost.com/login.aspx?direct=true&scope=site&site=ehost-live&db=mdc&AN=NLM28874139) - from EBSCO (MEDLINE Complete)

Available at [BMC Geriatrics](http://gateway.proquest.com/openurl?ctx_ver=Z39.88-2004&res_id=xri:pqm&req_dat=xri:pqil:pq_clntid=145298&rft_val_fmt=ori/fmt:kev:mtx:journal&genre=article&issn=1471-2318&volume=17&issue=1&spage=1) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMC Geriatrics](https://doi.org/10.1186/s12877-017-0602-5) - from Unpaywall

**Abstract:** BACKGROUND: It remains an open question whether falls are related with social relations, covering subjective (e.g., perceived loneliness) and more objective dimensions (e.g., number of important individuals in regular contact). Consequently, we aimed at examining the association between falls and social ties comprehensively, including loneliness, social exclusion and the number of important people in regular contact. METHODS: Cross-sectional data were used from a population-based sample of community-dwelling individuals aged 40 and over (n = 7808) in Germany. Self-rated loneliness was quantified using a short version of the De Jong Gierveld Loneliness Scale. Perceived social exclusion was measured using a scale developed by Bude and Lantermann. Furthermore and in contrast to the subjective outcome measures, the more objective number of important people in regular contact was also used as outcome variable. The experience of a fall in the preceding 12 months (yes; no) was assessed. RESULTS: Controlling for various possible confounding variables, linear regressions showed that experiencing a fall in the past 12 months was associated with higher social exclusion (β = .08, p < .001), and increased loneliness (β = .08, p < .001), whereas it was not associated with the number of important people in regular contact. CONCLUSIONS: Findings stress the relation between falls and feelings of loneliness and social exclusion, whereas falls were unrelated to the more objective measure of number of important people in regular contact, suggesting that falls are particularly related to subjective measures of social ties and relations. This underlines the importance of interventions to prevent falls. Preventing falls in turn might help to prevent loneliness and social exclusion.

**Database:** Medline

1. **The impact of social deprivation on mortality following hip fracture in England and Wales: a record linkage study**

**Author(s):** Thorne K.; Johansen A.; Akbari A.; Williams J.G.; Roberts S.E.

**Source:** Osteoporosis International; Sep 2016; vol. 27 (no. 9); p. 2727-2737

**Publication Date:** Sep 2016

**Publication Type(s):** Article

Available at [Osteoporosis international : a journal established as result of cooperation between the European Foundation for Osteoporosis and the National Osteoporosis Foundation of the USA](http://search.ebscohost.com/login.aspx?direct=true&scope=site&site=ehost-live&db=mdc&AN=27098537) - from EBSCO (MEDLINE Complete)

Available at [Osteoporosis international : a journal established as result of cooperation between the European Foundation for Osteoporosis and the National Osteoporosis Foundation of the USA](http://gateway.proquest.com/openurl?ctx_ver=Z39.88-2004&res_id=xri:pqm&req_dat=xri:pqil:pq_clntid=145298&rft_val_fmt=ori/fmt:kev:mtx:journal&genre=article&issn=0937-941X&volume=27&issue=9&spage=2727) - from ProQuest (Health Research Premium) - NHS Version

Available at [Osteoporosis international : a journal established as result of cooperation between the European Foundation for Osteoporosis and the National Osteoporosis Foundation of the USA](http://europepmc.org/articles/pmc4981619?pdf=render) - from Unpaywall

**Abstract:** Summary: We used routine hospital data to investigate whether socially deprived patients had an increased risk of dying following hip fracture compared with affluent patients. We found that the most deprived patients had a significantly increased risk of dying at 30, 90 and 365 days compared with the most affluent patients. Introduction: To identify whether social deprivation has any effect on mortality risk after emergency admission with hip fracture and to determine whether any increased mortality observed among deprived groups was associated with patient and hospital-related factors. Method(s): We used routine, linked hospital inpatient and mortality data for emergency admissions with a hip fracture in both England and Wales between 2004 and 2011. Mortality rates at 30, 90 and 365 days were reported. Logistic regression was used to identify any significant increases in mortality with higher levels of social deprivation and the influence of other risk factors on any increased mortality among the most deprived group. Result(s): Mortality rates at 30, 90 and 365 days were 9.3, 17.4 and 29.0 % in England and 8.3, 16.1 and 27.9 % in Wales. Social deprivation was significantly associated with increased mortality in the most deprived quintile compared with the least deprived quintile at 30, 90 and 365 days in England (OR = 1.187, 1.185 and 1.154, respectively) and at 90 and 365 days in Wales (1.135 and 1.203). There was a little interaction between deprivation and other risk factors influencing 30- and 365-day mortality except for patient age, pre-fracture residence and hospital size. Conclusion(s): We demonstrated a positive association between social deprivation and increased mortality at 30 days post-admission for hip fracture in both England and Wales that was still evident at 90 and 365 days. We found little influence of other factors on social inequalities in mortality risk at 30 and 365 days post-admission. Copyright © 2016, The Author(s).

**Database:** EMCARE

1. **Open ankle fractures: who gets them and why?**

**Author(s):** Bugler, Kate E; Clement, Nicholas D; Duckworth, Andrew D; White, Timothy O; McQueen, Margaret M; Court-Brown, Charles M

**Source:** Archives of Orthopaedic & Trauma Surgery; Mar 2015; vol. 135 (no. 3); p. 297-303

**Publication Date:** Mar 2015

**Publication Type(s):** Academic Journal

**PubMedID:** NLM25596941

Available at [Archives of Orthopaedic and Trauma Surgery](http://search.ebscohost.com/login.aspx?direct=true&scope=site&site=ehost-live&db=mdc&AN=25596941) - from EBSCO (MEDLINE Complete)

Available at [Archives of Orthopaedic and Trauma Surgery](http://gateway.proquest.com/openurl?ctx_ver=Z39.88-2004&res_id=xri:pqm&req_dat=xri:pqil:pq_clntid=145298&rft_val_fmt=ori/fmt:kev:mtx:journal&genre=article&issn=0936-8051&volume=135&issue=3&spage=297) - from ProQuest (Health Research Premium) - NHS Version

**Abstract:** Open ankle fractures present a significant clinical challenge. The management and outcome of these injuries has been extensively reported, but there have been no reports of the epidemiology and how this has changed over time. We report 178 adult patients with open ankle fractures presenting to our unit over a twenty-three year period. The study centre is the only hospital receiving adult orthopaedic trauma in the region and has a defined population. The incidence of open ankle fractures was 1.5/10(5)/year, representing 1.5 % of all ankle fractures. The mean age was 55 years (range 16-96), with the highest incidence occurring in women over the age of 90. The most common mechanism was a simple fall with only 26 % of cases due to a motor vehicle collision (MVC). 82 % of cases were isolated injuries. Social deprivation had no significant influence on the incidence, but there was a difference in the mechanism with the majority of injuries in the most deprived quintile caused by MVCs and significantly fewer due to simple falls (p = 0.047). Over the twenty-three years, there was a significant increase in the mean age from 44 to 64 years (p = 0.03). The overall incidence remained constant over the two decades. In common with many traumatic injuries, open ankle fractures are increasingly low-energy insufficiency fractures affecting elderly patients, particularly older women. This has implications for service planning and training as well as the surgical intervention in these patients.

**Database:** CINAHL

1. **Exercise, nutrition and managing hip fracture in older persons**

**Author(s):** Singh M.A.F.

**Source:** Current Opinion in Clinical Nutrition and Metabolic Care; Jan 2014; vol. 17 (no. 1); p. 12-24

**Publication Date:** Jan 2014

**Publication Type(s):** Review

**Abstract:** PURPOSE OF REVIEW: Lifestyle factors play a role in both the genesis and recovery from fragility fracture. The purpose of this review is to summarize recent evidence for exercise and nutrition in the management of hip fracture. RECENT FINDINGS: Recent randomized controlled trials of exercise have primarily consisted of isolated resistance training or multimodal home-based programs. More robust, long-term, or supervised training is generally associated with greater clinical benefits, including muscle strength, mobility, and function. Recent nutritional interventions have included multinutrient supplements, nutritional counseling and support, and vitamin D/calcium supplementation. Isolated nutritional interventions have not consistently shown significant impact on long-term outcomes after hip fracture, although improvements in body weight, biochemical indices, complication rates, and mobility have been reported. Overall, there is marked heterogeneity in the robustness of responses seen to hip fracture treatment studies. Few large, long-term, multicomponent interventions with clinically relevant outcomes of functional independence, need for residential care, mortality, and quality of life have been reported. SUMMARY: Evidence-based approaches to hip fracture should include comprehensive risk-factor assessment and treatment for sarcopenia/dynapenia, balance impairment, undernutrition of protein, energy, vitamin D and calcium, depression, cognitive impairment, sensory impairment, social isolation, and comorbid illness with exercise, nutrition and other modalities. © 2013 Wolters Kluwer Health Lippincott Williams & Wilkins.

**Database:** EMCARE

1. **Health risk appraisal in older people 2: The implications for clinicians and commissioners of social isolation risk in older people**

**Author(s):** Iliffe S.; Kharicha K.; Harari D.; Swift C.; Gillmann G.; Stuck A.E.

**Source:** British Journal of General Practice; Apr 2007; vol. 57 (no. 537); p. 277-282

**Publication Date:** Apr 2007

**Publication Type(s):** Article

Available at [The British journal of general practice: the journal of the Royal College of General Practitioners](https://www.ncbi.nlm.nih.gov/pubmed/17394730) - from PubMed

Available at [The British journal of general practice: the journal of the Royal College of General Practitioners](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2043334/) - from PubMed Central

**Abstract:** Background: Social isolation is associated with poorer health and is seen by the World Health Organisation (WHO) as one of the major issues facing the industrialised world. Aim(s): To explore the significance of social isolation in the older population for GPs and for service commissioners. Design of study: Secondary analysis of baseline data from a randomised controlled trial of health risk appraisal. Setting(s): A total of 2641 community-dwelling, non-disabled people aged 65 years and over in suburban London. Method(s): Demographic details, social network and risk for social isolation based on the 6-item Lubben Social Network Scale, measures of depressed mood, memory problems, numbers of chronic conditions, medication use, functional ability, self-reported use of medical services. Result(s): More than 15% of the older age group were at risk of social isolation, and this risk increased with advancing age. In bivariate analyses risk of social isolation was associated with older age, education up to 16 years only, depressed mood and impaired memory, perceived fair or poor health, perceived difficulty with both basic and instrumental activities of daily living, diminishing functional ability, and fear of failing. Despite poorer health status, those at risk of social isolation did not appear to make greater use of medical services, nor were they at greater risk of hospital admission. Half of those who scored as at risk of social isolation lived with others. Multivariate analysis showed significant independent associations between risk of social isolation and depressed mood and living alone, and weak associations with male sex, impaired memory and perceived poor health. Conclusion(s): The risk of social isolation is elevated in older men, older persons who live alone, persons with mood or cognitive problems, but is not associated with greater use of services. These findings would not support population screening for individuals at risk of social isolation with a view to averting service use by timely intervention. Awareness of social isolation should trigger further assessment, and consideration of interventions to alleviate social isolation, treat depression or ameliorate cognitive impairment. © British Journal of General Practice 2007.

**Database:** EMCARE

1. **Health risk appraisal in older people 1: Are older people living alone an 'at-risk' group?**

**Author(s):** Kharicha K.; Iliffe S.; Harari D.; Swift C.; Gillmann G.; Stuck A.E.

**Source:** British Journal of General Practice; Apr 2007; vol. 57 (no. 537); p. 271-276

**Publication Date:** Apr 2007

**Publication Type(s):** Article

**Abstract:** Background: In the UK, population screening for unmet need has failed to improve the health of older people. Attention is turning to interventions targeted at 'at-risk' groups. Living alone in later life is seen as a potential health risk, and older people living alone are thought to be an at-risk group worthy of further intervention. Aim(s): To explore the clinical significance of living alone and the epidemiology of lone status as an at-risk category, by investigating associations between lone status and health behaviours, health status, and service use, in non-disabled older people. Design of study: Secondary analysis of baseline data from a randomised controlled trial of health risk appraisal in older people. Setting(s): Four group practices in suburban London. Method(s): Sixty per cent of 2641 community-dwelling non-disabled people aged 65 years and over registered at a practice agreed to participate in the study; 84% of these returned completed questionnaires. A third of this group, (n = 860, 33.1 %) lived alone and two-thirds (n = 1741, 66.9%) lived with someone else. Result(s): Those living alone were more likely to report fair or poor health, poor vision, difficulties in instrumental and basic activities of daily living, worse memory and mood, lower physical activity, poorer diet, worsening function, risk of social isolation, hazardous alcohol use, having no emergency carer, and multiple falls in the previous 12 months. After adjustment for age, sex, income, and educational attainment, living alone remained associated with multiple falls, functional impairment, poor diet, smoking status, risk of social isolation, and three self-reported chronic conditions: arthritis and/or rheumatism, glaucoma, and cataracts. Conclusion(s): Clinicians working with independently-living older people living alone should anticipate higher levels of disease and disability in these patients, and higher health and social risks, much of which will be due to older age, lower educational status, and female sex. Living alone itself appears to be associated with higher risks of falling, and constellations of pathologies, including visual loss and joint disorders. Targeted population screening using lone status may be useful in identifying older individuals at high risk of failing. © British Journal of General Practice 2007.

**Database:** EMCARE

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**Databases searched:**

* + **Evidence-Based Reviews:** The Cochrane Library.
  + **Healthcare Databases:** MEDLINE, EMBASE, CINAHL, EMCARE, PubMed.

**Local Guidance:** Local guidance has not been searched as part of this literature search. However, local guidelines, policies and procedures are available via the red button on the intranet.

**Search Terms:**

|  |  |
| --- | --- |
| ***Subject Headings*** | ***Free Text Words*** |
| exp "ACCIDENTAL FALLS"/ | 2019 nCoV |
| exp CORONAVIRUS/ | confine\* |
| exp EPIDEMICS/ | confinement |
| exp FRACTURE/ | COVID-19 |
| exp FRACTURES/ | curfew |
| exp "FRACTURES, BONE"/ | fall\* |
| exp PANDEMICS/ | falls |
| exp QUARANTINE/ | fractures |
| exp "SOCIAL ISOLATION"/ | lockdown |
|  | quarantine |
|  | SARS-CoV-2 |
|  | SARS-nCoV2 |
|  | “social isolation” |

**Search Limits:** Humans, Adults,

**Search Date:** 23/04/2020

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