研究業績 英文表記

和文	
表題	地域在住住民のメンタルヘルスと骨量との関連;長崎アイランド研究における骨の健康に関する研究
著者名	大川内鉄二 ¹ , 有馬和彦 ^{1, 2} , 水上諭 ¹ , 古藤世梨奈 ¹ , 水光正裕 ¹ , キット彩 乃 ³ , 中島弘貴 ¹ , 内山迪子 ⁴ , 本田祐造 ⁵ , 田中奈津美 ⁴ , 辻本律 ⁶ , 西村 貴孝 ⁷ , 富田義人 ⁸ , 安部恵代 ⁹ , 草野洋介 ¹⁰ , 川尻真也 ^{11,12} , 玉井慎美 ¹² , 山梨啓友 ^{13,14} , 永田康浩 ^{2,11} , 川上純 ^{2,12} , 前田隆浩 ^{2,13} , 青栁潔 ^{1,2}
所属	1 長崎大学大学院医歯薬学総合研究科公衆衛生学分野 2 長崎大学大学院医歯薬学総合研究科 先端医療コアユニット 3 京都光華女子大学看護学科 4 長崎労災病院整形外科 5 諫早総合病院整形外科 6 長崎大学大学院医歯薬学総合研究科整形外科学講座 7 九州大学デザイン工学部ヒューマンライフデザイン学科 8 東京医療保健大学リハビリテーション学部理学療法学科 9 西九州大学健康栄養学科 10 西九州大学健康栄養学科 11 長崎大学大学院医歯薬学総合研究科地域医療学分野 12 長崎大学大学院医歯薬学総合研究科免疫・リウマチ学分野 13 長崎大学大学院医歯薬学総合研究科総合診療医学講座 14 長崎大学熱帯医学研究所臨床医学分野
英文	
Title	Association between mental health and bone mass among community-dwelling adults: Nagasaki Islands Study on bone health
Author	Tetsuji Okawachi1, Kazuhiko Arima1, 2, Satoshi Mizukami1, Serina Koto1, Masahiro Suiko1, Ayano Kit3, Hiroki Nakashima1, Michiko Uchiyama4, Yuzo Honda5, Natsumi Tanaka4, Ritsu Tsujimoto6, Takayuki Nishimura7, Yoshihito Tomita8, Yasuyo Abe9, Yosuke Kusano10, Shin-Ya Kawashiri11, 12, Mami Tamai12, Hirotomo Yamanashi13, 14, Yasuhiro Nagata2, 11, Atsushi Kawakami2, 12, Takahiro Maeda2, 13, Kiyoshi Aoyagi1, 2

- 1 Department of Public Health, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan.
- 2 Leading Medical Research Core Unit, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan
- 3 Department of Nursing, Kyoto Koka Women's University, Kyoto, Japan.
- 4 Department of Orthopedic Surgery, Nagasaki Rosai Hospital, Nagasaki, Japan.
- 5 Department of Orthopedic Surgery, Isahaya General Hospital, Nagasaki, Japan.
- 6 Department of Orthopedic Surgery, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan.
- 7 Department of Human Life Design, Faculty of Design, Kyushu University, Fukuoka, Japan.

Affiliation

- 8 School of Rehabilitation, Department of Physical Therapy, Tokyo Professional University of Health Sciences, Tokyo, Japan.
- 9 Department of Health and Nutrition, Nishikyusyu University, Saga, Japan.
- 10Department of Nursing, Nishikyusyu University, Saga, Japan.
- 11Department of Community Medicine, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan.
- 12Department of Immunology and Rheumatology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan.
- 13Department of General Medicine, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan.
- 14Department of Clinical Medicine, Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan.

Abstract

Osteoporosis and its related fractures are important public health issues. This study examined the association between the Kessler Psychological Distress Scale (K6) and low bone mass in middle-aged community-dwelling men and women. A cross sectional study was nested in a prospective observational study of 1,101 participants (median age: 57 [49-62] years in men and 58 [50-62] years in women) residing in a rural city in western Japan. Participants were recruited during medical check-ups in 2016 and 2017 from the community-dwelling population. The bone mass of the calcaneus was evaluated using quantitative ultrasound.

Of the participants, 56 men (14.9%) and 144 women (19.9%) had a bone mass of less than 70% of the mean of young adults. Univariate analysis revealed that there was a trend toward lower body mass index (BMI) and higher prevalence of low bone mass with an increase in K6 scores in men but not in women. Logistic regression analysis, adjusting for possible confounders (age, BMI, smoking, drinking habits, exercise habits, diabetes, hyperlipidemia, and hypertension), showed significant associations between the K6 scores and low bone mass (odds ratio (OR) = 2.66 for the men with 5 to 12 points of K6, OR = 7.51 for men with ≥ 13 of K6, not for women).

We showed an association between psychological distress and low bone mass independent of cofounders among community-dwelling middle-aged men but not women. This suggests that healthy mental health in middle-aged men may be a possible target for the prevention of consequent osteoporosis or fragile bone fractures.

keyword

Bone ultrasound, osteoporosis, community-dwelling adults, human association studies, Kessler Psychological Distress Scale

※本データの英文表記は実際の論文上の表記とは異なります。