SSRIs have been reported to regulate serotonin (5-HT) receptors and the transporter 5-HTT on osteoclasts and osteoblasts. Previous studies reporting reduced bone mineral density (BMD) among SSRI users may have been confounded by the effects of depression.

Methods: Among women enrolled in the Geelong Osteoporosis Study (GOS), a history of depression was ascertained by clinical interview (SCID-I/NP). BMD was measured at the PA spine, hip, total body and forearm using dual-energy absorptiometry, and medication use was self-reported.

Results: Among 177 women with a lifetime history of depression, current users of bisphosphonates, glucocorticoids, hormone therapy and other antidepressants were excluded (n = 49). Of the remaining 128 (median age 51.5 years, range 30–74), 26 (20.3%) reported current SSRI use. SSRI users were shorter than nonusers $(1.59 \pm 0.06 \text{ vs. } 1.62 \pm 0.06 \text{ m},$ P = 0.01); however, there were no differences in age, weight or smoking history. Using analysis of covariance and controlling for age, weight, height and smoking history, BMD among SSRI users was 5.7% lower at the femoral neck (0.977 \pm 0.015 vs. 0.922 \pm 0.025 g/cm^2 , P = 0.03), 6.1% lower at the trochanter $(0.813 \pm 0.010 \text{ vs. } 0.763 \pm 0.021 \text{ g/cm}^2, P = 0.04)$ and 4.4% lower at the midforearm (0.745 \pm 0.009 vs. $0.712 \pm 0.015 \text{ g/cm}^2$, P = 0.03) than nonusers. No differences in BMD were detected at other sites.

Conclusions: Among women with a lifetime history of depression, SSRI use is associated with reduced BMD. Although the mechanism remains unclear, these observations are consistent with a role for the serotonergic system in regulating bone metabolism.

'Gift of Hope' – motivation for brain donation into schizophrenia research

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Background: Schizophrenia is an illness that is unique to humans and animal models are of limited use. Consequently, NISAD has established a brain tissue bank and an associated premortem donor program called the Gift of Hope (GOH). This program invites people aged 18 years and over to donate their brain (after death) for research into Schizophrenia. The main benefit of GOH is that it provides researchers with high-quality, well-characterized tissues. This study is designed to identify why individuals are motivated to become donors in such a program.

Methods: Participants from the GOH database, who have a Sydney metro postal address, were selected to receive the paper-based, 26-item questionnaire that was developed by the 'Using Our Brains' group. It consisted of both open-ended and fixed responses designed to collect demographic information and the participant's comments on their reasons for donation.

Results: Forty-five participants completed and returned the questionnaire, a response rate of 60% (n=74). Personal experience of the illness was reported by 50% of the participants as their main reason for donating. A further 22% donated in the hope of improving knowledge and research in the area and 17% donated for altruistic reasons.

Conclusions: These preliminary results suggest that personal experience of schizophrenia, which includes being a family member of someone with the illness, is the key motivating factor when it comes to brain donation for the GOH program.