Booth J<sup>1</sup>, Roberts N<sup>1</sup>

1. Glasgow Caledonian University

# PERCEIVED PSYCHOSOCIAL STRESS IN CONTINENCE CLINIC ATTENDEES

#### Hypothesis / aims of study

Psychosocial stress is associated with bladder and bowel dysfunction in adults however no studies have investigated the nature or type of stress experienced. If we are to develop appropriate interventions to support effective self-management of psychosocial stress in the future it is important to understand individual perceptions about forms and sources of stress. This study aimed to evaluate perceptions of psychosocial stress among adults attending a community continence service and compare them with a general community nurse treatment clinic.

### Study design, materials and methods

A cross-sectional survey of perceived stress and related factors among clinic attendees was undertaken. Perceived psychosocial stress was defined as 'the sensation of tension, irritability, nervousness, anxiety or sleeplessness associated with poor health, family relationships, living arrangements, finance, work and stressful life events'. A composite 15-item Perceived Stress Instrument (PSI) was constructed to assess the components of stress identified in the definition and comprised: i) the stress assessment questions used in the INTERSTROKE (1) study; ii) a range of significant life events associated with perceived stress (2); iii) a measure of Sense of Coherence as a proxy for stress adaptive capacity (3) iv) a depression screen. Nurses at two community continence clinics (CCC) and two general community nurse treatment clinics (CNTC) gave a letter of invitation and explanation, a sealable envelope and a blank Perceived Stress Instrument (PSI) to each consecutive clinic attendee. Respondents completed the questionnaires at the clinic or took it home for completion and postal return at a later date. Only those with impaired capacity or who were unable to understand and/or write English were excluded. If attendees did not wish to participate they were asked to destroy the PSI or return it uncompleted. Data were collected between May 2013 and April 2014. As this was an anonymous survey, there was no opportunity for reminders or follow-up. Ethical approval was obtained.

The CCC group was older than the CNTC group, predominantly female and a greater proportion lived alone (table 1).

	Community Continence Clinic	Community Nurse Treatment Clinic	X <sup>2</sup> , t,
	(n=212) (%)	(n=393) (%)	p value
Sex			
Male	23 (11)	137 (35)	X <sup>2</sup> 59.157,
Female	189 (89)	234 (60)	p<.000
Age, mean years (SD)	58.6 (14.83)	52.6 (15.79)	t=4.632, p<.000
Living situation			
Alone	83 (39)	94 (24)	
With partner/spouse	75 (35)	177 (45)	
With other family	53 (25)	94 (24)	X <sup>2</sup> 27.266,
Anyone else	1 (0.5)	6 (1.5)	p<.000

Table 1 Characteristics of clinic attendees

Perceived psychosocial stress was commonly reported by both groups. Adults attending the CCCs reported significantly higher stress levels at home ( $X^2$  28.614, df 4, p<.001) with 30% reporting feeling permanent stress over the past year or 5 years, compared with 15% of the CNTC group. The CNTC group reported significantly more finance-related stress ( $X^2$  11,247, df 2, p=.004) but there was no difference between the groups in work-related stress, with 19% of the CCC group and 20% of the CNTC group reporting permanent stress at work in the past year or 5 year period. The two groups were similar in the total number of stressful life events experienced however the CCC group reported significantly more major family conflict (U=37303, p=.02), personal illness or injury (U=34194, p<.000) and death of close friends or pets (U=37062, p=.006). There was significantly more retirement (U=36367, p<.000) and marital separation/divorce in the CNTC group (U=38812, p=.045). The composite scores for Total Life Stress were significantly higher in the CCC group (U=28499, p<.000) however the Sense of Coherence was also higher in this group compared to the CNTC group (U=34729, p = .015). Fewer people in the CCC group believed stress to be a cause of their illness ( $X^2$  8.341, df 2, p=.015).

## Interpretation of results

This original study indicates that high levels of psychosocial stress are perceived by adult men and women attending community continence services. Perceptions of permanent stress at home, over a protracted period was a distinguishing feature of the psychosocial stress reported by this group. The nature of the stressful life events reported by the group also lends support to this finding as they were relationship focused. Despite the high levels of perceived stress reported, findings indicate that the CCC attendees had a higher Sense of Coherence and therefore a greater capacity to successfully adapt to perceived stress, which may in turn be reflected in the lower proportion of CCC attendees attributing their illness/condition to the effects of psychosocial stress. Further exploration of the psychosocial stress experienced is needed to better understand the relationship between perceptions of stress and bladder and bowel dysfunction, to determine whether continence issues are a cause or effect of psychosocial stress. Such understanding will enable future continence and stress-management interventions to be effectively targeted.

## Concluding message

High levels of perceived psychosocial stress at home are a common but unrecognised feature in those attending community continence services.

#### References

- 1. O'Donnell MJ, Xavier D, Liu L, Zhang H, Chin SL, Rao-Melacini P, et al. Risk Factors for ischaemic and intracerebral haemorrhagic stroke in 22 countries (the INTERSTROKE study): a case control study. Lancet. 2010; 376:112-123.
- 2. Holmes TH, Rahe RH 1967. The Social Readjustment Rating Scale Journal of Psychosomatic Research, 11, (2), 213-218
- 3. Schumann A, Hapke U, Meyer C, Rumpf H, John U. Measuring Sense of Coherence with only three items: A useful tool for population surveys. British Journal of Health Psychology 92003), 8,409-421

### Disclosures

Funding: Queens Nursing Institute Scotland, Glasgow Caledonian University Clinical Trial: No Subjects: HUMAN Ethics Committee: West of Scotland Research Ethics Service. REC reference 11/AL/0121 Helsinki: Yes Informed Consent: No