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## A PROSPECTIVE EXPLORATION OF THE EXPERIENCES AND FACTORS AFFECTING THE CONTINUITY OF USE OF INTERMITTENT SELF-CATHETERISATION (ISC) IN PEOPLE WITH MULTIPLE SCLEROSIS (MS) – COSMOS

### Hypothesis / aims of study

Intermittent self-catheterisation is the ‘gold-standard’ for bladder dysfunction in people with MS however there is evidence to suggest that it is not continued. The aim of this study was to identify facilitators and inhibitors for people with MS continuing with ISC during the first year of use

### Study design, materials and methods

204 people with MS, newly referred to continence services, were recruited. Following completion of consent, demographic, health and baseline outcome questionnaire data were returned. These included the ICIQ LUTS(1) and FLUTS(2) and the EQ-5D. All participants were re-contacted at 4, 8 and 12 months to update health and bladder status and complete the outcome questionnaires

### Results

69/204 (34%) participants were recommended to start using ISC, 56/204 (27%) commenced, 13/69 (18%) chose not to do so, 13/56(23%) stopped using ISC within the one year follow-up.

Participants were grouped into four categories based on their use of ISC: not recommended, resistors, discontinuers and continuers.

Discontinuers and continuers were compared using Pearson chi-square tests for categorical variables and two-sample t-tests for continuous variables (normally distributed). Statistical analysis was performed using SPSS v21. Binary logistic regression was used to identify potential baseline predictors of whether ISC was continued or discontinued at 12 months. The factors entered into the model were age, gender, LUTS/FLUTS/EQ-5D scores, self-reported general health, type, length of time with and main symptoms of MS, UTI history, location of ISC teaching, number of teaching visits, type of teaching aids used, type of catheter, highest academic qualification, employment status and household status (social support).

There was no significant difference in the age, gender, severity of bladder symptoms, type or length of time since diagnosis, between those that discontinued and those that continued ISC. Participants were also asked about their primary MS symptoms with a greater percentage of discontinuers (92% v 40%) identifying fatigue and poor balance as major symptoms ( $\chi^2=10.923$ , df=4, p=0.0459).

The number or venue of appointment, use of teaching aids, or type of catheter did not affect the continuity of use of ISC ( $\chi^2=2.400$ , df=3, p=0.494). However, there was a significant difference between the two groups in home support as those that discontinued either lived alone or alone with children compared to those that continued (Fisher's exact test, p = 0.007 $\chi^2$ ).

There were no significant difference within or between groups in the Total LUTS and FLUTS scores in those that discontinued and those that continued at any time-point (Mann Whitney p=0.499)

More participants who continued with ISC reported UTIs at baseline (51%) compared with those who discontinued (23%) (Fisher's exact test p=0.060). There was a significant difference in UTIs at 8 months with those that discontinued reporting significantly more when compared to those that continued ( $\chi^2=9.918$ , df=3, p=0.019).

### Interpretation of results

UTI frequency, home support, fatigue and poor balance are major factors impacting on the continuity of ISC. 23% of those who were recommended to start ISC did not. The number of participants that did not start ISC within the year was 18% and suggests that for some patients using ISC can be a difficult decision requiring time and support.

### Concluding message

The pencil and paper test(3) has since been developed and facilitates the assessment of the ability of neurological patients to practice ISC. However, further exploration of the behavioural change required to commence and continue ISC is needed.

### References

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### Disclosures

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