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Farrell S[1], Scott T[1], Farrell K[1], Irving L [1], Foren J [1], Twohig J [1]
1. Dalhousie University

A TRIAL OF A CONTINENCE TEAM APPROACH TO WOMEN'S CONTINENCE CARE : A STUDY OF HEALTH CARE EFFICACY AND COSTS.

Hypothesis / aims of study

The current pyramidal system of health care delivery in which a few subspecialized physicians with the most complete knowledge and expertise are inaccessible to the majority of patients, is inefficient and ineffective at delivering the best care. Urinary incontinence care exemplifies this problem. Wait times to see urogynaecologists and urologists can be up to one year or longer for patients, many of whom do not require subspecialized care. This study was designed to test a team approach to women's continence care with the expectation that this approach would be as effective, more efficient and less costly when compared to the traditional medical model which requires the physician to see every patient.

Study design, materials and methods

We studied a modification of urinary incontinence care which departed from the traditional medical model in two distinct ways. Firstly, patients were permitted to refer themselves directly to the specialty care team. Secondly, standardized questionnaires and evaluation tools facilitated assessment and management of the patients by a continence educator and nurses without the need for direct contact between patient and physician (continence team model). This model of care was compared to the traditional medical model where all patients were managed by a physician.

Continence team patients were interviewed by the continence educator and completed the following questionnaires : medical health, urinary and anal incontinence symptoms, short forms of IIQ and UDI. A urine sample was tested. Three members of the care team used a standardized form to triage the questionnaire results independently and completed a disposition form. These patients were not seen and examined by a physician unless this was recommended at the time of disposition. Patients with uncomplicated incontinence were managed in a stepwise fashion beginning with education from the continence educator concerning Kegel's exercises and bladder drill. The nurses were trained to fit incontinence pessaries ,and do pelvic assessments of kegel strength. Physicians saw patients who were not cured after treatment from the educator and nurses or who had come to the clinic with complex problems. In the medical model, all patients were seen by a physician and therapy was dependent upon the physician's assessment. The cost of care delivery was calculated by totaling the cost of three components of care; visits with health care professionals; costs of investigations and costs of procedures. Dollar values were determined for these components and the mean cost in dollars was calculated. Outcome measures included changes in questionnaire scores, a treatment satisfaction questionnaire and costs associated with care.

Results

Two hundred and thirty two women have completed follow-up, 154 in the continence team arm and 78 in the medical model arm. The demographics of the two study groups were similar. The pretreatment scores on a variety of measures of urinary incontinence including stress and urgency incontinence, irritative and obstructive bladder symptoms and several measures of quality of life were not significantly different between the two groups. The care team model patients experienced statistically (independent samples t-test) significantly better outcomes on the following scores : stress incontinence ($p=0.05$), irritative symptoms ($p=0.001$), quality of life ($p=0.01$and UDI ($p=0.01$). Both groups had high mean scores on the patient satisfaction questionnaire: care team (39/40) and medical model (36/40). The mean score of the care team group was significantly higher than that of the medical model group. (t-test $p < 0.01$) The overall cost of care was higher in the medical model group ($207 per patient) when compared to the self-referral group ($155 per patient) (t-test $p = 0.009$). The correlation between the triage assessments of the physicians, continence educator and nurses was very high. Using the physicians as the gold standard for safety the overall agreement for all aspects of the triage form was high for both nurses($k=.912$) and the continence educator($k=.930$)

Interpretation of results

We have successfully demonstrated that the continence team model provides care which equals and in some aspects exceeds that delivered by the traditional medical model of care. The participants who were involved in the new model of care were more satisfied than their counterparts in the regular medical model of care. Perhaps most relevant to medical systems administrators, the cost of delivering equivalent care was less.

Concluding message

It is our belief that this continence team model of health care delivery is a safe, highly effective and a cost efficient approach to the delivery of care to women with urinary incontinence. Implementation of such a model would result in improved and timely access for all consumers to high quality health care.

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