Variation in availability and use of surgical care for female urinary incontinence: a mixed-methods study

Rebecca S Geary,1,2 Ipek Gurol-Urganci,1,2* Jil B Mamza,1,2 Rebecca Lynch,1 Dina El-Hamamsy,3 Andrew Wilson,4 Simon Cohn,1 Douglas Tincello4 and Jan van der Meulen1,2

1Department of Health Services Research and Policy, London School of Hygiene & Tropical Medicine, London, UK
2Royal College of Obstetricians and Gynaecologists Centre for Quality Improvement and Clinical Audit, Royal College of Obstetricians and Gynaecologists, London, UK
3Department of Obstetrics and Gynaecology, Leicester General Hospital, University Hospitals of Leicester NHS Trust, Leicester, UK
4Department of Health Sciences, College of Life Sciences, University of Leicester, Leicester, UK

*Corresponding author ipek.gurol@lshtm.ac.uk

Declared competing interests of authors: Douglas Tincello was a member of the NIHR Health Technology Assessment Clinical Trials Committee (from July 2017 to March 2019) and he reports providing consultancy services to Cambridge Medical Robotics (CMR Surgical Ltd, Cambridge, UK), Femeda (London, UK) and Astellas Pharma Inc. (Surrey, UK).

Published March 2021
DOI: 10.3310/hsdr09070

Plain English summary

Variation in surgical care for female urinary incontinence

Health Services and Delivery Research 2021; Vol. 9: No. 7
DOI: 10.3310/hsdr09070

NIHR Journals Library www.journalslibrary.nihr.ac.uk
Urinary incontinence is the involuntary loss of urine. It affects between 25% and 45% of adult women, and for many has a negative impact on their quality of life. Stress urinary incontinence is leaking of urine when coughing, laughing or sneezing, and urgency urinary incontinence is a sudden strong urge to urinate that is hard to stop. Despite major national initiatives in the last decade, the quality and availability of urinary incontinence services remain variable.

Using existing NHS databases, interviews with women who have urinary incontinence, and a survey of gynaecologists, we investigated which factors determine whether or not urinary incontinence services are used.

We found that women assess the severity of their urinary incontinence based on more factors than just those considered by doctors. Women’s understanding of urinary incontinence and their decisions about surgery are influenced by their daily lives and their own and other women’s experiences.

The results of the study suggest that women were less likely to be referred to a urinary incontinence specialist or to receive surgery if they were older, obese or from a minority ethnic background.

We found considerable differences between particular areas of England in how likely women were to be referred to a specialist or receive surgery. This mirrors findings from our survey that there were large differences between gynaecologists in how likely they were to recommend surgery to women.

During the final year of the study, in response to safety concerns about the most common surgical treatment for stress urinary incontinence in women (‘mesh surgery’), NHS England suspended the use of these treatments. We conducted supplementary analyses using existing NHS data to provide evidence on the longer-term risks of these ‘mesh’ treatments. We found that about 1 in 30 women who received mesh had it removed within 9 years.

Future research could focus on how better assessment of a woman’s history of urinary incontinence and quality of life, as well as early provision of lifestyle interventions and pelvic floor muscle training in primary care, could reduce the number of women referred to secondary care and improve their urinary incontinence symptoms. Another research priority is to identify the types of problems that women experience after surgery, ideally using information reported by women themselves.
Health Services and Delivery Research

ISSN 2050-4349 (Print)
ISSN 2050-4357 (Online)

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: journals.library@nihr.ac.uk

The full HS&DR archive is freely available to view online at www.journalslibrary.nihr.ac.uk/hsdr. Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: www.journalslibrary.nihr.ac.uk

Criteria for inclusion in the Health Services and Delivery Research journal

Reports are published in Health Services and Delivery Research (HS&DR) if (1) they have resulted from work for the HS&DR programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

HS&DR programme

The HS&DR programme funds research to produce evidence to impact on the quality, accessibility and organisation of health and social care services. This includes evaluations of how the NHS and social care might improve delivery of services.

For more information about the HS&DR programme please visit the website at https://www.nihr.ac.uk/explore-nihr/funding-programmes/health-services-and-delivery-research.htm

This report

The research reported in this issue of the journal was funded by the HS&DR programme or one of its preceding programmes as project number 14/70/162. The contractual start date was in June 2016. The final report began editorial review in April 2019 and was accepted for publication in December 2019. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HS&DR editors and production house have tried to ensure the accuracy of the authors’ report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health and Social Care.

© Queen’s Printer and Controller of HMSO 2021. This work was produced by Geary et al. under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Published by the NIHR Journals Library (www.journalslibrary.nihr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland (www.prepress-projects.co.uk).
NIHR Journals Library Editor-in-Chief

Professor Ken Stein  Professor of Public Health, University of Exeter Medical School, UK

NIHR Journals Library Editors

Professor John Powell  Chair of HTA and EME Editorial Board and Editor-in-Chief of HTA and EME journals. Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK, and Professor of Digital Health Care, Nuffield Department of Primary Care Health Sciences, University of Oxford, UK

Professor Andrée Le May  Chair of NIHR Journals Library Editorial Group (HS&DR, PGfAR, PHR journals) and Editor-in-Chief of HS&DR, PGfAR, PHR journals

Professor Matthias Beck  Professor of Management, Cork University Business School, Department of Management and Marketing, University College Cork, Ireland

Dr Tessa Crilly  Director, Crystal Blue Consulting Ltd, UK

Dr Eugenia Cronin  Senior Scientific Advisor, Wessex Institute, UK

Dr Peter Davidson  Consultant Advisor, Wessex Institute, University of Southampton, UK

Ms Tara Lamont  Senior Scientific Adviser (Evidence Use), Wessex Institute, University of Southampton, UK

Dr Catriona McDaid  Senior Research Fellow, York Trials Unit, Department of Health Sciences, University of York, UK

Professor William McGuire  Professor of Child Health, Hull York Medical School, University of York, UK

Professor Geoffrey Meads  Emeritus Professor of Wellbeing Research, University of Winchester, UK

Professor James Raftery  Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

Dr Rob Riemsma  Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

Professor Helen Roberts  Professor of Child Health Research, UCL Great Ormond Street Institute of Child Health, UK

Professor Jonathan Ross  Professor of Sexual Health and HIV, University Hospital Birmingham, UK

Professor Helen Snooks  Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

Professor Ken Stein  Professor of Public Health, University of Exeter Medical School, UK

Professor Jim Thornton  Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

Please visit the website for a list of editors: www.journalslibrary.nihr.ac.uk/about/editors

Editorial contact: journals.library@nihr.ac.uk