Implementation Science 2020, 15(Suppl 4):105 https://doi.org/10.1186/s13012-020-01062-3

Implementation Science

MEETING ABSTRACTS

Open Access

Proceedings of the Virtual 3rd UK Implementation Science Research Conference



Virtual conference. 16 and 17 July 2020

Published: 17 December 2020

Institute of Psychiatry, Psychology and Neuroscience, King's College London, 16th and 17th July 2020



© The Author(s). 2020 Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated in a credit line to the data.

P40

OASI2: a hybrid effectiveness implementation RCT to inform scale up of care bundle to reduce obstetric anal sphincter injury (OASI) caused during childbirth

Magdalena Jurczuk¹, Posy Bidwell¹, Daniel Wolstenholme¹, Louise Silverton², Jan Van Der Meulen³, Nick Sevdalis^{4§}, Ipek Gurol-Urganci^{1,3§}, Ranee Thakar^{5§}

¹Centre for Quality Improvement and Clinical Audit, Royal College of Obstetricians and Gynaecologists, London SE1 1SZ, UK; ²Royal College of Midwives, London W1G 9NH, UK; ³Department of Health Services Research and Policy, London School of Hygiene and Tropical Medicine, London WC1H 9SH, UK; ⁴Centre for Implementation Science, Health Service and Population Research Department, King's College London, London SE5 8AF, UK; ⁵Croydon University Hospitals NHS Trust, Croydon CR7 7YE, UK

Correspondence: Magdalena Jurczuk (mjurczuk@rcog.org.uk) Implementation Science 2020, **15(Suppl 4):**P40.

§ Authors Ranee Thakar, Nick Sevdalis and Ipek Gurol-Urganci contributed equally to the study and share senior authorship Background

Obstetric anal sphincter injuries (OASI) can have severe debilitating consequences for women. A large-scale quality improvement study (OASI1; 2017-18) implemented a care bundle (antenatal information to women, manual perineal protection and mediolateral episiotomy when indicated) in 16 maternity units in Britain [1] which reduced OASI rates. OASI2 (2021-22) is a scale-up study, which examines strategies used to introduce, implement and sustain implementation.

Method

OASI2 is a cluster-randomised control trial with two arms. Arm 1 (peer-to-peer implementation, n=10) is supported by peer units. Arm 2 (lean implementation, n=10) does not receive any active implementation support. A parallel nonrandomised study group (sustainability arm) consisting of original OASI1 units, allows study of the care bundle's sustainability over time. An estimated 2,750 singleton live births/unit will be eligible for the care bundle. All three study groups receive an implementation toolkit including training resources. Table 1 details the expected implementation strategies across the three arms. Clinical outcomes (OASI rates) are collated from marenity information systems; implementation outcomes (acceptability, feasibility, appropriateness, sustainability) are collected through validated surveys [2,3] administered to women and clinicians, supplemented by qualitative research. Quantitative data are analysed using regression modelling and descriptive statistics.

Results

The trial will identify the effect of the applied implementation strategies [4] on implementation success, and link that to the clinical effectiveness of the bundle. Successful sustainability strategies will be identified.

Conclusion

The study will generate insights into how to effectively scale-up and sustain uptake and coverage of similar interventions in maternity units. A locally adaptable 'implementation blueprint', will be produced to inform development of future guidelines to prevent perineal trauma.

Acknowledgements

The study is funded by the Health Foundation. NS's research is supported by the NIHR Applied Research Collaboration South London. We are also grateful to our independent advisory group who have contributed to the conceptualization, design and implementation of both the OASI1 and the OASI2 studies.

Trial Registration

Trial registration pending completion of research protocol.

References

- Bidwell P, Thakar R, Sevdalis N, Silverton L, Novis V, Hellyer A, et al. A multi-centre quality improvement project to reduce the incidence of obstetric anal sphincter injury (OASI): Study protocol. BMC Pregnancy Childbirth. 2018;18(1):1–33.
- Weiner BJ, Lewis CC, Stanick C, Powell BJ, Dorsey CN, Clary AS, et al. Psychometric assessment of three newly developed implementation outcome measures. Implement Sci. 2017;12(1):1–12.

- 3. University W. Clinical Assessment Sustainability Tool. 2012.
- Powell BJ, Waltz TJ, Chinman MJ, Damschroder LJ, Smith JL, Matthieu MM, et al. A refined compilation of implementation strategies: Results from the Expert Recommendations for Implementing Change (ERIC) project. Implement Sci. 2015;10(1):1–14.

Table 1 (abstract P40). Discrete implementation strategies to be used in each group of participating units

Discrete Implementation Strategy / group of	up or participating unit	Sustainability group	Peer implementation	Lean implementation
strategies [4]				
Implementation requirements	Identify and prepare champions/ Facilitation/ Clinical supervision	х	x	х
	Develop and organize quality monitoring systems/ change record systems/ Audit & provide feedback/ facilitate relay of clinical data to providers	x	х	x
	Develop a formal implementation blueprint/ develop an implementation glossary	х	x	х
	Conduct educational meetings (clinicians)	х	×	х
	Use educational materials (toolkit resources)	х	х	х
	Remind clinicians: pens, posters, stickers (care bundle launch day and promote the care bundle continuously)	x	х	х
	Obtain and use patient feedback/ Prepare patients/ consumers to be active participants (engage local PPI group)	x	×	х
Strategies exclusive to external facilitation	Centralise technical assistance/ Provide local technical assistance/ Use an implementation advisor/ Provide ongoing consultation	Centralised technical assistance	Local technical assistance	
	Organize clinician implementation team meetings (skills development days led by external facilitators)	х	x	
	Create a learning collaborative/ Promote network weaving	х	х	
	Use train the trainer strategies	Project Team > clinicians through cascade	External facilitators > clinicians through cascade	
Strategies related to sustainability efforts	Conduct educational outreach visits	Site visits from Project Team		
	Involve executive boards	Ensure senior-buy in		
	Mandate change/ Create or change credentialing and/or licensure standards	Bundle introduced into mandatory training/ induction packages		
	Fund & contract for the clinical innovation	Protected time or champions		
	Revise professional roles	Formal titles for champions		
	Recruit, designate, train for leadership	Champions trained for external facilitator role		

Publisher's NoteSpringer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.