Nov 26, 2021

A protocol for a scoping review of implementation strategies to scale up self-administered depot medroxyprogesterone acetate subcutaneous injectable contraception

Systematic Reviews

DOI
https://dx.doi.org/10.17504/protocols.io.b2asqaee

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OPEN ACCESS

DOI: https://dx.doi.org/10.17504/protocols.io.b2asqaee

External link: https://doi.org/10.1186/s13643-023-02216-2

Protocol Citation: Adeniyi Kolade Aderoba, Petrus Steyn, James Njogu Kiarie 2021. A protocol for a scoping review of implementation strategies to scale up self-administered depot medroxyprogesterone acetate subcutaneous injectable contraception. **protocols.io https://dx.doi.org/10.17504/protocols.io.b2asqaee**

Manuscript citation:
Aderoba, A.K., Steyn, P.S. & Kiarie, J.N. Implementation strategies to scale up self-administered depot medroxyprogesterone acetate subcutaneous injectable contraception: a scoping review. *Syst Rev* **12**, 114 (2023). https://doi.org/10.1186/s13643-023-02216-2

Protocol status: Working
We use this protocol and it's working

Created: November 23, 2021

Last Modified: November 26, 2021

Protocol Integer ID: 55346

Keywords: Scoping review; implementation strategy; scale up; self administration; depot medroxyprogesterone acetate subcutaneous injectable; contraception, administration of depot medroxyprogesterone, subcutaneous injectable contraception self, administered depot medroxyprogesterone, subcutaneous injectable contraception, depot medroxyprogesterone, contraceptive access, administered dmpa, review of implementation strategy, implementation strategy, outcome of the implementation strategy, new efficacious intervention, major implementation issue, facilitators to these program, dmpa

Disclaimer

Abstract

Self-administration of depot medroxyprogesterone acetate subcutaneous injectable contraception (DMPA-SC) is effective, safe and registered in many countries. It shows great potential to improve contraceptive access, continuation, and autonomy, including in low-income and middle-income countries. However, there are challenges to roll out this new efficacious intervention, and major implementation issues have been encountered for scale-up. This study aims to describe the implementation strategies to scale up self-administered DMPA-SC programs, the barriers, and facilitators to these programs, and the outcome of the implementation strategy used.

1 Background

Research has shown that self-administration of depot medroxyprogesterone acetate subcutaneous injectable contraception (DMPA-SC) is feasible, safe, and effective.1 A recent meta-analysis of three randomized controlled trials found a significantly higher rate of 1-year DMPA-SC continuation among women who self-administered injections compared with those assigned to return to a provider for the injections.2 These findings show great potential for self-administration to improve contraceptive access, continuation, and autonomy, including in low-income and middle-income countries. Depot medroxyprogesterone acetate subcutaneous injectable contraception has been registered in many countries for self-injection. Still, there are challenges to roll out this new efficacious intervention, and major implementation issues have been encountered for scale-up. A challenge is identifying barriers that prevent effective implementation and strategies to mitigate these problems. Furthermore, many of these interventions are described in the grey literature and not published in peer-review journals, of which systematic reviews have been done.

2 Objective

This study aims to describe the implementation strategies to scale up self-administered DMPA-SC programs, the barriers, and facilitators to these programs, and the outcome of the implementation strategy used.

3 Methods

This scoping review protocol was developed using the Arksey and O'Malley's approach,3 the updated methodological guidance for conducting a Joanna Briggs Institute scoping review4, and the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) extension for scoping reviews.5 Further guidance comes from adapting guidelines for systematic review searches.6 In line with the recommendations from Arksey and O'Malley,3, the methodological quality of the included studies will not be assessed.

4 Inclusion criteria

Type of intervention

A publication or article will be included if it reported interventions with the potential to scale-up self-administered DMPA-SC implementation programs or the barriers and facilitators to such programs. Additionally, the outcome of the implementation strategy will be noted. The World Health Organization (WHO) defines scaling up as "deliberate efforts to increase the impact of successfully tested health innovations to benefit more people and to foster policy and program development on a lasting

basis'.7 Although pilot testing of self-administered DMPA-SC will be exempted, programs starting with strategic planning for the institutionalization and expansion of self-administered DMPA-SC will be included.

Type of studies

The study will include quantitative, qualitative, or mixed methods studies published in peer-reviewed journals or reports in the grey literature on interventions with the potential to scale-up self-administered DMPA-SC implementation programs or the barriers and facilitators to such programs. Abstracts with sufficient information will also be included.

Population

Studies involving women seeking contraception, their caregivers, and other relevant stakeholders with be included. This study will not be limited by date or context.

Outcomes

The primary outcomes of this study are as defined by Proctor et al.8 These include implementation outcomes (acceptability, adoption, appropriateness, costs, feasibility, fidelity, penetration, or sustainability); service outcomes (efficiency, safety, effectiveness, equity, patient-centeredness, or timeliness); or patient outcomes (satisfaction, function, or symptomatology).

5 Exclusion criteria

Studies will be excluded if they are focussed entirely on 1) programs that pilot test or roll out DMPA-SC self-administration without a scale-up component, 2) implementation science theoretical and conceptual development, and 3) clinical treatment or adverse outcomes. Trial protocols will be excluded from this scoping review. Additionally, editorials, opinion pieces, letters, guidelines, and review articles will be ineligible for inclusion because our search strategy is designed to map DMPA-SC self-administration interventions from their source published articles and grey literature project reports.

6 Information sources and search strategy

The following databases will be searched with no date limit: Cumulative Index to Nursing and Allied Health Literature - CINAHL (EBSCOhost), EMBASE (OvidSP), MEDLINE (OvidSP), Scopus (www.scopus.com) and Web of Science (core collection). Relevant thesaurus headings for "DMPA-SC" and "self-administration" will be used, along with free-text search strings constructed for the title or abstract fields. The following search strategy for OVID MEDLINE is modified for the other databases.

1. ((Depo-Provera or Sayana-Press or depot-medroxyprogesterone-acetate or depo-medroxyprogesterone-acetate or Depo-Medroxyprogesterone-Acetate or Medroxyprogesterone or Medroxyprogesterone-Acetate or DMPA or DMPA-SC or Uniject or Depo-Subq-Provera).ti,ab.) or Medroxyprogesterone-Acetate/ or Medroxyprogesterone/ or Long-Acting Reversible Contraception/

2. ((self-administ* or self-inject* or self-management* or self-care or self-assessment* or self-treatment* or patient-management* or home-use or home-administ* or home-inject* or self-vs-provider-administ* or self-and-provider-administ* or self-vs-physician-administ* or self-and-physician-administ* or self-and-clinic* or self-vs-clinic*).ti,ab.) or Self Administration/ or Self-Management/ or Self Medication/

3. 1 and 2

Grey literature will be identified by searching

- Websites of known organizations, networks, and collaborations working on DMPA-SC implementation research - DMPA-SC Access Collaborative Resource Library led by PATH in partnership with John Snow, Inc. (https://fpoptions.org/), Population Services International (https://www.psi.org/)
- Google
- Posting requests on online networks and listservs for people implementing programs on DMPA-SC, e.g., the WHO IBP Network (https://ibpnetwork.org/), CoreGroup - Reproductive, Maternal, Newborn, Child and Adolescent Health and Systems for Health working groups (https://coregroup.org/our-work/working-groups/#1502865240907-2c473617-a151).

The same keywords “DMPA-SC” and “self-administration” or adaptations will be used in the grey literature search. On websites with multiple pages showing search results, the first 100 search hits will be reviewed. In addition, the reference lists of all eligible studies will be manually searched for further relevant publications. The search strategy will be peer-reviewed using the Peer Review of Electronic Search Strategies (PRESS) guideline statement.9 Search results from the different databases will be merged in the Mendeley reference management application to facilitate deduplication, and data will be chatted in Microsoft Excel.

7 Data collection

Selection of studies

Two independent reviewers will conduct publication screening and selection. After removing duplicates, the search results will first be screened by their titles and abstracts for eligible studies using the inclusion and exclusion criteria. Full-text

publications selected will then undergo full eligibility screening for the scoping reviews. The reasons for exclusion at each screening stage will be documented. Search results and the studies included or excluded will be summarized in a PRISMA flow diagram.

Data extraction

Data will be extracted from each study using a structured form. Two independent reviewers will extract data from each study using a structured data extraction form. Information extracted will include:

- Author(s)
- Year of publication
- Journal or other types of publication
- Time of data collection (year), or source of data
- Country(ies)
- Objective of the study
- Study design and analysis method
- Targeted population(s)
- Interventions to scale-up self-administered DMPA-SC implementation programs or the barriers and facilitators to such programs.
- Outcomes, recommendations, and lessons learned for the interventions
- Any other relevant extraction topics.

8 Data analysis and synthesis

A meta-analysis is not planned because this review aims to describe the scope of interventions to scale up DMPA-SC programs and identify gaps and opportunities for improvement. Therefore, a narrative approach will be employed. The characteristics of included studies such as author and year of publication, timeframe, study design and setting, country of study, characteristics of the study populations, implementation program framework, DMPA-SC intervention approach or strategies, barriers and facilitators identified, and implementation outcomes that are relevant to this scoping review question will be summarized.

Thematic analysis of the different aspects of this scoping review will be conducted. This involves:

• Mapping the DMPA-SC implementation strategy for each study with the Cochrane Effective Practice and Organization of Care (EPOC) taxonomy of the health system framework.10 The EPOC taxonomy covers four health domains, namely healthcare delivery, financial arrangements, governance arrangements, and implementation strategies.

- Describing DMPA-SC implementation scale-up with the ExpandNet/WHO framework.7 The ExpandNet/WHO framework describes scaling up in terms of its elements: 1) the innovation, 2) user organizations, 3) environment, 4) resource term, 5) scaling -up strategy, and the strategic choice areas of implementation scale-up in term of type, dissemination and advocacy, organizational process, cost/resource mobilization, and monitoring and evaluation.

- Identifying the barriers and facilitators of DMPA-SC behavioral change. The Capability, Opportunity and Motivation Behavior system (COM-B)11 provides a practical framework to understand health behavior and behavioral change. Thus, COM-B will help to explain barriers and facilitators to implementing DMPA-SC programs.

- Describing the outcome of scaling up DMPA-SC programs in terms of implementation, service, and client outcomes would be as defined by Proctor et al.8

If applicable, the absence of data in any theme will be noted.
Reporting the results
Any technical report or publication generated from the scoping review will follow the PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews).5

Ethics and dissemination

This research utilizes publicly available published data; thus, an Ethics Committee review is not required. The findings will be published in a peer-reviewed journal.

9 Conflict of interest

None

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