Make Her Voice Count: Understanding the Use of Patient-Reported Outcomes in Contraceptive Trials

Kaelyn Rupinski[1], Madison C. Bernstein[1], Nina Sankriti Kumar[1], Nikita Murli[1], Sarah Ollis[1], Daniella Olonilua[1], Madeline Tallarico[1]

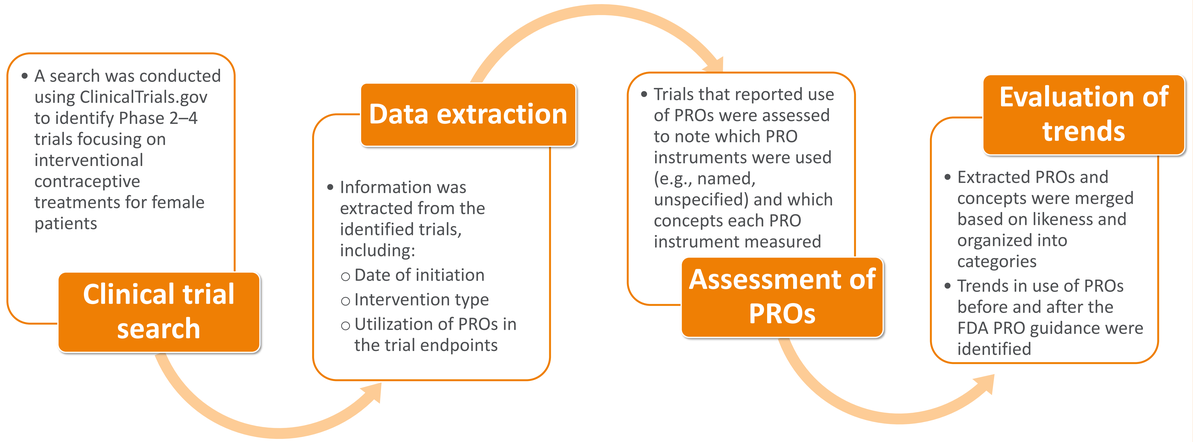
[1]Adelphi Values Patient-Centered Outcomes, Boston, United States

Introduction

- In the **Food and Drug Administration's (FDA) December 2009 guidance on the use of patient-reported outcomes (PROs)** in medication product development to support labeling claims, inclusion of PROs is "advised when measuring a **concept best known by the patient or best measured from the patient perspective**."[1(p.2)]
- Hormonal and non-hormonal contraceptives continue to be developed and assessed; however, **many contraceptives were evaluated prior to the FDA PRO guidance**.
- Contraceptives can be used for pregnancy prevention as well as additional purposes (e.g., menstrual pain,[2] acne[3]), and **assessing a variety of dimensions in clinical research** beyond pregnancy is essential to fully understand patient experiences with contraceptives.
- This research aimed to evaluate the inclusion of PROs in clinical trial measurement strategies for contraceptives to provide **insight into how the patient voice has been considered** both before and after the FDA PRO guidance.

Methodology

Figure 1. Overview of methods



Conclusions

- Following the 2009 FDA PRO guidance, there was an **observable increase** in the utilization of PROs in clinical trials related to contraceptive efficacy, highlighting the recognition within the field of the importance of incorporating patient perspectives into the evaluation of contraceptive methods.
- Despite this increase, PROs were used in **less than half** of examined trials, demonstrating the underrepresentation of patient-reported experience in clinical trial endpoints.
- A **limited range of concepts were frequently or consistently assessed** across the trials that did use PROs, suggesting that patient-reported data may still be limited or not comprehensively captured despite the increased use of PROs.
- Expanding this research to look beyond the FDA and consider the impact of **regulatory guidance in other countries** related to PRO use, as well as to look closer into **differences between measurement strategies for hormonal and non-hormonal contraceptives** could create a **stronger understanding of gaps in the patient voice** in contraceptive research and development.
- **The future of contraceptive development should aim to broaden the assessment of the patient perspective**. This could involve expanding the use of PROs in clinical trial measurement strategies and the scope of concepts evaluated through PRO instruments, including research into **what patients consider to be important and relevant** when it comes to contraceptive use (e.g., signs, symptoms, HRQoL impacts).

Results

- The search identified 244 clinical trials initiated between January 1997 and August 2022; 216 were ultimately included in the review and 28 were excluded as they did not evaluate interventional contraceptives in female participants (Figures 2 and 3).
- Seventy-three trials across 37 countries, the majority of which were inclusive of the United States, included PROs in their primary (n=37) or secondary/other endpoints (n=63; Figure 3).
- Forty-one PROs were reported to be used across the clinical trials, including both named and unnamed/unspecified PROs (i.e., PRO mentioned but was unclear what kind of PRO or if PRO was designed specifically for that trial; Figure 4).
  - The most frequently used PRO instruments were satisfaction questionnaires (n=22 trials) and a patient diary for bleeding/spotting (n=17 trials).
- Forty-eight measurement concepts were assessed by PRO instruments across the clinical trials, including signs/symptoms, health-related quality of life (HRQoL) impacts, and treatment-related concepts (Figure 5).
  - The most frequently assessed concepts were bleeding/spotting (n=40 trials) and satisfaction with treatment (n=37 trials).

Figure 2. Use of PROs in clinical trials before and after 2009 FDA PRO guidance (N=216)

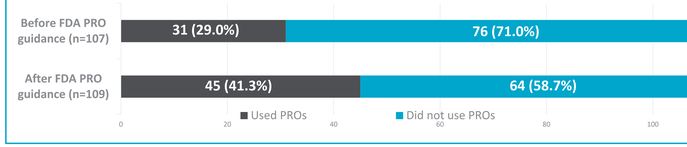
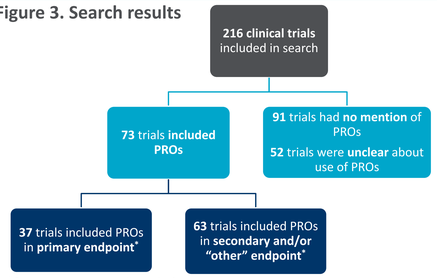


Figure 3. Search results



*Counts are not mutually exclusive

Figure 4. PROs used in clinical trials (N=73 trials)

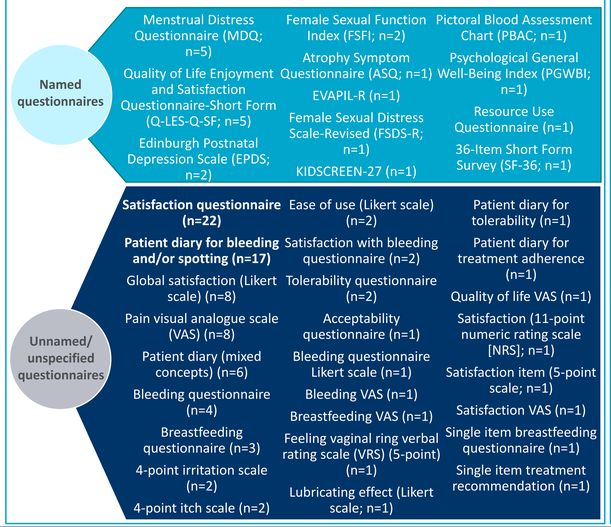
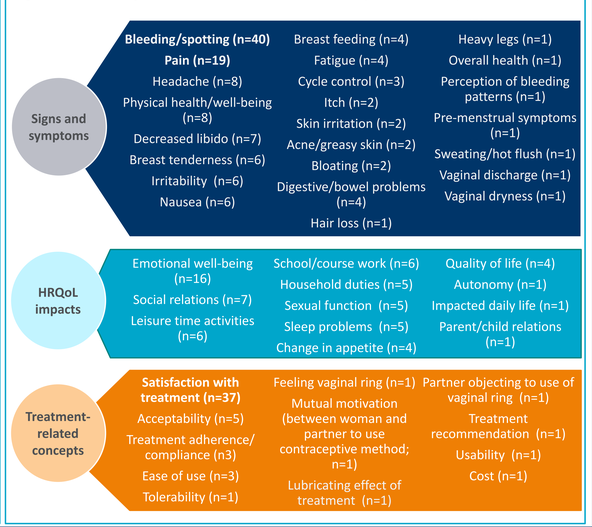


Figure 5. Concepts assessed in clinical trials (N=73 trials)



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