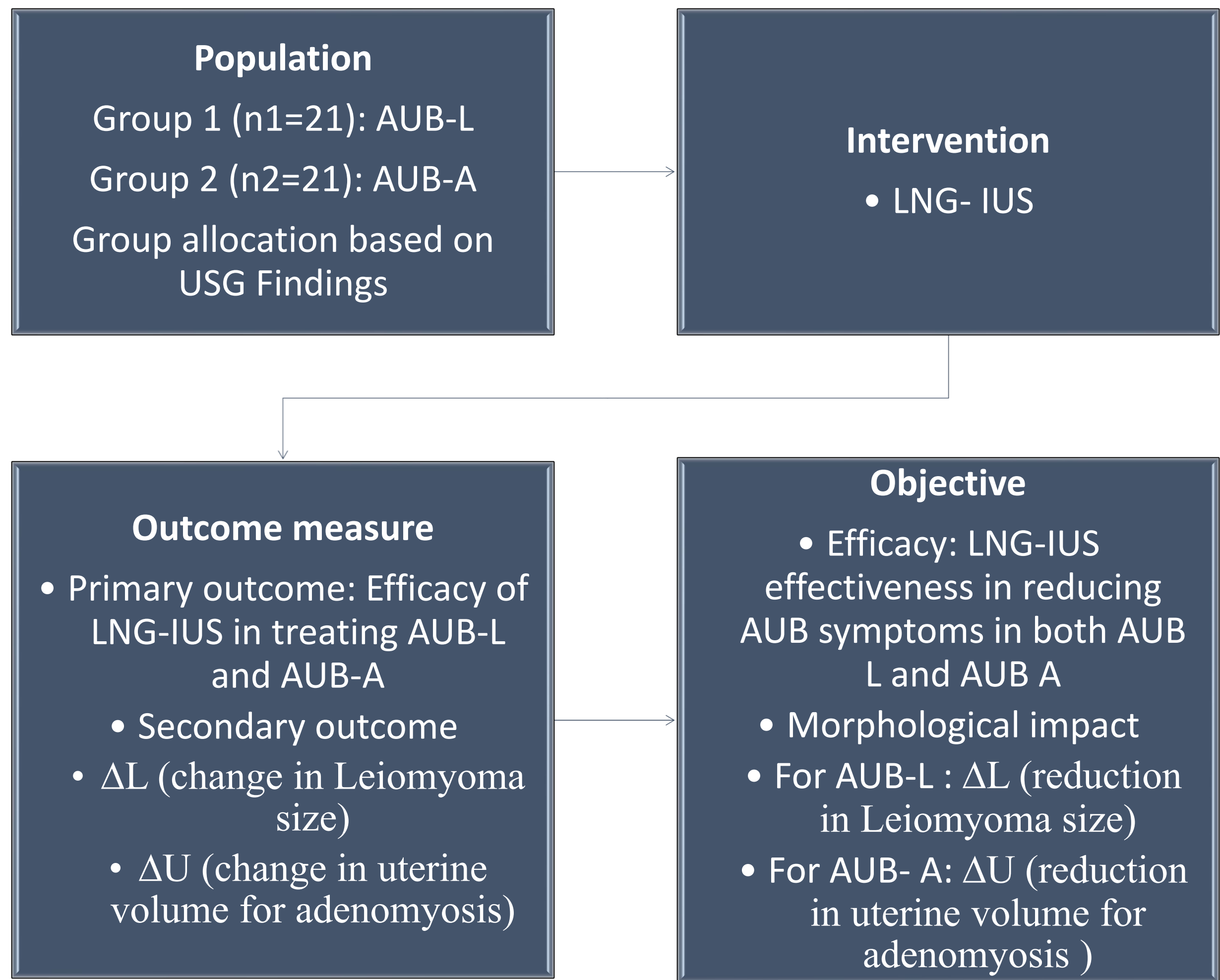


OBJECTIVES

- To compare the efficacy of LNG-IUS in the treatment of abnormal uterine bleeding due to leiomyoma and adenomyosis.
- To find out whether there is a reduction in uterine leiomyoma size or in the uterine volume incase of adenomyosis with use of LNG-IUS.

DESIGN



METHOD

Participants

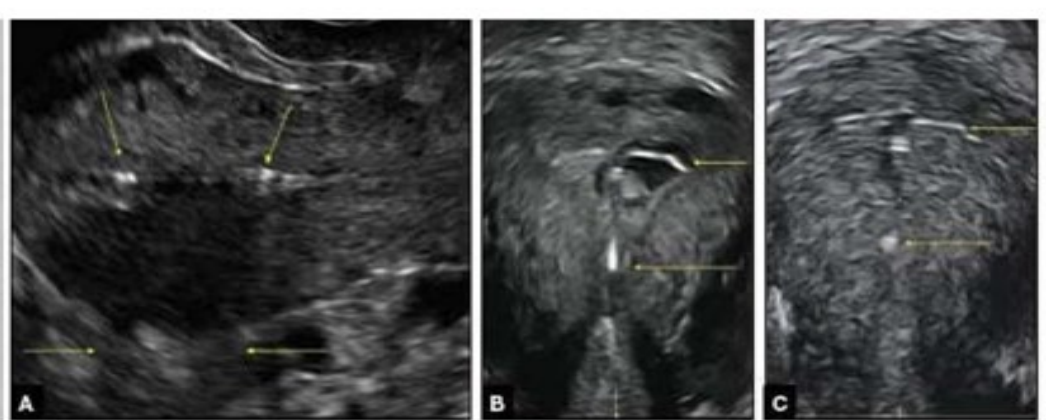
- Total Sample Size: 42 patients
- Group A (n = 21): AUB due to Fibroids (Leiomyoma)
- Group B (n = 21): AUB due to Adenomyosis
- Classification Method: Based on USG findings

Intervention

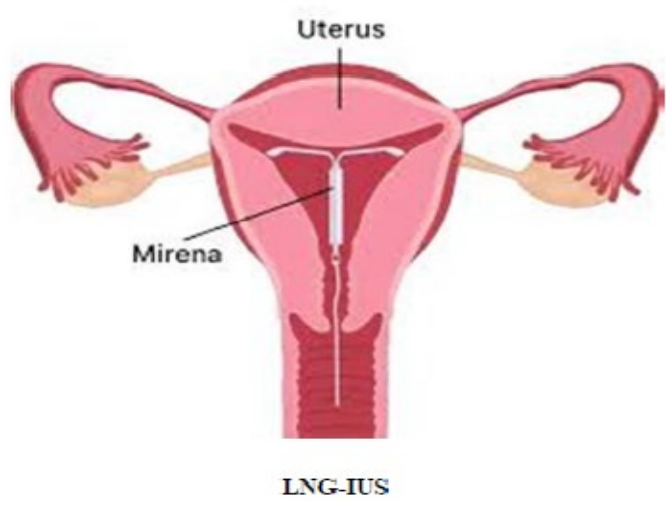
- Treatment Administered: LNG-IUS (Levonorgestrel Intrauterine System)
- Follow-Up Period: 6 months post-insertion
- Assessment: Treatment response monitored during follow-up

Sample Size Calculation

- Statistical Tool: G*Power (version 3.1.5)
- Parameters Used:
 - Significance level (α): 5%
 - Power ($1-\beta$): 80%
- Minimum Total Sample Required: 42
- Group 1 (AUB-L): 21



USG Showing LNG-IUS inside uterus

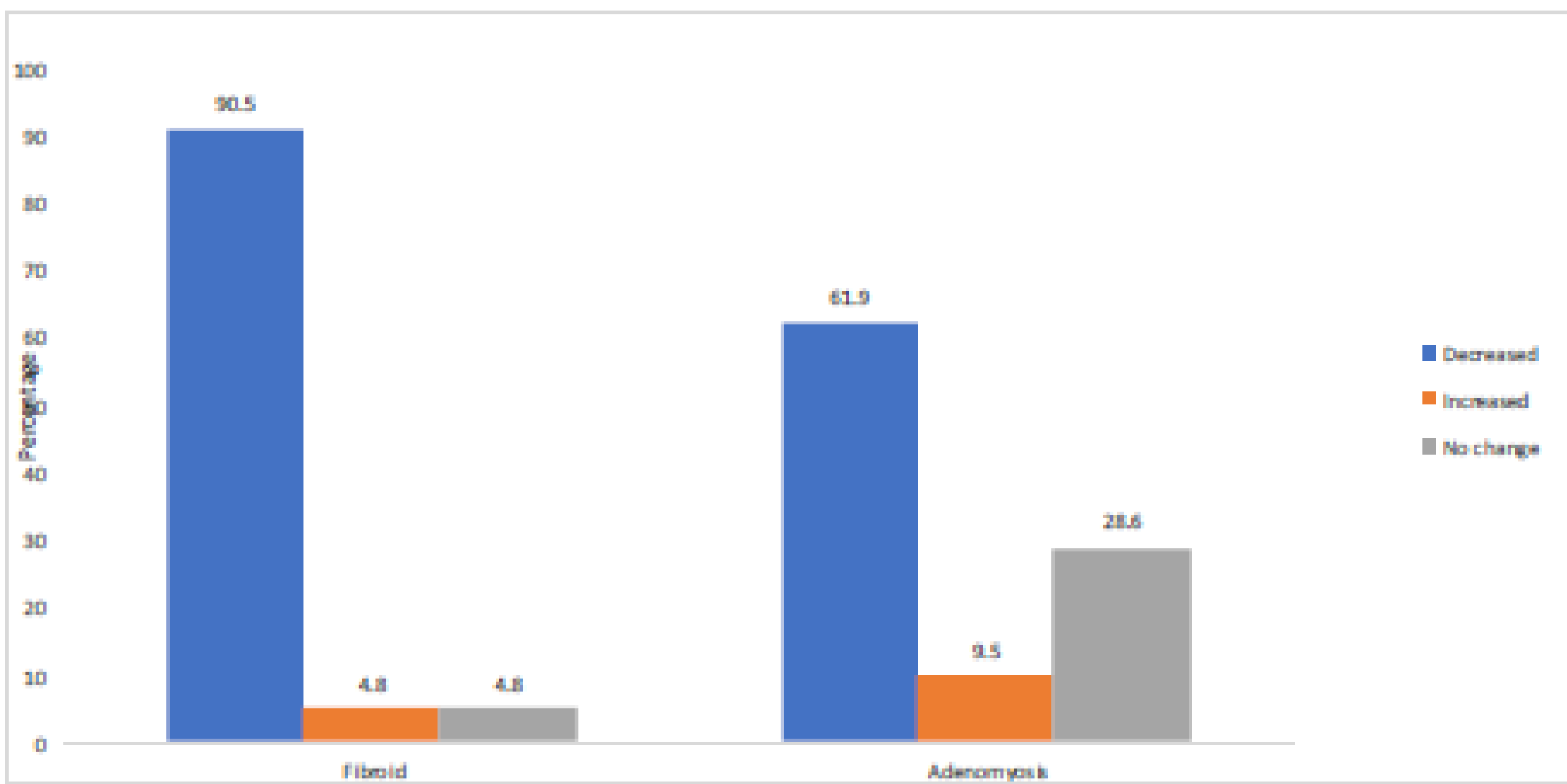


LNG-IUS

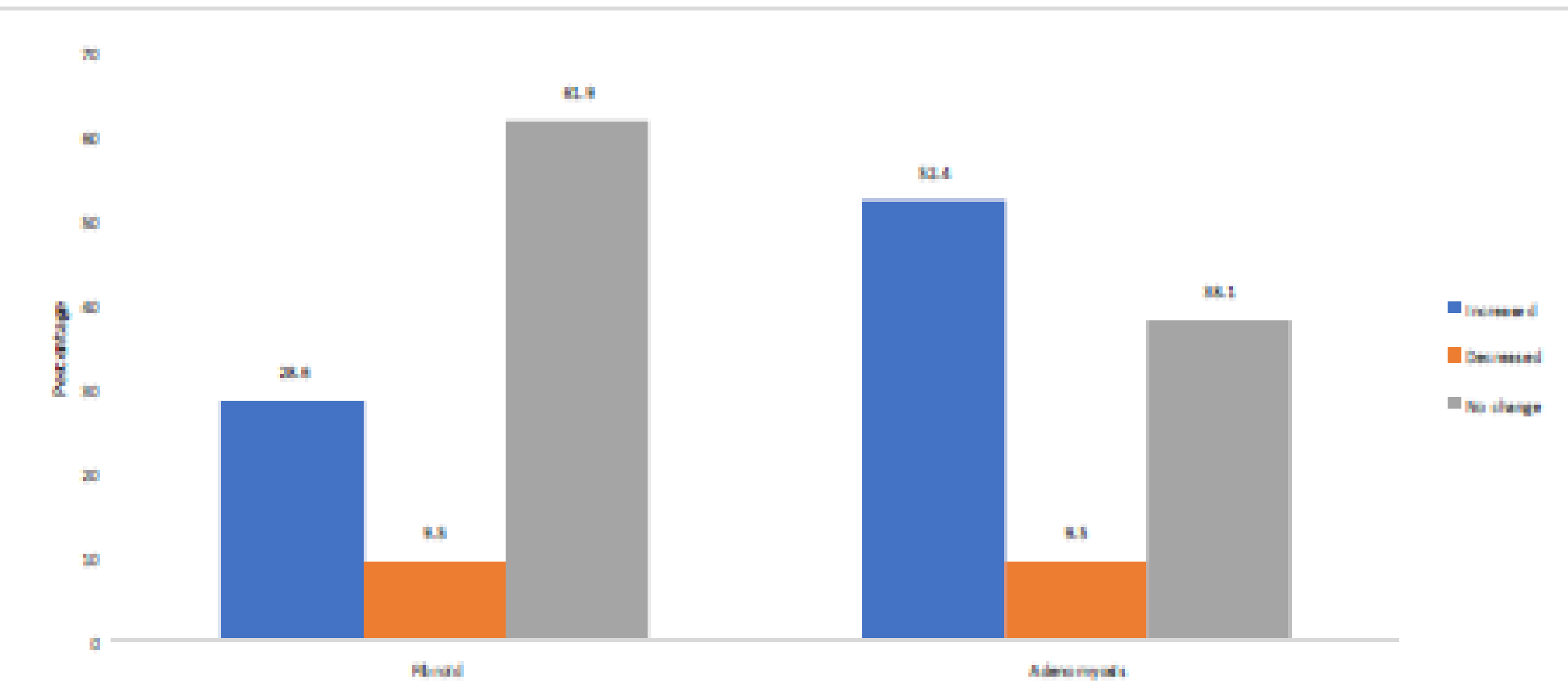
RESULTS

Distribution of study subjects based on general characteristics after insertion of LNG-IUS in fibroid group and adenomyosis group.

Change in heavy menstrual bleeding after insertion of LNG-IUS



USG findings after insertion of LNG- IUS in fibroid group in size of fibroid and in adenomyosis group in uterine volume.



DISCUSSIONS

Parameter	Fibroid Group (n=21)	Adenomyosis Group (n=21)
Past Medical History	76.2% had PMH (DM, HTN, thyroid); 23.8% none	66.7% had PMH; 33.3% none
Menstrual Cycle Regularity	85.7% regular, 14.3% irregular	81% regular, 19% irregular
Past Surgical History	57.1% had surgeries, 42.9% none	57.1% had surgeries, 42.9% none
HMB Duration	52.4% (6d), 19% (4d), 14.3% (3d), 9.5% (2d), 4.8% (8d)	38.1% (4d), 28.6% (6d), 19% (8d), 9.5% (5d), 4.8% (12d)
Conservative Medical Management	61.9% had, 38.1% none	81% had, 19% none
Change in HMB after LNG-IUS	90.5% ↓, 4.8% ↑, 4.8% no change	61.9% ↓, 9.5% ↑, 28.6% no change
Passage of Clots (Pre vs Post)	20 before; 4 after (↓ 80%) (p<0.001)	20 before; 6 after (↓ 70%) (p<0.001)
Dysmenorrhea (Pre vs Post)	10 before; 6 after (↓ 40%)	20 before; 12 after (↓ 40%) (p=0.008)
Change in Fibroid/Uterine Size LNG-IUS	9.5% ↓; 61.9% no change	9.5% ↓, 38.1% same, 52.4% ↑
Continuation/Expulsion	85.7% continued; 14.3% expelled	81% continued; 19% expelled
Statistical Significance (USG)	Fibroid size (p<0.001), volume, expulsion (p=0.001)	Expulsion only (p=0.002)

CONCLUSION

- Levonorgestrel-releasing intrauterine system, provides an incredible nonsurgical alternative in treatment of menorrhagia which is reversible and spares fertility.
- The safety of the device is high with no adverse effects on ovarian function except for increased risk of ovarian cysts.

REFERENCE

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- Song SY, Lee SY, Kim HY, Park DB, Kim DE, Lee KH, Lee S, Yang JB, Yoo HJ.Long-term efficacy and feasibility of levonorgestrel-releasing intrauterine device use in patients with adenomyosis. Medicine (Baltimore). 2020 May 29;99(22):e20421. doi:10.1097/MD.00000000000020421. PMID: 32481439.

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