The efficacy, safety, and acceptability of medical abortion provided by nurse midwives or physicians-

a randomized controlled equivalence trial

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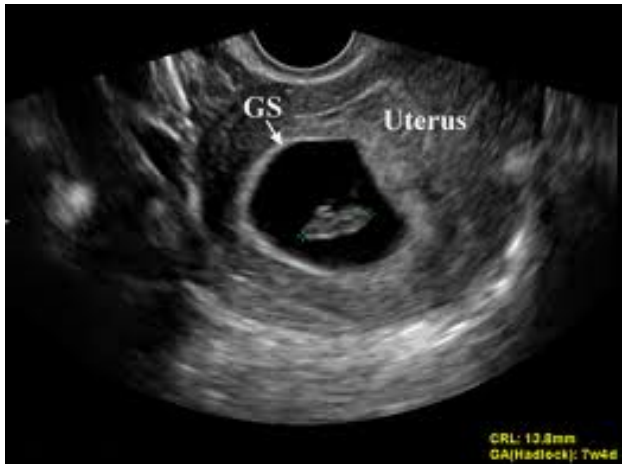
Background

- Task sharing is defined as sharing less advanced medical tasks with staff who have a lower level education but still the right level of education
- In medical abortion, surgical abortion and provision of caesarian sections this has been shown to be safe in a low resource setting

- In Sweden nurse midwives
  → have 4,5 years of university education (nurse 3 yrs- midwife 1,5 yrs)
  → provide contraceptive advice and prescriptions to healthy women
  → insert IUDs
  → Supervise all uncomplicated pregnancies
  → manage all uncomplicated vaginal deliveries
  → oversee all uncomplicated medical abortion

Preparation for the study



- 2 nurse midwives experienced in abortion care were trained in vaginal ultrasound
  - → Theroretical education
  - → Practical education, 50 supervised ultrasounds, 50 ultrasound passed after confirmation by physician.

- Women were eligible if they had a pregnancy of less then 9weeks and 0days estimated according to LMP.
- There was no pre-examination or screening.
  - → 597 women were randomized to the nurse midwife group
  - → 583 women were randomized to standard care.

Treatment

- 200 mg mifepristone
- 800mcg misoprostol vaginally after 24-48 hours
  → at home or in the clinic
- 400mcg misoprostol po if no bleeding after 3 hours

- Follow-up with low sensitivity u-hcg (cut off 500 IU/ml) by nurse midwife after 3-4 weeks

- Questionnaire at follow-up

Reasons for exclusion after allocation

Reason	Allocated to Nurse midwife	Allocated to Physician	Total number of women
Language difficulties	1	2	3
Withdrew consent	0	2	4
Ectopic pregnancy	3	3	6
Postponed TOP	4	3	7
Miscarriage	8	4	12
Continued with pregnancy	10	5	15
Too advanced gestational age	16	12	28
Chose surgical TOP	18	12	30
Total	62	43	105

None of the differences reached significance

Reason for second opinion

Reason for consultation	Allocated to nurse midwife N (%)	Allocated to physician N (%)	Total N (%)
No consult	396 (74)	510 (95.7)	906 (84.8)
Multiple pregnancy	7 (1.3)	1 (0.2)	8 (0.7)
High s-hCG	0 (0)	1 (0.2)	1 (0.9)
Information	3 (0.6)	1 (0.2)	4 (0.4)
Medical reasons	13 (2.4)	4 (0.8)	17 (1.6)
Ultrasound	59 (11)	8 (1.5)	67 (6.3)
Unknown	3 (0.6)	4 (0.8)	7 (0.7)
Prescription/second opinion for bacterial vaginosis	54 (10)	4 (0.8)	58 (5.4)
Total	535	533	1068

Follow up after 3-4 weeks

- 54 women in nurse midwife group were lost to follow up
- 76 patients in the physician group were lost to follow up

- Significant diffference between groups

500 IU/ml cut off

Overview of outcome measures

Outcome measure	Allocated to nurse midwife (%)	Allocated to physician (%)	Total (%)
Efficacy	476/481 (99)	445/457 (97.4)	923/940 (98.2)
Safety	453/473 (95.8)	414/443 (93.5)	867/916 (94.7)
Acceptability	200/535 (37.4)	12/533 (2.3)	212/1068 (19.9)

- Efficacy defined as no need for surgical intervention,
- Safety defined as no complication (no intervention for presumed complication)
- Acceptability defined as women preferring their allocated provider.

Primary outcome measure- efficacy

- Risk difference for surgical intervention was 1,6% with CI 0.2-3.0%
  - → Nurse midwife group 5 patients
  - → Physician group 12 pat
  - → Total17 patients = 1,8%

- Equivalence was used as nurse midwife provision may have additional advantages for women
  - → Having to meet only one provider
  - → Shorter waiting times
  - → Increasing acces

Contraceptive advice

- Nurse midwives prescribed long acting reversible contraceptives to 290/532 women
- Physicians prescribed LARC to 241/528 women

- The difference is statistically significant p=0.004).

Conclusion

- Nurse midwife provision of medical abortion in a high resource setting where vaginal ultrasound is part of the protocol is
- Effective
- Safe
- Highly acceptable

- Experienced and motivated nurse midwives prescribe LARCs to a larger extent than physicians in standard care

  → may have impact on repeat abortion rates

- Nurse midwife provision of medical abortion may increase access to medical abortion services