ketamine; 14 (22.2%) had injected these drugs intravenously. Two (3.2%) drug users had shared needles. The infection rates for HIV, syphilis, and hepatitis C were 4.8%, 25.4%, and 22.2%, respectively.

Further studies to promote knowledge about risks and enhance HIV testing among drug users are required, along with continued surveillance efforts among all FSWs.

## **Conflict of interest**

The authors have no conflicts of interest to declare.

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# Super flexion position for difficult speculum examination

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Pelvic examination including speculum examination is almost always performed with the patient in the dorsal lithotomy position [1,2]. However, when the speculum examination is unsatisfactory, particularly in obese women and women scheduled for surgery, decisions regarding surgical technique are often postponed until satisfactory findings are obtained at examination under anesthesia, just prior to surgery. To obtain satisfactory findings, positioning the patient with flexed thighs and flexed legs, in "super flexion," is an alternative option. Achieving an earlier decision would reassure the patient and allow provision of informed consent for the type of surgery to be performed.

The present study comprised 60 consecutive women, including 42 obese or morbidly obese women, scheduled to undergo uterine and/ or tubo-ovarian surgery who had unsatisfactory or incomplete speculum findings. Fifty of the 60 women were scheduled for hysterectomy, with concomitant salpingo-oophorectomy in 28 women, including 6 with benign adnexal pathology. Of the remaining 10 women, 6 were scheduled to undergo ovarian cystectomy, 2 for bilateral oophorectomy, and 2 for tubal sterilization via the posterior cul-de-sac without laparoscopic assistance and keeping the uterus intact.

It was explained that a repeat speculum examination in the super flexion position would be necessary to obtain satisfactory findings, and that this could avoid more invasive laparoscopic or open abdominal surgery. Oral consent was obtained.

In the super flexion position the patient lies on the table in a dorsal position with the edge of the buttocks at the lower end of the table or beyond (obese women in particular) with flexed thighs and flexed legs. The patient abducts and fully flexes both thighs to bring them onto her abdominal wall so that the anterior surface of both thighs is in close proximity or touching the lower abdominal wall. The next step is to fully flex both legs on the thighs so that the posterior surface of both legs (gastrocnemius muscles) is in close contact with the posterior surface of the thighs. The patient then uses both hands to keep both knees and feet apart to permit a clear view of the central lower abdominal wall, and in turn to provide a clear view of the vulvovaginal area (Fig. 1).

With the thighs abducted away in the super flexion position, the labia open out to permit visualization and access to the introitus for insertion of a regular-sized Sims speculum and vaginal wall retractor. Anatomically, this position makes the uterus descend downward and fall backward. This brings the cervix nearer to the introitus to exclude cervical pathology and permit traction with application of a vulsellum on the cervical lip(s) for a clear assessment of cervical descent and possible access to the anterior as well as posterior cul-de-sac. This permits clear inspection of the vaginal walls, depth of the vagina, and the physiological descent of the cervix.

Speculum findings after use of the super flexion position were compared with findings from the speculum examination that was incomplete or unfavorable. In all 60 women, the findings were satisfactory and complete and had changed dramatically from the previous findings, particularly for obese women. The findings favored the vaginal route for surgery in 46 women. In the remaining 14, the findings were unfavorable for undertaking the vaginal route and led to abdominal surgery.

Out of 50 women scheduled for hysterectomy, 38 with favorable speculum findings provided by the super flexion position had an uneventful vaginal hysterectomy with or without salpingo-oophorectomy, as required. Of the remaining 10 women, 8 women with favorable speculum findings via the super flexion position underwent ovarian cystectomy, bilateral oophorectomy, and tubal sterilization as planned,

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Fig. 1. Super flexion position. The patient's hands keep both feet apart and thus provide a clear view of the vulva and vaginal area.

via the pouch of Douglas without laparoscopic assistance. Of the 14 women who underwent abdominal surgery, 12 underwent abdominal hysterectomy and 2 had laparoscopic ovarian cystectomy.

A Cochrane evidence-based review and other evidence-based studies [3] have concluded that among the various techniques, vaginal hysterectomy has the best outcome among patients undergoing gyne-cologic surgery.

In obese women and for vaginal surgeons, when standard speculum examination is inconclusive, use of the super flexion position may spare some women from more invasive laparoscopic or abdominal surgery.

## **Conflict of interest**

There is no conflict of interest.

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