Gynaecological ultrasound in community sexual and reproductive health clinics

Ruhi Jawad, Gillian Robinson

Abstract

Background and methodology Many women seen in community sexual and reproductive health (SRH) clinics have gynaecological problems and a pelvic ultrasound scan forms part of their investigation. We present a retrospective analysis of 24 months’ provision of a gynaecological ultrasound service in the Department of Sexual and Reproductive Health, Southwark Primary Care Trust, London, UK.

Results A total of 327 women attended for ultrasound examination; 258 required a pelvic scan and 69 had an Implanon®-related problem. Of the women analysed, 152 were managed entirely in the community; eight women required referral to gynaecological outpatients and five women needed an abdominal pelvic X-ray.

Conclusions We believe we have demonstrated that gynaecological ultrasound can be performed in the community. This seems to be acceptable to patients and also reduces the requirement for hospital appointments.

Keywords community sexual and reproductive health clinics, gynaecological ultrasound, intrauterine device, IUD, lost threads

Introduction

The National Strategy for Sexual Health and HIV¹ recommended the provision of a comprehensive, integrated sexual health service within a larger framework of sexual health promotion. Many different models of health care provision have been assessed with the emphasis on a more personal and flexible system. The White Paper, Choosing Health,² promotes a radical change in service delivery, with care being centred in the community.

Many of the women seen in community sexual and reproductive health (SRH) clinics have gynaecological problems. In some women the problem is a consequence of their contraceptive method or a sexually transmitted infection (STI); in others the problem is primarily a gynaecological disorder. Ultrasound scanning is now an integral part of the assessment of gynaecological conditions.³ Currently a woman who is identified as requiring an ultrasound examination is referred to the local centre, which is generally the radiology department at the local hospital. This arrangement usually results in her travelling to hospital, being reviewed by the referring doctor with her scan result, and then often referral back to the gynaecology department of the same hospital. This results in considerable inconvenience for the women concerned.

We decided to investigate the feasibility of providing an ultrasound scanning service for certain gynaecological problems in the community. Initially we provided the service for women with intrauterine device (IUD) and intrauterine system (IUS) problems only but we have gradually expanded the service to include other conditions. We have also negotiated use of Formulary Prescriptions (FP10s) with the Primary Care Trust (PCT) so we can prescribe for immediate health needs and avoid unnecessary referrals. We elected not to scan for early pregnancy and early pregnancy complications since we have two early pregnancy units in our area that provide a comprehensive service in this regard.

We present a retrospective analysis of 24 months’ provision from January 2006 to December 2007 of the service in the Department of Sexual and Reproductive Health, Southwark Primary Care Trust, London, UK.

Methods

Southwark is an inner-city area in South East London with a diverse, multicultural population. Our SRH clinics offer a ‘walk-in service’. There is no restriction to access.

Women requiring an ultrasound scan were referred from the general SRH clinics or identified from general practitioner (GP) referral letters. A dedicated clinic was held once weekly in one of our community SRH clinic sites. In the period reviewed only one clinician (GR) performed the ultrasound examinations. Each appointment was for 30 minutes. This allowed time for history taking, ultrasound scanning, interpretation of the scan and further management.

The ultrasound machine is an Aloka SSD-100® (Aloka, Tokyo, Japan). We have both transvaginal and curvilinear probes for gynaecological examination. We have recently purchased a high-resolution linear array transducer to enable us to scan for deeply sited Implanon® devices.

Results

There were 73 referral clinics in the 2-year time period. A total of 362 women were referred, of whom 327 (90.3%) attended. Some 258 women required a gynaecological scan, and the remaining 69 women attended for Implanon localisation. Table 1 illustrates the indications for gynaecological referral.

A total of 258 women required a gynaecological scan; 181 (70.2%) women had problems relating to their IUD and 77 (29.8%) were referred for other problems, namely menstrual disorders and infertility. The majority of the women with IUD problems had ‘lost threads’; two (0.8%)

Key message points

- With appropriately trained personnel it is possible to provide a gynaecological ultrasound service in the community.
- The low ‘did not attend’ rate would suggest that women find community-based ultrasound acceptable.
women were referred with pelvic pain and a scan was performed to check the location of the device within the uterus. Fourteen (5.4%) women were referred because of difficulties in fitting an IUD.

The outcome for the women referred with lost threads \((n = 165)\) is shown in Table 2. In 80 (48.5%) women the IUD/IUS was identified and removed at the woman’s request. In 72 (43.6%) women the IUD/IUS was identified to be correctly sited and the woman was reassured. Eight (4.8%) women required referral to gynaecological outpatients because we were unable to remove the IUD/IUS. Five (3%) women required an abdominal pelvic X-ray because the device was not seen in the uterus; in each case the X-ray was reported as normal.

The 14 women who were referred for difficult IUD fitting all had a successful fitting under ultrasound guidance.

The women with pain with IUD were also scanned to ensure correct fundal positioning and went on to have a sexual health screen and further investigations if required. The women who were referred with pelvic pain had a pelvic scan performed and were managed accordingly.

Sixty-nine women were referred with Implanon-related problems, which the referring clinician considered might require a scan. In five of these women the Implanon was impalpable and so the women were scanned and a deep Implanon removal was performed.

### Discussion

Sexual health clinics, which are often open access with long opening hours, are attracting an increasing number of clients. The shortage of GPs and the transient population in Southwark encourages women with gynaecological problems to attend a self-referral open-access clinic.

The clinician who performed the ultrasound examinations during the time period reviewed has over 20 years’ ultrasound experience in both a hospital and community setting, and is now a Principal Trainer for the Faculty Certificate in Ultrasound.4

When the ultrasound clinic was planned a decision was taken to limit referrals to IUD/IUS problems and menstrual disorders. The rationale for this decision was that we had already agreed guidelines for the management of menstrual disorders with our local hospital and that we previously referred many women for ultrasound with IUD/IUS problems whom we had the clinical expertise to manage within our service.

In the 2-year period studied, 165 women were referred for investigation of lost threads. If a woman presents with lost threads and wishes to keep the device we believe that ultrasound is the investigation of choice.5 In 72 (43.6%) women the IUD was left in situ once the scan had shown the device was correctly sited, at the fundus, in the uterine cavity. In 80 (48.4%) women the device was identified and removed. In eight (4.8%) women referral to gynaecology outpatients was required as either the device could not be retrieved or the woman found the procedure too painful. All those women referred to X-ray were found to have expelled their device.

We suggest that we have saved 80 referrals to hospital ultrasound units since we identified and removed the IUD in 80/88 women referred with lost threads who wanted their IUD removed. It is likely that we have avoided many gynaecology outpatient referrals. Before our service offered ultrasound examination, many women who presented with lost threads would have been referred directly to gynaecology.

Some 77 (29.7%) patients were referred with other gynaecological conditions. These included menstrual disorders and infertility. In these cases the referring clinician requested an ultrasound scan to assist in the management.

Our ‘did not attend’ rate was low, suggesting that locally provided services are better suited to women who previously travelled to hospital for ultrasound appointments.

Ultrasound machines and probes are expensive to buy and maintain. We are aware that the machine was only used for one session each week and that only a small number of referrals were seen in the 2-year period. This needs to be considered and the service expanded if the skills of the clinician performing the examinations are to be maintained. We also believe that several clinicians should be involved in the provision of the service; other doctors within our service are currently being trained in ultrasonography and completing the Faculty module.4 Ideally doctors should have links to hospital-based units to maintain their skills.

Critics of ultrasound scanning within the community would claim that we do not have the same expertise as the radiographers at the hospital; neither do we have access to their superior equipment. However, we believe that we have demonstrated that if we restrict the referrals to well-defined criteria and are aware of our limitations then we can provide an ultrasound service in the community that is definitely more convenient for women. In addition, the woman is being scanned by a clinician who will scan as part of the consultation and can initiate treatment if needed. Ultrasound can resolve immediately many uncertainties in a wide range of gynaecological conditions.6

We accept that the cost-effectiveness of the clinic was not examined. We plan to undertake this exercise (which is a necessary prerequisite for investment in technology) in the near future as we anticipate demand for the service will increase.

In future, services and commissioning are likely to be driven by patient choice and access. This provides an opportunity for SRH services to consider expanding their role in medical gynaecology and diagnostics and offer a truly integrated care pathway.7

We believe we have demonstrated that gynaecological ultrasound has a role in the community setting. We plan to expand our service, and by working with the local hospital gynaecologists will develop pathways to ensure a smooth referral between community- and hospital-based care.

### Table 1

<table>
<thead>
<tr>
<th>Indication</th>
<th>n (%)</th>
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<tbody>
<tr>
<td>Lost threads</td>
<td>165 (64.0)</td>
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<tr>
<td>Difficult IUD fitting (for ultrasound guidance)</td>
<td>14 (5.4)</td>
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<tr>
<td>Pain with IUD</td>
<td>2 (0.8)</td>
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<tr>
<td>Other (infertility and menstrual problems)</td>
<td>77 (29.8)</td>
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<tr>
<td>Total</td>
<td>258 (100.0)</td>
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IUD, intrauterine device.

### Table 2

<table>
<thead>
<tr>
<th>Indication</th>
<th>n (%)</th>
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<tbody>
<tr>
<td>IUD identified and removed</td>
<td>80 (48.5)</td>
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<tr>
<td>IUD checked and patient reassured</td>
<td>72 (43.6)</td>
</tr>
<tr>
<td>Patient referred to gynaecology</td>
<td>8 (4.9)</td>
</tr>
<tr>
<td>Patient referred for pelvic X-ray</td>
<td>5 (3.0)</td>
</tr>
<tr>
<td>Total</td>
<td>165 (100.0)</td>
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</tbody>
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IUD, intrauterine device.
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Statements on funding and competing interests
Funding None identified.
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References

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