Evaluation of Nurse Providers of Comprehensive Abortion Care (CAC) using Manual Vacuum Aspiration (MVA) in Nepal

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Historically, Nepal’s maternal morbidity and mortality rates have been some of the highest in South Asia. However, the adjusted maternal mortality ratio has fallen from 830 maternal deaths per 100,000 live births in 2002 (UNICEF 2005) to 229 deaths per 100,000 live births in 2008 (Suvedi 2009). Though this suggests some success in safe motherhood efforts, unsafe abortion is still a leading cause of maternal morbidity and mortality in Nepal. A recent national study found that from April 2008-April 2009, approximately 7 percent of maternal mortality was due to abortion (Suvedi 2009).

A key strategy for improving access to abortion services, especially in rural areas, is to train midlevel providers such as nurses to provide safe abortion services. Studies have shown that midlevel providers can provide abortion care as safely and effectively as physicians (Warriner et al. 2006; Dickson-Tetteh and Billings 2002; Basnett 2004). In Nepal, nurse-midwives were promoted as providers of postabortion care (PAC) services through the National Postabortion Care Program beginning in 1999. The documented success of nurse-led provision of PAC services led to the recommendation that nurses be trained to provide comprehensive abortion care (CAC) services as well. The Family Health Division (FHD) of the Ministry of Health trained an initial cohort of 96 nurses to provide first-trimester CAC services using manual vacuum aspiration (MVA) between September 2006 and July 2009; 225 nurses have been trained to date.

Methods

This study evaluated the successes and areas for improvement in nurse provision of CAC services based on data from the initial cohort of 96 nurses. The information gained from this evaluation will be used to scale up efforts to train nurses to provide high-quality CAC services across Nepal.

Ipas Nepal, the National Health Training Center (NHTC) and FHD collaborated to train 96 nurses from 50 facilities on CAC service provision in five regions. CAC training was structured according to the national CAC training manual and lasted 14 days. Selection criteria for nurses include:

- Registration with their council;
- A minimum of a one-year midwifery course in their basic nursing education;
- In-service training on intrauterine contraceptive devices (IUCD), postabortion care (PAC) or training as a skilled birth attendant (SBA).

Nurses who met these criteria are selected, trained and certified to offer CAC services up to eight weeks of gestation. The curriculum included theory in a classroom setting; assessment of skills through role playing of counseling and practice procedures conducted on a pelvic model; and supervised procedures with live patients. Once certified to provide CAC services, nurses were required to perform 25 unsupervised cases at their own facility and to submit appropriate paperwork to the Family Health Division (FHD) before being officially listed as a CAC provider.

Five assessments were used to evaluate the success of CAC provision: facility CAC logbook data, nurse provider interviews, facility assessments, facility manager interviews, and procedure observation checklists. A total of 92 nurses participated in the evaluation.

Findings

Among the 96 nurses who received CAC training, all achieved clinical competency, and at follow-up, 86 percent (n=79) were providing CAC services in their health facility. Those who were not providing CAC services (n=13) cited reasons such as not being assigned to the CAC unit (n=5), studying (n=4), being too busy with other activities (n=2) and not having clients who request CAC services (n=2) (Figure 1). Though 86 percent of nurses were providing services, only 62 percent were listed as CAC providers, for the following reasons: not completing 25 cases (51 percent), not sending in paperwork (31 percent) and sending paperwork without receiving a certificate (17 percent). Nurses currently providing
CAC services reported an average of seven CAC providers working in their facility (SD=7.1). The monthly caseload per nurse was 14 CAC patients (SD=12.6; Range: 2 – 60). In addition, nurses reported referring on average 14 clients per month (to doctors in the same facility or elsewhere) who presented for CAC care at greater than eight weeks (Range: 1 – 70).

Overall, 5,600 women received CAC services from the 42 facilities where nurses provided services. Among women who received surgical abortion services, 68 (1.6 percent) experienced complications: 17 women had bleeding requiring at least one pint of IV fluid or a blood transfusion; two women had uterine or intra-abdominal injuries; 39 women had an incomplete abortion requiring a repeat procedure; four women had an infection requiring hospitalization and/or IV antibiotics; and six women had a failed abortion. Among medical abortion (MA) clients, 97 percent had a complete abortion at two weeks of follow-up, and 12 women (1.2 percent) experienced complications: eight women had bleeding requiring more than 1 pint of IV fluid or a blood transfusion and four women had an infection requiring antibiotics. More than 99 percent of CAC patients were discharged from the hospital well.

Nurses had positive attitudes about their CAC training. Ninety-nine percent were satisfied with the content of CAC training and 98 percent felt confident in their CAC skills after training. Overall, nurse providers felt supported by their managers (96 percent), doctors in their facility (92 percent) and other nurses (100 percent), and 100 percent of nurse providers felt that clients were happy receiving CAC services from them. Facility managers also had positive opinions about nurse providers. Ninety-seven percent of facility managers agreed that trained nurses provide high-quality CAC services after training, and 90 percent agreed that nurses can provide first-trimester services of the same quality as doctors. Facility managers felt that the primary benefits to training nurses as CAC providers were to maintain continuity of services (74 percent), share the burden on doctors (72 percent), retain nurses at the facility (28 percent) and client preference (24 percent). Although nurse providers are effectively stabilizing clients and providing referrals when appropriate, facility managers felt the primary limitations to nurses providing CAC services were their inability to manage severe complications (70 percent) and policy prohibition against providing CAC beyond eight weeks gestation (62 percent). Fortunately, severe complications are rare.

Nurse providers were especially successful in establishing rapport and providing post-procedure counseling, with 100 percent of nurses providing quality care under these domains. For 9 percent of nurses, lapses were observed in taking medical history. In addition, 6 percent did not maintain infection prevention measures because they failed to wear protective barriers and dispose of needles immediately.

Facility managers and nurses both felt that nurse providers need additional support for CAC service provision (Table 1). Facilitative supervision was commonly cited by both groups as a need. Nurses also mentioned needing additional practice (35 percent), and facility managers suggested that MVA refresher training and MA training would be beneficial (92 percent). Both groups mentioned the need for improved drug and equipment supply.
Table 1. Additional support nurses need for CAC service provision, according to nurses and facility managers

<table>
<thead>
<tr>
<th></th>
<th>Nurses</th>
<th>Facility managers</th>
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</thead>
<tbody>
<tr>
<td>Facilitative supervision</td>
<td>65%</td>
<td>74%</td>
</tr>
<tr>
<td>Further training/practice for nurses</td>
<td>35%</td>
<td>92%</td>
</tr>
<tr>
<td>Train more CAC providers</td>
<td>61%</td>
<td>0%</td>
</tr>
<tr>
<td>Train other staff (for support)</td>
<td>58%</td>
<td>0%</td>
</tr>
<tr>
<td>Improved equipment supply (e.g. MVA)</td>
<td>47%</td>
<td>63%</td>
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<tr>
<td>Improved drug supply (e.g. MA)</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>Private counseling area</td>
<td>0%</td>
<td>33%</td>
</tr>
<tr>
<td>Information, Education and Communication (IEC) activities to advertise services</td>
<td>57%</td>
<td>0%</td>
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</tbody>
</table>

Discussion

Trained nurses are providing high-quality CAC services in the five regions of Nepal. Nurses feel confident and supported in providing services, and facility managers have positive attitudes toward nurse providers. Nurses were satisfied with the CAC training that they received, and facility managers were confident in nurses’ abilities to provide quality CAC services. The procedure observation checklist showed that more than 90 percent of nurses were successful in each of the nine quality domains. Additional support in the form of facilitative supervision and training was requested by both nurses and their facility managers.

Recommendations

Based on the findings of this study, the following recommendations are made to scale up training of nurse providers of CAC services in Nepal:

- Though most trained nurses were providing CAC services at follow-up, efforts should be made to ensure that trained nurses are assigned to CAC units where they have an opportunity to provide services.
- The large number of women being referred due to a gestational age of greater than eight weeks emphasizes the need to raise awareness about CAC service availability in communities so that women can access services earlier in pregnancy.
- Increase emphasis on becoming a listed provider during training.
- Provide ongoing facilitative supervision after training is complete.
- Provide additional training on MA and refresher training on MVA, especially on clinical assessment and complications management.
- Improve equipment and drug supply to health facilities.
References


