Preventing unintended and closely spaced pregnancies is vital to saving lives and protecting the health of women and their children. Many postpartum women wish to avoid another pregnancy within the two years following childbirth. They have more frequent contacts with the health system and health care providers during pregnancy, at delivery and following birth when they can receive much needed information on family planning methods and services. Yet, unmet need for postpartum family planning has been high. Recognizing this missed opportunity for family planning, International Federation of Gynecology and Obstetrics (FIGO) developed the PPIUD intervention to institutionalize immediate postpartum IUD services as a routine part of antenatal counseling and delivery room services. With support from an anonymous donor, FIGO implemented this program through its nationally affiliated associations and societies of gynecologists and obstetricians in six countries. In three of those countries (Nepal, Sri Lanka, and Tanzania), the research project by Harvard T. H. Chan School of Public Health, also sponsored by the anonymous donor, estimates the impact of the intervention on PPIUD counselling and uptake. However, the research project goes further, examining the institutionalization of PPIUD services in the hospitals during and after the intervention, as well as its diffusion to other providers and facilities. The research project also ascertains the perspectives of providers on PPIUD provision, including potential for scaling up, as well as the perspectives of women who receive, discontinue, or never use PPIUD or any other method of contraception during the postpartum period.

Thus, a holistic assessment of the introduction and implementation of PPIUD intervention in Nepal, Sri Lanka and Tanzania is expected to emerge once all data have been analyzed. In December 2018, data collection was completed in all three countries and the analysis of data is ongoing with many useful insights emerging.

In this newsletter, we are privileged to include reflections from Professor Sir Sabaratnam Arulkumaran. Sir Arulkumaran’s insights are critical for PPIUD and other interventions breaking new grounds. We also share updates from the field, progress of the project, recent publications, as well as many exciting news and events.
What do you consider as the main achievements of the FIGO PPIUD initiative in the six countries?

Sensitising the governments, mobilising the professional organisations and changing the attitudes of obstetricians, midwives, nurses and women to accept PPIUD as an acceptable long-acting reversible contraceptive (LARC) method for birth spacing with minimal complications and a very low expulsion rate. With the help of the national professional associations, this culture change should last for decades and will be passed on to the next generation of service providers for them to continue offering the PPIUD - similar to instrumental vaginal deliveries in obstetric practice. In the long term, this practice will become routine and will help reduce maternal mortality, the incidence of high-risk closely spaced pregnancies, and protect women from unintended pregnancies.

By working with national professional societies, we strengthened their resolve for better governance, good financial control, and increased collaboration with midwives and the community. The national societies took their own initiatives to work with governments for sustainability of the PPIUD program and to take up other projects as part of their social responsibility to improve women’s health and rights.

What factors contributed greatest to the success of FIGO PPIUD? And, what challenges constrained achieving full success?

The keys to success were unreserved encouragement and support from the donor, close collaboration and teamwork by the FIGO/HQ team, and the country teams. Religious and personal beliefs of some health care personnel constrained the success; however, the main challenge was inadequate staffing and lack of time for health care personnel for counselling which prevented us from achieving full success.

How do you assess the strengths or limitations of focusing on one method, e.g. PPIUD, as compared to postpartum contraception using any spacing method of contraception?

PPIUD was the only method supported by the governments of all six countries under the FIGO initiative. They were willing to supply the Cu IUDs because of affordability. The other methods were not uniformly available due to cost. In addition, to avail other methods, the mothers had to come to the family planning clinics on a subsequent occasion a few weeks later knowing that there was no guarantee of availability of the chosen method. We counselled on all forms of postpartum contraception. Towards the later part of the initiative, in some countries, there was preference for postpartum long acting implants.
If you were to launch a new FIGO PPIUD initiative in the same six countries, what would you do differently?

I would initiate a national PPIUD implementation group consisting of government officers in charge of family planning, the officers of the national association and the national coordinator and manager of the project to function from the very onset of implementation in addition to an independent data safety monitoring committee. These committees would have four to six weekly meetings to assess progress of the project against timelines and to ensure that quality of service meets expectations.

How can we promote postpartum contraception and, in particular, postpartum IUD, in settings with high unmet need for postpartum contraception?

Joint work between governments, NGOs, and national midwifery and obstetric professional organizations should help promote postpartum contraception. They should, in turn, work with community health volunteers and women’s and village groups to increase awareness on safety and reliability of the method.

Finally, what are the key takeaway messages/lessons from the implementation of the FIGO PPIUD initiative in the six countries?

We were able to bring about a culture change amongst professionals that resulted in increased uptake of PPIUD in all countries with progress of time. If there was a decline then it was due to another method of postpartum contraception, such as implants being made available. There were no perforations at insertion and a minimal infection rate. The expulsion rate was about 3% at six weeks follow up of 50% of the nearly 40,000 women who had PPIUDs.

Based on this information, we need to take advantage of the global trend of increasing facility-based births and mobilise the untapped resources of a large number of obstetricians and midwives in facility settings to get involved in PPIUD. This will allow us to gain the advantages of birth spacing, i.e. reduction of maternal mortality, infant mortality, preterm and growth restricted babies.
Mahesh Puri and Saugat Joshi of the Center for Research on Environment Health and Population Activities (CREHPA) report that all rounds of data collection for the PPIUD evaluation study were completed by 31 December 2018. Form 3 data collection was completed in April 2018 with a follow-up rate of 80.9% and Form 4 data collection achieved a follow-up rate of 81.7% (covering 21,410 women).

Although the data collection process went as planned and was successful, the team did come across a few challenges. First, the enumerators were unable to interview a significant number of women due to temporary migration and change of contact information. In addition, because the 18-month follow-up did not, for the most part, take place in the hospital, the enumerators had to arrange either to meet the women at a common marketplace, or travel to their homes. In order to overcome these problems, the Nepal team introduced a phone follow-up protocol. This new procedure helped, but was not always effective because the woman being called did not always understand why she was being contacted. Thus, the study team continued to visit the study sites to meet with enumerators to discuss issues and how to resolve them.

The Harvard and CREHPA research teams are currently focusing on analyzing data, preparing papers, and disseminating key results at a national level. In addition, Dr. Puri presented the poster, “Investigating the quality of family planning counselling as part of routine antenatal care: a hospital-based qualitative study” at the International Conference on Family Planning, November 12-15, 2018, in Kigali, Rwanda. Finally, the team recently had a paper published as open access in *BMC Health Services Research* entitled, “Delivering postpartum family services in Nepal: are providers supportive” (see Recent Publications section for more information).
**Sri Lanka**

Ranjith de Silva, shares that all fieldwork was completed at the end of December 2018. The team completed the survey interviews in October 2018 achieving follow-up rates of 96.7% in Nuwaraeliya and almost 100.0% in Chilaw and Monaragala. Form 4 survey for Non-PPIUD women was completed in August 2018 and for PPIUD women at the end of October 2018 in Kalutara and Polonnaruwa. In these two areas, the team followed all PPIUD women and all Non-PPIUD women from the three most populated MOH areas with reference to one year (2016) baseline data. Completion rates were 87.7% in Kalutara and 84.1% in Polonnaruwa for Non-PPIUD women, and 93.5% in Kalutara and 100.0% in Polonnaruwa for PPIUD women. Different samples were chosen in Nawalapitiya, targeting all PPIUD women from the top three MOH areas with reference to entire baseline period and all Non-PPIUD women from the top three MOH areas with reference to the last 6 months of baseline (October 2016 to March 2017). Form 4 survey for Non-PPIUD women was completed by the end of November 2018 achieving a follow-up rate of 95.6%. The same survey for PPIUD women was completed by the end of December 2018 with a follow-up rate of 98.8% (as of December 21, 2018).

With regard to qualitative data collection, the team conducted 12 In-depth interviews (IDIs) with women. Although 4 IDIs are still being translated, the breakdown of the eight translated IDIs with 9 months postpartum PPIUD in 4 categories from all 6 facilities is as follows: 2 are continuers; 2 are discontinuers due to expulsion; 2 are intentional removers; and 2 consented but service was not received. Out of total 48 IDIs with 9-month postpartum women, 39 are completed, 3 are being translated, and 6 are being transcribed.

The research team is now fully immersed in data cleaning activities.

In other news, Ranjith de Silva presented a poster entitled, "Ethnolinguistic Concordance and the Provision of PPIUD Counseling Services in Sri Lanka" at the International Conference on Family Planning in Kigali, Rwanda in November 2018.

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**Tanzania**

The research team completed data collection for Forms 3 and 4. Hellen Neema Siril reports that the team is currently focused on analyzing data and facility surveys.

Also, the team conducted a verbal autopsy after finding that 9 deaths were reported among the 24,238 women enrolled in the PPIUD study between December 2016 and September 2018. To ascertain the probable causes of death, the study team interviewed with relatives of deceased women and health workers, and reviewed death certificates and hospital files over a period of three weeks in September 2018. The team presented results of the verbal autopsy to the Data Safety Monitoring Board (DSMB) in November 2018. The DSMB concluded that the deaths were unrelated to the PPIUD intervention.
Overall, 140,326 women who delivered in the study hospitals in Nepal, Sri Lanka, and Tanzania were enrolled in the project. Out of these women, 34,091 (24.3%) were counselled on PPIUD. Among those who were counselled, 15.0% received PPIUD. The uptake of counselling and PPIUD varied by country (Table 1). However, in all countries, the uptake of counselling and PPIUD was substantially greater during the intervention than during the baseline period (see Figures below). The PPIUD uptake was significantly higher among women who were counselled.

Table 1: Number and percentage of women enrolled, counselled, and used PPIUD as of December 31, 2018.

<table>
<thead>
<tr>
<th></th>
<th>Sri Lanka</th>
<th>Nepal</th>
<th>Tanzania</th>
</tr>
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<tbody>
<tr>
<td>Total women enrolled</td>
<td>40504</td>
<td>75584</td>
<td>24238</td>
</tr>
<tr>
<td>Total women counselled on PPIUD</td>
<td>14559 (35.9)</td>
<td>15606 (20.6)</td>
<td>3926 (16.2)</td>
</tr>
<tr>
<td>Total PPIUDs inserted</td>
<td>2730 (6.7)</td>
<td>1545 (2.0)</td>
<td>1154 (4.8)</td>
</tr>
<tr>
<td>Total women receiving PPIUD among counselled</td>
<td>2694 (18.5)</td>
<td>1412 (9.0)</td>
<td>1024 (26.1)</td>
</tr>
</tbody>
</table>
PPIUD Presence at the FIGO World Conference, Rio de Janeiro, Brazil

Iqbal Shah attended the 22nd annual World Congress of Gynecology and Obstetrics in Rio de Janeiro, Brazil, October 14 – 19. He participated, among other sessions, in the session on PPIUD organized by FIGO.

PPIUD Presentations at the International Conference on Family Planning, Kigali, Rwanda

Members from the PPIUD team presented project results at the International Conference on Family Planning (ICFP) in Kigali, Rwanda, November 12 - 15. David Canning presented, "Integrating Postpartum Contraceptive Counseling and IUD Insertion Services into Maternity Care in Nepal: Results from a Stepped-Wedge Randomized Trial". Leigh Senderowicz presented, "Quality of Contraceptive Counseling and the Ability to Realize Fertility Intentions in Tanzania, Nepal, and Sri Lanka". Mahesh Karra and Ranjith de Silva presented a poster entitled, "Ethnolinguistic Concordance and the Provision of Postpartum IUD (PPIUD) Counseling Services in Sri Lanka". Mahesh Puri presented a poster entitled, "Investigating Quality of Family Planning Counselling as part of Routine Antenatal Care: a hospital-based qualitative study".

Welcome Baby Matteo!

Congratulations to Julia Rohr and her family on the birth of their baby, Matteo Charles Del Sarto, on January 6 at 3:43 p.m. Everyone is doing well!

Recent Publications

A number of manuscripts are currently under review by journals. One recently published paper presents the perspectives of providers in Nepal and is described below.

“Delivering postpartum family planning services in Nepal: are providers supportive?” by Mahesh Puri, Manju Maharajan, Erin Pearson, Elina Pradhan, Yasaswi Dhungel, Aayush Khadka, and Iqbal Shah was published by BMC Health Services Research on December 6, 2018. The paper was published online with open access.

Investigators interviewed 14 obstetrician / gynecologists and nurses from six public hospitals in Nepal to understand the providers’: (1) viewpoints on providing postpartum family planning (PPFP) services and postpartum contraceptive methods such as immediate postpartum intra-uterine devices (PPIUD); (2) confidence in providing PPFP services; and (3) willingness to share knowledge and skills after receiving PPFP and PPIUD training.

The interviews with providers revealed that, although they are willing to provide quality PPFP services and train others on PPFP counseling and PPIUD insertion, several barriers remain. These barriers include limited staffing and high workload; scarcity of private space for counseling; insufficient supply of IUDs and educational materials; and inadequate support from hospital management. These must be addressed for PPFP service delivery to improve.
ICFP Poster Presentations

Investigating the quality of family planning counselling as part of routine antenatal care: a hospital-based qualitative study
Mahesh Puri, Matthew Moroni, Erin Pearson, Elina Pradhan and Iqbal H. Shah

BACKGROUND

- Though modern contraceptive use in Nepal has increased from 26% in 1996 to 43% in 2016, it remains low (39%) among postpartum women (within 23 months of birth).
- Only 15% of women receive family planning (FP) counseling during antenatal care and postpartum checkups in Nepal.
- Integration of counselling on FP at the time of antenatal care (ANC) and delivery has the potential to increase post-partum contraceptive use.
- In Nepal, women’s views on FP counselling particularly during their ANC visits and around the time of delivery are rarely documented.

Research Question

- What is the quality of FP counselling provided as part of routine antenatal care services among women who had at least two ANC visits?

METHODS

- Women were selected from a large impact evaluation (IE) that used a hospital level randomised rollout. The IE study seeks to determine the effect of an intervention that sought to institutionalise postpartum IUD counselling and insertion services as routine part of antenatal and delivery services in tertiary level public hospitals in Nepal.
- In-depth interviews (IDIs) were conducted with purposively selected 24 women who had at least two ANC visits in one of the six tertiary public hospitals.
- In-depth interviews were audio recorded, transcribed verbatim in Nepali, and translated into English.
- Data were analyzed thematically.

RESULTS

- Study participants were between 17-34 years of age, half of them did not have any children at the time of the interview, majority were living in urban setting, most completed 10 years of education and were home makers.
- Overall, the quality of FP counselling during ANC visits was unsatisfactory based on patients’ reported interaction with providers and FP methods offered, including offer of PPIUD.
- While 13 out of 24 women reported receiving FP counselling, the level of care, depth and quality of information they received varied significantly, ranging from (i) basic checkups of weight measurement and blood pressure to (ii) limited counselling on ANC and PNC topics to (iii) in-depth information about FP methods.
- About a third of women said that they did not receive any counselling services on postpartum FP.
- Despite their interest, most women reported that they did not receive thorough information about FP and were dissatisfied with the counseling services.

RESULTS – Cont.

- Reported reasons for dissatisfaction with counseling services included very crowded environment, short time with the provider, non-availability of provider to counsel on FP, long waiting times, limited number of days ANC services offered, non-receipt and lack of comprehension of FP related IEC materials.
- Nearly all women interviewed had heard about most of the modern methods of contraception prior to their visits, but only half of them could recall few methods.
- Responses often included inaccurate information about method’s effectiveness, advantages and disadvantages, risk, use duration.

- “Only she spoke, and I listened to her. She just provided information about copper-T that too she said in a rush. She didn’t ask me anything else; she didn’t even ask whether I understood what she had said. I hadn’t understood well about copper-T and I wasn’t even given a chance to put any queries”
  - ID 12, 25 years old, 10 years of education

- “I know little about IUCD. My sister has been using it for 1 and half years and hasn’t got pregnant. Doesn’t this work for 5 years?”
  - ID 62, 30 years old, 12 years of education

- “I am thinking of using permanent method. I am scared to use Norplant or Copper-T because I have not understood much about these methods. My husband doesn’t agree to use condoms... I haven’t understood much about pills and injection... Because copper-T might cause cancer and people say Norplant can be irritating. So, I have thought of doing permanent operation... After doing this operation, I can be relieved and relaxed and desired number of children is fulfilled”.
  - ID 16, 33 years old, 10 years of education

- Only 8 out of 24 women stated that they had selected a method of postpartum contraception during antenatal care counselling. Their choice was based on reaching desired family size, spacing next pregnancy, prior use, perceived low side effects, and experiences or recommendations of others.
- Women who visited hospitals with a dedicated FP counselor reported higher quality of FP counselling.

CONCLUSIONS

- High quality FP counseling during ANC visits has the potential to increase postpartum contraceptive use, which will ultimately improve maternal and child health in Nepal. Our study findings suggest that improving women’s access to PPEP requires:

  o Improvements in health system infrastructure to allow for ample time and resources during ANC counseling.
  o Improvement in the perceptions of long-acting reversible family planning methods (LARC’s) to dispel the myths around them.
  o Involvement of husbands and men in the family planning counselling sessions and discussions during ANC and PNC visits in hospital settings.
Ethnolinguistic Concordance and the Provision of PPIUD Counseling Services in Sri Lanka

Mahinna Kanna1, Erin Pearson2, David Canning3, Velintha Samarasinghe4

1Frederick S. Pardee School of Global Studies, Boston University, 2IPAS, 3Harvard T.H. Chan School of Public Health, 4Sri Lanka College of Obstetricians and Gynecologists

Abstract

This study examines how concordance between women and their Primary Health Workers (PHWs) in Sri Lanka is associated with women's receipt of postpartum IUD (PPIUD) counseling services. We use data from a clustered randomized trial in which women who delivered in six hospitals were offered PPIUD counseling services. We link data on PHWs and patients with information on linguistic concordance (whether the woman's spoken language matches her PHW's spoken language) and cultural concordance (whether the woman's ethnicity matches her PHW's ethnicity). We find that women from ethnolinguistic minority groups face larger disparities in receiving counseling. We identify ethnic discordance to be the driver of this disparity rather than linguistic discordance.

Motivation

- Intercultural barriers between doctors and patients may exacerbate disparities in health care, even across social class.
- Ethnolinguistic, cultural, and linguistic concordance between patients and their health care providers are an important dimension to the provider-patient relationship.
- Evidence on the impact of ethnolinguistic concordance is mixed.

Objectives

- Assess the relationship between ethnolinguistic concordance between women and their Primary Health Workers (PHWs) and receipt of PPIUD counseling in Sri Lanka.
- Assess how concordance across ethnicity and language are independently and jointly related to receipt of care.
- Disentangle the associations by these two determinants.

The PPIUD Study in Sri Lanka

- Launched in 2014 by IPAS with support from BCG.
- Aim: To institutionalize PPIUD services as a routine part of ANC counseling and delivery room services.
- Intervention: Training of PHWs on PPIUD counseling.
- Independent evaluation of PPIUD intervention conducted by IPAS using stepped-wedge cluster-randomized trial.

Data and Key Variables

- Merged data on women collected from the PPIUD cluster-randomized trial with linked de-identified data on PHWs.
- Analytic Sample: 4,497 women who delivered between Sep 2015 and Mar 2017 and matched to 2,445 PHWs from 13 ANC areas.
- Key Exposure: Concordance.
- Match a woman's spoken language and ethnicity with her PHW's spoken language and ethnicity.
- Generate measures of linguistic and ethnic concordance.
- Key Outcome: PPIUD Counseling.
- Whether woman in PHW (matched to PHW) received PPIUD counseling before admission to hospital.

Acknowledgements

The authors thank the participants of the Williams Reproductive Health Speakers Series for their comments and suggestions on the analysis.

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Figure 1: Map of Study Hospitals and PHW Distribution

Figure 2: Distribution of Women (Top), PHWs (Bottom)

Figure 3: Results from Ethnicity Interaction Analysis

Figure 4: Results from Language Interaction Analysis

Main Results

- Logistic regressions of PPIUD counseling on:
  - Woman's language, PHW's language, interaction
  - Woman's ethnicity, PHW's ethnicity, interaction
  - Woman's language and ethnicity, interaction terms
- Reference Group: Women who are ethnic Sinhalese and who speak only Sinhalese and who are matched to PHWs who are ethnic Sinhalese and who speak only Sinhalese.
- Women's level controls: (categorical) abortion, age, number of births, ever use of FP, FCH, fixed effects

The Role of Cultural Proximity

- In the context of horizontality, the role of cultural proximity on efficiency of outreach is ambiguous:
  - E.g., religious concordance and loans in India
- For service provision or public goods provision, however (transactions by one party only), the mechanism is clear:
  - Ethnic heterogeneity may lead to more inefficiency, understaffing, and free-riding
- Targeted provision of services by cultural identifiers may lead to more efficient, but less equitable, outcomes.

Summary of Results

- Following groups less likely to receive PPIUD counseling when compared to the ethnic linguistic majority:
  - Women who speak Tamil
  - Women who are ethnic non-Sinhalese
  - Indian Tamil, Sri Lankan Moors
- Unpacking our results by ethnicity and language:
  - Non-Sinhalese women who speak only Tamil are less likely to receive counseling when matched to Sinhalese PHWs who speak only Sinhalese.
  - Non-Sinhalese women who speak both Tamil and Sinhalese are just as unlikely to receive counseling when matched to Sinhalese PHWs who speak only Sinhalese.

Unpacking the Findings

- Ethnic: Linguistic minorities are less likely to receive counseling.
- Concordance: Both ethnic and linguistic, one is associated with lower counseling even when there is linguistic concordance.
- Specifically true when ethnic minority women matched to ethnic majority providers.
- Some is not observed with ethno-linguistically concordant but linguistically discordant matches.

Discussion and Conclusions

Results could be from:
- Ethnic minorities do not provide counseling to non-Sinhalese women in spite of linguistic concordance.
- Sinhalese PHWs may hesitate to serve ethnic minority women for fear of reprisal (historical ethnic tensions in Sri Lanka).
- Non-Sinhalese/minority women may be more reluctant to approach and receive services from Sinhalese PHWs.

Regardless of the explanation:
- Matching women and PHWs based on language alone does not eliminate disparities in provision of counseling services.
The PPIUD Project

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