The PPIUD intervention program to institutionalize immediate postpartum IUD services as a routine part of antenatal counseling and delivery room services was developed by the International Federation of Gynecology and Obstetrics (FIGO) and implemented through its nationally-affiliated Associations/Societies of Gynecologists and Obstetricians. In three (Nepal, Sri Lanka and Tanzania) of the six countries participating in the FIGO initiative, the research project by Harvard T. H. Chan School of Public Health estimates the impact of the intervention on PPIUD counselling and uptake. The research study also aims to assess whether the intervention leads to institutionalization of PPIUD services in the hospitals during and after the FIGO intervention and diffusion of the PPIUD services to other hospitals and/or providers. In this Newsletter issue, we share research project updates from Nepal, Sri Lanka, and Tanzania. We also highlight key findings from recently completed work, share exciting news and events, and introduce new members of the team.

### Progress

The PPIUD study is making good progress. Data collection for follow-up at the 9th month since delivery (Form 3) has been completed in all three countries. Data collection for follow-up at the 18th month since delivery (Form 4) is ongoing in all three countries. The cumulative report from the start of the project through August 31st, 2018 shows the following key indicators, by country.

<table>
<thead>
<tr>
<th></th>
<th>Sri Lanka</th>
<th>Nepal</th>
<th>Tanzania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total women enrolled</td>
<td>40433</td>
<td>75584</td>
<td>24238</td>
</tr>
<tr>
<td>Total women counseled on PPIUD</td>
<td>(36.0)</td>
<td>(15.0)</td>
<td>(6.4)</td>
</tr>
<tr>
<td>Counseled on PPIUD during baseline period</td>
<td>(12.2)</td>
<td>(10.8)</td>
<td>(6.4)</td>
</tr>
<tr>
<td>Counseled on PPIUD during intervention period</td>
<td>(34.9)</td>
<td>(25.4)</td>
<td>(3.1)</td>
</tr>
<tr>
<td>Total PPIUDs inserted</td>
<td>(6.7)</td>
<td>(27.2)</td>
<td>(4.8)</td>
</tr>
<tr>
<td>PPIUDs inserted during baseline period</td>
<td>(3.8)</td>
<td>(6.7)</td>
<td>(1.1)</td>
</tr>
<tr>
<td>PPIUDs inserted during intervention period</td>
<td>(3.1)</td>
<td>(26.9)</td>
<td>(10.2)</td>
</tr>
<tr>
<td>Total women receiving PPIUD among counselled</td>
<td>(18.5)</td>
<td>(8.0)</td>
<td>(10.2)</td>
</tr>
</tbody>
</table>

**Number and percentage of women enrolled, counselled, and used PPIUD, as of August 31, 2018**

### Percentage of women counselled on PPIUD during the baseline and intervention period, by country, as of August 2018

![Percentage of women counselled on PPIUD](image1)

### Percentage of women receiving PPIUD during the baseline and intervention period, by country, as of August 2018

![Percentage of women receiving PPIUD](image2)
Emerging Findings
As the above figures show, PPIUD intervention increased counselling and uptake in all three countries, albeit with varying magnitude. In-depth analysis of data is on-going to address the objectives of the project and a number of papers and reports are in progress. In the following, we highlight key findings from the work recently completed.

PPIUD intervention in Nepal contributed to increasing counselling and uptake

In Nepal, where 54% of women have an unmet need for family planning within the two years following a birth, the uptake of a long-acting and reversible contraceptive method following birth has been negligible. A recently completed paper by Pradhan et al entitled, “Integrating Postpartum Contraceptive Counseling and IUD Insertion Services into Maternity Care in Nepal: Results from Stepped-Wedge Randomized Controlled Trial”, examined the impact of PPIUD intervention in six large tertiary hospitals in Nepal. All women who gave birth in these hospitals in the 18-month period between September 2015 and March 2017 and consented to participate in the study (numbering 75,587) were interviewed after delivery and before discharge from hospital. A stepped-wedge cluster randomized design was used with randomization of the intervention timing at the hospital level. The baseline data collection began prior to the intervention in all hospitals and the intervention was introduced into the hospitals in two steps, with three hospitals implementing from the 4th month and the other three from the 10th months since the start of the baseline.

The results show that being exposed to the intervention increased PPIUD counseling among women by 25 percentage points (pp) [95% CI: 14 – 40 pp], and PPIUD uptake by four percentage points [95% CI: 3 – 6 pp]. The adherence adjusted estimate shows that, on average, being counseled due to the program increased PPIUD uptake by about 17 percentage points [95% CI: 14 - 40 pp]. Thus, the intervention had a significant impact on increasing PPIUD counseling rates and PPIUD uptake among women in the six study hospitals. However, the counselling covered only one in four women who delivered during the intervention period. If counseling had covered all women during the intervention period, PPIUD uptake would have been substantially higher. Providing high quality counseling and insertion services can, therefore, generate a demand for postpartum IUD services and reduce unmet need for spacing or limiting childbearing in Nepal.

Impact of PPIUD intervention in Sri Lanka: increased counselling but modest rise in choice and uptake of PPIUD

Similar to the work in Nepal, Karra et al examined the impact of PPIUD intervention on counselling and the choice, including uptake of PPIUD in Sri Lanka in a paper entitled, “The Effect of a Postpartum IUD (PPIUD) Intervention on Counselling and Acceptance: Evidence from a Cluster-Randomized Stepped-Wedge Trial in Sri Lanka”. Data were collected from 39,084 women who delivered in six study hospitals between September 2015 and January 2017 and consented to participate in the study. The paper investigated the impact of the intervention on PPIUD counselling and acceptance as well as how factors related to receipt of counselling, such as counselling timing and quality, are linked to acceptance of and demand for PPIUD, as measured by consent to receive a PPIUD, as well as PPIUD uptake (insertion of a PPIUD following delivery). PPIUD intervention significantly increased rates of counselling for PPIUD to around 29 to 30 percentage points; however, the impact on PPIUD uptake was modest at 2.7 percentage point [95% CI: 0.01 pp – 5.4 pp]. The intervention thus had a generally positive impact on PPIUD counselling and, to a lesser degree, on uptake of PPIUD in Sri Lanka.

Impact of PPIUD intervention in Sri Lanka:
Increased counselling but modest rise in choice and uptake of PPIUD

In addition to the quantitative data as presented above, the study also conducted in-depth interviews with providers and women. A recent paper by Puri et al entitled, “Delivering Postpartum Family Planning Services in Nepal: Are Providers Supportive?” explored the perspectives of providers. Health service providers play a
key role in addressing women’s need for pregnancy prevention, especially during the postpartum period. Yet, in Nepal and in other countries, little is known about their views on providing postpartum family planning (PPFP) services and postpartum contraceptive methods such as PPIUD. The paper explores the perspectives of different types of providers on PPFP including PPIUD, their confidence in providing PPFP services, and their willingness to share their knowledge and skills with colleagues after receiving PPFP and PPIUD training. In-depth interviews were conducted with 14 obstetricians/gynecologists and nurses from six tertiary level public hospitals in Nepal after they received PPFP and PPIUD training as part of the FIGO intervention. Providers identified several advantages of PPFP, supported the provision of such services, and were willing to transfer their newly acquired skills to colleagues in other facilities who had not received PPFP and PPIUD training. However, many providers identified several supply-side and training-related barriers to providing high quality PPFP services, such as, (a) lack of adequate human resources, particularly a FP counsellor; (b) work overload; (c) lack of private space for counseling; (d) lack of IUDs and information, education and counselling materials; and (e) lack of support from hospital management. Providers were motivated to deliver quality PPFP services and transfer their knowledge to colleagues but identified several barriers that prevent them from doing so. Future efforts to improve provision of quality PPFP services would need to address these barriers.

News & Events

Additional one-month data collection of women delivering recently in Nepal and Sri Lanka

In order to assess the extent to which PPIUD services were institutionalized, we collected Form 1 data from all women who delivered in study hospitals in Nepal during July 2018 and in Sri Lanka in September 2018. Form 1 data were collected by research team in Nepal from September 2015 to March 2017 and from September 2015 to January 2017 in Sri Lanka covering both the baseline and intervention periods. The FIGO intervention ended in Sri Lanka in June 2018. In Nepal, intervention ended in one hospital in April, but continued in other five hospitals. Among eligible women, 99.4% in Nepal and 99.2% in Sri Lanka consented to participate in the study and completed the interview. Data analysis is in progress, but the initial findings indicate contrasting patterns between Nepal and Sri Lanka. In Nepal, both counselling and PPIUD uptake among all women who delivered was higher in July 2018 than during the intervention period. However, PPIUD uptake among women who were counseled was lower in July compared to intervention period. On the other hand, both PPIUD counselling and uptake was substantially low in Sri Lanka during the post-intervention month of September 2018 as compared to the intervention period (see table below). Results from further analysis will be presented in the future issue of the PPIUD Newsletter.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Nepal</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intervention Period</td>
<td>July 2018</td>
</tr>
<tr>
<td>Number of women</td>
<td>75,584</td>
<td>4,587</td>
</tr>
<tr>
<td>Women counselled on PPIUD</td>
<td>25.4%</td>
<td>47.6%</td>
</tr>
<tr>
<td>Women received PPIUD</td>
<td>2.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Women received PPIUD among those counselled</td>
<td>9.0%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>
News & Events

Visits to Country PPIUD Teams

Julia K Rohr visited Tanzania PPIUD team at the Management and Development for Health (MDH) in January 2018 and Iqbal Shah visited the team in March 2018 to review the progress and to discuss plans of the study.

North American Forum on Family Planning, Atlanta, October 14-16, 2017

Leigh Senderowicz presented a poster on “Quality of Family Planning Counselling and the Ability to Realize Fertility Intentions in Tanzania”.

4th Asian Population Association Conference: Shanghai, July 11-14, 2018

Mahesh Puri attended the Conference and presented the paper highlighted below.

Delivering post-partum family planning services in Nepal: Are providers supportive?

Mahesh Puri, PhD; Mangu Ramakrishna, MSc; Erin Pearson, PhD; Enita Prender, PhD; Takami Shinget, BDEV5, Kalyani Khadka, MSc, and Iqbal H. Shah, PhD

Papers presented at the 4th Asian Population Association Conference

11-14 July, 2018, Shanghai, China

International Journal of Gynecology & Obstetrics (IJGO) Special Supplement on Institutionalization of Postpartum Intrauterine Devices, Vol 1431, Issue S1, September 2018

This landmark publication with results and experience of FIGO PPIUD intervention was recently released as an Open (Free) Access IJGO Supplement. Anita Makins and Sabartnam Arulkumaran guest edited the issue that includes 10 papers covering a range of topics that provide an overview of the FIGO PPIUD initiative, progress made and challenges encountered as well as substantive results from the six countries participating in the initiative. ¹

PPIUD Presentation at the Harvard T. H. Chan School of Public Health

On September 26th, 2018, Mahesh Karr presented results from Sri Lanka to a large audience of students, faculty and researchers. The title of his talk was “The Effect of Postpartum IUD Intervention on Counselling and Choice: Evidence from a Cluster-Randomized Stepped-Wedge Trial in Sri Lanka”.

PPIUD team presence at the International Conference on Family Planning, Kigali, 12-15 November 2018

PPIUD research findings will be presented at the forthcoming International Conference on Family Planning (ICFP). David Canning will present results on “Integrating Postpartum Contraceptive Counseling and IUD Insertion Services into Maternity Care in Nepal: Results from a Stepped-Wedge Randomized Trial”. Leigh Senderowicz will present on the “Quality of Contraceptive Counseling and the Ability to Realize Fertility Intentions in Tanzania, Nepal and Sri Lanka”. Mahesh Karr and Ranjith de Silva are scheduled to present on “Ethnolinguistic Concordance and the Provision of Postpartum IUD (PPIUD) Counseling Services in Sri Lanka” and Mahesh Puri will present on “Investigating Quality of Family Planning Counselling as part of Routine Antenatal Care: a hospital-based Qualitative Study”.

¹The papers can be freely downloaded from URL: https://obgyn.onlinelibrary.wiley.com/toc/18793479/2018/143/S1.
Meet the new members of the PPIUD team

Muqi Guo joined the PPIUD team as a research data analyst and coordinator. She is primarily responsible for checking the quality of data and coding data sets for statistical analyses. Muqi recently graduated from the Harvard T.H. Chan School of Public Health with a MS degree in Epidemiology. She obtained her first master degree in Sociology from Peking University in China. Her research interests are in health inequity with a focus on women’s development.

Jiaxi Yang is a 2nd-year PhD student in Population Health Sciences in the Department of Epidemiology at the Harvard T.H. Chan School of Public Health. She is interested in women’s health and women’s reproductive health. She is interested in the question: what would women do to best protect themselves when it comes to pregnancy and birth delivery? As a member of the PPIUD project team, she is currently investigating the impact of PPIUD intervention on contraceptive prevalence and complications after PPIUD insertion in Sri Lanka. She is looking forward to practicing her knowledge in epidemiology by applying it in real world settings, and learning more about public health practice from a global perspective.

Sarah Huber-Krum is a post-doctoral fellow at the Harvard T.H. Chan School of Public Health. She holds a PhD in Social Work from the Ohio State University and has MPA in Public Affairs with concentration in Quantitative Decision-Making, and MSW in Social Work with concentration in Community and Social Justice. Her doctoral dissertation was on “Method-specific barriers and facilitators: a novel evaluation of modern contraception in rural Malawi”. Her main research interests are in reproductive and sexual health inequities; sociocultural determinants of reproductive health outcomes, specifically contraceptive use and abortion; contraceptive decision making within social and structural contexts; uptake of sexual and reproductive health services; and family planning programs and policies. Sarah is supporting the analysis of PPIUD project data.
Meet the new members of the PPIUD team

Lisa Holtzman recently joined the PPIUD as Program Manager. She holds a MPH degree from the University of Michigan with a concentration in Health Behavior and Health Education and a BA from Smith College where she majored in Women’s Studies and received a certificate in Culture, Health, and Science. Before joining the PPIUD team, Lisa was supporting research and grant-related activities for another project within the Harvard T.H. Chan School of Public Health that focused on the ethical issues of HIV cure-related studies. Lisa is passionate about women’s health, and she is excited to return to working in these areas.

Hellen Neema Siril joined the PPIUD team as the National Research Coordinator for Tanzania on the departure of Joel M. Francis who had served in this role since the launch of the project in 2015. Hellen is a medical doctor with MPH and currently working on a PhD program in mental health. Hellen has worked as a co-PI and a PI on various research projects on improving women’s health, including healthy options program that used group psychotherapy to improve perinatal depression, and developing a local hope scale in Tanzania. Her research addresses issues that affect psychological health of women including partner violence, family planning and pregnancies among teenagers. Hellen is working with the project team at MDH and participating hospitals in Tanzania to achieve high rates of 18-month follow-up survey and the survey of providers. She is also working on how PPIUD project can inform best practices and policies to improve family planning program, especially the use of long-acting reversible methods, such as PPIUD, in Tanzania.