REPORT

VOLUNTEERING AROGYA INITATIVE

9th – 29th of January 2024

Pati, Champawat, Uttarakhand

WORK

- 5 Trainings with ANMs
- 1 Training with MPWs
- 8 days village visits
- 1 ANC clinic

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ANM Trainings:

In total, we conducted 5 training sessions with the Auxiliary Nurse Midwives (ANMs) and trained a total of 16 ANMs. The main focus was on the different stages of the delivery. We interactively covered the support and monitoring of the first phase, practiced the active second phase using a model doll depicting head and fetal development, and placed a significant emphasis on the active management of the third phase involving placental development and prevention of postpartum hemorrhage. This was also conducted interactively and practiced concretely using the model. Many questions and case studies were addressed and clarified. There was also a focus on actively and gently supporting the women during labor and providing thorough education to the families. Additionally, efforts were made to assess the medical accuracy of traditional practices and discuss them accordingly. Another topic was the recognition of danger situations and the appropriate procedure in such cases. In one of the training sessions, we also practiced the basics of Antenatal Care (ANC) and the identification of high-risk pregnancies.

Assessment:

The training with the ANMs was fun, and all participants were motivated and interested. However, there was often little emphasis on the trainings, and many other tasks took priority, resulting in not all invited ANMs attending. We had only about 2 hours for each session, which was insufficient for comprehensive training. Moreover, the educational background and level of experience varied greatly among the individual ANMs, making it challenging to conduct a one-size-fits-all training. Many of the ANMs had never assisted or witnessed a birth, making the training highly theoretical for them. On the other hand, more experienced ANMs would have preferred a much more detailed and in-depth discussion of the topic rather than covering only the basics.

Suggestions:

The training sessions with the ANMs are an exceptionally valuable initiative by Arogya. It is important to enhance and educate existing structures to raise the standard of medical care, especially in the support of pregnant women. However, in my opinion, it would be more effective to tailor the training of ANMs based on their level of education and experience. For those ANMs who have already assisted or are currently assisting in deliveries, the training should be much more detailed. There should be regular training on emergency situations in obstetrics (PPH, shoulder dystocia, breech delivery, twins, etc.). For the other, newer ANMs, the training seems to be overwhelming. In my view, first a foundation should be established. Unfortunately, the knowledge level is very low, with not even knowing what a uterus is, where a pregnancy occurs, what blood pressure means, which values are physiological or pathological. I believe the initial focus of the training should be on achieving good quality in Antenatal Care (ANC) for a better outcome in the deliveries. If possible, it would be beneficial to conduct the training much more frequently to get advanced courses. A continuous educating person would be desirable; in my opinion, a midwife might even be better suited for this role than a doctor. Nevertheless, there is already an evident impact of the training, which is a great success.

MPW Training:

For one day, we trained the Multi-Purpose Workers (MPW) of the Arogya Initiative along with two additional staff members. There is a total of 6 MPWs working in the project, each assigned to a specific village. The field workers maintain close contact with the families and pregnant women and are regularly visiting them. During the training, we covered both ANC and PNC as well as Newborn Care. We practiced conducting a comprehensive medical history and providing proper advice to families. We discussed physiological values and differentiated them from pathological parameters. We practiced gathering vital parameters on each other. Together, we trained to understand previous reports and ultrasound diagnoses. Furthermore, we focused on identifying warning signs in ANC, PNC, and in newborns for an early refer of women and children to a governmental center for further checkups or close monitoring. All of this was done interactively through role-playing.

Assessment:

The training was a complete success. Unfortunately, we had only one day available, so a lot of content had to be covered in a short time. All participants were very motivated and attentive. A noticeable difference could already be seen during the village visits in the following days. The MPWs could handle the visits almost independently and now knew what to look out for and what questions to ask.

Suggestions:

In my opinion, the field workers are a tremendous benefit to the project. They have a great relationship with the villagers and are very caring. As government workers seem to be less involved, I would suggest focusing on the MPWs. If they can recognize danger situations early on, and timely refer women and children for evaluation at government facilities, morbidity can be significantly reduced. Additional training and "bedside teaching" with the field workers are in my view the most crucial steps to improve maternal and child health in the region.

ANC Clinic:

Every first Wednesday of the month, pregnant women have the opportunity to undergo ANC in one of the sub-centers. On one day, we were part of the ANC clinic in Mulakote. A total of 6 women attended, each in different stages of pregnancy. Additionally, I treated 2 children with fungal, skin, and umbilical infections and had a counseling session with an ASHA worker regarding her gynecological complaints.

Assessment:

The ANC clinic is well-received by women who live nearby, but those who have a long journey seldom come. Furthermore, women mostly visit in the first trimester to receive the tetanus vaccination and get iron/calcium tablets, but afterward, they rarely return for check-ups. Unfortunately, we only had one day to be part of an ANC clinic, and the ANM was busy with child vaccinations, so we could conduct limited teaching. However, it was evident that the women were surprised and pleased that someone took the time for a thorough examination and consultation.

Suggestions:

The ANC clinic once a month is a great government initiative. More advertising should be done to encourage women to regularly take advantage of the opportunity for medical examinations. It would be ideally to convince the ANM to schedule vaccinations on a different day than ANC to have enough time for pregnant women. The sub-centers are well-equipped with a blood pressure monitor, hemoglobin meter, Doppler, scale, etc., allowing a collection of all essential parameters. Unfortunately, there is often too little time for this. ANMs should receive more training on how to conduct a comprehensive ANC, including abdominal examinations with fetal heart rate (FHR) assessment. In my opinion, a focus should be on ANC clinics to provide good ANC and reduce women's morbidity. Increasing women's motivation to visit clinics (e.g., through field workers) and ensuring comprehensive training for ANMs should be the next steps.

Village Visits:

We spent a total of 8 days in the mountain villages, visiting and treating 47 ANC mothers, 2 PNC mothers, provided care for 2 children with skin infections, and offered fertility advice to a couple. Each day, we accompanied the respective MPW to a different location in the four villages Paniya, Mulakote, Devidhura and Pati. During the visits, we conducted a comprehensive medical history, measured vital parameters including hemoglobin using a Hemocheck and blood sugar levels, reviewed existing reports and ultrasound findings, and provided advice to the women regarding their pregnancy and upcoming delivery. Families warmly welcomed us, and the women appreciated the home visits for prenatal check-ups.

Assessment:

The village visits were undoubtedly the highlight of my time here. Gaining such profound insights into the villages, homes, and families was incredibly fascinating. I learned a lot about traditions and customs and visited entirely remote areas. Every family was incredibly warm and receiving our visit positively. It was impressive to see how differently pregnant women live here; they work extensively, pay little attention to their nutrition, and rarely undergo prenatal check-ups. Nevertheless, the women seem to be healthy. There wasn't a single case of gestational diabetes or obesity. Noteworthy issues were insufficient weight gain, a significant prevalence of anemia (almost 50%), and SGA (small-for-gestational-age) infants. A substantial proportion of women (almost 20% of the multipara mothers!) experienced child loss, typically shortly after birth or within the first weeks of life. However, these women display incredible mental resilience, with only one showing visible signs of psychological distress. Malnutrition is undoubtedly a significant problem in the region. Due to religious traditions, pregnant women are sometimes restricted from consuming meat or dairy products in the first 3-5 months of pregnancy. Another tradition dictates that women must live separately for 11 days after childbirth due to bleeding, consuming only Roti and water. They often sleep on a cold floor in a separate room or even the cowshed. Both factors increase malnutrition and the risk of infection for both mother and child. The women have a completely different understanding of pregnancy and motherhood, managing these tasks incredibly impressively. Most of them work full-time until childbirth and resume work immediately after the delivery, without a single complaint. Even the official maternity leave is only 11 days, which is unimaginable from our Western perspective.

Suggestions:

As mentioned earlier, it's astonishing how healthy the Bahari women are. It's evident what modernization brings to Western countries: overweight, lack of exercise, unhealthy diets, and diabetes. None of these factors seem to play a role in this mountain region. Another protective factor is that the women are significantly younger (average age 23.7 years), minimizing pregnancy risks. However, due to the rarity of high-risk pregnancies, there are no guidelines on how to proceed in such cases. Almost 13% of women suffered from PIH, making guidelines, such as the one we have now created, essential. Additionally, it would be beneficial to have at least one gynecologist in the region (on-call or possibly even remote) to prescribe medications and answers questions. For example, vaginal pessaries against fungal and bacterial infections should be available in the centers since vaginal infections during pregnancy significantly increase the risk of preterm birth. Other useful

treatment would be providing magnesium, as many suffer from nighttime cramps, typical of pregnancy. Magnesium also helps against constipation, providing a dual effect. Another helpful medication would be an antiemetic, as many women experience pregnancy nausea and vomiting, sometimes even lasting into the 9th month. Plant-based medications such as Itinerol (vitamin B6) or Zintona (ginger), which can be prescribed without a prescription, could be stocked in the centers. Additionally, such women could be better advised to consume small portions several times a day and include ginger tea (without sugar) or raw ginger in their diet. In general, a focus should be on nutritional counseling. The women sometimes gain almost no weight during pregnancy due to their extensive workload. It's crucial that they consume more proteins, dairy and meat products, as well as vegetables, for a balanced diet and sufficient weight gain. Counseling on adequate fluid intake should also be provided. Particularly in these sessions, involving families seems to be crucial. During our visits, we could clearly see how the health and happiness of women were impacted by the family support.

While the visits were personally enriching for me and hopefully beneficial to currently pregnant women, they unfortunately will not have a lasting effect on the organization. For the future for volunteers with obstetric experience, I would recommend focusing on teaching, and visits to ANC women should be reserved for high-risk situations or, as described above, increased supervision in ANC clinics. In my opinion, the goal should be that field workers conduct visits independently to filter which women require medical attention by the volunteers or available doctors and midwifes.

Additional Experiences:

Further impressions were gained during a visit to the District Hospital Champawat, as well as accompanying a birth at the PHC Pati and two newborn care sessions (unfortunately, we arrived just after the actual births). The deliveries here progress much faster than I am used to. Women only enter the delivery room when the cervix is fully dilated. Prior to that, there is no care for the women in labor. Once the cervix is fully dilated, proactive birth induction occurs with immediate pushing, stimulation of contractions, and early giving of intravenous Oxytocin (5 IU as a bolus). The placental period is also actively managed. Despite the rapid delivery, the newborn is developing well, and bleeding is physiological. Unfortunately, there is no skin-to-skin contact, and often there is no initiation of breastfeeding within the first hour, which should be discussed again in further training sessions. In both the sub-centers and during the deliveries, I observed a lack of attention to hygiene. The use of sterile gloves, particularly during vaginal examinations, is indispensable to ensure infection prevention. Additionally, maintaining clean work attire and sanitary facilities would undoubtedly be helpful in reducing infections. The tour of the District Hospital provided me with further insights into Indian healthcare system. It was interesting to see the facility and meet the gynecologist. However, even there, comprehensive medical care cannot be provided. There are no ventilators, no neonatologists, no NICU, and no capability for blood transfusion. For such emergencies, women and children must be transferred to the nearest larger hospital, which is a 5-hour drive away. This delay and the overall distance to adequate medical care are undoubtedly a significant factor contributing to maternal and child morbidity and mortality in this region.

Summary:

The three weeks in Pati with the Arogya Initiative were an incredible experience and enrichment for me. I extend my gratitude to the entire team around Erika and Sushil, for their time and collaboration, and to Madhuri and Mamta for their translations and assistance in every possible situation. I gained a comprehensive insight into the organization, the Indian healthcare system, prenatal care, and life in the mountain villages. The nature, the people, and, of course, the food will always be fondly remembered. Although I could work as a medical professional only to a limited extent, I hope that my experiences and suggestions will still have a lasting impact on the project. I wish everyone the very best and continued success with the initiative!

Statistics:

	Amount	Percentage
Women in total	47	-
Primi Gravida	21	44.7 %
Multipara in total	26	55.3 %
2nd Gravida	15	31.9 %
3rd Gravida	8	17.0 %
4th Gravida	1	2.1 %
5th Gravida	2	4.3 %
Average age	23.7 years	-
Youngest woman	17 years	-
Oldest woman	35 years	-
Anemia	22	48.9 %
PIH	6	12.8 %
SGA	5	10.6 %
Low platelet count	3	6.4 %
Vaginal infection	2	4.3 %
Twins	1	2.1 %
Overdue	1	2.1 %
Mental issues	1	2.1 %
Ovarian cyst	1	2.1 %
No tests ran so far	7	14.9 %
Planned home delivery	3	11.5 % (of multipara)
Previous home delivery	3	6.4 %
Previous C-Section	0	-
Child loss in the first weeks	5	19.2 % (of multipara)