

Infertility and Pregnancy

Maya



At a monthly Antenatal and Child Clinic run by Tansen Hospital Community Health Department, a young woman in her twenties walks into the room where we sit. This Health Post is a 45-minute drive from the hospital and is on the ground floor of a new Government Ward Office building (left photo). These satellite clinics are held on the same date each month and align with Government and hospital goals of increased levels of ante- and postnatal care and routine vaccinations. The widely-praised governmental *Aama Suraksha* (Safe Motherhood) program has been credited with significantly reducing maternal and neonatal mortality rates since its inception in 1997. *[Figures will be inserted; different sources give different figures. TBD.]*

The Ward Chair's office is upstairs; various local government functions are run from the building. The building has an official but isolated feel to it. It is painted in the distinct colours used for government buildings, and the internal walls are adorned with multiple information signs.

Health Posts are increasingly situated between villages with the aim of better serving their surrounding populations. This can mean, as is the case here, that they are the only building in their vicinity and there are no tea or snack shops. The Ward Office and Health

Post are surrounded by hills, fields and dirt roads (right photo). It is just off the nearby paved road that connects the plains in the south to the hospital and surrounding communities. The villages that people have come from are out of sight.

Most patients have walked to the clinic; a few have come by motorbike, driven by male family members. Of the patients that I spoke to, three have walked 30 minutes to reach the clinic. In case of need, one of these patients could reach the clinic in 10 minutes by vehicle, if one is available. Another patient can either walk for one hour to get to the clinic or take 25 minutes by vehicle. A father drove his wife and child on motorbike for the child's vaccination. They report that the 15-minute drive saved them a 90-minute walk. The Health Post is open 6 days a week, staffed by two young government nurses also in their twenties who travel daily by bus from the city on the plains below. The hall of the clinic is filled with women and children waiting to see the nurses (bottom photo). The men who have accompanied their family members to the health post sit outside on plastic chairs, waiting. Patients will have completed morning agricultural tasks and cooked and eaten their morning *dal bhat* (traditional rice, dal, and – if available - vegetable meal) before coming. The clinic visit will take up the rest of the morning, but that is quicker than travelling to the hospital for the equivalent services.

The Health Post nurses and hospital nurse all know Maya¹ and introduce us. We explain the research and obtain consent for talking with her about her health journey and treatment preferences. She has already seen the nurse from the hospital and is



¹ Name changed

willing to stay a little longer to talk with us.

Maya's village is 15 to 30 minutes' walk away from the Ward Office, but she is not currently living there, and has had to travel for an hour-and-a-half by vehicle to reach today's clinic. Her shoulders are held up and in. In most contexts Nepalis greet newcomers with wide smiles. In formal or hierarchical contexts like the Clinic people can be much more reserved. However, usually when I start talking in Nepali, and especially when I share that I was born in the nearby hospital, patients relax. Maya's eyes continue to dart around or look down. No smile comes to her face, and she rubs her hands together in her lap. She seems nervous, maybe worried, and I am concerned about her feeling pressured to talk with me. I check again with her, and she assures us she is willing to talk.

Maya has had many miscarriages. Today she is five months pregnant, and she and the baby are well. She is here for one of her antenatal checkups. Maya also takes thyroid medication. This pregnancy the nurses counselled her to take “पाठेघर” (uterus) medicine to “make her reproductive system strong” (see photo²).

Maya initially refused to take both the thyroid and the progesterone treatment. “I really didn't want to take it. I wasn't thinking [concerned] about possible side effects. I just didn't want to eat/take it. But it was a necessity.” The hospital nurse shared that Maya only accepted the progesterone treatment after a lot of counselling that taking it would increase her chance of a successful pregnancy.

Progesterone is used to support development of the uterine lining, support implantation of an embryo, help prevent miscarriage in women with low levels of



² Photo [Gestofit 200 Capsule: Uses, Side Effects, Price & Substitutes](#)

progesterone, and reduce uterine contractions.³ Together these actions reduce the risk of early miscarriage.

Maya has now finished the three-month course of progesterone and is continuing with her thyroid medication. Maya finds it “easier to take Ayurvedic medicine, because after taking hospital medicine I feel like vomiting. I like the smell of plant medicine.” Nausea and vomiting are known side effects of progesterone [*ibid*]. Three or four years ago she took Ayurvedic “*gyastrik*” (i.e. for gastritis or related stomach problems) medicine and it was effective, but she hasn’t taken any Ayurvedic medicine in the last year. She regularly likes to take various *jadibuti* such as *tulsi* and *neempatta*. Tulsi is commonly used for coughs and colds, and neem for skin conditions, intestinal worms and reducing blood sugar (refs).

I then explained to her that I would share some statements and ask if she agreed or not with them: a verbal Likert Scale exercise. I had cards printed with each of the possible answers in Nepali, with an accompanying emoji. I emphasised that I was interested in her own opinions, and that it was not a test. Maya quickly and strongly agreed with the statement that she has confidence/trust in *jadibuti* (herbal/plant medicine). Her voice expression was earnest and engaged and she looked directly at me. She agreed in some ways but not in other ways with the statement that she has confidence/trust in hospital medicine: “I have *biswas* [faith, confidence] in it, but I do not like to take it.” She strongly agreed with the statement “I have respect for *jadibuti*,” and agreed with the parallel statement “I have respect for hospital medicine.”

When asked if *jadibuti*/Ayurvedic medicine or hospital medicine fit better with her culture, Maya answered “*jadibuti*” without hesitation. Why? “From my childhood I knew about Ayurvedic medicine because my parents, grandparents, neighbours, and friends all used it and advised about it.”

³ Haas DM, Hathaway TJ, Ramsey PS. Progestogen for preventing miscarriage in women with recurrent miscarriage of unclear etiology. Cochrane Database Syst Rev. 2018 Oct 8;10(10):CD003511. doi: 10.1002/14651858.CD003511.pub4. Update in: Cochrane Database Syst Rev. 2019 Nov 20;2019(11). doi: 10.1002/14651858.CD003511.pub5. PMID: 30298541; PMCID: PMC6516817; [Gestofit Capsule: Uses, Benefits, Side Effects, and Role in Pregnancy](#)

I then asked, “if a doctor told you that one of your hospital medicines was made from plants or copied from plants, would you would feel more confident/happy taking that hospital medicine?” Maya immediately agreed; for the first time in our conversation she smiled, and her face relaxed. “I would feel really accepting of it [the medicine].”

Then tears came into her eyes. “In the village people do evil magic. This led to the miscarriages. So this time I moved to _____ (an urban area), 1 ½ hours away, to take care of myself and the baby.”

The place Maya has relocated to has an abundance of government and private healthcare facilities that could provide antenatal care. The road between her current residence and the Clinic is notoriously prone to landslides and therefore in a constant state of disrepair. It is notable that Maya chooses to receive her antenatal care in this biomedical location with these staff that know her, despite her cultural preference for *jadibuti*, the long and uncomfortable journey, and the increased proximity to the source of evil magic that she believes caused her previous miscarriages.

Cultural context of childlessness in Nepal

Aside from individual desire for children, in Nepal there is strong social pressure for women to give birth to a child within a year of marriage. Infertility is widely assumed to be the fault of the wife, and childless women are frequently “stigmatized, isolated, ostracized, disinherited,” neglected, and/or physically or psychologically abused.⁴ Although infertility does not constitute legal grounds for divorce in Nepal, other reasons for divorce can be found, or a man might illegally take a second wife and thus relegate the childless first wife to a lower status (*ibid*). Divorced women lose the provision and protection marriage should afford, and when the legal protections around divorce are not enforced they often facing grinding poverty and a high level of prejudice. They very rarely

⁴ Adhikari, Renu, and Rajani Gupta (2021). “Childlessness and Health Seeking Behavior in Resource Poor Setting of Dang and Udayapur District of Nepal.” International Journal of Reproduction, Contraception, Obstetrics and Gynecology, n.d. doi:10.18203/2320-1770.IJRCOG20214313.

have the chance to remarry. Divorced men, on the other hand, are free and expected to remarry.

Grown children are expected to provide for and care for their elderly parents, a service that is especially important where other social safety nets are largely lacking. Moreover, in Nepali Hindu families, the eldest son is required to perform certain death rituals, making an appropriate offering on the deceased parent's behalf to the gods, helping them attain peace and a good position in the afterlife. If these rituals go unperformed, the deceased will not be acceptable to the gods, will not attain a place with ancestors, and instead risks becoming a *bhut* (ghost) prone to tormenting the living family members.⁵

Miscarriage in Nepal is also often seen through a spiritual lens. Some sickness comes from within the body. Other diseases have a supernatural cause, "*lagu*" (Kristvik 1999:94)⁶, and are often perceived to be the result of witchcraft. This is what Maya referred to in her village. Childless women and widows are more likely to be thought to be *boksi* (a witch) as they are considered to be prone to jealousy about the better circumstances of others (*ibid*: 56). Moreover, if small children are touched by a woman who has lost children herself (through abortion or young death), the child may be afflicted by a "*moch*" or "*rune*" – a particular types of "*bhut*" or ghost – that causes the child to "cry continuously, refuse to take food, and wither away" (*ibid*:61; Gupta et al 2021:4080).

It was not possible or appropriate to question Maya about her particular fears about remaining childless. The overview given here is offered as background knowledge of the host of social, economic, spiritual and physical risks childless women in Nepal face – in addition to the grief caused by child loss.

⁵ Pradhan, R. 1996. Sacrifice, Regeneration and Gifts: Mortuary Rituals Among Hindu Newars of Kathmandu. *Contributions to Nepalese Studies*, Vol 23, No. 1. Pp159-194
https://himalaya.socanth.cam.ac.uk/collections/journals/contributions/pdf/CNAS_23_01_11.pdf;
Upadhyay, P. Representations of Death in a Changing World: An Anthropological Perusal of Death Rites of Gurungs in Nepal. <https://www.nepjol.info/index.php/DSAJ/article/view/14023/11373> ;
<https://thewondernepal.com/articles/rituals-surrounding-death-and-mourning-in-nepal-a-comprehensive-overview/>

⁶ Kristvik full ref. All these works are from different geographical and ethnic areas of Nepal. However, these ideas are widespread across Nepal and while there will be variations specific to different people groups, the broad ideas are representative of ideas and practices found across the country.

Cultural safety in pregnancy and birth

The biomedical model of safety for mother and baby in pregnancy and birth is based primarily upon physical safety, where risks are mitigated through medical care. The importance of psychological and emotional wellbeing for patient safety is increasingly widely recognised across the world.⁷ However, the roles of spiritual and cultural safety in patient safety are less widely considered (Kaphle 2022). Biomedical practices do not readily consider the spiritual or cultural risks that a patient might take on when seeking and following biomedical treatment (*ibid*). The following two researchers offer poignant examples of clashes between cultural safety and biomedical practice in Nepal.

Hailati (2017) documents how the application of antiseptic gel to newborn umbilical cord stumps was perceived by some plains-dwelling Nepalis to increase the risk of spiritual attack or physical illness in the baby. The gel increased the time taken for the stump to dry and drop off; because the Hindu *Nawran* naming ceremony that imbued spiritual protection couldn't be held until the stump came off, this delay lengthened the time the infant was at risk.

Kaphle (2022) records how many women in remote mountainous villages in Mugu consider that delivery inside the home or in an institution instead of traditional delivery in the *goth* गोठ (animal shed) actually increases risks to mother and baby. After birth mother and child are seen to be impure for 30 days, so their presence in the house is believed to anger household *deuta* or deities. Items the mother touches or spaces she enters become polluted, and an angry *deuta* is deemed likely to bring illness, death or calamity upon the family. After institutional birth the mother and child have to return to the home and may have to cross streams vital for water supply enroute. In crossing the

⁷ D'Lima D, Crawford MJ, Darzi A, Archer S. Patient safety and quality of care in mental health: a world of its own? *BJPsych Bull.* 2017 Oct;41(5):241-243. doi: 10.1192/pb.bp.116.055327. PMID: 29018546; PMCID: PMC5623880.; Khan, Afsha, Dildar Muhammad, Najma Naz, Sabiha Khanum, and Awal Khan. 2025. "Exploring Emotional Safety and Harm Among Hospitalized Patients: A Qualitative Study of Patients' and Providers' Perspectives" *Healthcare* 13, no. 15: 1842. <https://doi.org/10.3390/healthcare13151842>; Grewal, Perbinder & Academy, Oxford. (2025). Psychological Safety and Patient Safety. 10.5281/zenodo.14796576. ; Bradshaw J, Siddiqui N, Greenfield D, Sharma A. Kindness, Listening, and Connection: Patient and Clinician Key Requirements for Emotional Support in Chronic and Complex Care. *J Patient Exp.* 2022 Apr 12;9:23743735221092627. doi: 10.1177/23743735221092627. PMID: 35434291; PMCID: PMC9008851.

stream in a polluted state, the mother again risks polluting the water source and angering local *deuta* (ref pg). Kaphle therefore argues that rather than being *forced* to give birth in the *goth*, many mothers exert their agency and *choose* to give birth there:

“The health workers do not understand that we like our tradition, and we are happy to stay in our village to give birth.” (Rima, Kaphle 2022:147)

“For Dolma, [the goth] is the safest place to experience birth.” (Kaphle 2022:18)

“[local] women see medical interventions as threats to childbirth safety” (Kaphle 2022:102)

“In their perspective, even medicine and technology did not supersede their belief in the power of God to ensure the survival of mother and baby during birth.” (Kaphle 2022: 159)

Kaphle (2022:163) concludes that “Maintaining culture, tradition and spirituality was the most important aspect of childbirth for women in the remote mountains” and that “breaking their connection to this spiritual relationship [with the *deuta*] created a threat to the safety of childbirth” (Kaphle 2022:159).

The spiritual and cultural considerations these women refer to would be dismissed as irrelevant, misguided, primitive, and superstitious by many biomedical service providers (ref). However, for these women they are significant factors in deciding which, if any, medical services to seek through pregnancy and childbirth. Kaphle records that for some women, these factors are more important than the potential death of a newborn (pg ref). Such deeply held cultural and spiritual beliefs do not disappear when a woman enters into biomedical spaces. Rather, these beliefs and preferences come with patients into treatment spaces, affecting patient decision making and health outcomes – whether or not medical staff and policy makers are cognisant that these factors are at play.

Maya, after many miscarriages, acted to mitigate the risks to her current pregnancy on two major fronts. Firstly, she sought out regular biomedical care at the Health Post and,

after a lot of counselling, accepted pharmaceutical medication. These actions fit neatly into the biomedical model of institutional care designed to increase the physical safety of her and the baby. However, accepting the hospital medicine went against her strong preferences for plant-based medicine. *Jadibuti*/Ayurvedic medicine reflect knowledge long held by her family and community, and was easier – physically and culturally – for her to take. Her acceptance of biomedical care was a matter of “necessity”, but in itself was also a source of stress for her. I suggest this decreased her emotional and psychological safety because it decreased the cultural safety of her biomedical care.

Secondly, Maya chose to move away from her marital village where she felt her and her baby were at risk from supernatural attack. This increased her spiritual and cultural safety in pregnancy but could decrease her physical safety, by increasing the distance between where she is living and her biomedical healthcare providers.

For Maya, the knowledge that certain hospital medicines are still made from plants, were originally learned from plants, or are copied from plants, provided a way to reconcile her strong cultural preference for *jadibuti* and the “necessity” of hospital medicine to increase her chances of having a child. This new information provided clear emotional relief for Maya in a stressful season of her life, making the culturally distant domain of hospital and clinic practice a little closer to her chosen and familiar practices of *jadibuti*/Ayurvedic medicine. The plant extract in her progesterone medication became a bridge or “boundary object” between these domains (ref).

Her story demonstrates how for patients with a strong preference for *jadibuti*, sharing the plant-basis of pharmaceutical medicines could ease their acceptance of biomedical treatment when it is deemed necessary. The potential for this knowledge to help lower stress levels for these patients is also notable as stress is known to increase physical and mental health risks in general, and particularly in pregnancy.⁸

⁸ Qu, F., Wu, Y., Zhu, YH. *et al.* The association between psychological stress and miscarriage: A systematic review and meta-analysis. *Sci Rep* 7, 1731 (2017). <https://doi.org/10.1038/s41598-017-01792-3>; Hasriantirisna, Hasriantirisna & Nanda, Kiki & M, St. (2024). Effects of Stress During Pregnancy on Maternal and Fetal Health: A Systematic Review. *Advances in Healthcare Research*. 2. 103-115. 10.60079/ahr.v2i2.339.

Dorje and Pema

A few months later I spoke with an older childless couple. Dorje, the wife, is 37 years old and her husband Pema is 44.⁹ We met at an Amchi clinic in Boudha, Kathmandu, where they were seeking treatment for Dorje's abdominal pain. The couple are from the Mugum Karmarong municipality in Mugu, one of Nepal's remote northern districts.¹⁰ The dirt road to the district capital only opened in 2012 and is still unpaved.¹¹ I visited their valley in 2022 to review the impact of INGO work and again in 2023 for MSc research.¹² Perhaps helped by this small connection, the couple agreed to meet again.

Dorje and Pema live in Mugu for the warmer half of the year and in Kathmandu over the winter. There is a small six bed Community Health Centre (Health Post and Birthing Centre) in Riusa Bagar¹³, 90 minutes' walk from their village: a steep descent into the main valley and then



⁹ Field notes 13th February 2026. Names changed.

¹⁰ Typical village. Photo Ray Bahadur Sha high, The Kathmandu Post. [No trade, no food. Life's hard in remote Mugu](#)

¹¹ [13 Years Later, Work Begins on Key Karnali Road – NepalConnect](#)

¹² Walking as a family along the main trail in the Mugum Karmarong valley. Joel Hafvenstein 2022.

¹³ https://chay-ya.org/en/projects/health/karmarong-mugu-mugum_karmarong_health_center-en

a steep return ascent. This health centre has been supported at times with staff, finance, and resources through various INGOs. However, Dorje and Pema report that it is not reliably staffed or supplied with medicines. The District Hospital is a day's walk beyond that, with motorbike or jeep transport possible for only part of the way. There used to be an Amchi further up the Mugum Karmarong valley, but they did not visit him and he subsequently died.

Both husband and wife prefer hospital medicine to Amchi medicine and say that hospital medicine fits better with their culture than Amchi medicine. Pema has bought gastric, headache, and common cold medicines from pharmacies. When he broke his leg, he sought care at an orthopedic hospital. Dorje explains her preference for hospital medicine in terms of efficacy: "If we get sick and take hospital medicine, it will help us get better."

Despite his history of seeking and preferring biomedical care, Pema shares the idea frequently cited by many other Boudha respondents that "Amchi medicine helps for a long time, but hospital medicine only helps for a short time. After finishing the hospital medicine, soon you will have to go again to get more. So it is better to take Amchi medicine." His statement is interesting in light of previous research done in the Mugum Karmarong valley for my Ethnobotany MSc fieldwork in 2023. The consensus about the use of *jadibuti* was that, although many locals collected certain medicinal plants for trading, the lack of nearby Amchis or other knowledgeable traditional healers meant that people did not know how to use the plants. Biomedical treatment was overwhelmingly dominant.¹⁴ This highlights the type of complexities or tensions often found within patient's explanatory frameworks regarding treatment choices; despite coming from an area with biomedical dominance in provision, and his individual preference for and history of biomedical care, Pema has internalised an idea about the superiority of Amchi medicine over biomedicine.

Dorje and Pema have been married for 17 years when we meet but remain childless. They were referred from the local health facility to the District Hospital for investigations, and

¹⁴ Fiona Hafvenstein 2023 Ethnobotany MSc Thesis

progressed from there to a private hospital in Kathmandu that was recommended for infertility treatment. “It is a good hospital; clean but very expensive. *Bideshis* (foreigners) also go there for [infertility] treatment.” The hospital website is in English and refers to its services as “Natural IVF”, without defining what is meant by that term.¹⁵

To help pay for this treatment the couple borrowed 300,000 rupees (£1555)¹⁶ from people in their village. Overall, they spent 5-600,000 rupees (£2424-2909) at the hospital. The GDP per capita for Karnali, the province that includes Mugu District, is the lowest out of all Nepal’s provinces at just 130,197 rupees (£634) per year.¹⁷ Neither Dorje or Pema have paying jobs. Pema is an only child himself, and only two people in their wider family have paying jobs. 45% of municipality residents live in extreme poverty, and vital income from collecting wild herbs and *yarsagumba* (the popular caterpillar fungus) has drastically reduced in recent years because of overharvesting.¹⁸

Dorje’s treatment at the fertility hospital included oral medications, injections, and an operation. She did become pregnant, with a boy. She miscarried him at 5 months. The doctors told her it was because “of a lack of water inside her” and advised her to wait 6 months and then come back to try again. They said next time “they would take the baby out early and keep it in ICU”. That was 6 or 7 months ago.

¹⁵ [Vatsalya Natural IVF: The Best Fertility Centre in Nepal - Vatsalya-Natural IVF](#)

¹⁶ Conversion on 2nd May 2026

¹⁷ <https://data.nsonepal.gov.np/dataset/provincial-national-accounts/resource/ca6c56c4-95af-4993-9c2a-5651cfa8780f> Data from 2022/23

¹⁸ [No trade, no food. Life’s hard in remote Mugu](#)

A week prior to our first meeting Dorje developed lower abdominal pain and they decided to try Amchi treatment for the first time. She says that since the miscarriage her uterus has been “बिग्रेको,” “broken”. She had just been treated by the Amchi when we first met but reports on our second meeting that the treatment was not successful. They will return to the fertility hospital after we finish talking.

Both Dorje and Pema know that Amchi medicines are made from *jadibuti* and flowers. Dorje doesn’t know what hospital medicines are made from. Pema speculates that they might be made from *jadibuti*.



I then explain the different categories of hospital medicine (plant extract, plant extract mixed with other substances, copied plant extract made from other substances, fully synthetic) and ask them which type they would prefer. Dorje does not know. Pema quickly chooses medicine made from plant extracts. As a way of understanding this preference, I ask Pema what concerns him about medicines made from other man-made substances. He responds, “I don’t think there are any problems [with the man-made substance medicines], but it seems the other types of medicines are made from plants and I like that.”

When I showed them examples of medicines made from a mix of plant and other substances (man-made substances), Dorje recognises the Gestofit progesterone medicine. She tells me that she took it during her pregnancy. I ask her how she feels learning that this medicine is a mixture of plant and man-made substances:

“At first, I didn’t know it was a mix. But now I know and I feel more happy, because it is made from a mix of plant and other substances and it will be better for health.”

In contrast to Maya, both Dorje and Pema expressed clear preferences for hospital medicine over traditional plant-based medicine (in this case Amchi medicine). This preference has been formed through some availability of biomedical care and lack of Amchi care in their rural home, the husband's experiences of effective pharmacy medicines for low level health problems and biomedical treatment of a bone break, and the wife's one unsuccessful treatment by an Amchi. Their experiences of biomedical treatment at the fertility hospital are mixed. Dorje did become pregnant but sadly lost the baby.

Even with such clear preferences for biomedicine both husband and wife gave positive responses to learning about the plant basis of some hospital medicines. This suggests that some patients who hold strong preferences for biomedical care will be positively impacted by learning if their medication is in some way plant-based.

Potential misunderstandings

We know that on one level Pema believes that Amchi medicine has longer-lasting effectiveness than hospital medicine, and that therefore "it is better to take Amchi medicine". This might explain why he likes the idea of plant-based hospital medicine. However, it also raises the question of whether he would assume that plant-based pharmaceutical medicine would also have longer effectiveness than fully synthetic medicine.

Dorje's positive response to learning about the plant component of Gestofit more clearly indicated a lateral application of qualities, characteristics and attributes of traditional plant medicines to plant-based pharmaceuticals. Her statement revealed a belief that [traditional] plant medicines are "better for health," as well as an assumption that because Gestofit is made using a plant extract as a precursor ingredient, it would also be better for health than a purely synthetic medication.

This cross-application of attributes from traditional plant medicine to plant-based pharmaceuticals was also found in other respondents (ref field notes) and highlights a risk of increasing awareness of the plant basis of pharmaceutical medications. The expectation that plant-based pharmaceuticals would be better for health, safer, have

fewer side effects, and possibly have more lasting effect arose from research participants and were in no way communicated by the researchers. There is already a widespread practice of people in Nepal taking prescribed medicines without medical supervision (ref). If patients assume that a plant-based pharmaceutical will not have side-effects, it could further increase the risks associated with unsupervised use of pharmaceuticals. Therefore, whenever a respondent shared such a perception I would take time to talk through the differences between traditional herbal medicines and plant-based pharmaceuticals, and the need to use plant-based pharmaceuticals as prescribed by a doctor.

A similar concern was also raised by a young female Amchi who practices in the Kathmandu valley. She trained in city's Sowa Rigpa International College and now works in a clinic with a fellow graduate. On hearing about Maya's experience and responses, she asked about the side effects of plant-based hormonal medications; "Are the side-effects any less than if the medication was purely synthetic?"¹⁹ I responded that all the plant-based pharmaceutical medications still need to be understood and treated as pharmaceutical medications. They are concentrated forms of particular compounds. The fact that the compound is made using an extract (precursor material) from a plant does not eliminate the likelihood and impact of side effects. *[Expand with discussion of bioidentical hormonal medications??]*.

These responses highlight the importance of identifying and addressing assumptions that practitioners and patients make about plant-based pharmaceuticals as part of any program that increases awareness of pharmaceutical reliance upon medicinal plants. Because sharing information on the plant-basis of some pharmaceuticals can affect patient treatment decision making processes it is clinically and ethically imperative to address potential misunderstandings as part of the process. This issue of cross-application of attributes of traditional plant medicine to plant-based pharmaceutical medicine will be further developed further in Chapter X.

¹⁹ Field notes: 26th April 2026

So how are Maya and Dorje's hormonal medications plant-based? *[This will be the next section, but I'm sparing you all that more technical section.]*