The best healthcare (commodity) available (for purchase): provider-induced demand for obstetric ultrasonography among ethnic minority women in rural northern Vietnam

Bronwyn McBride, PhD; Sumit Kane, PhD; John O'Neil, PhD; Liem T. Nguyen, PhD

Despite Vietnam's overall progress on maternal health indicators, marginalized ethnic minorities in remote areas face lower access to antenatal care and higher maternal mortality rates relative to the Kinh (majority ethnic group). Last year, we conducted fieldwork for 2 qualitative research projects that aimed to address maternal health inequities among pregnant ethnic minority women in rural Northern Vietnam. Although not the focus of our research, the use of ultrasonography services at for-profit private clinics was ubiquitous in participants' healthcare-seeking accounts. Ultrasound scans from for-profit clinics were a major component of ethnic minority women's antenatal care: many purchased 8 to 10 scans during pregnancy at $6.15 US dollars per scan, despite their limited agricultural income of $120 to $205 per month. Women were unaware of how many scans were recommended and their medically indicated scheduling, but purchased frequent scans to assuage pregnancy anxieties and access what they experienced as the highest-quality antenatal service. In tandem, for-profit ultrasonography providers offered broader opening hours, immediate results, and rich technological scans, which seemed to deliver poor families the most tangible "value" for their hard-earned money.

Previous literature documented the concerning overuse of ultrasonography among Kinh women in urban Vietnam: What are the implications of this trend extending to affect rural-dwelling ethnic minority women who face lower education, economic marginalization, and a 4-fold higher maternal mortality rate? Our findings raise concerns related to safety, financial vulnerability and provider-induced demand, and broader health policy questions regarding healthcare commodities in low-resource settings. Critically, there is no evidence of the effect of obstetrical ultrasound on reducing maternal mortality in low- and middle-income countries, and its excess use could burden available resources and detract from evidence-based services.

Our findings suggest that health system gaps are driving poor women toward frequent purchases of a single insufficient maternal health commodity: this will not improve their pregnancy outcomes or health equity for marginalized ethnic minorities. We argue that addressing this overuse of ultrasonography due to provider-induced demand requires a multipronged response that meets women's growing expectations. Our findings highlight the need for investment in health education, health promotion, and reliable high-quality public maternal healthcare for ethnic minority communities in Vietnam.

Key words: maternal health, ethnic minorities, provider-induced demand, ultrasound overuse, health inequities, Vietnam

From the Faculty of Health Sciences, Simon Fraser University, Burnaby, British Columbia, Canada (McBride and O'Neil); Nossal Institute for Global Health, Melbourne School of Population and Global Health, The University of Melbourne, Victoria, Australia (Kane); Institute of Population, Health and Development, Dong Da, Hanoi, Vietnam (Nguyen)

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Corresponding author: Bronwyn McBride, PhD. bronwyn_mcbride@sfu.ca

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Introduction

This article explores the provider-driven overuse of ultrasonography as a replacement for comprehensive antenatal care (ANC) among ethnic minority women in remote areas of Northern Vietnam. Vietnam's overall progress on maternal, newborn, and child health (MNCH) indicators obscures severe disparities among marginalized ethnic minority communities living in remote, mountainous areas.[1,2] In Vietnam, there are 53 ethnic minority groups that account for approximately 14.5% of the total population. In Vietnam, as in other Southeast Asian countries, the term "ethnic minorities" is commonly used by communities and government bodies for these populations, who may elsewhere be classified as indigenous peoples. As government authorities in Vietnam do not recognize indigenous identity in politics, programs, or reports, this manuscript uses the terminology "ethnic minorities." Ethnic minorities in Vietnam face significantly higher maternal mortality rates at 316 vs 81 per 100,000 live births relative to the Kinh, the majority ethnic group.[3] In mountainous regions where the vast majority of ethnic minority communities live, the infant mortality rate is 24.8 per 1000 live births, relative to 8.6 in urban settings.[4] Minority women remain far less likely than Kinh women to have given birth with a skilled attendant (70.7% vs 99.4%, respectively).[2]

Data from the Multiple Indicator Cluster Survey in 2000, 2006, 2011, and 2014 showed that at all survey time points, the proportions of women who received ANC by a skilled attendant were significantly higher among the Kinh, those with higher economic status, and those in urban areas,[2] highlighting clear and widening inequities for ethnic minority women in remote settings.[1,2] Our emerging research in Northern Vietnam found that ultrasound scans from for-profit private clinics, paid for by ethnic minority women and their families, were a central component of women's maternal healthcare-seeking. However, will this address maternal health inequities?

Medical and social role of obstetrical ultrasound

Obstetrical ultrasonography is a well-established evidence-based practice in pregnancy care.[5] Medically indicated, timely ultrasound scans during pregnancy help assess gestational age; detect multiple pregnancies, abnormal placentation, and fetal anomalies; and diagnose nonviable pregnancies.[6,7] In addition, social scientists have noted that ultrasound scans can play a powerful social role for pregnant women and expectant families who attend ANC appointments. The scans fulfill emotional, psychological, and familial desires for visual confirmation of the pregnancy, "meeting" the baby, and assuage maternal anxieties through reassurance about the fetus's development.[5,8] Moreover, researchers have noted how the social desirability of ultrasonography can problematically interact with rapidly commercializing, increasingly market-driven health systems. In particular, research from low- and middle-income countries (LMICs) has identified the devaluing, minimizing, and replacement of other components of ANC (eg, history-taking and clinical examinations, such as blood pressure measurement and urine testing) in favor of obstetrical ultrasound[9–12] and the overuse of ultrasound associated with private provider-induced demand as emerging trends.[5,8,12] These issues are increasingly salient in contemporary Vietnam.

Obstetrical ultrasonography in Vietnam today

Over the past 2 decades, obstetrical ultrasonography has become a central component of ANC in urban Vietnam. The confluence of alluring modern technology, its fulfillment of women and families' social desires to see their child before birth, and its significant revenue-generating potential for medical professionals in both public and private facilities[10,13] have created ideal conditions for the commoditization of ultrasound scans (ie, the transformation of this ANC service into a product or commodity that can be bought and sold) and the widespread proliferation of for-profit ultrasound clinics in urban Vietnam.

In the 1990s, pregnant women in urban Vietnam underwent ultrasound scans only on indication.[13] The first study to document the routine use and overuse of obstetrical ultrasound in Vietnam was a 2007 study conducted in the capital city of Hanoi, where more than 98% of the population is Kinh.[14] This research found ultrasounds being performed in high volume at an urban hospital, with a single doctor able to perform 80 2-dimensional (2D) scans or 50 3-dimensional (3D) scans daily, resulting in hastily delivered services and minimal doctor-patient contact.[13] Of note, 3 studies in urban Vietnam from 2007 to 2020 have raised concerns that traditional ANC examinations "were being performed less thoroughly"[13] than before ultrasonography became so prominent in maternal care.[10,11,13] The reasons cited for this shift included increased commercialization and accessibility of ultrasound technology, physicians recommending frequent scans because of their revenue generation, women's requests, women perceiving ultrasound as more trustworthy than traditional examinations, and the increasing prioritization of fetal heath over maternal health.[10,11,13] In recent research, urban Vietnamese women chose to forego other clinical examinations in favor of ultrasound scans: they viewed ultrasonography as a "complete" pregnancy check, making other ANC components redundant.[10,11] This sometimes resulted in pregnancy complications (ie, high blood pressure or preeclampsia) being missed,[10] serious illnesses, and even maternal deaths.[11]

Our fieldwork and emerging findings

In the last year, we conducted fieldwork for 2 qualitative research projects among pregnant ethnic minority women and new mothers across several sites in rural Northern Vietnam. Although not the primary focus of these studies, a common finding across the self-reported data from in-depth interviews and focus group discussions was the ubiquity of ultrasonography in women's healthcare-seeking accounts. Although our research did not evaluate the maternal health outcomes

associated with ultrasound scans, rural and ethnic minority women's strong attraction toward and associated use of this insufficient ANC commodity emerged as a concerning finding with important policy implications.

Most recently, in January 2024, we interviewed 35 pregnant and postpartum ethnic minority women and family members in Thai Nguyen Province, Northern Vietnam. All women viewed ultrasound scans (obtained from qualified medical professionals at for-profit private clinics) as a major, if not central, component of their ANC: many women obtained 8 to 10 scans during pregnancy or at least 1 scan every month. Despite the cost of 150,000 Vietnamese dong (VND; $6.15 USD) per scan in a setting where agricultural and factory work income is limited (3−5 million VND [$120−205 USD] per month), families found ultrasound scans at private clinics to be a worthwhile health expenditure. Because their local commune health center did not offer ultrasonography (in line with current public health facility norms), women concurrently sought care from for-profit private clinics: they shopped between public and private facilities to access the highest-quality services, and to seek a second opinion because of their limited knowledge of maternal health. Women were not aware of how many scans were recommended during pregnancy or their medically indicated scheduling. In March 2023, we interviewed 30 Mong ethnic minority women and family members in Dien Bien province. In this economically marginalized, remote area adjacent to the Laos border, more than 90% of the population are ethnic minorities. Despite only 66% of pregnant women receiving ≥4 ANC visits at public facilities, a high rate of home births (40%), and a strong adherence to Mong traditions, respondents routinely sought ultrasound scans from for-profit clinics: in in-depth interviews, women reported having had 5 or 6 ultrasounds. In 1 focus group discussion, all women reported having had frequent ultrasound scans during their pregnancy to monitor their baby's growth, with some seeking scans every time they felt abnormal or when the fetus was moving less.

In both fieldwork settings, ethnic minority women's motivation for repeated scans—as often as they could afford them—was to access what they were led to understand as the highest-quality pregnancy care. Women seemed to view ultrasounds as the centerpiece of ANC, which provided the greatest value by providing attractive, reassuring images of the fetus's development. In addition, scans provided women and families with social and class benefits and the satisfaction of using the most modern technology available—a sense of doing their best. In tandem, the for-profit ultrasonography providers tailored their services to meet families' desires and preferences in ways that provided valuable insights into gaps in traditional ANC services. For-profit ultrasound clinics offered advanced technology, broader opening hours, short wait times, and immediate results, which corresponded with families' increasing expectations regarding health services and further affirmed their impression of receiving comprehensive, high-quality ANC. These advantages offered by for-profit ultrasonography providers reified women and families' perception that frequent ultrasounds were investments in the best healthcare their money could buy.

Our fieldwork highlights that the documented overuse of ultrasonography in urban Vietnam[10,11,13] is now extending to ethnic minority communities in remote areas. We argue that this trend is problematic, and that the implications of this market practice need to be understood from equity- and health system−level perspectives. In the early 2000s in Hanoi, modern 2D and 3D ultrasound scans at hospitals had an irresistible appeal to women[13]; our fieldwork suggests that, in 2024, for-profit ultrasonography providers are offering 5-dimensional scans with a 360° live fetal video to women even in remote, mountainous settings, highlighting the breathless pace of technological and commercial development. In swiftly modernizing, increasingly market-driven Vietnam, women from all socioeconomic walks of life want the best for their babies and their families. A confluence of factors makes modern ultrasound technology seem to be the best healthcare (commodity) available (for purchase). However, is this good antenatal care? And what risks might this perception carry?

Our emerging findings raise concerns related to safety, effectiveness in improving maternal health outcomes, economic marginalization and provider-induced demand, timely comprehensive ANC and continuity of care, and broader health policy questions regarding healthcare commodities in low-resource settings. We briefly reflect on these concerns below.

Safety

For-profit ultrasonography clinics in Vietnam are staffed by physicians and qualified medical professionals who often also work in public facilities,[10,13] and our fieldwork did not identify situations involving unqualified ultrasound technicians. However, the World Federation for Ultrasound in Medicine and Biology recommends against the nonmedical use of scans (ie, for souvenir fetal images).[15] Although there is no epidemiologic evidence of fetal harm from ultrasonography, unnecessary and "uncontrolled use of ultrasound without medical benefit should be avoided."

Effectiveness in improving maternal health outcomes

The complications accounting for nearly 75% of all maternal deaths are postpartum hemorrhage, infections, high blood pressure during pregnancy, complications from delivery, and unsafe abortion.[16] Traditional ANC examinations, such as blood testing for anemia and blood pressure measurement, are used to identify and respond to hemorrhage risk and high blood pressure during pregnancy; none of the most lethal pregnancy complications can be identified or addressed through ultrasound scans. Critically, there is no evidence of the effect of obstetrical ultrasound on reducing maternal or perinatal mortality in LMICs,[5,17−19] and its excess use could potentially pose a large burden on

available resources (both public health resources and the limited financial resources of economically marginalized families) and detract from other more beneficial ANC services.[17] This calls for a deeper interrogation of whose interests the overuse of this technology serves and what population- and health system–level risks it might entail.

Economic marginalization and provider-induced demand

Our fieldwork found ethnic minority families who work largely in agricultural or factory labor purchasing frequent ultrasound scans, despite voicing clear concerns about their financial situation. The rich technological and visual experience of the scan seemed to deliver poor families the most immediate, tangible "value" for their hard-earned money. This suggests that the for-profit ultrasonography providers are filling an existing gap in accessible (ie, broad opening hours or quick results) and attractive (ie, using the most modern technology) ANC services, which are insufficiently provided by the public health sector. Moreover, it raises concerns that rural women's limited maternal health education, lack of information, and maternal desires to access the best available healthcare for their fetus may be exploited and that their demand for healthcare manipulated to serve commercial interests. Many women in our fieldwork reported receiving phone calls from private ultrasound clinics reminding them of their "monthly" appointments, as documented in previous research.[11] Such provider-induced demand for repeated scans is not without harm when it involves the depletion of poor families' limited resources while not improving their health outcomes and when it distracts families and providers alike from other appropriate, evidence-based ANC services. Although ultrasound scans seemed to deliver high perceived "value" for women and families, there is no evidence that repeated ultrasounds improve maternal or neonatal health outcomes in LMICs.[5,17,19] As such, our findings raise concerns that the true "value" of multiple, nonmedically indicated ultrasound scans is in the form of revenue to for-profit ultrasound providers.

Timely, comprehensive antenatal care and continuity of care

Although Vietnam's national guidelines for reproductive health services recommend 3 ultrasounds at 11 to 13, 18 to 22, and 28 to 32 weeks of gestation,[20] our respondents purchased scans at a much higher frequency but did not know or adhere to this recommended schedule. This highlights their usage of ultrasonography as a commodity rather than according to medical indications.

Our fieldwork found that ethnic minority women in rural Vietnam perceived ultrasonography to be a more attractive and comprehensive service than other nontechnical elements of ANC, such as blood pressure measurement or urine or blood tests. This suggests that, despite their limited use, the social appeal of modern technology and the broader commercialization and commoditization of care are contributing to the priority of ultrasound scans over other important ANC components. In our fieldwork, women typically sought basic pregnancy guidance (ie, on nutrition) from their commune health center, underwent several ultrasounds from private clinics, and then delivered at the district health center or provincial hospital. This finding reflects previous research in Hanoi, which found women "shopping" between diverse public and private providers,[13] and raises concerns about the continuity of ANC and the inefficient use of limited family and health system resources.

Policy implications

What was thus far a phenomenon limited to Kinh women in urban contexts in Vietnam seems to be a reality for ethnic minority women in remote settings too. However, given that this population faces lower levels of education, lower economic status, and a maternal mortality rate 4 times higher than that of Kinh women,[21] what are the implications for the well-being of marginalized pregnant women, for addressing the severe socioeconomic and MNCH inequities among ethnic minority communities, and for the Vietnamese health system at large? We have discussed some health, safety, and economic implications regarding the wasteful allocation of resources to unnecessary ultrasound consultations. In the following sections, we share reflections on the latter question.

Anxiety during pregnancy is a common experience, and studies have documented high levels of anxiety among pregnant and postpartum women in rural Vietnam.[22,23] The seductive appeal of fetal imaging offered by cutting-edge ultrasound technology to assuage maternal anxieties—particularly for ethnic minority women who face sociostructural barriers to health information[1,24] and more maternal deaths—is clear. However, should these anxieties be assuaged by allowing market forces to relieve poor families of their hard-earned money, particularly when there is no evidence of maternal health benefits from repeated scans? Given the literature demonstrating that obstetrical ultrasound must be used in conjunction with and complementary to comprehensive ANC in LMICs,[5] our emerging findings suggest a need for public health systems to strengthen health promotion, education, and reproductive health services to better guide and facilitate women's health-seeking decisions toward more comprehensive ANC.

Beyond the clear influence of provider-induced demand, our fieldwork suggests that the use of the latest modern technology seems to be a proxy for high-quality healthcare because other markers of quality care (such as trustworthy sources of verified, reliable, and accessible health information) are not manifesting themselves as clearly. This highlights the need for improved health education efforts among marginalized ethnic minority communities in rural Vietnam.

Our findings align with a broad body of literature on ultrasound overuse in LMICs calling for public health resources to be effectively allocated and to

prioritize evidence-based strategies that improve maternal health.[5,12] Our fieldwork adds to existing scholarly calls for healthcare systems and public health education efforts in Vietnam to communicate the limitations of repeated ultrasound scans without medical indication and to caution against replacing evidence-based approaches to ANC.[10,11] Although current literature does not present effective evidence-based responses to the public health issue of the overuse of obstetrical ultrasound, we suggest that addressing the overuse and misuse of ultrasonography due to provider-induced demand requires a multipronged response that helps meet the growing and legitimate expectations of women in Vietnam.[11,25] In addition to accessible maternal and reproductive health education, which stimulates families' demand for a broader range of evidence-based ANC services, our findings highlight the need for investing in comprehensive, trustworthy, and high-quality perinatal public health services at primary and secondary care levels and ensuring that they can be experienced as accessible, comprehensive, high quality, and modern to fulfill communities' expectations.

Conclusions and recommendations

Our findings present evidence of market failure in the for-profit provision of ANC services in remote areas of Vietnam where the vast majority of ethnic minority communities live, with for-profit clinics encouraging unnecessary ultrasound consultations to the detriment of vulnerable women. Greater health equity for marginalized ethnic minorities in Vietnam can not be achieved through market influences that misdirect women's health-seeking behavior and drain their limited economic resources only to receive inadequate maternal care. Ethnic minority women's and families' desires to access the highest-quality healthcare for their soon-to-be-born babies are legitimate and should be fulfilled through comprehensive, evidence-based ANC services that are affordable and responsive. This calls for greater investment in health promotion and reliable high-quality public maternal healthcare in Vietnam. ■

CRediT authorship contribution statement

Bronwyn McBride: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Sumit Kane:** Writing – review & editing, Supervision, Methodology, Formal analysis, Conceptualization. **John O'Neil:** Writing – review & editing, Supervision, Project administration, Methodology, Investigation, Funding acquisition. **Liem T. Nguyen:** Writing – review & editing, Supervision, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

REFERENCES

1. Målqvist M, Lincetto O, Du NH, Burgess C, Hoa DTP. Maternal health care utilization in Viet Nam: increasing ethnic inequity. Bull World Health Organ 2013;91:254–61.

2. Chuong NC, Van Minh H, Thi Thuy Duong D, Duc DM, Anh Dao LT, Duy Anh N. Progress on maternal health care in Vietnam: findings from Vietnam Multiple Indicator Cluster Survey 2000, 2006, 2011, and 2014. Health Care Women Int 2018;39:368–76.

3. Viet Nam Population and Housing Census 2009: age-sex structure and marital status of the population in Viet Nam. General Statistics Office, Ministry of Planning and Investment. 2011. Available at: https://vietnam.unfpa.org/sites/default/files/pub-pdf/6_Monograph-Age-Sex-Structure.pdf. Accessed March 19, 2024.

4. Statistical yearbook of Vietnam 2017. General Statistics Office Vietnam. 2017. Available at: https://www.gso.gov.vn/en/data-and-statistics/2019/10/7559/. Accessed March 19, 2024.

5. Kim ET, Singh K, Moran A, Armbruster D, Kozuki N. Obstetric ultrasound use in low and middle income countries: a narrative review. Reprod Health 2018;15:129.

6. Whitworth M, Bricker L, Mullan C. Ultrasound for fetal assessment in early pregnancy. Cochrane Database Syst Rev 2015;2015:CD007058.

7. Makhlouf M, Saade G. Should second trimester ultrasound be routine for all pregnancies? Semin Perinatol 2013;37:323–6.

8. Bashour H, Hafez R, Abdulsalam A. Syrian women's perceptions and experiences of ultrasound screening in pregnancy: implications for antenatal policy. Reprod Health Matters 2005;13:147–54.

9. Tautz S, Jahn A, Molokomme I, Görgen R. Between fear and relief: how rural pregnant women experience foetal ultrasound in a Botswana district hospital. Soc Sci Med 2000;50:689–701.

10. Edvardsson K, Graner S, Thi LP, et al. 'Women think pregnancy management means obstetric ultrasound': Vietnamese obstetricians' views on the use of ultrasound during pregnancy. Glob Health Action 2015;8:28405. https://doi.org/10.3402/gha.v8.28405.

11. Holmlund S, Lan PT, Edvardsson K, et al. Sub-optimal use of ultrasound examinations may result in underperformance of Vietnamese maternity care – a qualitative study of midwives' experiences and views. Sex Reprod Healthc 2020;24:100508.

12. Ibrahimi J, Mumtaz Z. Ultrasound imaging and the culture of pregnancy management in low-and middle-income countries: a systematic review. Int J Gynaecol Obstet 2024;165:76–93.

13. Gammeltoft T, Nguyen HTT. The commodification of obstetric ultrasound scanning in Hanoi, Viet Nam. Reprod Health Matters 2007;15:163–71.

14. Completed results of the 2019 Viet Nam population and housing census.General Statistics Office Viet Nam 2020. Available at: https://www.gso.gov.vn/wp-content/uploads/2019/12/Ket-qua-toan-bo-Tong-dieu-tra-dan-so-va-nha-o-2019.pdf. Accessed June 13, 2024.

15. WFUMB policy and statements on safety of ultrasound. Ultrasound Med Biol 2013;39:926–9.

16. Maternal health in Viet Nam. World Health Organization. 2023. Available at: https://www.who.int/vietnam/health-topics/maternal-health. Accessed January 29, 2024.

17. Mcclure E, Goldenberg R, Swanson D, et al. Routine antenatal ultrasound in low/middle income countries: a cluster randomized trial. American Journal of Obstetrics and Gynecology 2017;216:S3. https://doi.org/10.1016/j.ajog.2016.11.004.

18. Groen RS, Leow JJ, Sadasivam V, Kushner AL. Review: indications for ultrasound use in low- and middle-income countries. Trop Med Int Health 2011;16:1525–35.

19. Gonzaga MA, Kiguli-Malwadde E, Businge F, Byanyima RK. Utilisation of obstetric sonography at a periurban health centre in Uganda. Pan Afr Med J 2010;7:24.

20. National guidelines for reproductive health care services. Ministry of Health. 2009. Available at: https://platform.who.int/docs/default-source/mca-documents/policy-documents/guideline/VNM-CC-10-01-GUIDELINE-2009-eng-National-Guideline-for-RH-Services.pdf. Accessed January 29, 2024.

21. Viet nam's voluntary national review on the implementation of the sustainable development goals. Government of Vietnam. 2018. Available

at: https://vietnam.un.org/sites/default/files/2019-06/Viet%20Nam%202018%20VNR_English %20%281%29.pdf. Accessed March 27, 2024.

22. Nguyen TT, Tran TD, Tran T, La B, Nguyen H, Fisher J. Postpartum change in common mental disorders among rural Vietnamese women: incidence, recovery and risk and protective factors. Br J Psychiatry 2015;206:110–5.

23. Fisher J, Tran T, Duc Tran T, et al. Prevalence and risk factors for symptoms of common mental disorders in early and late pregnancy in Vietnamese women: a prospective population-based study. J Affect Disord 2013;146:213–9.

24. The report figures on ethnic minority women and men in Viet Nam 2015–2019. United Nations in Viet Nam. 2021. Available at: https://vietnam.un.org/en/149838-report-figures-ethnic-minority-women-and-men-viet-nam-2015-2019. Accessed January 3, 2024.

25. Lakin K, Ha DT, Mirzoev T, Ha BTT, Agyepong IA, Kane S. "We can't expect much": childbearing women's 'horizon of expectations' of the health system in rural Vietnam. Health Place 2024;85:103166.