Case Study and Policy Analysis in Enhancing Midwifery Students' Understanding of the International Code of Marketing of Breastmilk Substitutes

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ABSTRACT

Background: The International Code of Breastmilk Substitutes (the Code), adopted by the World Health Assembly in 1981, remains a cornerstone in protecting breastfeeding from inappropriate commercial influence. Purpos of study: This study aims to evaluate the combined use of case study and policy analysis methods in enhancing midwifery students' understanding of the Code. Methods: This qualitative study applied a dual-method approach case study and policy analysis to enhance student understanding of the Code within the context of Indonesia. Case reports of Code violations were documented by midwifery students through field assignments, while a policy analysis component utilized lecture materials, government regulations (PP 33/2012; Ministry of Health regulation 39/2013), and WHO/UNICEF guidance. Results: Findings demonstrate that combining casebased learning with structured policy analysis significantly improved students' ability to identify Code breaches, link them to specific articles, and recommend appropriate reporting and advocacy measures. This approach not only strengthened academic learning but also fostered professional advocacy skills. Conclusion: The study concludes that integrating case study and policy analysis into midwifery curricula can be an effective pedagogical model to prepare health professionals as protectors of breastfeeding rights in line with international and national commitments.

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1. INTRODUCTION

Breastfeeding is universally recognized as the optimal form of infant nutrition, contributing to child survival, maternal health, and long-term human development. Evidence shows that exclusive breastfeeding could prevent up to 823,000 child deaths and 20,000 maternal deaths annually

worldwide (Victora *et al.*, 2016). However, aggressive marketing of breastmilk substitutes (BMS) undermines breastfeeding practices, particularly in low- and middle-income countries (Rollins *et al.*, 2016). To address these threats, the International Code of Marketing of Breastmilk Substitutes (hereafter, "the Code") was adopted by the World Health Assembly in 1981 (WHO, 1981). The Code establishes ethical standards for the marketing and distribution of infant formula, follow-on milk, bottles, and teats, prohibiting direct promotion to the public, distribution of free samples, and sponsorship of health workers. Despite being a non-binding instrument, the Code has been reinforced by subsequent WHA resolutions and incorporated into national laws in many countries, including Indonesia (WHO and UNICEF, 2020; WHO, 2025). In Indonesia, the Code has been translated **into** legal frameworks, such as: PP No. 33/2012 on Exclusive Breastfeeding (Government Regulation) MOH Regulation No. 39/2013 on Formula Milk and Other Baby Products MOH regulation No. 49/2014 on Growing-Up Formula (1–3 years).

These regulations prohibit free distribution of formula, promotion in health facilities, misleading advertising, and cross-promotion. Nonetheless, violations remain prevalent. For example, case findings by midwifery students documented formula displays in supermarkets and influencer marketing on Instagram promoting formula milk for young children—both practices in breach of Code Articles 5 and 7. Midwifery education plays a critical role in equipping future professionals with the ability to recognize and act upon Code violations. Traditional lectures provide theoretical grounding, but students often struggle to connect abstract principles with real-world practice. Educational research suggests that case study methods encourage active learning, critical thinking, and problem-solving (Lau *et al.*, 2016), while policy analysis sharpens students' ability to interpret regulatory frameworks and apply them to practice (Walt *et al.*, 2008).

This study aims to evaluate the combined use of case study and policy analysis methods in enhancing midwifery students' understanding of the Code. Specifically, it explores: How case study assignments (field-based observation of Code violations) contribute to students' recognition of unethical marketing.; How structured policy analysis of WHO and national regulations deepens students' ability to contextualize and recommend actions.; The effectiveness of combining these pedagogical approaches in strengthening advocacy competencies among midwifery students. By focusing on student experiences in documenting Code violations and analyzing related policies, this study contributes to educational innovation in midwifery and provides insights for strengthening professional roles in breastfeeding protection.

2. METHODS

This study employed a qualitative research design combining two complementary approaches: Case study method to capture real-world examples of Code violations through student field assignments. Policy analysis method to examine the legal and regulatory frameworks that govern marketing of breastmilk substitutes in Indonesia and to interpret how these apply to identified cases. This dual-method approach aligns with pedagogical innovations in midwifery education that emphasize experiential learning and critical engagement with policy (JW and JD, 2018; Shapu *et al.*, 2022). The study was conducted within the undergraduate Midwifery Program at Universitas Respati Indonesia (URINDO). Participants were midwifery students enrolled in the Lactation Management course, facilitated by the course lecturer. Students were tasked with documenting real or digital cases of Code violations, analyzing them according to relevant Code articles, and proposing advocacy actions.

Data were drawn from two main sources: case study reports; students documented observed violations of the Code, both in offline settings (e.g., supermarkets) and online platforms (e.g., Instagram); Reports included product information, company names, type of violation, supporting evidence (photographs/screenshots), and linkage to specific Code articles; For example, one case documented formula milk displays at a Jakarta supermarket (violation of Article 5.1 prohibiting point-of-sale promotion), while another reported influencer-led formula advertising on Instagram

(violations of Articles 5.1 and 7.2 prohibiting direct promotion and health professional involvement). Policy Documents and Lecture Materials; Lecture notes and teaching materials on the International Code, WHO/UNICEF guidelines, and Indonesian regulations (PP 33/2012, MOH regulation 39/2013, MOH regulation 49/2014) were used as the basis for policy analysis.; Supplementary global sources were also referenced, such as WHO's Guidance on ending inappropriate promotion of foods for infants and young children (WHO, 2023) and the Lancet Breastfeeding Series (Coovadia et al., 2007). This educational study was conducted as part of coursework without direct human subject involvement. But the authors have accepted the ethical clearence form the Ethic Institution from University of Respati Indonesia in 2025.

3. FINDINGS AND DISCUSSION

The specific results showed in this table:

Tabel 1. The finding from the case study method

Case	Product / I	Platform /	T AND A	Code Article(s)	Student
		Location	Type of Violation	Violated	Recommendation
1	Soy (PT S	Supermarket,	Point-of-sale promotion (display & marketing materials in store)	•	Report to Health Office & BPOM; Educate store owners; Routine monitoring
2	Morinaga Chilkid Gold I (Morinaga @ Indonesia)	nstagram @morinaga_id	Digital marketing & influencer promotion	Article 7.2 (no promotional engagement with	Request platform takedown; Strengthen
3	milk (various o	FV & retail cross- promotion	(branding similarity between infant formula	1 0 0	Advocate stronger regulation on labeling; Consumer education
4	clinics (Health facility general example)	Free samples/distribution	Article 5.2 & 5.4 (no samples to families or health workers)	Encourage enforcement of PP 33/2012 sanctions
5	,	professional	Conflict of interest & sponsorship	Article 7.2 & WHA 49.15 (ban on sponsorship)	Promote professional independence; Reporting to professional associations

The student case studies revealed that Code violations continue to occur across offline retail environments and digital media platforms. Offline violations were primarily related to in-store product displays and promotions, directly contravening Article 5.1 of the Code. Such promotional tactics normalize formula visibility and subtly equate it with routine consumer goods, undermining exclusive breastfeeding messaging. Online, violations took more sophisticated forms. The use of social media influencers and emotional narratives (e.g., portraying mothers bonding with toddlers while consuming formula) represents a powerful marketing strategy. These tactics exploit parental aspirations and emotional vulnerabilities, in direct violation of Code Article 5.1 (ban on advertising) and 7.2 (ban on using persuasive figures to promote formula). This reflects a growing challenge:

digital marketing of formula is more pervasive, harder to monitor, and less regulated than traditional advertising (Piwoz and Huffman, 2015; WHO, 2025)

The policy analysis highlighted that Indonesia has a strong legal foundation through PP 33/2012 on Exclusive Breastfeeding and subsequent ministerial decrees (MOH regulation 39/2013, 49/2014). These regulations mirror the Code by prohibiting free samples, discounts, health worker involvement, and misleading advertising. However, enforcement remains inconsistent. Supermarket displays continue despite clear bans on point-of-sale promotions; Digital marketing is not sufficiently covered in national laws, leaving gaps in addressing influencer-led campaigns; Cross-promotion between infant formula and growing-up milk exploits labeling loopholes, blurring distinctions for consumers; Sponsorship of health workers/events persists subtly, undermining professional independence. Students noted that while laws exist, monitoring and sanctions are weak, creating a disconnect between policy content and practical enforcement.

The case study and policy analysis exercise had significant educational benefits: Critical observation skills; Students became adept at identifying subtle marketing tactics (e.g., cross-branding, influencer persuasion). Policy literacy; By mapping cases to Code articles and Indonesian law, students deepened their understanding of legal frameworks. Advocacy orientation Students developed practical recommendations, such as reporting mechanisms (via *PelanggaranKode* platform), educating store owners, and strengthening social media oversight. Professional identity; The exercise reinforced students' roles as future midwives not only in clinical care but also as guardians of breastfeeding rights. In short, the findings show that the integration of real-world case study documentation with structured policy analysis creates an effective pedagogical tool for bridging classroom learning with professional advocacy.

Discussion

The findings of this study are consistent with global evidence showing persistent violations of the International Code of Marketing of Breastmilk Substitutes. Research indicates that formula companies spend billions annually on marketing strategies that undermine breastfeeding (Baker *et al.*, 2016, 2021, 2023). Such strategies include aggressive promotion, cross-branding, health claims, and increasingly, digital marketing through social media influencers (WHO and UNICEF, 2020; Pérez-Escamilla *et al.*, 2023).

Despite the Code's adoption in 1981 and subsequent WHA resolutions, violations remain widespread. A recent WHO/UNICEF monitoring report found that over 70% of countries still report inappropriate promotion of formula products. (WHO; UNICEF, 2019; WHO and UNICEF, 2020, 2021). This underscores the gap between normative global standards and practical enforcement Our study adds to this literature by showing that in Indonesia, both traditional (supermarket displays) and modern (Instagram influencer campaigns) violations are easily observed by students in their everyday environment. This demonstrates how pervasive formula marketing has become, influencing maternal decision-making at multiple levels.

This study illustrates the pedagogical value of combining case study and policy analysis methods in midwifery education. Case Study Method: Encouraged active learning by requiring students to observe, document, and analyze real-world violations. Case study approaches foster critical thinking and contextual understanding that cannot be achieved through lectures alone. Policy Analysis Method: Strengthened students' ability to interpret laws, link cases to specific Code articles, and critically assess enforcement. Walt & Gilson's (1994) policy analysis triangle proved useful for unpacking the content, context, actors, and process of Indonesia's Code-related policies. (Walt *et al.*, 2008; Siregar, Pitriyan and Walters, 2018). Integration of Both: By linking observed violations with policy frameworks, students not only recognized unethical marketing but also developed advocacy-oriented solutions (e.g., reporting channels, consumer education, regulatory strengthening). This integration aligns with adult learning theories that emphasize problem-based and applied learning. Overall, the dual-method approach transformed passive learning into experiential professional preparation, equipping future midwives with both technical knowledge and advocacy skills.

Findings from this study also highlight critical policy implications: Need for stronger enforcement of existing regulations; While Indonesia has a robust legal framework (PP 33/2012, MOH regulation 39/2013, MOH regulation 49/2014), enforcement mechanisms are weak. Monitoring should be systematic, with clear sanctions applied for violations. Regulation of digital marketing; Current Indonesian policies focus largely on print and broadcast media. As students' findings show, social media promotions via influencers are a major gap. Policy must evolve to address these new marketing channel (WHO, 2025). Cross-promotion loopholes; the use of similar branding for formula products across different age categories misleads consumers. Regulatory frameworks should prohibit brand continuity between infant formula and follow-up or growing-up milk (Piwoz and Huffman, 2015; Pries et al., 2016). Conflict of interest in health sector; Sponsorship of professional events by formula companies continues to undermine health worker independence (Henjum et al., 2017; Hernández-Cordero et al., 2019; Michaud-Létourneau, Gayard and Pelletier, 2019; WHO, 2020). Stronger enforcement of bans on sponsorship and clearer professional guidelines are needed. Community-based advocacy; Platforms such as PelanggaranKode (https://pelanggarankode.org) provide an accessible channel for community reporting. Midwives and students should be trained to utilize such mechanisms, strengthening grassroots monitoring.

Midwives play a pivotal role as protectors of breastfeeding. Beyond clinical skills, midwives must be able to: Recognize inappropriate marketing practices; Counsel families with accurate, evidence-based information; Report violations through official mechanisms; Engage in community advocacy to protect breastfeeding rights. Integrating case study and policy analysis into curricula prepares midwifery students to fulfill this role. It empowers them as advocates against corporate practices that compromise maternal and child health. This aligns with the WHO's Global Strategy for Infant and Young Child Feeding (2003) which emphasizes the role of health professionals in promoting and protecting breastfeeding.

Several limitations should be acknowledged: Sample size and scope – Data were limited to student assignments within a single institution, which may not represent the full diversity of Code violations in Indonesia. Depth of policy analysis; While lecture materials and regulations were analyzed, more comprehensive review of enforcement data and stakeholder perspectives would strengthen the analysis. Lack of longitudinal data. The study captured observations at a single point in time. A longitudinal design could explore whether educational interventions sustain student advocacy behaviors over time. Potential observer bias; Students may have selectively reported more obvious violations while subtler forms of marketing (e.g., packaging design, corporate social responsibility activities) may have been overlooked. Despite these limitations, the study provides valuable insights into both the learning process and the state of Code implementation in Indonesia.

4. CONCLUSION

This study demonstrates that combining case study and policy analysis methods can significantly enhance midwifery students' understanding of the *International Code of Marketing of Breastmilk Substitutes*. By documenting real-world violations and linking them to both international and national legal frameworks, students developed not only academic knowledge but also critical advocacy skills. The findings showed that Code violations remain widespread in Indonesia, including supermarket product displays, social media influencer promotions, cross-promotion tactics, and sponsorship of health events. Despite a strong regulatory framework (PP 33/2012, MOH regulation 39/2013, MOH regulation 49/2014), gaps in enforcement and digital marketing oversight persist, undermining breastfeeding protection efforts. For midwifery education, this dual-method pedagogical approach proved effective in: Cultivating critical observation skills for detecting violations; Strengthening policy literacy and regulatory interpretation; Instilling advocacy orientation through practical reporting and recommendation exercises; Reinforcing professional identity as protectors of breastfeeding rights. For policy and practice, the study emphasizes the urgent need to: Strengthen enforcement of existing laws.; Expand regulation to address digital and influencer

marketing; Close loopholes on cross-promotion and labelling; Prevent conflicts of interest between formula companies and health professionals; Empower communities and professionals through accessible reporting platforms such as *PelanggaranKode*.

In conclusion, integrating case study and policy analysis into midwifery curricula should be considered a best practice for preparing future health professionals. This approach equips midwives not only as clinicians but also as advocates in the global effort to protect, promote, and support breastfeeding in line with WHO/UNICEF standards and Indonesia's legal commitments.

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Conflicts of Interest: The authors declare no conflict of interest. The study was conducted as part of an educational assignment and received no external funding. All observations were based on publicly available information, and no commercial entities had any role in the design, data collection, analysis, or reporting of this study.

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