

# Developing a Lactation Case Report or is it a Case Study?

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## **Keywords**

breastfeeding, breastfeeding experience, breastfeeding promotion

Case reports are important contributions to the literature within the health sciences, predominately medicine and nursing; whereas case studies are more usual in the applied social sciences (e.g., social work, psychology). There are distinctly different approaches used in case reports and case studies.

Case reports are familiar ways of sharing events or efforts of intervening with single patients with previously unreported features . . . case study research encompasses a great deal more complexity than a typical case report and often incorporates multiple streams of data combined in creative ways. The depth and richness of case study description helps readers understand the case and whether findings might be applicable beyond that setting (Alpi & Evans, 2019, p. 1).

Although commonalities exist between case reports and case study guidelines and preferences for what is important, content varies within different fields. In developing the JHL guidelines that best suit the nature of what lactation care providers concern themselves with, we have taken into consideration the unique nature of clinical lactation practice, as well as the needs of clinical practitioners.

As the editorial team at JHL developed our guidelines for case reports/studies, it soon became apparent that our specialty field was unique for several important reasons. First, the subject of the case was not usually a single person, rather a dyad and family actively involved in both physiological and psycho-social processes over an extended period of time. Thus, physical and mental health domains had to be addressed in each case, often requiring inclusion of both quantitative and qualitative data. Second, multiple levels of licensed and unlicensed health care providers would most likely be involved in the care of the dyad and family. As teaching tools, case studies are valued by our readers as examples of lactation interventions that might be incorporated into their own practices; therefore, details about the education and counseling techniques are as valuable as are details about other types of interventions. Additionally, the social and geographical environment within which the dyad, family, and lactation care providers operated is extremely important given our international readership, which comprises people who live in many circumstances very different from that of where the case took place. In lactation, each case may have commonalities with others but is a unique intersection among particulars of time, place, dyad, and family. It became clear that we would need to meld the most appropriate content from medicine and nursing case reports and from social science case studies into a lactation-specific case study format.

Case reports and studies are both types of descriptive observational research. Therefore, authors need to exercise more rigor in the conduct and reporting of this type research than would be expected of a personal narrative or story. A systematic and precise description of relevant information presented, using research terminology and methods, is required. Although case reports, as defined in the medical and nursing literature, are quantitative in nature; the mixed methods approach used in case studies is a better fit for the nature of work that lactation providers do. Lactation "practice is one of dynamic interaction with clients, with a particular focus on outcomes in the real world of physical, social, and spiritual participation" (Tomlin & Borgetto, 2011, p. 189).

Case reports are ranked low on the evidence-based pyramid established in the early 1990s by medical professionals to evaluate the relative reliability of evidence for use in their clinical practice (Smith & Rennie, 2014). Case studies, which were a later adaptation of the original evidence-based hierarchy, share the same ranking in the levels of evidence. "In contrast to other research designs, such as surveys or experiments, a key strength of case study is that it allows the researcher to adopt a holistic

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Table I. JHL's Required Components of a Case Study.

Component	Content Within Each Component				
Abstract (250 words)	<ul> <li>Introduction—What is unique about this case and why is it important within the socio-cultural context of the breastfeeding dyad and family?</li> <li>Main issue—Major lactation issue including the important clinical findings</li> <li>Management—The actions taken and outcomes</li> <li>Conclusion—What are one or more "take-away" messages?</li> </ul>				
Introduction	<ul> <li>Brief summary as to why this case is unique in the lactation literature using current evidence</li> <li>Socio-cultural context is important and described it clearly</li> <li>End this section with a statement about IRB approval<sup>a</sup></li> </ul>				
History & Observational Assessment	<ul> <li>De-identified demographic and other relevant historical and observational information</li> <li>Main concerns and presenting signs and symptoms of the major issue for the breastfeeding/lactation issue for this family</li> <li>Relevant past intervention(s) and their outcomes</li> <li>End this section with a summary paragraph of the evaluation of the history and observational assessment</li> </ul>				
Management	<ul> <li>Types of interventions with specific timeframes and rationales, including any referrals or consultations</li> <li>Changes made to the original management with their rationales</li> <li>Follow-up actions taken</li> </ul>				
Outcome(s)	<ul> <li>Clinician and client assessment of outcomes. It is appropriate to use quotes, as needed.</li> <li>Adherence to and tolerance of the management regime</li> <li>Adverse and unanticipated events</li> </ul>				
Discussion	<ul> <li>Critical analysis of the process and outcomes of the management</li> <li>Discussion of the relevant literature</li> <li>Strengths and weaknesses of the management approach</li> <li>Main "take-away" lesson(s) learned</li> <li>Rationale for your conclusions</li> </ul>				
Conflict of interest statement	<ul> <li>Must be specified for each author</li> <li>Include any financial relationship that any author has with any sponsoring organization</li> <li>Include the for-profit interests the organization represents</li> <li>Include relationships with any for-profit product discussed or implied in the text of the article</li> <li>Include any commercial or financial involvements that might represent an appearance of a conflict of interest</li> </ul>				
References	<ul> <li>Format according to APA Style Manual (7th Edition)</li> <li>All references should be the most current available (preferably no older than 5 years), with the exception of classic articles in the field</li> </ul>				
Timeline (required)	<ul> <li>May use either a figure or a table format</li> <li>Create a chronological summary of the case in table or figure format to help readers understand the timeframes involved in this case</li> <li>See examples</li> </ul>				

Note. Specific directions for tables, figures, and photographs can be found in the JHL Author Directions. Adapted from: Riley et al. (2017); Rison (2013) and CARE Group (2017) CARE (CAse Report) case report guidelines http://www.care- statement.org/resources/checklist alnostitutional Review Board approval is not necessary for all case studies, but a statement about why it was or was not done it. A consent to publish

is required, which is a statement acknowledging that the person or persons discussed in the case have provided their written consent for publication of the case, and have read and approved of the case as submitted to the Journal. This consent must remain with the author(s); however, it can be requested by the JHL Editor in Chief at any time (Barbour, 2016).

approach—rather than an isolated approach" (Fàbregues & Fetters, 2019, p. 1). Indeed, case studies often have been cited by our readers as one of the most useful types of articles we publish. In a practice profession where the first person to see the dyad and identify lactation issues often is an IBCLC (International Board Certified Lactation Consultant) or a lactation support person (e.g., peer counselor, nutrition counselor,

Certified Lactation Counselor), whose clinical experience may be limited to more common lactation issues, case studies offer important information about unusual, complex, or otherwise significant situations. A further layer of complexity is added when one acknowledges that lactation care providers may have professional licensure (e.g., MD, RN, RD, MBBS), which changes their scope of practice legally. The clinical lactation

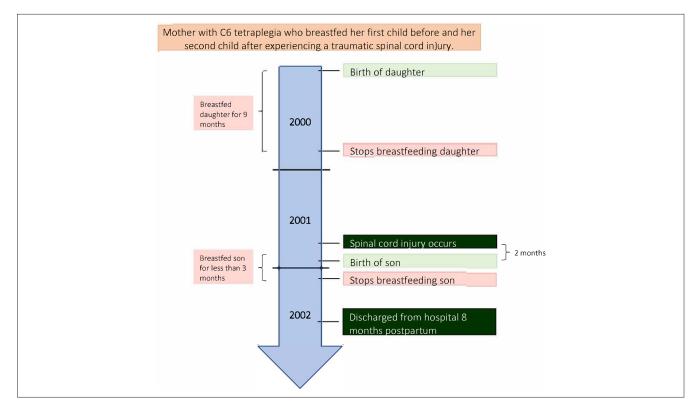


Figure 1. Breastfeeding and spinal cord injury timeline.

Note. This figure indicates the relative timing of the participants' two child deliveries, her spinal cord injury, and breastfeeding cessation (Lee et al., 2019).

field encompasses many different levels of knowledge and expertise, along with levels of practitioners, than does many other professions. One cannot assume a set body of knowledge or experience within any one practitioner.

# **Components of a Lactation Case Study**

The research aim or purpose of a lactation case study is to describe the course of infant feeding within a specific dyad and family in order to explain an unusual situation and/or course of treatment. They are valuable learning tools for clinicians and educators because of the picture they paint of a single dyad's journey from before the issue to resolution of the issue. For researchers, the value of these learning tools lies in the identification of possible researchable questions. Therefore, a case study must contain enough contextual description and detailed specificity about the lactation issue to paint that picture.

In developing our author guidelines for lactation case studies, we started with adapting the international standard set by the CARE (CAse Report) Case Report Guidelines (CARE Group, 2017) by adding qualitative components necessary to understand the dynamics of the lactation situation. Our required content, along with the major components within cases' study manuscripts, are presented in Table 1. Unlike other research manuscripts, case studies need to have

a timeline, which can take the form of a figure or a table (see Figure 1 and Table 2). Due to the longitudinal nature of a case study, a clear visual representation of events over time helps the readers better understand the sequencing and timing of interventions and outcomes.

## **Ethical Considerations**

There are two main ethical concerns to address in preparing a case study: (1) Does this research required approval by an accredited Institutional Review Board (IRB); and (2) Is the consent to publish required from the person(s) discussed in the case? For a case study submitted to JHL, a third ethical issue must also be addressed: (3) Is there compliance with the International Code for the Marketing of Breast-Milk Substitutes (IC). Each issue is addressed below.

The regulations about whether IRB approval is needed when conducting a case study vary considerably worldwide. There is no one unifying rule or guidance about this that is consistently recognized globally, except the Helsinki Declaration: Ethical Principles for Medical Research Involving Human Subjects (The World Medical Association, 2013). Although not legally binding, this document continues to guide the ethical conduct of research worldwide. As an international journal and given that IRB requirements vary among

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Table 2. Example of a Timeline.

	Т		HEALTH-			
TIME- LINE		CARE LEVEL	CARE SETTING	HEALTHCARE INTERVENTIONS	$\triangleright$	MOTHER'S SYMPTOMS, ACTIONS AND OUTCOME
1997		al Care	Delivery room	Premature labor, 3 cm cervix dilation and labor induction	$\triangleright$	Premature birth of son at 36 weeks
1st week		Hospital Care	Maternity ward	Mother-baby separation and bottle feeding of formula in hospital	$\triangleright$	Difficulty initiating breastfeeding: Nipple confusion, refusal of baby to latch
2 weeks	BOY	Hospital discharge	Home	Mother equipped with electric breast pump, but no further instructions or support	Δ	Bottle feeding formula and small amounts of expressed milk Attempts at breastfeeding
1997 at 6 weeks		Commu- nity care	Follow-up care	Lack of follow-up care  Lack of breastfeeding support	Δ	Unintentional weaning following decreased milk supply and persistent latch difficulties
2017		မွ	Delivery room	Support of natural birth	Δ	Term spontaneous birth of baby girl at week 41 after 1 hour of labor
Up to day 2		Hospital care	Maternity ward	Exclusion of tongue/lip tie Latching support in cradle and football positions Nipple shields as treatment of cracked and sore nipples	٥	Cracked and sore nipples from latching baby
Day 3		Hospital discharge	Home	Recommendation of herbal tea as natural remedy to increase milk supply Electric pump provided	Δ	Breastfeeding difficulties: Perceived low supply, sore nipples
Until week 3	T		Midwife home visits	Suggestion to omit nipple shields Before-after-weighing Introduction of formula with feeding schedule recommendation to reach birth weight	▷	Improved latching enables omission of nipple shields, though with some persisting pain  50-80ml of formula in 24h introduced, on top of expressed milk  Baby reaches birth weight on day 18
Day 25	GIR	Community care	LLL leader	Suggests consulting an IBCLC Provides encouragement	<b>&gt;</b>	Mother contacts an IBCLC
Day 26	Community care		IBCLC home visit	Observes vasospasm Demonstrates BN and side-lying Develops 2 phase-intervention Follow-up e-mail offering further support as needed	Δ	Pain-free latch  Mother contributes to the 2-phase plan development  Husband procures second pumping kit
Until week 5			IBCLC follow-up	Frequent email exchange on plan implementation progress, encouragement	Δ	Two consecutive days of power-pumping as immediate intervention Followed by unrestricted BN Re-gaining trust in breastfeeding abilities, reaching personal goal of unsupplemented breastfeeding by increased supply, adequate weight development and enjoyable breastfeeding
Starting from week 6		Peer sup- port group	Visit and exchange with peers and an educated group leader	Δ	Continued peer support, information and exchange fosters breastfeeding exclusivity and duration; enabling the mother to reach her personal breastfeeding goals	

Note: Rosen, 2019.

countries, JHL adheres to the tenants of the Helsinki Declaration, respect for persons, beneficence, and justice. We require evidence of IRB approval if an individual or a group of individuals can be identified by what is written in the case study. Should IRB approval be deemed necessary, journals

may not collect a copy of the consent form, as this would violate confidentiality (Barbour et al., 2016). However, JHL editors will request a copy of the IRB approval letter, which is congruent with the COPE guidance (Barbour, 2016). Therefore, we welcome IRB approval but do not require it for case studies, if authors can document that either an IRB approval has been deemed not necessary by an accredited IRB or by institutional policy. A statement about this needs to be included in the case study (see Table 1).

In 2016, the International Committee on Publication Ethics (COPE) published guidance in the form of best practices for journals concerning the consents needed from the person(s) about whom a case was written, regardless of an IRB approval (Barbour, 2016). JHL is a COPE member and operates in accordance with these COPE guidelines. Barbour (2016) stated "Consent to publishing a case report [study] addresses, specifically, the publication of the case and the possibility that the individual described in it could be identified" (see Definitions sections). This entails two separate consents, first the participant's written consent to be the subject of the case study before data are collected and, second, written consent acknowledging that the participant has read and approved the case study manuscript. "Individuals have the right to control the extent to which personal (including medical) information is revealed, and to whom" (Barbour, 2016, see Definition section). Consent to publish the case study is required by JHL; however, the signed consent is kept by and attested to by the author in a letter sent to the editor, with the understanding that the Editor in Chief can request a copy of this consent at any time (Barbour, 2016). The purpose of the consent to publish, signed by the person(s) whose case is presented, is to ensure that the case study's author(s) has adequately involved and protected the person(s) whom they have written about (Barbour, 2016). A risk of identification is always a possibility and it must be clear that the person(s) about whom the case has been written has been fully informed about and is comfortable with that risk no matter how small.

Lastly, everything that is published in JHL must adhere to the World Health Organization (1981). All manuscripts submitted to us are reviewed through the lens of the IC, as previously stated in the journal (Dodgson, 2016). We review the content of the case study and any funding the authors received, as well as any affiliations the authors may have.

Case studies are essential to advancing knowledge in a practice profession, and lactation is no exception. Case studies are also excellent venues for clinicians and novice researchers to share what works with the broader lactation community. We can all learn a lot from sharing the specifics of complicated or unusual situations that occur in our practices.

#### **Declaration of Conflicting Interests**

The author(s) declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article: None. The author is the Editor in Chief of the Journal of Human Lactation. This article was independently peer reviewed without an influence by the author.

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