Christou, Prokopis A. "Thematic analysis through artificial intelligence (AI)." *Qualitative Report* **29, no. 2 (2024).**

This article explores the integration of AI into thematic analysis. AI should serve as a complementary tool to enhance efficiency and depth in analysis, rather than replace human interpretive skills. The paper outlines opportunities (e.g., automated coding, summarization) and risks (e.g., bias, over-reliance on automation) of using AI in thematic analysis and provides practical criteria for its ethical and effective application. Table 1 details the stages of thematic analysis, the opportunities AI offers at each stage, associated risks, and criteria to mitigate these risks. The article concludes by advocating for a balanced approach where AI supports, but does not overshadow, human analytical expertise.

Christou, Prokopis A. "How to use artificial intelligence (AI) as a resource, methodological and analysis tool in qualitative research?." *Qualitative Report* **28, no. 7 (2023).**

This article examines the role of AI in qualitative research, focusing on its applications as a methodological tool and analytical aid while addressing ethical and reliability concerns. The author provides a five-step framework for researchers to integrate AI responsibly:

1. Familiarize with AI-generated data to ensure the output aligns with research goals.

2. Mitigate bias and ethical risks by critically reviewing AI outputs.

3. Cross-reference AI-produced information with credible sources to verify validity.

4. Maintain control over AI-assisted analysis to preserve methodological rigor.

5. Apply human expertise to interpret results and derive meaningful insights.

The article underscores AI's potential to enhance efficiency in tasks like literature reviews and thematic analysis but warns against over-reliance, advocating for transparency and researcher oversight to uphold research integrity.

Christou, Prokopis A. "A critical perspective over whether and how to acknowledge the use of artificial intelligence (AI) in qualitative studies." *The Qualitative Report* **28, no. 7 (2023): 1981-1991.**

This article centers the debate around acknowledging AI's role in qualitative research. AI tools like ChatGPT are increasingly used for literature reviews, data analysis, and even theory development. However, many researchers hesitate to disclose this assistance, often fearing

skepticism from reviewers or journal editors. The paper makes a case for transparency, arguing that proper acknowledgment maintains academic integrity without diminishing the researcher's contribution. Practical recommendations are offered, such as detailing AI use in methodology sections or including disclosure statements, while still emphasizing the irreplaceable value of human critical thinking. Ultimately, the article encourages an open, balanced approach that embraces AI's potential while ensuring research remains rigorous and ethically sound.

Hamilton, Leah, Desha Elliott, Aaron Quick, Simone Smith, and Victoria Choplin. "Exploring the use of AI in qualitative analysis: A comparative study of guaranteed income data." *International journal of qualitative methods* **22 (2023): 16094069231201504.**

This study explores the potential of ChatGPT to assist in qualitative research analysis by comparing its performance with human-generated analyses. While there was overlap in themes, human coders captured nuanced motivations like family and faith, as well as broader structural issues, which ChatGPT missed. However, ChatGPT highlighted specific economic concerns and parenting struggles that humans overlooked. The study concludes that AI can efficiently process large datasets and uncover hidden patterns, but human analysis remains crucial for depth, context, and interpretive flexibility. The authors suggest that AI tools like ChatGPT should complement, not replace, human researchers. Future research could refine AI's role by feeding raw transcripts directly into the system or integrating AI-generated themes into collaborative discussions.

Leung, Tiffany I., Taiane de Azevedo Cardoso, Amaryllis Mavragani, and Gunther Eysenbach. "Best practices for using AI tools as an author, peer reviewer, or editor." *Journal of Medical Internet Research* **25 (2023): e51584.**

This article outlines best practices for using AI tools like ChatGPT in scientific publishing. It highlights the ethical concerns around AI-generated content, such as inaccuracies, biases, and fake citations, and stresses that AI should never be listed as a coauthor since it can't take responsibility for the work. For authors, transparency is key. They should disclose AI use and fact-check all outputs. Peer reviewers and editors should be cautious with AI to ensure confidentiality and avoid tools that might leak manuscript details. While AI can streamline tasks like summarizing reviews or drafting text, human oversight remains essential to maintain research integrity. The article also shares JMIR Publication policies, which emphasize accountability, transparency, and confidentiality.

Li, Ron C., Steven M. Asch, and Nigam H. Shah. "Developing a delivery science for artificial intelligence in healthcare." *NPJ digital medicine* **3, no. 1 (2020): 107.**

While AI and machine learning (ML) have shown great promise in healthcare, their real-world impact remains limited due to a lack of focus on implementation. The authors propose a "delivery science" for AI, emphasizing that ML models alone aren't enough, and they must be integrated into broader care delivery systems that consider workflows, team dynamics, and user experience. Using examples like an ML model for predicting acute kidney injury, they highlight the need for multidisciplinary collaboration, including process improvement, design thinking, and implementation science. The article also outlines a framework for designing, implementing, and evaluating AI-enabled solutions, stressing that success depends on understanding clinical

contexts, engaging stakeholders early, and continuously monitoring model performance. The authors call for a shift from isolated model development to holistic system design to ensure AI delivers meaningful and sustainable improvements in healthcare.

Trinkley, Katy E., Ruopeng An, Anna M. Maw, Russell E. Glasgow, and Ross C. Brownson. "Leveraging artificial intelligence to advance implementation science: potential opportunities and cautions." *Implementation Science* **19, no. 1 (2024): 17.**

The article discusses how AI can enhance implementation science by speeding up processes, improving equity, and assessing causality. AI technologies like machine learning, natural language processing, and chatbots can automate data collection and analysis, enhance partner engagement, and provide culturally tailored interventions. However, the authors warn about unintended consequences, including biases, inequities, and ethical concerns arising from AI's reliance on potentially flawed or unrepresentative data. They emphasize the need for transdisciplinary collaboration, proactive monitoring, and responsible use of AI to maximize its benefits while mitigating risks. The paper concludes with recommendations for integrating AI into IS research and practice ethically and effectively.

van Manen, Michael. "What does ChatGPT mean for qualitative health research?." *Qualitative Health Research* **33, no. 13 (2023): 1135-1139.**

This article discusses the role of ChatGPT in qualitative health research, suggesting it as both a tool for efficiency and a subject of methodological concern. AI-generated text can support tasks such as coding and thematic analysis. However, it relies on probabilistic modeling, limiting its capacity for meaningful interpretation, particularly in phenomenological studies when lived experience is central. The article highlights ethical considerations, including transparency in AI use and the risk of superficial analysis, while advocating for critical engagement with AI. The authors call for further research to establish guidelines for integrating AI into qualitative inquiry without compromising scholarly depth or integrity. This aligns with broader disciplinary conversations on balancing technological innovation with the foundational principles of human-centered research.