# Turbulent Waiting: Rural Families Experiencing Chemotherapy-Induced Neutropenia

## Purpose/Objectives
To explore how rural families understand and manage the chemotherapy-induced neutropenia (CIN) experience.

## Design
Qualitative, inductive approach using family interviews.

## Setting
Family homes in a rural community in the midwestern United States.

## Participants
A convenience sample (7 families [21 people] who had a family member experiencing CIN) recruited from a regional cancer treatment center.

## Methods
Semistructured family interviews that were recorded on audiotape occurred along with constant, comparative analysis over 12 months. An interdisciplinary research team analyzed the transcribed data using grounded theory methodology.

## Main Research Variable
The family experience of CIN.

## Findings
An overall family process of turbulent waiting with intensified connections was revealed. Families in the study experienced a sense of vulnerability in response to the diagnosis of CIN. Intensified connections existed within and beyond the families to nurses, physicians, and community members, emphasizing the value of relationships for rural families and highlighting trust in their care providers. Waiting for chemotherapy to resume created a sense of turbulence, an unsettling time described by families as “being on a roller coaster” or “dangling.” To manage the period of waiting and protect the neutropenic patient, families developed family caring strategies, including inquiry, vigilance, and balancing. The process of turbulent waiting with intensified connections led families to a reframed family integrity that included an expanded capacity for caring and protecting.

## Conclusions
Rural families understand and manage CIN in a context of vulnerability. The threat posed by cancer is heightened by CIN. Family waiting is a rich, interactive process by which families reemphasize relationships to manage neutropenia and is a process that healthcare professionals should acknowledge.

## Implications for Nursing
Findings suggest the need for further investigation of family caring strategies and for the development of family-level assessment measures in the instance of CIN. Findings contribute to theory development regarding family cancer care and suggest a need to develop an intervention protocol constructed from the perspective of a family-professional partnership.

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The family cancer experience involves perceptions across all points of the continuum: prevention and early detection, diagnosis and treatment, survivorship, and palliative care. Attention to best practices of care for families calls for nurses to acknowledge family responses during all phases of the life-threatening, chronic illness. Research that focuses on including the family as an integral agent of healing in cancer care is vital (Given, 2001). One of the phases that requires attention is that of chemotherapy-induced neutropenia (CIN), a side effect commonly associated with many treatment protocols. Yet the family’s experience and role in managing CIN have received sparse attention in the literature.

Because the primary goal of cancer treatment is cure and cessation of abnormal cell growth, chemotherapy protocols increasingly have been targeted to interrupt multiple stages of rapid cell growth (Hayes, 2001). With the recognition that chemotherapy dosing and dose intensity can make a difference in survival rates for patients with cancer, practitioners are challenged to find methods to increase the percentage of patients treated with at least 85% of the planned chemotherapy dose.

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**Key Points . . .**

- The central phenomenon revealed by the families was the social process of turbulent waiting with intensified connections.
- The rural families in this study experienced a sense of vulnerability in response to the diagnosis of chemotherapy-induced neutropenia that threatened the control families previously may have perceived over their situations.
- Families developed family caring strategies to manage the period of waiting.
- A reframed family integrity emerged that included an expanded capacity for caring and protecting.

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Digital Object Identifier: 10.1188/04.ONF.1145-1152