

CADTH Reference List

# Experiences of Blood Testing for the Management of Clozapine

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## Key Messages

- We found 1 primary qualitative study exploring the significance of socio-therapeutic relationships related to the experiences of people living with schizophrenia engaging with (and clinical caregivers providing) blood testing to monitor hematological side effects within the context of clozapine clinics.
- We did not find any relevant qualitative studies detailing the experiences of non-clinical caregivers of people living with schizophrenia spectrum and other psychiatric disorders regarding blood testing to monitor white blood cell counts for the management of clozapine. We did not identify any mixed-methods studies on the sample or phenomenon of interest.

## Research Question

What literature is available on the perspectives and experiences of people living (or caring for someone) with schizophrenia spectrum and other psychiatric disorders, and their health care providers, regarding blood testing to monitor white blood cell counts for the management of clozapine?

## Methods

### Literature Search Methods

A limited search was conducted by an information specialist on key resources including MEDLINE, Cumulative Index to Nursing and Allied Health Literature (CINHAL), PsycInfo, and Scopus. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medial Subject Headings), and keywords. The main search concepts were clozapine and blood testing. No filters were applied to limit the retrieval by study type. An additional search was conducted on clozapine or blood testing, with CADTH-developed search filters applied to limit retrieval to qualitative studies. Where possible, retrieval was limited to the human population. The search was completed on October 31, 2022 and limited to English-language documents published since January 1, 2017. Internet links were provided, where available.

### Selection Criteria

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in [Table 1](#). Full texts of study publications were not reviewed.

**Table 1: Inclusion Criteria**

Criteria	Description
<b>Sample</b>	Adults ≥ 18 years of age living (or caring for someone) with schizophrenia spectrum disorders (e.g., schizophrenia, delusional disorder, brief psychotic disorder, schizophreniform disorder, and schizoaffective disorder) and other psychiatric disorders that may be treated with clozapine (e.g., bipolar disorder and borderline personality disorder) who have been prescribed the medication, and their health care providers.
<b>Phenomenon of interest</b>	Blood testing (e.g., venipuncture and point of care testing) used to monitor white blood cell counts for the management of clozapine.
<b>Design</b>	Any qualitative design.
<b>Evaluation</b>	Views, experiences, perspectives, and perceptions of ordering and providing, accessing, and engaging with blood testing to monitor white blood cell counts for the management of clozapine.
<b>Research type</b>	Primary qualitative studies; mixed-methods studies with qualitative components (excluding surveys).

## Results

The literature search yielded 330 citations, including 1 primary qualitative study eligible for inclusion.<sup>1</sup> The included ethnography, informed by fieldwork with 43 people living with schizophrenia and 16 clinical caregivers, explores the significance of socio-therapeutic relationships related to the experiences of accessing, engaging with, and providing blood testing to monitor hematological side effects within the context of clozapine clinics.<sup>1</sup> No relevant qualitative studies examining the experiences of family members or non-clinical caregivers were identified. No relevant mixed methods studies were identified.

Additional references of potential interest that did not meet the inclusion criteria or contained insufficient information in the title and abstract to determine eligibility for inclusion are provided in [Appendix 1](#).

## References

### Primary Qualitative Studies

1. Brown, JEH. Relegating Psychosis: Blood Work and "Routine Connection" in the Clozapine Clinic. *Cult Med Psychiatry*. 2020;44(2):263-285. [PubMed](#)

### Primary Mixed Methods Studies

None identified.

## Appendix 1: References of Potential Interest

### Systematic Reviews

- Verdoux H, Quiles C, Bachmann CJ, Siskind D. Prescriber and institutional barriers and facilitators of clozapine use: A systematic review. *Schizophr Res*. 2018;201:10-19. [PubMed](#)

### Additional References

#### Primary Qualitative Studies

- Rezaie L, Nazari A, Khazaie H. Exploration of the Barriers to Clozapine Prescribing in Patients with Treatment-Resistant Schizophrenia: A Qualitative Study [published online ahead of print, 2022 Aug 3]. *J Psychosoc Rehabil Ment Health*. 2022;1-9. [PubMed](#)
- Blagden S, Beenstock J, Auld N, Noblett S, Limmer M. A qualitative exploration of the barriers to and facilitators of clozapine monitoring in a secure psychiatric setting. *BJPsych Bull*. 2021;45(3):134-140. [PubMed](#)  
Note: Clozapine monitoring may include blood testing for the assessment of white blood cell counts.
- Ismail D, Tounsi K, Zolezzi M, Eltorki Y. A qualitative exploration of clozapine prescribing and monitoring practices in the Arabian Gulf countries. *Asian J Psychiatr*. 2019;39:93-97. [PubMed](#)  
Note: Clozapine monitoring may include blood testing for the assessment of white blood cell counts.
- Brown JEH, Dennis S. Actively Negotiating the Mind-Body Divide: How Clozapine-Treated Schizophrenia Patients Make Health for Themselves. *Cult Med Psychiatry*. 2017;41(3):368-381. [PubMed](#)

#### Survey Studies

- Kelly DL, Ponomareva OY, Mackowick M, et al. Feasibility and patient-reported satisfaction using a novel point-of-care fingerstick method for monitoring absolute neutrophil count for clozapine. *Ann Clin Psychiatry*. 2021;33(2):116-123. [PubMed](#)
- Kelly D, Glassman M, Mackowick M, et al. 09.1. SATISFACTION WITH USING A NOVEL FINGERSTICK FOR ABSOLUTE NEUTROPHIL COUNT (ANC) AT THE POINT OF TREATMENT IN PATIENTS TREATED WITH CLOZAPINE. *Schizophr Bull*. 2020;46(Suppl 1):S20-S21. [PubMed](#)
- Kelly DL, Ben-Yoav H, Payne GF, et al. Blood Draw Barriers for Treatment with Clozapine and Development of a Point-of-Care Monitoring Device. *Clin Schizophr Relat Psychoses*. 2018;12(1):23-30. [PubMed](#)
- Gee SH, Shergill SS, Taylor DM. Patient attitudes to clozapine initiation [published correction appears in *Int Clin Psychopharmacol*. 2019 Sep;34(5):273]. *Int Clin Psychopharmacol*. 2017;32(6):337-342. [PubMed](#)