Pharmacogenomic testing for depression: A qualitative study of the perceptions of people with lived experience and professional stakeholders

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BACKGROUND
• As evidence for the clinical utility of pharmacogenomic (PGx) testing for depression accumulates,3-5 issues related to the implementation of this testing into routine clinical care must be considered.6
• Perspectives of key stakeholders (both people with lived experience [PWLE] and professional stakeholders and healthcare providers [P/HCPs]) are critical, but not frequently explored.7
• Our goal was to understand how PWLE and P/HCPs perceive PGx testing for depression, to inform the consideration of clinical implementation within the public healthcare system in British Columbia (BC), Canada.

METHODS
As part of a larger study on PGx testing in BC, we:
• Purposively recruited and conducted one-hour, semi-structured interviews with 1) PWLE and 2) P/HCPs
• Recorded, transcribed and analyzed interviews using interpretive description

RESULTS
• 17 interviews were completed with PWLE (Table 1); 15 interviews were completed with P/HCPs (Table 2).
• Models of PWLE’s and P/HCPs’ perceptions of PGx testing were developed (Figures 1-2), with key messages for their implementation in BC (Box 1).

DISCUSSION & CONCLUSIONS
• Our findings can help inform PGx implementation strategies that have the best chance of being acceptable and effective within BC’s public healthcare system.
• Pre-test counselling should address expectations, limitations and misconceptions of PGx testing.
• PGx test results should be applied in a person-centered manner with appropriate psychiatric care.
• Further research is needed about the accessibility, effectiveness and cost-effectiveness of various implementation strategies that could be used in BC.

The hopes, concerns and needs of people with depression, and their healthcare providers, should be considered when integrating pharmacogenomic testing for depression into routine care.

Box 1. Key takeaways from interviews with PWLE and P/HCPs about the potential implementation of PGx testing for depression in British Columbia, Canada.

People With Lived Experience (PWLE) and Professional stakeholders/Healthcare Providers (P/HCPs):

- PWLE want:
  - No cost, equitable, and easy access to testing
  - Accessible, holistic psychiatric care
  - Informed consent and counselling/ emotional support

- P/HCPs want:
  - Clinical protocols and technological support
  - Concise, economic analysis to support the use of PGx
  - Ongoing evaluation and outcomes monitoring

REFERENCES

Table 1. Demographic information for PWLE.

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Table 2. Demographic information for P/HCPs.

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<tbody>
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<td></td>
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<td>Men</td>
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Figure 1. Visual model of patient perceptions of PGx testing in BC. PWLE describe thinking about the present state of the test itself – whether or not the test is currently useful – and thinking about the possible future use of PGx testing in BC. In both scenarios, there is a cyclical relationship between PWLE’s attitudes (tops and corners) and perceptions of PGx testing and its use before PGx testing is implemented nationally in BC. PWLE expect their thinking about PGx testing to change in the future, around the time of PGx testing implementation. The way people think about PGx testing is influenced by their own personal experiences. PWLE: People With Lived Experience. P/HCPs: Pharmacogenomics.

Figure 2. Visual model of P/HCPs’ perceptions of PGx testing in BC. P/HCPs have hopes and concerns about PGx testing, which influence their perceptions about what additional evidence for PGx testing is needed. There is a further cyclical relationship between P/HCPs’ hopes/concerns for evidence and the way they believe PGx testing can occur in the future. P/HCPs expect their thinking about PGx testing to change in the future, around the time of PGx testing implementation. The way people think about PGx testing is influenced by their own personal experiences. P/HCPs: Professional stakeholders/Healthcare Providers. PGx: Pharmacogenomics.