Workshop to Increase Prescriber Ability to Identify Treatment-Resistant Schizophrenia (TRS) and Clozapine-Eligible Patients

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Background

TRS is usually defined as "persistent moderate psychosis and moderate functional impairment despite 2 antipsychotics trial at > 6 weeks each at adequate therapeutic dose" and **clozapine is a highly effective first line treatment for TRS.** A prior UCSF PPF fellow identified prescriber-level barriers around clozapine use at Chinatown North Beach (CTNB) Clinic, including **inconsistent definitions of TRS** including identifying moderate functional impairment, and **clozapine as "last resort"** (i.e. after several hospitalizations).

Setting: Behavioral health clinic in SF Chinatown that serves adults (18+) and primarily serving Chinese immigrant populations

Intervention Goal and Learning Objectives:

In CTNB, improve provider awareness and ability to apply guidelines for diagnosing TRS and identify clozapine-eligible patients

❶ Describe standard definition and assessment of TRS ❷Recognize SFDPH guidelines on clozapine indications ❸Apply to cases

Methods:

1. Developed prescriber workshop grounded in Adult Learning Theory by prioritizing ***relevance, internal motivation, experience/problem-centered discussion***
2. Conducted a **1.5-hour long case-centered workshop** with all current CTNB prescribers (n=8)

Case #1:

Goal: Familiarize with definitions of TRS and indications for clozapine ***Why this patient?*** *Patient had clear persistent moderate symptoms and hospitalizations/severe functional impairment*

Case #2:

Goal: Establish shared definition of "moderate functional impairment" and "adequate medication trial"
Why this patient? *Younger patient with* ***symptoms and significant social/occupational function, few hospitalizations.*** *Family provides significant wraparound to help her be able to eat, socialize, attend online classes*

Case #3:

Goal: Discuss prescriber decision to consider clozapine
Why this patient? *Patient was on clozapine in China but stopped in US due to monitoring requirements.* ***Stable symptoms*** *for 10 yrs on Risperdal* ***but significant social/occupational impairment*** *due to SMI*

Pre- and Post- Workshop Survey Results

Prescriber Knowledge	% Correct Pre (n=8)	% Correct Post (n=6)
% TRS patients responding to clozapine <3 yrs from dx (correct answer 81%)	12.5%	**75%**
Clozapine is indicated for suicidal behavior in schizophrenia	86%	**100%**
Clozapine is indicated for reducing aggressive behavior	86%	**100%**
Indicated for tardive dyskinesia	75%	**100%**
Prescriber Confidence (0–4 scale)	**Mean Pre (n =8)**	**Mean Post (n=6)**
Confidence diagnosing TRS	2.9	**4.0**
Confidence in clozapine indication	3.0	**4.0**
Belief that clozapine efficacious if started within 3 years	3.0	**4.0**
Preference for using dual antipsychotics vs clozapine for TRS	1.8	**1.8**

Evaluation: Qualitative Themes and Pre- and Post-Intervention Survey

- Analyzed workshop notes to identify overarching themes
- Assessed prescriber knowledge, comfort, and attitude around TRS diagnosis and clozapine indications (n=8)

Key Qualitative Findings

Pre-workshop conceptualizations of TRS focused on multiple hospitalizations, prolonged treatment without improving, inability to hold self together in public
- Objective social/occupational goals not mentioned

Prescribers preferred personalized rather than objective assessment of treatment resistance
Prioritize family and patient view their own function:
- Less likely to consider clozapine if family is satisfied and patient is "stable" at home, even if patient not meeting social/occupational goals (ex. patient difficulty taking care of self without family, using substances, little meaningful relationships)

Prescribers note difficulty reaching adequate dose of med
- Family and patients express fear of increasing dose
- Slow metabolizers may not reach defined doses

Prescribers would consider clozapine if patient is symptomatic enough to benefit, but functional enough to adhere
- Concern cross-titrating may destabilize patients who have stable symptoms but are not achieving functional goals

Conclusions

1. Prescribers showed **hesitance to adopt standard TRS definition of functional goals/impairment**, instead preferred patient/family view of function
2. Prescriber are concerned that cross-titrating to clozapine may destabilize patients with limited functional benefit
3. Workshop **raised prescriber knowledge and confidence** around diagnosing TRS and clozapine, but **did not change preference for using dual antipsychotics vs. clozapine**

Recommendations

- Train prescribers in objective assessment of functional impairment
- Increase prescriber awareness of gap between patient's current function and objective functional goals
- Future TRS- and clozapine-focused workshops