

# Analysis of Interdisciplinary Agreement in a Shared Care Setting

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# Background

- Health care delivery services in Canada are evolving. The move towards professional cooperation in the primary care setting is one step that is being taken, an example of more efficient, improved care
- The Shared Mental Health Care (SMHC) program in Thunder Bay, ON is an example of an effective collaborative mental health program

# Background (Continued)

- The SMHC program under study is located in a primary care clinic and provides psychiatric consultation and brief counselling to mentally ill patients
- Upon referral, clinicians indicated 'clinical concerns' on the referral checklist (RCL) form for each patient (N = 2220) over a 6-year period (2001-2007)

# Background (Continued)

- In a precursor study (Haggarty et al., 2008), the same SMHC program was evaluated for 'symptom improvement' over a 5-year period.
- The study yielded positive results, in that the referred patients exhibited significant reductions in symptoms and enhanced function upon release from the program

# Background (Continued)

- Other studies have looked at agreement between disciplinaries:
  - Miller (2005) found that when primary care workers (physicians and physicians' assistants) and mental health clinicians (psychiatrists and psychologists) diagnosed depressive illness, they agreed 76% of the time
  - Montandon and Harding (1984) found when a group of psychiatrists were evaluated on agreement against groups of other non-psychiatrist clinicians (nurses, psychologists, etc.), the psychiatrists tended to agree the most as a group, offering insight into the similar

# Methods

- SMHC Program:
  - Site includes 2 full-time counsellors (masters and bachelor-level social work) on-site and a psychiatrist 1/2 day a week
  - Team collaborated by means of direct and indirect consultations, prompt notes to primary care physicians (PCPs), phone and email contact, and PCPs were included in treatment preference
  - Treatment duration: 6-8 sessions per course of care, and referrals to other members of SMHC team were made if necessary

# Methods (Continued)

- The PCPs within the clinic upon referral completed the RCL as did each of the subsequent clinicians if engaged in care
- Patients were referred to either counselling (with a social worker) or psychiatry for consultation
- A comparison of agreeability or consistency of priority clinical areas was done between each of the clinical group for all referrals

# Methods (Continued)

- Analysis conducted with a version of Kappa developed by Mezzich et al. (1981)
- This method of analysis is the most suitable, as it gives credit for partial agreements
- Landis & Koch (1977) have interpreted Kappa values in the following manner, based on strength of agreement:  
 $<0.00$  = poor,  $0.00-0.20$  = slight,  $0.21-0.40$  = fair,  $0.41-0.60$  = moderate,  $0.61-0.80$  = substantial

# Methods (Continued)

- RCL was compared for each member of the team
  - PCP = Referral Form
  - Social Worker = Assessment Intervention Form
  - Psychiatrist = Psychiatric Intervention Form

# Referral Checklist (RCL)

## Psychiatric Symptoms

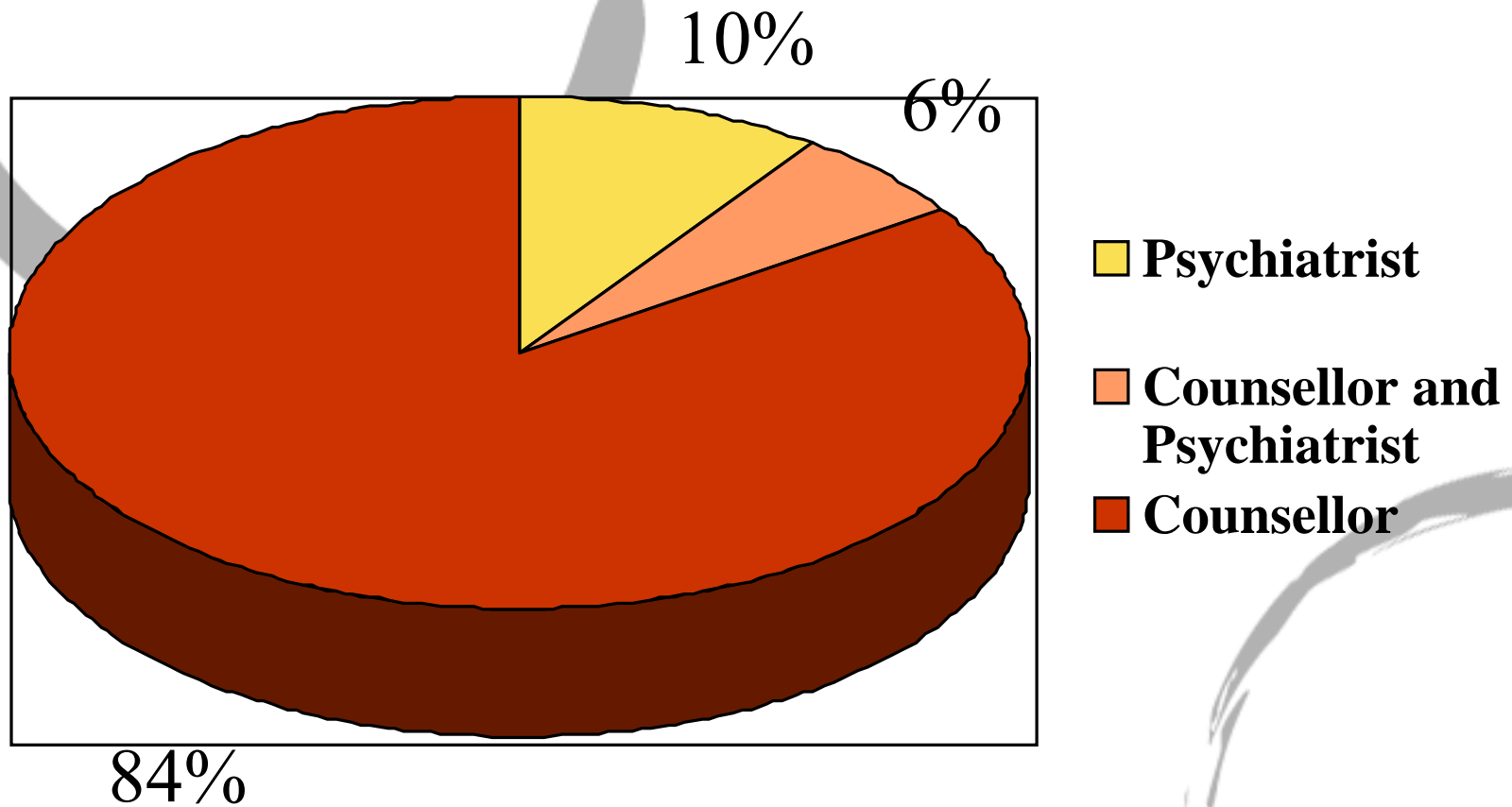
- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Depressed Mood                       | <input type="checkbox"/> Other Anxiety Symptoms                | <input type="checkbox"/> Attention Deficit / Hyperactivity         |
| <input type="checkbox"/> Elevated Mood                        | <input type="checkbox"/> Excessive Somatic Symptoms            | <input type="checkbox"/> Personality Problems: _____               |
| <input type="checkbox"/> Fluctuating Mood (Mood Swings)       | <input type="checkbox"/> Sleep Disturbance                     | <input type="checkbox"/> Unusual Behaviour                         |
| <input type="checkbox"/> Suicidal Thoughts/Actions/Behaviours | <input type="checkbox"/> Delusions                             | <input type="checkbox"/> Alcohol Abuse In Self                     |
| <input type="checkbox"/> Obsessive Thoughts: _____            | <input type="checkbox"/> Hallucinations                        | <input type="checkbox"/> Other Substance Abuse in Self             |
| <input type="checkbox"/> Compulsive Behaviour: _____          | <input type="checkbox"/> Disorganized Thought Processes: _____ | <input type="checkbox"/> Abnormal Eating Behaviours: _____         |
| <input type="checkbox"/> Phobia(s): _____                     | <input type="checkbox"/> Memory Impairment                     | <input type="checkbox"/> Dev. Disability/Mental Retardation        |
| <input type="checkbox"/> Panic Symptoms or Attacks            | <input type="checkbox"/> Confusion                             | <input type="checkbox"/> Other Current Psychiatric Symptoms: _____ |

## Psychosocial Issues

- |   |  |   |                                       |
|---|--|---|---------------------------------------|
| <input type="checkbox"/> Marital/Common-law/Partner Problem | <input type="checkbox"/> Other Family Problems                   | <input type="checkbox"/> Work Problems                        | <input type="checkbox"/> Assault      |
| <input type="checkbox"/> Separation/Divorce                 | <input type="checkbox"/> Illness in Family Member                | <input type="checkbox"/> Accommodation                        | <input type="checkbox"/> Other Trauma |
| <input type="checkbox"/> Other Relationship Issues          | <input type="checkbox"/> Alcohol Abuse in Family Member          | <input type="checkbox"/> Unemployment                         |                                       |
| <input type="checkbox"/> Sexual Problem                     | <input type="checkbox"/> Past Alcohol Abuse in Self              | <input type="checkbox"/> Financial Issues                     |                                       |
| <input type="checkbox"/> Self Esteem                        | <input type="checkbox"/> Lack of Social Support/Social Isolation | <input type="checkbox"/> Legal Issues                         |                                       |
| <input type="checkbox"/> Anger/Temper Control               | <input type="checkbox"/> Physical/Sexual Abuse During Childhc    | <input type="checkbox"/> Other Stressful Events: _____        |                                       |
| <input type="checkbox"/> Bereavement                        | <input type="checkbox"/> Past Physical/Sexual Abuse (Victim)     | <input type="checkbox"/> Insurance Form/Letter to be Prepared |                                       |
| <input type="checkbox"/> Parent/Child Issues                | <input type="checkbox"/> Current Physical/Sexual Abuse (Partner) | <input type="checkbox"/> WSIB Issue                           |                                       |
| <input type="checkbox"/> Child Behaviour Problems           | <input type="checkbox"/> Other Current Abuse: _____              | <input type="checkbox"/> Other: _____                         |                                       |
|   | <input type="checkbox"/> School Problems                         |   |                                       |

# Results

## Services Used



# Results (Continued)

	<b>All 3 Judges</b>	<b>RF vs. AIF</b>	<b>RF vs. PCF</b>	<b>AIF vs. PCF</b>
<b>Psychiatric Symptoms</b>	$P_o = 0.43,$ $P_c = 0.36$	$P_o =$ $0.44, P_c$ $= 0.36$	$P_o =$ $0.32, P_c$ $= 0.34$	$P_o =$ $0.33, P_c$ $= 0.39$
	<b>Kappa =</b> <b>0.10</b>	<b>Kappa =</b> <b>0.12</b>	<b>Kappa =</b> <b>-0.03</b>	<b>Kappa =</b> <b>-0.9</b>
	$T = 10.39$	$T =$ $12.43$	$T = 3.66$	$T = 11.25$
	$Df = 1405$	$Df =$ $1276$	$Df = 251$	$Df = 137$

$P_o$  = Proportion of Observed Agreement

$P_c$  = Proportion of Chance Agreement

# Results (Continued)

	<b>All 3 Judges</b>	<b>RF vs. AIF</b>	<b>RF vs. PCF</b>	<b>AIF vs. PCF</b>
<b>Psychosoci al Issues</b>	$P_o = 0.37,$ $P_c = 0.51$	$P_o = 0.39,$ $P_c = 0.49$	$P_o =$ $0.27, P_c$ $= 0.40$	$P_o =$ $0.25, P_c$ $= 0.63$
	<b>Kappa=</b> <b>-0.27</b>	<b>Kappa =</b> <b>-0.21</b>	<b>Kappa =</b> <b>-0.21</b>	<b>Kappa =</b> <b>-1.00</b>
	$T = 21.49$	$T = 17.25$	$T =$ $18.83$	$T =$ $65.58$
	$Df = 1236$	$Df = 1132$	$Df = 136$	$Df = 106$

$P_o$  = Proportion of Observed Agreement

$P_c$  = Proportion of Chance Agreement

# Discussion

- This study examined the degree of agreement between clinicians in a SMHC program. Although the results indicate low agreement, previous research has shown the data to be effective during the same period the data was gathered.
- Low agreement during early course of care appears to still permit positive outcomes and not be a critical limiting factor
- Collaborative care success may have other factors leading to improving care such as communication, co-

# Discussion (Continued)

- Reasons for low agreement?
  - Differences in education, training and clinical perspectives (medical background for psychiatrists)
  - RCL has many possible responses which may decrease agreeability odds
  - RCL is completed early in care, before clinician can develop substantial relationship with patient
  - Patient sees members of the team at different time frames of clinical assessment

# Conclusion

- Although agreement between clinicians is low, the RCL is only one factor in the program. Low agreement may be sufficient to run a SMHC program effectively, based on previous research
- This study is important in that it may assist program development, as well as better the integration of mental health in the primary care setting

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