

The East Toronto Hepatitis C Program: An Innovative Model for Treating Hepatitis C, Mental Illness & Addictions

Dr. Sanjeev Sockalingam
Psychiatrist, University Health Network
Assistant Professor, Department of Psychiatry
University of Toronto

1st Canadian HIV/HBV/HCV Co-Infection Research Summit
October 30, 2010

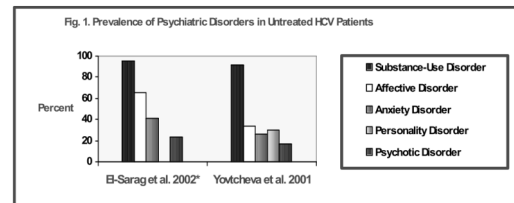
Outline

- Review the challenges with tri-morbidity in the context of hepatitis C
- Identify the limitations of current treatment models for hepatitis C
- Introduce an innovative interdisciplinary model for managing co-morbid substance use and psychiatric illness during hepatitis C treatment

“Difficult to Treat” Patients with Hepatitis C: Addressing Tri-Morbidity



Psychiatric Disorders Among HCV Patients



*Rates include both past and present diagnoses
Both studies involved veterans populations

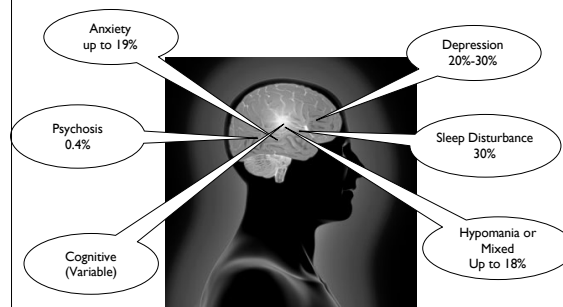
Sockalingam S et al. BJHM 2007; 68: 520-525

HCV & Mental Illness: A Bi-Directional Relationship

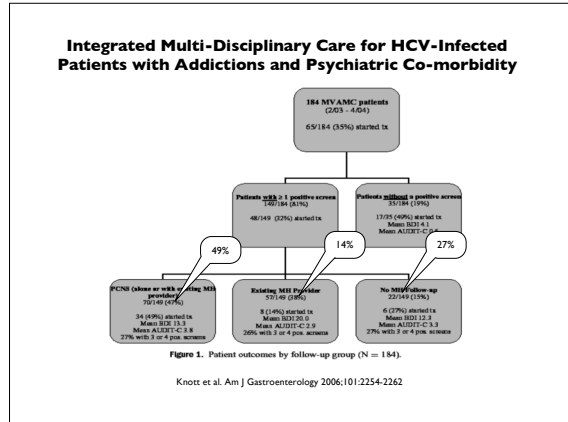
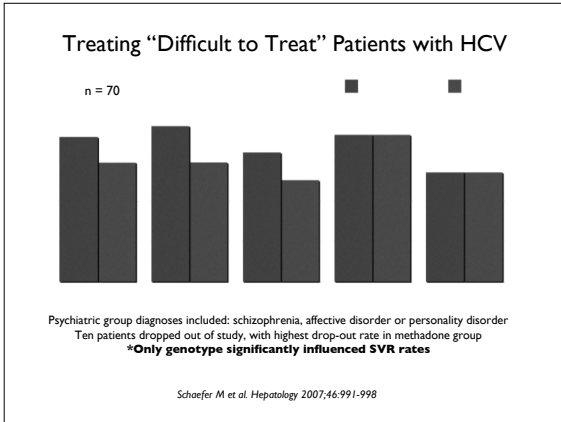
- Homelessness is a risk factor (1.47-fold risk) ¹
- High prevalence of HCV in mentally ill populations vs. U.S. general population (11-fold risk) ²
- High 1-Year Prevalence in psychiatric inpatients (8.5%) ³
- Increased rates in bipolar patients (1.3 fold risk) ⁴
 - 5.46-fold risk if co-morbid substance use
- High prevalence in schizophrenia/schizoaffective disorder patients (3-fold risk) ⁵

¹ Kim C et al. BMC Public Health 2009;9:270; ² Rosenberg SD et al. Am J Public Health 2001;91:31-7
³ Dirwiddie SH et al. Am J Psychiatry 2003;160:172-4; ⁴ Matthews AM et al. Bipolar Disor 2008;10:266-70
⁵ Sockalingam S et al. Schiz Research 2010

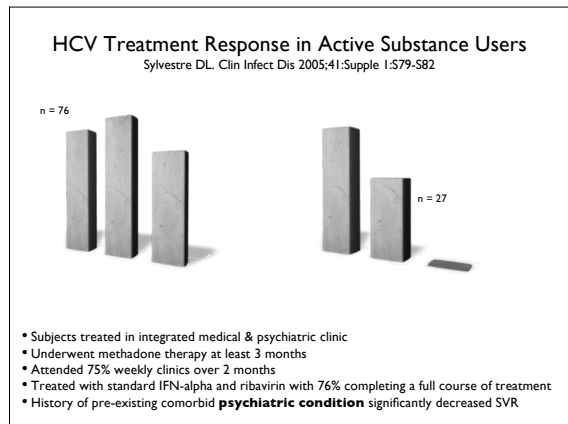
Neuropsychiatric Sequelae of IFN α



Fattovich G et al. J Hepatol 1996;24:38-47; Constant A et al. J Clin Psychiatry 2005;66:1050-1057;
Evan DM et al. Aliment Pharmacol Ther 2008;27:1071-1080; Pawelczyk T et al. Gen Hosp Psych 2008;30:501-508;
Sockalingam S et al. J Clin Gastroenterol 2010;44:38-45



- ### Treating HCV in Current or Former Drug Users in Community Settings
- Baptiste-John A et al. J Viral Hepatitis 2010; 16: 557-567
- Substance use can be a marker of chaotic life circumstances influencing medical treatment adherence
 - Ex: attending liver biopsy appointments
 - Former IDUs may have higher rates of comorbid psychiatric issues, further delaying IFN
 - **OATC (Ontario Addiction Treatment Centres)**
 - Patients treated with methadone maintenance
 - Demonstrated lower SVR in patients with +ve opioid or ETOH use in 6 months before starting IFN α
 - Likely mediated through lower completion rates



- ### Treatment Eligibility Among HCV/HIV Co-infected Patients
- Tertiary care setting ¹
 - More likely to have more than one contraindication to therapy compared to HCV mono-infected patients
 - Depression and ongoing drug/alcohol use more common as contraindication
 - Veterans study ²
 - Negative predictor of starting HCV treatment were history of chronic mental illness and history of hard drug use
- ¹ Butt AA et al. HIV Clin Trials 2009;10:25-32
² Backus LI et al. J Viral Hepat 2006;13:799-810

- ### East Toronto Hepatitis C Program
- The aim of the ETHCP is to expand access to HCV treatment to people who have traditionally faced barriers.
 - We are currently the only program in Toronto that is offering access to treatment to the most marginalized HCV infected substance users
 - Do not require methadone treatment
-

East Toronto Hepatitis C Program - The Partners -



**Regent Park
Community
Health Centre**



The ETHCP Team

- Group Facilitator/Peer Program coordinator
- Case Manager
- HCV Treatment RN
- Family Physician
- Consulting specialists
 - Infectious disease
 - Psychiatrist



Goals of the Program

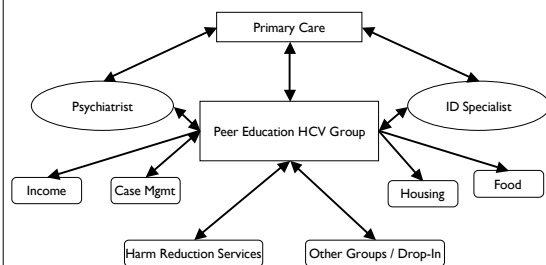
- Build on established relationships serving marginalized communities and specifically illicit drug users
- Foundation is a Peer Education Model developed by Street Health and Community Based Health Centres for Primary Care and HCV treatment
- Specialists move to community based settings and integration into interdisciplinary team structure
- Centralized and coordinated care for this sub-group of patients who are “lost” in traditional HCV treatment programs

Comparison of ETHCP Program vs. Other Comparable Programs for Substance Users Infected with HCV

- | | |
|--|--|
| • Predominance of cocaine use | • Predominance of opioid use |
| • Small proportion on methadone | • Large focus on methadone treatment |
| • Harm reduction approach | • Abstinence predominant focus |
| • Peer education model | • Peer education model |
| • No addiction specialist | • Addictions specialist |
| • Psychiatric services fully integrated in program | • Psychiatrist not routinely part of program |

Sylvestre D et al. Int J of Drug Policy 2007;18:406-410

ETHCP Treatment Model



ETHCP Psycho-Educational Group

- Weekly group sessions and HCV clinics run by interdisciplinary teams at three Health Centres
- Group cycle consists of 16 weeks
- Group size - 15-22 individuals
- Family physicians and specialists participate in groups at some point during the cycle
- Clients offered food, transportation and honoraria

ETHCP Psycho-Educational Groups

- Topics:
 - All about hepatitis C
 - Harm reduction and illicit drug use
 - Alternative and complimentary therapies
 - Nutrition on a fixed income
 - Hepatitis C treatment
 - Coping with treatment side effects
 - Managing psychiatric illness pre- and during hepatitis C treatment
- Support elements of the program include advocacy, case managers, referrals, support with external appointments and housing assistance

Challenges Encountered in Group Model

- Instability of group members' lives
 - Jail, housing, homelessness, relationships, mental health issues, substance use, food security
- Vulnerability of some group members
- Need for intensive social service resources
 - Case management and crisis intervention
- Overcoming fears about medical system
- Level of education

Role of the Psychiatrist in ETHCP Group Intervention

- Groups brings the psychiatrist to members (collaborative care model)
 - Monthly clinics, additional education sessions, email/phone advice
- Pre-screen majority of patients in program based on group facilitator, RN, ID specialist and family physician assessments
- Psychiatric assistance available by phone
- Patients monitored using PHQ-9* and psychiatric re-assessment provided if treatment-emergent psychiatric side effects emerge

* Sockalingam S et al. 2010 (under review)

Patient Perspectives

- *"Ah the support I get from the nurses and ah the workers gives me something to look forward to every Wednesday. I haven't missed a, ever since I've started I don't think I've missed a class once....(I= talk to me about the group) To me it's like talkin' to a shrink, that ah, you get your word in, and you get a lot of feedback, and ah it calms you right down, and ah really helps mentally."*



*Preliminary Data from Qualitative Research Study

Program Outcomes

- **150 participants in group over 3 years**
 - Some patients repeated group cycles
- **25 patients were started on treatment**
 - 8 still on treatment at this time
 - 4 failed to achieve EVR
 - 8 achieved ETR
 - 5 achieved SVR
- **5 deaths (pre- and during treatment)**
 - 1 death may have been treatment related suicide

Summary & Discussion

- Marginalized patient populations who are at highest risk of HCV can receive treatment for HCV using an appropriate model
- The interdisciplinary model of the program is its strength and bridges the gaps in patient access to HCV treatment
- Qualitative feedback supports the ETHCP model and quantitative data is currently being collected