PTSD

Assessment and Management in the Community Setting

Grand River Hospital - Day in Psychiatry
Robyn S. Fallen
PGY5 Psychiatry
McMaster University – Waterloo Regional Campus
November 2016

Assessment and Management of PTSD in the Community Setting

Dr. Robyn Fallen

Declaration of Conflict of Interest:

I DO NOT have any affiliation with any pharmaceutical, medical device or communication organization.

I INTEND to make therapeutic recommendations for medications

that have not received regulatory approval (e.g. “off-label” use).

Assessment and Management of PTSD in the Community Setting

Dr. Robyn Fallen

This **Day in Psychiatry** educational event has received unrestricted educational grants from the following organizations:

Lundbeck

Otsuka

Pfizer

Janssen

Purdue

Shire

Sunovion

KW Guardian Pharmacy

HLS Therapeutics

Assessment and Management of PTSD in the Community Setting

Dr. Robyn Fallen

Mitigating Potential Conflicts of Interest:

Not applicable

I will specifically mention when my therapeutic recommendations have not received regulatory approval.

Introduction

Psychiatry Resident (PGY 5)

- The Working Centre – St. John's Kitchen
  - Psychiatric Outreach Project
- Kitchener Downtown Community Health Centre
- Assertive Community Treatment Team
  - South Wellington (Guelph)
  - Waterloo Regional Homes (Thresholds)
  - Grand River Hospital
- Specialized Mental Health
  - Seniors Team
  - Adult – Inpatient, COTT, Dual Diagnosis
- CAIP, Grand River Hospital
- Homewood - Trillium (Acute Crisis/Stabilization Unit)
- Basic Clinical Training Year

McMaster University, Class of 2012

- Waterloo Regional Campus

Clinical Interests

- Severe and Persistent Mental Illness

- Marginalized / Vulnerable
  - Homeless / Street involved
  - New Canadians / refugees
  - Dual Diagnosis
    - Intellectual Disability and Mental Health concerns

... exposure to trauma is a common comorbidity

Overview

1. Relevance
2. Prevention (?)
3. Diagnosis
    1. Tools for Primary Care
4. Evidence – Supported Treatment
    1. Psychoeducation
    2. Self – Management Strategies
    3. Pharmacotherapy
    4. Psychotherapy
5. Resources

Reflection:

What percentage of individuals in your practice would have met criteria for a diagnosis of PTSD in their lifetime?

In your practice…

< 1 %

1 – 5 %

5 – 10 %

10 – 15 %

> 15 %

Prevalence in Canada

- Lifetime prevalence estimate Canada: 9.2 %
  - Point prevalence approximately 2 %
- Canadians reporting exposure to a significantly traumatic event: > 76 %
- Onset often in mid – late 20s
  - Peak productivity years … trajectory?
- Females 2 : 1 Males

Van Ameringen et al. 2008

In Canada, what is the most common form of trauma resulting in PTSD?

a. Unexpected death of someone else
b. Sexual assault
c. Serious illness or injury to someone close
d. Having a child with a serious illness
e. Being beaten by a partner or caregiver
f. All of the above
g. None of the above

In Canada, what is the most common form of trauma resulting in PTSD?

a. Unexpected death of someone else
b. Sexual assault
c. Serious illness or injury to someone close
d. Having a child with a serious illness
e. Being beaten by a partner or caregiver
f. All of the above
g. None of the above

Van Ameringen et al. 2008

Consequences

PTST is associated with significant:

- Reduced Quality of Life
- Functional Impairment
- Comorbidity
  - Chronic pain
  - Sleep problems
  - Sexual Dysfunction
  - Cognitive Dysfunction

Katzman et al. 2014

Consequences

Risk of suicide attempts is increased 2 – 3 fold by PTSD

Katzman et al. 2014

Consequences

- In primary care populations, PTSD associated with:
  - Longer hospitalizations
  - Greater use of mental health care

Katzman et al. 2014

What proportion of patients with PTSD have another comorbid psychiatric disorder?

a. 10 %
b. 25 %
c. 50 %
d. 75 %
e. 90%

What proportion of patients with PTSD have another comorbid psychiatric disorder?

a. 10 %
b. 25 %
c. 50 %
d. 75 %
e. 90%

Katzman et al. 2014

Comorbidity

- Higher rates of:
  - Other anxiety disorders
  - Major Depressive Disorder
  - Oppositional Defiant Disorder
  - ADHD
  - Substance Use Disorder
    - Alcohol Dependence
  - Borderline Personality Disorder
    - Poorer quality of life
    - More comorbid psychiatric conditions
    - Higher lifetime rates of suicide attempts

Note: Comorbid panic disorder or mood disorder = higher degree of functional impairment than PTSD alone

Katzman et al. 2014

Overview

1. Relevance
2. Prevention (?)
3. Diagnosis
    1. Tools for Primary Care
4. Evidence – Supported Treatment
    1. Psychoeducation
    2. Self – Management Strategies
    3. Pharmacotherapy
    4. Psychotherapy
5. Resources

Case

Case

43 year old woman

Married, 2 kids
Works in sales
Generally healthy
No substance use
No past psychiatric history

Presents for cough
2 days ago woke in the night to smoke alarm
Fire in home – all family members evacuated safely

Are there strategies to reduce the risk of developing PTSD early after the exposure?

First, Do No Harm

- Most don't develop PTSD!
  - Recall: 76 % of Canadians have a lifetime exposure to traumatic event
    - Only 9 % develop PTSD
  - Population – based study following Norway terrorist attacks in 2011
    - 490 survivors followed
    - Only 11 % developed PTSD

Van Ameringen et al. 2008
Dyb et al. 2014

First, Do No Harm

T[illegible]RISK O[illegible]with
[illegible]itical Incident De[illegible]

- Some fo[illegible] early:
  - i. [illegible]ional processing/ve[illegible]n,
  - ii [illegible]uraging recollect[illegible]orking of th[illegible]umatic event
  - ii[illegible]rmalizatio[illegible]tional reaction to[illegible]vent

- Cochra[illegible] 15 RCTs found hi[illegible]rates of conversio[illegible]SD for those rece[illegible]his intervention
  - Odds Ratio (OR)

Rose et al. 2002

Why is debriefing harmful?

- Possible rationale:
  - Vividly recalling /describing details of event in a state of hyperarousal reinforces these neural pathways
  - (Strengthens the association between negative emotional state / physical hyperarousal and the memories of the event)

Pharmacotherapy for prevention

Limited evi to support use of rmacotherapy for preve of PTSD sympto ermath of a traumatic e nce.

Katzman et al. 2014

How to help after an incident

PSYCHOLOGICAL FIRST AID

- Evidence-supported, promoted by WHO
  - Used by Red Cross internationally in disaster responses
- Neutral or reduces risk of conversion to PTSD
  - Awaiting larger trials
- First developed in the 1950s

"A description of a humane, supportive response to a fellow human being who is suffering and who may need support"

Bisson 2014

Psychological First Aid: Approach

1. Active listening
    - Respect desire not to talk
2. Assess physical needs
3. Assess basic needs, ensure they are met
    - Shelter
    - Nutrition etc.
4. Promote positive coping mechanisms
5. Supportive advice, linking with sources of support
6. Encourage participation in normal daily routines
7. Identify those needing further help

Applying Psychological First Aid

1. Active listening
    - Respect desire not to talk
2. Assess physical needs
3. Assess basic needs, ensure they are met
    - Shelter
    - Nutrition etc.
4. Promote positive coping mechanisms
5. Supportive advice, linking with sources of support
6. Encourage participation in normal daily routines
7. Identify those needing further help

Applying Psychological First Aid

1. Active listening
2. Assess physical needs
   - Cough
3. Assess basic needs, ensure they are met
   - Kids, husband ok?
   - Shelter : Somewhere to stay?
   - Nutrition: Access to meals?
4. Promote positive coping mechanisms
5. Supportive advice, linking with sources of support
6. Encourage participation in normal daily routines
7. Identify those needing further help

Risk / Prognostic Factors PRE-Trauma

- Temperamental
  - Childhood emotional problems
  - Prior mental disorders (panic, depression, OCD)
- Environmental
  - Lower SES, lower education
  - Prior exposure to trauma (especially in childhood)
  - Childhood adversity (economic, family dysfunction, parental separation/death)
  - Lower intelligence
  - Minority racial / ethnic status
  - Family psychiatric history
- Genetic / Physiologic
  - Female
  - Younger age at times of exposure (for adults)

Protective: Strong social support

DSM 5

Risk / Prognostic Factors **PERI-Trauma**

- Environmental
  - Severity (dose) of trauma
  - Perceived life threat
  - Personal injury
  - Intentional
  - Interpersonal violence
    - Ex. perpetrated by caregiver or
      witnessed threat to caregiver (for kids)
  - For military:
    - Being a perpetrator
    - Witnessing atrocities
    - Killing the enemy
  - Dissociation during trauma / that persists

DSM 5

Risk / Prognostic Factors **POST-Trauma**

- Temperamental
  - Negative appraisals
  - Maladaptive coping strategies
  - Development of acute stress disorder
- Environmental
  - Subsequent exposure to repeated upsetting reminders
  - Subsequent adverse life events
  - Financial or other trauma-related losses

Protective: Social support

(for kids: family stability)

DSM 5

Risk Assessment

- "Are any of these dangerous or life-threatening experiences still continuing in your life now?"
  - Ex. Intimate partner violence
    - Acknowledge the difficulty in seeking help when trauma hasn't stopped
    - Determine if there is a mandatory reporting issue
      - Ex. Children at risk – Family and Children's Services
    - Provide information about local resources
- Assess for risk of suicide

Overview

1. Relevance
2. Prevention (?)
3. Diagnosis
    1. Tools for Primary Care
4. Evidence – Supported Treatment
    1. Psychoeducation
    2. Self – Management Strategies
    3. Pharmacotherapy
    4. Psychotherapy
5. Resources

Case

43 year old woman

Returns 2 months later

- Appreciated your practical help the week of the incident
- Family is now in a rental unit while home is rebuilt
- Chief complaint: difficulty with sleep

Does this woman have PTSD?

Broad differential diagnosis:

- Medical causes of insomnia
- Normal grief / bereavement
- Adjustment Disorder
- Mood Disorder (e.g. Major Depressive Disorder)
- Anxiety Disorder
- Acute Stress Disorder (3 days – 1 month post trauma)
- PTSD
- …etc

Does this woman have PTSD?

SCREENING TOOLS FOR PRIMARY CARE

JAMA Rational Clinical Exam series recommends:

- Primary Care PTSD Screen (PC- PTSD)
- PTSD Checklist

Canadian PTSD Treatment Guidelines recommend:

- PTSD – MACSCREEN

Katzman et al. 2014
Spoont et al. 2015

Does this woman have PTSD?

Primary Care PTSD Screen (PC- PTSD)

- Available free online in PDF format
- Used by US Department of Veterans Affairs Primary Care Clinics
- 4 Items
- Positive Screen = 3 / 4
  - Sensitivity 0.69
  - Specificity 0.92

1. Have had nightmares about it or thought about it when you did not want to?
2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
3. Were constantly on guard, watchful, or easily startled?
4. Felt numb or detached from others, activities, or your surroundings?

If + … further assessment

Katzman et al. 2014
Spoont et al. 2015

Does this woman have PTSD?

PTSD Checklist (PCL – C)

- Available free online in PDF format : Civilian version
- Also used by US Department of Veterans Affairs Primary Care Clinics
- Self-administered
- 17 Items
  - Likert scale 1-5
- Positive Screen = > 40
  - Sensitivity 0.70
  - Specificity 0.90

If + … further assessment

Katzman et al. 2014
Spoont et al. 2015

Does this woman have PTSD?

MACSCREEN - PTSD

- Canadian tool
- Clinician or self-administered
- 2 Items
- Positive Screen = YES to both

If + … further assessment

Have you experienced or seen a life-threatening or traumatic event such as a rape, accident, someone badly hurt or killed, assault,
natural or man-made disaster, war, or torture?

If you answered "YES" then continue

Do you re-experience the event in disturbing (upsetting) ways such as dreams, intrusive memories, flashbacks, or physical reactions to situations that remind you of the event?

Katzman et al. 2014
Spoont et al. 2015

DSM 5 Criteria : PTSD

A. Exposure to actual / threatened death, serious injury, or sexual violence
   - Directly experienced
   - Witnessing in person
   - Learning a traumatic event occurred to close family
   - Experiencing repeated / extreme exposure to details
     ex. First responders

B. Intrusion symptoms (1 or more)
   - Recurrent involuntary distressing memories
   - Recurrent distressing dreams / nightmares
   - Flashbacks (feel as if event re-occuring)
   - IN CHILDREN: trauma-reenactment may occur in play

DSM 5

DSM 5 Criteria : PTSD

C. Avoidance symptoms (1 or more)
   - Efforts to avoid memories / thoughts / feelings about event
   - Avoidance of external reminders of event

D. Negative cognitions / mood (2 or more)
   - Inability to remember important aspects of event
   - Persistent negative believes about self / others / world
   - Distorted cognitions about cause / consequences of event (self-blame)
   - Persistent negative emotional state
   - Diminished interest in activities
   - Feeling detached / estranged from others
   - Inability to experience positive emotions

DSM 5

DSM 5 Criteria : PTSD

E. Hyperarousal symptoms (2 or more)
   - Irritable behaviour, angry outbursts (verbal / physical)
   - Reckless or self-destructive behaviour
   - Hypervigilance
   - Exaggerated startle response
   - Problems with concentration
   - Sleep disturbance (difficulty falling / staying asleep)

F. Duration is > 1 month

G. Causes distress or impairment

H. Not due to effects of a substance or medical condition

DSM 5

Tools for Tracking Severity

https://www.psychiatry.org/psychiatrists/practice/dsm/educational-resources/assessment-measures

Severity of Posttraumatic Stress Symptoms, Adult
(National Stressful Events Survey PTSD Short Scale)
[NSESS]

- Available free online as PDF to download
- 9 symptoms of PTSD
  - Rate each 0 (none at all) to 4 (extremely)
- Can use to track treatment progress

APA 2016

Case

43 year old woman

Positive screen

Meets DSM criteria for PTSD

How to approach treatment?

Overview

1. Relevance
2. Prevention (?)
3. Diagnosis
    1. Tools for Primary Care
4. Evidence – Supported Treatment
    1. Psychoeducation
    2. Self – Management Strategies
    3. Pharmacotherapy
    4. Psychotherapy
5. Resources

Treatment: Approach

- Empathic, validating, accepting stance
- Provide sense of safety and control
- Assess and address comorbidities
  - Depression
  - Substance Use, etc.
- Ongoing sources of trauma can complicate treatment
- Culturally- sensitive approach

Note: Use of translators

Psychoeducation

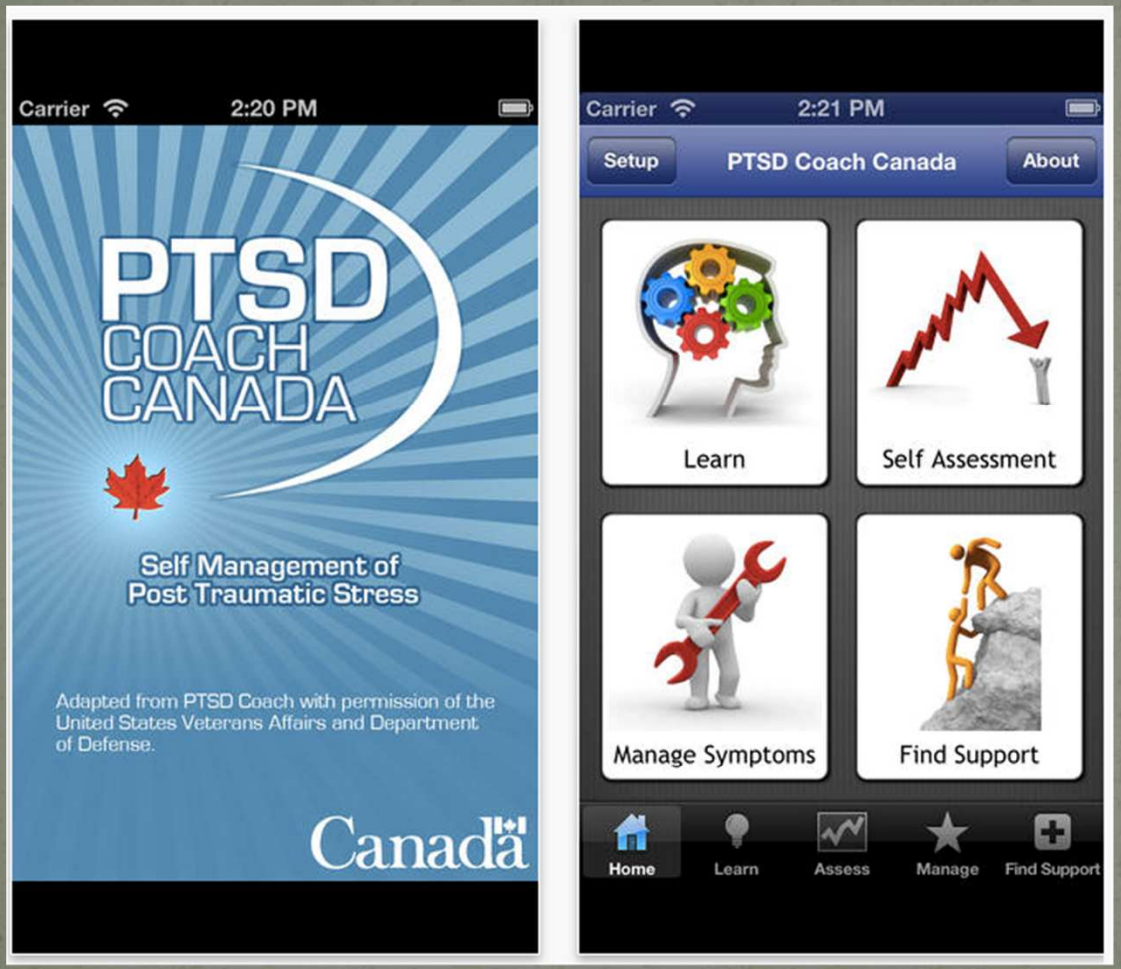
"Normal response to an abnormal event"

- Fight / flight / freeze response is helpful / adaptive when we are in physical danger
- This response becomes a problem when the body tells us there is danger when there is no real danger
  - Some clients live with ongoing threats
  - Goal is to be able to feel a sense of safety in times / places it is safe

Psychoeducation : Resources

- AnxietyBC (www.anxietybc.com/adults/ptsd)
  - Print free handouts
    - Calm breathing
    - Grounding
    - Muscle relaxation etc…
- National Center for PTSD (www.ptsd.va.gov)
- Books:
  - Life After Trauma – A Workbook for Healing

Self- Management Strategies



- Free mobile app
- User – friendly
- Visual and audio
- Available in French
- Guided:
  - Deep breathing
  - Progressive Muscle Relaxation

Have this on your device to show / teach!

Self- Management Strategies

- Free mobile app
- User – friendly
- Text and audio
- Created by US VA
- Guided:
  - Mindful breathing
  - Mindful walking
  - Mindful eating …

Useful beyond PTSD
-Anxiety
-Mood
-"Stress"

Pharmacotherapy for PTSD

Note: Prescribing for PTSD is off-label

- Informed consent involves counseling about this
- Consider risk vs benefit

Pharmacotherapy

Best evidence is for pharmacotherapy + psychotherapy !

Predictors of long-term treatment outcome in combat and peacekeeping veterans with military-related PTSD

- "Real world" study in outpatient treatment
- High rates of comorbid depression, alcohol use
- Intervention: psychoed+ medication + therapy
- Response rate 66 %
- Progressive improvement in PTSD symptoms over 2 years
  - … encouraging patients to remain in long-term treatment important

Richardson et al. 2014

Pharmacotherapy approach

- Start with monotherapy of 1st line option
- If response to sufficient trial (4- 6 weeks) at optimized dose is inadequate or agent is not tolerated, then:
  - Switch to another 1st line agent (or 2nd line if required)
- If partial response obtained,
  - Add nightmare-specific treatment if needed (1st line)
  - Add augmentation agent (2nd or 3rd line)

Note: Attempt to preserve gains!

Katzman et al. 2014

Pharmacotherapy : PTSD

First Line	Fluoxetine Paroxetine * Sertraline Venlafaxine XR
Second Line	Fluvoxamine ** Mirtazapine

* Side effects can limit tolerability.
Withdrawal effects may be more severe vs other SSRIs

** Caution : increased risk of drug-drug interactions. Inhibits several CYP 450 enzymes

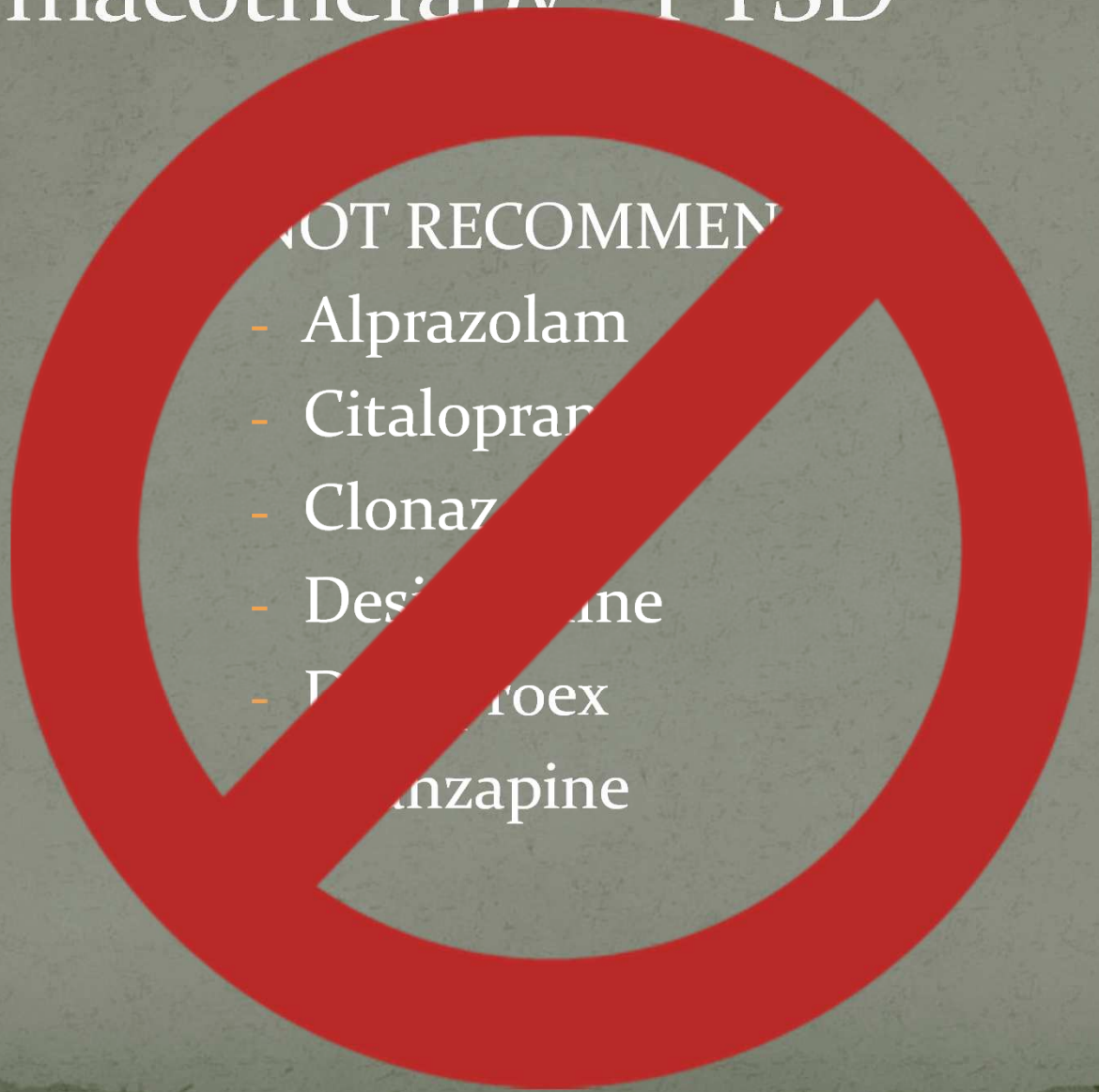
Katzman et al. 2014

Relapse Prevention

- Long term therapy with SSRIs has been evaluated
  - In responders to SSRIs :
    - Highly significant reduction in relapse rates with continued SSRI use (vs switch to placebo) over 6 months
    - Odds ratio for relapse was 0.25
  - In RCT discontinuation studies:
    - Significantly lower relapse rates over 6 months with SSRI use
      - On SSRI 5 – 20 %
      - Placebo 20 – 50 %
  - Open follow up studies of SSRI use
    - Sustained and continued improvement over 6 – 12 months

Katzman et al. 2014

Pharmacotherapy - PTSD



NOT RECOMMEN

- Alprazolam
- Citalopra
- Clonaz
- Des ine
- oex
- nzapine

Katzman et al. 2014

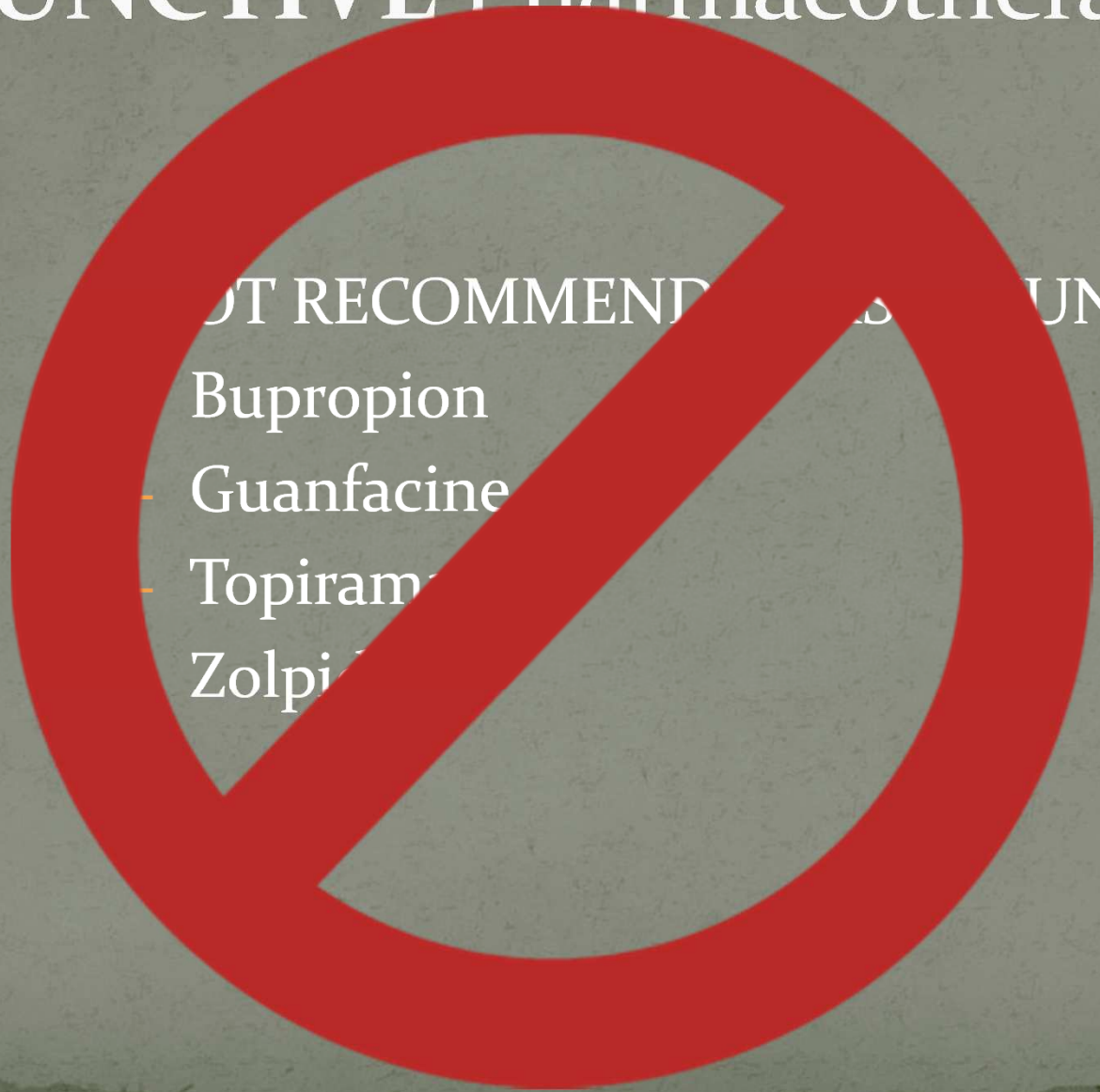
ADJUNCTIVE Pharmacotherapy

Second Line (Adjunct)	Eszopiclone Olanzapine * Risperidone *
Third Line (Adjunct)	Aripiprazole Clonidine Gabapentin Levetiracetam Pregabalin Quetiapine

* Only if psychotic symptoms

Katzman et al. 2014

ADJUNCTIVE Pharmacotherapy



DT RECOMMEND S UNCTIVE:

- Bupropion
- Guanfacine
- Topiram
- Zolpi

Katzman et al. 2014

Prazosin for trauma-related nightmares

Prazosin

- An alpha-1 adrenergic blocker
  - Reduces noradrenergic hyperactivation
  - Blocking central noradrenergic receptors during sleep may reduce nightmares
- Level 1 Evidence
  - Reduces nightmares
  - Improves sleep quality
  - Decreases severity of PTSD symptoms (including daytime symptoms)

Katzman et al. 2014

Prazosin for trauma-related nightmares

- Health Canada approved to treat HYPERTENSION
- Notable risks:
  - Hypotension (especially orthostatic)
  - Dizziness
  - Lightheadedness
  - Headache
  - Fatigue
- To reduce risk of syncope:
  - Limit initial dose to 1 mg
  - Dose at bedtime
  - Counsel regarding orthostatic hypotention
  - Slow dose titration

Katzman et al. 2014

Psychotherapy

First Line / Evidence Supported	Trauma-Focused CBT - Individual - Group EMDR - Evidence for faster recovery --- Stress Management Superior & Equally Effective
Less Effective / Limited evidence	Supportive Therapy Nondirective counseling Psychodynamic therapy Hypnotherapy

Katzman et al. 2014

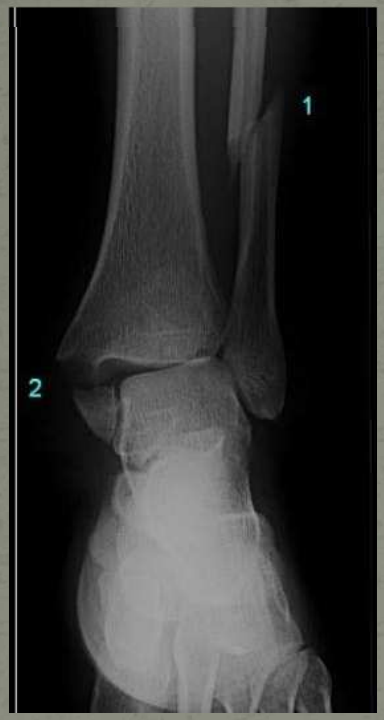
Psychotherapy

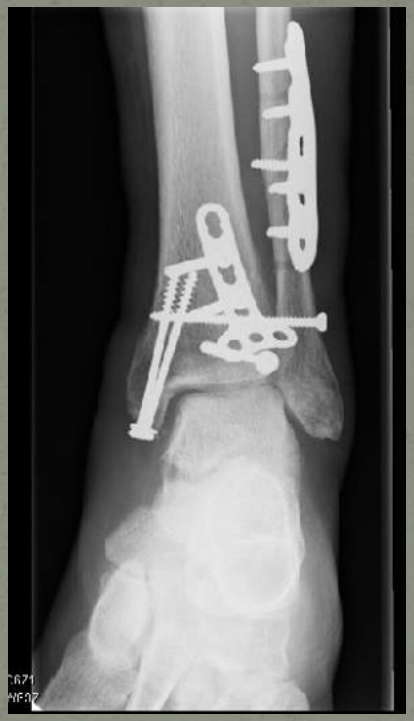
Dialectical Behavioural Therapy (DBT)

- Developed to reduce self-harm and other symptoms in individuals with Borderline Personality Disorder
  - Distress tolerance
  - Mindfulness
  - Emotion regulation
  - Interpersonal effectiveness
- Also useful in some individuals with PTSD
  - Reduces self-harm
  - May help individuals to become suitable candidates for PTSD-specific treatment

Katzman et al. 2014

Thinking about Psychotherapy for PTSD





FRACTURE → SURGERY → PHYSIOTHERAPY

PTSD → STABILIZATION → Trauma PSYCHOTHERAPY
- Self-regulation skills
- Addictions management

Overview

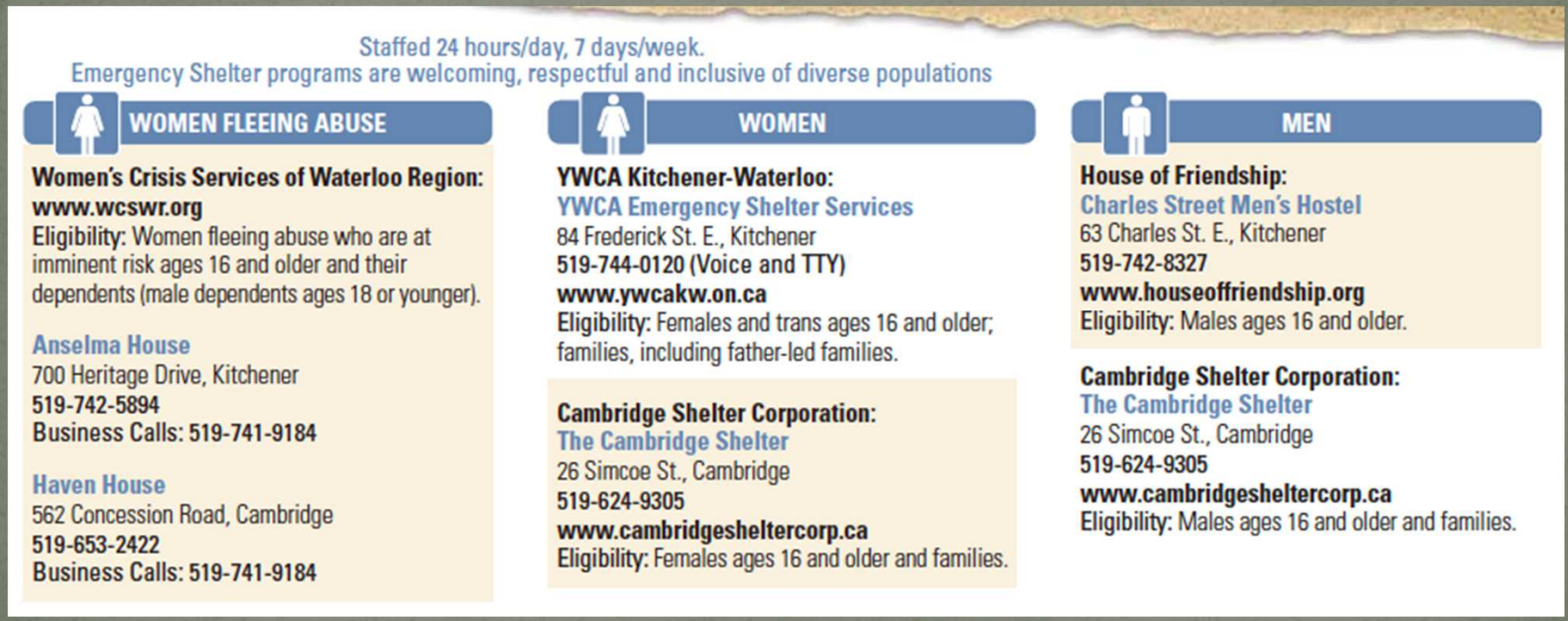
1. Relevance
2. Prevention (?)
3. Diagnosis
    1. Tools for Primary Care
4. Evidence – Supported Treatment
    1. Psychoeducation
    2. Self – Management Strategies
    3. Pharmacotherapy
    4. Psychotherapy
5. Resources

Local Resources

- Waterloo Trauma Service Initiative
  - Carizon Family & Community Services
  - Family & Children's Services
  - Kitchener-Waterloo Multicultural Centre
  - Sanguen Health Centre
  - Over 60 organizations throughout Waterloo Region
  - Education and trauma-informed treatment
    - Non-profit centres
    - Private practitioners
- Grand River Hospital Adult Outpatient Psychiatry
  - Referral form available online

Local Resources

- Distress lines
  - HERE 24/7 1-844-437-3247



Staffed 24 hours/day, 7 days/week.
Emergency Shelter programs are welcoming, respectful and inclusive of diverse populations

WOMEN FLEEING ABUSE

Women's Crisis Services of Waterloo Region:
www.wcswr.org
Eligibility: Women fleeing abuse who are at imminent risk ages 16 and older and their dependents (male dependents ages 18 or younger).

Anselma House
700 Heritage Drive, Kitchener
519-742-5894
Business Calls: 519-741-9184

Haven House
562 Concession Road, Cambridge
519-653-2422
Business Calls: 519-741-9184

WOMEN

YWCA Kitchener-Waterloo:
YWCA Emergency Shelter Services
84 Frederick St. E., Kitchener
519-744-0120 (Voice and TTY)
www.ywcakw.on.ca
Eligibility: Females and trans ages 16 and older; families, including father-led families.

Cambridge Shelter Corporation:
The Cambridge Shelter
26 Simcoe St., Cambridge
519-624-9305
www.cambridgesheltercorp.ca
Eligibility: Females ages 16 and older and families.

MEN

House of Friendship:
Charles Street Men's Hostel
63 Charles St. E., Kitchener
519-742-8327
www.houseoffriendship.org
Eligibility: Males ages 16 and older.

Cambridge Shelter Corporation:
The Cambridge Shelter
26 Simcoe St., Cambridge
519-624-9305
www.cambridgesheltercorp.ca
Eligibility: Males ages 16 and older and families.

Region of Waterloo

Local Resources

FAMILIES

Eligibility: Families with children under 18 years old, who are at-risk of housing loss or experiencing homelessness.

Lutherwood is the first point of contact for families to access emergency shelter. Lutherwood staff will support families to stay in their current housing or find new housing with the goal of reducing or avoiding emergency shelter stays. If a shelter stay is needed, Lutherwood staff facilitate access to emergency shelter.

During Business Hours
Monday-Friday from 8:30 a.m.-4:30 p.m.: (Phone or walk-in welcome)

Lutherwood:
Families in Transition
41 Weber St. W., Kitchener **OR** 35 Dickson St., Cambridge
519-749-2450 519-623-9380
www.lutherwood.ca

After Business Hours
Contact these shelters directly.

Cambridge Shelter Corporation:
The Cambridge Shelter
26 Simcoe St., Cambridge
519-624-9305
www.cambridgesheltercorp.ca

YWCA Kitchener-Waterloo:
YWCA Emergency Shelter Services
84 Frederick St. E., Kitchener
519-744-0120 (Voice and TTY)
www.ywcakw.on.ca

Highlighted Resource

Katzman *et al. BMC Psychiatry* 2014, **14**(Suppl 1):S1
http://www.biomedcentral.com/1471-244X/14/S1/S1

REVIEW Open Access

Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders

Martin A Katzman[1*], Pierre Bleau[2], Pierre Blier[3], Pratap Chokka[4], Kevin Kjernisted[5], Michael Van Ameringen[6], the Canadian Anxiety Guidelines Initiative Group on behalf of the Anxiety Disorders Association of Canada/ Association Canadienne des troubles anxieux and McGill University

Highlighted Resource
www.macpsychhandbook.ca

McMaster Psychiatry **Handbook App**

Download on the App Store

GET IT ON Google play

Practical Content
- High yield topics
- Evidence-supported

New Tools
- BMI calculator
- AIMS tool

User-Friendly
- Intuitive search
- Bookmarks
- Adjust font size

Ideal for...
- Physicians
- Residents
- Medical Students
- Nurses
- Social Workers
- OT
- Mental Health Workers

McMaster University
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Michael G. DeGroote SCHOOL OF MEDICINE

References

American Psychological Association. The DSM 5. 2013.

Bisson. Early Responding to traumatic events. British Journal of Psychiatry. 2014. 204: 329-330.

Dyb G, Jensen TK, Nygaard E, Ekeberg Ø, Diseth TH, Wenzel-Larsen T, et al. Post-traumatic stress reactions in survivors of the 2011 massacre on Utøya Island, Norway. Br J Psychiatry 2014; 204: 361–7.

Katzman et al. Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders. BMC Psychiatry. 2014. 14(Suppl1):S1

Richardson et al. Predictors of long-term treatment outcome in combat and peacekeeping veterans with military-related PTSD. Journal of Clinical Psychiatry. 2014. 75(11) 1299-305.

Rose et al. Psychological debriefing for preventing post traumatic stress disorder (PTSD). Cochrane Database of Systematic Reviews. 2002.

References

Spoont et al. Does this patient have Posttraumatic Stress Disorder?: Rational Clinical Examination Systematic Review. 2015. 314(5) 501-10.

Van Ameringen M, Mancini C, Patterson B, Boyle MH: Post-traumatic stress disorder in Canada. CNS Neurosci Ther. 2008, 14: 171-181.

http://communityservices.regionofwaterloo.ca/en/communityprogramssupports/domiciliaryemergencyshelters.asp