Adventures in Health Behaviour

Lessons from the front lines of teaching and clinical work

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Objectives

1. Demonstrate that facilitating behaviour change is often crucial to achieving clinical outcomes

2. Describe barriers to successful behaviour change in patients and health care providers

3. Discuss initiatives targeting behaviour change in pre-licensure medical learners and practicing psychologists
Interest in Behaviour Change
Consider...

• A quarter of medical patients in general do not adhere to their treatment regimens\(^1\). Rates of non-adherence to treatment for chronic disease approximate 50\(\%\)^2

• CPSI estimates that about 220,000 Canadians get hospital-acquired infections annually\(^3\). Rates of non-adherence to hand hygiene protocols in Canadian medical settings vary from 10-50\(\%^{4,5}\)
What is killing Canadians?^6

Total deaths: 248,000
NCDs are estimated to account for 88% of total deaths.
WHO estimates that at least 80% of heart disease, stroke and type II diabetes and 40% of cancer could be prevented through healthy diet, physical activity and avoidance of tobacco products.
Adherence to guidelines is dismal\textsuperscript{8}

<table>
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<th>12-19</th>
<th>20-34</th>
<th>35-49</th>
<th>50-64</th>
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<tr>
<td>Obesity (CHMS)</td>
<td>12.6*</td>
<td>21**</td>
<td>29.2</td>
<td>29.6</td>
<td>26</td>
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<tr>
<td>Physical Inactivity (CHMS)</td>
<td>90.7*</td>
<td>63.8**</td>
<td>82</td>
<td>83.3</td>
<td>88.2</td>
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<tr>
<td>Unhealthy Eating (CCHS)</td>
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<td>61.0</td>
<td>60.2</td>
<td>63.6</td>
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<tr>
<td>Heavy Drinking (CCHS)</td>
<td>10.9</td>
<td>30.6</td>
<td>19.7</td>
<td>15.5</td>
<td>6.0</td>
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<td>Daily or Occasional Smoking (CCHS)</td>
<td>7.8</td>
<td>24.3</td>
<td>20.3</td>
<td>19.9</td>
<td>9.3</td>
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80% of Canadians over age 20 report at least one modifiable risk factor for chronic disease.
Department of Clinical Health Psychology

- Academic department in Max Rady College of Medicine for almost 25 years
- Clinical program in Winnipeg Regional Health Authority (and other RHAs) for almost 20 years
- Accredited residency program (40 years)
- ~50 faculty; 25 yrs teaching medical students
Project 1: Health Behaviour Change in Medical Training

• Clinical Health Psychology a distinct theme, with a designated leader and representation across the 4 years of undergraduate medical education

• Skills for Health Behaviour Change:
  • Health Behaviour Change- TTC
  • Motivational Interviewing- 2 sessions (Clerkship)
  • 3-week clinical elective focused on skills for behaviour change
Integrated spiral scaffold...

Motivational Interviewing Clerkship

Behaviour Change Selective - TTR

Health Behaviour Change TTC
Lecture: 

So why don’t patients do “the right thing”?

• In many cases, health promoting behaviour is *abnormal* behaviour

• Health Behaviours have multiple determinants
  • Environmental factors
  • Social factors
  • Individual factors

• What helps people to change behavior?
Tutorial:
Why don’t health care providers do “the right thing?”

• Blood Donation
• Hand Hygiene*
Hand Hygiene

**Hand Hygiene Auditing Results in the WRHA by Facility/Area**

Hand Hygiene compliance within WRHA acute care facilities

| Physicians | 28% | 30% | 53% | 39% | 54% | 44% | 59% | 52% | 66% | 52% | 75% | 51% | 60% | 55% | 64% | 59% | 65% | 59% | 65% | 68% | 54% | 56% | 50% | 43% | 54% | 51% | 58% | 57% |
| Nurses      | 60% | 62% | 73% | 70% | 74% | 67% | 66% | 65% | 73% | 64% | 71% | 68% | 73% | 74% | 71% | 76% | 75% | 79% | 82% | 79% | 75% | 73% | 68% | 73% | 75% | 74% | 73% |
| MCAs        | 56% | 52% | 65% | 61% | 72% | 65% | 64% | 64% | 72% | 67% | 72% | 71% | 69% | 71% | 67% | 71% | 74% | 76% | 71% | 73% | 73% | 74% | 80% | 71% | 71% | 74% | 77% | 73% |
| ALL         | 54% | 55% | 68% | 65% | 71% | 65% | 66% | 64% | 72% | 63% | 72% | 67% | 70% | 71% | 69% | 74% | 74% | 76% | 79% | 76% | 75% | 74% | 75% | 68% | 70% | 74% | 74% | 72% |
| Goal        | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% |
| Target      | 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%| 100%|
Reasons generated by medical students...

- HH takes time
- Issues related to sanitizer
- Physician role
- Role modeling
- Individual factors
  - Beliefs about the effectiveness of HH in preventing the spread of disease (likelihood, severity)
  - Deficits in knowledge and skills to perform HH
  - Discomfort/cognitive dissonance
Suggestions for Improvement

• Targeted feedback/shaming
• Rewards
• Leadership (hierarchy)
• Increasing ease/comfort associated with sanitizer
• Engagement of patients/peers/co-workers
• Increasing salience/skills
• Environmental interventions (technology)
Feedback

• Students appreciate the session
  • Engaging, fun
  • Immediate relevance & potential utility
  • Focus on being realistic about human nature/current demands
  • 95% strongly agreed it stimulated their thinking on the topic

• Foundation for subsequent sessions looking at building skills for behavior change
Project 2: Evidence-Based Practice Portal

• Persistent gap between psychological science and practice

• Although there is controversy regarding what constitutes “evidence”, the vast majority of psychologists support the idea that they should practice in a manner that is evidence-based
What is Evidence-Based Practice?

“conscientious, explicit, and judicious use of the best available research evidence... This requires [applying] knowledge of the best available research in the context of specific client characteristics, cultural backgrounds, and treatment preferences... entails the monitoring and evaluation of services provided to clients throughout treatment” (Dozois et al., 2014, p. 155).
Keeping up with the literature?¹²

Number of articles that you would have to read every day to keep up to date with all of the SRs/MAAs/RCTs relevant to mental health.
Dozois et al. (2014). The CPA Presidential Task Force on Evidence-Based Practice of Psychological Treatments. *Canadian Psychology, 55*, 153-160
Environmental Scan

1. Search the published, academic literature (0)
2. Naïve Internet Search (5)
3. Targeted Internet Search (3)
4. Expert consultation (29!)
   • Accessibility
   • Comprehensiveness
   • Transparency/Authority
   • Ease of Use

https://cpa.ca/sections/clinicalpsychology/resources/
Needs Assessment

- Data collected in 2015 and early 2016
- 198 respondents
  - 88.75% of respondents belonged to CPA
  - 81% clinical section
- Most respondents (79%) had a doctoral degree; mean number of years in practice was 15
- 39% were in private practice, 32% hospital or healthcare centre
Approach to EBP

Resources for Finding Evidence

- Academic search engine
- Empirically supported treatment list
- Database of systematic reviews
- Organization
- Google or other search engines
- Other

Academic search engine has the highest usage rate.
Resources used to find CPGs

- PsyInfo or other literature search
- Database of CPGs
- Clinical decision support tool
- Google or other search engine
- Psychological associations
- Educational institutions
- Other
Reasons for not using CPGs

- Not clinically informative or relevant
- Not sure how to find CPGs relevant to psychology
- Unsure about quality
- Don't know what CPGs are
- Prefer to review evidence myself
- Don't think about it
- Other
Is there anything that would make you more likely to use CPGs?

Relevance/utility
Ease of Use/convenience
Quality Assurance**

*Unsolicited feedback*: Participants mentioned wanting access to information about EBP more broadly, not just CPGs
From CPGs to EBPP

- Team formed in 2017
- In addition to CPGs, need to include information about other initiatives relevant to implementing EBP
- Site developed with input from a range of perspectives including clinicians, academics and learners from across the country and representing a variety of practice settings
Vision for the site

- Tools
- CPG
- EBP
- PRN
- PM
Welcome to the Best Practices in Psychology Portal. Our national team of researchers, clinicians and students are committed to disseminating the best available knowledge and tools to clinicians, so that the best possible care can be provided to all.
Definitions of Terms/Navigation

Evidence-Based Practice

What is evidence-based practice?

Evidence-based practice (EBP) aims to maximize the effectiveness of psychological interventions through adherence to principles informed by empirical findings, clinical expertise, and client characteristics. The Canadian Psychological Association (CPA) Task Force on Evidence-Based Practice of Psychological Treatments (2012) defined EBP as follows:

Evidence-based practice of best-practices-psychologyehological treatments involves the conscientious, explicit and judicious use of the best available research evidence to inform each stage of clinical decision-making and service delivery. This requires that best-practices-psychologyehologists apply their knowledge of the best available research in the context of specific client
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- CPA Task Force on Evidence-Based Practice, 2012 (click here to download full report)

More specifically, evidence-based practice entails:

- Efforts to provide the best possible services (which minimize the risk of harm and maximize the chance of benefit) for those seeking psychological
Clinician-friendly Research Summaries

Group Therapy

Does PM improve client retention and outcomes in group psychotherapy?

Participants were individuals partaking in group therapy for social anxiety and interpersonal issues at a university counselling centre. Groups were randomized to either a feedback (Fb) or treatment as usual (TAU) condition.

Participants in the Fb condition were assessed every session using the PCOMS (both the Outcome Rating Scale (ORS) and the Session Rating Scale (SRS)).

Participants in the TAU condition were assessed every session using the Outcome Rating Scale (ORS), a component of the PCOMS, only.
CPG Database* in development

Guidelines

What are Clinical Practice Guidelines (CPGs)?

There are many different definitions of what are Clinical Practice Guidelines (CPGs).

One oft-cited definition was proposed by the Institute of Medicine who defines CPGs as “systematically developed statements to assist practitioner and patients’ decisions about appropriate healthcare for specific clinical circumstances”. Similarly, the American Psychological Association states that CPGs “provide research-based recommendations for the treatment of particular disorders. They generally include assessments of the strength of the current scientific evidence for each recommendation”. Many other organizations have proposed definitions of practice guidelines, including the Health Council of Canada, the American Academy of Family Physicians, and the National Institute for Health and Care Excellence, to name but a few.

While many definitions for CPGs exist, they do not always capture all of the important elements of CPGs as applied to psychology. Beauchamp, Drapeau, and Dionne (2015) recommend using the definition proposed by the Institut National d’Excellence en Santé et en Services Sociaux (INESSS; National Institute of Excellence in Health and Social Services) which defines CPGs as:

* CPG Database in development
Clinical Tools* in development

Access to measures on the site that are

- Psychometrically sound
- Brief
- Easy to use
- Free

- Other tools TBD: websites, textbooks, treatment manuals, etc.
Depression

Centre for Epidemiologic Studies Depression Scale for Children (CES-DC)
This self-report measure was developed to assess the severity depressive symptoms among youths aged 6 to 25 years of age and is composed of 20 items.
- Centre for Epidemiologic Studies Depression Scale for Children (CES-DC)

Depression Self Rating Scale for Children (DSRSC)
This self-report measure assesses depressive symptoms among children aged 8 to 14 and is composed of 18 items.
- Depression Self Rating Scale for Children (DSRSC)

Hamilton Rating Scale for Depression (HAM-D)
This clinician-rated measure assesses the severity of depressive symptoms in adults and is composed of 17 items.
- Hamilton Rating Scale for Depression (HAM-D)

Patient Health Questionnaire-9 (PHQ-9)
This self-report measure was developed for the screening of depressive symptoms in adults and is composed of 9 items.
- Patient Health Questionnaire-9 (PHQ-9)
Acknowledgements

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Some Thoughts

1. Health behavior change, for patients and providers, is complex.

2. Student and clinician feedback highlights the importance of environmental, social and systemic factors for sustainable change.

3. We need more applied research to help us target interventions more effectively.
People don't resist change. They resist being changed.

— Peter Senge
References


References


