The Experience of Living with Diabetes and Mental Illness for Low Income Canadians

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Presentation Objectives

- To increase understanding of how social determinants affect development and self-management of type 2 diabetes mellitus (T2DM)
- To explore the intersection of poverty, mental illness and T2DM
- To identify health service needs of persons with T2DM & mental illness
- To identify policy and practice implications concerning T2DM
The Problem

- Poverty is a significant risk factor for poor physical and mental health (CMHA, 2007)
- T2DM is more prevalent in low-income populations and those with mental illness; also, these populations have higher rates of complications and premature mortality.

Why?

- “Social injustice is killing people on a grand scale” (World Health Organisation, 2008)
Material Deprivation

- Adverse childhood circumstances are good predictors of type 2 diabetes during adulthood (Brunner & Marmot, 2006).

- Intrauterine-growth retarded babies are most likely to be born of lower income mothers and are at higher risk of developing type 2 diabetes, regardless of later life circumstances (Barker et al., 2001).
Psychosocial Stress

- Stress produces cortisol
- Cortisol levels are higher among deprived populations
- Cortisol increases levels of blood glucose and is an antagonist of insulin
- “The cluster of risk factors may be the product of altered activity of the HPA (hypothalamic-pituitary-adrenal) axis in response to long-term exposure to adverse psychosocial circumstances.” (Brunner & Marmot, 2006)
3 Mechanisms Linked with Type 2 Diabetes

1. Material deprivation
2. Psychological Stress
3. Adoption of health-threatening coping mechanisms
Mental Illness and T2DM

- Mental illness (depression, anxiety, schizophrenia) is associated with T2DM (see Bibliography)
  - consequence, or risk factor??

- T2DM and depression both have a neuroendocrine basis (Champaneri, Wand, Malhotra, Casagrande, & Golden, 2010).

- Mental illness is associated with higher morbidity and mortality from T2DM (Rustad, Musselman, & Nemerof, 2011).
What Explains the Association of T2DM & Mental Illness?

- Poverty
  
  “The relationship between poverty and mental illness is both straightforward and complex in its pervasive reach” (CMHA, 2007).

- Poverty is a risk factor for poor health (recall the 3 mechanisms)

- “People with mental illness often live in chronic poverty” (CMHA, 2007).
Methodology

- **Part 1:**
  - Analysis of large data sets (Canadian Community Health Survey; National Population Health Survey)

- **Part 2:**
  - 60 in-depth interviews with individuals with T2DM, and 3 focus groups with service providers.
  - Thematic and content analysis
    - Critical perspective, social determinants a sensitizing concept
Part 2a) Perspective of Persons with Diabetes

- Purposive sampling of clients from 4 different community health centres in Toronto
  - Inclusion criteria: type 2 diabetes; low income; diversity
- Semi-structured interviews, audio-taped and transcribed verbatim
Description of Participants

- **Gender:** 34 women, 26 men (total = 60)
- **Age:** mean = 57 years (range, 30 – 76 years)
- **Marital status:** 36 single, widowed, divorced, or separated; 24 married or common-law
- **Source of Income:** 28 on ODSP; 17 seniors on a pension; 6 on OW; 6 working or living on spouse’s income
- **Income:** all participants < $35,000/year
  - 38 had income <$15,000/year
- **Racial and ethnic diversity:** 43 born outside of Canada; only 5 self-identified as ‘Canadian’
- **Medical status:** range from newly diagnosed to dx > 10 years ago
- **Mental Illness:** 6 self-identified with a mental illness:
  - schizophrenia (2); addiction &/or depression (4)
Findings

- Overarching theme:
  
  *Resilient struggle for survival amid hardship*

- Sub-themes:
  
  - Balancing competing priorities
  - Making the best of it
  - Applying knowledge and know-how in diabetes self-management
Resilient Struggle for Survival amidst Hardship

- The daily struggle to survive in the face of multiple challenges of trying to manage their diabetes while living on a low income (food insecurity, employment insecurity, inadequate housing, lack of access to affordable transportation, etc.)

- For newcomers to Canada, the struggle was compounded by cultural adjustment issues and language barrier

- In addition, many had concurrent medical conditions, including physical disabilities and/or mental health challenges.
Balancing Competing Priorities

- Refers to the constant juggling act required to survive on a limited income; for instance, whether to buy good quality food, or diabetes medication, or orthopedic shoes, or pay the rent.

- Such forced choices represent *dilemmas*, where any choice would have undesirable consequences when other basic needs or priorities cannot be met.
Making the Best of It

- Participants mustered support and resources from various sources, including friends and family, health services, and community and social services, in order to make the best of their difficult circumstances.
Applying Knowledge and Know-How in Diabetes Self-Management

- Participants described making use of medical as well as experiential knowledge in order to manage their diabetes as best they could, within the difficult circumstances of their lives.
Part 2b) Insights from Healthcare Workers

**Theme 1:** Compounding, negative effects of social factors on the health of people with diabetes:

- insecure housing, resource-poor neighborhoods, unemployment/insecure employment, food insecurity, disability, and unequal access to healthcare
- gender, culture, and language issues
Quotations from Healthcare Workers...

- “Their lives are very chaotic...”
- “Their closest grocery store in the community just closed...”
- “They often don’t really want to go out on the street or walk....”
- “It’s a very complicated and exhausting life...”
- “Many don’t have access to health services...”
Theme 2: The Need for Responsive Supports from Multiple Levels

- To help people better manage their diabetes or prevent it in the first place, responsive supports are needed at the point of care, and at the healthcare system and policy levels.

a) Point of care:
  - Programs and services to increase self-care capacity
  - Client-centred approach
b) Healthcare System Level

- The need for more integrated, coordinated, comprehensive healthcare that is responsive to the needs of communities
  - Integrate primary health care, public health, and social services
c) Public Policy Level

- Policy changes resulting in cuts to health and social spending have worked against the poor.

- To address diabetes epidemic, policy should address the SDOH: “People need the basics: safe, secure housing, proper income, access to postsecondary education…so that they get a job that pays enough to sustain them.”
Public Policy (cont’d)

- Health policy:
  - coverage of extended health benefits and medications for the working poor;
  - ensuring access to healthcare for those lacking a health card or physician referral
  - preserving the special diet allowance
  - more emphasis on health promotion and diabetes prevention

- Environmental and urban planning policies
Theme 3: Barriers to Change

- **Professional**
  - Limited time to engage in advocacy
  - Lack of understanding of the social issues around diabetes, on the part of those who ‘set the agenda’

- **Political**
  - lack of incentive for politicians to address long term strategies
Barriers to Change (cont)

- Societal
  - Market-driven (neo-liberal) economic model
  - Lack of public awareness of, and disengagement from, issues of poverty, disability and mental illness due to negative attitudes and stigma
Discussion & Implications

- **Intersectionality perspective**
  - Health and illness are shaped by intersecting social categories and “power dynamics” that lead to social inequality and health inequities (Hankivsky & Christoffersen, 2008).

- Living in poverty may produce T2DM (and mental illness); moreover, it complicates its management, once present (as does mental illness).
Discussion & Implications (cont.)

- “Buffering effect” of good primary health care
  - Focus on whole person in social context
- Call for advocacy on behalf of vulnerable populations (Falk-Rafael, 2005)
Health Policy Recommendations

- Increase benefit levels and minimum wages to raise individuals above the poverty line.
- Provincial and federal governments must re-enter the housing sector, develop a national housing strategy, and invest more in housing.
- Develop a strategy to reduce income insecurity.
- Implement public policies that promote redistribution of income and wealth.
- Add universal pharmacare to medicare
Implications for Education and Practice

- Inclusion of socio-political curriculum in health professionals’ education
- Poverty as a clinical risk factor (Bloch et al., 2008)
- **Person centred care**: collaborate with clients to meet their identified needs & priorities
- Multidisciplinary team approaches, including coalition building with other health and social programs
- Community development approaches to facilitate empowerment for health promotion and disease prevention.
Conclusions

- Findings underscore the importance of income among a web of factors (including mental illness) in determining the risk of developing T2DM and ability to self-manage it, once acquired.
  - Health professionals must advocate for poverty reduction

- In addition to person-centred approaches, comprehensive, integrative strategies that address socioeconomic issues are needed for diabetes prevention & management.
Conclusions (cont’d)

- Optimal management will not only alleviate unnecessary suffering and improve quality of life, but will also save the healthcare system enormous expenses in the future arising from preventable, devastating complications of this chronic disease.
Published Articles


References


Diabetes & Mental Illness

Bibliography


