Understanding the complexity of treatment of mental illness and addictions in Ontario

Report of the Collaborative Mental Health Care Working Group, University of Toronto Department of Psychiatry and Department of Family & Community Medicine

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Executive Summary

The purpose of this report is to inform decision-makers about disability arising from mental illness and how mental illness is treated in Ontario's healthcare system. Many people with mental illness do not seek treatment and therefore will not have a documented medical history. The majority of those who do seek care are managed by primary care health care providers such as family doctors or nurse practitioners, who are trained to diagnose and treat a broad range of mental health conditions. Collaborative partnerships between primary and mental health care professionals, integrating mental health services within primary care settings, are an increasingly common model of care.

Because practice, system, patient and policy factors impact specialist referrals, the absence of a referral does not reflect the severity of a patient's mental health condition and their level of functional impairment. Further psychiatric follow up may or may not occur after assessment. The hospital emergency department is used by some people as part of their care, and its use is affected by many factors.

The treatment of mental illness and addictions is complex and is influenced by many factors: limited availability and access to specialized treatment and outpatient care especially for those who are low income and disadvantaged; the stigma of treatment; intolerance to the side effects of medication; limits to the effectiveness of medication; and variations in prescribing medication. As such, treatment history can be an unreliable predictor of the severity of a person's illness or level of functional impairment.

Diagnosis is also a poor indicator of functionality. Co-occurrence of psychiatric and medical illness is common, and typically results in under-treatment, higher costs, and amplified disability. People with addictions are at risk for other mental illness, chronically restricted range of functioning, and face challenges to their full engagement in society, even during periods of remission.

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Part I: The Collaborative Mental Health Care Working Group

The Collaborative Mental Health Care Working Group (CMHCWG) is a joint initiative of the departments of Psychiatry and Family and Community Medicine at the University of Toronto. The group is made up of faculty members from each department, who are currently:

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- Abbas Ghavam-Rassoul, MD MHSc CCFP FCFP, Family Physician, Department of Family and Community Medicine, St. Michael's Academic Family Health Team; Assistant Professor, Department of Family and Community Medicine and Dalla Lana School of Public Health, University of Toronto; Program Director, Masters of Science in Community Health (Health Practitioner Teacher Education), Medical Education Fellowship & Clinical Teacher Certificate Programs, Department of Family and Community Medicine and Dalla Lana School of Public Health, University of Toronto.
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- Dr. Michael Tau, MD, is a resident in the Department of Psychiatry, University of Toronto and a contributing author.

CMHCWG members share a common interest in the ways in which their respective areas of medicine can work together more effectively in the mental health care system. We work to promote education, research and quality improvement.

This report canvasses the treatment of people with mental health conditions in Ontario. It addresses the role of primary care providers and the family medicine approach to treating mental health conditions; the role of specialists; the efficacy of treatment options; and the barriers to accessing care.

Part II: The care of mental health conditions in Ontario

1. Primary care

According to the Mental Health Commission of Canada, one in five Canadians is affected by a mental illness or addiction issue every year. Many people with mental illness will not seek care and therefore will not have a documented history of their illness and treatment. Those that do seek care will most often present to and be managed in primary care. The burden of mental illness and addictions in Ontario (measured by years of premature death and reduced functioning) is more than 1.5 times that of all cancers, and more than seven times that of all infectious diseases.[1]

(i) Family physicians and nurse practitioners (primary care providers)

The majority of mental illness that is treated is managed in primary care - typically by a family doctor or nurse practitioner, sometimes working with an inter-professional team (for example, including social work, nursing, and psychology). The primary care provider (PCP) takes a broad lens and approach to the care of a person, looking at the comprehensive scope of a person's mental health condition and contributing factors. Having a longitudinal relationship with patients, PCPs are well situated to consider the cumulative burden of multiple comorbid conditions and psychosocial factors. PCPs are trained to diagnose and treat a broad range of mental and physical conditions ranging from mild to severe.

Management of mental illness in primary care can include a variety of modalities including supporting self-care, psychological counselling, medication prescription, family support, referral to community and social supports (e.g. case management, peer support, etc.). The target of the intervention can be symptoms, suffering, functional impairment and/or social determinants of health (such as housing, employment, income support, or settlement issues).

Primary care providers are trained and experienced in managing common mental health problems for their patients. It is estimated that up to 50% of the problems they treat may relate to mental health[1]. Many PCPs develop an interest in mental health conditions, or if there is great need in their community, they may focus their continuing education in this area, just as one might focus on pediatrics or care of the elderly. Canadian family physicians can also obtain certification to be a GP (general practitioner) psychotherapist, which means they can then have patients referred to them from other PCPs. In some northern and inner city settings, the burden of mental illness is so high that PCPs in these areas become expert at treating severe mental illness. The bottom line is that the spectrum of PCP expertise in treating mental illness is wide, and many PCPs are highly qualified to diagnose and treat moderate to severe mental illness.

(ii) Collaborative partnerships in primary care

Over the last decade there has been growing recognition of the benefits in building collaborative partnerships between primary care and mental health care providers,

including the integration of mental health services within primary care settings.[2] An increasingly common model involves psychiatrists and other mental health professionals co-located in a primary care setting, or consulting by telephone or email to provide advice, guidance, and follow-up to PCPs. These consultations support care of patients and families while sharing ongoing responsibility for care. A further advantage is that patients often prefer to receive mental health support in their primary care 'medical home' due to increased accessibility and decreased stigma.[3] While these collaborative models are developing in a growing number of Family Health Teams (FHTs) and Community Health Centres (CHCs), PCPs who are not based in such teams usually do not have similar resources.

In 2001, the Ontario College of Family Physicians (OCFP) established the Collaborative Mental Health Network (CMHN). This network was in response to a needs assessment by the OCFP that identified significant challenges for family physicians trying to access psychiatric consultations for their patients, in addition to increased stress in the absence of access to information, guidance and advice.[4] The CMHN connects family physician mentees to Psychiatry and GP Psychotherapist mentors through telephone, email and fax. Mentees may contact their mentors on an informal basis for rapid response guidance and support.

A newer initiative in Ontario is based on the trademarked Extension for Community Healthcare Outcomes or "ECHO" model of collaborative care, which links specialists and primary care to improve and expand clinical skills and capacity. There is a mental health focused ECHO™ in Ontario led by the Centre for Addiction and Mental Health (CAMH) and the University of Toronto (UofT). This ECHO™ is a virtual community of practice connecting 20+ rural "spoke" primary care sites with mental health and addiction specialists at the Toronto-based "hub."[5]

All of the aforementioned Collaborative Care initiatives are funded directly or indirectly by Ontario's Ministry of Health and Long Term Care (MoHLTC) and are a part of a broader health policy shift and mental health strategy to optimize access to high quality mental health care in primary care settings, such that a greater proportion of people experiencing mental illness are supported in these settings.[6]

2. Specialist care

(i) Referral to specialist care

Like other areas of medicine, the reasons for specialist referral for patients with mental health problems are multitude. Common reasons include diagnostic clarification, treatment optimization (especially related to medications), assessment of patients not responding to treatment, and assistance with managing the complexities of associated social factors, such as lack of housing, employment, and supportive relationships. Because several factors impact the referral process, the presence or absence of a referral to a psychiatrist does not necessarily reflect the severity of the patient's mental health problem. These factors include:

(a) Practice factors

Depending on practice setting, community needs or experience, PCPs will have greater competence and comfort in managing the spectrum of mental illness severity, such that the threshold for referral to specialist care can vary significantly. For example, more seasoned practitioners, those with a lot of experience treating mental illness, or those in team settings may feel comfortable managing many issues on their own, including making an accurate diagnosis, initiating and monitoring the appropriate medications, and accessing community resources. Conversely, newer practitioners, those in settings with lower rates of severe mental illness, or those with little team support may need to refer to a psychiatrist earlier in the patient's illness and require more support in the ongoing management.

(b) Systemic barriers to specialist care

In some settings, access to psychiatric consultation is severely limited, such as in more northern or rural and other under-serviced Ontario communities.[7] Many times, unfortunately, even if a psychiatrist's opinion is needed, it is not available or the wait time is many months so that the PCPs must manage the patient to the best of their abilities with the knowledge and resources available. Access to psychiatry has been rated the poorest among specialists by family physicians in Canada.[8] In more rural parts of Ontario, excessive wait times have also been identified as one of the most significant barriers to psychiatry referral.[9] Many patients with mental health problems simply cannot access timely specialized psychiatric care in our current system.

(c) Patient factors

Both stigma and the symptoms of mental illness contribute to non-adherence with psychiatric care. Some patients will refuse referral to a psychiatrist for fear of being stigmatized, even when their PCP recommends it. For others, it is the symptoms of their mental illness, such as severe depression or anxiety, which affects cognition, energy and motivation, and which results in them missing their consultation or follow-up visit with the psychiatrist.

(d) Health policy factors

As mentioned, improving access to psychiatric consultation in their primary care "medical home" is one initiative to try to overcome these barriers, but only 3 million of Ontario's 13 million residents are patients of Family Health Teams.[10] Furthermore, owing to provincial health policy that fails to incentivize PCPs to accept patients with greater complexity, people experiencing mental illness and addictions are underrepresented among FHT patients.[11] Additionally, even under Ontario's single-payer system, being disadvantaged can interfere with access to care; within urban Ontario, epidemiological data shows that recent immigrants are less likely to use mental health services than long-term residents.[12]

The above practice, system, patient, and policy factors help explain why the severity of a patient's mental health condition and their level of functional impairment might be poorly predicted by whether or not they have been referred to a psychiatrist. This idea has been substantiated by empirical research. One epidemiological study, using data collected from 9953 Ontarians as part of the Ontario Health Survey, showed that rates of disability in the past 30 days were not significantly different between patients being seen by their family physician, by a psychiatrist, or by both.[13] A Canada-wide epidemiological study surveying 125,493 people showed that, amongst 10,886 mental health care help-seekers, the rates of disability over the prior two weeks was 29.7% for those accessing mental health care through their family physician, 35.1% for those receiving care through a psychiatrist, and 42.8% for those being followed by multiple practitioners[14]. This suggests that the difference in levels of disability between those seen by a mental health specialist and those followed solely in primary care are modest at best. Research specifically examining the decision to refer patients to a mental health specialist is limited. One study, using a Canada-wide dataset of 17,244 interviewees, identified 608 people who reported an episode of depression in the 12 months preceding the survey and who had contacted a family physician during that time. Of the 47 persons in that study with severely impairing major depressive disorder, 16 were referred to a psychiatrist or psychologist, whereas 31 were not.[15] Taken together, this research indicates small differences in impairment and illness severity between those receiving primary care versus specialty services, and suggests great numbers of patients with severe impairment do not get referred for specialty mental health care.

Referrals to psychiatric specialists may lead to one of several outcomes. Specialists (individually or through the clinical programs or services in which they work) may decline a referral for reasons varying from lack of availability, administrative matters (e.g. the patient resides outside of the geographic "catchment" area that the program serves), or clinical matters (e.g. the patient's problem doesn't align with the target population of the program or is thought to be unlikely to benefit from the program). Another possible outcome is that the referral may be accepted but the patient may not attend the appointment. This can occur for a variety of reasons, including but not limited to mental illness symptoms interfering with ability to attend. In such circumstances programs may or may not offer the patient another appointment.

(ii) Specialist assessment

Should the patient attend an appointment, they are typically seen for a 45 to 75 minute consultation in order to make a diagnosis and 'formulation', assess risks of harm to the patient or others arising from their mental illness, and make treatment recommendations. Formulation refers to an understanding of the biological, psychological, social, cultural, and other factors that predisposed the patient to develop their mental problems, that precipitated and/or are perpetuating their problems, or that are protective factors or strengths. In some settings the consultation/assessment is done in conjunction with another provider (e.g. nurse, social worker, psychologist, or other health professional). Typically, this assessment culminates in a letter back to the

referring PCP. Unfortunately, psychiatrists vary greatly in the timeliness, quality, and level of detail provided in consultation letters.[16,17]

Numerous factors are considered when making recommendations, including diagnoses, formulation, assessment of risks, medical literature regarding effective treatments, patient past treatment experience, affordability and accessibility of treatments, and patient preference.

(iii) Specialist follow-up

Psychiatric consultation may or may not lead to further psychiatric follow up being offered to the patient (and accepted by the patient). Illness acuity, chronicity, complexity, risks, level of function, and the presence of goals that are likely to be amenable to treatment inform the psychiatrist's decision whether to offer follow up, as do alignment or 'fit' between the physician or program and patient, and the availability of alternatives. Additionally, epidemiological research suggests that psychiatrists in higher resource settings (i.e. in parts of the province where there are more psychiatrists per capita) are more likely to provide follow-up appointments, and to see a patient more frequently, compared with psychiatrists in other parts of the province.[7]

If psychiatric follow-up is offered it may be frequent and time-limited (e.g. every one to two weeks for several months) or less frequent and longer term (e.g. every one to three months for years). Appointments can include monitoring symptoms, risks and level of function; education and support for chronic disease self-management and self-care; optimizing pharmacotherapy based on effectiveness, tolerability, and other considerations; psychotherapy (e.g. supportive, problem-solving, cognitive-behavioural, or other therapy modalities); addressing social determinants of health, and/or; encouragement of connections to informal or community supports.

3. Hospital care

Some patients use the hospital emergency department (ED) as a part of their care and others do not, with numerous contributory factors. Typically, problems with mental illness-related symptoms, risks, or level of function are severe by the time a patient attends the emergency department, and certainly if they are hospitalized. Voluntary use of the ED may be influenced by the presence of a psychosocial crisis (e.g. related to life events) with a high level of distress, the absence of coping mechanisms (e.g. internal coping skills, social networks of family and friends, or existing health care treatment relationships), and past positive or negative experiences of healthcare. Some patients with persistent mental illness may come or be brought to the ED due to worsening of illness related to non-adherence with medication or loss of medication effectiveness.

Patients presenting to the emergency department may be admitted to stay in the hospital, or discharged with urgent outpatient follow up, or discharged without any new resources / services. Hospitalization is uncommon and typically only occurs if the patient's illness is so severe that it compromises their ability to reside safely in the

community, or requires rapid adjustments in biological treatments under close supervision, or if hospital admission will facilitate other critical steps such as getting tests done, legal matters attended to (e.g. finding of incapacity), or urgently needed care coordinated. For example, in the seven hospitals of the Toronto Central LHIN, in fiscal year 2015-16, only 11.2% of mental health and addictions-related emergency department visits resulted in admission (which represents a 32% decrease in the admission rate per ED visit over a four year interval) (Mental Health and Addictions Acute Care Alliance, personal communication, 2016).

Urgent outpatient follow up may be offered if available and appropriate for the patient's needs (e.g. for ongoing monitoring of acute risks to self or others, further diagnostic clarification, crisis stabilization, and/or bridging/connections to continuing care e.g. for patients lacking a PCP or therapist or needing a higher level of ongoing specialist care).[18] However, urgent outpatient follow up may not be offered because of scarcity, or because the service is not anticipated to be of benefit for the patient, or because it is not needed or desired by the patient. Finally, follow up may be offered but in a manner that is difficult for a patient to use during a crisis (e.g. requiring one or more phone calls to initiate service, attendance at a pre-scheduled appointment, etc.).[19]

Part III: Treatment of mental health conditions

1. Treatment options

Mental illness and addictions can be managed by a wide range of treatments. The most straightforward classification of these is binary: 'biological' treatments, consisting primarily of medication but including electroconvulsive or other neuro-stimulation therapies; and 'non-biological' treatments, which include a variety of psychotherapies, behavioral treatments, family therapy, social programs, and addressing social determinants of health, etc. As in other branches of medicine, there is an extensive evidence base that supports clinical guidelines for the application of particular therapies to particular conditions. In mental illness, however, a number of significant issues influence the apparent simplicity of applying these measures - with mental health illness, it is not as straightforward as prescribing a drug for high blood pressure.

2. Complexities of treatment

(i) Limited access to mental health programs

In Ontario, there is limited access to psychiatrists and specialized mental illness programs to deliver evidence-based treatments. For example, with respect to eating disorders, there is only one specialized adult eating disorder unit in downtown Toronto, which can treat a maximum of 180 patients a year in hospital-based care. Provincially, there are only about 20 beds for adults to receive specialized treatment for eating disorders, and another 20 or so for children or adolescents. As a result the typical wait for a bed is 3-4 months.[20]

Similarly, limited access plagues outpatient care for general psychiatric patients or for specialized services.[21] For an adult with a mood disorder in Toronto, ongoing psychiatric follow-up is difficult to obtain. Poor access is further exacerbated within socially marginalized populations. The homeless, immigrant, indigenous, and co-morbidly medically ill, have less access to mental illness care than the already low standard. Illustrating this point, research has shown that within Toronto, individuals within neighbourhoods with the highest levels of educational attainment had more rapid access to see a psychiatrist, and were significantly less likely to require a family physician's referral in order to access psychiatric care, than those in areas with the lowest education levels.[11] Additionally, a 2006 study demonstrated that, within a sample of 746,141 residents of the southern central region of Toronto who had had a health visit in 2000, those living in neighbourhoods with the highest socioeconomic stratum were 1.6 times as likely to access psychiatric care as those in the lowest socioeconomic stratum.[22] These research results support the notion that social disadvantage is associated with reduced access to specialty mental health care.

A recent American epidemiological study confirms this notion, showing that low income level, health insurance status, and race combine to increase the rate of medication non-adherence[23], suggesting that disadvantaged populations are less likely to be receiving treatment. Of course, these increased rates of non-adherence could be due to reasons other than limited access to care, such as stigma, financial barriers, different cultural expectations of medication, or because the stressful life experiences related to being marginalized interfere with one's ability to take medication consistently.

Access also varies for each treatment modality - it is easier for a family physician to receive medication advice and deliver a prescription then it is for him/her to provide (or locate a resource to provide) a 21-hour course of cognitive-behavioral therapy.

(ii) Treatment stigma

Patients are not prepared to uniformly accept all treatment recommendations. Mental illness, more than physical illness, evokes personal reactions about what constitutes a 'legitimate' treatment. Some people see taking a medication for mood as a stigmatizing sign of weakness, others would find the self-revelation typical of a psychotherapy to be shaming, whilst others will balk at the amount of time required to attend a cognitive behavioral treatment, and complete all the homework assignments. These attitudes tend to be deeply ingrained in people, their families, and culture, and may inhibit uptake or even 'over-rule' the physician's recommendation of optimal treatment.[24,25]

(iii) Treatment does not always reflect illness severity

While in many cases treatment may correlate with illness severity, this isn't necessarily the case.[26] Reflecting this, a recent study showed that, among patients with obsessive compulsive disorder (OCD), those who refused medication treatment actually had greater severity of OCD and greater levels of disability than those who had not refused.[27] In the absence of more definitive studies, it cannot be assumed that less treatment implies less disability.

(iv) Limits to treatment tolerability

Mental illness treatments require ongoing adherence to be effective. However, psychiatric medication can create side-effects - many of which are difficult to endure - such as fatigue, weight gain, glucose intolerance, nausea, restlessness, or reduction of sexual drive or capacity. Moreover, some of the medications can have serious medical consequences, such as organ dysfunction (liver, kidney, thyroid, cardiac), diabetes, and premature mortality. One study showed that the development of side-effects is associated with worsened levels of functional impairment.[28] Other studies demonstrate an advantage of medication over placebo but also note a (maximum) drop-out rate of 34%, which means that a 1/3 of patients were unable to tolerate the medication long enough to see if it could work.[29] Therefore, the absence of treatment does not mean the patient is resisting treatment, because the treatment could be intolerable. Non-biological treatments typically require a commitment in time, money, and effort, and appointments may be scheduled in such a way that they require accommodation at work, or revealing explanations to family members. These factors further reduce consistent application of mental illness treatments.

(v) Limits to treatment effectiveness

Mental illness treatments are not ubiquitously effective, even when adhered to consistently by the patient. Focusing on mood disorders as a common example, the efficacy of anti-depressants for Major Depression Disorder has been seriously challenged in prominent medical journals.[30] Therefore there are many legitimate reasons why someone with a disabling mental health condition may not be undertaking potentially effective treatments. Several review articles have examined the effects of psychiatric medications on improving patients' level of functioning using empirically validated scales of disability. Studies conflict on whether medications improve functioning in generalized anxiety disorder, a common anxiety disorder,[31] while reviews of common antidepressants duloxetine and desvenlafaxine show that treatment improves functional recovery in depressed patients by a mere 5% to 10.8% relative to placebo.[32,33] This reflects the fact that, while antidepressant medications can improve symptoms of mood and anxiety disorders, their ability to improve people's level of function and disability is severely limited, raising questions about whether the number of medications someone has received is a useful indicator of their degree of impairment.

(vi) Optimal management – one medication

A tenet of psychiatric management is that one attempts to address several conditions with one intervention. For instance, in a depressed individual rendered sleepless with chronic pain, one would ideally use one medication to impact on the depression, pain, and insomnia at the same time. This is considered optimal management as it reduces medication interaction and therefore the odds of intolerable side-effects, almost certainly increasing adherence. Therefore, the seriousness of a condition is not necessarily directly related to the number of medications prescribed.

(vii) Prescriber practices

Lastly, practitioners greatly differ in terms of how many medications they prescribe for mental health conditions. A UK study compared the rates at which family physicians prescribed various psychiatric medications. They found that, when they compared the highest prescribing physicians to the lowest prescribing physicians, there were 13-fold and eightfold differences between rates of prescriptions of anti-anxiety and anti-depressant medications, respectively.[34] As a result, the number of medications a patient is taking, or has taken in the past, might vary as a function of who is prescribing them.

The six reasons above suggest that the extent of the treatment a patient receives is influenced by many different factors, and calls into question the idea that a patient's illness severity, or level of functional impairment, can be predicted by their treatment history. A literature review undertaken by the authors of this report, performed using a major medical research database (MEDLINE) and by reviewing Canadian and Ontario epidemiological data, revealed no evidence that the level of a patient's functional impairment or disability, as measured by empirically-validated scales, can be predicted by the number of treatments that they are currently receiving, or have previously received. In fact, as discussed earlier, Canadian and Ontario epidemiologic data shows that many individuals with severe mental illness are not currently receiving specialized mental health treatment, and are not referred to these services by their primary care providers.[13–15]

Part IV: Diagnosis is an inconsistent indicator of functional impairment

Diagnoses and symptoms are poor indicators of function. People may have 'milder' diagnoses, such as anxiety, and function very poorly, or 'serious' diagnoses, such as Bipolar Affective Disorder, and be able to hold onto a job and relationship. Impairment is contributed to by the person's syndrome, but beyond the diagnostic category there are often factors that negatively impact on function. As one example, the commonest of these is early (and frequently lifelong) exposure to adversity, such as sexual or physical abuse, neglect, substance use or criminality in the family of origin, or loss of a parent as a child. These factors are repeatedly and clearly associated in multiple studies[35–39] with illness and impairment as an adult, yet are rarely addressed or taken into account in discussions about an individual's diagnosis. Other factors, such as presence/absence of social supports and medical comorbidity, also impact how a patient functions.

Ultimately, the 'medical model' of mental illness, in which there are clearly delineated diagnoses, separate from each other, each with their own specific and efficacious treatment, is a poor fit with the reality of psychiatric management.

Part V: The case of medical-psychiatric co-morbidity

Having two diseases is inevitably worse than having one. Nowhere is this more problematic than when there is medical-psychiatric comorbidity. There are several ways in which this co-occurrence of illnesses can occur and cause problems:

1. Patients with a physical disease may have an increased risk of mental illness, For instance cancer patients are more likely to have a psychiatric disorder.[40]
2. Psychological issues may worsen the physical illness. In Cardiovascular Disease there is a large body of literature that supports the idea that specific psychological issues – namely depression, anxiety, personality factors, social isolation, and chronic life stress - contribute to the severity of the cardiac syndrome.[41]
3. In other diseases, such as Multiple Sclerosis, symptoms that mimic psychiatric syndromes, such as Bipolar disorder, may be part of the core disorder.[42]
4. Treatments for one disease may compromise treatment for the other, as is the case with Hepatitis C.[43]
5. Treatments for one may actually cause the secondary disease; for instance metabolic consequences, including diabetes, can result from anti-psychotic treatment.[44]

Unfortunately, the co-occurrence of illnesses does not typically lead to more extensive care, but rather the opposite – one disease is likely to be undertreated. Schizophrenic patients with acute cardiac presentations are less likely to receive specialist care and 56% more likely to die from the cardiac event than non-schizophrenic patients.[45] Even when in an explicitly terminal phase of medical illness, patients with schizophrenia are still less likely to see a specialist (other than a psychiatrist) or to receive palliative care and opioid analgesia, standards of care for this phase of illness.[46] The disjointed care also results in higher costs as the co-morbid population tends to be high utilizers of healthcare.[47]

Ultimately, having more illness, with less efficient treatment, leads to increased disability. For instance, the negative impact of depression and other psychiatric conditions in Parkinson's disease has been shown to definitively contribute significantly to the degree of disability.[48]

In summary, the co-occurrence of psychiatric and medical illness is common, and typically results in under-treatment, higher costs, and amplified disability.

Part VI: The case of addictions

Although addiction is a mental illness to which all of the above conditions adhere, there are some aspects of addiction that deserve particular emphasis, including:

1. Early age of onset. Because they often develop at a young age and continue over a long period of time, mental illness and addictions cause major disruptions in

people's ability to lead healthy lives. Quality of life, interpersonal relationships, ability to work or study, financial stability, and legal issues can all be profoundly affected by addiction.[49]

2. Heightened stigma and the widespread tendency to blame people experiencing addictions for their condition and resultant impairment.
3. Frequent co-morbidity with other mental and medical illness. Addiction is often co-morbid with other mental illness. In Ontario, symptoms of mental illness are reported among 16% percent of patients with alcohol use problems and 29% of those with illicit drug use problems. Similarly, compared to patients without a mental illness, patients with mental illness (especially schizophrenia, bipolar disorder, and anxiety disorders) are up to twice as likely to have addiction issues.[49] Such individuals are characterized by more difficult treatment courses and poorer outcomes. Furthermore, the development of over 65 medical conditions ranging from injuries (such as increased risk of trauma in motor vehicle accidents) to chronic medical illnesses has been linked to the consumption of alcohol.[1] Other addictions similarly are associated with a number of medical problems. This complexity and vulnerability combined often result in non-adherence with medical appointments and treatments, more severe symptoms, decreased overall function, and higher relapse rates of their disease.
4. Persistence of functional impairment during episodes of remission is particularly poorly understood. During periods of remission there remains a great deal of vulnerability to stress and relapse; it is often the retreat from potential triggers / stressors that enables people to maintain sobriety. Abstinence may be a full time job. Additionally, there is a lot of disruption in their other foundational aspects of life (e.g. family and social support, education and employment history, housing, etc.) that support functioning. A return to fuller functioning and employment takes time and may not be realistic for some.

In summary the patient with addiction is at risk for other mental illness, a chronically restricted range of functioning, and a challenge around restoring the aspects of their life that would permit full engagement in society.[50]

Part VII: Conclusion

The treatment of mental health conditions is complex and depends on the particular circumstances of the individual. Access to treatment can be challenging, with multiple potential barriers for patients, such as stigma, limited institutional resources, and financial constraints. In this context, treatment history can play a limited role in the assessment of the severity of mental conditions and functional impairment.

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