

Case Report

Economic burden of silent mental disorders: a case study of agnosia in schizophrenia

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ABSTRACT

Mental health problems affect society as a whole, and not just a small, isolated segment. In developed countries with well-organized healthcare systems, between 44% and 70% of patients with mental disorders do not receive treatment whereas in developing countries the treatment gap being close to 90%. Schizophrenia is a severe mental disorder affecting more than 21 million people worldwide. People with schizophrenia are 2-2.5 times more likely to die early than the general population. The case study highlights about agnosia in a schizophrenic patient in a primary care setting and how to address the management at a broader perspective using the appropriate antipsychotic medication and ensuring the support from a family without violating the human rights of the patient. The World Economic Forum estimated that the cumulative global impact of mental disorders in terms of lost economic output will amount to US\$ 16 trillion over the next 20 years, equivalent to more than 1% of the global gross domestic product. Mental health should be a concern for all of us, rather than only for those who suffer from a mental disorder. The mental health action plan 2013-2020, endorsed by the World Health Assembly in 2013, highlights the steps required to provide appropriate services for people with mental disorders including schizophrenia. A key recommendation of the action plan is to shift services from institutions to the community. Mental health must be considered a focus of renewed investment not just in terms of human development and dignity but also in terms of social and economic development.

Keywords: Mental health, Schizophrenia, Agnosia, Delusions, Mental health action plan, Human rights

INTRODUCTION

Mental health is more than the mere lack of mental disorders. Mental health problems affect society as a whole, and not just a small, isolated segment. They are therefore a major challenge to global development. No group is immune to mental disorders, but the risk is higher among the poor, homeless, the unemployed, persons with low education, victims of violence, migrants, and refugees, indigenous populations, children, and adolescents, abused women and the neglected

elderly.¹ Concepts of mental health include subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence and recognition of the ability to realize one's intellectual and emotional potential. It has also been defined as a state of well-being whereby individuals recognize their abilities, are able to cope with the normal stresses of life, work productively and fruitfully, and make a contribution to their communities. Mental health is about enhancing competencies of individuals and communities and enabling them to achieve their self-determined goals. In

developed countries with well-organized healthcare systems, between 44% and 70% of patients with mental disorders do not receive treatment. In developing countries, the figures are even more startling, with the treatment gap being close to 90%.²

Schizophrenia

According to the latest statistics by WHO, schizophrenia which is a severe mental disorder globally affects more than 21 million people. The disease is characterized by distortions in thinking, perception, emotions, language, sense of self and behavior and the most common experiences include hearing voices and delusions. Interestingly, it commonly starts earlier among men it is found to be more common among males (12 million) than females (9 million). People with schizophrenia are 2-2.5 times more likely to die early than the general population often due to physical illnesses, such as cardiovascular, metabolic and infectious diseases. There is a greater degree of Stigma and discrimination attached to this and violation of human rights of people with schizophrenia are very common.

Economic burden of mental disorders

Globally, more than 25% of all years lived with disability and over 10% of the total burden of disease is attributable to mental, neurological and substance use disorders.³ The economic impacts of mental illness affect personal income, the ability of ill persons— and often their caregivers— to work, productivity in the workplace and contributions to the national economy, as well as the utilization of treatment and support services. Treating people with psychosis with older antipsychotic drugs plus psychosocial support is a quite cost-effective public-health intervention. It is feasible to implement it in primary care. However, some referral support is required, making it less affordable.³ The cost of mental health problems in developed countries is estimated to be between 3% and 4% of GNP. Mental, neurological and substance use disorders are major contributors to morbidity and premature mortality throughout the world. Over 10% of the global burden of disease, measured in terms of years of healthy life lost, can be attributed to these disorders.⁴

Case study: Agnosia in schizophrenia

When I saw my patient, CG, my feelings ran the gamut of gratitude to fatigue. I was relieved this 22-year-old with schizophrenia decided to show up for his appointment with me. But before we even exchange one word, I was exhausted with the anticipation of my pointless never-ending cycle of cajoling and pleading that accompanies CG's reluctance to take his antipsychotic medication. His current legal problems stem from his medication noncompliance.

CG is a 22 year old male of Nepali extraction who presented to my office for primary care. His current history started with a pick up by the police a mere 48 hours after his 18th birthday for soliciting on downtown Manchester streets for rocket fuel, while intoxicated on cannabis. His explanation to anyone who would listen was that he had a spaceship built for Martian travel and needed the fuel for his trip. This episode resulted in a 4-day admission to the State Hospital for psychosis and initiation of medication, but because he did not demonstrate any proclivity to harm himself or others, did not desire treatment and was now a legal adult, the psychiatrists were compelled to release him. I am grateful to the doctor who called me to let me know what happened since there is often no communication between mental health centers and primary care doctors such as I am.

CG did not follow up with visits to his psychiatrist, nor did he take the respiradal prescribed to him and spent the following months at home drinking, smoking pot and generally making life miserable for his family who had no understanding of his disease. When he became too loud or argumentative, the police would take him away for a period of days or weeks from the multi-family tenement building where he lived. This was how CG spent his life for more than a year before I (Doctor) would see CG in my office. An example of our conversations follows

Doc: Have you been seeing your mental health doctor?	CG: Yes
Doc: When did you see him last?	CG: When I was in Concord
Doc: When were you there?	CG: Three years ago
Doc: So you haven't seen a mental health doctor since you were admitted to the hospital?	CG: But I am going
Doc: When?	CG: I have an appointment
Doc: When?	CG: I don't know. I have to call
We did the same dance around the medications I prescribed.	
Doc: Are you having any problems with Risperdal? How does it make you feel?	CG: Fine
Doc: When was your last dose?	CG: When I was at the doctor.
Doc: Which doctor? Do you mean me and my office?	CG: No, Concord
Doc: That was three years ago. What happened to the pills I prescribed for you at your last visit with me?	CG: I had them.

At this point, realizing I was going to learn nothing from any conversation with CG, telephoned the pharmacist to find out if CG ever picked up his prescription and found that it had not been picked up at all.

Lack of good judgment and absence of rationality are hallmarks of schizophrenia. On first meeting with patients suffering this condition a physician can feel an amused sort of awe at just how insane their conversations are. This initial feeling gives way to a sense of frustration with the idea that no amount of debate club training could win these arguments. CG and other similar patients lack insight into their condition and miss the logical reality that delusional thinking and their actions will lead to trouble. This incongruent thinking is the cold hard evidence of the psychotic state. In CG's case, his parents and sister told me CG had been arrested a couple of times. But when I questioned him on how he was doing, he kept answering, "good", even when I presented him with the evidence he wasn't. Unemployed, broke, court date looming, arrest record, high school dropout, these are not features of a good life, I argued with him repeatedly.

This is a classic case of agnosia in schizophrenic populations. The term refers to a patient's neurological unawareness of a condition that is easily seen by others. Described eloquently in Oliver Sacks book "The Man Who Mistook His Wife for a Hat," agnosia occurs in a variety of neurological conditions featuring permanent brain injury: brain tumors, and more often right cerebral hemisphere strokes. For example, if in examination a physician asks a patient who suffered a stroke to lift his left hand, the patient would be unable because of the stroke's paralyzing effects. However, because of agnosia, the patient would not recognize the fact his arm was uselessly limp. He might insist it was raised. Even if shown his left arm dangling downward as evidence of his disability, the agnosiac stroke patient would still feel he was capable of lifting his left hand. He would argue his arm remained down because it was someone else's hand or I as the examiner was playing a trick on him.

Knowing agnosia to be part of mental illness's spectrum, gave me a vision of how to treat CG. I realized I could no longer argue and rationalize. I needed to find something CG wanted that was legal, healthy and helpful, something that would necessitate his compliance with antipsychotic medication. In this case that something was social security benefits.

Schizophrenics with diagnoses made early in adulthood like CG have a poor prognosis for functionality. Even while medicated, it is unlikely CG will achieve financial and social independence. The severity of CG's disease, even if he takes Risperdal will render him fit only for the most menial of jobs. At this point, the best I hope for is safety for him and those he lives with. Social Security disability income would allow him that level of insurance to pay for medications, visits to therapists and secure his

housing, and an independent representative payee can be appointed to make sure he does not spend his money foolishly on whatever his delusions are telling him to do.

I am not sure what the future brings for CG, but armed with this knowledge, I can stop thinking about schizophrenia's poor judgment as something I can cure with debate and start recognizing it as much a part of the disease's brain injury as a stroke or tumor are to a neurology patient.

DISCUSSION

There is a strong international consensus that the shortage of financial and human resources for mental health requires a policy to integrate mental health care into general health care. Such integration provides opportunities for reducing the stigma of mental health problems, which in itself is a major barrier to accessing care. A recent study by the World Economic Forum estimated that the cumulative global impact of mental disorders in terms of lost economic output will amount to US\$ 16 trillion over the next 20 years.⁴ A recent report by WHO and WONCA presents the advantages of providing mental health services in primary care, and describes how a range of health systems have successfully undertaken this transformation.⁵ Studies from specific countries provide similarly sobering findings where the health care costs and lost earnings amount to at least US\$ 50 billion in Canada and US\$ 75 billion in the United Kingdom both equivalent to more than 2.5% of national GDP.^{6,7} According to a recent analysis for India, it was found that half of the out-of-pocket expenditures made by households for psychiatric disorders came from loans and a further 40% from household income or savings.⁸ More than 50% of people with schizophrenia are not receiving appropriate care. Ninety percent of people with untreated schizophrenia live in low- and middle-income countries. Lack of access to mental health services is an important issue. Furthermore, people with schizophrenia are less likely to seek care than the general population. Schizophrenia is treatable. Treatment with medicines and psychosocial support is effective. However, the majority of people with chronic schizophrenia lack access to treatment. Efforts to transfer care from mental health institutions to the community need to be expanded and accelerated. The engagement of family members and the wider community in providing support is very important. Programmes in several low- and middle-income countries (e.g. Ethiopia, Guinea-Bissau, India, Iran, Pakistan, Tanzania) have demonstrated the feasibility of providing care to people with severe mental illness through the primary health-care system by: training primary health-care personnel; providing access to essential drugs; supporting families in providing home care; educating the public to decrease stigma and discrimination; enhancing independent living skills through recovery-oriented psychosocial interventions (e.g., life skills training, social skills training) can be offered for people with schizophrenia and for their families and/or caregivers;

and facilitating independent living, if possible or assisted living, supported housing and supported employment for people with schizophrenia. This can act as a base for people with Schizophrenia to achieve recovery goals. People affected by schizophrenia often face difficulty in obtaining or retaining normal employment or housing opportunities.⁹

CONCLUSION

In fact, mental health should be a concern for everyone rather than only for those who suffer from a mental disorder. As per recommendations of the World Health Report 2001 on mental health, to address the gaps in mental health services, the WHO has created the mental health global action programme (mhGAP) to implement various strategies aimed at improving the mental health of populations which need regular follow-up. There is still an enormous gap between the need for treatment of mental disorders and the resources available to the people who need those essential services. Mental health can be considered a focus of renewed investment not just in terms of human development and dignity but also in terms of social and economic development at global level.

Way forward

The WHO's mental health action plan 2013-2020, endorsed by the World Health Assembly in 2013, highlights the steps required to provide appropriate services for people with mental disorders including schizophrenia.¹⁰ A key recommendation of the action plan is to shift services from institutions to the community.

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