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Psychiatric Crisis Care and the More is Less Paradox

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Abstract



Psychiatric crisis care in the U.S. exemplifies the "more is less paradox" of U.S. health care. We spend more for health care than any other high-income country, yet our outcomes are typically poor compared to these other countries (OECD in OECD health statistics. Retrieved from https://www.oced.org/health/health-data.html, 2020). We do this, in part, by emphasizing medical treatments for problems that are inherently social, rather than addressing social determinants of health. Medical interventions for socio-economic problems are usually expensive and ineffective. For mental health crisis care, adding unfunded, untested, medical interventions to the current mélange of poorly funded, disorganized arrangements will not help. Instead, the U.S. should address social determinants, emphasize research-based interventions, and emphasize prevention—proven strategies that decrease costs and improve outcomes.

Keywords Mental health services · Crisis care · Evidence-based practices · Prevention

Introduction

U.S. health care exemplifies the "more is less paradox" of health care. The U.S. spends far more on health care than any of the other 36 high-income country in the Organization for Economic Co-operation and Development (OECD) (Papanicolas et al., 2019), but our health outcomes, e.g., maternal health, serious infectious disease, and longevity, are typically in the lowest tenth (OECD, 2020; Roser, 2020). The U.S. does this by emphasizing high-technology medical treatments, pharmaceuticals, and higher costs for fewer professional services, rather than providing social services (Bradley et al., 2011; Squires & Anderson, 2015), even though health outcomes for chronic illnesses are predominantly (80-90%) related to social determinants rather than to medical care (Magnan, 2017). People who are poor, unemployed, and living in unstable housing in problemridden neighborhoods inevitably experience distress, develop psychiatric symptoms, and use alcohol and other substances excessively. Moreover, they die prematurely due to "diseases of despair," such as alcohol and drug poisoning, alcohol-related liver disease, and depression/suicide (Case & Deaton, 2020). The COVID-19 pandemic has amplified these relationships between stress and mental health conditions (Czeisler et al., 2020; Gifford et al., 2020).

The U.S. spends about the same proportion of its health budget as other high-income countries on mental health care but has a much higher overall health budget and therefore spends more on mental health care (OECD, 2020). But what about outcomes? Countries do not report mental health outcomes using the same metrics, but compared to European countries, the U.S. has very high rates of suicide (OECD, 2020), homelessness (Fazel et al., 2014) and imprisonment (Duffin, 2020)—all of which are symptoms of an inadequate systemic response to behavioral health problems.

Psychiatric interventions, such as involuntary hospitalizations, brain imaging, expensive medications, and polypharmacy, are neither what patients want nor solutions to these social problems (Drake, 2017; Drake & Wallach, 2019). Although the pharmaceutical and other industries, professional guilds, hospital associations, insurance companies, and private providers benefit from medicalizing social problems, most of the people who bear the distress do not.

The "more is less paradox" should be at the forefront of discussion among mental health policy makers now because, as we struggle with the COVID-19 pandemic and its related employment and mental health problems, state and federal mental health budgets are likely to be cut significantly rather than increased (Gifford et al., 2020). Providers will of course

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continue to advocate for more psychiatric hospitals, emergency services, medications, and other medical interventions, but more medical treatment is unlikely to solve the problems.

The U.S. needs a new paradigm for mental health services. The crisis care model presents one opportunity to change from a "more is less" mental health approach to a "less is more" approach. Current crisis care is emblematic of the current, expensive, dysfunctional behavioral health system in the U.S. In this essay, we consider the current crisis care system and examine several alternatives.

Current Crisis Care

Consider the following example of a common mental health crisis (actually an amalgam of several patients we have interviewed in recent years), which occurs every day in numerous towns and cities across the U.S. Someone calls 911 in distress reporting suicidal thoughts and is subsequently transported to a hospital emergency room, often by ambulance and in restraints. The precipitant for this episode is likely to be a situational stressor rather than an illness: for example, a father's alcoholic relapse and violent outburst precipitates an adolescent's mental health crisis. Once in the emergency department, however, the individual experiencing stress becomes a patient with a medical issue in a medical system that insists on evaluation by a highly trained professional. Even worse, the crisis may involve police who are unprepared to deal with a mental health crisis and escalate the situation to a traumatic, dangerous, and sometimes deadly encounter. The professional in the emergency room often has limited time because the emergency department is overwhelmed and may have little information for a variety of reasons: the patient may be traumatized and uncooperative after having been restrained, a local treatment provider who knows the patient may not be available, medical records may be difficult to access, the patient may deny permission to make contact with family, and so on. Thus, the professional may have little opportunity to explore the sources of the crisis, talk with the family and local mental health provider, or consider alternatives to hospitalization. Nevertheless, once the individual becomes a patient in the emergency room, the professional, with minimal information about the patient and the relevant environmental issues, has medical and legal responsibility. The easiest and safest decision is to insist on hospitalization, even if the patient disagrees vehemently. The patient may now be legally committed to be transported to the hospital but may be housed in the emergency room until a bed in the public hospital is available. After a few hours or days in the emergency room, an ambulance or police car takes the patient, in restraints again, for a lengthy drive to the public hospital. In the hospital, a court hearing, further assessments, daily evaluations, medication trials, and other medical and legal procedures ensue. After several days or weeks of hospitalization, the patient returns home, usually with new medications but without resolution of the social precipitant that led to hospitalization, setting the stage for cyclical crises and hospitalizations in the future.

Note that there are no malign professionals in this typical scenario. The emergency medical technicians, police, emergency room doctor, and hospital staff are trying to be helpful, doing their jobs to the best of their ability, following legal procedures. This is how our system is set up; this is how it works—or doesn't work.

Every day this type of crisis care occurs in states across the U.S. People with a behavioral health crisis receive interventions from the legal system, medical emergency systems, and psychiatric hospitals. The situation is worse in some states where untrained police turn a psychiatric crisis into a tragedy and in some states where an individual may be kept in jail without treatment while waiting for a psychiatric bed. The system is expensive, legalized, medicalized, hospital-based, doctor-oriented, and, most important, ineffective. Moreover, the interventions create more trauma and a revolving-door system of care that reinforces a chronic patient identity.

Some people do receive help, but this system neither prevents suicides, many of which actually occur in the hospital (Pompili et al., 2004), nor leads to functional recovery. The evidence shows instead that crisis interventions and waiting for inpatient care in the hospital are often harmful (Clarke et al., 2007), in part because transport to the hospital handcuffed in a police car and being held involuntarily in the hospital add trauma to the individual's problems. Some suicide experts consider hospitalization a risk factor for suicide (Pompili et al., 2004). Even more disturbing, news articles every week report that police interventions for mental health crises can end tragically with a patient's death. The call for more hospital beds to relieve crowded emergency rooms and bolster an ineffective system rings hollow. Current crisis care in the U.S. is largely ineffective and often harmful. But what are the alternatives?

A New System of Crisis Care

Imagine that the U.S. could create a comprehensive crisis response system that would deliver crisis services to "anyone, anywhere, and any time" without so much reliance on hospitals, emergency medical teams, and police. This is the promise of the substance abuse and mental health services administration's (SAMHSA) national guidelines for behavioral health crisis care—A best practice toolkit (https://www. samhsa.gov/find-help/implementing-behavioral-health-crisis-care). The SAMHSA plan proposes three major new services that would be available in every community: crisis telephone lines linked to a national GPS network available 24/7 to assess needs and dispatch supports, mobile crisis teams to deliver supports outside of hospital settings 24/7, and stabilization facilities outside of hospitals that would provide crisis residences 24/7. Well trained clinicians in teams led by psychiatrists and psychiatric nurse practitioners would oversee triage and care 24/7. The system would provide credentialed peer supports, follow national suicide prevention guidelines, coordinate overflow coverage, dispatch mobile crisis teams as needed, use modern technologies, be trauma-informed, and connect individuals to facility-based care provided by trained clinicians when needed. The system would not involve police, except in special circumstances of dangerousness, and would avoid coercion, except as a last resort. Supervisory staff, a national registry, and staffed stabilization facilities would be available 24/7. This new system sounds ideal.

The SAMHSA proposal offers several components that have been advocated and sometimes provided for decades. For example, various residential alternatives to hospitalization have been used for many years in Europe and the U.S. (Lloyd-Evans & Johnson, 2019). Similarly, crisis call lines and outreach teams have been used in the U.S. for over 40 years (Guo et al., 2001; Stein & Test, 1980). These recommendations are reasonable and practical, and some reflect common sense. For example, a family calling for help with a psychiatric crisis should be able to access an empathic behavioral health worker rather than a police response (the switch to a 988 number promises such a change).

But the SAMHSA proposal also has serious weaknesses. First, SAMHSA terms the proposed system "best practices" rather than "evidence-based practices" because little rigorous scientific evidence exists to support such a system and many of its components. For example, only one randomized controlled study has addressed the central service, mobile crisis teams, and this single study found improved connections to outpatient care (a presumed mediator of outcomes) but no advantages in terms of actual social and symptom outcomes (Currier et al., 2010). The problem is that best practices count heavily on expert opinion, which is unreliable, unscientific, and often incorrect (Sackett et al., 2000). Second, many of the proposed best practices exist or have existed in the recent past. For example, 39 states reported having mobile crisis teams as far back as 1993 (Geller et al., 1995). Similarly, many states have provided crisis call lines, suicide prevention interventions, and residential diversion services over the years. Yet lack of funding has prevented sustaining any of these services on more than a minimal level (Lloyd-Evans & Johnson, 2019). Third, although the proposal suggests that a new crisis system would be integrated with the current fragmented system, the evidence shows that government has been consistently unable to engineer such major changes in mental health (Goldman & Grob, 2006; Goldman & Morrissey, 2020). For example,

the federal government has been trying to combine mental health and substance use services into integrated treatment programs for over 30 years (Ridgely et al., 1990), but such services remain rare (McGovern et al., 2014). Fourth, the financial plan to fund an extensive new crisis care system makes little sense in light of government's historical failure to fund its mental health policies (Goldman & Grob, 2006). Fifth, large government mental health policies have typically produced unintended, adverse consequences for states, providers, and patients (Frank et al., 2003). Finally, the 80-page SAMHSA document fails to mention, much less address, prevention.

Evidence-Based Interventions

Before relying on expert opinion, which is notoriously fallible, what about using existing evidence-based practices? Numerous well studied interventions can reduce hospital admissions (Drake & Wallach, 2019). Some of these are proximal—that is, they activate at the time of a potential crisis to avert an unnecessary hospitalization. For example, assertive community treatment teams follow high-risk patients in the community over time, meet with them in the community, and are available to patients, families, and landlords 24/7 to resolve potential problems that may lead to a crisis (Dieterich et al., 2010).

Most evidence-based practices that reduce hospitalizations are more distal, meaning that they prevent hospitalizations by helping people with mental health conditions to build skills and supports that avert crises weeks or months ahead. Examples include a set of non-medical interventions such as family psychoeducation (Murray-Swank & Dixon, 2004), peer supports (Bouchery et al., 2018; O'Connell et al., 2018), supported housing (Ly & Latimer, 2015; Woodhall-Melnik & Dunn, 2015), and supported employment (Knapp et al., 2013). Importantly, these evidencebased practices address social determinants and involve intervening before people are in acute crisis. Randomized controlled trials have shown that some of these interventions can reduce hospitalizations by 40-50% (Drake & Wallach, 2019), especially among high-risk patients with extensive histories of psychiatric hospitalizations (Burns et al., 2007).

Despite the potential to prevent crises, these non-medical, evidence-based practices are rarely available to the great majority of people with a serious mental health condition in the U.S. For example, after 40 years of dissemination, only 13% of mental health agencies provide assertive community treatment (Spivak et al., 2019). Recent SAMHSA surveys have found that less than 3% of patients in mental health treatment settings were able to access any one of several evidence-based practices (Bruns et al., 2016). The profound shortage of affordable housing persists (Anacker, 2019).

Why do mental health centers not provide interventions that we know would help people avoid crises and reduce hospitalizations? The crux of the problem is that evidencebased practices require financing to support infrastructure, training of staff, and high-fidelity implementation to achieve the desired outcomes (Bond & Drake, 2020). Lack of public financing renders these components rare or impossible to achieve over time. Public and private health insurers in the U.S. generally define these interventions as "social services" and do not consider them "medically necessary," even though they are arguably the most effective mental health interventions currently available (Drake & Wallach, 2020). Moreover, the organizations that save money when these evidence-based practices are available are emergency and inpatient departments of hospitals, not the community agencies that would provide the effective services. At the federal, state, and local levels, organizations rarely collaborate and share funding for psychosocial services; instead, they protect their budgets fiercely. Further, states are currently expecting cuts to Medicaid at a time of rapidly increasing need (Aron-Dine et al., 2020).

Meanwhile, excessive mental health dollars in the U.S. continue to go to the pharmaceutical industry for new medications. For example, spending on medications for mental illness increased from \$2.8 billion in 1987 to \$18 billion in 2001, even before the opioid epidemic (Frank et al., 2005). These increases have occurred despite evidence that the pharmaceutical industry's promises of more effective medications have repeatedly failed (Harrington, 2019).

A Prevention Approach

Financing an expensive new crisis care system or many existing evidence-based practices may ignore the underlying causes of mental health crises. Although many mental health disorders have a biomedical substrate, crises are often due to social factors. People with mental health conditions enter crisis mode when they lose or fear losing their housing, jobs, relationships, or other important supports.

Current crisis care overlooks the long-standing, consistent, public health finding that prevention is generally more effective and less expensive than treatment. Just as clean water rather than medical treatments historically stopped cholera epidemics, we now need healthy nutrition to combat the obesity epidemic more than additional weight reduction programs, bariatric surgeries, diabetes medications, and heart surgeries. Similarly, we need more smoking prevention rather than more oxygen tanks, cancer treatments, and lung transplants for smoking-related illnesses. The same principle applies to mental health crises: prevention is always the best medicine.

Primary prevention can reduce the prevalence of mental illness. The literature on evidence-based prevention of mental health conditions, e.g., by providing perinatal maternal care, pre-school education, family supports, and numerous other interventions, is voluminous (Saxena et al., 2006). Although primary prevention may prevent mental health crises years into the future, secondary and tertiary preventions can reduce crises in current time. Early intervention for psychosis patients (secondary prevention) can ameliorate social deterioration and prevent hospitalizations (McGorry, 2015). Increasing access to affordable housing (Tsemberis et al., 2004) and supported employment (Drake et al., 2012) for those with established serious mental disorders (tertiary prevention) can also prevent crises and hospitalizations. Yet these services are rarely available in the U.S.A number of the evidence-based services identified earlier in this essay can prevent crises, institutional care, and the attendant traumas that characterize the crisis care system in the U.S. Yet we rarely provide these services. Instead, we spend enormous amounts on medications, hospitals, emergency services, and criminal justice system costs.

To avoid crises, people with mental health conditions need the same conditions that everyone needs: food security, safe housing, employment opportunities, health insurance, and social supports. In the U.S. these individuals languish in their homes, apartments, homelessness settings, hospitals, jails, and emergency rooms because they lack modest social supports and meaningful employment that would help them to avoid crises, relapses, and expensive service use. Most of these people want to work, have friends, and be selfsufficient; and when they are helped to develop meaningful activities and supports, they experience better health and fewer crises (Drake et al., 2012).

Even a modest effort to boost prevention services could avert many psychiatric crises and lead to better outcomes. Nevertheless, problems with the prevention approach are significant. The chief barrier is political. After numerous cycles of failure for more than a century, the U.S. continues to fund biomedical treatments advocated by industry and professional guilds rather than social services desired by patients (Drake & Wallach, 2020). Further, many politicians continue to assert that providing social safety net services will undermine motivation for employment, despite extensive economics research to the contrary (Banerjee & Duflo, 2019). The reality is that people who have food security and health care insurance are more able to work (Hall et al., 2018), and employment reduces crises. A second problem is the extreme fragmentation of federal agencies, programs, budgets, and goals. As just one example, providing supported employment to everyone with a mental illness who wants to work seems an obvious improvement to our mental health system because it is cost-effective and would have numerous positive outcomes, not least of which is reducing crises and hospitalizations (Bond et al., 2020; Drake & Wallach, 2020). But because no single entity pays for supported employment, providers must bill multiple sources and combine, or braid, funds—a difficult task for individual agencies. Meanwhile, the hospitals that save money when patients are employed do not support the mental health centers that provide the preventive services. Third, as income disparities become greater and greater in the U.S., government has not redistributed wealth by expanding basic supports to disadvantaged populations (Schaefer, 2020). Instead, psychiatric hospital advocates increasingly pressure states to provide more hospital beds (O'Reilly et al., 2019).

Discussion and Conclusions

The current mental health crisis system in the U.S. provides an expensive, non-evidence-based hodge-podge of services that are largely ineffective and often harmful. As an alternative, SAMHSA has proposed to expand the current system substantially by adding expensive new services-a national call-in system of triage, mobile crisis teams in every community, and regional crisis residential centers-interventions that for the most part are neither evidence-based nor funded. A second alternative would be to fund existing evidencebased practices that prevent hospitalizations. Services with strong scientific evidence do exist but are unavailable in most communities because they lack funding, infrastructure, and trained staff. A third alternative would be to address social determinants by following public health guidelines for prevention, which are largely ignored in the U.S. None of these alternatives-creating a new crisis care system, using evidence-based practices, or addressing social determinants for prevention-would be easy to implement. Vested interests, bureaucracies, resistance to change, and lack of funding will contravene efforts to reform the current system.

How should government policy makers decide what would be the most effective combination of strategies? We believe that health care and social service systems should follow several basic principles of science. Consilience requires that new approaches must be consistent with past evidence from all of science (Wilson, 1998). Parsimony means that policy makers should choose the simplest approach that fits the evidence (Sober, 2009). Hierarchy of evidence dictates the use rigorous evidence in a descending order: for example, meta-analyses are superior to single experiments, randomized controlled trials are better than studies with non-experimental comparison groups, observational studies provide weak evidence, and expert opinion is extremely weak and unreliable (Jenicek, 2019). Public health science proves that prevention helps more people more efficiently than treatments for illnesses (Goetzel, 2009). Incrementalism shows that stepwise changes in health care have been more successful than radical health care reforms (Goldman & Grob, 2006; Goldman & Morrissey, 2020).

Considering all of these principles leads to the conclusion that the U.S. should do whatever is possible to prevent mental health crises (consilience and public health), use the best available science (hierarchy of evidence), and make simple, straightforward changes (parsimony and incrementalism). We therefore recommend a combination of providing some of the known evidence-based practices that can alleviate crises, such as assertive community treatment; preventing crises proximally, for example, by providing psychoeducation and support to families and patients; and expanding some evidence-based social services that could prevent crises more distally, such as supported housing and supported employment. These proposed changes are realistic steps based on current science and current commitments, but they will require shifting away from the usual "more is less" direction of American health care.

Government leaders must resist the demands of vested interests to fund every new medication and polypharmacy, build more hospitals, and provide unproven medical systems of crisis care. These interventions will only layer additional, expensive, ineffective medical solutions to solve social problems. Policy makers should instead redirect funds to the fundamental, evidence-based, social supports that people need and want. People who have safe housing, a meaningful job, and regular contacts with peers, family, or a supportive care manager will experience fewer crises and need fewer hospitalizations.

Government should avoid paying for new medications, new medical services, and new systems of care until research demonstrates that these interventions are clearly more effective than what currently exists. Changes that seem obvious (for example, day treatment and promising new medications) are often instituted prematurely and turn out to be unhelpful or even harmful-that is the history of psychiatry (Harrington, 2019). Developing effective changes should proceed in scientific steps. Small observational studies should precede efficacy experiments, which should precede large effectiveness demonstrations, which should precede national policy changes. Moreover, government should pay for infrastructure and training before trying to implement complex interventions, should align provider incentives with desired outcomes of patients rather than those of vested interests, and should demand that data be used to monitor implementations and outcomes. Most important, the mental health system should shift emphasis to address basic social needs before additional medical interventions. Together, these strategies could convert our "more is less" crisis care and overall mental health system to a "less is more" system that would be simpler, less medically oriented, less expensive, and more effective.

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