Review

Mental Health and Illness; Arguments for Integrative Bio-Psycho-Social Model

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Mentálne zdravie a choroba; argumenty pre integratívny bio-psycho-sociálny model

Summary

The review paper focuses on mental health and illness as one of public health challenges in the 21st century. Main epidemiological data and strategies discussed on both national and European level are shortly presented. The main emphasis is than given to overview of recent findings from disciplines such as critical psychiatry, developmental psychology, neuroscience, trauma and social studies. The current knowledge from those disciplines is still rarely included in general medicine and psychiatry, particularly in those European countries, in which a narrow biological model dominates medicine, and in which the transformation of mental health care system has not been accomplished. However, the reviewed findings seem to provide both critical reflection of biological model in psychiatry and better understanding of the complexity of mental health/illness issues. It is argued throughout the text, that such findings inevitably call for a bio-psycho-social approach in both prevention and treatment of mental disorders. On top of that, integrating the reviewed findings into a new framework of mental health/illness may lead to a development of more effective prevention strategies and well-functioning, multileveled mental health services.

Keywords: mental health, mental illness, bio-psycho-social model, critical psychiatry, neuroscience, developmental psychology, public health.

Introduction

Mental health in population has become one of the major public health issues today. Various manifestation of mental ill health pose significant burden for individuals, families, communities, and societies. Since the 1990' of the 20th century, we have witnessed a considerable development of knowledge of human brain, neurophysiology, and an advancement in neuropsychopharmacology. At the same time, rapidly growing psychotherapy research have provided a strong evidence that various psychotherapeutic approaches are effective in helping people with mental distress. However, a rather narrow biological model that primarily focuses on genetics and brain functions in aetiopathogenesis and treatment of mental disorders have dominated the conceptualization and treatment of mental health problems for several decades. The biological model still prevails in both academical psychiatry and many psychiatric institutions. On top of that, it informs public awareness and public mental health strategies. Due to the expanding research in neuroscience, developmental psychology, and social sciences in the last two decades, it has

become evident that biological processes are affected by traumatic experiences and adverse life events. This paper reviews recent findings from those disciplines to provide evidence-based arguments for a bio-psycho-social model of mental health and illness. The thing is that current findings from the abovementioned disciplines are usually missing or marginalized in most general medicine and psychiatry textbooks despite the fact that they might be crucial for public health strategies including prevention and development of mental health services.

Epidemiology of Mental Health and Its Relevance for General Medicine

Mental disorders are on the rise both in well-developed and low-income countries, affecting about 1.1 billion of people with any mental or substance use disorder according to recent estimates (Ritchie and Roser, 2018). Depression and anxiety disorders are the most common and depression is ranked by the WHO as the single largest contributor to the global disability (7.5% of all years lived with disability in 2015; WHO, 2017). A recent epidemiological study provided a detailed report of 12 months **prevalence** and **disability** burden estimates of a broad range of mental and neurological disorders in all EU member states (EU-27) plus Switzerland, Iceland, and Norway (Witchen et al., 2011). According to its authors, it is estimated that each year 38.2% of the EU population suffers from a mental disorder. In this study, the most

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frequent disorders found were anxiety disorders, insomnia, major depression, somatophorm disorders, alcohol and drug dependence, ADHD in the young and dementias in the old age (Witchen et al., 2011). Mental disorders affect individuals´ and families´ quality of life, cause significant burdens to various systems such as social, economic, educational justice. It is no surprise that researchers, clinicians, and health care policy makers see **mental illness as a top global health challenge** of 21st century.

Mental health is not a problem to be dealt with only by psychiatrists and clinical psychologists. It is well known that mental health and physical health are intertwined, with bidirectional, reciprocal, and comorbid relations (Kazdin and Rabbitt, 2013). All mind processes have neurological, biochemical and physiological correlates. Mental health affects physical health and vice versa. There is vast amount of evidence for such interconnections from various fields such as psychoneuroimmunology, genetics, neuroscience, and health psychology. Comorbidities challenge clinicians at various departments, for instance internal medicine, gynaecology, oncology, surgery, neurology, and even paediatrics. Therefore, mental health should be integrated into organisation of general health care and multi-levelled system of mental health care should be developed. A bio-psycho-social approach is considered as a necessary framework for interdisciplinary and collaborative treatment, both person and family-centred, within accessible and effective services (McDaniel et al., 2013).

Suggested Strategies and Preventive Measures

Such a challenging health issue becomes more and more a political one. On the EU level, health care policy makers and professionals have discussed **preventive measures** and **health care strategies** on both national and international level. Documents such as *Green Paper* (2005) or *European Framework for Action on Mental Health and Well-Being* (2016), for instance, provide detailed information about statistical data, suggested prevention strategies and mental health policies.

A main reference point for such public health actions serve the WHO **definition** of **mental health** and **illness**. It describes mental health as a state of well-being in which the individual realizes his or her abilities, can cope with the normal stresses of life, can work productively, and is able to contribute to his or her community. On the other hand, mental illness includes mental health problems and strain, impaired functioning associated with distress, symptoms, and diagnosable mental disorders such as depression and psychosis. It is a fact that mental condition of people is determined by a **multiplicity of factors** including biological (e.g. genetics, sex), individual (e.g. developmental issues, personal experiences), family and social (interpersonal trauma, social support), economic and environmental (e.g. social status and living conditions). Thus the formulation of strategies and interventions applied by international health organisations clearly imply that to promote mental health of population, various interventions should be developed at multiple levels in accord with **bio-psycho-social model** in medicine (Borrell-Carrio et al., 2004).

There are several **objectives** to be accomplished. Priority is given to provide effective and high quality, accessible treatment services to those with a diagnosis of mental disorders and their families. Further, various actions for the whole population are needed to promote mental health, prevent disorders, address challenges associated with stigma, take necessary measures for public safety, and develop network of coordinated services that ensure continuity of both treatment and social support. Because of rapid social changes and globalisation processes, an exchange of experience and coordination among the EU member states and worldwide is necessary in applying interventions and seeking solutions. One of the most important tasks is to address the **risk factors** and **determinants** to promote mental health of population through **preventive actions**. A crucial aspect of this is also looking for ways to strengthen protective factors (i.e. family attachments, resilience, social support), which are tightly linked with development of human individuals.

There is a robust evidence that mental health is strongly determined during the **early years of life** including the foundation of resilience towards life adversities (Kobak et al., 2016; Schore, 2015). Promoting mental health in **childhood** and **adolescence** is a priority in terms of both prevention and development of services for families at risk. It has been recognized by experts from different fields that considerable effort is to be made to reduce various risks factors at schools, institutions and workplaces, where people spend large parts of their lives. Impact of bullying, humiliation, and disrespect to human rights are detrimental to one's well-being and thus mentioned in documents about mental health preventive strategies. Clinical experience and media reports inform about striking examples of precarious jobs and workplace environments, which lack respect, dignity, and recognition of health outcomes.

Wider **social contexts** do matter and awareness of the influence of social factors on mental health is crucial to any serious public health strategy. Brains and minds do not exist in a social vacuum as one might gather from some research or conference presentations. There are studies that provide evidence of connections between mental health/illness and **poverty, ethnicity,** and **discrimination** (Read, Johnstone and Taitimu, 2013; Read, 2004). For instance, Wilkinson and Pickett (2009) demonstrated a relationship between relative poverty in societies and a whole range of social, health and mental health outcomes. They found that the rates of mental illness are five times higher in the most unequal compared to the least unequal societies. Thus, for development of "saner" societies, we need to discussion fair working conditions, justice, solidarity, and other challenges in late modern societies. As research in various fields suggests, psychosocial factors are not mere triggers or exacerbators of a genetically predisposed vulnerability. The vulnerability to various stressful experiences leading to symptomatology can also be acquired via **adverse life events** (Anda et al., 2006; Coan, 2016; Meaney, 2010; Read, 2013; Read et al., 2008).

Against Medicalisation – Ideas from Critical Psychiatry and Psychology

Any strategy aiming to promote mental health in population cannot be successful without engaging the representatives of clinical disciplines such as **psychiatry, neurology,**

clinical psychology and psychotherapy. A remarkable progress in biomedical treatment in both psychiatry and neurology took place in the last couple of decades. This progress unfortunately reinforced a rift between psychotherapy-informed psychiatry and biological psychiatry, which could be traced back in history of the discipline at the detriment of both patients and professionals (Luhrmann, 2000). The irrefutable success of biomedical model in many respects resulted in inappropriate biological conceptualisation of more and more human conditions. With regard to the entire mental health, a **biomedical model** including a "diagnose and drug" approach has long dominated psychiatry (Read and Dillon, 2013).

The narrow biological model of mental health and illness and medicalisation of human distress have been challenged by many clinicans and scholars (Rapley et al., 2011; Read and Dillon, 2013). In the process of **medicalisation**, more and more human conditions are redefined as a sign of sickness, a disorder in need of a biological treatment. The pharmaceutical industry and sometimes even scientific community have been criticized for playing an unfortunate role in this process. Determining the agenda of research, manipulating with data, hiding scientific evidence, hiring ghost-writers to publish in favour of drugs to be launched, organizing disease awareness campaigns to create the needs in the market, and other more or less sophisticated corruption practices were reported by authors in psychiatry and general medicine (Foley, 2012; Moncrieff, 2003; Moyinihan et al., 2002).

As a result, people's **health behaviour** and the way how they understand their experience and situations is changing accordingly to the biomedical model including their expectations regarding the treatment (Moncrieff et al., 2014). In childhood and adolescence, the medicalisation of distress is particularly damaging because during those periods of development, affective and cognitive processes as well as behaviour are partly shaped by family dynamics, interpersonal factors and context. Current research from developmental psychology and neuroscience supports observations of clinicians who stress the necessity for systemic assessment and person/family centred approach instead of sole reliance on drug treatment (Crittenden, 2015). Rather than an atheoretical, nosological category, which may sometimes be a rather crude simplification of complex mess of human misery, a so-called case formulation approach, suggested by contemporary psychotherapists, might be more suitable prior to any treatment (Johnstone and Dallos, 2013).

Some authors warn that ignoring psychological and social factors' impact on mental health leads to overlooking of what goes on in people's lives, in their families, and in the societies in which they live (Rapley et al., 2011). In the same vein, psychiatrists and clinical psychologists critical of these trends also cast doubts on the validity and usefulness of prevailing classification systems of mental disorders stating that mainstream psychology and biological psychiatry "run the project of codifying human suffering into disease-like categories" (Speed et al., 2014). It has been argued that in the typical process of assessment based on categorisation, people behind the "disorders" may be overlooked, and the social circumstances that cause or contribute to their suffering often go unexamined and unchallenged. Boyle (2011), criticises both mainstream psychology and psychiatry an avoidant strategy in in which

"*simply converting distress and problem behaviour to disorders and looking for causes in brains obscures the fact that there is even a person behind the symptoms and deficits. By rarely or never mentioning context, this strategy has the effect of making it look as if it is simply not relevant in explaining distress*" (Boyle, 2011, p. 28-29).

Representatives of critical psychiatry and psychology call for a balanced model that will lead to a raised awareness of important psychological and social factors and to the development of humane and accessible mental health services. It seems that we need a **new framework/set of knowledge** with the potential to change the way we conceptualize human suffering across the whole spectrum of mental ill health.

Neuroscience and Developmental Perspective

A strong evidence-based synthesis of findings supporting the necessity of a new framework for understanding mental health and illness comes from developmental psychology, (particularly contemporary **attachment theory** and research), neuroscience (e.g. **interpersonal neurobiology**), **trauma studies**, and social studies (**systemic theory**). Leading neuroscientists present sound evidence that both structure and function of the developing brain are determined by how experience, especially within close interpersonal relationships, shape the genetically programmed maturation of the nervous system. Relationship experience have an influence on brain because the circuits for social perception are the same as or tightly linked to those that integrate the important functions controlling the creation of meaning, the regulation of bodily states, the modulation of affect/emotion, the organisation of memory, and the capacity for interpersonal communication (Schore, 2015; Siegel, 2012).

Experience can even alter the regulatory molecules that control gene expression (Szyt, 2011). Changes in **epigenetic regulation of gene expression** induced by experience can be long-lasting and may even be passed on to the next generation by way of alterations of epigenetic regulatory molecules in sperm or egg (Meaney, 2010). Genes contain the information for the general organisation of the brain's structure, but experience plays an important role in determining which genes become expressed, how they will be activated, and the timing of that activation (Siegel, 2012). It is particularly the **stressful and/or traumatic experience** in the early stages of development, which may have damaging and lasting effect on neural circuitry in some parts of the brain (e.g. amygdala, hippocampus, thalamus, prefrontal cortex). Not only morphological/structural changes but also functional disturbances may ensue (irregularities or dysfunctions in neurotransmitter systems). Functioning of hypothalamic-pituitary- adrenocortical (HPA axis) is also affected together with autonomic nervous and neuroimmune systems, which may lead to altered physiology, dysregulation and chronic arousal with various symptomatology (Montgomery, 2013).

Current research based on **attachment theory** brings consistent evidence that experiences with primary carers in the first months and years of life shape brain, mind, and body physiology that is related both to basic functions (e.g. affect regulation) and more complex skills during an individual's development (e.g. empathy, narrative and reflective skills;

Kobak et al., 2016; Cassidy and Shaver, 2016). In a broader sense, attachment can be understood as a stable progression of cognitive, affective, and behavioural style that persists into adulthood, creating interpersonal template that underpins one's ability to relate to others, regulate one's own emotions, manage autonomic arousal in order to cope with challenging/threatening factors and situations, and also to relate to oneself in a balanced way. Attachment disturbances (e.g. inconsistencies, deprivation, neglect, abuse) in the first months and years of child's development can lead to neurotransmitter abnormalities, overactivity of HPA axis, and structural changes including alteration of connectivity between parts of the brain (Coan, 2016).

In recent, expanded version of attachment theory, a **Dynamic Maturational Model,** Crittenden (2015) offers a thorough developmental framework for understanding how individual's affective, cognitive, and somatic processes organize behaviour and how these processes, traditionally understood as individual-based, are dependent on the context and mutually interconnected with interpersonal experience. Because any behaviour or symptom is manifested within intrapsychic, interpersonal and social processes, a systemic assessment is needed prior to any intervention. A combination of treatment methods including individual psychotherapy or family therapy in some cases is usually necessary. From the perspective of the dynamic maturational model, current psychiatric diagnoses are not particularly helpful because "*they are atheoretical clusters of symptoms. Such symptoms may not function similarly for everyone who bears the same diagnostic label. If there are within-diagnosis differences in information processing, then these individuals need different interventions... In bypassing systemic studies of aetiology, we may prematurely discount environmental input; this is particularly discouraging because the environment can be modified. Instead, we often lose sight of individual differences in treating the diagnosis instead of individuals or families*" (Crittenden, 2015, p. 20).

This view is supported also by current emphasis on personalised approach and tailored treatment approaches in mental health (Kennedy, 2018). Discussions about **personalised/person** centred and/or **family centred treatment** go well alongside an increased recognition of heterogenous nature of standard diagnostic categories within DSM-V. It has been repeatedly argued that there are various individual experiences, developmental and relationship variables, and specific causal pathways within diagnostic categories. These are thought to be important and should be acknowledged in treatment planning instead of a blind "faith" in the model of discrete categories of disorders (Alsopp et al., 2019). No matter how crucial the attachment experiences for the brain and mind development are in the first years of individual's life, family dynamics including attachment relationships is important in the subsequent stages of development too. Transitional periods in family life-cycle and any individual's development-related changes are typically accompanied with stressful experiences and demands for adaptation so that problems including mental distress/ill-health are frequent and well-reported by clinicians (Crittenden et al., 2014; Chvála et al., 2013).

The abovementioned knowledge is not always and appropriately included in both undergraduate and postgraduate medical training including psychiatry, particularly in countries, which still await for a transformation of mental health care including psychiatry. The reason for somewhat reserved attitude in medicine towards recognition **of connection between relationships and experience in human development and biological functioning** is possibly the attempt to avoid harmful historical errors. Some conclusions formulated in the past tended to be too simplistic and parent blaming, generating sense of guilt, shame and failure in the families, which complicated therapeutic collaboration and healing. Acknowledging this issue, Crittenden and Dallos (2009) point out the dilemma that mental health professionals including family therapists face in this respect. "*It is important to avoid blaming while working with families, but at the same time it must be acknowledged that family members sometimes act with each other in ways that result in unintended distress and trauma.*" (Crittenden and Dallos, 2009, p. 400). This is relevant particularly in the light of powerful evidence of a high rate of undetected physical, sexual and emotional abuse in people treated for psychosis and, more broadly, of links to a variety of severe psychological disturbances and trauma in families (Read, 2013; Read et al., 2008; Reading, 2006; van der Kolk, 2015). As Read and Dillon (2013) expressed: "*Some parents do inflict deliberate cruelty, neglect and abuse on their children, and the issue of blaming families is not problematic in those cases. However, many parents themselves suffered in childhood, or experienced serious adversity as adults, and consequently struggle to provide an optimum environment for their own children. Rather than blaming families or exacerbating their difficulties by pathologizing their loved ones' distress, acknowledging the effects of intergenerational trauma, poverty and other social ills would help us identify, and respond to, the needs not only of the 'identified patient' but of family members, whose problems and needs often go unnoticed.*" (Read and Dillon, 2013, p. 396).

It is clear that people we work with should have a sense of responsibility for the experiences they provide without unnecessary burden of guilt implied by the belief that their actions are the only factors leading to the outcome of another family member's development and health. Regarding the development in neuroscience and developmental psychology, some authors envision a future, in which mental health professionals and neuroscientists work together to "*ensure new approaches to detecting risk, validating diagnoses, and developing novel interventions that may be based on altering plasticity or retuning circuitry rather than neurotransmitter pharmacology*" (Insel and Wang, 2010, p. 197).

Perspective from Trauma Studies

As was already mentioned, there is an accumulated evidence about how both developmental processes and **trauma** are encoded/hard wired in certain brain areas and autonomous nervous system, creating or setting particular **"psychobiological modes of (dys) functioning"** that lead to long-term problems in people's adult life. A rapidly expanding literature confirm high prevalence of trauma and abuse (both broadly defined) in many psychiatric nosological categories (personality disorders, eating disorders, depression, anxiety, and psychosis (Anda et al., 2006; Read, 2013; Read et al., 2008). Not only extreme distress such as physical violence,

sexual abuse or any severe maltreatment in childhood and adolescence, but also more subtle variations of traumatisation or attachment disruptions that are described in detail in contemporary attachment research are evidenced to affect both physical and mental health. (Crittenden and Landini, 2011; Dallos and Vetere, 2009).

Trauma results in fundamental reorganisation of the way mind and brain manage **perception, information processing** and responding to experience and events. As a result, the imprints of traumatic experiences are organised not as a coherent, logical narratives of self, others and life events, but in fragmented psychobiological traces: emotions, images, sounds, physical sensations. Although psychotherapy and family therapy have important role in helping to find words and meanings for what happened (and ways to cope), articulating verbally the traumatic experience it is not always possible and sometimes it is not enough. The act of telling the story does not necessarily nor easily change the automatic physical and hormonal responses of bodies that remain hypervigilant, prepared to be humiliated, threatened or violated at any time (van der Kolk, 2015). Depending on **different forms** of **trauma** and the **timing** when it happened (period of life and stage of development), traumatic experiences affect brain regions that are important in essential processes such as memory storage, information processing, language, affect regulation, physical arousal response, integration of experience and more complex skills (Schore, 2015; Reading, 2006; Edwards et al., 2003). Experts on trauma suggest that if we look beyond the list of specific symptoms that entail formal psychiatric diagnosis, we find that almost all mental suffering involves either trouble in creating workable and satisfying relationships or difficulties in regulating arousal or both (van der Kolk, 2015).

Trauma experts are also critical of standard biomedical model that is focused on discovering the right drug to treat a particular "disorder". Drugs cannot cure trauma, they can only moderate the expressions of disturbed physiology. They can help control thoughts, emotions, and consequently behaviour by decreasing hyperarousal and modulating neurophysiological processes that lead to tormenting and constraining symptoms difficult to alter or control with other means (van der Kolk, 2015). Despite the usually inevitable side- effects, **pharmacological treatment** does have an important place in bio-psycho-social model of treatment. Novel antidepressants and antipsychotics help many patients to alleviate their suffering and improve their quality of lives. What matters though is the kind of message which given to the patient together with a drug prescription. Suggesting that the patient´s problems just stem from a brain disorder run the risk of ignoring real life events and adversities that contribute to mental distress. Moncrieff (2007) made an important point by advocating for a different view of psychotropic drug action so that we have a better a theory underpinning how the drugs work. Instead of disease-centred model of understanding drug action, she proposes a drug-centred model, in which we see drugs as modifies brain states with therapeutic effect of changing cognitions, emotions, and behaviour. In latest neuroscience-based formulation, we can emphasize the psychotropic drugs potential to modulate the activity of neuro-

physiological systems, which leads to regulation of unpleasant mind and body processes and to improving of quality of life (Skorunka, 2015).

Stigma, Negative Attitudes, Prejudice, and Discrimination

Despite of deepened understanding of mental health and illness and advancements in psychiatry including treatment options, people with mental disorders still experience **stigmatisation, discrimination,** and even social exclusion. Since Goffman (1963) first wrote about **stigma** of mentally ill, the concept evolved and have been discussed across various disciplines and contexts. Link and Phelan (2001) defined stigma with four components distinguishing it from other social phenomena: (a) it is fundamentally a label of an out-group; (b) the labelled differences are negative; (c) the differences separate "us" from "them"; and (d) label and separation lead to status loss and discrimination. Other authors extrapolated these components into a matrix useful for understanding the stigma of disease and disability which is defined by two dimensions: a) the social – cognitive constructs that underlie stigma; b) the types that meaningfully impact the person with illness. A **self-stigma, public stigma,** and **family-perceived stigma** could be distinguished within the matrix (Corrigan and Angermayer, 2004).

Stigma directly affects people with mental illness, their families as well as the support system, provider network, and community resources. It also undermines seeking out and participating in mental health services that are available with a negative consequence for relief of suffering and promoting recovery (Corrigan et al., 2014). Being considered mentally ill by others has significant effect on employment prospects, financial situations, status in the community, family dynamics, parenting issues, and relationships in general. The fact of being diagnosed with a mental illness can even interfere with treatment decisions in primary care consequently affecting the quality of provided health care (Corrigan et al., 2013). It has been argued that stigma stems from improper or insufficient knowledge about mental illness and its treatment (Thornicroft et al., 2007). A term "mental health literacy" was offered in discussions about how to provide the public with all important information about mental illness that are needed for its recognition, prevention, and help seeking were discussed (Jorm, 2000). However, some authors criticized this term and related "disease awareness campaigns" as being too closely linked with the disease model and again ignoring what goes on in people's lives, in their families, and in the societies.

Stereotypes of and **negative attitudes** towards people with mental illness are related with stigma as well. Negative attitudes, prejudice, and stereotypes are historically grounded, and difficult to change even today, with more in-depth knowledge about mental health. A mentally ill person is typically perceived as dangerous, unpredictable, weak person who lacks responsibility of own action, or even inferior to other people. The media play significant role in maintaining those presumptions, being a powerful resource of social representations of mental health, illness, and mentally ill people in the late modern society (Skorunka, 2011). The media often

highlight the few tragic cases, in which someone is murdered by a person with a diagnosis of mental disorders. In other cases, media frequently connect violent behaviour with a particular diagnosis as if the link between mental disorder and danger for public was obvious. The stereotype of the aggressive and dangerous "madman" remains despite the evidence that people with severe mental illness such as psychosis are more likely to be assaulted than to assault others (Tailor and Gunn, 1999). A politicians' typical response is to promise an easy fix and straightforward solutions while experts struggle to find a consensus about social control, safety measures, and the psychiatry's role. The point is that understanding complexity of risk factors is necessary to act preventively and appropriately in any single situations. On top of that, a reliable assessment and setting the clear boundary between "sanity" and "insanity" sometimes pose a challenging task even to seasoned professionals (Melle, 2013).

According to some authors, negative attitudes are fuelled with endorsement of the biomedical model of mental disease that make many people conceive of mental health problems in an essentialist way (Haslam et al., 2002). In such a view, people with mental health problems are seen as discrete kinds of people, who have fundamental flaws that are essentially unalterable and beyond their personal control (Read et al., 2013). **Biogenetic explanations** encourage the view that people who display unusual behaviour are categorically and fundamentally different from normality, as if distinct species. Sadly, even mental health providers endorse stereotypes about mental illness, including perceptions of dangerousness, unpredictability, and blame (Kingdon et al., 2004; Magliano et al., 2004). This should not be underestimated as the representations and agendas of mental health professionals also have far-reaching consequences for clients/patients' understanding of their often-distressing experience, which can either support or hinder their coping strategies including integration of their experiences and inclusion in the community (Foster, 2007).

In some countries, stigma is extended to providers of mental health care including psychiatrists, which in turn may exacerbate public stigma and prevent people from seeking the services. A comprehensive review of more than 500 studies suggested that the public endorses varied **stereotypes about psychiatry and psychiatrists** (Sartorius et al., 2010). The public see the practice of psychiatry as possibly harmful, the medical students as having low status, and the rest of the medical community as not a proper medical discipline (Corrigan et al., 2013). Unfortunately, psychiatrists do not always have a good reputation either. The media sometimes represent psychiatrists in extremes, either clinicians with almost magic powers or strange doctors, sometimes even exploitative practitioners. The question is, how psychiatry itself contribute to its public image. Many psychiatrists have spoken openly about their dissatisfaction with theoretical and clinical tensions in the field, harmful ties with pharmaceutical industry, and the public image of being mere pill pushers. Regarding the approach to patients, some psychiatrists recalled their disillusionment with some of their colleagues ´detachment, lack of empathy and interest in understanding of possible causes of their patient´s suffering and pathologizing of the patients´ lives (van der Kolk, 2015; Skorunka, 2013; Shooter, 2005; Scharfstein, 2005; Moncrieff, 2003).

The Voice of People in Need of Mental Health Services

Until now, scientific findings and experts' opinions were introduced in the text. However, both **experiences** and **needs** of individuals suffering from mental disorders and their families who cope with such burden are important as well. More recently, there has been growing awareness that one of the ways of counteracting stigma of mental illness is to increase understanding of that experience from the client's point of view (Corrigan et al., 2014).

In the past, **separating and isolating** those with experience of mental illness were typical responses by the society. The institutions built up to confine people considered "insane" and protect the public were typically located away from centres of towns, as far as possible (Millon and Simonsen, 2010). One reason for such social response was perhaps fear and perceived threat of **"the otherness"** of those considered mad. Losing control over one's mind is something terrible to happen, given the ideology of **individual Self**, which has been so strong in so-called Western civilisation for centuries. The Self was considered located within the mind in our society. A disorder of mind (in biomedical terms a disorder of the brain) and losing control over one's Self is perceived a major threat in a society which value rationality above all else (Tew, 2005). As a result, the separation unfortunately deprived wider society of the chance to learn more about the views and experiences of those who were isolated. The separation also reinforced the sense of "the otherness" and the assumptions that those who have mental health problems are incomprehensible and entirely different from the rest of the society (Foster, 2007).

Of course, in mainstream psychiatry, the experiences and perspectives of those who were considered to have mental disorders have been absent as well. It was, and still is in many cases, assumed that patients are incapable of giving rational answers because of lacking insight into their mental conditions, because of their deranged mind, especially in the most severe mental disorders. Research focused on the **patients'** or in other words **mental health service users' experience** show that people make a considerable effort to understand and integrate their experience of being mentally ill and develop various coping strategies towards recovery (Foster, 2007; Geekie, 2004). When seeking help, people and families' experiences, situations, and needs vary greatly. Therefore, people responsible for attaining public health objectives and development of services should consider those important variables. Examining **clients' understandings** of mental health problems has significant implications for organisation and coordination of mental health care services. People with experience of mental disorders have **unique** and **valuable expertise** and thus should be included in discussions about and implementing some of the suggested actions. This is very important today, when there is a significant mismatch between the need and provision of mental health services and systematic disparities among those services even in well-developed countries despite advances in both pharmacological and psychological treatments (Kazdin and Rabbitt, 2013).

Conclusion

In this chapter, we have given an overview of recent findings and ideas from social sciences, critical psychiatry, developmental psychology, neuroscience, and trauma studies. The evidence-based synthesis could be seen as having potential for profound changes in ways we deal with mental health issues today and in the future. First, we need a new way for conceptualization of human suffering across the whole spectrum of mental health difficulties (Dillon et al., 2014). It requires a recognition of reciprocal interactions between an individual (mind, brain, body), attachment relationships (development in relational context), and wider social factors, which affect individual´s and public mental health. Second, such a conceptual shift is likely to change the way we approach development of preventive strategies. This must primarily be based on understanding key risk factors so that necessary support and interventions are provided to at-risk families/populations in the right time. Without acknowledging developmental as we as social adversities as real risk factors, healthcare initiatives based only on simple biological model cannot bring about significant changes in public mental health. Given the evidence available, it is clear that "disease awareness campaigns" are not enough but may even be misleading. As the evidence suggest, the new model should also acknowledge relationships and community as central for well-being of children, adults and families. Third, both research evidence and clinical experience speak in favour of bio-psycho-social framework for multileveled organisation of mental health care and interdisciplinary collaboration. In mental health, treatment provided to a person with any mental disorder (i.e. psychosis, depression, addiction, eating disorder) often requires collaboration between professionals who have different theoretical and clinical background (clinical psychologist, psychiatrist, social worker, and psychotherapist). Therefore, an integrative framework is necessary to face mental health/illness complexity and diversity in clinical practice (Skorunka, 2015). As patients´, families´, and professionals´ experiences, perspectives, and needs usually differ significantly, an integrative and dialogical approach is necessary for bridging those differences and enabling all experiences to be heard, shared, and responded to (Skorunka, 2013). Only with integrating the presented findings to a truly bio-psycho-social model of mental health/illness, we can be successful in improving public mental health and developing accessible, affordable and effective services within a system of mental health care.

References

ALSOPP, K., READ, J., CORCORAN, R., KINDER-MAN, P.: Heterogeneity in psychiatric diagnostic classification. Psychiatry Research, 2019, 279, 15-22.

ANDA, R., FELITTI, V., BREMNER, D. et al.: The Enduring Effects of Abuse and Related Adverse Experiences in Childhood. European Archives of Psychiatry and Clinical Neuroscience, 2006, 256 (3): 174-186.

BORRELL-CARRIO, F., SUCHMAN, A.L., EPSTIEN, R.M.: The Biopsychosocial Model 25 Years Later: Principles, Practice, and Scientific Inquiry. Annals of Family Medicine, 2004, 2(6): 576-582.

BOYLE, M.: Making the World Go Away and How Psychology and Psychiatry Benefit. In M. Rapley, J. Moncrieff, J. Dillon (eds.): De-Medicalizing Misery: Psychiatry, Psychology, and the Human Condition. London: Palgrave, 2011, pp. 27-43.

CASSIDY, J., SHAVER, P.: The Handbook of Attachment. New York: Guilford, 2016.

COAN, J.A.: Toward Neuroscience of Attachment. In J. Cassidy, P. Shaver (eds.): The Handbook of Attachment. New York: Guilford, 2016, pp. 242-269.

CORRIGAN, P.W., MITTAL, D., REAVES, C.M. et al.: Mental Health Stigma and Primary Health Care Decisions. Psychiatry Research, 2013, 218 (1–2): 35–38.

CORRIGAN, P.W., ANGERMEYER, M.C.: Mental Illness Stigma: Concepts, Consequences, and Initiatives to Reduce Stigma. European Psychiatry, 2004, 20 (8): 529-539.

CORRIGAN, P.W., DRUSS, B.G., PERLICK, D.A.: The Impact of Mental Illness Stigma on Seeking and Participating in Mental Health Care. Psychological Science in the Public Interest, 2014, 15(2): 37-70.

CRITTENDEN, P.M.: Raising Parents: Attachment, Parenting and Child Safety. 2nd ed. Hove: Routledge, 2015.

CRITTENDEN, P., DALLOS, R.: All in the Family: Integrating Attachment and Family Systems Theories. Clinical Child Psychology and Psychiatry, 2009, 14(3): 389-409.

CRITTENDEN, P., DALLOS, R., LANDINI, A., KOZLOWSKA, K.: Attachment and family therapy. London: Open University Press, 2014.

CRITTENDEN, P.M., LANDINI, A.: Assessing Adult Attachment: A Dynamic-Maturational Approach to Discourse Analysis. New York: Norton, 2011.

DALLOS, R., JOHNSTONE, L.: Formulation in Psychology and Psychotherapy: Making Sense of People's Problems. Hove: Routledge, 2014.

DALLOS, R., VETERE, A.: Systemic Therapy and Attachment Narratives. Hove: Routledge, 2009.

deKLOET, E.R., JOEL, M., HOLSBOER, F.: Stress and the Brain: from Adaptation to Disease. Nature Reviews Neuroscience, 2006, 6: 463-475.

DILLON, J., READ, J., LONGDEN, E.: Trauma Studies, Attachment, and Neuroscience: a New Paradigm for Understanding Severe Mental Distress. In E. Speed, J. Moncrieff, M. Rapley (eds.): De-Medicalizing Misery II. Society, Politics, and the Mental Health Industry. London: Palgrave. 2014, pp 226-234.

EDWARDS, V.J. et al.: Experiencing Multiple Forms of Childhood Maltreatment and Adult Mental Health: Results from the Adverse Childhood Experiences (ACE) Study. American Journal of Psychiatry, 2003, 160(8): 1453-1460.

EUROPEAN FRAMEWORK for Action on Mental Health and Well-Being (2016). Brussels: European Commision. https://ec.europa.eu

FOLEY, S.: GlaxoSmithKline Pays 3 Billion Dollars for Illegally Marketing Depression Drug. The Independent, 2012, July 3.

FOSTER, J.L.: Journeys through Mental Illness: Clients Experiences and Understandings of Mental Distress. Basingstoke: Palgrave, 2007.

GEEKIE, J.: Listening to the voices we hear; clients' understandings of psychotic experiences. In J. Read, L. Mosher, R. Bentall (eds.): Models of Madness: Psychological, Social and Biological Approaches to Schizofrenia. Hove: Routledge, 2004, pp. 148-160.

GOFFMAN, E.: Stigma: Notes on the Management of Spoiled Identity. Touchstone, 1963.

GREEN PAPER. 2005. Brussels: European Commission. https://ec.europa.eu

HASLAM, N., ROTHSCHILD, L., ERNST, D.: Are Essentialist Beliefs Associated with Prejudice? British Journal of Social Psychology, 2002, 41: 87-100.

CHVÁLA, V., TRAPKOVÁ, L., SKORUNKA, D.: A Developmental Concept in Family Therapy for Psychosomatic Disorders. Contemporary Family Therapy, 2012, 34(2): 293-312.

INSEL, T.R., WANG, P.S.: Rethinking Mental Illness. Journal of American Medical Association, 2010, 303(19): 1970–1971.

JOHNSTONE, L., DALLOS, R.: Formulation in Psychology and Psychotherapy. Hove: Routledge, 2013.

JORM, A.F.: Mental Health Literacy: Public Knowledge and Beliefs about Mental Disorders. British Journal of Psychiatry, 2000, 177: 396-401.

KAZDIN, A.E., RABBITT, S.M.: Novel Models for Delivering Mental Health Services and Reducing the Burdens of Mental Illness. Clinical Psychological Science, 2013, 1(2): 170–191.

KENNEDY, E.: Stratified Medicine and Child Psychology and Psychiatry: an Old or New Paradigm? Clinical Child Psychology and Psychiatry, 2018, 23(3): 361-364.

KINGDON, D., SHARMA, T., HART, D.: What Attitudes Do Psychiatrists Hold towards People with Mental Illness? Psychiatric Bulletin, 2004, 28(11): 401-406.

KOBAK, R., ZAJAC, K., MADSEN, S.D.: Attachment Disruption, Reparative Processes, and Psychopathology: Theoretical and Clinical Implications. In J. Cassidy, P. Shaver (eds.): The Handbook of Attachment. New York: Guilford, 2016, pp. 25-39.

LINK, B.G., PHELAN, J.C.: Conceptualizing stigma. Annual Review of Sociology, 2001, 27(6): 363-385

LUHRMANN, T.M.: Off Two Minds: An Antropologist's Look at American Psychiatry. New York: Vintage, 2000.

MAGLIANO, L., FIORILLO, A., DE ROSA, C. et al.: Beliefs about Schizophrenia in Italy: A Comparative Nationwide Survey of the General Public, Mental Health Professionals, and Patients' Relatives. Canadian Journal of Psychiatry, 2004, 49(5): 322-330.

McDANIEL, S., DOHERTY, W., HEPWORTH, J.: Medical Family Therapy and Integrated Care. 2nd ed. Washington: APA, 2013.

MEANEY, M.J.: Epigenetics and the Biological Definition of Gene and Environment. Child Development, 2010, 81(1): 41-79.

MELLE, I.: The Breivik Case and What Psychiatrists Can Learn from It. World Psychiatry, 2013, 16(1): 16–21.

MILLON, T., SIMONSEN, E.: A Précis of Psychopathological History. In T. Millon, R.F. Krueger, E. Simonsen (eds.): Contemporary Directions in Psychopatology: Scientific Foundations of the DSM-V and ICD-11. NewYork: Guilford, 2010, pp. 3-52.

MONCRIEFF, J.: Is Psychiatry for Sale? An Examination of the Influence of the Pharmaceutical Industry on Academic and Practical Psychiatry. Maudsley Discussion Paper 13, 2003.

MONCRIEFF, J.: The Myth of The Chemical Cure: A Critique of Psychiatric Drug Treatment. London: Palgrave, 2007.

MONCRIEFF, J., RAPLEY, M., TIMIMI, S.: The Construction of Psychiatric Diagnoses: The Case of Adult ADHD. In E. Speed, J. Moncrieff, M. Rapley (eds.): De-Medicalizing Misery II: Society, Politics and the Mental Health Industry. London: Palgrave, 2014, pp. 76-78.

MONTGOMERY, A.: Neurobiology Essentials for Clinicians. New York: Norton, 2013.

MOYNIHAN, R., HEATH, I., HENRY, D.: Selling Sickness; The Pharmaceutical Industry and Disease Mongering. British Medical Journal, 2002, 324: 886-891.

RAPLEY, M., MONCRIEFF, J., DILLON, J.: De-Medicalizing Misery: Psychiatry, Psychology, and the Human Condition. London: Palgrave, 2011.

READ, J.: Childhood Adversity and Psychosis: From herecy to certainty. In J. Read, J. Dillon (eds.): Models of Madness: Psychological, Social and Biological Approaches to Schizofrenia. 2nd ed. Hove: Routledge, 2013, pp. 249-275.

READ, J., DILLON, J.: Creating Evidence-based, Effective and Humane Mental Health Services. In J. Read, J. Dillon (eds.): Models of Madness: Psychological, Social and Biological Approaches to Schizofrenia. Hove: Routledge, 2013, pp. 392-407.

READ, J., FINK, P.J., RUDEGEAIR, T. et al.: Child Maltreatment and Psychosis: A Return to a Genuinely Integrated Bio-Psycho-Social Model. Clinical Schizophrenia & Related Psychoses, 2008, 2(3): 235-254.

READ, J., HASLAM, N., MAGLIANO, L.: Prejudice, Stigma, and 'Schizophrenia': The Role of Bio-Genetic Ideology. In J. Read, J. Dillon (eds.): Models of Madness: Psychological, Social and Biological Approaches to Schizofrenia. 2nd ed. Hove: Routledge, 2013, pp. 157-177.

READ, J., JOHNSTONE, L., TAITIMU, M.: Psychosis, poverty, and ethnicity In J. Read, J. Dillon (eds.): Models of Madness: Psychological, Social and Biological Approaches to Schizofrenia. 2nd ed. Hove: Routledge, 2013, pp. 191-209.

READING, R.: The Enduring effEcts of Abuse and Related Adverse Expeirences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology. Child: Care, Health, and Development, 2006, 32(2): 253-256.

RITCHIE, H., ROSER, M.: Mental Health. 2018. https://ourworldindata.org/mental-health

SARTORIUS, N., GAEBEL, W., CLEVELAND, H.R. et al.: WPA Guidance on How to Combat Stigmatization of Psychiatry and Psychiatrists. World Psychiatry, 2010, 9: 131–144.

SHARFSTEIN, S.: Big Pharma and American Psychiatry: The Good, the Bad, and the Ugly. Psychiatry News, 2005, 40(16): 3.

SHOOTER, M.: Dancing with the devil? A personal view of psychiatry's relationship with the pharmaceutical industry. Psychiatric Bulletin, 2005, 29(3): 81-83.

SCHORE, A.: Affect Regulation and the Origin of the Self: The neurobiology ofemotional development. Hove: Routledge, 2015.

SIEGEL, D.: The Developing Mind. New York: The Guilford Press, 2012.

SKORUNKA, D.: Duševní nemoc; subjektivní perspektivy a faktory, které je formují. In J. Mareš, E. Vachková. Pacientovo pojetí nemoci III. Brno: MSD, 2011, pp. 53-72.

SKORUNKA, D.: Kdy(ž) se dialog nedaří. Psychoterapie, 2013, 9(1): 172-186.

SKORUNKA, D.: Porucha nebo něco jiného? Psychosomatický přístup v ambulantní psychiatrické praxi. Psychiatrie pro praxi, 2015, 16(3): 96-100.

SPEED, E., MONCRIEFF, J., RAPLEY, M.: De-Medicalizing Misery II: Society, Politics, and the Mental Health Industry. London: Palgrave, 2014.

SZYT, M.: The Early Life Social Environment and DNA Methylation: DNA Methylation Mediating the Long-Term Impact of Social Environment Early in Life. Epigenetics, 2011, 6(8): 971-978.

TAILOR, P.J., GUNN, J.: Homicides by People with Mental Illness: Myth and Reality. British Journal of Psychiatry, 1999, 174: 9-14.

TEW, J.: Power Relations, Social Order, and Mental Distress. In J. Tew (ed.). Social Perspectives in Mental Health: Developing Social Models to Understand and Work with Mental Distress. London: Jessica Kingsley, 2005.

THORNICROFT, G., ROSE, D., KASSAM, A., SARTORIUS, N.: Stigma: Ignorance, Prejudice or Discrimination? British Journal of Psychiatry, 2007, 190: 192-193.

van der KOLK, B.: The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma. London: Penguin, 2015.

WHO: Depression and Other Common Mental Disorders: Global Health Estimates. Geneva: WHO, 2017.

WILKINSON, R., PICKETT, K.: The Spirit Level. London: Allen Lane, 2009.

WITCHEN, H.U., JACOBI, F., EHM, J. et al.: The Size and Burden of Mental Disorders and Other Disorders of the Brain in Europe 2010. European Neuropsychopharmacology, 2011, 21: 655-679.