

THEORETICAL PSYCHIATRY: MISSING LINK BETWEEN ACADEMIC AND CLINICAL PSYCHIATRY FOR FURTHER SCIENTIFIC AND PROFESSIONAL MATURATION OF PSYCHIATRY

Miro Jakovljević

University Hospital Centre Zagreb, Department of Psychiatry, Zagreb, Croatia

SUMMARY

Psychiatry is in the midst of the paradigm shift. The new field called theoretical psychiatry is fundamental for further scientific and professional maturation of psychiatry at the twenty first century. The cross disciplinary interactions and transdisciplinary systems approach are of great importance in science and the paradigm shift.

Key words: *theoretical psychiatry - systems psychiatry - academic psychiatry - transdisciplinary psychiatry*

* * * * *

“Nothing is as important as a good theory”

Kurt Lewin

The beginning of the twenty-first century has marked the need for a new field called „theoretical psychiatry“ for the further scientific and professional maturation of the discipline. Psychiatry, from its beginning, has been characterized by different concepts, orientations and approaches. These were formalized as “schools“, like psychoanalysis and psychodynamic psychiatry, social psychiatry, medical psychiatry, biological psychiatry and pharmacopsychiatry, evolutionary psychiatry, etc., which bore influence during different eras. Different schools of thought assessing mental health and mental disorders have given rise to different perspectives of psychiatry: the medical or disease perspective, and the dimensional, cognitive, behavioral, narrative, spiritual and systems perspectives (see Jakovljević et al. 2012). Each of these perspectives tends to analyze, understand, define and treat mental disorders in different ways, each with their own merits, albeit without enough success. Psychiatry has yet to become a coherent field of scientific theory and one unified and standardized practice; rather it looks like a loosely assembled set of theoretical concepts and practices. Many of the fragmentary psychiatric schools lack respect for, aggressively criticize, and negate the fundamental tenets and treatment principles of others. However, it is evident that there are common threads in many of these schools. The challenges of the present time push main-stream psychiatry to move beyond the narrow and fragmentary frameworks that characterized the discipline in the last century (Jakovljević 2012). Psychiatry as a field has a plentitude of data, hypotheses, diverse experiences and stories, but there is a comparative lack of good scientific theories and models. Relatively few clinicians have time for theory because the clinical practice is so all-absorbing, and finding the time to consider epistemological issues is indeed a luxury (Bartlett 2011). Academic psychiatrists

may have the time, but are usually engaged with academic lectures and extending their own narrow research interests. Furthermore, academic psychiatry is dominated by rigid rules that define success and failure with short cycles for evaluation of performance and follow-up as well as by a fragmentary neurobiological paradigm, which both have stifled creativity (Priebe et al. 2013). According to Priebe (2013), the past three decades have not witnessed any discoveries leading to major advances in psychiatric practice. Major achievements in fundamental research are claimed to have led to no obvious breakthrough in better treatments, and that new mental health medications are not clearly more effective than those available 30 years ago (Priebe et al. 2013). The international ICD-10 and DSM-V classifications of mental disorders are descriptive and “atheoretical“ tools, characterized by an empirical approach and demonstrating a limited understanding, rather than credible practices based on comprehensive theory. There is a re-emergence of the old clash in psychiatry between observation and empathy, general causal laws and diverse meaningful accounts, explanations and understanding (Kecmanović 2013), that is, in fact, the clash between nomothetic and idiographic knowledge. Philosophy, particularly epistemology and axiology are not given enough respect in the main-stream psychiatry, particularly in medical psychiatry. As a result, many controversies persist regarding the appropriate methodological, epistemological, and ontological necessity for psychiatric explanatories and therapies. Establishing a coherent transdisciplinary scientific narrative and a more theoretical foundation for psychiatry is a great challenge for the beginning of the twenty-first century. Really, “psychiatry needs its Higgs boson moment“ (Craddock 2013) as well as a new neurophilosophy of the brain and mind (Tretter 2010).

Systems or complexity theory, epistemology and philosophy of science in psychiatry

Theoretical psychiatry can be defined as the field of hypotheses, models, and theories that describe and explain the mechanisms of mental disorders (Tretter 2010) and their treatment. Unfortunately, in reality there is no explicit field that can be recognized as “theoretical psychiatry“, but there have been some attempts aiming to construct a theoretical perspective. Although the major schools in psychiatry have fundamental differences in approach and orientation, they all have legitimacy as parts of science and philosophy in psychiatry, and they share a concern for discovering the etiology, pathophysiology and phenomenology of mental disorders and improving their treatment. Conceptual discord is a powerful disintegrating force within psychiatry, and the future of the discipline greatly depends on how conceptual heterogeneity will be resolved (Kecmanović 2011). Systems thinking, systems (complexity) theory, epistemology and philosophy of science are paramount for psychiatry to develop explanatory concepts and models that successfully incorporate the incredible amount of data from neurosciences, mind sciences, social and spiritual sciences into a conceptual framework of mind-brain-body functions and dysfunctions (see Jakovljević et al. 2012). Creatively integrating the different theoretical perspectives brings us closer to a holistic understanding of the complex nature of mental health and mental disorders, and a more efficient treatment of mental health problems (see Jakovljević 2013a). We need to develop a personalized, systems approach to mental disorders that integrates many diverse inputs including neurobiological, phenomenological, environmental and clinical information, and create specific models for individual mental diseases. This view implies that the traditional “one-size-fits-all“ approach to diagnosis and treatment should be reconsidered, and new diagnostic and therapeutic tools should be offered. An interesting example is “the five P’s approach to case formulation or case conceptualization“ which includes the presenting problem, predisposing factors, precipitating factors, perpetuating factors, and protective/positive factors (Macneil et al. 2012). Case formulation is the process of developing an explicit and clear understanding of patients and their problems that effectively guides treatment. This approach synthesizes the patient’s experience with relevant clinical theory and research, and builds the bridge between diagnostic assessment and treatment. When done well, case formulation provides an opportunity for a shared understanding of a patient’s symptoms and difficulties answering the classic questions: “Why this problem? Why in this person? and Why just now?” (Macneil et al. 2012). It also offers a rationale and shared agenda for what to target and in what order (Macneil et al. 2012). Instead of relatively broad pathological diagnoses and nonspecific „one-size-fits-all“ therapies, psychiatry is moving toward an era of

individualized and person-centered care and treatment, that should offer the right drug to the right patient (Jakovljević et al. 2010, Jakovljević 2012).

The core of systems psychiatry is to understand and describe mental and brain systems and their reciprocal communication involved in mental disorders at all levels, to dive into their complexities and to find effective methods of treatment. According to systems thinking, the genome operate within the context of the body, the body within the context of the self, the self within the context of society, and the society within the context of the universe (Cloninger 2004). The phenotype of an organism is the joint product of the genotype and the environment. It is fascinating that genes within a single body can compete as well as genes in different bodies can collaborate (Dawkins 1999). All systems are composed of various elements and their relations. We are able to understand reality by constructing maps and models, starting with qualitative concepts and ending up with corresponding mathematical models that can be testing by computer experiments within computational neuroscience (Tretter 2010). Systems or complexity psychiatry is another name for a holistic, integrative and transdisciplinary psychiatry (see Jakovljević 2008).

Evidence-based practices versus best practices: Misunderstanding, fraud and spin

The problems with evidence-based medicine in modern psychiatry and clinical psychopharmacology are manifold, and are products of misunderstanding, fraud and spin (Marshal 2004). According to Marshal (2004) fraud is defined as deliberate falsifications of study results, whereas spin is an attempt to mislead that falls short of actual falsification. Misunderstandings are usually result of mechanistic, formistic, reductionistic and linear thinking. The existence of many different models, languages and paradigms within competing, sometimes bitterly opposing schools of thought, is an important source of misunderstandings. The terms evidence-based practices (EBPs) and best practices are synonymous to many experts, yet they often have different meanings in real life (see Mueser & Drake 2005). EBPs refer to treatment modalities with scientifically proven effectiveness, while best practices refer to treatment modalities evaluated as most effective by a majority. EBPs and best practices sometimes overlap. Best practices may be biased by the actual beliefs, attitudes or theories of opinion makers in the field, by the prejudices of guild organizations or by the successful marketing of pharmaceutical industry. Proclaimed best practices are not seldom shown incorrect by reliable scientific research. On the other hand, the results of many randomized controlled trials (RCTs) and basic research are not confirmed in clinical practice and they may lead to the so-called science-biased practices. That’s why the best evidence-based (RCTs) practices are only those confirmed by practice-based evidence (naturalistic studies, pragmatic trials).

The dominance of nomothetic knowledge: Problems with evidence-based medicine in modern clinical psychopharmacology

Defining specific mental disorders and specific treatments for them is a wishful thinking and exercise, and has not proven to be a successful trend in modern psychiatry. Within this framework, the priority is to diagnose and treat specific mental disorders with specific drugs and other methods that influence the psychopathophysiologic processes associated with particular disorders. Clinical guidelines and research, focused on diagnostic groups which are very heterogeneous, are based on nomothetic knowledge. The key goal of research in biological psychiatry and psychopharmacology is to establish causal relationships between specific pathophysiological processes and specific mental diseases, and to choose rational treatment options on this basis; context, meaning and reasons are neglected. RCTs have become a gold standard for evaluating drug efficacy and effectiveness and a cornerstone of evidence-based psychiatry (Jakovljević 2009). They produce nomothetic knowledge, and are characterized by tendency to generalize and derive laws that explain objective phenomena. Inferential statistics are used for evaluating the likelihood of intervention or drug X producing outcome Y in the form of the Number Needed to Treat (NNT) statistic. NNT refers to the number of patients who must be treated to achieve a positive outcome or prevent a negative outcome (see Slade 2011). Therefore, the more effective treatments are those with a lower NNT. According to this concept the optimal drug treatment is that with the lowest NNT, which “at least in theory, and sometimes in practice can be expressed as a deterministic flowchart” (Slade 2011).

Epistemological problems in modern clinical psychopharmacology are manifold. The most important ones are related to the fact that clinicians in day-to-day practice treat individuals not groups, and that what is statistically significant may not be clinically significant, and vice versa. In everyday clinical practice, the question is not what a group of patients with the same diagnosis would benefit from, but rather what would be an optimal choice with the most benefit for an individual patient (see Jakovljević 2013b). Furthermore, the overall effect of drug treatment depends on many complex internal and external factors. Each medication has its specific pharmacodynamic and non-specific psychological effects that may also significantly influence the final treatment outcome. That's why idiographic knowledge, characterized by tendency to specify and understand the meaning of contingent, accidental and often subjective phenomena, is needed to estimate what the optimal treatment choice is for an individual patient (see Slade 2013). Emphasizing nomothetic knowledge promotes a technical rationality in psychiatry which is not sufficient for addressing human health and disease problems. The dominance of nomothetic knowledge impoverishes both scientific discourse

and clinical practice. Non-adherence to treatment and non-alliance of patients may be associated with nomothetic impersonal and technical rationality. An exclusive focus on idiographic knowledge is associated with a number of blind spots including difficulties in differentiating what is optimal for individual patients from what may be useful for a group of patients with the same diagnosis; harmful mistrust of professionals who operate on the basis of nomothetic evidence; and an oppositional discourse and blaming for problems (Slade 2011). Treatment decisions may be often based on false dichotomies (see Jakovljević 2007) including the nomothetic – idiographic knowledge dichotomy as well. The fact is that neither nomothetic nor idiographic knowledge alone are sufficient pillars for good clinical practice. For a rational and creative psychopharmacotherapy both nomothetic and idiographic knowledge are necessary evidence components.

Conclusion

The beginning of the twenty-first century has marked the need for a new field called theoretical psychiatry, which is required for the further scientific and professional maturation of the discipline. Systems thinking, systems (complexity) theory, epistemology and philosophy of science are pillars of the theoretical psychiatry. Creatively combining the different theoretical perspectives brings us closer to a holistic understanding of the complex nature of mental health and mental disorders, and a more efficient treatment of mental health problems. The traditional „one-size-fits-all“ approach to diagnosis and treatment should be reconsidered and new diagnostic and therapeutic tools should be offered. Psychiatry seems to be moving toward an era of individualized and person-centered care and a type of treatment that should offer the right drug to the right patient.

Acknowledgements: None.

Conflict of interest: None to declare.

References

1. Bartlett SJ: *Normality Does Not Equal Mental Health – The Need to Look Elsewhere for Standards of Good Psychological Health*. Praeger, Santa Barbara & Denver & Oxford, 2011.
2. Craddock N: *Psychiatry needs its Higgs boson moment*. *New Scientist*. Issue 2914, 29 April 2013.
3. Dawkins R: *The Extended Phenotype: The Long Reach of the Gene*. Oxford University Press, 1999.
4. Jakovljević M: *Creativity, mental disorders and its treatment: personal recovery-focused psychopharmacotherapy*. *Psychiatr Danub* 2013a; 25:311-315.
5. Jakovljević M: *How to increase treatment effectiveness and efficiency in psychiatry: Creative psychopharmacotherapy –*

- Part 1: Definition, fundamental principles and higher effectiveness polipharmacy. Psychiatr Danub* 2013b; 25:269-273.
6. Jakovljević M, Brajković L, Jakšić N, Lončar M, Aukst-Margetić B & Lasić D: Posttraumatic stress disorders from different perspectives: A transdisciplinary approach. *Psychiatr Danub* 2012; 24:246-255.
 7. Jakovljević M: Psychiatry at crossroad between crisis and new identity. *Psychiatr Danub* 2012; 24(suppl 3):267-271.
 8. Jakovljević M, Reiner Ž, Miličić D & Crnčević Ž: Comorbidity, multimorbidity and personalized psychosomatic medicine: Epigenetics rolling on the horizon. *Psychiatr Danub* 2010; 22:184-189.
 9. Jakovljević M: New generation vs. first generation anti-psychotics debate: Pragmatic clinical trials and practice based evidence. *Psychiatr Danub* 2009; 21:446-452.
 10. Jakovljević M: Transdisciplinary holistic integrative psychiatry – A wishful thinking or reality? *Psychiatr Danub* 2008; 20:341-348.
 11. Jakovljević M: Contemporary psychopharmacotherapy in the context of brave new psychiatry, well-being therapy and life coaching. *Psychiatr Danub* 2007; 19:195-201.
 12. Kecmanović D: DSM-5: The more it changes the more it is the same. *Psychiatr Danub* 2013; 25:94-96.
 13. Kecmanović D: Conceptual discord in psychiatry: origin, implications and failed attempts to resolve it. *Psychiatr Danub* 2011; 23:210-222.
 14. Macneil CA, Hasty MK, Conus P & Berk M: Is diagnosis enough to guide interventions in mental health? Using case formulation in clinical practice. *BMC Medicine* 2012; 10:111. <http://www.biomedcentral.com/1741-7015/10/111>
 15. Marshall M: Randomized controlled trials – misunderstanding, fraud and spon. In Priebe S & Slade M (eds): *Evidence in Mental Health Care*, 59-71. Brunner & Routledge, Hove & New York, 2004.
 16. Mueser KT & Drake RE: How does a practice become evidence-based? In Drake RE, Merrens MR & Lynde DW (eds): *Evidence-Based Mental Health Practice – A Textbook*, 217-241. W.W. Norton & Company, New York & London, 2005.
 17. Priebe S, Burns T & Craig TKJ: The future of academic psychiatry may be social. *The British Journal of Psychiatry* 2013; 202:319-320. doi: 10.1192/bjp.bp.112.116905
 18. Slade M: The primacy of personal recovery. In Slade M: *Personal Recovery and Mental Illness – A Guide for Mental Health Professionals*, 45-56. Cambridge University Press, 2011.
 19. Tretter F: Philosophical aspects of neuropsychiatry. In Tretter F, Gebicke-Haerter PJ, Mendoza ER & Winterer G (eds): *Systems Biology in Psychiatric Research – From High-Throughput Data to Mathematical Modeling*, 3-25. Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim, 2010.

Correspondence:

Prof. dr. Miro Jakovljević, MD, PhD
University Hospital Centre Zagreb, Department of Psychiatry
Kišpatićeva 12, 10000 Zagreb, Croatia
E-mail: predstojnik_psi@kbc-zagreb.hr