**Holistic means All of It, and, Do No Harm**

 *(Contribution to an online discussion with colleagues – 2012- about the necessity to rebalance the current treatment approach to mental illness, heavily skewed towards seeing it as defective neurochemistry)*

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Why would we want to take the word "bio" or "psycho" or "social" or for that matter “spiritual”, or any of the components that make up the whole human being and explain his/her functioning in his environment, from the big picture? We are made of all of these, and certainly, anything that we do behaviorally has a neurobiological substrate.

Remember the Hebbian synapse and Long-Term Potentiation? When we learn new information we form new neural pathways, we strengthen neural responses and circuits hence literally changing the structure of the brain. Hence during psychotherapy, our patients learn new information, ways to relate, develop insights into their behavior and learn new ones, all of which effect their memory, brain, and functioning.

(The material below is from a nice paper of Liggan and Kay -1999)

“…. mechanisms involved in neuronal learning and memory, such as LTP and LTD, are used and reused in the molding of personality and behavior based on experience”.

…..The explicit memory system records experience for later recall by utilizing temporal lobe structures, especially the hippocampus…

…… In contrast, implicit memory is an enduring neural structure that depends on the basal ganglia and whose existence is inferred from observable influence on emotional behaviors related to early attachment experiences. Information from this system is not available for conscious recall…….

……In psychotherapy, these patterns of implicit rules are revealed and reflected upon, and change occurs through the learning of new patterns explicitly repeated until the new habit-based manner is engrained in the implicit memory system……

…..Amini et al. posit that psychotherapy (I would add here, good quality, in-depth psychotherapy).... is an attachment relationship, which is a physiologic process capable of regulating neurophysiology and altering underlying neural structure…..

…it may function as an attachment relationship whose purpose is to regulate affective homeostasis and restructure attachment-related implicit memory. ..

…..Therefore, when patients participate in psychotherapy, they first of all activate the implicit memory system and then engage the mechanism whereby implicitly stored material can be modified….

THEIR CONCLUSION

......The search for a model of the neural mechanisms of memory is based on discoveries that training or differential experience leads to significant changes in brain neurochemistry, anatomy, and electrophysiology......

.....Consequently, it is generally accepted that psychotherapy is a powerful intervention that directly affects and changes the brain.

The reason I wanted to highlight (is me again) the intimate connection between learning (environment), biology and functioning is because we tend to polarize our views on this or that pole, but really, we need to keep the whole picture in mind, cause that is how we are made.

At the same time, armed with this knowledge, we need to focus our efforts on de-emphasizing the INTERVENTION from the biological perspective, because it is overemphasized by the medical model and big pharma. Everything got skewed and out of balance, in name of materialism, reductionism, and profit. It is so unfortunate that the correlation between biology and behavior is misused for profit. Instead of focusing on the whole individual, only this small and fragmented piece of information is highlighted to medical students and public and ultimately used for profit.

THIS is the fallacy (and more than a fallacy that is), not the fact that we are bio-psycho-social-spiritual beings.

We, as psychotherapists, we need to know how our work affect our patients, and to what extent it does so. And we need to know what it takes to help people: In my opinion, dedicated psychotherapy and judicious, time-limited use of medications when there is nowhere else to slam our head against.