Mental health: more than neurobiology

Starting with the next grant cycle in June 2014, the NIMH will exclusively fund research examining the neurobiological roots of mental disorders (http://www.nature.com/news/nih-rethinks-psychiatry-trials-1.14877). The idea behind this decision is that important psychiatric diagnoses, such as mood and anxiety disorders, are due to brain abnormalities.

NIMH's reductionist approach ignores important empirical facts. Despite decades of research, consistent and causal biological evidence in support of the idea that mental disorders are brain dysfunctions is nearly completely absent, and it is well-established that etiologies of common mental disorders are massively multi-factorial, featuring biological, psychological, and environmental influences[1].

Moreover, the notion of underlying neural mechanisms presupposes that symptoms of specific disorders cluster because they have the same biological cause, similar to the way measles cause fever, red eyes, and Koplik's spots. This assumption renders symptoms passive and interchangeable indicators of a common cause. However, psychopathology symptoms of disorders such as depression differ dramatically in their etiological and genetic context: they do not share a common biological background, which is in direct contradiction with the disease model underlying NIMH's decision[2].

Novel models of psychopathology have demonstrated that symptoms do not cluster because they share a common cause – they cluster because they are causally connected in complex networks of direct influence: insomnia leads to fatigue which in turn causes concentration and psychomotor problems, irrespective of the particular diagnosis a patient may have[3].

NIMH's decision to solely focus on the investigation of neurobiological roots is directly opposed to these new insights. The majority of patients suffering from mental health problems do not have brain disorders. Instead, they are caught in vicious circles of problems that fuel each other. Consequently, NIMH's funding policy may stall important clinical insights pertaining to the development, prevention, and intervention of mental disorders for years to come, and we suggest that it be reconsidered.


http://www.nature.com/nature/journal/v508/n7497/full/508458c.html
References

