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The issue of natural kinds and the health/disease distinction

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- Disease is much more social concept than medical people and patients usually think about this;
- The concept of disease is nowadays rather more important to society than to diseased people themselves because in case of broad consensus with that it helps efficiently locate human beings in social environment.

The initial question

- At least in medical community diseases are very real and objective entities, in fact rather more real than health which seems to be much more ambiguous and variable status and concept.
- What does mean their real existence and objectivity?

The natural kinds approach is a way to study and understand basic health conditions.

There are numerous divisions
of kinds:

Natural and arbitrary (artificial)
kinds (1)

What are natural kinds?

- Zachar (2001): A NATURAL KIND is an entity that is regular (nonrandom) and internally consistent from one instance to next. ... Defining conditions refer to necessary and sufficient properties that are inherent to the thing in question.

For example, any element (also a natural kind – AS) that has an atomic number 79 is **gold**.

What are natural kinds?

- Alexander Bird & Emma Tobin (SEP, 2008): Scientific disciplines divide the particulars they study into kinds and theorize about those kinds. To say a *kind* is natural is to say that it corresponds to a grouping or ordering that does not depend on humans.

Philosophical framework for natural kinds (Bird & Tobin)

2 main questions about natural kinds (2)

- Metaphysical question: what are natural kinds? – **My direction today**
- Semantic question: what do natural kind terms mean and how do they refer? – **Also very interesting theoretical and practical question, but not the focus of this presentation, but unavoidable indeed.**

3 more specific metaphysical questions (Bird & Tobin)

- Are the kinds that we think of as 'natural' kinds genuinely natural? – We'll discuss this in the context of diseases
- Do natural kinds have essences? – By the logic of essentialism (having of special ontologically identifying properties), yes.
- Are natural kind basic ontological entities or are they derived from or reducible to other entities -- NO

Pairs of basic -isms about natural kinds

ESSENTIALISM	Necessary and sufficient set of properties	ANTI-ESSENTIALISM
NATURALISM	Relation to reality	CONVENTIONALISM (Normativism)
REALISM	Relation to reality	NOMINALISM

Are diseases natural kinds?

- Many say 'yes' (most of medical doctors, also Boors); others say 'no' (e.g. Sulmasy); the thirds try to find intermediate position (e.g. Zachar), they for example say that bodily diseases can be natural kinds and psychiatric ones certainly aren't.
- Different opinions most obviously come from differences in basic positions about objectivism and constructivism as Philip Kitcher has put the the main controversy of the issue.

Is health a natural kind?

- Health is very natural status, but probably not natural kind;
- If there are many different diseases, then health seems to be only one and complete;
- A disease is specified by a unique set of causality, pathogenesis, symptoms and therapy. Health doesn't have such structure, main criteria of it are total normality and subjective wellbeing.

Medical argument to support diseases as natural kinds

- Productive classifications of diseases support the claim that diseases are natural kinds and these classifications catch essential properties of diseases.
- Essential properties of a disease come from stable diagnostic criteria and unique set or specific unity of etiology, pathogenesis and symptoms.

Medical arguments **against** diseases as natural kinds

- Great variability of concrete cases within one disease;
- Forced knowledge-based changes in understandings and classifications through history of medicine;
- The natural kinds approach is too demanding, like having God's-eye view (Zachar, 2000)

Practical kinds

- Zacher (2000) offers a compromise between 2 camps – there are also *practical kinds*;
- “Practical kinds are fuzzier than natural kinds, but they are not arbitrary. ... As a result, practical kinds do not have perfect reliability. They can be thought of as existing on continuum, with some of them having higher reliability than others“. (p. 168)

My own position

- Diseases are some sort of more or less programmed scenarios of human-environment interactions.
- At least some more strictly programmed concrete diseases can be natural kinds in the same way as gold is an example of chemical elements. For example these are diseases based on genetic defects.

What to do with natural kinds in medicine?

- The current set of diseases is still clearly very heterogeneous picture of different scenarios in the sense of explanatory exactness therefore some people suggest to differentiate more carefully them, e.g. diseases, illnesses, disabilities, injuries, maladies etc.
- Thus, it is possible to use traditional natural kinds approach to specify the **quality** of understanding about a medical condition and good quality gives a chance to get closer epistemological and ontological approach to the world.

Test case: Essential hypertension

- The initial essential symptom was increased arterial blood pressure;
- In the course of development of knowledge some forms of hypertension are taken as secondary ones;
- In the future all forms of hypertension are secondary in explanatory sense and we'll lose the need to keep primary hypertension as a kind of disease.

Conclusions

- As health and disease are different in relation to natural kinds, then they (NKs) help to specify health/disease distinction.
- I believe that ideal understanding of a disease takes it as the natural kind;
- If I'll be wrong, natural kinds have still been a valuable methodological step in development of medical sciences.
- Practical kinds can be a good compromise for existing *state of art* in medicine.

References

- Zachar P. Psychiatric disorders are not natural kinds. *Philosophy, Psychiatry, & Psychology*, 2001, 7, 3, 167-182.
- Bird A; Tobin E. Natural kinds. *Stanford Encyclopedia of Philosophy*, 2008
- Sulmasy DP. Diseases and natural kinds. *Theoretical Medicine and Bioethics*, 2005, 26, 487-513.