

## Transdisciplinarity and Health

### Reading text

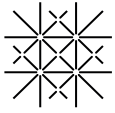
The World Health Organization declared health as a human right in 1945. The International Conference on Primary Health Care (first in 1978 in Almaty, Kazakhstan; subsequently in 1986 in Ottawa, Canada) confirmed the provision of health care to all people as a human right and called for community participation and engagement in the planning of health service provision. Atkinson and co-workers entreated that communities were competent and showed significant health benefits of interventions when communities were involved in the planning and implementation [1].

Transdisciplinary approaches in health research attempt to go a step further by extending the research and development processes through engaging with respective stakeholders as research partners. Together transformatory knowledge is co-produced for the best possible planning of health services and interventions as societal problem solving [2]. By engaging with communities and patients, their perception of health and illnesses and pathways of help seeking can be better understood. Among pastoralists in Africa, tuberculosis is often perceived as inherited and incurable because they have almost no access to adequate services. New mobile tuberculosis treatment services among mobile pastoralists are currently being tested in Eastern Ethiopia, following repeated meetings with communities, health care providers, and local authorities [3].

Conceptual frameworks like the 'Access framework' [4] or the socially layered 'resilience framework' [5] provide excellent foundations for a well-grounded approach for engaging at the same time with different stakeholders to identify locally perceived health priorities and locally adapted health care. In this way, transdisciplinary approaches are multilevel reflexive processes, relating the societal problem solving aspects with scientific methods, considering social dynamics and self-reflexivity with regard to one's own position and role. Prevailing cultural, philosophical and spiritual dimensions, which are critical aspects of health care access and provision, can be reflected. Actors pay attention to mutual understanding between multiple epistemologies (ie ways of creating knowledge and understanding).

Fragmented medical services often do not communicate adequately together in patient care.

For example, in a Mongolian hospital, clinicians, radiologists, pharmacists, and surgeons dealt with patients suffering from infections with the 'dog tapeworm' (*Echinococcus granulosus*) but no one was really in charge of the patient. Through iterative transdisciplinary stakeholder meetings, we could improve tapeworm case management in Mongolia and avoid unnecessary surgeries [6]. In the Peten region of Guatemala, we established a dialogue between Maya communities, Maya healers, health care providers, representatives of the ministry of health, and agriculture, animal health care providers, anthropologists, and linguists to develop an integrated approach for surveillance of zoonotic diseases (ie diseases transmissible between animals and humans). We had to seek an intercultural-intersubjective consensus to attempt a mutual understanding. We took care with the different languages and translations to assure that participants could make their statements in their own languages. The different ways of understanding health and illnesses diverged widely, although communities make use of both Maya and modern medical health services. If patients and their needs for health care are at the centre of attention, they can choose their health care in a way that suits their needs. Health care is often sought alternatively from modern medicine and Maya healers sequentially and sometimes even at the same time. An explanatory video on the transdisciplinary research with Maya communities in Guatemala can be found here ([www.youtube.com/watch?v=BL6fti8u7kk](http://www.youtube.com/watch?v=BL6fti8u7kk)).



Health research is a prime topic for using transdisciplinary approaches for a) a better understanding of population health needs and b) for developing locally adapted effective health services and interventions – in both a development context and also in high income countries.

**References:**

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