

M5. THE USE OF GENOMIC INFORMATION IN MEDICAL PRACTICE: A SURVEY ON PEOPLE'S KNOWLEDGE, EXPECTATIONS, AND FEARS

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Background Integrating novel medical technologies, like genomic high throughput research, into daily clinical practice very often involves considering various ethical, legal and social aspects (ELSA). Here, we aim to survey the attitudes towards the use of genomic high throughput technologies and compare the views of different groups of participants, e.g. geneticists, physicians, patients, and the general population. To get an idea of the current perspectives, we developed a questionnaire that investigates on the one hand the current state of knowledge about the field of genetics (e.g. legal aspects) and on the other hand surveys the attitudes, fears, and expectations toward genome sequencing approaches.

Methods We developed a questionnaire to assess people's knowledge about genetics, professional experiences in the genetic context as well as their personal attitudes, fears and expectations towards the disclosure of findings from genomic high throughput approaches. The recruitment started in May 2016 and so far the sample includes data of 151 individuals that we studied in a preliminary analysis.

Results 63 % of the participants would get their genome sequenced if they had the possibility in a clinical or in a research context. The wish to receive information about a finding heavily depended on the specifics of the finding in question. In case of a finding about a somatic genetic disease, 70.8 % wanted to be informed, in case of a psychiatric disorder, only 54.5 % wanted to receive information. Interestingly 83.4 % of participants who had a psychiatric disorder themselves wished to learn findings concerning psychiatric disorders, whereas only 48.6% of participants who had no psychiatric disorders wanted to be informed about those findings. When asked about potential consequences after disclosure, a majority of participants found that such knowledge might cause them to experience distress, even to the point of developing a depression. With regard to the disclosure of a clinically relevant finding, the majority of respondents (77.3%) were strongly interested in receiving counseling sessions. Regarding participants' assumptions about legal regulations, we find that 52.3 % believe that there is a legal duty to disclose an incidental finding in the research context.

Discussion Our data show that, in general, there is a positive and open attitude toward the implementation of genomic high throughput approaches. However, there comes a point where participants do not want to be informed anymore. The willingness to receive information on one's own genetic conditions based on genomic data is critically influenced by the characteristics of the potential finding. Of particular note, people are much more open toward learning about a risk of a somatic genetic disease than they are about receiving information related to a psychiatric disorder. This finding is relevant to the field of psychiatric genetics as it indicates that there still might be subliminal tendencies of stigmatization. Further analysis will show to what extent the stakeholders' attitudes will differ and if knowledge and expertise in the field has an impact on attitudes.

Disclosure: Nothing to Disclose.