IMPLEMENTING HEALTH INFORMATION TECHNOLOGIES IN UNDERGRADUATE MEDICAL CURRICULA AS A TOOL IN THE TRANSFORMATION OF HEALTHCARE SERVICES AND QUALITY IMPROVEMENT

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Background

Previous research revealed that medical graduates are not adequately prepared for the modern health care context in terms of education about health information technology. This study intends to examine the extent of health information implementation within European health care education curricula in the DACH region

Summary of Work

The QS World ranking was consulted to develop a list of top medical universities in the DACH region. As a next step, online curricula from these higher education institutions were checked to discover the extent of health informatics courses implementation within medical education. After looking at courses that met the definition, qualitative analysis was undertaken to understand the extent of health informatics implementation within respective courses.

Image 1- Geographic location from the ten top Universities in the DACH region according to the QS World Ranking

1- Ruprecht Karls University Heidelberg
2- Charité Berlin
3- Ludwig Maximilian University, Munich
4- Medical University of Vienna
5- TUM Munich
6- University of Basel
7- University of Geneva
8- University of Zurich
9- Eberhard Karls University Tübingen
10- Goethe-University Frankfurt am Main

Table 1 Universities ordered according to their ranking position in the QS World Ranking in the European Location and selected in order of appearance in the List. (https://www.topuniversities.com/university-rankings/university-subject-rankings/2020/medicine)

Summary of Results

There is a higher tendency to find HIT related courses in German universities where three out of six had HIT related courses; compared to Austria one of one and, Switzerland one of three. The presence of Germany´s Universities in the QS World ranking list is predominant compared to Austrian´s and Swiss universities. Further analysis of the rest of the DACH universities could be necessary to obtain a real number of HIT influence in curricula in the DACH region independent frm they appear in the QS World Ranking list or not.

Discussion and Conclusions

Within the DACH region, the extent of HIT subjects offered within the health care practitioner curricula is very low.

The DACH region eventually plus UK and Netherlands (highly ranked in publications and study programs) is playing a trendsetting role for the European educational market the focus was set on the DACH region for its close connections and comparability. It seems, that such training is not seen as valuable enough and thus is not part of the preparation for the modern health care environment to the required extent. If HIT training would form part of medical education to an extent reflecting the current developments in the health care market, the cost of training for new technologies for practitioners could eventually be reduced and thus treatment standards are increased. Such development would reduce the entry barrier for new technologies and eventually therefore even reduce the cost of health care.

Take-home Messages

Even though research in medical technology and HIT in Germany is ranking within the top countries, HIT education in Germany and beyond the DACH-region is lacking to reflect this high standard. Curricula of medical studies of other universities within the DACH region, the Netherlands, the UK, and also broader Europe are required to develop an understanding of this just being a phenomenon of top universities or a wider problem throughout the DACH-region or even Europe.

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