



BRIEF COMMUNICATION

## Why German Medical Students Abandon Dissertations

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**ABSTRACT** *In Germany, conducting a research project followed by writing a thesis is necessary to receive the title “Doctor” but is not necessary to work as a physician. To determine the reasons that students abandon their dissertations, we conducted and analyzed a survey among 160 fifth- and sixth-year medical students at the University of Wuerzburg. Fifteen of 160 respondents (9%) reported to have stopped working on their original project before starting their current replacement thesis research project. Among these 15, the major reasons for abandoning the original research project were: seven (47%) reported lack of supervision, three (20%) reported no recognizable progress, and another three (20%) reported an unacceptable burden of work. Unfamiliarity with experimental methods led two students (13%) to stop working on their original research project. Close supervision and a thorough training remain necessary to prevent students from abandoning medical dissertations and thus should be an essential part of every research project in which medical students are involved.*

### Introduction

In contrast to the situation in many European and overseas countries, German medical students only receive the title “Doctor” if they pursue a research project and write a thesis, in addition to becoming physicians. However, conducting a research project is not necessary to graduate from medical school and to become a practicing physician. The title “Doctor” is necessary to pursue an academic

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career. Research activities most frequently accompany the six years of regular medical studies and are usually finished shortly after graduating from medical school. However, during recent years, the number of successful medical dissertations has been declining steadily and an increasing number of dissertations have been abandoned. About 17% of all German medical students never have intended to conduct a research project during their medical studies (Klinkhammer, 1993; Minks & Bathke, 1994). To date, no studies have been published to clarify the reasons for this trend.

Here, we present our data from a survey among 160 fifth- and sixth-year medical students from the University of Wuerzburg, Germany, to determine the reasons why students stopped working on a research project.

## Survey Design and Instrument

The survey was announced between May and July, 1999, during classes, ward rounds and on notice boards across the medical campus. Additionally, many students were contacted and informed personally. The survey instrument was given to 180 interested students (85 fifth-year and 95 sixth-year students) out of 480 students in total (240 fifth-year students and 240 sixth-year students). There was no gender preference, with approximately 50% of the study population being women. According to the official information booklet of the Faculty of Medicine, 58% of all medical students are women. All 180 students replied, but 20 questionnaires had to be excluded due to incorrect or missing answers. The final study population consisted of 82 fifth-year students and 78 sixth-year students and thus comprised one-third of the total number of students from two years.

The questions were grouped into two blocks. One block referred to more general data (e.g. age, study year, gender) and the second block contained more thesis-specific questions (e.g. number of research projects, abandonment of former ventures, and the reasons for doing so).

There were no important differences in the responses and response rates between the fifth- and sixth-year students.

## Results

On average, a first thesis project was initiated during the seventh semester, corresponding to the fourth year of medical studies. Fifteen (9%) of 160 participants reported having stopped working on one research project before they started their current replacement thesis project. None reported to have abandoned two or more projects.

Seven of the 15 students (47%) who stopped working on their original research project reported experiencing a lack of supervision during their work

(e.g. difficulties in getting an appointment with their supervisors or an insufficient training period). Interestingly, students who worked in clinical research facilities, such as the Department of Internal Medicine, where large research groups predominate, were the only ones who reported this reason.

Three of the 15 thesis dropouts (20%) found it difficult to recognize any progress during their work (e.g. to perform successful experiments or to find interesting data, which may lead to further investigations). Another three students (20%) reported inappropriate timing. These students were faced with an unacceptable burden of work, which considerably exceeded the students' available time for research. Two of the 15 students (13%) quit their first research project because they did not become familiar with the experimental method.

A recognized risk for students comes from the fact that some thesis supervisors leave their university positions to start working at other hospitals or universities, causing their student supervisees to be neglected. None in our study population reported this reason for stopping their research work.

Interestingly, more than 50% ( $n = 82$ ) of our survey respondents did not know exactly how long they were going to work on their thesis.

## Discussion and Conclusions

A recently published survey among medical faculty members of the University of Wuerzburg showed that about 10% of all dissertations are abandoned before they are finished (Altunbas & Cursiefen, 1998). Our survey among medical students indicates that about one of 10 students stopped working on their original research project before starting their current replacement thesis research project. Although our study population is rather small (just one-third of the total number of students from two years) and limited to one medical school, it appears to reflect the situation at medium-sized medical schools in our country.

According to a recent study, about 30% of doctorates report a delayed graduation and a reduced exam preparation (and thus a delayed beginning of professional careers) due to thesis work (Weihrauch *et al.*, 1998).

It seems reasonable to conclude that thesis supervisors should be encouraged to provide a thorough training period and adequate supervision to reduce the number of abandoned dissertations and the financial costs for both students and universities.

## References

- ALTUNBAS, A. & CURSIEFEN, C. (1998). Research activities of medical students in Germany using as an example the Wuerzburg University Clinic. *Deutsche Medizinische Wochenschrift*, 123, 617–620.
- KLINKHAMMER, G. (1993). Neuordnung des Medizinstudiums—Revolutionäre Überraschung. *Deutsches Ärzteblatt*, 90, C1159.

- MINKS, K.H. & BATHKE, G. (1994). *Absolventenreport Medizin. Ergebnisse einer Längsschnittuntersuchung zum Berufsübergang von Absolventinnen und Absolventen der Humanmedizin*. Scientific Report. Bonn: Department of Education and Science, Office for Public Relations.
- WEIHRAUCH, M., WEBER, A., WELTLE, D., PABST, R. & LEHNERT, G. (1998). The path to “Doctor of Medicine”: how doctoral candidates assess their doctoral dissertation. *Deutsche Medizinische Wochenschrift*, 123, 375–380.