## Forensic uses and misuses of DNA: a case report from Norway

## **BJØRN HOFMANN**

## **Abstract**

New technology generates fantastic possibilities which challenge traditional distinctions between good and bad. Genetic analysis of DNA for forensic purposes is but one example of this. Here society's need for convicting criminals can conflict with the same society's need to assure the confidentiality of information about its members and their trust in its institutions. In order to illustrate the complexity of such challenges, a case report from Norway is presented. The point is to reflect on the way we handle trailblazing health technologies in general and on cases where law and order is gained by means that can be conceived of as immoral in particular. The case calls for careful ethical reflection.

## Introduction

Forensic use of DNA provides us with a powerful tool in the struggle for justice. At the same time it may imply profound moral challenges. On the one hand there is a legitimate search for truth in criminal cases in order to convict guilty persons. On the other hand we have to protect the confidentiality and privacy of individuals. This delicate balance can become subject to substantial stress, in particular in cases of brutal crime.

Where biological material which is gained by diagnostic and therapeutic (or research) means in health care is used for other purposes, the trust which is the basis of health care services is at stake as well.

The following interesting case from a brutal robbery in Norway is but one example of this. It highlights both the profound challenges and the complexity of such cases. Hopefully, considering the case can make us better equipped to face such challenges in the future.

Early Monday morning, April 5 2004, the Norwegian Cash Service in Stavanger – a branch of the national bank of Norway – was robbed brutally. The robbers, shooting their way into the building with machineguns, killed one police officer and got away with 57 million Norwegian Kroner (about seven million Euro). This well planned and brutal robbery shocked the whole country and significant resources were provided for the subsequent investigation.

As part of their work the police found DNA on a balaclava. The analysis did not show any identifiable match in the police's registers, but turned out to match DNA on a sledgehammer from another unresolved brutal robbery in Oslo in October 2003. After a repeated search the police found a match with DNA on a mouth guard from a third robbery in Hemsedal 2002. By interrogating one of the suspects in the Hemsedal robbery, this led them to two brothers, one a famous Norwegian boxer and the other a Norwegian kick boxer. At this time the boxer drowned in a boat accident (May 2004). As there existed biological material from the autopsy, the police wanted it analyzed,

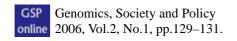
and this was supported by the state attorney. The DNA analysis showed that the DNA found on the sledgehammer (from the robbery in Oslo in 2003) and the balaclava (from the Stavanger robbery 2005) did not stem from the boxer, but that it had significant similarity. This directed the suspicion against the older brother, the kick boxer. None of the brothers had earlier been convicted, and thus were not in any criminal DNA-register.<sup>1</sup>

This case and subsequent similar cases fuelled fierce debates on a series of issues: Can biological material collected for one purpose, e.g. a medical purpose, such as autopsy, be used for another, e.g. a forensic purpose? According to the Norwegian Biobank Act to use material in diagnostic biobanks for other purposes, such as research, requires express informed consent. However, the Health Personnel Act allows for communicating health information under certain conditions.

Can DNA acquired in one case (e.g. the forensic autopsy of a suspicious death: the drowned boxer) be used in another case (Oslo, Hemsedal, or Stavanger robbery)? Even more: can DNA acquired from one person (the boxer) be used in order to find out if another person is involved (the kickboxing brother)? To what extent is DNA that the police have collected their 'property' free for use? The DNA-register regulation restricts the use of DNA, however, how much is disputed.

Can DNA be collected, e.g. from a coffee cup or from the garbage bin in a private garden without a person knowing. This material has a different status than biological material found on a crime scene, as the identity of the person is known. However, it does not qualify for entering the criminal DNA-register. According to Norwegian law, entry in the criminal DNA-register is only permitted in the case of persons convicted for serious crimes. Suspects are not allowed in the DNA-register.

- What should an independent institute for forensic medicine do when the state attorney supports a request for DNA analysis, but when it is not clear whether such a request is legal?
- Furthermore, can material collected in a disputed or even illegal manner be used as evidence in a serious case as this?
- How are we to face the fact that the DNA collected and stored by the police constitutes a 'biobank' that does not fall under the Biobank Act?
- Can DNA from dead persons be collected or registered, as they cannot be suspected or prosecuted? According to Norwegian legislation DNA can be collected only if there is ample suspicion. DNA from dead persons cannot enter DNA-registers, because they cannot be convicted. Furthermore, what respect do dead persons deserve? How should we respect the relatives?
- How to handle consent with respect to biological material from dead persons, e.g. if a family member consents to analysis of DNA from a dead person in order to clear the person out of a case? Proxy consent is not common in Norway, but the Health Personnel Act says that information on a dead person can be passed on if it is in the interest of the person, his or her family or society. But if



health care information about a dead person can be passed on, why can DNA from dead persons not be passed on under similar circumstances?

These questions touch upon profound ethical issues. For one it challenges trust, being the moral basis of social institutions, such as health care, police, and (legislative branch of) parliament. Second, the case raises issues of autonomy, privacy and confidentiality. Third, it challenges the relationship between biological material and clinical information, and on the status of biological material: what is the biological material in relation to the person it stems from. Moreover, we are challenged with respect to the moral and legal status of a dead person, and what respect relatives deserve on behalf of a dead person.

As a result of the debate, the Institute for Forensic Medicine University of Oslo concluded that they should have required a court decision before performing the DNA analysis of the dead boxer. At the time, they claimed, they had not reflected on the legal basis of the requested analysis. As it was asked for by the police, they assumed it would be legal. However, the heated debate made them refuse to perform analysis in a subsequent case (where they were put under pressure by the Faculty of Medicine at the University to perform the analysis).

As a result of the debates, another university hospital refused to give biological material from a diagnostic biobank for analysis in the same case (in Stavanger). This made the prosecutor bring the case all the way to the Supreme Court who decided that biological material gained for medical purposes could not be used for forensic purposes. This was based on the Biobank Act requiring consent for extended use of biological material, and, as consent was not given by the dead person (or his family), the DNA analysis could not be performed. Hence, the consent clause of the Biobank Act, which has been extensively criticised for being excessively restrictive (and even research hostile), turned out to protect the individual against altered use of biological material collected for diagnostic (or therapeutic) purposes.

One of the key issues in this and the subsequent similar cases has been how to balance a society's need for investigating crime and convicting criminals on the one hand and protecting the individual's interests on the other. Behind this lures the question of how to preserve trust in society and its institutions.

New technology generates fantastic possibilities, which can be used for good and bad. However, the balance mentioned above makes it difficult to discern the good from the bad. Additionally, new technology creates new space for human action (and agency) that are not covered by existing law. On the contrary, it generates 'lawless spaces', which urges moral awareness and ethical reflection.

\_

<sup>&</sup>lt;sup>1</sup> The prosecution of the Stavanger robbery is not finished yet and the information in this case report stems from public sources only.