



Forensic Uses of Bioinformation

A Joint Response to the Nuffield Council of Bioethics Consultation on the Forensic Uses of Bioinformation from the Wales Gene Park and Techniquist

INTRODUCTION

On January 9th 2007, the Wales Gene Park and Techniquist held a consultation at the Cardiff Medicentre, Cardiff University, to explore the views of young people aged 16-19 years on some of the issues raised in the Nuffield Council of Bioethics (NCOB) paper 'Forensic Uses of Bioinformation' and to compile a response to the questions posed in the paper. The event comprised a presentation by an expert, a discussion and electronic voting. The responses are summarised in this report.

Recruitment

Local schools across South Wales were contacted to see if their post-16 students would be interested in taking part in the event. Attendance was free. A total of 13 participants (3 female, 10 male) from two schools took part in the event. The consultation deadline meant that the event had to be run in early January. However, we had replies from a number of schools pointing out that A-level exams were held at this time, so it was impossible for them to attend.

Programme

The event began with a brief outline of 'Forensic Uses of Bioinformation' and the aims of the consultation. Due to time constraints, we chose to discuss the two sections of the consultation most relevant to post-16 students: Sampling Powers and Ethical Issues. The questions raised in these sections were posed to the audience. Voting was done anonymously by means of electronic handsets. This was followed by a presentation on sampling powers and the ethical issues surrounding the National DNA Database and questions from the audience. An open discussion then took place on 'What are the arguments for and against an extension of the database?' with the speaker on hand to provide explanations and further information as required. This was followed by a second round of voting – on exactly the same questions – to see whether opinions had changed. The results from both voting sessions were shared with the audience. At each stage of the event, the audience was reassured that there were no wrong or right answers to the questions asked.

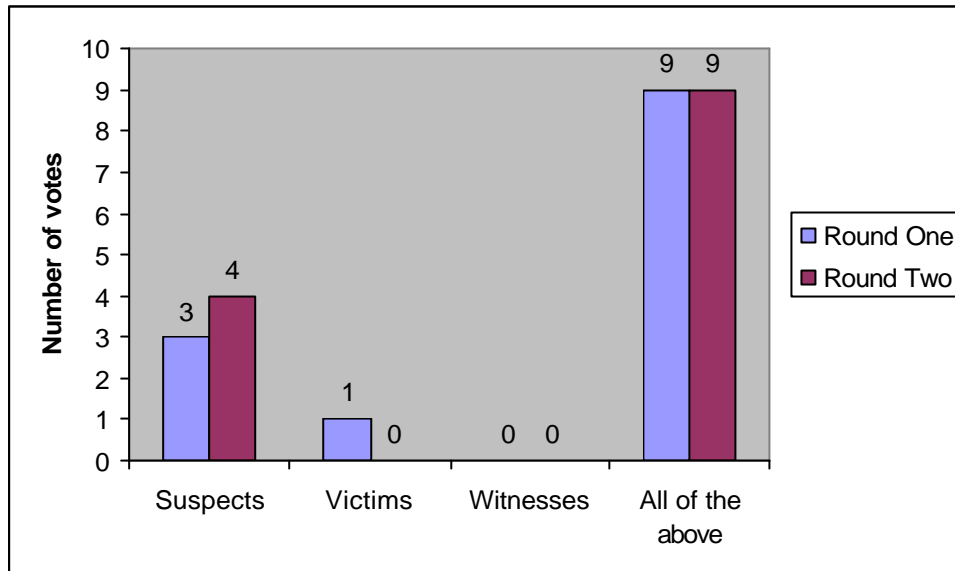
Voting

The votes of the participants are presented in the charts below with Round One of voting in blue and Round Two in purple. It was not possible to track the votes from individual handsets.

RESULTS

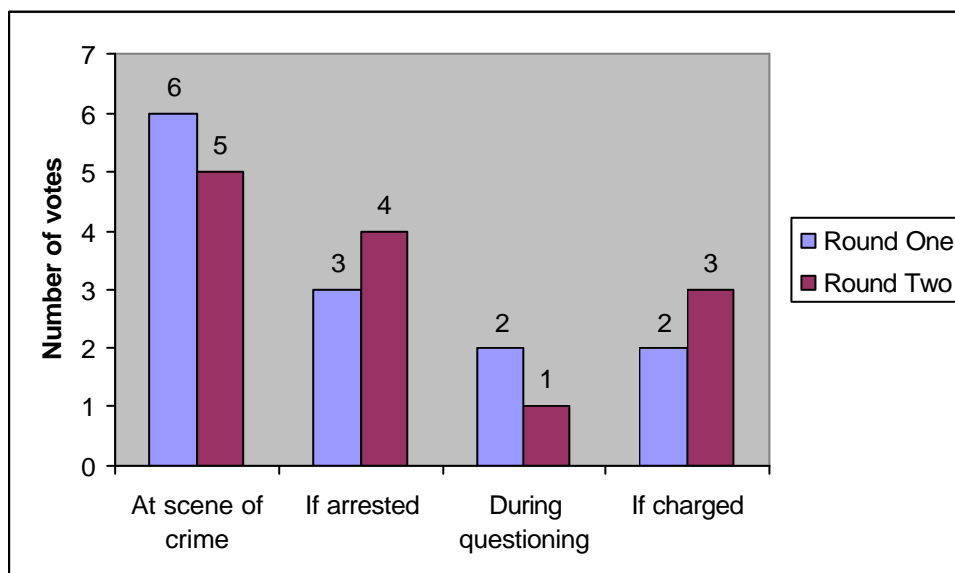
SAMPLING POWERS

From whom should the police be able to take fingerprints & DNA samples?



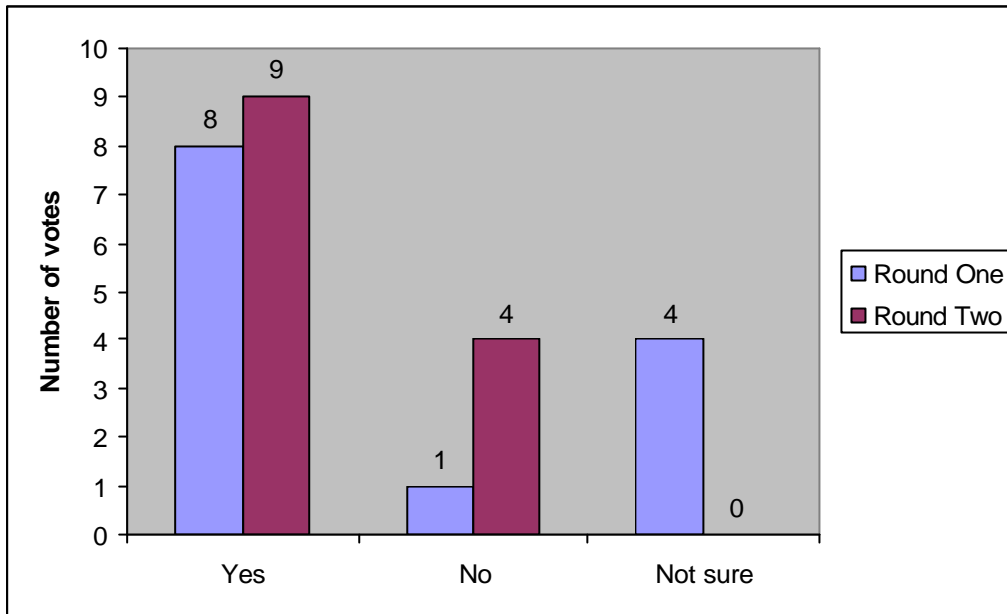
The majority of the participants supported fingerprints and DNA being taken from suspects, victims and witnesses during Round One and Round Two of voting. One participant who initially believed that samples should be taken from victims only changed his/her mind at the second round of voting. The number of participants who supported samples being taken from suspects only rose from 3 to 4.

At what stage in criminal investigations should samples be taken?



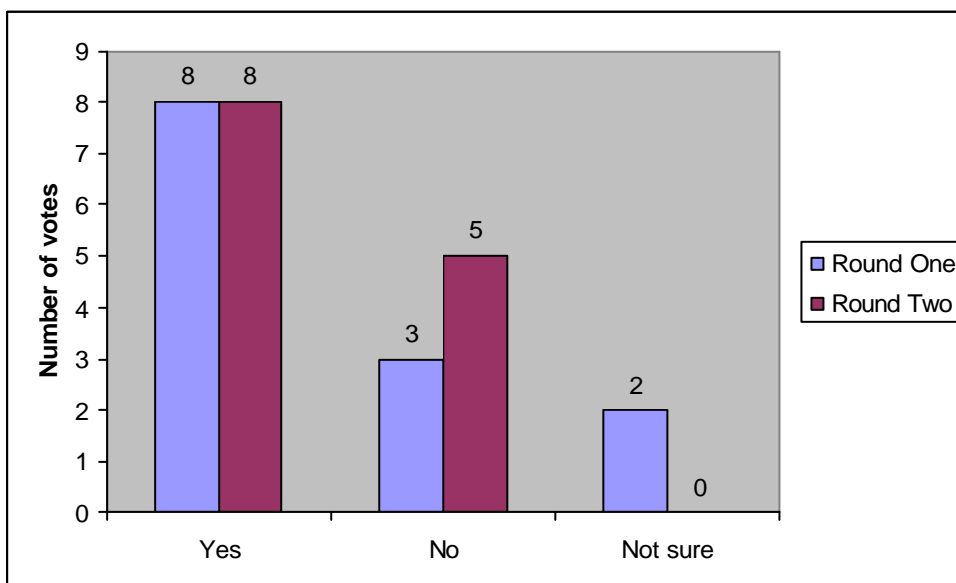
The participants' votes changed on this issue over the course of the event with participants' views shifting towards samples being taken at later stages of the criminal investigation. This may be partly explained by the post-presentation discussion which noted that samples from those arrested who are later found to have been innocent are retained on the National DNA Database.

Should the police be able to request further information from DNA analysts, such as physical characteristics or ethnic origins?



The majority of participants supported the police obtaining further information such as physical characteristics and ethnic origins from DNA analysts. Almost a third of participants voted 'Not sure' during Round One, however in Round Two, all participants were certain of their views and voted either 'Yes' or 'No' with the number of 'No' votes rising from 1 to 4. This shift may partly be explained to a discussion on a case in which ethnic origins were obtained from a person's DNA and how meaningful such results can be.

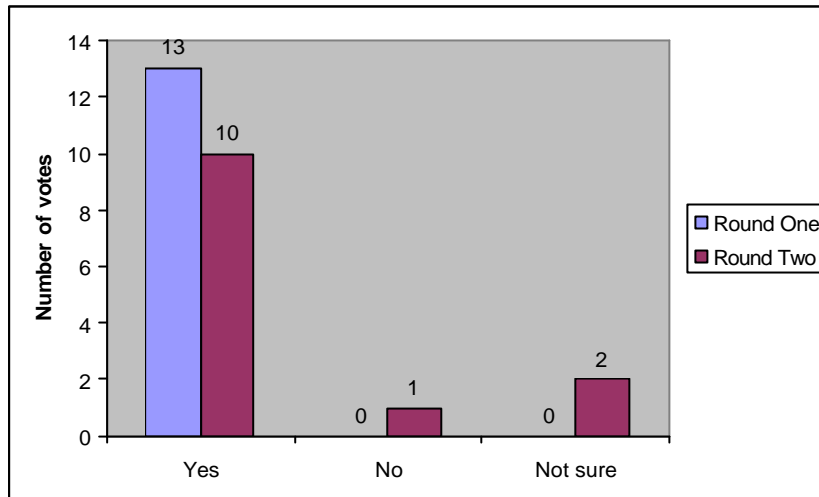
Should the retention of bioinformation from those who are not convicted of an offence be kept on the DNA database?



During Round One and Round Two of voting, the majority of participants supported the retention of bioinformation from those who are not convicted of an offence.

Participants who voted 'Not sure' in Round One voted either 'Yes' or 'No' in Round Two with the number of 'No' votes increasing from 3 to 5.

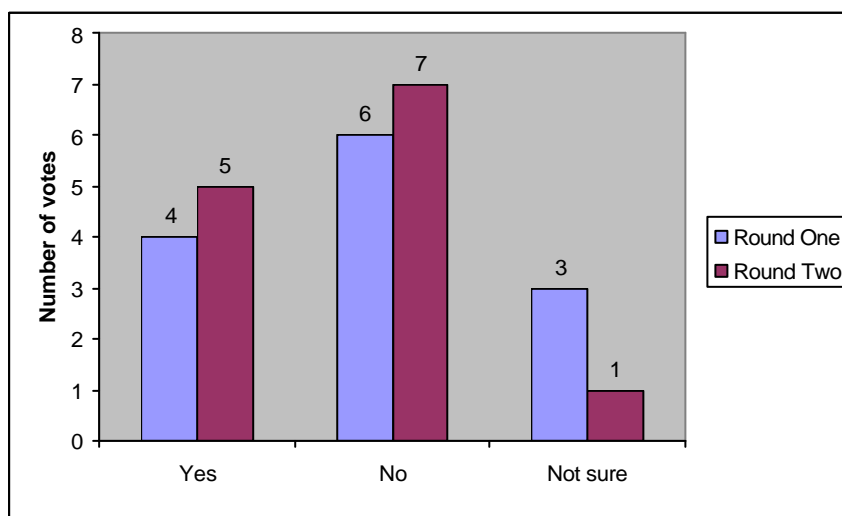
Is it acceptable for bioinformation to be taken from minors and for their DNA profiles to be added to the National DNA Database?



A minor was defined to the audience as a person below 18 years of age. Given that the vast majority of the participants were aged 16-19 years, it was interesting to find that all participants initially voted 'Yes' for bioinformation to be taken from minors and for their DNA profiles to be added on the National DNA Database. In Round Two of voting, however, the 'Yes' votes dropped to 10 with one person voting 'No' and two participants voting 'Not sure'. The discussion following the presentation had presented a case in which DNA samples were taken from a 1-year-old child and their 16-year-old mother, which may partly explain the shift in the voting results.

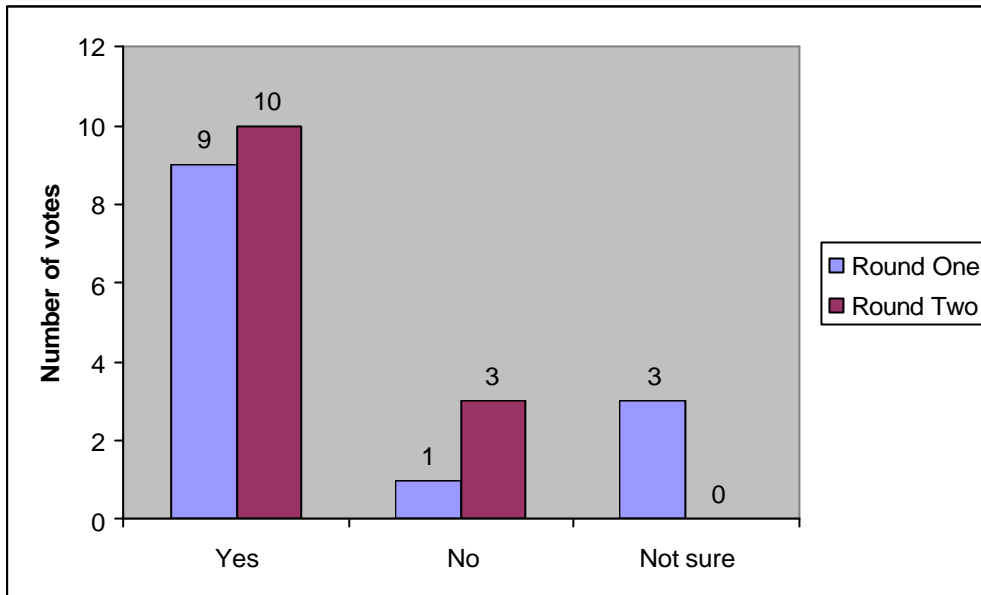
ETHICAL ISSUES

Do you consider the use of familial searching may be an unwarranted invasion of privacy?



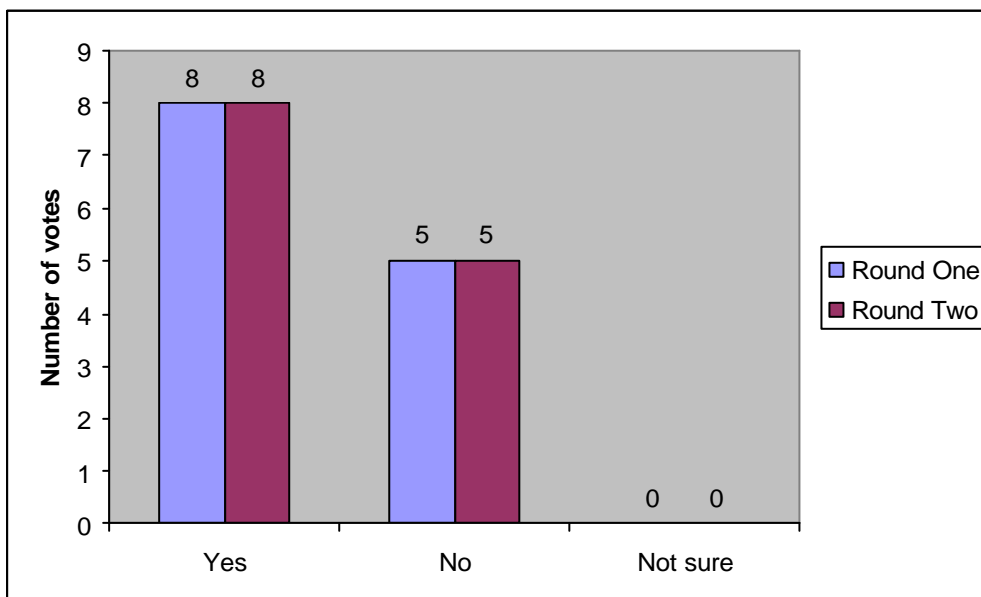
The participants' votes changed on this issue over the course of the event. The number of participants who voted 'Not sure' dropped from 3 to 1. The number of 'Yes' votes rose from 4 to 5 and the number of 'No' votes increased from 6 to 7.

Is the use of DNA profiles in 'familial searching' enquiries acceptable?



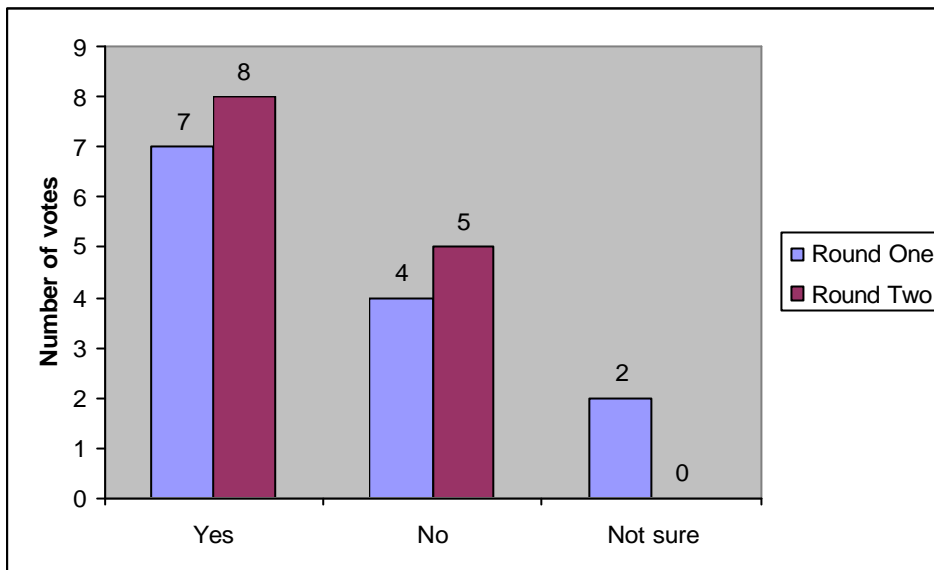
The participants' votes changed on this issue over the course of the event with participants being more certain of their opinions; during Round Two, the number of participants who voted 'Not sure' dropped from 3 to 0. The majority of participants supported the use of DNA profiles in 'familial searching' enquiries with the number of votes increasing from 9 to 10. The number of 'No' votes increased from 1 to 3.

Certain groups such as ethnic minorities and young males are disproportionately represented on forensic databases. Is this bias acceptable?



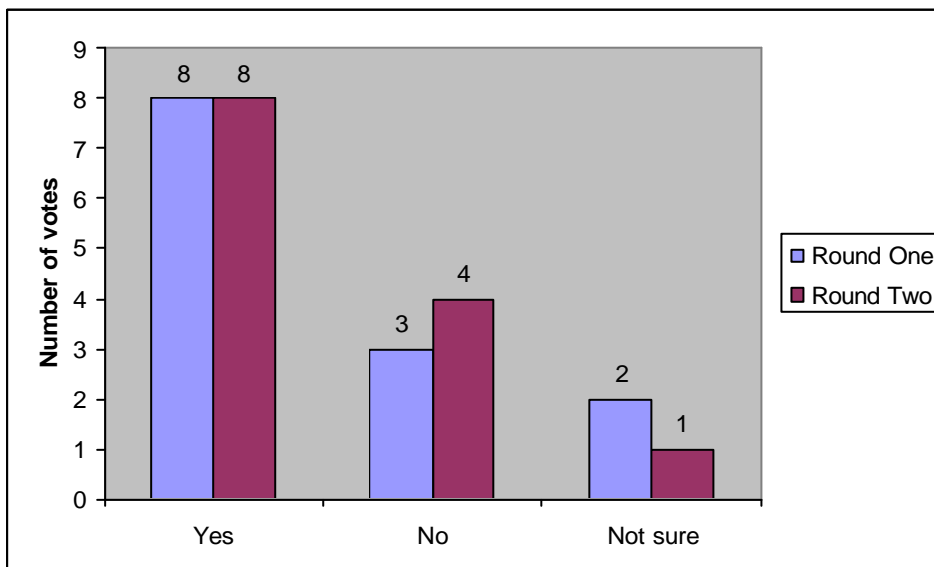
Given that the majority of the audience were young males, it was interesting to see that most of the audience accepted this bias in forensic databases. The percentage of votes remained the same from Round One to Round Two with the number of 'Yes', 'No' and 'Not sure' votes being 8, 5 and 0, respectively.

Is it acceptable that volunteers (such as victims & witnesses) have their profile retained on the National DNA Database?



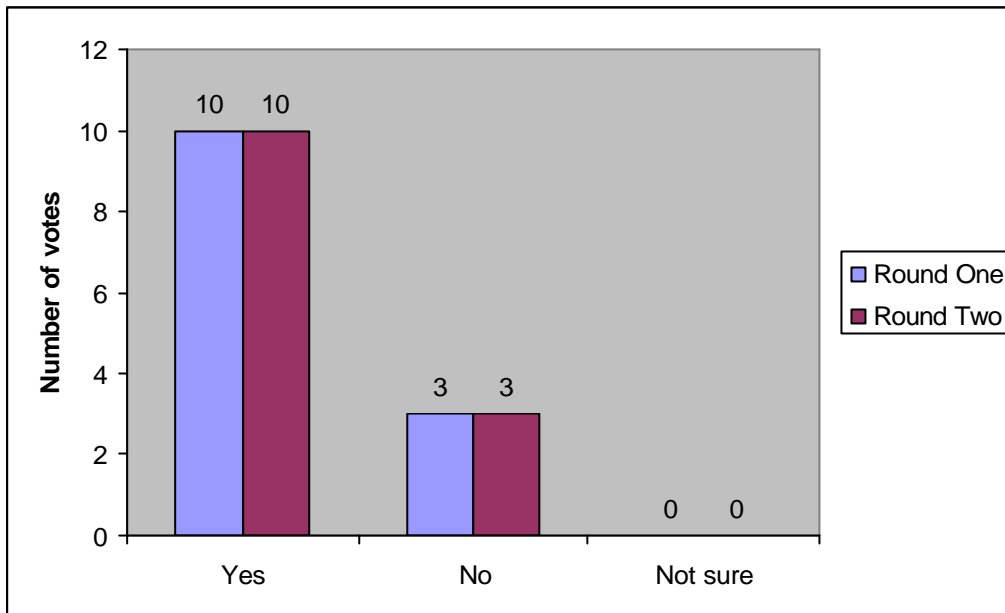
The participants' votes changed on this issue over the course of the event. The number of participants who voted 'Not sure' dropped from 2 to 0. The number of 'Yes' votes rose from 7 to 8 and the number of 'No' votes increased from 4 to 5. Interestingly, when the participants were asked if they would volunteer to provide a sample of their DNA for the National DNA Database, just under half of the participants said they would.

Should volunteers be allowed to withdraw their consent and have their DNA records removed from the database?



The majority of participants voted 'Yes' with eight participants voting 'Yes' in both Round One and Rounds Two. The number of 'No' votes rose from 3 to 4 and the number of 'Not sure' votes dropped from 2 to 1.

Would the collection of DNA from everyone at birth be more equitable that collecting samples from only those who come into contact with the criminal justice system?



The majority of participants voted 'Yes' to the collection of DNA from everyone at birth with the ten 'Yes' votes in both Round One and Round Two. There were three votes of 'No' in each round of voting. As stated earlier in this report, it was not known how individuals' voted therefore it is not known whether the participants voted the same in both rounds or whether an equal number of participants changed their views from 'Yes' to 'No' and vice versa.

EXTENDING THE USE OF THE NATIONAL DNA DATABASE

After the presentations, the participants discussed 'What are the advantages and disadvantages about extending the National DNA Database?'

The participants listed the advantages of extending the National DNA database as follows:

- Extending the number of profiles on the National DNA Database would be of benefit as it could lead to an increased number of convictions.
- Using DNA samples in criminal prosecutions could potentially increase the number of convictions as it could provide more conclusive evidence in court than the use of fingerprints alone.
- It could increase the number of suspects who could be eliminated from a criminal enquiry.
- Although the National DNA Database is not used at present for identifying deceased people or body parts, just under half of the participants believed that expanding the uses of the National DNA Database to allow this would be of benefit. None of the participants opposed to the National DNA Database being used in this way.

The disadvantages of the extending the National DNA Database were as follows:

- There were concerns about how the National DNA Database could be used in the future. Participants were concerned that physical samples are not destroyed after they have been coded and added to the National DNA Database, but are stored indefinitely. Participants were concerned that scientific research could be performed on the DNA samples.
- It was raised by one participant that he would not want to know or have other people to know information that could be obtained from his DNA, such as genetic predispositions to certain conditions, especially late-onset conditions, which

currently cannot be cured. There were concerns such information could affect health insurance and employment opportunities.

- There was also concern about the status to which DNA evidence is regarded in court and that there was a strong possibility that DNA evidence could begin to overshadow other evidence presented in court.
- Finally, there was concern about how the samples are classified within the National DNA Database. The participants were informed that although samples are currently coded to distinguish samples from arrestees from those taken from volunteers, this distinction is soon to be removed and those acquitted of a crime will be unable to have their samples removed from the National DNA Database.

CONCLUSION

This event provided an opportunity for young people to express some of their opinions and concerns about the National DNA Database, to discuss and debate its regulations and uses, and to consider what others view as acceptable public policies. Overall, most of the participants agreed with the majority of the current policies prior to the presentation and discussion. Although the votes changed a small amount between Round One and Round Two, most participants still supported these policies. There were two issues that the participants showed a majority opposition. Most participants would prefer samples to be taken from everyone at birth rather than bioinformation being taken from those who come into contact with the criminal justice system. The majority of participants also believed that it is unacceptable for volunteers who provide samples to the National DNA Database to be unable to withdraw their consent in order to have their DNA samples removed from the National DNA Database.

ACKNOWLEDGEMENTS

Many thanks to our speaker, Professor Stephen Bain, and particular thanks to the students and teachers at The Bishop of Llandaff CW High School and Ysgol Gyfun Gymraeg Plasmawr who participated in the event.

15 January 2007