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Dental checks can't verify the age of child asylum seekers



David Davies: calling for X-rays
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By **Tim Cole**

Images of children who fled war and persecution being granted asylum in the UK have sparked controversy. Conservative MP David Davies has questioned the true age of some individuals and suggested border officials should perform dental scans to be sure they are not adults.

International child protection laws mean asylum seekers are more likely to be admitted to the UK if they are under 18. Amid domestic and international pressure, the UK government agreed to take in some unaccompanied minors – who often lack documents – from a refugee camp in Calais. The first wave of these arrivals, from nations such as Afghanistan, has prompted the call for more checks.

But the idea of using dental X-rays, or similar methods such as wrist bone scans, is far from an ideal way of verifying age. It relies on the concept of physical development, in this case, that the teeth and bones of growing children – as seen on X-ray – change in appearance over time.

These changes can be calibrated against a reference group of children to provide a developmental age, the age at which an average child reaches each stage.

At a certain point, the appearance reaches the final adult stage, after which time the bone or tooth is mature and does not change. The key assumption of such tests is that if an individual's teeth or bones have reached the adult stage then they must be over 18 years old.

But that is too simplistic and inaccurate much of the time. The problem is that developmental timing is very variable. Take the height growth spurt during puberty, or menarche (when girls start their periods): the age they occur can vary by up to 5 years.

Bones and teeth are even more variable – the age when they reach the mature stage ranging from around 15 years up to at least 23 years.

The dental approach focuses on wisdom teeth and can give the wrong answer in two ways. If this tooth is mature, then the individual is assumed to be adult even if they are a child. If the tooth is immature, the individual is assumed to be a child even if they are adult.

In the first case, a child will be denied care by the local authority, which may have a major impact on its well-being.

In the second case an adult will be treated as a child, and will be supported by the local authority and housed with children. Neither outcome is desirable.

And the risk of a misleading result is high. Broadly, there is a 10 per cent chance of a child being assessed as an adult, and a 50 per cent chance of an adult being assessed as a child. The average error of 30 per cent means that one in three assessments will be wrong. It is not until the ages 25 to 30 that this test becomes far more accurate.

Scans of wrist bones have also been used to assess age, but these are even less useful than third molars. And there really is no other physical test of any value. This time the UK Home Office has ruled out the calls for tooth or bone checks.

Checks on bones and teeth seem appealing because they are scientific and objective. That's probably why some politicians reach for them on tricky issues. But to claim they can accurately tell children from adults is wrong.

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