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The Impact of Māori Cultural Values on Forensic Science Practice in New Zealand

ABSTRACT: Forensic science aims to serve society by advancing justice. It is accepted that some actions taken by the state in the interests of advancing justice, such as postmortem examinations, may impinge on values held by members of groups within society. Such actions have the potential to cause cultural offense. It is important that forensic scientists are aware of these issues and that as a profession we should take actions, where possible, to reduce any potential offense and consequently reduce unnecessary distress. This paper examines the impact of these issues on forensic practice in New Zealand, and, in particular, in relation to the cultural values of Māori, the indigenous people of New Zealand. Interviews and workshops were used to identify forensic practices involving a risk of cultural offense. Particular issues were identified in regard to crime scene attendance and examination, postmortem attendance and sample storage, disposal, and return. This paper describes the response developed by the Institute of Environmental Science and Research Limited (ESR) to address these issues, including a cultural awareness training package and reference brochure.

KEYWORDS: forensic science, cultural values, New Zealand Māori

New Zealand is made up of diverse cultures comprising the indigenous people (Māori) and subsequent immigrant groups. During the early post-European-contact period these immigrant groups arose largely from the United Kingdom, but during the last 50 years they have come from more diverse areas of Polynesia, Europe, Asia, and Africa. In New Zealand, the primary mechanism, which Māori have used to have their indigenous rights addressed, is the Treaty of Waitangi (1–8). The Treaty principles have been widely adopted throughout government organizations as a guide to policy in aspects that affect Māori.

Forensic scientists have long accepted their responsibility to society. Many interpret this as requiring them, quite rightly, to maintain the highest professional standards with regards to their examinations and testimony to advance the interests of justice. In New Zealand, more recently, we have sought to ensure that the pursuit of justice by forensic science is done in a manner that respects the cultural values of affected communities. We realize that we are part of a local and international movement that is reassessing the interaction between science and society and in many cases organizations are far more advanced than we are (9–13).

Other sectors in New Zealand, particularly health, have responded to increasing Māori calls for transparency and recognition of cultural values. Forensic services in New Zealand were behind these sectors in starting the process. Although this gives us more ground to make up it also allows us to learn from the experience of others. The issues in many cases are very similar and often center around the return, retention, or destruction of bodily samples.

There is no one specific piece of legislation covering the forensic use of bodily samples in New Zealand. Rather there are separate acts such as the Criminal Investigations (Bodily Samples) Act 1995

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and the Coroners Act 2006 under which we operate. A significant change in the recently updated Coroners Act is the move toward a more culturally sensitive stance. There are related codes and pieces of legislations in the health sector that can also serve as guides. For example, the Code defining patients' rights was recently amended to allow, in some restricted situations, the retention and research upon some body samples taken during healthcare without the informed consent of the donor (14).

This project sought, initially, to identify those areas where forensic science could interact with Māori cultural values, as a template for the examination of our practices with regard to all cultures represented in New Zealand. The project raised issues ranging from the deeply philosophical, such as the cultural and spiritual basis of Māori beliefs, to the practical return of samples that are potential biohazards. A project such as this has considerable potential to create offense both to Māori who may suspect tokenism and to non-Māori who may resent the focus on a specific set of cultural values. However, this should not hinder consideration of these issues which are of significance to Māori and can demonstrate a process which serves as a template for exploring other cultures.

Forensic science interacts with individuals in a number of differing contexts. They may be victims, deceased or not, of a crime, they may be the family of such victims, they may be innocent or guilty suspects, or they may be participants in the legal system as police, lawyers, jury, judge, or medical personnel. Māori are over-represented as victims of crime both in regard to the prevalence of victimization and the average number of victimizations per victim (15), and under-represented as the aforementioned participants in the legal system.

The greatest potential for conflict between the pursuit of justice and cultural values occurs in the event of a suspicious or homicidal death. In such circumstances a scene and postmortem examination may be desired by the state to determine cause and circumstance of death, to obtain samples for toxicological examination and for forensic testing to identify an offender. Conversely, Māori cultural protocols expect the timely presentation of the body to allow the

immediate family, extended family, and friends to express their sorrow and grief prior to burial on the third day following death. The traditional mourning process takes place in the presence of the body lying in an open casket. We focus on these issues in this paper but the principles can be applied to other cases not involving death. This leaves out a large and important area regarding the creation, storage, and use of genetic information (16).

Māori Beliefs and Death

As with all peoples, there is diversity of values and beliefs amongst Māori. However, due to the holistic nature of Māori philosophies, when death occurred there was always consideration of supernatural elements and forces that may have contributed to that event. This is not a Māori view alone (17).

In contemporary New Zealand society, Māori recognize the prevailing Western construct that attributes the underlying cause of death as physical in origin. At the same time, many may also wish to acknowledge the potential that another cause, possibly spiritual in nature, may have contributed to the death. Depending on the cause, a prescription for closure may include *karakia* (prayer) to cleanse people, a place, or items that are held to have contributed to the problem, as well as postmortems and participation in medical research to establish physical causes.

Ideally, immediately following the death, a ceremony to “tuku i te wairua” is carried out to ensure that the spirit (wairua) is fully freed from the body, and to support it on its journey. Family may be particularly distressed about the spiritual as well as physical condition of a person who dies alone and/or is not found until well after the death.

The body of the dead person—the *tūpāpaku*—should not be neglected or treated with disrespect. “The dead are to be cared for, cherished, mourned, spoken to, honoured in a way which other [cultural groups] might consider over-emotional and over-demonstrative” (17). To disrespect the dead remains one of the strongest prohibitions amongst Māori. All parts of the body should be kept together if possible, and buried as one. From the moment the death is notified to the family they become *tapu*, “set aside from everyday matters.” The *tapu* status can allow the immediate family time to focus on the *tūpāpaku*, permission to grieve openly and be supported by an extended network of friends and family. Maintaining *tapu* can also reduce the risk of disease transmission. The immediate *whānau* do not generally speak in public, and may be represented by elders—for example when dealing with officials or the media.

Method

Detailed information on forensic processes was obtained by interview and workshops with forensic staff including those involved in scene work, continuity, storage and disposal, forensic examination, and management. The number of staff involved was over 20 and all were volunteers. The information on process was developed into process maps that summarized the information gained, in particular crime scenes and the handling, storage, and disposal of samples.

These process maps were examined and those areas where there was a risk of cultural offense identified. These risks were evaluated against a cultural framework developed from:

1. A literature review concerning Māori beliefs and practices around injury and death.
2. A review of the relevant legislation and policies.
3. A review of the literature on international practice.

4. Interview of and inspection by Māori with a key interest in this area.
5. Meetings with interested Māori representatives from a range of relevant community, health, and government agencies.
6. A formal audit of ESR’s premises by a Māori representative.

Results and Discussion

The comparison of current process with Māori values and beliefs identified the key points of interaction as:

- crime scene attendance and examination;
- post-mortem attendance and sampling; and
- sample storage, disposal, or return.

Crime Scenes

Crime scenes in New Zealand are managed by the New Zealand Police. Many police districts have Iwi (tribal) liaison officers appointed to facilitate the interaction of police with Māori. Forensic scientists are present at these scenes as invited consultants and have no statutory authority or responsibility. However, they clearly have a professional and moral responsibility to ensure that the advice they give or the actions that they take safeguard the interests of justice with a minimum of cultural or religious affront to individuals, alive or deceased.

Typically at a homicide scene there is an Officer in Charge of the scene, an Officer in Charge of the body and an Officer in Charge of exhibits. The drivers from a Māori perspective may be to release the body and scene quickly. If this is not possible relatives may wish to stay with the body, as it is culturally inappropriate to leave it alone. There may also be a strong desire to offer *karakia* and invoke spiritual protection for the scene.

These requirements need to be balanced against forensic requirements that may require such matters as an overnight examination using, say, luminol and against the simple fact that a detailed examination may take some time. It is often necessary to manage the physical tiredness of scene personnel (forensic or police). Hygiene requirements suggest that food should not be consumed near the scene and that hands be washed and overalls and overshoes left behind when leaving to eat. This is consistent with Māori cultural practices.

Once the scene is about to be released there is often a “clean-up” phase. This may be a key area where both the physical and spiritual aspects may be important. A recent example in New Zealand was the controversy caused by the fire service cleaning a homicide scene by washing blood down a storm-water drain. This action caused affront and dismay to the local Māori community who had not been given the opportunity to be involved in the process to ensure their cultural beliefs had been respected.

Postmortem

At the postmortem examination, again, the forensic scientist is present by invitation. This is often to examine wounds in firearms fatalities or to collect samples in more general casework. Many requirements parallel the scene. New Zealand is considering legislative change that will give legal status to the respect for cultural values. Many mortuaries in New Zealand are providing family rooms where the family can accompany (at a short distance) the body. There is a desire to release the body to the family as soon as it is practicable and to minimize the taking of body samples and any

interference with the body. We are aware of an innovative approach applied in at least one jurisdiction (Western Australia), where an urgent toxicological analysis on blood and/or urine samples drawn from the otherwise intact body may be undertaken to determine the need or otherwise for a full postmortem examination. Forensic scientists may consider what can be achieved by X-ray and microscopic examination without the taking of any or many body samples. Of interest is the inquiry by the New South Wales Health Ministry into the experimental stabbing of two bodies to study knife penetration for forensic purposes in Australia. One body had been donated for research purposes; the status of the other was unclear (9).

Sample Storage, Disposal, or Return

Renteln discusses the fact that Anglo-American law generally does not regard the body as the property of the relatives, but rather that it is no person's property. Living relatives have what is termed a "quasi-property" interest (18).

Organ retention for medical purposes has been contentious internationally. Carvel comments that as many as 100,000 organs may be stored in English hospitals and medical schools for research or unknown purposes (9). Some of these organs may have been taken without consent and even the knowledge of the families. In the event of organ donation for medical purposes there are often considerable consent procedures, with individuals having the opportunity to consent to the donation of organs whilst they are alive. This makes an interesting contrast with forensic practice where the deceased has not, in death, the ability to consent or decline, nor was there any formal process to obtain consent in life. The practical issues of obtaining formal consent in advance of death would be considerable and the chance of a given individual dying under suspicious circumstances is, hopefully, small. It may be possible to obtain consent from surviving relatives who may know or be able to judge what the deceased's wishes would be. However in many cases the state may consider that the benefit to advancing justice overrides any personal or family right to decline or restrict a post-mortem. But the contrast is interesting.

There may be concerns over moving a body from/through areas associated with other iwi, for example, to a mortuary for a specialized forensic postmortem. Iwi (Māori tribes) are strongly associated with particular geographic areas although with increasing urbanization and mobility in society the impact is reducing.

Forensic laboratories may hold bodily samples ranging from buccal scrapes that may contain a few hundred cells to recognizable body parts such as portions of liver. In New Zealand, these samples are held by the forensic laboratory on behalf of either the New Zealand Police or the Coroner. As in much of our work the forensic service does not have the authority or responsibility to return items *per se* to individuals. This would need sanction by the Police and Coroner. Our responsibility would lie principally in ensuring that our actions minimize as far as possible any potential cultural offense.

In normal toxicological analyses, tissue samples are processed in a way that enables effective extraction of any drugs and poisons that may be present. At the end of this process the body sample may be unrecognizable. In addition all biological samples have the potential to be bio hazardous. However, many cultural beliefs and certainly Māori belief seek the reunion of the body parts prior to burial. This is clearly an area with the greatest potential adverse interaction between forensic and Māori cultural perspectives. The practical difficulties in identifying whether the family wish the body part returned and then doing so in a way

that safeguards the health of the individuals and returns the body sample in an inoffensive state are considerable. This certainly suggests an advantage to taking only what is necessary. In the event of the return of samples it will be desirable to pay attention to the management of health risks and the presentation of the body sample in an inoffensive manner. For example it has been identified that "body parts should be returned in appropriate containers" (19). Against this must be weighed the potential that advances in science will allow, at some future time, some examination of retained samples that may identify a murderer or shed light on the cause of a suspicious death.

Samples that are not returned must either be retained indefinitely or destroyed. Both of these options raise cultural issues. Indefinite retention has the advantage that any future developments could be applied to the sample and may advance justice. However, the retention of bodily samples without the knowledge or consent of relatives has been known to raise very powerfully felt objections.

The destruction of samples as biohazardous waste by, for example, burning, also has considerable potential for interaction with cultural values as cremation is not a traditional burial process. Relatives may wish to be present or may care about the manner in which the ash is handled after cremation. If multiple samples are cremated together then multiple families and potentially multiple cultures may have an interest in the correct handling of the ash. There are some examples of specific processes being instituted to address this issue. At Auckland Hospital, biological samples for destruction are often stored together to be cremated with an appropriate ceremony. However, the general practice in New Zealand and indeed at ESR is to dispose of samples within biohazard waste bins. The company responsible for disposal of biohazard waste uses a process involving autoclaving (heating to 140°C and grinding down the waste) before disposal in a landfill, as burning is now thought to be deleterious to the environment.

The interaction of cultural values and forensic practice has some potential to create offense. These concerns can only be resolved by firstly, recognizing that the concerns exist, and secondly, including affected parties (i.e., Māori) in the development of the processes and procedures aimed at managing the issues arising from conflicting values. This project identified areas of concern and provides a foundation for action. We have taken the first steps towards addressing these issues by stressing the importance of understanding and respect for Māori cultural perspectives. This will serve as a template for the consideration of the perspectives of other cultures.

To create awareness of cultural issues in forensics, ESR has developed a cultural training package for its forensic staff. It is largely based on actual situations at crime scenes where forensic staff have noticed cultural tensions. It provides background information about the particular cultural beliefs or constructs that inform those positions. Initially the training was delivered by facilitators from ESR, NZ Police, and local iwi (tribes); however it will be continued by forensic staff as part of normal induction processes. In addition to the training package, ESR has also developed a small brochure designed to fit within scene kits that gives practical advice on how to identify and respond to cultural issues that may arise at a scene or a postmortem examination. This brochure may be requested from the corresponding author.

Other tangible outcomes of our process to date include a re-assessment of what is taken in the way of bodily samples and what is retained with an emphasis on taking less and retaining less. Forensic processes for sample storage and handling have been evaluated by an external cultural auditor and this audit highlighted the

return of samples as an issue to address. We are aiming to develop cultural appropriate protocols for the return of samples to requesting family (whanau), alongside relevant organizations and members of the Māori community.

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