

**TITLE:**

**THE NATURE AND SCOPE OF THE PROBLEM OF IDENTIFYING  
UNIDENTIFIED BODIES AT MEDICO-LEGAL MORTUARIES IN SOUTH  
AFRICA: A MEDICO-LEGAL PERSPECTIVE**

by

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Submitted as the dissertation component (which counts for 50% of the degree) in partial  
fulfillment of the requirements for the degree of

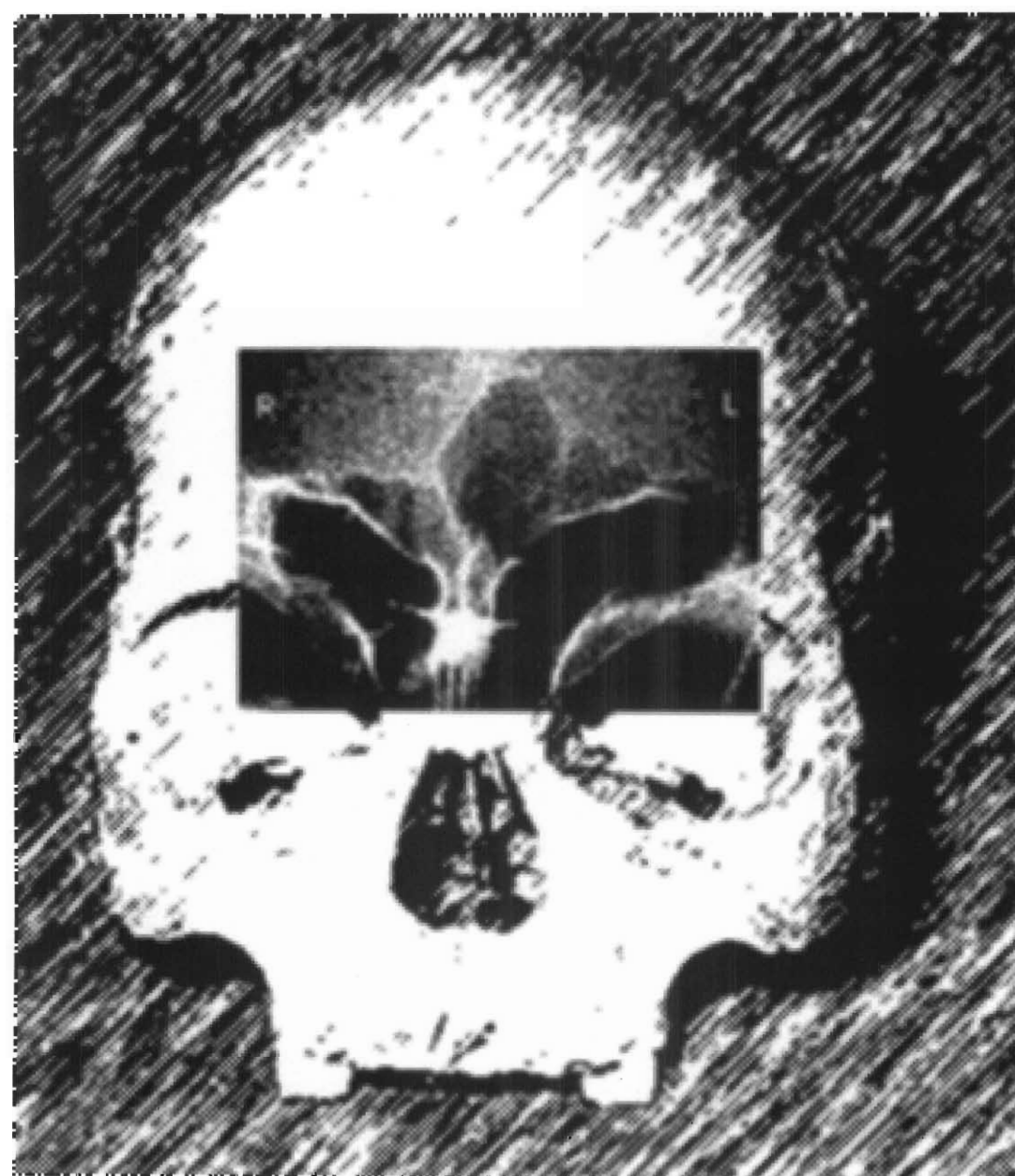
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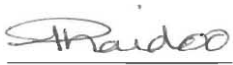
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**2007**



### **Declaration**

I certify that the whole dissertation, unless specifically indicated to the contrary in the text, is my own work. It is submitted as the dissertation component (which counts for 50% of the degree) in partial fulfillment of the requirements for the degree of Masters of Law in the Faculty of Law, University of Natal.



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## **Dedication**

*To:*

*the memory of my father,  
Ugapragasam Frank Mundhree:  
my gentle giant;*

*my mother,  
Kamala Mundhree:  
who taught me that knowledge was the key that opened the door to life;*

*my partner in life,  
Steve:  
thank you for being all that I am not;*

*my siblings,  
Manogarjie, Vinodh, Pooveshni:  
my pillars of love and support;*

*my children,  
Kineta & Thrivin:  
my anchors in life.*

## Acknowledgements

Like most non-white female radiographers in South Africa during the Apartheid era, I entered the field of Radiography because of the lack of opportunities to study in a scientific field. Although this field offered no opportunities, even denying most of us the chance to be the first to work with modern equipment, work in the field of cancer therapy, or study further, it was a safe place to be until an opportunity arose. And so, I will always be indebted to those who presented me with such opportunities.

To begin with, I thank the late Dr Vallabh Govind Mistry who employed me as a young inexperienced radiographer and took time daily to teach me many skills in Radiology, which developed my passion to study the bones of the human body. Since many in my profession are not exposed to such mentoring by their peers, I feel privileged. I will always treasure the fond memories I have of Dr Mistry and his loving family, and his gift of his personal copy of *Radiographic Atlas of Skeletal Development of the Hand and Wrist*.

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My interest in Forensic Radiography began when the late Professor Jurie Nel asked me for advice on achieving better quality X-rays at the local medico-legal laboratory in the early 1980's, and my association with, and understanding of Forensic Medicine grew equally as my husband Steve's understanding of Radiology and human identification. I thank everyone I have had the privilege of interacting with through the UKZN Forensic Medicine Department, both in South Africa and abroad.

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with, and still interact with, internationally. To the people of Kosovo who so graciously opened their homes and hearts during this humanitarian mission, I wish you the joy of an independent and free Kosovo so that you can heal from the wounds of ethnic cleansing.

And finally, I thank my dear family for their unwavering support during my studies. During the writing of this thesis it was difficult not to reflect on the memory of Steve's brother Sydney, an *Umkhonto we Sizwe* cadre during the Apartheid struggle, and whose mortal remains have yet to be found and identified. Like many others who have lost their loved ones during this struggle, I hope that this dissertation will motivate the relevant authorities to find their remains.

***Show me the manner in which a nation or a community cares for its dead  
and I will measure with mathematics exactness,  
the tender mercies of its people,  
their respect for the law of the land,  
and their loyalties to high ideals***

W E Gladstone  
Prime Minister of England (1892 -1894)

## **ABSTRACT**

In South Africa, the high rate of violent deaths, the lack of proper identification documents, and internal migration within the country stemming from the previous socio-political dispensation of society, has led to a high incidence of unidentified human bodies being found, a large proportion of which are skeletal remains, mainly of indigent Black persons. The low incidence of dental records, especially in disadvantaged, rural populations adds to the failure of identification. Without positive identification of individuals, an inquest or criminal case cannot succeed. In routine post mortem practice, only broad groupings of identity are recorded before disposal of remains. The basic rights of these deceased individuals to be properly identified with regards to police investigations and other legal, religious and cultural requirements are disregarded. Further, a large number of persons are reported missing on a daily basis in the country, some never to be found. This study suggests that national legislation be developed to allow for the administration of affairs in respect of missing persons and unidentified bodies, with regulations under this to provide for the mandatory preservation and storage of all medical and radiological records, a national policy and a national plan of action be established to deal with the burden of missing persons and found bodies, and the establishment of a central database of records of unidentified bodies and missing persons. The study also reviews the strengths and weaknesses of available human identification techniques that can be used to facilitate the identification of bodies, and by use of a case report, proposes to demonstrate to the South African Courts that frontal sinus radiographic identification comprises a useful, rapid and inexpensive method as an application in forensic science that can be compared to the individuality of fingerprints, and serves as a reliable additional method in establishing human identity.



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## **CHAPTER 1    GENERAL INTRODUCTION**

### **1.1        Statement of the topic**

The discourse that follows is the outcome of research and investigation into the dilemma of the great numbers of unidentified and unclaimed bodies dealt with, and considered against the large numbers of persons reported missing and yet not found in South Africa today. The study questions the ability to forge a coherent reconciliation between these two and the validity of the current methods of human identification procedures.

The writer presents a credible technique of establishing identity, to be implemented as part of the identification protocol as the problem of identification cannot be disregarded purely on the basis of a lack of resources. A case study is presented to validate the authenticity of the identification technique, and to establish its credibility. The study considers the extent and depth of the difficulties, prevailing circumstances, practices and legislation in South Africa, as well as international legislation and practices, and concludes with recommendations to address the dilemma.

### **1.2        Background to the topic**

In South Africa, municipalities are overwhelmed with the increasing numbers of unclaimed bodies<sup>1</sup>. Aside from having to bear the costs for the disposal of indigent<sup>2</sup> bodies found within their jurisdictions<sup>3</sup>, burial ground is in short supply in almost all urban areas<sup>4</sup>. A large proportion of the deceased are indigent Black persons<sup>5</sup>. Some municipal authorities are cremating<sup>6</sup> indigent bodies in order to contain costs<sup>7</sup>. At the same time, 50 per cent of

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<sup>1</sup> Councillor O. Mlaba, Mayor of Durban: Opening Speech presented at the National Cemeteries and Crematoria Conference, Durban International Convention Centre (15 July 2004).

<sup>2</sup> City of Johannesburg Metropolitan Municipality Cemeteries and Crematoria By-laws GN 824 of GG 179 (21 May 2004) defines an indigent or pauper as 'a destitute person who has died in indigent circumstances, or if no relative or other person can be found to bear the costs of a burial or cremation of the deceased person'.

<sup>3</sup> Constitution of RSA 108 of 1996. s156(1)(a) read with part B of Schedule 5 provides that cemeteries, funeral parlours and crematoria are a function of local government.

<sup>4</sup> Supra (note 1 above); Zama Feni Municipal Reporter 'Buffalo City Asked to Bury Mdantsane Paupers' *Dispatch Online* (23 August 2001) Available at <http://www.dispatch.co.za/> [Accessed 2 January 2007].

<sup>5</sup> Ibid.

<sup>6</sup> Supra (note 2 above) s1 of GN 824 of GG 179 (21 May 2004) defines 'cremation' as 'a process of disposing a human body by fire'.

persons reported missing in this country, are not found<sup>8</sup>. It is not known whether any unidentified persons, and how many of them, buried as paupers, may be amongst those reported missing. This cannot be verified, as statistics, or any other information regarding missing persons and unclaimed bodies, are not formally collected.

In researching the situation of missing persons and unclaimed bodies in South Africa, the Truth and Reconciliation Commission's (TRC)<sup>9</sup> investigations into human rights violations reveals the challenges that South Africa presently faces regarding missing persons and pauper burials. The Commission found that during Apartheid, 'the South African security forces played an active role in systematically abducting, killing, and secretly disposing the bodies of a number of Black people'<sup>10</sup>. During this period, police purposely omitted to investigate reports of missing persons<sup>11</sup>, and buried their deceased victims as paupers, even though the perpetrators knew the deceased's family<sup>12</sup>. The Commission equated the harsh activities of the Apartheid government, which resulted in many Black people being unaccounted for, to 'enforced disappearances'<sup>13</sup>. According to the United Nations Special Rapporteur, 'the act of forced disappearances inflicts severe suffering onto victims and

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<sup>7</sup> P Dass 'The Disposal of Indigent and Unidentified Paupers' Paper presented at the National Cemeteries and Crematoria Conference, Durban International Convention Centre (15-16 July 2004). Cape Town, Tshwane and Nelson Mandela Municipalities are cremating deceased indigent persons.

<sup>8</sup> S Timm 'Lost in the Missing Person's Bureau' (6 April 2002) *The Cape Argus*, Cape Town.

<sup>9</sup> In 1996, Truth and Reconciliation Commission was established in terms of the Promotion of National Unity and Reconciliation Act 34 of 1995 to investigate and report on cases of disappearances, abductions and torture between 1960-1994. The investigations were based on reports from families of victims and perpetrators applying for amnesty protection. Available at <http://www.doj.gov.za/trc/> [Accessed on 12 January 2005].

<sup>10</sup> Truth and Reconciliation Commission Report of Human Rights Violations Committee *Abductions, Disappearances and Missing Persons* (2003) 516. The Apartheid government funded these sections to covertly dispose of persons that opposed their policies.

<sup>11</sup> Ibid 515. The Commission noted that the police refrained from investigating missing persons' cases to conceal the fact that they themselves were the abductors.

<sup>12</sup> Truth and Reconciliation Report *The Former South African Government and its Security Forces. Part 1: Overview of Amnesty Applications from members of the security forces 1960 – 1994* (1998) 198.

<sup>13</sup> Supra (note 10 above) 514. Article 1 of the United Nation's United Declaration on the Protection of All Persons from Enforced Disappearance (12 January 1998) E/CN.4/1998/43, defines 'enforced disappearance' as 'A person arrested, detained, abducted or otherwise deprived of his or her liberty by officials of different branches or levels of government, or by organised groups of private individuals acting on their behalf, or with the support, direct or indirect, consent or acquiescence of the government, followed by a refusal to disclose the fact or whereabouts of the person concerned, or a refusal to acknowledge the deprivation of his or her liberty, thereby placing such persons outside the protection of the law'.

their families’<sup>14</sup>. Many people were also reported missing between 1980 and 1994, when Black families were displaced because they had to flee their homes during the political unrest<sup>15</sup>. It is presumed that those that were killed during this time may not have been identified at death, which may be the reason why they remain missing<sup>16</sup>. Here again, the police were often found to be the instigators of such violence<sup>17</sup>. Family members approached the Commission with the hope that they could at least find the body of their missing loved ones<sup>18</sup> so that they can bury them according to their religious beliefs<sup>19</sup>, and thereby gain some relief from the emotional anguish that they endure of not knowing the fate of their loved ones<sup>20</sup>. Many of the missing were breadwinners, which resulted in their families being without an income when they disappeared<sup>21</sup>. In describing the families of missing persons, the TRC noted the following:

Families remain trapped in the past, unable to move on. Unlike a death, which however painful leads eventually to some kind of acceptance, families of the disappeared remain constantly caught between certainty that the missing person is dead, and the hope that he or she will return.<sup>22</sup>

During their investigations, the Commission found that ‘post-mortem records, municipal burial orders, and inquest documentation were deficient’<sup>23</sup>. The bodies that were exhumed by the TRC were previously buried as paupers without a proper forensic examination being conducted on them<sup>24</sup>. It was also found that those responsible for the management and

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<sup>14</sup> United Nations Special Rapporteur *Torture and Other Cruel, Inhuman and Degrading Treatment or Punishment* (3 July 2001) A/56/156. ‘Enforced’ and ‘forced’ disappearances have the same definition.

<sup>15</sup> Supra (note 10 above) 527.

<sup>16</sup> Supra (note 10 above). The TRC could not investigate the whereabouts of these missing persons, who were not victims of human rights violations, and therefore did not fall within their mandate.

<sup>17</sup> Supra (note 12 above) 193. One such instance was the ‘KwaMakhutha Massacre on 21 January 1987, where it is reported that mostly women and children were killed by an Inkatha Freedom Party hit squad that was armed and trained by the South African Defence Force’

<sup>18</sup> Truth and Reconciliation Commission Report of Human Rights Violations Committee *Exhumations* (2003) 554.

<sup>19</sup> Ibid 568.

<sup>20</sup> Supra (note 18 above).

<sup>21</sup> Supra (note 10 above) 513.

<sup>22</sup> Supra (note 10 above) 515.

<sup>23</sup> Supra (note 18 above) 561. The lack of proper records hindered TRC investigations.

<sup>24</sup> Supra (note 18 above) 553.



burial of unidentified paupers, namely forensic mortuary personnel and funeral undertakers, had erred<sup>25</sup>. The Commission noted that ‘this was doubtless the consequence of a racist system in which Black life was regarded as being of little importance’<sup>26</sup>. In the case of Ntombikayise Priscilla Khubeka whose original post-mortem examination report had the cause of her death recorded as inconclusive, the exhumation and re-examination of her remains showed that she was executed<sup>27</sup>.

Families that received the exhumed remains of their loved ones described the process as ‘healing’ as they were able to ‘put to rest a painful period that haunted them’<sup>28</sup>. Hilda Madiba described the exhumation and reburial of her son as a ‘gift’ after enduring 22 years of sleepless nights not receiving any news about her son<sup>29</sup>. The Commission also heard that according to African customary rites, ‘the deceased must return home to be initiated as an ancestor’<sup>30</sup>.

In its final report, the Commission made the following profound recommendations concerning missing persons and pauper burials<sup>31</sup>:

- ‘Police must urgently investigate reports of missing persons, as the first few days of a disappearance are critical in terms of solving these cases’<sup>32</sup>. Also, ‘investigations regarding missing persons require the combination of a focused and dedicated investigation unit that has capacity, good research skills to investigate human rights violations, and specialised forensic skills’<sup>33</sup>.

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<sup>25</sup> Supra (note 10 above) 536; The Truth and Reconciliation Commission Report *The Health Sector* (1998) par 53. The Commission noted that some forensic pathologists and district surgeons, who had a corrupt relationship with the police, compiled false post-mortem reports to release the State of human rights violations.

<sup>26</sup> Supra (note 10 above) 537.

<sup>27</sup> Supra (note 18 above) 553.

<sup>28</sup> Supra (note 18 above) 568.

<sup>29</sup> Daily News Reporter ‘Never too late to offer peace’ *Daily News* (20 October 2006) 10. Hilda Madiba’s son was killed by police in 1984 and buried as an unidentified pauper.

<sup>30</sup> Supra (note 18 above) 568.

<sup>31</sup> Supra (note 10 above) 533.

<sup>32</sup> Supra (note 10 above) 515.

<sup>33</sup> Supra (note 10 above) 530.

- ‘Current legislation, policies and practices relating to the management of unidentified deceased persons must be reviewed by a law commission. This includes examining the manner in which records pertaining to unidentified remains are retained.’<sup>34</sup>
- ‘Municipalities must maintain proper documentation for unclaimed bodies so that these can be available to families who are looking for their missing relative, and, funeral companies that are contracted to dispose of unclaimed bodies must be monitored.’<sup>35</sup>
- ‘Those who are responsible for the management of unidentified human remains must afford these the proper care and attention it deserves. A protocol for human identification procedures based on scientifically accepted reliable methods and technology, and includes a programme for the collection of ante-mortem information, must be established. The identification process must not be obstructed by any other processes.’<sup>36</sup>

Another significant finding made by the Commission was that ‘poverty and deprivation’ suffered by the majority of South Africans was the direct consequence of ‘Apartheid’s segregation policies, migrant labour, forced removals and Bantu education’<sup>37</sup>. To underscore the impact of Apartheid on the lives of Black people, the Commission noted that:

[O]ne did not need to be a political activist to become a victim of apartheid; it was sufficient to be Black, alive and seeking the basic necessities of life that Whites took for granted and enjoyed by right.<sup>38</sup>

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<sup>34</sup> Supra (note 10 above) 537.

<sup>35</sup> Supra (note 10 above).

<sup>36</sup> Supra (note 10 above) 536.

<sup>37</sup> Truth and Reconciliation Commission Report *Historical Context* (1998) 45. The Bantu Education Act of 1953 ensured a ‘separate and inferior’ education for Blacks.

<sup>38</sup> Ibid 46.

The TRC's findings in its reports were a turning point in that it identified a major shortcoming in the way the state dealt with the issues of unclaimed bodies and missing persons up to that time.

### **1.3 Objectives of the study**

The impetus for this dissertation arose from the findings and recommendations arising from the TRC in relation to missing persons and pauper burials.

This study was undertaken to look at the questions of both the large numbers of missing persons reported and not found, and the corresponding issue of the high numbers of unclaimed bodies buried as paupers, and attempt to ascertain whether efforts were made to reconcile these, and additionally, to look at whether the Commission's recommendations were taken cognisance of in this area. The TRC's reports convey an important insight into the involvement of members of the South African security forces in abductions and pauper burials, which may have some influence in the manner in which the police currently manage missing persons and unclaimed deceased bodies. Although current practices may not be driven by the motives of 'enforced disappearances' of Apartheid, it would appear that practices may not have changed. An urgent intervention is required to improve the situation.

Current practices in the management of missing persons and unclaimed bodies by the relevant authorities will be examined<sup>39</sup>. The question raised is whether the TRC's recommendations are implemented<sup>40</sup>. In addition, it is questionable whether personal identification procedures and police investigations can be disregarded before the cremation of unclaimed bodies to release municipalities from additional costs<sup>41</sup>. Central to this discussion is whether it is reasonable to expect economically deprived indigent persons to undertake their own investigations regarding the whereabouts of a missing family member.

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<sup>39</sup> Chapter 2 below.

<sup>40</sup> Supra (notes 32 & 35 above).

<sup>41</sup> Note 117 below.

Further, cremation of unclaimed bodies will obstruct families' investigations into finding the remains of deceased loved ones, as their remains will be destroyed.

Current legislation relating to missing persons and unclaimed bodies will be reviewed<sup>42</sup>. This dissertation also challenges legislation that is shaped to disregard the principle of seeking consent from the deceased's next-of-kin before the anatomical donation of the body of an unclaimed 'destitute',<sup>43</sup>.

A review of international legislation and practical guidelines is undertaken to show that these are developing to emphasise the rights of families of unidentified deceased persons and missing persons<sup>44</sup>. The United Nation's guidelines for the protection of internally displaced communities are also reviewed to show the similarity between internally displaced persons and historically disadvantaged South Africans who succumb to poverty<sup>45</sup>. Foreign human identification programmes are reviewed to establish their strengths and limitations.

If positive identification must be the pre-requisite to anatomical donations or disposal of human remains by cremation, then a simple, cost-effective human identification technique must be implemented to accompany the identification protocol. The management of the forensic medical mortuaries was recently taken over by the Department of Health, and protocols relating to human identification procedures are still forthcoming<sup>46</sup>. In compliance of the TRC's recommendation on human identification<sup>47</sup>, the writer will present a scientifically credible, cost-effective human identification technique that will complement the forensic autopsy, thereby leaving the costly techniques for cases where positive identification cannot be achieved by any other mode.

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<sup>42</sup> Chapter 3 below.

<sup>43</sup> Chapter 3.2.5 below.

<sup>44</sup> Chapter 4 below.

<sup>45</sup> Chapter 4.3.1.2 below.

<sup>46</sup> Communication with Dr T Naidoo, Forensic Pathologist, Forensic Pathology Services, Durban Metropolitan Region (30 January 2006).

<sup>47</sup> Supra (note 36 above).

This dissertation will additionally show with the presentation of a case study that the comparison of the frontal sinuses of the skull, obtained from X-rays, is a credible method of establishing personal identification of unknown persons for whom skull X-rays exist<sup>48</sup>. Further, it will achieve the requisite high evidential standards demanded by the Courts, and by science, where the identification can be verified by direct observation of reference points at any time<sup>49</sup>.

Since frontal sinus identification is dependent on the availability of ante-mortem X-rays, the writer will review new legislation that has an impact on the ownership of medical records<sup>50</sup>. Presently, public medical institutions destroy patient's X-rays after retaining these for a period of five years, whilst private institutions hand these to their patients<sup>51</sup>. Apart from the fact that X-rays form a significant part of a patient's medical history, they are also a primary source of ante-mortem records in terms of comparing identifying features<sup>52</sup>. This study will also propose that the disposal of X-rays be regulated.

#### **1.4 Methodology**

This dissertation is based upon a comprehensive review of the literature on both legal and scientific aspects associated with human identification. This was achieved by referring to cases, legislation, international instruments, books and journal articles. Internet sources and newspaper articles were referred to so as to gain insight into general public opinion and media statements relating to missing persons and unclaimed bodies. The TRC reports were also studied.

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<sup>48</sup> Chapter 6 below.

<sup>49</sup> DT Zeffert et al *The South African Law of Evidence* (2003) 305. The Courts are persuaded as to the integrity of human identification methods when evidence of identity is derived from matching physical characteristics. See note 750 below for a discussion on the JF Kennedy conspiracy case.

<sup>50</sup> Chapter 3.4.5 below.

<sup>51</sup> Personal communication with Ms P Nzama, Assistant Manager of the Department of Radiology, King Edward VIII Hospital, Durban (20 November 2006) The Health Professions Council Of South Africa *Guidelines on Keeping of Patient Records* Booklet 11 (July 2002) 3. The *Guidelines* state that patient's records shall be stored for a period of not less than six years (par 6.2), however, a medical practitioner shall provide a patient direct access to his/her records (par 8). The Guidelines do not provide for patients who may require their X-rays that were taken more than six years ago.

<sup>52</sup> National Centre for Forensic Mass Fatality Guide *Final Draft Document* [REV/01/02/jb] United States of America (2002) 55.

In 2002, fieldwork included work undertaken by the writer for the United Nations Interim Administration in Kosovo as part of a team of forensic experts involved with human identification of exhumed corpses of those who had perished in the war in the former Yugoslavia. Practical experience was gained from working with the United Nation's human identification protocols including administration of missing persons' files.

In KwaZulu Natal, medical facilities were visited to investigate the availability of radiology services, and the period of retention of X-rays.

Forensic mortuaries in KwaZulu Natal and Johannesburg were visited to examine their radiology facilities. Current identification protocols were examined to determine the success rate for positive identification and any alternate methods used for individuals who may not have fingerprints such as charred, decomposed, or skeletonised human remains.

The Home Affairs Departments in Durban and Tongaat in KwaZulu Natal were visited to ascertain the procedures followed in cases involving missing and unidentified deceased persons.

A case study was also undertaken by the writer to verify the validity of the science of frontal sinus comparison. The technique described in this literature was studied and performed on the skull to verify the technique and simplicity of the procedure, and the resources required.

## **1.5 Presentation of dissertation**

Chapter two briefly looks at the current predicament of missing persons and unclaimed bodies in South Africa. A discussion on the characteristics of an indigent person is undertaken to facilitate an understanding of the reasons why family may not claim a deceased relative.

Chapter three considers national legislation that relate to unidentified deceased persons, missing persons, and their families. The issues dealt with in this section are whether the

families of unidentified deceased persons and missing persons are afforded any protection under South Africa's newly found democratic dispensation. Of concern is that destitute people are not afforded the privilege of being positively identified before their bodies are disposed at death. Special focus is given to this community that is at risk of being unaccounted for when they die. Since human identification is reliant on the existence of ante-mortem medical records, especially X-rays, the current legal position regarding destruction of medical records is also examined.

Chapter four discusses international legislation and guidelines that relate to missing persons, their families, and unclaimed bodies. Accordingly, the objectives of the Constitution<sup>53</sup> are met.

Chapter five is a comprehensive literature review on the significance and application of frontal sinus identification to show that the technique is consistent and credible, and should be implemented as a standard addition to the tools for identification of human remains. This section underscores the principle that the shape and pattern of frontal sinuses are unique for each person, with no two persons' frontal sinuses being the same.

Chapter six presents the technique of frontal sinus identification. An actual case referred by a forensic pathologist to the writer is presented.

Chapter seven concludes with recommendations for the adoption and creation of legislation and guidelines for the protection of missing persons and their families, the promotion of respect for the family of unidentified persons, and respect for the bodies of unidentified persons. A final statement is made for historically disadvantaged persons to be protected under specific legislation that would compel the State to provide for their basic needs. A proposal is made for the role of forensic medical examiners to be defined in accordance with the United Nations Guidelines so that these professionals maintain their impartial status in investigating human rights abuses that may not only be limited to examinations of

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<sup>53</sup> Act 108 of 1996. s39(1)(b) provides that 'international law must be considered when interpreting the Bill of Rights'.

a criminal nature. A recommendation is also made for the support of the forensic community in adding the technique of frontal sinus identification into their autopsy protocol. Accordingly, a caveat is presented that medical X-rays cannot be destroyed. A final statement is made regarding respect for the deceased, especially from the sector of health professionals and researchers.



## CHAPTER 2 CRITICAL ANALYSIS OF PREVAILING CIRCUMSTANCES AND PRACTICES IN SOUTH AFRICA

### 2.1 Introduction

This chapter describes the current processes followed when a person is reported missing, or, when relatives do not claim a deceased person. In doing so, it emphasises the plight of family members, and the dilemma experienced by municipalities regarding the high number of pauper burials<sup>54</sup>. This section also explores the final outcome of the unidentified deceased person.

This section also looks at the general profile of the many unclaimed bodies that have become a problem to municipalities<sup>55</sup>. A person living in poverty is referred to as indigent<sup>56</sup>. In South Africa, the majority of indigent persons are Blacks who remain poor because of the discrimination they experienced during Apartheid<sup>57</sup>. Almost all unclaimed bodies are from this group of people<sup>58</sup>. It is therefore important to consider the role of Apartheid in internal labour migration, which contributed to poverty and destitution among Black South Africans, and which may be the reason why bodies are not claimed by relatives<sup>59</sup>.

### 2.2 Missing persons

In 1994, the South African Police Service (SAPS) established six National Bureaus for Missing Persons<sup>60</sup>. According to the SAPS manager of the bureaus, this community-orientated service provides a toll-free telephone number for families to report the disappearance of a relative<sup>61</sup>. The project aims to 'address the emotional distress that missing person's families experience, ensure that the community does not take any

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<sup>54</sup> South African Cities Network *Spatial Planning, Land Development and Land Use Management in a Context of HIV and AIDS* (2005) 32.

<sup>55</sup> Supra (note 1 above).

<sup>56</sup> J Crowther *Oxford Advanced Learner's Dictionary* (1995) 606.

<sup>57</sup> Supra (note 1 above).

<sup>58</sup> Supra (note 1 above).

<sup>59</sup> South African Cities Network (note 54 above) 33-35.

<sup>60</sup> SABC News Online 'Search for Missing Children Goes Online' (26 June 2001) Johannesburg Available at <http://www.sabcnews.com/> [Accessed 4 May 2003].

<sup>61</sup> Ibid. A statement made by the manager, Captain F van Deventer.

investigation of a missing person into their own hands, and to render a support service to the investigating official by setting up a database that would be accessible to every police officer in the country<sup>62</sup>. Families must report a relative missing at the nearest police station<sup>63</sup>. All details regarding the missing person will be transmitted to a central database that contains information about the identification features of the missing person such as hair and eye colour, the presence of scars and tattoos, and a recent photograph. In addition, the database includes information of people who have been found, including information regarding unidentified bodies<sup>64</sup>. The database is claimed to have 'state of the art computer equipment that enables storage of photographs' that are broadcast on national television within a short space of time<sup>65</sup>.

After five years, the Bureau reported a success rate of 82 per cent in finding missing persons, all of who were under the age of 18 years<sup>66</sup>. The success rate was claimed to be due to the advanced technology and the fact that South Africa is a small country managed by a single law enforcement agency, with a single public broadcaster<sup>67</sup>. Modern information technology allowed for rapid distribution of information<sup>68</sup>. Unsuccessful cases were claimed to be due to a lack of cooperation from the public and business sector, and future projects of the Bureau would be to raise public awareness by investing in advertising campaigns, and to expand partnerships with the business sector.<sup>69</sup>

In 2002, despite claims of national success, the Bureau was criticized for being inefficient, with three Missing Persons' Bureaus closing down<sup>70</sup>. In addition, the proclaimed success rate was attributed to children who had run away from home, or who were lost at shopping malls or beaches. The person managing the Cape Town Bureau stated that the reason for

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<sup>62</sup> Safety, Security and Defence *South African Yearbook 2001/2002* (2002) 450 Available at <http://www.gcis.gov.za/docs/publications/yearbook02/chap18.pdf> [Accessed 4 May 2003].

<sup>63</sup> Supra (note 60 above).

<sup>64</sup> Supra (note 62 above).

<sup>65</sup> Press release 'Dell takes up Missing Person's Challenge' (8 May 2001) Johannesburg Available at <http://www.dell.co.za/> [Accessed 4 May 2003].

<sup>66</sup> Supra (note 62 above).

<sup>67</sup> Supra (note 62 above).

<sup>68</sup> Supra (note 62 above).

<sup>69</sup> Supra (note 60 above).

<sup>70</sup> Timm (note 8 above).

closure of certain branches was due to the fact that too few cases were reported<sup>71</sup>. Another problem was that television coverage of missing persons was being affected by the fact that only four cases could be aired per show, resulting in a lengthy waiting list and delay before broadcast<sup>72</sup>. Also, the SAPS exploited the broadcasting opportunity to highlight their most wanted persons' list, which was given priority over missing persons. A woman claimed that police had lost the only photograph of her 43 year old mother, whom she had reported missing<sup>73</sup>. She also found that the missing person's document in possession of the police had noted the wrong age, eye colour and surname. In another case in 2001, a family was told by the police that they had to wait 24 hours before reporting their 67 year old brother missing<sup>74</sup>. According to the head of the Bureau, the procedure of a waiting period was done away with in 1994<sup>75</sup>. He also admitted that there were often errors in the 12-page missing person's document, and that police occasionally failed to forward forms to the Bureau. However, he stated that relatives of missing persons 'should not expect the police to do all the work, and should be involved in sending out flyers, and make their own enquiries about their relative's whereabouts in their community'<sup>76</sup>.

In 2004, the Missing Persons Bureau changed its name to 'The South African Centre for Missing and Exploited Children' (SACMEC) with a new call centre in Johannesburg that receives and directs calls to the appropriate police station<sup>77</sup>. However, the centre is managed by a single person and requires more funds to increase its capacity<sup>78</sup>.

The SAPS only began collecting statistics on missing persons in 1994, which reflect that between 1994 and December 1998, only 6464 people of the 98 995 people reported missing

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<sup>71</sup> Timm (note 8 above). Media statement by B Rheeder: Manager of Cape Town Bureau of Missing Persons.

<sup>72</sup> Timm (note 8 above).

<sup>73</sup> Timm (note 8 above).

<sup>74</sup> Timm (note 8 above).

<sup>75</sup> Timm (note 8 above).

<sup>76</sup> Timm (note 8 above).

<sup>77</sup> Press release 'Early Successes for SACMEC Call Centre' (6 April 2004) Johannesburg. Available at <http://www.missingkids.co.za>. [Accessed 7 July 2004].

<sup>78</sup> Ibid. Statement by Captain F van Deventer: President of SACMEC.

were found, which illustrates the magnitude of the problem<sup>79</sup>. These statistics not only indicate that cases of missing persons are reported to the police, but also that over 90 000 families may not know the fate of their next-of-kin missing in this period.

The manner in which the SAPS manage missing persons indicates that the missing person does not attract immediate police attention and investigation as any other case does. It is reasonable to believe that a family will report a relative missing when they are concerned about the safety of the missing person, and will therefore expect that the police would urgently proceed with investigations. It has been shown on many occasions, that police involvement and media attention result in at least the body of the missing person being found<sup>80</sup>. It ought to be the duty of the police to investigate the whereabouts of missing persons with equal consideration and attention as they would afford any other criminal case, especially considering that a missing person's life may be threatened.

### **2.3 Unidentified deceased persons**

When an unidentified body is found, it is taken to a forensic mortuary<sup>81</sup>. In 2003, statistics at the Gale Street Mortuary showed that the mortuary received an average of 30 to 50 destitute bodies from the central Durban area every month<sup>82</sup>. In terms of the greater Metropolitan Durban area, an average of 100 destitute bodies per month was received<sup>83</sup>.

At the same mortuary, an investigation by the 'Scorpions'<sup>84</sup> found that a syndicate of five members, which included a mortuary worker and Home Affairs officials, sold the bodies of unidentified deceased persons<sup>85</sup>. These bodies were used to facilitate false life insurance

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<sup>79</sup> Dispatch Online 'Toll-free Tips Lead to 1200 Arrests' (5 February 1999) Available at <http://www.dispatch.co.za/1999/02/05/> [Accessed 23 January 2007].

<sup>80</sup> G Gillford 'Matthews Killing: Man Questioned' (18 July 2006) *The Daily News* 4. This case is an example of how the SAPS were involved in investigating the case of a missing university student whose body was later found. This case gained countrywide police and media attention.

<sup>81</sup> A procedure followed by a provision in s48(1)(d)(i) of the now repealed Health Act 63 of 1977.

<sup>82</sup> Personal communication with Inspector R Naicker, Gale Street Mortuary, Durban. (12 December 2003).

<sup>83</sup> Ibid.

<sup>84</sup> Directorate of Special Operations in South Africa (DSO). The DSO was established by the Minister of Justice and Constitutional Development in 1999 to eradicate organised crime in South Africa. Available at <http://www.npa.gov.za/> [Accessed 17 January 2003].

<sup>85</sup> G Hosken & M Ndadana 'Cops Crack Macabre Morgue Scam' (17 January 2003) *The Daily News* 2.

policy claims, by using the identities of living persons. Identity and death certificate documents were fabricated and forwarded to insurance companies for payment of life policies<sup>86</sup>. The unidentified bodies were later destroyed by cremation.<sup>87</sup>

A retrospective study undertaken by Lerer and Kugel<sup>88</sup> in Cape Town adds significant insight to the general profile of unclaimed bodies that were received at a medico-legal mortuary between 1980 and 1995. It was found that unclaimed bodies were victims of violence and accidents because they were exposed to these situations when commuting from their informal homes<sup>89</sup>. Many adults died in their homes that caught alight<sup>90</sup>, whilst children died from infections<sup>91</sup>. A significant finding of this study was that the identities of persons that died in violence associated with ‘taxi wars’ were quickly established because these cases received police and media attention, whilst those persons that died in accidents were not identified because of the lack of police investigation<sup>92</sup>. Those deaths that were caused by natural diseases did not receive any police investigation because ‘official identification forms were not filled’ by medical examiners, and were subsequently buried as ‘paupers’ even though police knew the identities of many of these victims<sup>93</sup>. Positive identification was only established in these cases when relatives came to the mortuary in search of their missing relative<sup>94</sup>. When family visited the mortuaries, they were not shown any photographs, but were taken to the mortuary cold-rooms to view unidentified bodies<sup>95</sup>. It also noted that the ‘recently established national police missing-person centre’ did not establish any links with requests from missing persons’ families and unclaimed bodies<sup>96</sup>. Another finding regarding deaths from natural causes was that relatives were unable to afford costs involved in transporting a body, and bodies were therefore ‘written off’ as

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<sup>86</sup> Ibid.

<sup>87</sup> Ibid. Media statement by Police Superintendent V Naidu, Durban.

<sup>88</sup> LB Lerer & C Kugel ‘Delays in the Identification of Non-natural Mortality’, (1998) 19(4) *American J of Forensic Medicine & Pathology* 347.

<sup>89</sup> Ibid 349. These commonly included ‘crossing railway lines or highways’ to get to the ‘poorer suburbs’.

<sup>90</sup> Lerer & Kugel (note 88 above) 349. It was found that many informal homes were made from flammable material and occupants rarely survived in these fires.

<sup>91</sup> Lerer & Kugel (note 88 above) 350. The infections were either of the lung or gastrointestinal tract.

<sup>92</sup> Lerer & Kugel (note 88 above) 349.

<sup>93</sup> Lerer & Kugel (note 88 above) 350.

<sup>94</sup> Lerer & Kugel (note 88 above) 350.

<sup>95</sup> Lerer & Kugel (note 88 above) 350.

<sup>96</sup> Lerer & Kugel (note 88 above) 350.

unidentified and buried as paupers<sup>97</sup>. The authors conclude that the plight of unclaimed bodies is a consequence of Apartheid and reflects the social impact of poverty and hardship that these people experience<sup>98</sup>. The authors also advocate that forensic specialists apply their skills to reduce the numbers of unidentified deceased persons<sup>99</sup>.

It appears that very little effort is made by the police to find relatives of unclaimed bodies, especially if the deaths were due to natural causes. Also, identity does not seem to be investigated by forensic personnel in cases of natural deaths. A procedure where missing persons' profiles are matched with unclaimed bodies does not seem to exist. General procedures used in forensic medical practice for determining identification are discussed below.

### **2.3.1 Forensic medicine and human identification**

Personal identification of human remains requires the matching of selected characteristics ascertained from the remains, with information about physical characteristics of a known person that is missing at that particular time<sup>100</sup>.

In routine post-mortem practice, only broad groupings of identity are recorded before disposal of the remains<sup>101</sup>. This includes basic external physical observations of race, age, stature, and gender<sup>102</sup>. Documents and other articles found on the body, including fingerprints and body scars, often lead to positive identification of the deceased individual, and collecting this evidence is generally the responsibility of the police<sup>103</sup>. Positive identification is therefore often concluded by police officers<sup>104</sup>. Specific and individual identity by additional means is therefore not routinely pursued since the majority of the

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<sup>97</sup> Lerer & Kugel (note 88 above) 350.

<sup>98</sup> Lerer & Kugel (note 88 above) 351.

<sup>99</sup> Lerer & Kugel (note 88 above) 351.

<sup>100</sup> CP Warren 'Personal Identification of Human Remains: An Overview' (1978) 23(2) *J of Forensic Science* 388.

<sup>101</sup> B Knight *Forensic Pathology* 2 ed (1996) 95.

<sup>102</sup> Ibid.

<sup>103</sup> Knight (note 101 above). Knight notes that personal possessions may include hospital cards, medication containers, photographs of relatives, jewellery, or any article that can be associated with a person. Knight describes this manner of establishment of personal identification as 'having no medical content'.

<sup>104</sup> TG Schwär et al *The Forensic ABC in Medical Practice-A Practical Guide* (1988) 462.

deceased are identified in this manner<sup>105</sup>. In the situation where external physical features of the human remains are unrecognizable due to mutilation or decomposition of the body, expert medical knowledge of a trained and experienced forensic pathologist is required in order to ascertain race, stature, and gender through careful examination of the human skeleton<sup>106</sup>. The low prevalence of dental records among disadvantaged rural populations excludes dental identification as a routine sustainable method of individual identification<sup>107</sup>.

Specific unique characteristics of individual identity, such as de-oxyribose nucleic acid (DNA) samples are sometimes retained but not processed until a family member makes a claim to a deceased body<sup>108</sup>. However, this seldom happens and when it does, the specimen is often either lost or contaminated in storage<sup>109</sup>. The reason for storing specimens at the mortuary is due to the fact that forensic DNA sampling is done largely in a single national police laboratory that is overwhelmed with samples for criminal cases that take precedence over cases for human identification<sup>110</sup>. Although the laboratory is currently upgrading its equipment, South Africa also lacks skilled scientists who can process forensic DNA specimens<sup>111</sup>. The average waiting period for a result in a criminal case is over 18 months and often a sample cannot be processed because they were either poorly stored or a chain of custody was not maintained<sup>112</sup>. It seems clear that the problems of the over-burdened DNA forensic laboratory will not be solved in the near future, and other means of identification to address the great number of missing persons and unclaimed bodies must be considered.

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<sup>105</sup> Ibid 462.

<sup>106</sup> Knight (note 101above) 95-102.

<sup>107</sup> H de Villiers Slabbert & M Altino 'Person Identification by Means of the Teeth' (1990) *SALJ* 500, where the authors draw attention to the fact that 'people belonging to the low socio-economic group usually have their teeth extracted because aesthetic dental treatment is unaffordable to them'.

<sup>108</sup> Communication with Dr T Naidoo, Forensic Pathologist, Forensic Pathology Services, Durban Metropolitan Region (30 January 2006).

<sup>109</sup> Ibid.

<sup>110</sup> D Mahlangu et al 'Why Criminals Are Walking Free: Police Forensics Is A Mess, With R100 000 000 Machines to Test DNA Gathering Dust' (1 October 2006) *Sunday Times*, Durban 1

<sup>111</sup> M Witbooi 'South Africa: Justice Goes by the Board as Forensic Evidence Logjam Continues' (2 October 2006) *The Cape Argus* 3.

<sup>112</sup> Ibid.

## **2.3.2 The disposal of indigent deceased and unidentified persons**

### **2.3.2.1 Municipalities**

The responsibility for the removal and disposal of unclaimed bodies falls with the local authorities within whose jurisdiction the body is found<sup>113</sup>. Generally, unclaimed bodies were buried as paupers<sup>114</sup> until 1981, when legislation allowed for the cremation of such bodies<sup>115</sup>. Recently, this legislation was repealed with the introduction of the National Health Act<sup>116</sup>. Subsequently, some municipalities who wished to continue with cremation of unclaimed bodies have created regulations<sup>117</sup> that facilitate this practice<sup>118</sup>. These municipalities acknowledge that they have compromised respect for the dignity of the deceased in order to contain costs<sup>119</sup>.

At the end of the year 2003, Durban's eThekweni Municipality statistics reflected that 1836 indigent burials were processed during the year at a cost of approximately R1 000 000<sup>120</sup>. Statistics also show that in 2004, an average of 45 such burials were held weekly in the Durban area compared to only six per week in 1999<sup>121</sup>. The deceased were between 18 and 30 years old, and all deaths were due to natural causes<sup>122</sup>. The Umgungundlovu and City of Cape Town Municipalities have each processed approximately 700 indigent burials per year<sup>123</sup>. The Council of the Johannesburg Municipality reported a drastic increase in the numbers of unclaimed bodies over the past five years, with 700 in 2001 and 1200 in 2006<sup>124</sup>. In order to contain costs, three to four bodies are interred as paupers in one grave

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<sup>113</sup> Supra (note 3 above).

<sup>114</sup> Health Act 63 of 1977, s48(2). See ch 3.2.4 for a discussion on the Health Act.

<sup>115</sup> Ibid s48(2A) was inserted by s11 of the Health Amendment Act 33 of 1981.

<sup>116</sup> 61 of 2003.

<sup>117</sup> KwaZulu Natal's eThekweni Municipality: Burials/Cremation of Destitute Deceased Persons GN 2122 of GG PO1M13404RPT (21 November 2003) par 2.3; Eastern Cape's Senqu Municipality: Bylaw relating to Cemeteries Local Authority GN 202 of GG 1405 (9 December 2005) par 33.2; City of Johannesburg Metropolitan Municipality Cemeteries and Crematoria By-laws GN 824 of GG 179 (21 May 2004) s41(2).

<sup>118</sup> By-laws published by municipalities are provided for by s84(1) of the Local Government Municipal Structures Act 117 of 1998, and, s13 of the Municipal Structures Act 32 of 2000.

<sup>119</sup> Dass (note 7 above).

<sup>120</sup> Dass (note 7 above).

<sup>121</sup> Supra (note 1 above).

<sup>122</sup> Supra (note 1 above).

<sup>123</sup> Dass (note 7 above).

<sup>124</sup> P Molwedi '1200 Paupers' Burials in Johannesburg This Year' *The Star* (21 July 2006) 2.



without a headstone<sup>125</sup>. Any person making a claim to a deceased body, or wishing to erect a headstone, must apply for the exhumation and re-interment of the deceased at the cost of the person making the application<sup>126</sup>.

Some local authorities have considered community sentiments regarding cremation<sup>127</sup>. Mogale City Municipality provides that unidentified human remains cannot be cremated<sup>128</sup>. The Ehlanzeni District Municipality performed a comprehensive study<sup>129</sup> in the community within their jurisdiction and found that the residents believed that the dead must be buried with their ancestors, and not be cremated<sup>130</sup>. Accordingly, the local authorities decided to increase their budget for burials to accommodate burial traditions of their impoverished community<sup>131</sup>. The Council further proposed that studies be performed to address the reasons for the increasing mortality rate in the area<sup>132</sup>.

### **2.3.2.2 Anatomical donations**

Historically, unclaimed bodies have also been donated to anatomy laboratories for teaching and research purposes<sup>133</sup>. Currently, the Human Tissue Act<sup>134</sup> provides that the body of a destitute may be donated to authorized institutions for the purposes of medical research and training<sup>135</sup>.

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<sup>125</sup> Ibid.

<sup>126</sup> Senqu Municipality Eastern Cape Local Authority GN 202 of GG 1405 (9 December 2005) par 20.7.

<sup>127</sup> Mogale City By-laws relating to Crematoria and Cremations GN 64 of GG 4 (11 January 2007); Ehlanzeni District *Cemeteries In-Depth Study: 2003 Revision* 2003.

<sup>128</sup> Mogale City By-laws relating to Crematoria and Cremations GN 64 of GG 4 (11 January 2007), s15(b).

<sup>129</sup> Ehlanzeni District Municipality *Cemeteries In-Depth Study: 2003 Revision* 2003.

<sup>130</sup> Ibid 4.

<sup>131</sup> Ehlanzeni District Municipality (note 129 above) 5.

<sup>132</sup> Ehlanzeni District Municipality (note 129 above) 6.

<sup>133</sup> Repealed legislation that dealt with donation of human remains were the Anatomy Act of 1959, Anatomy Amendment Act 27 of 1961, Anatomical Donations and Post-Mortem Examinations Act 24 of 1970, Anatomical Donations and Post-Mortems Examinations Amendment Acts 42 of 1972, 59 of 1973, and 39 of 1980, and, s40 of the Health Act 63 of 1977.

<sup>134</sup> Act 65 of 1983.

<sup>135</sup> Ibid ss10, 11 and 12. See ch 3.2.5 for a discussion on the Human Tissue Act.

Although legislation provides that an unclaimed body can be donated without substitute consent<sup>136</sup>, ethical obligations as prescribed by the Health Professions Council of South Africa (HPCSA)<sup>137</sup> provides that:

A practitioner shall only for research, educational, training or statutory prescribed purposes retain the organs of a deceased person during an autopsy with the express written consent of the patient given by him or her during his or her lifetime or, in the case of a minor under the age of 14 years, with the written consent of his or her parent or guardian or, in the case of a deceased patient who had not previously given such written consent, with the written consent of his or her next-of-kin or the executor of his or her estate.<sup>138</sup>

In light of this *Ethical and Professional Rule*, dissection of unclaimed bodies for medical research and training would amount to unprofessional conduct on the part of the practitioner, as written consent would not have been sought from the next-of-kin of the deceased.

The Department of Anatomy and Histology at the Stellenbosch Medical School in the Western Cape received 1698 cadaver donations between the years 1956 to 1996<sup>139</sup>. The deceased were described as being from the disadvantaged Black African and Coloured population groups and, although young, had a high prevalence of disease<sup>140</sup>. These findings concur with those of Lerer and Kugel<sup>141</sup>, and reaffirm that unclaimed bodies originate from those that were discriminated against during Apartheid, and that these people died because they were physically weakened by poverty and disease.

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<sup>136</sup> Human Tissue Act 65 of 1983, s12.

<sup>137</sup> The HPCSA is a statutory body established in terms of the Health Professions Act 56 of 1974.

<sup>138</sup> The Health Professions Council of South Africa *Ethical and Professional Rules of the Medical and Dental Professions Board* (2002) Rule 13. The Council will take disciplinary steps against a practitioner who fails to adhere to these rules.

<sup>139</sup> CJ Labuschagne & B Mathey 'Cadaver profile at the University of Stellenbosch Medical School, South Africa' (2000) 13 *Clinical Anatomy* 88.

<sup>140</sup> Ibid.

<sup>141</sup> Lerer and Kugel (note 88 above).

## **2.4 The indigent person**

### **2.4.1 The impact of Apartheid on prevailing circumstances**

In South Africa, Black people were displaced by forced removal and discriminating land policies<sup>142</sup>, which influenced labour migration<sup>143</sup>, and forced people to live in neglected informal settlements<sup>144</sup>. Labour migration has been linked to poverty and promoted a lifestyle that separated a family unit<sup>145</sup> because workers only returned to their rural homes when they had accumulated a reasonable amount of money<sup>146</sup>. The end of Apartheid left South Africa with a social and economic burden characterized by racial division and discrimination<sup>147</sup>. Presently, urban areas are experiencing positive economic growth that attract people from under-developed rural areas, who settle in overcrowded temporary dwellings in these cities, with the hope of finding employment<sup>148</sup>. However, many of these people are exposed to poverty<sup>149</sup>, disease<sup>150</sup>, and violent crime, which result in a large number of them dying destitute in the confines of the city<sup>151</sup>.

### **2.4.2 The burden of disease**

In 2005, 63.1 per cent of all registered deaths in South Africa were amongst Blacks<sup>152</sup>, with 90 per cent of these deaths being from natural causes<sup>153</sup>, with those between the ages one to four years and those between the ages 15 to 24 years being most affected<sup>154</sup>.

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<sup>142</sup> Native Land Act of 1913; Native (Urban Areas) Act of 1923; Native Administration Act of 1927; Slums Clearance Act of 1934; Population Registration Act of 1950; Group Areas Act 41 of 1950.

<sup>143</sup> P Kok & M Collinson 'Migration and Urbanisation in South Africa' (2006) 1. People migrated to urban areas to seek employment as rural areas remained under-developed.

<sup>144</sup> P Kok & D Gelderblom 'Urbanisation: South Africa's Challenge' (1994) 2.

<sup>145</sup> Kok & Collinson (note 143 above) 17.

<sup>146</sup> Kok & Collinson (note 143 above) 3.

<sup>147</sup> T Binns & E Nel 'Beyond the Development Impasse: Local Economic Development and Community Self-Reliance in South Africa' 1999 *J of African Studies* 37(3) 389.

<sup>148</sup> South African Cities Network (note 54 above) 6.2.

<sup>149</sup> LB Landau 'Shaping Urban Futures: Human Mobility and Poverty in Africa's Globalising Cities' (2006) 26 *Forced Migration Working Paper Series* 2.

<sup>150</sup> MN Lurie et al 'Circular Migration and Sexual Networking in Rural KwaZulu Natal: Implications for the Spread of HIV and other Sexually Transmitted Diseases' (1997) 17 (3) *Health Transition Review* 17; M Lurie 'Migration and AIDS in Southern Africa: A Review' (2000) 96 *SA J of Science* 343.

<sup>151</sup> H Bhorat et al *Fighting Poverty: Labour Markets and Inequality in South Africa* (2001) 216.

<sup>152</sup> Statistics South Africa 'Mortality and Causes of Death in South Africa, 2005: Findings from Death Notification' (2007) 12.

<sup>153</sup> Ibid 16.

<sup>154</sup> Statistics South Africa (note 152 above) 22.

Tuberculosis<sup>155</sup>, intestinal infections<sup>156</sup>, influenza and pneumonia<sup>157</sup>, malnutrition<sup>158</sup> and HIV/AIDS are listed as the leading causes of these deaths<sup>159</sup>. Since 1997, the number of deaths has increased consistently each year<sup>160</sup>. The main purpose of collecting mortality statistics is to monitor the health status of a nation so that government can formulate policies aimed at increasing the life expectancy of those that are at risk<sup>161</sup>. These statistics clearly indicate that young Black South Africans are dying of diseases that can be prevented. Access to clean water, a safe environment, and health care services will help prevent these early deaths.

## 2.5 Conclusion

The Missing Persons Bureau in South Africa has undergone many changes since its inception in 1994, and it is claimed that its future success requires community support and additional resources<sup>162</sup>. However, the early closure of these Bureaus, discontinuance of television coverage, poor statement taking and loss of a missing person's photograph, all indicate that this service is inefficiently managed<sup>163</sup>. Further, there is no suggestion that rural areas are included in the Bureau's infrastructure, which makes this service inaccessible to those living in remote parts of the country. The TRC recommendation that 'a trained and dedicated unit with good research skills must undertake the management of missing persons'<sup>164</sup> is therefore not met. It is obvious that accountability lies with the SAPS to acknowledge that the current manner in which missing persons cases are handled,

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<sup>155</sup> RM Youngson *Collins Dictionary of Medicine* 4 ed (2005) 620. A lung infection caused by the organism 'Mycobacterium tuberculosis'.

<sup>156</sup> RN Mitchell et al *Robbins and Cotran Pathologic Basis of Disease* 7 ed (2006) 832. Infections of the gastro-intestinal tract which cause diarrhoea and vomiting.

<sup>157</sup> Youngson (note 155 above) 323. Influenza is an infection of the upper respiratory system that is caused by a virus of the 'Orthomyxoviridae' family, complications of which lead to pneumonia, an infection of the lungs.

<sup>158</sup> Youngson (note 155 above) 385. A disorder resulting from a diet that lacks the essential nutrients required to sustain life.

<sup>159</sup> Statistics South Africa (note 152 above).

<sup>160</sup> Statistics South Africa (note 152 above) 8.

<sup>161</sup> Statistics South Africa (note 152 above) 1.

<sup>162</sup> Supra (notes 76 & 78 above).

<sup>163</sup> Supra (notes 70-75 above).

<sup>164</sup> Supra (note 33 above).

dates back to the Apartheid years<sup>165</sup>. Community trust can only be gained when police show efficiency in investigating these cases.

A deceased body that is not claimed for disposal is presumed to be that of an indigent person who has no family. Consideration is not given to the fact that their next-of-kin may be unaware of their demise and that the deceased person may be in an area that is not his or her habitual residence, and may therefore not be known to the local community. Attempts to identify unclaimed bodies so that family can be located are not pursued by the police<sup>166</sup>. The forensic medical field is equipped with professional skills in human identification, which can be applied to assist with personal identification of all unidentified bodies.

Poverty and labour migration negatively influenced the lives of Black people and plays a decisive role as the reason for their bodies not being claimed at death. Since past discrimination greatly influences the present lives of indigent Black persons, all effort should be made to find their next-of-kin when their bodies are not claimed at death.

Although legislation allows for anatomical donation of unclaimed bodies, the *Ethical and Professional Rules* of the HPCSA prescribes that medical personnel gain written consent from the next-of-kin, which suggests that unclaimed bodies must first be identified before dissections. This ethical rule is in line with the TRC recommendation<sup>167</sup> and the study undertaken by Lerer and Kugel<sup>168</sup>, and suggests that medical personnel ought to afford more attention to the humanitarian aspects associated with unidentified bodies.

Ehlanzeni and Mogale municipalities have considered the sentiments of the community regarding cremation and have decided not to cremate indigent bodies<sup>169</sup>. All municipalities should consult with their local communities to verify their position on the cremation of unclaimed bodies.

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<sup>165</sup> Supra (note 11 above).

<sup>166</sup> Supra (note 92 & 93 above).

<sup>167</sup> Supra (note 36 above).

<sup>168</sup> Supra (note 99 above).

<sup>169</sup> Supra (notes 118 and 119 above).

In the next chapter, South African legislation that relate to indigent persons, missing persons and unidentified deceased persons is discussed.

## **CHAPTER 3     SOUTH AFRICAN LEGISLATION RELATING TO UNCLAIMED BODIES, MISSING PERSONS AND DESTITUTE PERSONS.**

### **3.1        Introduction**

The establishment of the fact of death for a particular individual has legal importance in South African law<sup>170</sup>. Legislation does not specify that a deceased body must be protected from any interference. In fact, legislation allows for the anatomical donation of the deceased to medical research institutions<sup>171</sup>. Of significance is whether South Africa's democratic laws would permit the donation of an unclaimed body without consent being sought from the next-of-kin especially that a large number of unclaimed bodies are Blacks who suffered past discrimination<sup>172</sup>.

Legislation that relates to missing persons has its importance in protecting the assets of the missing person and dissolving a marriage between the missing person and his or her spouse.

This section discusses laws that relate to unclaimed bodies, missing persons, and the families of missing persons. Included in this section is a discussion of human rights legislation that protects the destitute and their next-of-kin who are not informed of their loved ones demise.

### **3.2        Legislation relating to unclaimed deceased persons**

#### **3.2.1     The legal consequences of death**

According to Boberg, death creates legal consequences for relatives of the deceased<sup>173</sup>. It forces family members to suddenly assess their economic situation, transfer possessions to heirs<sup>174</sup> and dissolve a marriage<sup>175</sup> whilst dealing with the emotional and cultural aspects that are associated with the loss of a loved one. It is therefore necessary to confirm

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<sup>170</sup> SA Strauss *Doctor, Patient and the Law* 3 ed (1991) 321.

<sup>171</sup> Supra (chapter 2.3.2.2 above).

<sup>172</sup> Supra (note 98 above).

<sup>173</sup> PQR Boberg *Boberg's Law of Persons and the Family* 2 ed (1999) 53.

<sup>174</sup> Ibid.

<sup>175</sup> Boberg (note 173 above) 54.

death<sup>176</sup>, establish the exact time, cause, and manner of death, and, identify the person who has died<sup>177</sup>. These facts are documented to allow the transfer of the assets of the deceased person to his or her beneficiaries<sup>178</sup>. In the case of unidentified dead persons, this essential requirement of the law cannot advance<sup>179</sup>.

According to Cronjé and Heaton, a person's 'legal personality' ends at the onset of death; the significance of which is that a dead person can have 'no rights or duties'<sup>180</sup>. This legal position implies that the deceased cannot be protected within the structure of the law<sup>181</sup>. The deceased's estate is protected in the interests of the beneficiaries and not in the own interests of the deceased<sup>182</sup>. Disposal of the body of the deceased is regulated by law<sup>183</sup> in the interests of public health and safety<sup>184</sup>. This implies that legislation used to protect the body of a living person cannot be applied to the deceased.

### **3.2.2 The Births and Deaths Registration Act 51 of 1992**

The Births and Deaths Registration Act<sup>185</sup> specifies that every death must be reported to the Director-General of Home Affairs<sup>186</sup>, whether such death is due to natural causes<sup>187</sup> or not<sup>188</sup>. If death was caused by natural causes, a medical practitioner who examined the body issues a notification of death by means of a 'prescribed certificate'<sup>189</sup>. The death is registered at the Department of Home Affairs, and a burial order is issued<sup>190</sup>. If it is

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<sup>176</sup> Boberg (note 163 above) 50.

<sup>177</sup> s16(2) of the Inquest Act 58 of 1959.

<sup>178</sup> Strauss (note 170 above).

<sup>179</sup> s16(1) of the Inquest Act 58 of 1959..

<sup>180</sup> DSP Cronjé & J Heaton *The South African Law of Persons* 2 ed (2003) 25.

<sup>181</sup> Ibid.

<sup>182</sup> Cronjé & Heaton (note 180 above).

<sup>183</sup> Births and Deaths Registration Act 51 of 1992, ch 3.

<sup>184</sup> Health Act 63 of 1977, ss 46, 47, 48 .

<sup>185</sup> 51 of 1992.

<sup>186</sup> Ibid. s5 of the Act provides that the Director-General of Home Affairs is the custodian of all documents relating to deaths.

<sup>187</sup> Supra (note 183 above) s14(1).

<sup>188</sup> Supra (note 183 above) s17(2).

<sup>189</sup> Supra (note 183 above) ss15(1), 15(2).

<sup>190</sup> Supra (note 183 above) s14(2).



believed that a person's death was due to unnatural causes<sup>191</sup>, a police officer is notified<sup>192</sup> so that the circumstances under which the death had occurred can be investigated<sup>193</sup>.

The Birth and Deaths Registration Act<sup>194</sup> does not provide for specific processes to be followed in order to register the death of an unidentified person, whose next-of-kin are unaware of the death, and are not available to receive the burial order. Although the Act specifies that a birth can only be registered if a forename and a surname is assigned to it<sup>195</sup>, similar requirements are not specified for the registration of deaths. However, in completing the death notification form<sup>196</sup>, the medical practitioner is instructed to record the name, identity number and thumb prints of the deceased person, and, if this is not possible because the deceased is not identified, every effort should be made to obtain these details from the deceased's family<sup>197</sup>. It would therefore appear to be the duty of the police officer to investigate the whereabouts of the family of the deceased.

If the purpose of the Act is to keep a population register of every birth and death of South African citizens<sup>198</sup>, then the register is incomplete if deaths do not reflect the identity of the person who has died. In terms of the Births and Deaths Registration Act<sup>199</sup>, it is an offence to provide false details during registration<sup>200</sup>. The actions of mortuary personnel and others who registered bodies under a different name in order to claim insurance benefits is therefore criminal<sup>201</sup>.

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<sup>191</sup> In MA Dada 'The Autopsy' in MA Dada & DJ McQuoid-Mason (eds) *Introduction to Medico-Legal Practice* (2001) 328, Dada explains that there is no legal definition for 'unnatural death', however, 'unnatural death refers to death caused by application of direct or indirect force on the body by chemical, physical or mechanical factors, sudden and unexpected deaths, anaesthetic deaths as defined by the Health Professions Act 56 of 1974, and, acts of commission or omission by somebody'.

<sup>192</sup> Supra (note 183 above) s14(3).

<sup>193</sup> Supra (note 183 above) s16, and s3 of the Inquest Act 58 of 1959.

<sup>194</sup> 51 of 1992.

<sup>195</sup> Ibid s9(6).

<sup>196</sup> The death notification form is referred to as the 'BI 1663'.

<sup>197</sup> Department of Home Affairs *Training Manual for the Death Notification Form BI 1663* (1999) par 5.

<sup>198</sup> Supra (note 172 above) s5.

<sup>199</sup> 51 of 1992.

<sup>200</sup> Ibid s31(b).

<sup>201</sup> Supra (note 85 above).

### 3.2.3 The Inquest Act 58 of 1959

The founding law that relates to the performance of forensic post-mortem examinations is the Inquest Act<sup>202</sup>. The main purpose of the Act is to reassure the public that all deaths resulting from unnatural causes will be accorded proper consideration and inquiry so that persons responsible for these deaths may be prosecuted<sup>203</sup>. The Act compels any person who believes that the death of another person was due to unnatural causes, to report the death to a police officer<sup>204</sup>. The death must be reported in the district where the deceased is found<sup>205</sup>, and all records and statements pertaining to the deceased person will remain in that district<sup>206</sup>. If a body cannot be identified<sup>207</sup>, the magistrate holding the inquest must record this fact together with all other evidence<sup>208</sup>, and submit a record of the inquest proceedings to the Attorney-General<sup>209</sup>, who shall request that the inquest resume when further evidence becomes available<sup>210</sup>. Further review of the case may imply that the body be exhumed for a post-mortem examination<sup>211</sup>.

A post-mortem examination contributes to the knowledge of events that caused the victim's demise<sup>212</sup>. A forensic pathologist is therefore required to exercise a reasonable degree of care and skill during the course of the post-mortem examination, to observe and record all information, and retain appropriate tissue samples potentially relevant in determining the cause of death.<sup>213</sup> The limitation of the Inquest Act<sup>214</sup> is that it does not specify that positive identification be a part of the post-mortem examination.

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<sup>202</sup> 58 of 1959.

<sup>203</sup> CW Van Wyk 'Post-mortems, Burials, Anatomy' in WA Joubert (ed) 20 *The Law of South Africa* (2000) 211, 212.

<sup>204</sup> Supra (note 202 above) s2(1).

<sup>205</sup> Supra (note 202 above) s 6(a).

<sup>206</sup> Supra (note 202 above) s19(2).

<sup>207</sup> Supra (note 202 above) s16(2)(a).

<sup>208</sup> Supra (note 202 above) s16(2).

<sup>209</sup> Supra (note 202 above) s17(1)(a).

<sup>210</sup> Supra (note 202 above) s17(2).

<sup>211</sup> Supra (note 202 above) s17(2).

<sup>212</sup> Supra (note 202 above) s3(2).

<sup>213</sup> Supra (note 202 above) s3(3).

<sup>214</sup> 58 of 1959.

The Act also stipulates that an investigation of the circumstances surrounding the death shall be conducted<sup>215</sup>. It would therefore be reasonable to believe that these investigations include an extensive search to identify the person. This can be further implied by the consideration that an inquest must be held at a time when reasonable notice is given to the spouse or relative of the deceased person<sup>216</sup>. In the situation of the unclaimed body whose death was due to unnatural causes, an inquest can hardly proceed if the identity of the person is not known<sup>217</sup>. An inquest will re-open when the destitute is positively identified<sup>218</sup>. Further, the inquest is held in the district where the body is found<sup>219</sup>, and the body is interred in the same district<sup>220</sup>. The dilemma that surrounds unidentified deceased persons is that they are in geographical areas where they are not known and therefore not identified. This also indicates that information about their death is not communicated to anyone outside the district, and such information may not reach relatives living outside this district.

The fact that the Inquest Act provides that the body may be exhumed for further examination if an inquest re-opens<sup>221</sup> implies that the body of the unidentified deceased person whose death was caused by unnatural causes, cannot be cremated.

The Inquest Act<sup>222</sup> also makes special provision where evidence at an inquest proves beyond reasonable doubt that the body of a person was destroyed, or cannot be found, to record that a death has occurred, although there is no body to examine<sup>223</sup>. If the judicial officer records the identification of the person<sup>224</sup>, and the date of death<sup>225</sup>, and, if this finding is confirmed by review of the evidence by a Supreme Court of South Africa in the

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<sup>215</sup> Ibid s3(1)(a).

<sup>216</sup> Supra (note 202 above) s7.

<sup>217</sup> Supra (note 202 above) s16(2)(a).

<sup>218</sup> Supra (note 202 above), as required by s17(2).

<sup>219</sup> Supra (note 202 above) s6(a).

<sup>220</sup> Health Act 63 of 1977, s48(2).

<sup>221</sup> Supra (note 202 above) s17(2).

<sup>222</sup> 58 of 1959.

<sup>223</sup> Supra (note 202 above) s16(1).

<sup>224</sup> Supra (note 202 above) s16(2)(a).

<sup>225</sup> Supra (note 202 above) s16(2)(c).

area where the inquest is held, the death of the person can be presumed<sup>226</sup>. In this case, a record of the presumption of death will result in an automatic dissolution of the marriage of the missing person<sup>227</sup>. This implies that in the case of married persons, the spouse is not burdened with the tedious process of applying to the courts to presume the death of a spouse in order that the deceased person's estate is transferred to his or her beneficiaries<sup>228</sup>. This provision would be beneficial for relatives whose loved ones have perished in a disaster, where overwhelming evidence supports the fact that the person had died, even though there is no body to prove that death had occurred.

### **3.2.4 The Health Act 63 of 1977<sup>229</sup>**

The Health Act<sup>230</sup> provided for the disposal of unclaimed bodies. The police are notified when such a body is found<sup>231</sup>, and the body is taken to a medico-legal mortuary<sup>232</sup>. The responsibility for the removal and disposal of a destitute lies with the local authority of the municipal area in which the body is found<sup>233</sup>. The local authority may cremate unclaimed bodies instead of burying them<sup>234</sup>. If a police officer suspects that the death of the unidentified person was due to an unnatural cause, the circumstances and cause of the death are investigated in terms of the Inquest Act<sup>235</sup>.

The Health Act<sup>236</sup> clearly implied that unclaimed bodies fell within the control of the State.

<sup>226</sup> Supra (note 202 above) ss18(2), 18(2A).

<sup>227</sup> Dissolution of Marriages on Presumption of Death Act 23 of 1979, s2.

<sup>228</sup> Cronjé & J Heaton (note 180 above) 29.

<sup>229</sup> It must be noted that at the time of writing this dissertation, the Health Act was repealed and replaced by the National Health Act 61 of 2003. However, regulations regarding unclaimed bodies are still pending and the processes provided for unclaimed bodies by the Health Act are still being followed by those persons managing unclaimed bodies.

<sup>230</sup> 63 of 1977.

<sup>231</sup> Ibid s48(1)(d).

<sup>232</sup> Supra (note 230 above) s48(1)(d)(i).

<sup>233</sup> Supra (note 230 above) s48(2).

<sup>234</sup> Supra (note 230 above) s48(2A)(a). This section was inserted into the Health Act by s11 of the Health Amendment Act 33 of 1981.

<sup>235</sup> Supra (note 183 above) s3. s16 of the Births and Deaths Registration Act provides that a police officer must act in terms of s3 of the Inquest Act 58 of 1959 in the case of unnatural deaths.

<sup>236</sup> 63 of 1977.

### 3.2.5 The Human Tissue Act 65 of 1983

The Human Tissue Act<sup>237</sup> provides for the donation of unclaimed bodies<sup>238</sup> to specified institutions<sup>239</sup> for the purposes of medical and dental training and research<sup>240</sup>, and for the advancement of medicine and dentistry<sup>241</sup>. The Act prescribes that a deceased person, if unclaimed within 24 hours, is at the disposal of the inspector of anatomy who may hand the body over to an institution<sup>242</sup>. If an order is not received from the inspector of anatomy after 12 hours of receipt of notification, the inspector is no longer responsible for the disposal of the body<sup>243</sup>. If notice is received from the inspector of anatomy, the body may be handed over to an authorized institution<sup>244</sup>, where it must be preserved for at least 14 days before use<sup>245</sup>.

Although the Act stipulates that consent must be sought before the donation of a body<sup>246</sup>, where all ‘reasonable steps’ must be taken to locate the next-of-kin<sup>247</sup>, it makes a unique exception to this requirement of consent in the case of a destitute<sup>248</sup>. According to Strauss<sup>249</sup>, the donation of an unidentified deceased person cannot be possible, as it is difficult to ensure that the authorised person making the donation would be content that ‘all reasonable steps’ had been taken to locate the next-of-kin of the deceased<sup>250</sup>. Although ‘all reasonable steps’ is not clearly described, it seems plausible if these included widespread media and publication attention of identifiable features of unclaimed bodies, which would afford relatives a reasonable opportunity to respond. The period of 14 days seems inadequate for ‘all reasonable steps’ to be taken in investigating the whereabouts of the next-of-kin, who may be in another district. The migrant labour pattern is associated with

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<sup>237</sup> 65 of 1983.

<sup>238</sup> Ibid ss10, 11 & 12.

<sup>239</sup> Supra (note 237 above) s3(1).

<sup>240</sup> Supra (note 237 above) s4.

<sup>241</sup> Supra (note 237 above) Preamble of the Human Tissue Act.

<sup>242</sup> Supra (note 237 above) s10.

<sup>243</sup> Supra (note 237 above) s12(4).

<sup>244</sup> Supra (note 237 above) s11.

<sup>245</sup> Supra (note 237 above) s13.

<sup>246</sup> Supra (note 237 above) s2(1). According to s14(2) of the Act, ‘the authorising official must be satisfied that the body or tissue was in fact donated’.

<sup>247</sup> Supra (note 237 above) s2(2)(b).

<sup>248</sup> Supra (note 237 above) ss10 and 11. This rule also applies to inmates of public institutions.

<sup>249</sup> SA Strauss (note 170 above) 153.

<sup>250</sup> Supra (note 237 above) s2(2)(b).

the informal movement of people between urban and rural areas<sup>251</sup>, which means that more time, effort, and other innovative means are required to track the movement of individuals.

An additional issue is that the Act does not substantiate the reasons for specifying that the bodies of unclaimed deceased destitute persons and prisoners be donated without consent from their next-of-kin. It can only be assumed by the writer that government believed that destitute persons had no family, or, that local authorities may have been overwhelmed with large numbers of unclaimed bodies. However, the inclusion of prisoners<sup>252</sup> in this excluded group infers that destitute people, together with prisoners, are regarded as unworthy members of our society. Conversely, the Human Tissue Act<sup>253</sup> was functional at a time when a large number of Black people were reported missing<sup>254</sup>. In view of these findings, anatomical donation of unclaimed bodies must be re-examined.

### **3.2.6 Legislation that advocates respect for the dead**

#### **3.2.6.1 Common law violation of a corpse**

Milton describes the violation of a corpse as an unlawful and intentional physical interference of a dead human body<sup>255</sup>. Principles relevant to the deceased are that the body is protected from ‘mutilation or destruction’ and that ‘a measure of protection be afforded, and not automatically be removed’, when consent cannot be gained from the next-of-kin<sup>256</sup>.

In the case of *Rex v Sephuma*<sup>257</sup>, it was found that the destruction of a grave and the mutilation of the corpse caused a ‘gross outrage to the feelings and sensibilities of the relatives’<sup>258</sup>. Although dissection of destitute bodies for the purposes of medical research

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<sup>251</sup> Supra (note 146 above).

<sup>252</sup> I Gordon et al *Medical Jurisprudence* 3 ed (1953) 238. It is noted that in Holland, it was an established practice to deliver the bodies of executed persons to the University of Leyden for anatomical donations and scientific research.

<sup>253</sup> 65 of 1983.

<sup>254</sup> Supra (notes 15 & 16 above).

<sup>255</sup> JRL Milton *South African Criminal Law and Procedure II: Common Law Crimes* 3 ed (1996) 283.

<sup>256</sup> Ibid 285.

<sup>257</sup> *Rex v Sephuma* (TPD) 1948 (3) SALR.

<sup>258</sup> Ibid 982.

and education is 'not unlawful' as this is provided for by legislation<sup>259</sup>, it is likely that anatomical dissection, or the cremation of destitute bodies without gaining consent from the next-of-kin, would offend their 'sensibilities', and therefore constitute a violation of a dead body. It is inherent that public morals command respect for the dead, and any interference of the dead that offends the public's sense of morality can amount to a crime<sup>260</sup>.

### 3.2.6.2 Customary Law

The structure of South African Customary Law is derived from traditional customs and practices observed by the indigenous African society, of which rituals and principles are important elements<sup>261</sup>. African culture places considerable emphasis on the place of burial and the manner in which a person is buried, since the deceased person's spirit must be united with the ancestors<sup>262</sup>. Accordingly, the deceased must be buried in their birthplace, together with their ancestors<sup>263</sup>.

The disposal of a body by cremation is regarded as insensitive in African culture<sup>264</sup>.

Customary rites and beliefs associated with funerals are important to relatives who wish to commemorate the memory of a loved one<sup>265</sup>.

### 3.2.6.3 Provincial regulations

The fact that provincial regulations<sup>266</sup> stipulate the manner in which the deceased must be managed implies that South African society does place significance on respect for the dead. KwaZulu Natal's regulations provide that 'human remains must be conveyed in an orderly and proper manner, and in a proper coffin or other decent and sufficient covering'<sup>267</sup>. Also,

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<sup>259</sup> *Rex v Sephuma* (note 257 above) This is provided for by the Human Tissue Act 65 of 1983.

<sup>260</sup> Milton (note 255 above) 288.

<sup>261</sup> The Proposed Draft Bill on Application of Customary Law in SA Law Commission Report on Conflicts of Law *The Harmonisation of the Common Law and the Indigenous Law* (September 1999) 190.

<sup>262</sup> SA Law Commission Discussion Paper 93 *Customary Law of Succession* (August 2000) par 6.2. See also *supra* (note 30 above).

<sup>263</sup> Ehlanzeni District Municipality (note 129 above) 4. See also note 30 above.

<sup>264</sup> South African Cities Network (note 54 above) 24.

<sup>265</sup> Milton (note 255 above) 286.

<sup>266</sup> KwaZulu Natal Cemeteries & Crematoria Regulations GN 130 of GG 5196 (17 April 1997); Eastern Cape Cemeteries & Crematoria Regulations GN 202 of GG 1405 (9 December 2005).

<sup>267</sup> KwaZulu Natal Cemeteries & Crematoria Regulations GN 130 of GG 5196 (17 April 1997), s15.

‘no person may cause any disturbance in the cemetery, commit any unseemly act’<sup>268</sup>, or ‘damage, destroy or tamper with any memorial stone’<sup>269</sup>. Eastern Cape’s regulations provide that ‘no person may convey a body in a disrespectful manner in a public place’<sup>270</sup>, or ‘damage’<sup>271</sup>, or ‘walk on a grave’<sup>272</sup>. These regulations indicate that the present boni mores of South African society include respect for the deceased.

### 3.2.7 Conclusion

It is clear that a deceased human body has no rights within the South African legal framework<sup>273</sup>. Even though a person may prefer that his or her body be disposed of in a certain manner, these wishes can be over-ridden, especially in the interests of public health and safety<sup>274</sup>. However, public sentiment and morals that advocate respect for the dead can be considered significant, especially when relatives are aggrieved by any interference of the body of a deceased loved one<sup>275</sup>. From this perspective, it would therefore be prudent to gain consent from the deceased’s next-of-kin before a body is donated to a medical research institution or disposed of by cremation. Similarly, by making anatomical donations of unclaimed destitute persons lawful, the Human Tissue Act<sup>276</sup> disregards the importance of family and their sentiments of destitute persons.

Customary Law clearly indicates that the disposal of a body by cremation is unacceptable in African culture.

The Inquest Act<sup>277</sup> and the Births and Deaths Registration Act<sup>278</sup> both infer, although not explicitly stated, that the whereabouts of the next-of-kin of unidentified deceased persons ought to be investigated<sup>279</sup>.

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<sup>268</sup> Ibid s17.

<sup>269</sup> Supra (note 267 above) s19.

<sup>270</sup> Eastern Cape Cemeteries & Crematoria Regulations GN 202 of GG 1405 (9 December 2005) s16.2.

<sup>271</sup> Ibid s34.2(c).

<sup>272</sup> Supra (note 270 above) s34.2(e).

<sup>273</sup> Supra (note 180 above).

<sup>274</sup> Supra (note 184 above).

<sup>275</sup> Supra (note 258 above).

<sup>276</sup> 65 of 1983.

<sup>277</sup> 58 of 1959.



Every unclaimed body should be regarded as a deceased person whose family is not aware of his or her demise. To the family, this person would be regarded as missing. The next section considers legislation that is relevant to the family of missing persons.

### **3.3 Legislation relating to missing persons**

#### **3.3.1 Common Law order of presumption of death**

A married person whose spouse is missing can apply to a High Court in order to presume a missing person dead<sup>280</sup>. Once a Common Law order of presumption of death has been granted, the surviving spouse may apply for a court order for the dissolution of his or her marriage<sup>281</sup>. However, a Common Law order of presumption of death does not mean that the person is dead as there is no body, or overwhelming evidence to prove that the person had died<sup>282</sup>. Furthermore, although the assets of the person presumed to be dead can be distributed, the courts may order that the heirs provide security for the reimbursement of the assets, or its value, should the person return<sup>283</sup>.

Apart from the fact that an application to a High Court for a Common Law order of presumption of death would incur legal costs, the surviving partners of missing persons may be forced to presume the death of the missing partner in order to access any finances for their survival. This situation can cause emotional anguish for the immediate family of the missing person<sup>284</sup>. Under these circumstances, credible police investigation of the missing person would offer reliable evidence in court on behalf of the family making the application, thereby facilitating the process<sup>285</sup>.

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<sup>278</sup> 51 of 1992.

<sup>279</sup> Supra (notes 197, 215 & 216 above).

<sup>280</sup> Cronjé & Heaton (note 180 above) 27, 29. The surviving spouse does not have to wait for a specified period before making such an application.

<sup>281</sup> Dissolution of Marriages on Presumption of Death Act 23 of 1979, s1.

<sup>282</sup> Cronjé & Heaton (note 180 above) 29.

<sup>283</sup> Cronjé & Heaton (note 180 above) 29.

<sup>284</sup> Supra (note 21 above).

<sup>285</sup> Cronjé & Heaton (note 180 above) 29.

### 3.3.2 Conclusion

The Inquest Act<sup>286</sup>, in providing for an automatic dissolution of a marriage when there is overwhelming evidence that a spouse has died<sup>287</sup>, benefits surviving partners as it facilitates the automatic transfer of deceased partner's assets to his or her beneficiaries.

The Common Law presumption of death benefits partners of missing persons by not prescribing a waiting period before an application can be made to the Courts to presume a missing partner dead. However, partners of missing persons are burdened with providing proof that the missing person will not return, which can be both daunting and expensive. The missing partner's funds cannot be accessed if a case does not succeed in Court.

South Africa does not have specific legislation that relates to missing persons and therefore no duty is placed on the relevant authorities to urgently investigate these cases. The TRC recommendation that police urgently investigate reports of missing persons<sup>288</sup> can only be realised if written laws compel the police to do so; besides, it will also make them accountable for their actions.

South Africa's democratic legislation was drafted to protect previously disadvantaged Black South Africans from further discrimination<sup>289</sup>. These are discussed in the next section with the argument that the 'destitute' specified in the Human Tissue Act<sup>290</sup> and provincial regulations<sup>291</sup> originate from a vulnerable group who ought to be positively identified and handed to their next-of-kin or, disposed of respectfully in line with African traditional values. Also, potential provisions in this legislation for the better management of missing persons and unclaimed bodies will be discussed.

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<sup>286</sup> 58 of 1959.

<sup>287</sup> Supra (notes 223-227 above).

<sup>288</sup> Supra (note 32 above).

<sup>289</sup> C Albertyn 'Equality' in MH Cheadle et al (eds) *South African Constitutional Law: The Bill of Rights* (2002) 51, 79.

<sup>290</sup> 65 of 1983, s10.

<sup>291</sup> Supra (note 117 above).

### 3.4 Human rights legislation relating to destitute persons and their families

#### 3.4.1 The Constitution of the Republic of South Africa Act 108 of 1996

The Bill of Rights in chapter two of the Constitution<sup>292</sup> recognises the democratic values of human dignity<sup>293</sup>, equality<sup>294</sup> and freedom<sup>295</sup>, has dominance over all forms of law and binds all branches of the State to it<sup>296</sup>. Further, no right may be limited unless it is 'reasonable and justifiable to do so in an open and democratic society based on human dignity, equality, and freedom',<sup>297</sup>.

Although Blacks should enjoy equal opportunities, they are unable to release themselves from their materially deprived circumstances without significant assistance from the State, as was described in the case of *Soobramoney v Minister of Health, KwaZulu Natal*<sup>298</sup> where it was stated that:

[W]e live in a society in which there are great disparities in wealth. Millions of people are living in deplorable conditions and in great poverty. There is a high level of unemployment and inadequate health services. These conditions already existed when the Constitution was adopted and a commitment to address them, and to transform our society into one in which there will be human dignity, freedom and equality, lies at the heart of our new constitutional order. For as long as these conditions continue to exist that aspiration will have a hollow ring.<sup>299</sup>

It therefore appears that destitute Black persons need to be protected from further harm. Albertyn also notes that discrimination occurs when vulnerable people are treated similarly to the general public when government omits to offer them additional assistance<sup>300</sup>. Similarly, discrimination occurs when government ignores the high incidence of destitution

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<sup>292</sup> Act 108 of 1996.

<sup>293</sup> Ibid s10.

<sup>294</sup> Supra (note 292 above) s9.

<sup>295</sup> Supra (note 292 above) s12.

<sup>296</sup> Supra (note 292 above) s8.

<sup>297</sup> Supra (note 292 above) s36(1).

<sup>298</sup> *Soobramoney v Minister of Health, KwaZulu-Natal* 1997 (12) BCLR 1696 (CC) (Right of access to renal dialysis treatment as emergency treatment at a public hospital).

<sup>299</sup> Ibid par 8.

<sup>300</sup> Albertyn (note 292 above) 88.

in urban areas, and fails to create conditions that will decrease the high mortality rate amongst the destitute.

#### 3.4.1.1 Socio-economic rights

Socio-economic rights include the right to essential resources and opportunities such as healthcare<sup>301</sup>, food and water<sup>302</sup>, social security<sup>303</sup>, housing<sup>304</sup>, and education<sup>305</sup>. However, the State can limit these rights and make them available according to ‘available resources’<sup>306</sup>, which means that the destitute may have to wait their turn in order to enjoy these rights. This may be unreasonable as was found in the case below.

In the case of *Government of the Republic of South Africa and Others v Grootboom and Others*<sup>307</sup>, Yacoob J emphasised that ‘Apartheid policies, neglect of rural areas and labour migration were key factors that contributed to a shortage of houses in the urban areas, which is a cause of destitution for many historically disadvantaged people in South Africa’<sup>308</sup>. It was also emphasised that ‘human dignity, equality, and freedom were inter-related with other rights in the Constitution, and are violated if people are denied food, water, and shelter’<sup>309</sup>. The Court ordered the State to implement a regularly reviewed housing programme that would provide relief for those people that were in desperate need for a ‘roof over their heads’<sup>310</sup>. Other significant points highlighted in this case were that the municipality failed to consult with the affected community on related issues, did not respect their dignity, and therefore did not treat them as human beings<sup>311</sup>. This case<sup>312</sup> underscores the plight of many destitute people throughout South Africa who live in

<sup>301</sup> Supra (note 292 above) s27(1)(a).

<sup>302</sup> Supra (note 292 above) s27(1)(b).

<sup>303</sup> Supra (note 292 above) s27.

<sup>304</sup> Supra (note 292 above) s26.

<sup>305</sup> Supra (note 292 above) s27(1)(c).

<sup>306</sup> Supra (note 292 above) s36.

<sup>307</sup> *Government of the Republic of South Africa and Others v Grootboom and Others* 2000 (11) BCLR 1169 (CC) (Mrs Grootboom requested that the State provide her and 900 other informal settlers with basic shelter).

<sup>308</sup> Ibid par 6.

<sup>309</sup> *Government of the Republic of South Africa and Others v Grootboom and Others* (note 307 above) pars 23 and 24.

<sup>310</sup> *Government of the Republic of South Africa and Others v Grootboom and Others* (note 307 above) par 52.

<sup>311</sup> *Government of the Republic of South Africa and Others v Grootboom and Others* (note 307 above) par 83.

<sup>312</sup> *Government of the Republic of South Africa and Others v Grootboom and Others* (note 307 above).

‘deplorable conditions’, and, reaffirms that the State is obliged by the Constitution to act positively to improve their quality of life by assisting them to access land, housing, healthcare, sufficient food and water, and, social security<sup>313</sup>. Further, local governments have a duty to ensure that basic human needs are met in the community they govern<sup>314</sup>.

In the case of *Treatment Action Campaign and Others v Minister of Health and Others*<sup>315</sup>, Botha J held that the State was obliged by the Constitution<sup>316</sup> to take reasonable measures to achieve the realisation of the right to access health care services<sup>317</sup> by making anti-retroviral treatment available to all HIV positive pregnant women attending public hospitals<sup>318</sup>. This case indicates that the State is obliged to take steps to ensure that destitute people have access to health care. If this obligation is met, the death rate amongst those that succumb to premature death from preventable diseases will decrease.

#### **3.4.1.2 The right to equality and human dignity**

The Constitution<sup>319</sup> guarantees every person ‘equal protection and benefit of the law’<sup>320</sup>. In order to achieve this, the State must take ‘legislative and other measures to protect and advance categories of persons’<sup>321</sup> that are discriminated against on a number of specified grounds including social origin<sup>322</sup>. Accordingly, the Promotion of Equality and Prevention of Unfair Discrimination Act<sup>323</sup> gives effect to the constitutional right to equality<sup>324</sup>.

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<sup>313</sup> *Government of the Republic of South Africa and Others v Grootboom and Others* (note 307 above) par 93.

<sup>314</sup> *Government of the Republic of South Africa and Others v Grootboom and Others* (note 307 above) par 39-44.

<sup>315</sup> *Treatment Action Campaign and Others v Minister of Health and Others* 2002 (4) BCLR 356 (T) (Right of access to healthcare).

<sup>316</sup> Supra (note 292 above) s27(2).

<sup>317</sup> Supra (note 292 above) s27(1)(a).

<sup>318</sup> *Treatment Action Campaign and Others v Minister of Health and Others* (note 315 above) par 94.

<sup>319</sup> Act 108 of 1996.

<sup>320</sup> Ibid s9(1).

<sup>321</sup> Supra (note 292 above) s9(2).

<sup>322</sup> Supra (note 292 above) s9 (3).

<sup>323</sup> Act 4 of 2000.

<sup>324</sup> Supra (note 292 above) s9(4).

#### 3.4.1.2.1 Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000

The Act<sup>325</sup> recognises that ‘constitutional democracy’ can only be achieved when ‘all social and economic inequalities’ created by Apartheid’s ‘social structures, practices and attitudes’, that caused ‘pain and suffering to our people’, are removed<sup>326</sup>. One of the objectives of the Act is to ‘promote the advancement of historically disadvantaged individuals, communities and social groups who were dispossessed of their land and resources, deprived of their human dignity and who continue to endure the hardship of the resulting circumstances’<sup>327</sup>. The Act defines discrimination as ‘an act or omission, including policy, law, rule, practice, condition, or situation, which directly or indirectly imposes burdens or disadvantages any person on a number of specified grounds’<sup>328</sup>. Relevant to the destitute is the provision that special consideration be given to include HIV/AIDS status<sup>329</sup>, socio-economic status<sup>330</sup> and family status<sup>331</sup> as prohibited grounds by the Minister for Justice and Constitutional Development<sup>332</sup>. Hence, the State has a duty to protect historically disadvantaged people living in destitution.

Section 10 of the Human Tissue Act<sup>333</sup> deprives the family of deceased persons presumed to have died destitute, the right to be consulted before an anatomical donation of the body of a loved one is made. The possibility therefore exists that the family can claim that they

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<sup>325</sup> Supra (note 323 above).

<sup>326</sup> Supra (note 323 above) Preamble of the Promotion of Equality and the Prevention of Unfair Discrimination Act.

<sup>327</sup> Supra (note 323 above) Preamble of the Promotion of Equality and the Prevention of Unfair Discrimination Act.

<sup>328</sup> Supra (note 323 above) s1(1)(viii).

<sup>329</sup> Supra (note 323 above) s1(1)(xvi) states that ‘HIV/AIDS status’ includes actual or perceived presence in a person’s body of the Human Immunodeficiency Virus or symptoms of Acquired Immune Deficiency Syndrome, as well as adverse assumptions based on this status.

<sup>330</sup> Supra (note 323 above) s1(1)(xxvi) states that ‘socio-economic status’ includes a social or economic condition or perceived condition of a person who is disadvantaged by poverty, low employment status or lack of or low-level educational qualification.

<sup>331</sup> Supra (note 323 above) s1(1)(xii) states that ‘family status’ includes membership in a family and the social cultural, and legal rights and expectations associated with such status.

<sup>332</sup> Supra (note 323 above) s34(1)(a) provides that ‘in view of the overwhelming evidence of the importance, impact on society and the link to systemic disadvantage and discrimination on the grounds of HIV/AIDS status, socio-economic status, nationality, family responsibility and family status, special consideration must be given by the Minister to include these grounds under the definition of “prohibited grounds” ’.

<sup>333</sup> 65 of 1983.

are indirectly discriminated against when their consent is disregarded before the anatomical donation of their next-of-kin, whereas, the deceased that are not presumed to be destitute or prison inmates, cannot be donated without consent from their next-of-kin<sup>334</sup>. Anatomical donation of deceased destitute persons therefore suggests that destitute people are categorized as a group that do not have extended family that may be aggrieved by the donation. A similar assumption that was made in the case of *National Coalition for Gay and Lesbian Equality and Others v Minister of Home Affairs and Others*<sup>335</sup> was found to be a ‘hurtful and harmful stereotype on self-worth, which constitutes a violation of dignity and therefore equality’<sup>336</sup>.

### 3.4.1.3 Right to cultural well-being

The Constitution<sup>337</sup> protects the cultural identity of people<sup>338</sup> and the right to practise one’s religion<sup>339</sup>, providing these do not violate the rights of other people. Cultural ceremonies include the opportunity to hold funerals and memorial services that form an important aspect in the life of the relatives of the deceased<sup>340</sup>. Families who do not receive information regarding the death of a loved one are denied the human need to lay their loved one to rest, honourably<sup>341</sup>.

Central to African culture and religion are values that promote the concept of Ubuntu<sup>342</sup>, a guiding principle that requires every person to know, understand and support the human values of others<sup>343</sup>. Cremation of destitute bodies does not show respect for African

<sup>334</sup> Supra (note 248 above).

<sup>335</sup> *National Coalition for Gay and Lesbian Equality and Others v Minister of Home Affairs and Others* 2000 (1) BCLR 39 (CC) (The right of same-sex partners to marry).

<sup>336</sup> Ibid par 45–53, where the court found that reinforced stereotypes convey the message that gay and lesbian people lack inherent humanity to constitute families and live within the protection of the law, impacts on the group’s self-worth and dignity.

<sup>337</sup> Act 108 of 1996.

<sup>338</sup> Ibid s31.

<sup>339</sup> Supra (note 292 above) s31(1)(a).

<sup>340</sup> Supra (notes 28-30 above).

<sup>341</sup> Supra (note 22 above).

<sup>342</sup> L Mbigi & J Maree *Ubuntu: The Spirit of African Transformation Management* (1995) 8. The principle of Ubuntu translates to ‘I am human because you are human’. Ubuntu also appears in the postamble of the Constitution of the Republic of South Africa Act 200 of 1993.

<sup>343</sup> Ibid 20.

culture<sup>344</sup> and may therefore not concur with the principles of Ubuntu since the emotional suffering endured by the family of the deceased are not considered. Families can therefore claim that their human dignity had been violated.

#### **3.4.1.4 Citizenship rights**

The Constitution<sup>345</sup> guarantees citizenship rights<sup>346</sup> to all South Africans<sup>347</sup>. In order to facilitate the enjoyment of these rights, including political<sup>348</sup> and occupational<sup>349</sup> rights, a citizen's personal identification details must be recorded in a population register, which is maintained by the Department of Home Affairs<sup>350</sup>. A South African citizen will not be able to participate in an election if he or she is not in possession of a valid identity document<sup>351</sup>.

The fact that a large number of unclaimed bodies cannot be positively identified on the population register suggests that corresponding identification records do not exist with the Department of Home Affairs, which implies that many destitute people are not registered as citizens. It may also suggest that the processes and techniques employed to verify identification through the population register may be flawed.

#### **3.4.1.5 The right to freedom and security of a person**

The Constitution<sup>352</sup> provides that 'everyone has the right to freedom and security of the person, which includes the right to be free from all forms of violence from either public or private sources'<sup>353</sup>, and, 'not to be treated or punished in a cruel, inhuman, or degrading

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<sup>344</sup> Supra (note 264 above).

<sup>345</sup> Act 108 of 1996.

<sup>346</sup> Ibid ss 20, 21(3), 21(4).

<sup>347</sup> Supra (note 292 above) s20.

<sup>348</sup> Supra (note 292 above) s19.

<sup>349</sup> Supra (note 292 above) s22.

<sup>350</sup> The Identification Act 68 of 1997, s5. s8 provides a list of personal details recorded, which include a set of fingerprints and a photograph.

<sup>351</sup> P Maduna 'Political Rights' in MH Cheadle et al (eds) *South African Constitutional Law: The Bill of Rights* (2002) 267, 275.

<sup>352</sup> Act 108 of 1996.

<sup>353</sup> Ibid s12(1)(c).



way’<sup>354</sup>. In terms of the missing person, these rights are violated if missing citizens are not protected at the report of them having disappeared.

Davis explains that the scope of this right can be extended to include psychological abuse<sup>355</sup>. The family of the deceased whose remains are cremated can suffer psychological injury based on the uncertainty about the actual death and the inability to receive the body of a loved one. Cremation destroys all evidence that can be linked to a missing relative that a family continues to look for because they were not informed of his or her demise, thereby prolonging their emotional suffering<sup>356</sup>.

### **3.4.2 Promotion of Access to Information Act 2 of 2000**

The purpose of the Promotion of Access to Information Act<sup>357</sup> is to give effect to the Constitutional right of access to any information held by the State or another person that is required for the exercise or protection of any rights<sup>358</sup>. The Act specifically recognises the ‘secretive and unresponsive culture’ of the past Apartheid government and therefore aims to ensure the promotion of a culture of transparency and accountability in the interest of all South Africans<sup>359</sup>. The Act prescribes procedures to provide for the efficient access of information held by government and includes the empowerment of all citizens to understand their right to access information<sup>360</sup>. Any information held by a public body can be published periodically within a year, without a formal request, at the cost of the public body<sup>361</sup>.

The Promotion of Access to Information Act would therefore compel district municipalities to collect and publish information relating to the characteristics of unclaimed bodies that

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<sup>354</sup> Supra (note 292 above) s12(1)(e).

<sup>355</sup> D Davis ‘Freedom and Security of the Person’ in MH Cheadle et al (eds) *South African Constitutional Law: The Bill of Rights* (2002) 153, 172.

<sup>356</sup> Supra (note 36 above). Cremation obstructs future identification of the deceased as it completely destroys the body.

<sup>357</sup> 2 of 2000.

<sup>358</sup> Ibid Preamble of the Promotion of Access to Information Act.

<sup>359</sup> Supra (note 357 above).

<sup>360</sup> Supra (note 357 above) s9.

<sup>361</sup> Supra (note 357 above) s15.

they dispose of. It also compels the forensic pathology services to publish all information regarding unidentified deceased persons so that families of missing persons can automatically access these records. State departments that retain medical records, including X-rays of unclaimed bodies, are therefore obliged to ensure that these are available in an open and efficient manner so that families, who are looking for a missing relative, can have easy access to these. Significant issues that require addressing is that information must be made available to people in rural locations in a language and literacy level that they are familiar with.

### **3.4.3 Promotion of Administrative Justice Act 3 of 2000**

The purpose of the Promotion of Administrative Justice Act<sup>362</sup> is to give effect to the right to administrative action that is lawful, reasonable, and procedurally fair<sup>363</sup>, and to the right to receive written reasons for administrative action as contemplated in the Constitution<sup>364</sup>. Administrative action includes any decision taken, or any failure to take a decision, by an organ of the State when performing a public function in terms of any legislation, which adversely affects the rights of any person<sup>365</sup>.

Municipalities, the SAPS and the forensic pathology services must therefore ensure the efficient administration of information regarding unclaimed bodies and missing persons as families of missing persons have a right to the diligent administration of documents and collation of information. This also suggests that families must be given notice of the death of a relative, and that a sensible plan be in place to address the dilemma of missing persons and unclaimed bodies.

### **3.4.4 The National Health Act 61 of 2003**

The National Health Act<sup>366</sup> replaced the Health Act<sup>367</sup> in July 2004 and provides a framework for a uniform health system, including forensic medicine and pathology

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<sup>362</sup> 3 of 2000.

<sup>363</sup> Ibid s33(1).

<sup>364</sup> Supra (note 362 above) s33(2).

<sup>365</sup> Supra (note 362 above) s1 of the Promotion of Administrative Justice Act.

<sup>366</sup> 61 of 2003.

<sup>367</sup> 63 of 1977.

services<sup>368</sup>, at national<sup>369</sup>, provincial<sup>370</sup> and district levels<sup>371</sup>. The Act recognises the socio-economic injustices and inequities of the past and the need to improve the quality of life of all citizens<sup>372</sup>. In terms of the National Health Act<sup>373</sup>, every metropolitan and district municipality must ensure that appropriate municipal health services are effectively and equitably provided in their respective areas<sup>374</sup>.

The Act also provides for a national health information system at provincial, national and district levels<sup>375</sup> for the purpose of creating, maintaining or adapting a national database for the collection and compilation of categories of data<sup>376</sup>. Each province must establish a committee to maintain, facilitate and implement the health information system<sup>377</sup>, and, every municipality must establish and maintain such a system as part of the national health information system<sup>378</sup>. This provision will therefore allow for the establishment of a database specifically dedicated to the compilation of all information related to unclaimed bodies, including X-rays, which can be available to every district.

The Act also makes special provisions for any person who is admitted to a health establishment without consent being obtained<sup>379</sup> where the institution must notify the head of the provincial department within 48 hours after the admission<sup>380</sup>. This would refer to any patient admitted as 'unknown' or 'unidentified' on the basis of serious illness in an unconscious state or any degree of lowered consciousness. This will ensure the keeping of a central record of people who were not able to inform their next-of-kin of their whereabouts in the case of a serious illness or accident.

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<sup>368</sup> Supra (note 366 above) s90(i). Regulations for these services are still pending at the time of writing this dissertation.

<sup>369</sup> Supra (note 366 above) ch 3.

<sup>370</sup> Supra (note 366 above) ch 4.

<sup>371</sup> Supra (note 366 above) chapter 5.

<sup>372</sup> Supra (note 366 above) Preamble of the National Health Act.

<sup>373</sup> 61 of 2003.

<sup>374</sup> Ibid s32(1).

<sup>375</sup> Supra (note 366 above) s74(1).

<sup>376</sup> Supra (note 366 above) s74(2).

<sup>377</sup> Supra (note 366 above) s75.

<sup>378</sup> Supra (note 366 above) s76.

<sup>379</sup> This will require the reporting of any person who is unable to communicate because he or she is seriously ill, unconscious or suffering from amnesia.

<sup>380</sup> Supra (note 366 above) s9.

In terms of the protection of medical records, the Act<sup>381</sup> provides that the person in charge of a health establishment<sup>382</sup> must set up control measures to prevent destruction of medical records<sup>383</sup>. Medical records include X-rays or any other report, which can form part of a collection of ante-mortem records to assist with positive identification of a deceased person.

### 3.5 Conclusion

Although the destitute are protected within the framework of the law, this legal protection falls away at death<sup>384</sup>, and the unidentified body is disposed of in a manner that is chosen to be cost-effective by the State. Although human rights principles cannot be applied to the deceased person, an omission to inform their relatives about their demise and the manner in which their bodies are disposed of can violate the rights of their next-of-kin. In view of the fact that the established practice of not identifying the deceased and not informing their families of their demise was found to reflect a 'racist system in which Black life was not important' by the TRC<sup>385</sup>, consideration must be afforded to the families of the deceased<sup>386</sup>. The anatomical donation or cremation of unclaimed bodies is therefore a violation of the dignity of families of the deceased who may be emotionally burdened with not ever knowing the fate of their loved ones. Further, these practices 'undermine the aspirations of our constitutional democracy' and do not 'facilitate a society marked by human relations that are caring and compassionate'<sup>387</sup> and in the spirit of Ubuntu<sup>388</sup>.

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<sup>381</sup> Supra (note 366 above).

<sup>382</sup> Supra (note 366 above) s1 of the National Health Act defines 'user' as 'the person receiving treatment in a health establishment, including receiving blood or blood products, or using a health service, and, includes the person's parent or guardian in the case of a minor, or the next-of-kin where a person is incapable of taking decisions'.

<sup>383</sup> Supra (note 366 above) s17.

<sup>384</sup> Cronjé & J Heaton (note 180 above). A dead person can have no rights or obligations.

<sup>385</sup> Supra (note 26 above).

<sup>386</sup> Supra (note 16 above). Regrettably, the TRC was not able to assist many families in locating the whereabouts of their missing loved ones, as their mandate only included missing persons that were shown to be victims of human rights abuses by the Apartheid government.

<sup>387</sup> Supra (note 323 above) Preamble of the Promotion of Equality and the Prevention of Unfair Discrimination Act.

<sup>388</sup> Supra (note 342 above)

The high premature death rate amongst Blacks is an indication that the State has not met its Constitutional obligations in ensuring that their basic human rights are respected, a deprivation of which is a violation of their human dignity and equality<sup>389</sup>. The State must therefore acknowledge that the crisis it faces concerning unclaimed bodies is a consequence of its inability to fulfil the rights of previously disadvantaged people.

Mechanisms to support a missing persons and unclaimed bodies programme can be found in South Africa's human rights legislation. Principles from South Africa's democratic legislation have provisions that can compel municipalities, police services and forensic pathology services to change the manner in which they manage information regarding unclaimed bodies and missing persons so that past inequities can be redressed<sup>390</sup>. These laws promote the protection of post-mortem records, burial records, inquest documents and ante-mortem medical records which include X-rays<sup>391</sup>. They also support the establishment of an electronic information database at municipal, provincial, and district level so that information regarding missing persons and unclaimed bodies can be disseminated and accessed by the relevant authorities to facilitate the classification of post-mortem and ante-mortem information to sustain a human identification programme<sup>392</sup>.

Although the legal principles can be inferred for the creation of legislation within the framework of South African human rights legislation to investigate missing persons and unclaimed bodies, there are no practical guidelines available to achieve this. The Constitution<sup>393</sup> provides that international law must be considered when interpreting the Bill of Rights<sup>394</sup>. Similarly, the Promotion of Equality and Prevention of Unfair Discrimination Act<sup>395</sup> provide that 'customary international law'<sup>396</sup> and 'comparable

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<sup>389</sup> Supra (note 309 above).

<sup>390</sup> Supra (chapter 3.4.2 above).

<sup>391</sup> Supra (notes 357 & 360 above).

<sup>392</sup> Supra (note 375 above).

<sup>393</sup> Act 108 of 1996.

<sup>394</sup> Ibid s39 (1)(b).

<sup>395</sup> Act 4 of 2000.

<sup>396</sup> Ibid s3(2)(b).

foreign law<sup>397</sup> be considered when interpreting the Act<sup>398</sup>. Accordingly, the next chapter reviews international law regarding unclaimed bodies and missing persons.

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<sup>397</sup> Supra (note 323 above) s3(2)(c).

<sup>398</sup> Supra (note 323 above).

## CHAPTER 4 INTERNATIONAL LEGISLATION AND GUIDELINES

### 4.1 Introduction

International instruments and practices that address the management of human remains and missing persons are reflected in different situations, namely, armed conflict<sup>399</sup>, disasters<sup>400</sup>, natural and man-made catastrophes<sup>401</sup>, and aircraft accidents<sup>402</sup>. Although the scope and characteristics of these instruments may vary from the dilemma of unclaimed bodies in South Africa, they are relevant in that these situations are generally associated with significant loss of life and large numbers of missing persons. Of significance are guiding principles and techniques employed by international authorities to identify, store and dispose of the deceased when the rate of death is high.

Many international non-governmental organisations involved in humanitarian work adopt international human rights standards as a practical guide to their missions in other countries. From their experiences, some have developed these standards into operating procedures to provide guidelines on the management of missing and deceased persons, within a human rights framework. The publications and practices of these organisations will be discussed<sup>403</sup>.

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<sup>399</sup> Geneva Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (12 August 1949) 75 UNTS 31; Geneva Convention II for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (12 August 1949) 75 UNTS 85; Geneva Convention III relative to the Treatment of Prisoners of War (12 August 1949) 75 UNTS 135; Geneva Convention IV relative to the Protection of Civilian Persons in Time of War (12 August 1949) 75 UNTS 287; Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflict (Protocol I)(8 June 1977) 1125 UNTS 3; Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II)(8 June 1977) 1125 UNTS 609.

<sup>400</sup> The Standing Committee on Disaster Victim Identification: International Criminal Police Organization *The Disaster Victim Identification Guide* (1997).

<sup>401</sup> FM Deng: United Nations General Assembly and Commission of Human Rights *Guiding Principles on Internal Displacement* (1998) E/CN.4/1998/53/Add.2.

<sup>402</sup> International Civil Aviation Organization *Guidance on Assistance to Aircraft Accident Victims and their Families* (2 October 1998) ICAO Circular 285, Resolution A32-7.

<sup>403</sup> Chapter 4.3.2 below.

Research into regional law show that their Courts have interpreted provisions in regional human rights instruments to compensate families who were not able to find a missing relative<sup>404</sup>. A review of relevant cases is undertaken in this section.

The dilemma of unclaimed bodies and missing persons is a global predicament that is prevalent in both developed and under-developed countries<sup>405</sup>. An analysis of documented foreign human identification programmes is undertaken to ascertain their strengths and weaknesses.

Relevant international humanitarian law is reviewed in the section below.

## **4.2 International humanitarian law**

### **4.2.1 The Geneva Conventions and their Additional Protocols**

The four Geneva Conventions<sup>406</sup> and their two Additional Protocols<sup>407</sup> form part of international humanitarian law and are one of the oldest provisions that offer protection to all persons affected by armed conflict<sup>408</sup>.

Although armed conflict is associated with a large number of deaths, the Conventions and their Additional Protocols place a duty on relevant authorities to manage the deceased in a dignified manner<sup>409</sup>. The bodies of the deceased must be examined so that their identity can be determined<sup>410</sup>, be 'protected from destruction'<sup>411</sup> and 'respectfully disposed of

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<sup>404</sup> Chapter 4.4 below.

<sup>405</sup> C Cattaneo et al 'Unidentified cadavers and human remains in the EU: an unknown issue' (2000) 113(3) *Int. J. Legal Med* 2.

<sup>406</sup> Supra (note 399 above) Geneva Convention I (1949); Geneva Convention II (1949); Geneva Convention III (1949); Geneva Convention IV (1949).

<sup>407</sup> Supra (note 399 above) Additional Protocol I (1977); Additional Protocol II (1977).

<sup>408</sup> JM Henckaerts 'Study on Customary International Humanitarian Law' (2005) 87(857) *International Review of the Red Cross* 187.

<sup>409</sup> Supra (note 399 above) Arts 16 & 17 of the Geneva Convention I (1949); Arts 19 & 20 of the Geneva Convention II (1949); Art 130 of Geneva Convention III (1949); Art 120 of Geneva Convention IV (1949); Art 34 of Additional Protocol I (1977); Art 8 Additional Protocol II (1977).

<sup>410</sup> Supra (note 399 above) Art 17 of Geneva Convention I (1949), and, Arts 19 & 20 of Geneva Convention II (1949); Art 120 of Geneva Convention IV (1949); Arts 33(2)(b) & 33(4) of Additional Protocol I (1977).

<sup>411</sup> Supra (note 399 above) Art 15 of Geneva Convention III (1949); Art 8 of Additional Protocol II (1977).



according to the religious beliefs of the deceased'<sup>412</sup>, in 'individual accurately marked graves'<sup>413</sup>. Authorities that are in possession of bodies of deceased persons 'must prepare and forward death certificates with identification details' with 'documents and articles of sentimental value found on their bodies', to the next-of-kin through a 'central information bureau'<sup>414</sup>. Bodies 'shall not be cremated except for the justification of hygiene and religion, with reasons and circumstances for the cremation stated in detail on the death certificate'<sup>415</sup>. 'Ashes of the cremated remains of the deceased must be stored safely so that it can be handed to the next-of-kin when the opportunity arises'<sup>416</sup>. Should the family of the deceased request the remains of their next-of-kin, 'an exhumation, identification, and the transport of the remains to the deceased's home country, must be facilitated by the relevant authorities'<sup>417</sup>

Any processes that concern the missing and the dead must be 'driven by the right of families to know the fate of their relatives'<sup>418</sup>, where identification information regarding missing and deceased persons must be centrally processed<sup>419</sup>. In situations where family members are separated because of constant relocation due to violence in their areas, authorities must try to re-establish contact with other family members as soon as possible<sup>420</sup>. If people are missing because of 'detention by authorities or hospitalisation', their families must be informed without delay<sup>421</sup>.

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<sup>412</sup> Supra (note 399 above) Art 17 of Geneva Convention I (1949); Art 130 of Geneva Convention III (1949); Art 120 of Geneva Convention IV (1949); Art 34(1) of Additional Protocol I (1977).

<sup>413</sup> Supra (note 399 above) Art 17 of Geneva Convention I (1949); Art 130 of Geneva Convention III (1949); Art 120 of Geneva Convention IV (1949); Art 34(1) of Additional Protocol I (1977).

<sup>414</sup> Supra (note 399 above) Art 16 of the Geneva Convention I (1949); Article 19 of Geneva Convention II (1949); Arts 129 & 136-141 of Geneva Convention III (1949); Art 122 of Geneva Convention IV (1949).

<sup>415</sup> Supra (note 412 above).

<sup>416</sup> Supra (note 412 above).

<sup>417</sup> Supra (note 399 above) Art 34 of Additional Protocol I (1977)

<sup>418</sup> Supra (note 399 above) Arts 32 & 33 of Additional Protocol I (1977).

<sup>419</sup> Supra (note 399 above) Art 16 of Geneva Convention I (1949); Art 19 of Geneva Convention II (1949); Arts 136-141 of Geneva Convention III (1949); Arts 122 of Geneva Convention IV (1949); Art 8 of Additional Protocol II (1977). A central information bureau must be established.

<sup>420</sup> Supra (note 399 above) Arts 25 & 26 of the Geneva Convention IV (1949); Art 74 of Additional Protocol I (1977).

<sup>421</sup> Supra (note 399 above) Arts 136 & 137 of the Geneva Convention (III) (1949), and, Art 122 of the Geneva Convention IV (1949). See also note 380 above, where a similar provision is made in the National Health Act 61 of 2003.

#### **4.2.1.1 Conclusion**

The Conventions and their Additional Protocols demonstrate uncompromising respect for the deceased and their families even through the difficulties of war. Identification of the deceased is essential, even at a later stage when the body can be exhumed so that the next-of-kin can receive the remains. Investigations focused at finding missing family members to keep a family unit together show respect for the dignity family life. Processing of information for both deceased and missing persons must be undertaken at a single central base with task teams employed to collect relevant information that can be useful in identifying the deceased. These provisions are obligatory during armed conflict. Similar provisions can be found in international human rights law that can place a similar duty on certain countries that are not at war. These are discussed below.

### **4.3 International human rights law and practice**

#### **4.3.1 The United Nations**

The United Nations is an international governmental organisation that was established in 1945 with a mission to promote and protect international human rights law and practices<sup>422</sup>. Since adopting the Universal Declaration of Human Rights<sup>423</sup>, the International Covenant on Civil and Political Rights<sup>424</sup> and the International Covenant on Economic, Social and Cultural Rights<sup>425</sup>, the organisation has created several guidelines on various human rights issues, to focus the international community on respecting the rights expressed in these

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<sup>422</sup> Art 1 of the Charter of the United Nations (26 June 1945) TS 993.

<sup>423</sup> The Universal Declaration of Human Rights (1948) GA Res 217A(III) UN Doc A/810, 71. The Declaration was adopted by the General Assembly of the United Nations in 1948. The Declaration is based on the fundamental principle that human rights are based on the 'inherent dignity of all members of the human family' and are the 'foundation of freedom, justice and peace in the world'.

<sup>424</sup> The International Covenant on Civil and Political Rights (16 December 1966) 999 UNTS 171.

<sup>425</sup> The International Covenant on Economic, Social and Cultural Rights (16 December 1966) 993 UNTS 3.

documents. The Covenants<sup>426</sup> form the foundation of regional human rights instruments<sup>427</sup> and are also reflected in the South African Constitution<sup>428</sup>.

The United Nations has developed documents relating to the practice of forensic medicine and its role in human identification. The organisation also published principles to draw international attention to the vulnerability of internally displaced persons, who are at risk of dying in areas where they are not known. These documents are discussed below.

#### **4.3.1.1 The practice of forensic medicine**

The United Nations, through its Commission on Human Rights, composed many documents on forensic medical practice with the aim to standardise working procedures globally<sup>429</sup>. The field of international forensic practice has evolved over the years, from initially only documenting evidence from victims of human rights violations in order to facilitate prosecution of the perpetrators<sup>430</sup>, to the exhumation and positive identification of deceased persons so that their remains can be handed over to their family<sup>431</sup>.

The Minnesota Protocol<sup>432</sup> was adopted by the United Nations as guiding principles for medico-legal investigations<sup>433</sup>. In 1991, principles and protocols were published by the United Nations to provide technical guidance for the conduct of investigations, together

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<sup>426</sup> Supra (notes 424 & 425 above).

<sup>427</sup> The European Convention for the Protection of Human Rights and Fundamental Freedoms (4 November 1950) Europ TS 5, 213 UNTS 221; the American Convention on Human Rights (21 November 1969) OAS TS 36, 1144 UNTS 143; the African Charter on Human and Peoples' Rights (27 June 1981) OAU Doc CAB/LEG/67/3 rev 5, 1520 UNTS 217, 245. These represent the European, Inter-American, and African human rights systems respectively. See chapter 4.4 below for a discussion on regional intergovernmental systems.

<sup>428</sup> Act 108 of 1996. South Africa became party to the Conventions on 10 December 1998, and is therefore obligated by its provisions.

<sup>429</sup> United Nations Commission on Human Rights *Report of the Special Rapporteur on Summary or Arbitrary Executions* (4 December 1986) E/CN.4/1986/21

<sup>430</sup> Ibid par 209.

<sup>431</sup> United Nations Commission on Human Rights and Human Remains *Resolution Human Rights and Forensic Science* (21 January 2002) E/CN.4/2002/67 par 5(k).

<sup>432</sup> The Minnesota Advocates for Human Rights *Protocol for Preventing Arbitrary Killings through Adequate Death Investigation and Autopsy* (1984).

<sup>433</sup> United Nations *Principles on the Effective Prevention & Investigation of Extra-legal, Arbitrary & Summary Executions* (24 May 1989) ECOSOC – E/RES/1989/65.

with protocols for a model autopsy and the disinterment and analysis of skeletal remains<sup>434</sup>. Fundamental to the autopsy examination is the establishment of identification, which includes whole-body radiography, including the frontal sinuses, to assist with identification<sup>435</sup>. In 1992, the United Nations Commission on Human Rights established a United Nations Standing Team of Forensic Experts to support their investigations into human rights violations<sup>436</sup>. In 1995, guidelines for inquiries into allegations of massacres were published<sup>437</sup>, with the aim to produce documented evidence of human rights violations so that the perpetrator can be held accountable.

Further resolutions<sup>438</sup> highlighted the work accomplished in the field of forensic medicine, and encouraged the training of forensic experts, especially in countries that lacked such expertise<sup>439</sup>. In 2000, it was noted that the practice of forensic science included identification procedures for the deceased<sup>440</sup>, and in 2002, the competency of the forensic specialist was described to include the following skills:

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<sup>434</sup> United Nations *Manual on the Effective Prevention & Investigation of Extra-legal, Arbitrary & Summary Executions* (1991) ST/CSDHA/12.

<sup>435</sup> Ibid par A(d)(ii) of Annex IV.

<sup>436</sup> United Nations Commission on Human Rights and Human Remains *Resolution Human Rights and Forensic Science* (28 February 1992) CHR-E/CN.4/RES/1992/24.

<sup>437</sup> United Nations Office of Legal Affairs *Guidelines for the Conduct of United Nations Inquiries into Allegations of Massacres* (1995).

<sup>438</sup> United Nations Commission on Human Rights and Human Remains *Resolution Human Rights and Forensic Science* (24 May 1989) ECOSOC-E/RES/1989/65; *Human Rights in the Administration of Justice* (15 December 1989) HR-A/RES/44/162(1989); *Report of the Secretary-General on Human Rights and Forensic Science Submitted Pursuant to Commission on Human Rights Resolution 1992/24* (5 February 1993) CHR-E/CN.4/1993/20; *Resolution Human Rights and Forensic Science* (5 March 1993) CHR-E/CN.4/RES/1993/33; *Report of the Secretary-General on Human Rights and Forensic Science* (7 February 1994) CHR-E/CN.4/1994/24; *Resolution Human Rights and Forensic Science* (4 March 1994) CHR-E/CN.4/RES/1994/31; *Decision Human Rights and Forensic Science* (22 July 1994) ECOSOC-E/DEC/1994/249; *Report of the Secretary-General on Human Rights and Forensic Science* (7 March 1996) CHR-E/CN.4/1996/41; *Resolution Human Rights and Forensic Science* (19 April 1996) CHR-E/CN.4/RES/1996/31; *Decision Human Rights and Forensic Science* (26 July 1996) ECOSOC-E/DEC/1996/262; *Report of the Secretary-General on Human Rights and Forensic Science* (5 January 1998) CHR-E/CN.4/1998/32; *Resolution Human Rights and Forensic Science* (17 April 1998) CHR-E/CN.4/RES/1998/36; *Report of the Office of the High Commissioner for Human Rights on Human Rights and Forensic Science* (15 December 1999) CHR-E/CN.4/2000/57; *Resolution Human Rights and Forensic Science* (20 April 2000) CHR-E/CN.4/RES/2000/32; *Resolution Human Rights and Forensic Science* (21 January 2002) E/CN.4/2002/67; *Resolution Human Rights and Forensic Science* (25 April 2003) CHR-E/CN.4/RES/2003/33.

<sup>439</sup> Ibid E/CN.4/1993/20; E/CN.4/1994/24; E/CN.4/1996/41, E/CN.4/1998/32.

<sup>440</sup> Preamble of the United Nations Commission on Human Rights and Human Remains *Resolution Human Rights and Forensic Science* (20 April 2000) CHR-E/CN.4/RES/2000/32.

- (a) forensic physician/pathologist/expert in the field of forensic medicine;
- (b) forensic pathology related to deaths caused by explosions, projectiles or firearms;
- (c) anatomical dissection and morphology of decomposed bodies; mass graves;
- (d) identification of corpses in individual cases; coordination in identification centres with large numbers of corpses;
- (e) clinical forensic information relating to sexual crimes, personal injury, state of health, domestic violence, etc;
- (f) assessment of physical injuries and related evidence;
- (g) investigation of the presence of toxins in bodily and other fluids;
- (h) analysis of cause of death from projectiles from firearms and other weapons; imprints and marks on the skin and at the crime scene;
- (i) investigation of traces of biological evidence found at the crime scene or on the body of the victim or suspects in crimes such as homicide or sexual assault;
- (j) forensic information systems for cross-linking cases;
- (k) conducting forensic exhumation and autopsy examinations; exhumation and identification of bodies; investigation of mass graves, and,
- (l) forensic medical training.<sup>441</sup>

The need to define the role of a forensic specialist arose from difficulties experienced by the United Nations during its programme in the former Yugoslavia<sup>442</sup>. The mission involved the excavation of mass graves and the exhumation of human remains, initially focused on investigating war crimes to bring the perpetrators to justice, where the aim of the post-mortem examination was to obtain evidence to support these investigations, and not to establish the identification of individuals<sup>443</sup>. During the first exhumations, forensic experts found strong evidence to show that serious crimes against humanity had been

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<sup>441</sup> United Nations Commission on Human Rights and Human Remains *Resolution Human Rights and Forensic Science* (21 January 2002) E/CN.4/2002/67 par 5.

<sup>442</sup> United Nations investigations were carried out for the purposes of the International Criminal Tribunal for the former Yugoslavia (ICTY) which was established by the United Nations Security Council Resolution 808 (22 February 1993) and Security Council Resolution 827 (25 May 1993).

<sup>443</sup> G Blewitt 'The Role of Forensic Investigations in Genocide Prosecutions Before an International Tribunal' (1997) 37(4) *Medical Science Law* 284.

committed since these mass graves contained bodies with close-range bullet wounds, blindfolds, and ligatures around the wrists<sup>444</sup>. This evidence was adequate to enable the prosecution process of the presumed perpetrators, which was the primary purpose of the ICTY<sup>445</sup>. This meant that further exhumations were not necessary. However, over 30 000 people were still unaccounted for in the Former Yugoslavia alone, and surviving family members demanded to know the location of family members<sup>446</sup>. Consequently, the United Nations High Commissioner for Human Rights stated that ‘families of missing persons needed to receive their missing relatives whether they were dead, in which case they can provide a decent burial, or alive’<sup>447</sup>. The Secretary-General of the United Nations further stressed the importance of identifying deceased persons so that their remains can be returned to their families<sup>448</sup>. Subsequent reports stated that ‘human rights violations had provided more impetus for the need for forensic experts to identify deceased victims’ and proposed that ‘all forensic programmes include personal identification of the dead so that the remains can be returned to their next-of-kin’<sup>449</sup>. This suggests that the role of the forensic specialist is extended to include identification procedures, even if these deaths are caused by natural disease processes.

#### **4.3.1.2 Guiding principles on internally displaced persons**

The plight of internally displaced persons was addressed by the United Nations at the request of its Commission on Human Rights. In 1992, the Secretary-General of the United Nations appointed a representative to study ‘the causes and consequences of internal displacement, the status of the internally displaced in international law, and ways in which

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<sup>444</sup> Ibid 288.

<sup>445</sup> Blewitt (note 443 above) 278.

<sup>446</sup> United Nations Commission on Human Rights *Special process on Missing Persons in the Territory of the Former Yugoslavia* (4 March 1996) E/CN.4/1996/36 par 19.

<sup>447</sup> United Nations Commission on Human Rights *Special process on Missing Persons in the Territory of the Former Yugoslavia* (15 January 1997) E/CN.4/1997/55 par 4.

<sup>448</sup> United Nations Commission on Human Rights and Human Remains *Report of the Secretary-General on Human Rights and Forensic Science* (5 January 1998) E/CN.4/1998/32.

<sup>449</sup> United Nations Commission on Human Rights and Human Remains *Report of the Office of the High Commissioner of Human Rights on Human Rights and Forensic Science* (15 December 1999) CHR-E/CN.4/2000/57.

their protection can be improved<sup>450</sup>. This study revealed that communities become physically displaced because they do not have homes to return to, which also leads to the separation of family members<sup>451</sup>. Internally displaced persons usually lack identification documents and are not able to access schooling or other social benefits<sup>452</sup>.

*The Guiding Principles on Internal Displacement*<sup>453</sup> provides a legal framework for the protection of internally displaced persons, who ‘suffer hardship and deprivation’<sup>454</sup>.

Internally displaced persons are defined as ‘persons who have been forced to leave their places of habitual residence as a result of, or in order to, avoid the effects of armed conflict, situations of generalised violence, violations of human rights or, natural or human made disasters’<sup>455</sup>. This wide definition includes the displacement of people based on Apartheid policies<sup>456</sup>. This suggests that historically disadvantaged South Africans who settle informally in urban areas can be classified as ‘internally displaced persons’.

Internally displaced persons are not protected by international legislation that offers protection to refugees<sup>457</sup> because they are within the borders of their own country, and their only recourse for assistance is with their governments<sup>458</sup>. Internally displaced persons have a ‘right to seek safety in another part of their country’<sup>459</sup>, and must be protected against ‘forcible return to any place where their life, safety, or health would be threatened’<sup>460</sup>. They also have a ‘right to know the fate and whereabouts of their loved ones’<sup>461</sup> where, ‘authorities must endeavour to establish the fate of loved ones that are reported missing’<sup>462</sup>,

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<sup>450</sup> FM Deng *Internally Displaced Persons: Compilation and Analysis of Legal Norms* (5 December 1996) E/CN.4/1996/52/Add. 2, and, *Internally Displaced Persons: Compilation and Analysis of Legal Norms, Part II* (11 February 1998) E/CN.4/1998/53/Add.1.

<sup>451</sup> International Committee of the Red Cross *ICRC Position on Internally Displaced Persons* (2006) 3.

<sup>452</sup> Ibid.

<sup>453</sup> Deng (note 401 above).

<sup>454</sup> Deng (note 401 above) Introductory note to *The Guiding Principles on Internal Displacement*.

<sup>455</sup> Deng (note 401 above) s2 of the Introduction to *The Guiding Principles on Internal Displacement*.

<sup>456</sup> Deng (note 401 above) Principle 6(2)(a).

<sup>457</sup> The United Nations Convention Relating to the Status of Refugees (1951); the United Nations Protocol Relating to the Status of Refugees (1967).

<sup>458</sup> Deng (note 401 above) Principle 25.

<sup>459</sup> Deng (note 401 above) Principle 15(a).

<sup>460</sup> Deng (note 401 above) Principle 15(d).

<sup>461</sup> Deng (note 401 above) Principle 16(1).

<sup>462</sup> Deng (note 401 above) Principle 16(2).

‘collect and identify the deceased, prevent their mutilation, and facilitate the return of the remains to their family, or, dispose of them respectfully’,<sup>463</sup>. Gravesites of internally displaced persons should be ‘protected and respected in all circumstances, and relatives must have access to these gravesites’,<sup>464</sup>. All internally displaced persons also have a right to an ‘adequate standard of living’,<sup>465</sup> including ‘access to food and water’,<sup>466</sup>, ‘basic shelter’,<sup>467</sup>, ‘appropriate clothing’,<sup>468</sup> and ‘essential services’,<sup>469</sup>. Special attention must be given to their health needs including ‘the prevention of contagious diseases such as AIDS’,<sup>470</sup>. Local government authorities must issue personal identity documents to all internally displaced persons so that they can ‘exercise their legal rights’,<sup>471</sup>.

Since the United Nations initially drew international attention to the crisis of internal displacement, many intergovernmental and non-governmental organisations have broadened their scope of activities to address the needs of the internally displaced<sup>472</sup>.

#### **4.3.1.3 Conclusion**

The fundamental principle of forensic medical practice is an inquiry into a death to determine the events that had caused the death, with human identification forming an essential part of the inquiry<sup>473</sup>, so that the remains of the deceased can be handed over to their next-of-kin. Therefore, the premature deaths of unidentified young Blacks in South Africa ought to be subject to an urgent inquiry, where forensic medical examiners and scientists can facilitate identification of these bodies so that they can be handed to their next-of-kin, which is a requirement under international standards. Further, the cause of these deaths can be determined so that the relevant authorities can be held accountable.

<sup>463</sup> Deng (note 401 above) Principle 16(3).

<sup>464</sup> Deng (note 401 above) Principle 16(4).

<sup>465</sup> Deng (note 401 above) Principle 18(1).

<sup>466</sup> Deng (note 401 above) Principle 18(2)(a).

<sup>467</sup> Deng (note 401 above) Principle 18(2)(b).

<sup>468</sup> Deng (note 401 above) Principle 18(2)(c).

<sup>469</sup> Deng (note 401 above) Principle 18(2)(d).

<sup>470</sup> Deng (note 401 above) Principle 19(3).

<sup>471</sup> Deng (note 401 above) Principle 20(2). A fulfilment of the right to recognition as a person before the law.

<sup>472</sup> V Mattar & P White *Consistent and Predictable Responses to IDP's* (2005) 15. The government of Angola incorporated the *Guiding Principles* into its law to guide the return of displaced Angolans after the civil war.

<sup>473</sup> Supra (note 441 above).



Historically disadvantaged South Africans are, in fact, mostly internally displaced persons of South Africa, as they were physically displaced by Apartheid policies and succumb to destitution because they do not have land or a home to return to. According to the *Guiding Principles*, they must be identified at death, their next-of-kin must be found, and their bodies cannot be disposed of by cremation. In fact, they should correctly be referred to as ‘internally displaced persons’ of South Africa instead of being referred to as ‘destitute’, or ‘indigent’.

The humanitarian efforts of international non-governmental organisations are discussed below.

#### **4.3.2 International non-governmental organisations**

##### **4.3.2.1 The International Committee of the Red Cross (ICRC)**

The ICRC is a humanitarian organisation that has extensive experience in providing support to people affected by armed conflict, internal violence and internal displacement, with special focus given to reuniting families that are separated because of these situations<sup>474</sup>.

The large-scale dilemma of missing persons prompted the organisation to convene discussions with relevant international organisations and forensic experts in order to establish recommendations for the management of missing persons and unclaimed bodies<sup>475</sup>. These are discussed below.

##### **4.3.2.1.1 Families of missing persons**

The ICRC recommends that governments regard a missing person as a member of a family unit that includes parents, siblings and other relatives that share a lifestyle, values and

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<sup>474</sup> M Sassòli & ML Tougas ‘The ICRC and the Missing’ (2002) 84(848) *International Review of the Red Cross* 730; International Committee of the Red Cross ‘The ICRC Position on Internally Displaced Persons’ (2006) 3. The ICRC also provides an advisory service to governments based on international humanitarian law.

<sup>475</sup> International Committee of the Red Cross Report *The Missing and their Families* Summary of the Conclusions arising from the Events held prior to the 28<sup>th</sup> International Conference of Governmental and Non-Governmental Experts (19 -21 February 2003) Available at <http://www.icrc.org/web/eng/siteeng0.nsf/iwpList509/FF9B5105DF214B95C1256EC8004B9B0C> [Accessed 2 June 2004].

customs together<sup>476</sup>. A missing person is therefore a member of a family, whose family has no knowledge of where he or she is<sup>477</sup>. Families report a loved one missing because they are concerned about their safety and become distressed when they do not receive any information regarding their whereabouts<sup>478</sup>. According to the ICRC, authorities do not communicate with families because they fail to investigate these cases<sup>479</sup>. The organisation suggests that governments create legislation that consider the lack of investigation by the relevant authorities as a criminal offence for which families be awarded fair compensation<sup>480</sup>.

#### **4.3.2.1.2 Management of human remains**

The ICRC supports the principles promoted under international humanitarian law<sup>481</sup>. The organisation also supports the extended definition of the role of the forensic specialist<sup>482</sup>.

#### **4.3.2.1.3 The role of DNA analysis in forensic human identification**

The ICRC drew attention to the advancement of DNA technology and its role in forensic human identification<sup>483</sup>. DNA technology has changed the science of human identification because of its credibility to ascertain and establish biological relationships through the analysis of human tissue specimens<sup>484</sup>. However, there are technical and legal challenges that create difficult predicaments for this technology when used in the context of missing persons and forensic science<sup>485</sup>.

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<sup>476</sup> International Commission of the Red Cross Final Report and Outcome *The Missing: Human Remains Management* (2002) ICRC/The Missing/10.2002/EN/3 Available at <http://www.icrc.org/web/eng/siteeng0.nsf/iwpList509/6153661F40C8E50C41256CB100441A8F> [Accessed 2 June 2004] 46.

<sup>477</sup> International Commission of the Red Cross *Missing Persons and their Families: Recommendations for Drafting National Legislation* (2003) s1.

<sup>478</sup> Ibid s8; M Blaauw & V Lähtenmäki 'Denial and Silence or Acknowledgement and Disclosure' (2002) 88(848) *International Review of the Red Cross* 769.

<sup>479</sup> Supra (note 477 above) s1 par 2(C).

<sup>480</sup> Supra (note 477 above) s1 par 2(B).

<sup>481</sup> Supra (note 399 above). The Geneva Conventions and their Additional Protocols.

<sup>482</sup> Supra (note 477 above) s6.

<sup>483</sup> Supra (note 476 above) ICRC/The Missing/10.2002/EN/3 123.

<sup>484</sup> International Committee of the Red Cross *Missing People, DNA Analysis and Identification of Human Remains* (2005) 7.

<sup>485</sup> Ibid.

A credible genetic match is dependent on the ‘type, quality, quantity, handling and preservation’ of the biological specimen collected<sup>486</sup>. Another challenge is that post-mortem tissue is often inferior in quality due to the breakdown of DNA material<sup>487</sup>. The sensitivity of DNA analysis requires specimens to be collected, stored and transported in a controlled environment to prevent contamination and degradation of specimens<sup>488</sup>. Forensic laboratories must therefore have highly specialised equipment and skilled scientists<sup>489</sup> in facilities that have received accreditation<sup>490</sup>. These mandatory considerations make DNA technology an expensive option in determining forensic human identification<sup>491</sup>.

In the case of missing persons, an identification programme will require the creation of a DNA database that will compare genetic information of family members that report a loved one missing with genetic information from unclaimed bodies with the probability of finding a match, thereby linking a deceased person to a family member<sup>492</sup>. However, DNA profiles also provide insight into susceptibility to certain diseases and legitimacy of birth<sup>493</sup>. This increases the potential for genetic discrimination by governments, insurers, employers, banks, and many others<sup>494</sup>. A significant challenge includes the length of time for which a relative’s biological samples and DNA information should be retained<sup>495</sup>. If a missing person is found, either alive or dead, samples and DNA profiles should be destroyed immediately<sup>496</sup>. Legislation must therefore include protections for privacy and confidentiality of genetic information<sup>497</sup>. The ICRC recommends that the approach to the identification of human remains be adapted to a country’s available resources and must

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<sup>486</sup> Supra (note 484 above) 14.

<sup>487</sup> Supra (note 484 above) 10,14. It is suggested that post-mortem specimens be collected 48 hours after death where climate temperatures are high.

<sup>488</sup> Supra (note 484 above) 12.

<sup>489</sup> Supra (note 484 above) 14.

<sup>490</sup> Supra (note 484 above) 13.

<sup>491</sup> Supra (note 484 above).

<sup>492</sup> Supra (note 484 above) 15.

<sup>493</sup> Supra (note 484 above) 16.

<sup>494</sup> Supra (note 484 above) 17.

<sup>495</sup> Supra (note 484 above) 18.

<sup>496</sup> Supra (note 484 above).

<sup>497</sup> Supra (note 484 above).

include the collection of ante-mortem information<sup>498</sup>. DNA analysis should not be preferred over other means of identification<sup>499</sup>, and should be reserved for situations where other techniques are inadequate or unrewarding<sup>500</sup>.

#### **4.3.2.1.4 Information management of missing persons and unclaimed bodies**

The ICRC recommends that governments establish and manage a single central database at national level<sup>501</sup>. The aim must be to centralise identifiable information on missing persons and unclaimed deceased persons<sup>502</sup>. Those involved with management of the database must be trained<sup>503</sup>.

#### **4.3.2.2 The International Aviation Organisation (ICAO)**

The ICAO, a specialised agency of the United Nations Economic and Social Council, was established by The Convention on International Civil Aviation<sup>504</sup> and is responsible for managing and controlling international air travel<sup>505</sup>.

In 1998, the ICAO addressed the humanitarian aspects related to families of victims of aircraft accidents by recommending that ‘air-carriers make advance payments without delay based on the immediate economic needs of the victims of aircraft accidents and their families’<sup>506</sup>. It was further resolved that the policy of the ICAO and its contracting States should:

- [E]nsure that the mental, physical and spiritual well-being of victims of civil aviation accidents and their families be considered;
- [R]ecognise the timely notification of family members of the victims;

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<sup>498</sup> Supra (note 476 above) ICRC/The Missing/10.2002/EN/3 23, 121.

<sup>499</sup> Supra (note 477 above) s9 par 3(B).

<sup>500</sup> Supra (note 476 above) ICRC/The Missing/10.2002/EN/3 16.

<sup>501</sup> Supra (note 477 above) s7 par 4(A).

<sup>502</sup> Supra (note 477 above) s7 par 4(A)(a).

<sup>503</sup> Supra (note 477 above) s9 par 2.

<sup>504</sup> International Civil Aviation Organization’s Document 7300/9 (2006) 9 ed., commonly known as The Chicago Convention (1944).

<sup>505</sup> The Convention on International Civil Aviation Document 7300/9 (2006), Arts 43, 44.

<sup>506</sup> International Civil Aviation Organization *Guidance on Assistance to Aircraft Accident Victims and their Families* Document 9730 (2 October 1998) ICAO circular 285.

- [R]ecognise that the air-carrier involved in a civil aviation accident assist families in the immediate aftermath of the accident, and,
- [N]ote that family members of the victims, irrespective of where the accident occurs or the national origin of the victims, express certain fundamental human needs and emotions.<sup>507</sup>

These declarations reflect that the ICAO has extended the scope of their legislation to incorporate the humanitarian aspects associated with the disappearance of a loved one. Also, the consideration of the families need to be kept regularly informed about the progress of investigations by the relevant authorities, show respect for the families right to information about their missing next-of-kin. South Africa is a contracting State to the Convention.

Concerning the inquiry into the deaths and the accident, the State in which the accident occurs must set up procedures in accordance with its relevant legislation<sup>508</sup>. However, the ICAO may recommend procedures to the investigations, in which case, the organisation works with Interpol's disaster victim identification programme<sup>509</sup>, which is discussed below.

#### **4.3.2.3 The International Criminal Police Organisation**

The International Criminal Police Organisation, commonly referred to as 'Interpol', is an international agency that consists of 182 member States whose criminal police authorities coordinate their activities to promote the prevention of crime beyond the borders of their country<sup>510</sup>. In 2004, South African Police Commissioner Jackie Selebi was elected

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<sup>507</sup> Preamble of the International Civil Aviation Organization's *Harmonization of the Regulations and Programmes for dealing with Assistance to Victims of Aviation Accidents and their Families* Document 7300 (2 October 1998) Resolution A32-7.

<sup>508</sup> Supra (note 505 above) Art 26.

<sup>509</sup> ICAO/IMO Joint Working Group on Search and Rescue *Mass Rescue Operations* (25 July 2003) ICAO/IMO JWG/10-WP/4.

<sup>510</sup> International Criminal Police Organization Website *Interpol Guide – What is Interpol?* Available at <http://www.interpol.int/> [Accessed 24 July 2007].

president of Interpol<sup>511</sup>. The organisation also has experience in managing investigations surrounding international disasters<sup>512</sup>, and owing to its extensive experience gained in managing missing persons and unidentified bodies, produced a *Disaster Victim Identification Guide* for its member States on standards and procedures to be followed when dealing with a large number of missing and deceased persons<sup>513</sup>. Interpol recognises that identification also represents the ‘right of human beings not to lose their identity after death’<sup>514</sup>. It also recognises that families of missing persons suffer emotional distress and should therefore be kept informed through a ‘family liaison officer’ in the aftermath of a disaster, which will ensure the facilitation of information between the police and family<sup>515</sup>. The *Guide* has achieved global recognition and prestige, and is distributed and promoted widely by the United Nations<sup>516</sup>.

The aim of the *Guide* is to establish the identity of every deceased person, by ensuring the accurate completion of forms together with the rapid and urgent collection of all ante-mortem information that would facilitate identification in a manner that would stand up to international forensic scrutiny<sup>517</sup>. In order to achieve this, an identification centre comprising of separate identification sections such as photography, fingerprint, personal effects, ante-mortem X-ray images and DNA analysis, must be established<sup>518</sup>. An ‘Identification Board’ is tasked with matching ante-mortem records with post-mortem

<sup>511</sup> South Africa.info reporter ‘Selebi Elected to Head Interpol’ (12 October 2004) Available at <http://www.southafrica.info/> [Accessed 24 July 2007].

<sup>512</sup> International Criminal Police Organization Fact Sheet *Disaster Victim Identification* (2006) COM/FS/2006-03/FS-02. In December 2004, Interpol managed the Thai Tsunami Victim Identification Information Management Centre in Phuket, Thailand, where 3000 victims were positively identified. Available at <http://www.interpol.int/> [Accessed 24 July 2007].

<sup>513</sup> Supra (note 400 above) Foreword of the *Disaster Victim Identification Guide*.

<sup>514</sup> International Criminal Police Organization 65<sup>th</sup> Session of the Interpol General Assembly (1996) Resolution AGN/65/RES/13.

<sup>515</sup> Supra (note 400 above) Appendix E Available at <http://www.interpol.int/Public/DisasterVictim/guide/appendices.asp#top#top> [Accessed 4 August 2007].

<sup>516</sup> International Committee of the Red Cross *The Handling of Human Remains and Information on the Dead in Situations Relating to Armed Conflicts or Internal Violence and Involving Missing Persons* Contribution from the International Committee of the Red Cross at the 16<sup>th</sup> Meeting of the Standing Committee on Disaster Victim Identification held in France (5-7 May 2004); International Civil Aviation Organization/African Civil Aviation Commission *Preparing a Sea Air Rescue Exercise* (2006).

<sup>517</sup> Supra (note 400 above) Introduction of the *Disaster Victim Identification Guide*.

<sup>518</sup> Supra (note 400 above) par 4.5.2.

records, and, issuing of death certificates<sup>519</sup>. The methodology of the various identification methods is described<sup>520</sup>. The Interpol Standing Committee on Disaster Victim Identification has designed victim identifications forms, including ante-mortem and post-mortem report forms, to ensure that comprehensive and relevant information is collected<sup>521</sup>.

#### **4.3.2.4 Conclusion**

The ICRC, ICAO and Interpol all reflect the humanitarian aspirations of the Geneva Conventions and their Additional Protocols<sup>522</sup> in their policies and missions when attending to families of missing persons and unidentified human remains

The ICRC, owing to their extensive experience, maintains that human identification techniques must be used sensibly, so that a country can sustain a human identification programme. Resource intensive DNA identification should only be used when other methods of identification are difficult to achieve. The organisation is also resolute on the extension of the scope of forensic medicine to include the establishment of human identity.

The next section will look at how the regional human rights systems of the Organisation of the American States, the Council of Europe, and the African Union addresses this problem.

### **4.4 Regional inter-governmental organisations**

#### **4.4.1 The Organisation of American States (OAS)**

An individual who believes that his or her protected right established in the American Convention on Human Rights<sup>523</sup> has been violated, can make an appeal to the Inter-American Commission on Human Rights to, once having exhausted domestic recourse<sup>524</sup>. If the Commission accepts a case, a report will be prepared and published on their

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<sup>519</sup> Supra (note 400 above) par 4.5.3.

<sup>520</sup> Supra (note 400 above) Chapter 3.

<sup>521</sup> Supra (note 400 above) par 1.3. The disaster identification forms are available at <http://www.interpol.int/Public/DisasterVictim/default.asp> [Accessed on 4 August 2007].

<sup>522</sup> Supra (note 399 above).

<sup>523</sup> The American Convention on Human Rights (21 November 1969) OAS TS 36, 1144 UNTS 143.

<sup>524</sup> Ibid Arts 44 & 46.

conclusions for presentation to the Inter-American Court of Human Rights<sup>525</sup>. The Court may rule that compensation be awarded to an injured party whose right or freedom under the Convention<sup>526</sup> had been violated<sup>527</sup>. A judgement of the Inter-American Court is final and is therefore not subject to appeal<sup>528</sup>.

In the case of *Trujillo Oroza v State of Bolivia*<sup>529</sup>, 21 year old José Carlos Trujillo Oroza, a university student, disappeared in February 1972 whilst in detention in a Bolivian State Prison<sup>530</sup>. Although the State of Bolivia reached political stability in 1999, the Bolivian authorities failed to locate the remains of José Carlos Trujillo Oroza<sup>531</sup>. The Inter-American Court found that:

- ‘[J]osé Carlos Trujillo Oroza’s next-of-kin are victims of the violation of Articles 5(1), 5(2), 8(1) and 25 of the Convention<sup>532</sup>’,<sup>533</sup>

<sup>525</sup> Supra (note 523 above) Art 50(1).

<sup>526</sup> Supra (note 523 above)

<sup>527</sup> Supra (note 523 above) Art 63(1).

<sup>528</sup> Supra (note 523 above) Art 67.

<sup>529</sup> *Trujillo Oroza v State of Bolivia* Judgement of the Inter-American Court of Human Rights (Series C) No. 92 (2002).

<sup>530</sup> Ibid par 46.

<sup>531</sup> *Trujillo Oroza v State of Bolivia* (note 529 above) par 92.

<sup>532</sup> Supra (note 523 above) The American Convention on Human Rights provides that:

Article 5: Right to Humane Treatment

1. Every person has the right to have his physical, mental, and moral integrity respected.
2. No one shall be subjected to torture or to cruel, inhuman, or degrading punishment or treatment. All persons deprived of their liberty shall be treated with respect for the inherent dignity of the human person.

Article 8: Right to a Fair Trial

1. Every person has the right to a hearing, with due guarantees and within a reasonable time, by a competent, independent, and impartial tribunal, previously established by law, in the substantiation of any accusation of a criminal nature made against him or for the determination of his rights and obligations of a civil, labor, fiscal, or any other nature.

Article 25: Right to Judicial Protection

1. Everyone has the right to simple and prompt recourse, or any other effective recourse, to a competent court or tribunal for protection against acts that violate his fundamental rights recognized by the constitution or laws of the state concerned or by this Convention, even though such violation may have been committed by persons acting in the course of their official duties.
2. The States Parties undertake:
  - a. to ensure that any person claiming such remedy shall have his rights determined by the competent authority provided for by the legal system of the state;
  - b. to develop the possibilities of judicial remedy; and



- ‘[T]he anguish and uncertainty that the disappearance and lack of information about the whereabouts of the victim caused upon his next-of-kin, resulted in non-pecuniary damage’<sup>534</sup>;
- ‘[T]he continued denial of the truth about the fate of a disappeared person is a form of cruel, inhuman and degrading treatment for close family to endure. The right of a victim’s next-of-kin to know what has happened to him, and where the mortal remains are, constitute a measure of reparation and therefore an expectation that the State should satisfy for the next-of-kin and society as a whole’<sup>535</sup>, and,
- ‘[I]t is an act of justice to know the whereabouts of the disappeared person, and it is a form of reparation because it allows the victims to be honoured since the mortal remains of a person merits being treated with respect by their relatives, so that the latter can bury them appropriately’<sup>536</sup>.

In the case of *El Caracazo v Republic of Venezuela*<sup>537</sup>, the Inter-American Court of Human Rights ordered the Government of Venezuela to investigate the disappearance of over 276 people in 1989. Families of the disappeared approached the Court after local authorities had not responded to their appeals to find their relatives, whom they believed were buried at the Caracas Cemetery in Venezuela. The Commission requested that the State of Venezuela:

- ‘[P]erform an exhaustive investigation to find the bodies of the missing persons, investigate their deaths, and, punish those responsible for their deaths’<sup>538</sup>;
- ‘[P]ay fair compensation for patrimonial and non-patrimonial damages for the pain and suffering caused to the families of the victims found’<sup>539</sup>;

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c. to ensure that the competent authorities shall enforce such remedies when granted.

<sup>533</sup> *Trujillo Oroza v State of Bolivia* (note 529 above) par 55.

<sup>534</sup> *Trujillo Oroza v State of Bolivia* (note 529 above) par 88.

<sup>535</sup> *Trujillo Oroza v State of Bolivia* (note 529 above) par 114.

<sup>536</sup> *Trujillo Oroza v State of Bolivia* (note 529 above) par 115.

<sup>537</sup> *El Caracazo v Republic of Venezuela* Judgement of the Inter-American Court of Human Rights. (Series C) No 58 (1999).

<sup>538</sup> *El Caracazo v Republic of Venezuela* (note 537 above) par 478.

<sup>539</sup> *El Caracazo v Republic of Venezuela* (note 537 above) par 477.

- ‘[C]onduct an exhaustive investigation to identify, prosecute and order the disciplinary, administrative and criminal punishment of those responsible for the unlawful burial of corpses’<sup>540</sup>;
- ‘[R]eorganise and modernise the Department of Identification and Foreigners’<sup>541</sup>;
- ‘[P]rovide the Institute of Forensic Medicine with the necessary human and material resources to enable it to operate effectively and promptly’<sup>542</sup>; and,
- ‘[I]ntroduce a comprehensive training programme in human rights for the various security organs of the Venezuelan State’<sup>543</sup>.

In the case of *Godínez Cruz v State of Honduras*<sup>544</sup>, the Court found that:

[I]n certain circumstances, it may be difficult to investigate acts that violate an individual’s right. The duty to investigate, like the duty to prevent, is not breached merely because the investigation does not produce a satisfactory result. Nevertheless, it must be undertaken in a serious manner and not as a mere formality preordained to be ineffective. An investigation must have an objective and be assumed by the State as its own legal duty, and, not as a step taken by private interests that depend upon the initiative of the victim or his family or upon their offer of proof without an effective search for the truth by the government. This is true, regardless of what agent is eventually found responsible for the violation. Where the acts of private parties that violate the Convention are not seriously investigated, those parties are aided in a sense by the government, thereby making the State responsible on an international plane.<sup>545</sup>

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<sup>540</sup> *El Caracazo v Republic of Venezuela* (note 537 above) par 480.

<sup>541</sup> *El Caracazo v Republic of Venezuela* (note 537 above) par 484.

<sup>542</sup> *El Caracazo v Republic of Venezuela* (note 537 above) par 485.

<sup>543</sup> *El Caracazo v Republic of Venezuela* (note 537 above) par 486.

<sup>544</sup> *Godínez Cruz v State of Honduras* Judgement of the Inter-American Court of Human Rights. (Series C) No 5 (1989).

<sup>545</sup> *Ibid* par 188.

A judgement in the *Blake v Republic of Guatemala*<sup>546</sup> case found that:

- ‘[T]he matter raised by the Commission may only be examined in connection with Nicholas Blake's relatives, since the violation of those relatives’ mental and moral integrity is a direct consequence of his forced disappearance. The circumstances of such disappearances generate suffering and anguish, in addition to a sense of insecurity, frustration, and impotence in the face of the public authorities’ failure to investigate.’<sup>547</sup>
- ‘[T]he burning of Nicholas Blake’s mortal remains to destroy all traces that could reveal his whereabouts is an assault on the cultural values prevailing in Guatemalan society, which are handed down from generation to generation, with regard to respecting the dead. The burning of the victim’s remains by members of the civil patrol on the orders of a member of the Guatemalan army increased the suffering of Mr. Nicholas Blake’s relatives.’<sup>548</sup>
- ‘[S]uch suffering, to the detriment of the mental and moral integrity of Nicholas Blake’s relatives, constitutes a violation by the State of Article 5 of the Convention.’<sup>549</sup>

#### **4.4.2 The Council of Europe**

The European regional human rights system was set up in 1949 with the establishment of the Council of Europe, which adopted the Convention for the Protection of Human Rights and Fundamental Freedoms<sup>550</sup>. Any person who believes that his or her rights in the Convention<sup>551</sup> have been violated, can apply for their case to be heard in the European

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<sup>546</sup> *Blake v Republic of Guatemala* Judgement of the Inter-American Court of Human Rights. (Series C) No 48 (1999). See notes 753 & 754 below for the positive identification of Blake through frontal sinus prints.

<sup>547</sup> Ibid par 114.

<sup>548</sup> *Blake v Republic of Guatemala* (note 546 above) par 115.

<sup>549</sup> *Blake v Republic of Guatemala* (note 546 above) par 116. Article 5(1) of the American Convention on Human Rights (18 July 1978) states that ‘Every person has the right to have his physical, mental, and moral integrity respected’.

<sup>550</sup> The European Convention for the Protection of Human Rights and Fundamental Freedoms (4 November 1950) Europ TS 5, 213 UNTS 221.

<sup>551</sup> Ibid.

Court of Human Rights<sup>552</sup> after exhausting domestic recourse<sup>553</sup>. The Court<sup>554</sup> can order member states to compensate injured parties<sup>555</sup>, and has interpreted Article 3 of the Convention<sup>556</sup> to include mental suffering of families who have not received information regarding their missing loved ones who had died in the following cases.

In the case of *Çakici v Republic of Turkey*<sup>557</sup>, the European Court of Human Rights found that the Turkish authorities failed to consult Ahmet Çakici's family about his identity and burial arrangements when his body was found<sup>558</sup>. Thomassen J stated that:

[T]he Turkish government was responsible for leaving the family with uncertainty, doubt and apprehension for more than five and a half years. In doing so, they demonstrated a cruel disregard for family feelings and efforts to find out about the fate of Ahmet Çakici. The government must also be held responsible for the severe mental distress and anguish the family has suffered for a prolonged and continued period of time as a consequence of their acts and negligence.<sup>559</sup>

The Court found this to be a violation of Article 3 of the Convention<sup>560</sup>, and ordered the Turkish government to pay for non-pecuniary damage to Ahmet Çakici's family<sup>561</sup>. The judgement in this case reflects the judgements of the Inter-American Court<sup>562</sup>.

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<sup>552</sup> Supra (note 550 above). The Court was established in terms of Article 19 of the amended version of the Convention in accordance with provisions of Protocol No. 11 (ETS No. 155) which entered into force on 1 November 1998.

<sup>553</sup> Supra (note 550 above) Art 35(1).

<sup>554</sup> The European Court of Human Rights.

<sup>555</sup> Supra (note 550 above) Art 41.

<sup>556</sup> Supra (note 550 above) Art 3 of the Convention refers to the 'Prohibition of torture' and provides that 'no one shall be subjected to torture or to inhuman treatment or degrading or punishment'.

<sup>557</sup> *Çakici v Republic of Turkey* (8 July 1999) The European Court of Human Rights Application No. 23657/94.

<sup>558</sup> Ibid par 134.

<sup>559</sup> *Çakici v Republic of Turkey* (note 557 above).

<sup>560</sup> Supra (note 550 above).

<sup>561</sup> *Çakici v Republic of Turkey* (note 559 above) par 134(9)(ii).

<sup>562</sup> Supra (notes 529, 537, 544 & 546 above).

#### 4.4.3 The African Union (AU)

The African Union succeeded the Organisation of African Unity (OAU) in 2002, and in 2004, the African Court on Human and People's Rights was established<sup>563</sup> to 'strengthen the functions of the African Commission on Human and Peoples' Rights'<sup>564</sup>. South Africa ratified the African Charter on Human and Peoples' Rights<sup>565</sup> on 9 July 1996. The African Commission on Human and Peoples' Rights has not considered cases relating to missing persons and the respectful treatment of the deceased, although it has considered cases relating to socio-economic rights.

The African Charter on Human and Peoples' Rights<sup>566</sup> affords particular attention to 'economic, social, and cultural rights'<sup>567</sup>, where every individual has 'the right to enjoy the best attainable physical and mental health'<sup>568</sup>, and member states 'shall take the necessary measures to protect the health of their people and to ensure that they receive medical attention when they are sick'<sup>569</sup>. Member States also have a 'duty to protect the physical and moral health of the family, which is regarded as the natural element and basis of society'<sup>570</sup>.

In the case of *Social and Economic Rights Action Centre and Another v Federal Republic of Nigeria*<sup>571</sup>, the African Commission on Human and Peoples' Rights stated that 'the right to

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<sup>563</sup> Art 1 of the Protocol to the African Charter on Human and Peoples' Rights on the Establishment of an African Court on Human and Peoples' Rights (9 June 1998) OAU Doc OAU/LEG/EXP/AFCHPR/PROT (III).

<sup>564</sup> Ibid Art 2. The African Commission on Human and Peoples' Rights was established by Art 30 of the African Charter on Human and Peoples' Rights (27 June 1981) OAU Doc CAB/LEG/67/3 rev 5, 1520 UNTS 217, 245, to investigate, promote and ensure the protection of human and peoples' rights of the people of Africa.

<sup>565</sup> African Charter on Human and Peoples' Rights (27 June 1981) OAU Doc CAB/LEG/67/3 rev 5, 1520 UNTS 217, 245.

<sup>566</sup> Ibid.

<sup>567</sup> Supra (note 565 above) Arts 14 to 18.

<sup>568</sup> Supra (note 565 above) Art 16(1).

<sup>569</sup> Supra (note 565 above) Art 16(2).

<sup>570</sup> Supra (note 565 above) Art 18(1).

<sup>571</sup> *Social and Economic Rights Action Centre and Another v Federal Republic of Nigeria* (2001) AHRLR 60 (ACHPR 2001) Communication 155/96 para 1-3, where the government of Nigeria disregarded the harmful effects suffered by a community that was exposed to hazardous waste products from a state oil company

shelter or housing satisfies the combined effect of the right to property<sup>572</sup>, the right to enjoy the best attainable state of mental and physical health<sup>573</sup>, and the protection accorded to the family<sup>574, 575</sup>. It is therefore obvious that governments have a primary duty to provide indigent people with safe shelter, which will ensure them of better physical health.

Although the above case shows that African Member States can be held accountable when they violate the rights in the African Charter<sup>576</sup>, the African regional system received harsh criticism from Amnesty International<sup>577</sup> for its inability to make African leaders accountable for the continuing crisis of gross human rights violations<sup>578</sup>, poverty<sup>579</sup>, refugees<sup>580</sup>, internal displacement<sup>581</sup>, and the HIV/AIDS pandemic<sup>582</sup> in Africa. More recently, African Union chairperson, Alpha Oumar Konare, stated that the organisation suffered a lack of funding in its

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<sup>572</sup> Supra (note 565 above) Art 14 of the African Charter on Human and Peoples' Rights guarantees the right to property.

<sup>573</sup> Supra (note 565 above) Art 16.

<sup>574</sup> Supra (note 565 above) Art 18(1).

<sup>575</sup> *Social and Economic Rights Action Centre and Another v Federal Republic of Nigeria* (note 571 above) par 60.

<sup>576</sup> Supra (note 565 above).

<sup>577</sup> Amnesty International is a non-governmental organisation with a membership of over 2.2 million human rights activists in 150 countries who campaign for governments throughout the world to promote and protect internationally respected human rights of its citizens. Available at <http://web.amnesty.org> [Accessed 2 September 2007].

<sup>578</sup> Amnesty International Report 'Regional Overview of Africa' (2006) par 1 Available at <http://web.amnesty.org/report2006/index-eng> [Accessed 2 September 2007]. It is reported that grave human rights violations including killings, rape and other forms of sexual violence, still occur in Burundi, Chad, Democratic Republic of Congo, Somalia, Togo, Eritrea and Sudan amongst others. Human rights defenders continued to face harassment and unlawful detention whilst governments are not held accountable for their actions.

<sup>579</sup> Ibid. It is reported that 'corrupt governments are indifferent to the suffering of their citizens who lack clean water, adequate shelter, food, education, and essential healthcare services' par 2.

<sup>580</sup> Amnesty International News Service 'African Commission on Human and Peoples Rights: Human Rights Situation in Africa – Ending Impunity in Sudan' (29 April 2005) AI Index: IOR 10/001/2005 Available at <http://web.amnesty.org/library/eng-2af/reports> [Accessed 2 September 2007]. The Organisation of African Convention Governing the Specific Aspects of Refugee Problems in Africa was adopted by the OAU in September 1969 and entered into force in June 1974, OAU Document CAAB/LEG/24.3.

<sup>581</sup> Amnesty International News Service 'African Commission on Human and Peoples Rights: Human Rights Situation in Africa – Ending Impunity in Sudan' (29 April 2005) AI Index: IOR 10/001/2005 Available at <http://web.amnesty.org/library/eng-2af/reports> [Accessed 2 September 2007].

<sup>582</sup> The African Commission on Human and Peoples' Rights *Resolution on HIV/AIDS Pandemic: Threat Against Human Rights and Humanity* (7 May 2001) at its 29<sup>th</sup> Ordinary Session held in Tripoli, Libya. It was noted that nine million people perished from HIV/AIDS in Sub-Saharan Africa, and that the crisis was of emergency proportions and is therefore a human rights issue.

first peacekeeping mission in Sudan, and called for international aid<sup>583</sup>. The recently established African Court, together with the African Commission, on Human and Peoples' Rights face significant challenges to ensure that delinquent leaders are held accountable for violating rights enshrined in the African Charter of Human and Peoples' Rights<sup>584</sup>. South Africa itself must re-examine its commitment to this Charter<sup>585</sup>, where the HIV/AIDS pandemic requires an intervention that does not violate the dignity of African people.

#### **4.4.4 Conclusion**

The judgements in the Inter-American Court show that the whereabouts of a missing person must be urgently investigated by State authorities<sup>586</sup> and that investigation must continue, even if the missing person is believed to be dead<sup>587</sup>, in which case, the location of the remains must be found so that the next-of-kin can honour their loved one with a funeral<sup>588</sup>. Failure of the State to do so denies the family the right to information regarding the fate of their loved one, and consequently subjects the family to 'torture, or, cruel, inhuman and degrading treatment'.

The pain and mental anguish suffered by families who continue to search for a missing relative whose body is disposed of in a manner that obstructs future identification, violates the physical, mental and moral integrity' of the family. Both the Inter-American Court and the European Court on Human Rights Courts have interpreted these provisions to signify mental suffering, thereby extending the definition of 'torture'<sup>589</sup>. Moral harm can also be brought upon a family when their loved one is disposed of in a manner that is not in accordance with the cultural beliefs of the community the deceased belongs to. A duty also

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<sup>583</sup> C Lynch 'African Union Force Low on Money, Supplies and Morale' (13 May 2007) *The Washington Post* Available at <http://www.washingtonpost.com> [Accessed 2 September 2007].

<sup>584</sup> Supra (note 565 above).

<sup>585</sup> Supra (note 565 above).

<sup>586</sup> Supra (notes 534, 545, 547, 559 above).

<sup>587</sup> Supra (notes 535, 538 above).

<sup>588</sup> Supra (note 536 above).

<sup>589</sup> Davies (note 355 above). Davies suggests that this possibility exists with a similar provision in the Constitution of RSA Act 108 of 1996.

exists for States to adequately resource their forensic medicine departments so that they can facilitate the identification of human remains<sup>590</sup>.

Although regional human rights systems have the authority to hold governments of Member States accountable for violating the rights of their citizens, people may be reluctant to use this route as they first have to exhaust legal remedies in their countries before approaching their regional systems. This may be difficult for many Africans, who may face persecution from their 'corrupt' governments<sup>591</sup>.

The human identification programmes of different countries are discussed in the next section.

## **4.5 Foreign law and practices**

### **4.5.1 The United States of America (USA)**

In 1983, the United States of America's Federal Bureau of Investigation (FBI) implemented an 'Unidentified Persons File' system into its National Crime Information Centre (NCIC)<sup>592</sup> to establish a central repository for information concerning missing and unidentified persons<sup>593</sup>. Law enforcement officers across the USA are able to share and cross-reference information from missing person's files against information of unclaimed bodies<sup>594</sup>. In 1985, the implementation of a computer-aided dental identification programme aimed at comparing dental X-rays of missing persons and unidentified persons, was unsuccessful due to the lack of dental records, as dental care is a privilege amongst the poor<sup>595</sup>. In 1997,

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<sup>590</sup> Supra (note 542 above).

<sup>591</sup> Supra (note 579 above).

<sup>592</sup> The National Crime Information Centre (NCIC) is the United States of America's central information database, linked to all states, thereby facilitating the sharing of crime-related information. The NCIC was established in 1967, and is maintained by the Federal Bureau of Investigations. Available at [http://en.wikipedia.org/wiki/National\\_Crime\\_Information\\_Center](http://en.wikipedia.org/wiki/National_Crime_Information_Center) [Accessed 1 October 2006].

<sup>593</sup> RM Weinberg 'Oversight: NYPD's Handling of Missing Person Cases' (2000) par 3.

<sup>594</sup> Ibid. Prior to the establishment of a DNA database, a set of fingerprints from the unidentified body was sent to the FBI's National Fingerprint and Criminal History Database (Integrated Automated Fingerprint Identification System).

<sup>595</sup> National Crime Information Centre Statistics 'Flawed national dental database leaves dead nameless' (26 March 2001) *Seattle Post-Intelligencer Flyer* Available at [http://www.seattlepi.nwsource.com/dayart/pdf/20030226Missing\\_NCIC\\_Dental.pdf](http://www.seattlepi.nwsource.com/dayart/pdf/20030226Missing_NCIC_Dental.pdf) [Accessed 1 October 2006].



the programme was more successful when all body X-rays were scanned and stored in a computer file<sup>596</sup>. In 1999, a Bill<sup>597</sup> to provide American States with six million dollars over a three-year period to update files on unidentified persons, was passed in the House of Representatives, and became known as 'Jennifer's Law'<sup>598</sup>.

In January 2001, the FBI set up 'The Missing Person's DNA Programme' into its NCIC established 'Combined DNA Index System' (CODIS) database<sup>599</sup>, which retains DNA profiles of USA's convicted criminals<sup>600</sup>. The 'Missing Person's Programme' retains and collects DNA profiles of missing persons' genetically linked relatives, and unclaimed bodies, with the aim of finding a match<sup>601</sup>. This programme received adequate government funding to ensure that each state develops legislation, train law enforcement officers on DNA profiling, and improve forensic laboratory facilities and databases<sup>602</sup>. In 2004, a review<sup>603</sup> of the missing person's programme showed that:

- 24 States developed legislation that provided for the collection, analysis and profiling of DNA specimens from unclaimed human remains and relatives of missing persons<sup>604</sup>;
- 28 States did not provide for the retention and destruction of DNA specimens<sup>605</sup>;

<sup>596</sup> L Olsen 'Without a Trace: Records Often Are As Hard To Find As A Body' (24 February 2003) *Seattle Post-Intelligencer* Part 7 Available at <http://www.seattlepi.nwsource.com/missing/> [Accessed 17 October 2006].

<sup>597</sup> The Bill (H.R.1915) R-N.Y.

<sup>598</sup> Weinberg (note 593 above) par 1. The Law was named after Jennifer Wilmer, a Long Island woman who disappeared in California in 1993 (Statement by T Mitchell, manager of governmental affairs with the National Centre for Missing and Exploited Children, June 1999, New York).

<sup>599</sup> Provided for by the United States of America's DNA Identification Act of 1994, which authorises the FBI to operate CODIS, and set national standards for forensic DNA testing.

<sup>600</sup> R Willing 'FBI Adds Uses For Its DNA Databases' (30 May 2006) *USA Today* Available at [http://www.usatoday.com/news/nation/2006-05-30-dna-database\\_x.htm](http://www.usatoday.com/news/nation/2006-05-30-dna-database_x.htm) [Accessed 1 October 2006]. All fifty States collect specimens from all convicted persons for DNA analysis, profiling and retention in the country's national NCIC database.

<sup>601</sup> N Ritter 'Missing Persons and Unidentified Remains: The Nations Silent Mass Disaster' (2007) 256 *National Institute of Justice J* par 3 Available at <http://www.ojp.usdoj.gov/nij/journals/256/index.html> [Accessed 1 October 2007].

<sup>602</sup> California State Auditor Report 406 *Department of Justice's Response to The Missing Persons DNA Programme-Report Number 2004-114* (2007) 85.

<sup>603</sup> Ibid. The Department of Justice requested that individual State's statutory provisions be reviewed by the American Society of Law, Medicine and Ethics. The Bureau of State Audits was requested to examine whether the missing persons programme was cost-effective.

<sup>604</sup> S Axelrad *Survey of State DNA Database Statutes* (2005) 6.

<sup>605</sup> Ibid 5.

- Only eight States prohibit the use of the database for genetic research<sup>606</sup>;
- Only 14 States impose a penalty for tampering with DNA samples or records<sup>607</sup>;
- There was backlog of almost two years for analysing DNA specimens from unidentified human remains<sup>608</sup>, and,
- Medical examiners were not collecting biological specimens of unidentified remains for DNA testing<sup>609</sup>.

Following these findings, the National Institute of Justice<sup>610</sup> published a guide to encourage States to develop uniform legislation<sup>611</sup>, which recommends that legislation provide that unclaimed bodies may not be disposed of prior to a DNA test being done<sup>612</sup>. Although the missing persons programme does not seem to be cost-effective, the Department of Justice will continue funding the programme until 2010, when it will be re-examined<sup>613</sup>.

It was also found that although the NCIC contains more than 100 000 missing person's files, the 'Integrated Automated Fingerprint Identification System' database only contained 47 sets of fingerprints<sup>614</sup>. This indicates that simple human identification techniques may be neglected whilst all resources are focused towards implementing the resource-intensive DNA identification programme. Further, CODIS only reflects 15 per cent of DNA profiles of unidentified human remains', as the process is time-consuming<sup>615</sup>. Mandatory DNA testing<sup>616</sup> for all unclaimed human remains will further compound this process, making

<sup>606</sup> Axelrad (note 604 above) 7.

<sup>607</sup> Axelrad (note 604 above).

<sup>608</sup> Supra (note 602 above) 85. The number of specimens collected for DNA testing increased because legislation required that all convicted offenders be tested.

<sup>609</sup> T MacLellan *Improving Public Safety by Expanding the Use of Forensic DNA* (2007) 7.

<sup>610</sup> The National Institute of Justice is a Research, Development and Evaluation Agency of the United States of America's Department of Justice Available at <http://www.ojp.usdoj.gov/nij/welcome.html> [Accessed 1 October 2007].

<sup>611</sup> The National Institute of Justice *Identifying the Missing: Model State Legislation* (2005) Available at <http://www.ncjrs.gov/pdffiles1/nij/210740v2.pdf> [Accessed 2 October 2007]

<sup>612</sup> J Silverman 'Bills Would Require DNA analysis of Remains, Missing Person' (6 October 2007) Available at <http://www.oregonlive.com/newsflash/regional/index.ssf?/base/news-19/1181500165251020.xml&storylist=orlocal&thispage=1> [Accessed 6 October 2007].

<sup>613</sup> Supra (note 602 above) 87. The Assembly Bill 940 (Chapter 471, Statutes of 2005) was approved on 4 October 2005. The Bill extends funds supporting the missing persons programme until 1 January 2010.

<sup>614</sup> Supra (note 602 above).

<sup>615</sup> Supra (note 602 above).

<sup>616</sup> Silverman (note 612 above).

identification a very expensive project, especially when it will be compulsory where other simpler techniques in human identification can easily verify identification. Although successful DNA matching achieved positive identification<sup>617</sup>, cases have been concluded by simple identification techniques<sup>618</sup>. The success of the missing persons programme will also be dependent on the confidence of the general public, where legislation must reflect security and privacy of genetic data when DNA testing becomes mandatory for unclaimed bodies.<sup>619</sup> Whilst most American States are gradually progressing towards creating a missing persons and unidentified deceased persons programme, the States of California and Texas have already established these, which is be discussed below<sup>620</sup>.

#### 4.5.1.1 The State of California

The State of California has a 'Missing Persons and Unidentified Persons Unit' within its Department of Justice, and has created legislation<sup>621</sup> to facilitate prompt investigations of missing persons, and the identification of unclaimed bodies<sup>622</sup>. Trained<sup>623</sup> law enforcement officers must prioritise and act immediately when a person is reported missing<sup>624</sup>. The centre classifies information relating to the missing person into categories<sup>625</sup>, namely,

<sup>617</sup> V Tweddell 'Sister Seeks Closure in Man's Mysterious Death' (9 February 2007) Available at <http://www.state-journal.com/news/article/2488512> [Accessed 2 October 2007], where a woman's DNA in the CODIS database matched the DNA of the unidentified remains of her brother who went missing 20 years ago.

<sup>618</sup> L Stovall 'Missing US Airman's Remains Found 64 Years Later' (6 September 2007) Available at <http://www.thebostonchannel.com/news/14055718/detail.html> [Accessed 2 October 2007], where a USA World War II airman, who went missing on 21 December 1943, was identified by clothing and other items. A very elaborate and expensive DNA test technique (mitochondrial DNA testing), which confirmed identification, could have been omitted.

<sup>619</sup> Axelrad (note 602 above) 9.

<sup>620</sup> MacLellan (note 609 above) 6.

<sup>621</sup> The California Penal Code (1 July 1989), ss 14200 – 14213 of Available at <http://leginfo.ca.gov/cgi-bin/displaycode?section=pen&group=14001-15000&file=14200-14213>. [Accessed 21 January 2006].

<sup>622</sup> Ibid s14200 provides for the establishment of the 'Violent Crime Information Centre', and section 14201 provides that the centre maintain an active online electronic system available to all law enforcement officers.

<sup>623</sup> Supra (note 621 above) s14204 provides that staff must be trained to ensure the efficient management of services provided by the unit.

<sup>624</sup> Supra (note 621 above) s14205(a) that any report, including a telephonic report, must be accepted. s14210(a) provides that any law enforcement officer has a duty to immediately assist any person attempting to report a person missing.

<sup>625</sup> Supra (note 621 above) s14201. This section provides for an unrestricted and unlimited number of categories to be established.

‘physical identification’<sup>626</sup>, ‘dental and skeletal X-rays’<sup>627</sup>, and, ‘missing children clearinghouse’<sup>628</sup>, before being compared to information regarding unclaimed bodies<sup>629</sup>. Other provisions include steps to be taken by law enforcement officers in terms of elapsed time from the hour of receipt of a missing person report, and, the distribution of posters, and offers of rewards<sup>630</sup>.

Review of the ‘Missing Persons DNA Database’ will be done in 2010 as part of a national assessment of DNA databases to determine its cost-effectiveness<sup>631</sup>. This assessment will offer valuable information to the rest of the world, as it can be compared to California’s established human identification programme that uses conventional methods of identification backed by legislation, credible processes of investigation, and documentation.

#### **4.5.1.2. The State of Texas**

The University of North Texas Centre for Human Identification, situated in a forensic science laboratory, established a DNA database for missing and unidentified persons<sup>632</sup>. Forensic scientists utilise sophisticated DNA technology to perform mitochondrial DNA tests<sup>633</sup> on unidentified human remains<sup>634</sup>. The university has an Advisory Committee<sup>635</sup> that is charged with developing standards and guidelines for the collection of biological samples<sup>636</sup>. DNA analysis can only be performed for the sole purpose of identifying

<sup>626</sup> Supra (note 621 above) s14203(b).

<sup>627</sup> Supra (note 621 above) s14206. Medical facilities must release medical X-rays of the missing person to law enforcement officers within ten days of the request. This implies that medical facilities cannot destroy medical X-rays.

<sup>628</sup> Supra (note 621 above) s14203.

<sup>629</sup> Supra (note 621 above) s14202(b)(1).

<sup>630</sup> Supra (note 621 above) ss 14208 - 14209.

<sup>631</sup> Supra (note 602 above).

<sup>632</sup> An Act Relating to the Establishment of Missing or Unidentified Persons at the University of North Texas Health Science Centre (1 September 2001), s105.112.

<sup>633</sup> WS Klug & MR Cummings *Essentials of Genetics* 3 ed (1999) 149. Mitochondrial DNA testing analyses the mitochondria of the human cell that carries maternal genetic information, whereas traditional DNA testing involves the analysis of the nucleus of a cell that carries genetic information from both parents. Mitochondrial DNA testing requires sophisticated equipment and is therefore very expensive. Also, the reference sample must be from a person of the same maternal line.

<sup>634</sup> K Jolkowski ‘DNA Testing Helps Identify Victims, Missing Persons’ (6 June 2007) Available at [http://www.amw.com/features/feature\\_story\\_detail.cfm?id=1906](http://www.amw.com/features/feature_story_detail.cfm?id=1906) [Accessed 2 October 2007].

<sup>635</sup> Supra (note 632 above) s105.126(a).

<sup>636</sup> Supra (note 632 above) s105.115.

missing and unidentified deceased persons<sup>637</sup>, and all information and samples must be destroyed when positive identification is achieved<sup>638</sup>.

#### **4.5.1.3. Anatomical donations**

Although the USA has embarked on a resource intensive missing persons programme, there are established institutions that have relied on donation of unclaimed bodies from medical examiners for experimentation<sup>639</sup>. The University of Tennessee's Anthropological Research Facility is an outdoor laboratory that examines the rate of decomposition of human remains for the purposes of estimating the time of death<sup>640</sup>. The university has been accused of violating the rights of unclaimed deceased bodies for scientific purposes without receiving prior consent to do so<sup>641</sup>. Researchers at the institution argue that 'the domain of autonomous choice extends to one's own corpse only if expressed wishes are made prior to one's death', and that 'in the absence of expressed intent toward final disposition, it is acceptable for the institution to receive donations from medical examiners for the benefit of research conducted'<sup>642</sup>.

These experiments require that bodies be left to decay, which may violate the moral integrity of the family of the deceased. In light of the Inter-American Court judgements<sup>643</sup>, it is doubtful that these researchers would be successful in their arguments should the family of the deceased claim that their rights in the American Convention<sup>644</sup>, had been violated. Further, researchers cannot presume that the deceased did not express the manner in which he or she would prefer to be disposed of after death, as these wishes can only be verified if the deceased is identified and his or her next-of-kin found.

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<sup>637</sup> Supra (note 632 above) s105.112(b).

<sup>638</sup> Supra (note 632 above) s105.121.

<sup>639</sup> AM Christensen 'Moral considerations in body donations for scientific research: a unique look at the University of Tennessee's Anthropological Research Facility' (2006) 20(3) *Bioethics* 136.

<sup>640</sup> R Kelley 'Body Farms' (11 June 2007) *Newsweek Science & Technology* Available at <http://www.msnbc.msn.com/id/12318129/site/newsweek/?bclid=959016282> [Accessed on 14 July 2007]. This research facility, commonly known as the 'body farm', studies the rate of decomposition of human bodies that are exposed to different weather conditions and parasites.

<sup>641</sup> Christensen (note 639 above).

<sup>642</sup> Ibid.

<sup>643</sup> Chapter 4.4.1 above.

<sup>644</sup> Supra (note 523 above) Art 5 of the American Convention.

#### 4.5.2 Canada

Each year, the Canadian Police Information Centre reports approximately 4800 missing persons remaining unaccounted for<sup>645</sup>. In addition, approximately 30 unclaimed human remains are found yearly<sup>646</sup>. Medical examiners record fingerprints and document the dental profile whenever possible, which are kept in file and examined when police believe that a missing person report may be linked to a set of human remains<sup>647</sup>. DNA tests are only done to confirm identity in cases where a possible match between a missing person and unclaimed human remains exist, and when other means of identification are not possible<sup>648</sup>.

Canada has a 'National DNA Databank' that retains DNA profiles, which are examined by law enforcement officers to find possible links to DNA samples found at scenes of crime<sup>649</sup>. Canada's Federal, Provincial, and Territorial Ministers Responsible for Justice contemplated on establishing a DNA database to alleviate the dilemma of missing persons and unclaimed bodies, and conceded that such a database would require a legal framework protecting privacy, and acknowledging the interests of law enforcement officers, forensic pathologists, and families of missing persons<sup>650</sup>. The Ministers requested that a consultation study be conducted among the Canadian general public for an opinion on the feasibility of such a databank<sup>651</sup>.

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<sup>645</sup> Federal, Provincial and Territorial Working Group 'DNA Missing Persons Index: A Public Consultation Paper' (2005) par 3 Available at [http://www.psepc-sppcc.gc.ca/publications/Policing/mpi/mpi\\_consultationpaper\\_e.doc](http://www.psepc-sppcc.gc.ca/publications/Policing/mpi/mpi_consultationpaper_e.doc) [Accessed 10 February 2006].

<sup>646</sup> Ibid par 4.

<sup>647</sup> Supra (note 645 above) par 6.

<sup>648</sup> Supra (note 645 above).

<sup>649</sup> Provided for by the Canada's DNA Identification Act of 1998.

<sup>650</sup> Supra (note 645 above) par 1.

<sup>651</sup> Supra (note 645 above).

### 4.5.3 The United Kingdom

In 1994, the United Kingdom established the Police National Missing Persons Bureau based on a Council of Europe recommendation<sup>652</sup>. The agency has a ‘specialist intelligence unit’ that maintains personal information, dental records, and photographs of missing persons and unidentified deceased persons<sup>653</sup>. Liaising closely with Interpol<sup>654</sup>, the bureau is also able to maintain profiles of missing persons from other countries<sup>655</sup>. Local police, who are responsible for investigating reports of missing persons and unclaimed bodies forward information electronically to a national bureau, whose primary function is to cross-reference information to find a match<sup>656</sup>. Between 2002 and 2005, the bureau has solved many cases, with approximately only 65 cases per year remaining unsolved<sup>657</sup>.

### 4.5.4 The Former Yugoslavia

Many international communities, through the United Nations, assisted with the recovery and identification of the remains of victims of the conflict in the Former Yugoslavia<sup>658</sup>. The frequency of mass graves made the identification process very challenging, as human remains were co-mingled<sup>659</sup>. The circumstances called for innovative methods to establish personal identity<sup>660</sup>, and many lessons were learned during work carried out in the Former Yugoslavia<sup>661</sup>.

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<sup>652</sup> Council of Europe *Search for Missing Persons* (20 April 1979) Recommendation No. R(79)6. In view of the global dilemma of missing persons, it was recommended that all European Member States establish national offices in order to exchange information regarding the search for missing persons, at both national and international levels.

<sup>653</sup> The United Kingdom National Missing Persons Bureau Available at <http://www.missingpersons.police.uk/about.htm> [Accessed 23 September 2007].

<sup>654</sup> Supra (ch 4.3.2.3 above).

<sup>655</sup> Supra (note 653 above) Available at [http://www.missingpersons.police.uk/public\\_information.htm](http://www.missingpersons.police.uk/public_information.htm) [Accessed 23 September 2007].

<sup>656</sup> Supra (note 653 above).

<sup>657</sup> Supra (note 653 above) Available at [http://www.missingpersons.police.uk/case\\_studies.htm](http://www.missingpersons.police.uk/case_studies.htm) [Accessed 23 September 2007].

<sup>658</sup> United Nations Commission on Human Rights and Human Remains *Report of the office of the High Commissioner of Human Rights on Human Rights and Forensic Science* (21 January 2002) CHR-E/CN.4/2002/67 par 4. Also see note 442 above.

<sup>659</sup> M Skinner et al ‘Guidelines for International Forensic Bio-archaeology Monitors of Mass Grave Exhumations’ (2003) 134 *Forensic Science International* 81, 86. The process of identification involved excavation, cleaning, and assembling of bones into skeletons.

<sup>660</sup> Ibid 82.

<sup>661</sup> The writer was part of a forensic expert team involved in human identification in the Former Yugoslavia.

The International Commission on Missing Persons (ICMP) established a DNA database for relatives of missing persons and unclaimed bodies<sup>662</sup>. However in 2003, many relatives were still waiting for bone samples and reference blood samples to be processed so that genetic profiles can be matched<sup>663</sup>. Further, when the international community completed their mission, the local forensic team did not have the resources to continue with identification by DNA analysis<sup>664</sup>. Subsequently, the ICRC recommended that DNA testing only be undertaken when financial and technical resources are sustainable, and, when identification is difficult to establish by traditional methods<sup>665</sup>. Furthermore, 70 per cent of the bodies exhumed in Kosovo in 1999 were identified by clothing, personal effects<sup>666</sup> and radiology<sup>667</sup>.

The experience in the Former Yugoslavia shows that human identification requires the application of a variety of techniques, and is dependent on the condition of human remains, with no single method having precedence over the other.

#### 4.5.5 Africa

While most countries are attempting to solve the dilemma of missing persons, basic human identification protocols and procedures are meagre or completely lacking in countries in Africa<sup>668</sup>.

In Kenya, the Department of Medico-legal Services is ‘under funded, ill equipped, and seriously under staffed’, which makes human identification beyond the capabilities of the

<sup>662</sup> E Huffine et al ‘Mass identification of persons missing from the break-up of the former Yugoslavia: structure, function, and role of the International Commission on Missing Persons’ (2001) 3(42) *Croatian Medical Journal* 271, 275.

<sup>663</sup> D Alempijevic ‘Identification of Human Remains: What We Ought To Learn From Former Yugoslavia’ Presentation at the International Committee of the Red Cross Workshop on Human Remains in Geneva (23–24 May 2002).

<sup>664</sup> Ibid.

<sup>665</sup> Supra (ch 498 above).

<sup>666</sup> D Komar ‘Lessons from Srebrenica: The Contributions and Limitations of Physical Anthropology in Identifying Victims of War Crimes’ (2003) 48(4) *J of Forensic Science* 713.

<sup>667</sup> J Ranio ‘Radiology in Forensic Expert Team Operations’ (2001) 116(2) 171.

<sup>668</sup> AK Olumbe & AK Yakub ‘Management, exhumation and identification of human remains: A viewpoint of the developing world’ (2002) 84(848) *International Review of the Red Cross* 893, 896.



basic forensic autopsy<sup>669</sup>. Highly specialised technology such as DNA analysis will have to be ruled out in most countries in Africa<sup>670</sup>. The main mortuary in Nairobi manages approximately 350 unclaimed bodies per year<sup>671</sup>.

In Rwanda, DNA matching was slow to produce results, as many relatives were not available for testing as they had fled the country<sup>672</sup>.

The City of Gaborone Council of Botswana is overwhelmed with the increasing numbers of unclaimed Zimbabwean bodies and the lack of burial space to bury these bodies<sup>673</sup>. The Council will not consider cremation, as this practice is not in accordance with African culture<sup>674</sup>.

#### **4.5.6 Spain**

Spain was one of the first countries to initiate a national DNA database programme referred to as the ‘Spanish Phoenix Programme’, to match relatives of missing person’s genetic information with specimens taken from unidentified human remains<sup>675</sup>. The Spanish Phoenix Programme was started in 1999; however, by 2003, only a few positive matches were made<sup>676</sup>.

#### **4.5.7 Argentina**

In Argentina, where 10 000 people disappeared between the years 1976 and 1983, identification by DNA typing techniques was not successful<sup>677</sup>. In under-developed countries, there are few or no forensic laboratories to process the large number of

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<sup>669</sup> Ibid 899.

<sup>670</sup> Olumbe & Yakub (note 668 above) 896.

<sup>671</sup> Olumbe & Yakub (note 668 above) 899.

<sup>672</sup> Supra (note 476 above) ICRC/The Missing/10.2002/EN/3, 49.

<sup>673</sup> Botswana Press Agency ‘Pauper Costs Worrisome’ (15 January 2007) Available at <http://www.gov.bw/cgi-bih/news.cgi> [Accessed 3 September 2007].

<sup>674</sup> Ibid.

<sup>675</sup> J Lorente et al ‘Identification of Missing Persons: The Spanish Phoenix Program’ (2001) 42(3) *Croatian Medical* 267.

<sup>676</sup> Supra (note 476 above) ICRC/The Missing/10.2002/EN/3, 51.

<sup>677</sup> D Corach et al ‘Additional approaches to DNA typing of skeletal remains: The search for “missing” persons killed during the last dictatorship in Argentina’ 18 *Electrophoresis* 1608.

specimens<sup>678</sup>. Further, dental records are non-existent in indigent populations as dental care is not regarded as primary health care, and is therefore unaffordable in poor communities<sup>679</sup>.

#### **4.5.8 Conclusion**

The USA and the UK are financially capable of setting up comprehensive human identification programmes; the USA investing heavily in the profiling of DNA and the UK more on conventional methodology. Their state of development in these programmes can be used as a benchmark for South Africa, by closely observing their progress so as to benefit from their experiences.

A DNA profiling programme for unclaimed bodies and missing persons is resource-intensive and can present with challenges. Although such a system is in place in the USA, backed by extensive government funding, it is not proving to be effective. Its single DNA database, which also contains DNA profiles of the countries' criminals, is available to law enforcement officers, which has the potential to undermine the privacy of genetic information<sup>680</sup>. This may also discourage relatives from adding their profile to the databank, which in turn, will weaken the identification programme. Mandatory DNA testing will also overwhelm forensic laboratories that not only test human remains, but also relatives that come forward to claim a body, which will further increase the lengthy waiting period before a result is obtained. This process may frustrate relatives, especially if identification of their next-of-kin could have been facilitated by simpler techniques. A DNA identification programme for missing and unidentified persons should not commence until legislation relating to the collection and storage of DNA profiles, is created to guarantee privacy of genetic information. Nonetheless, DNA testing is a credible tool for matching human identity, and its use should be reserved for those cases where identification cannot be determined by another cost-effective technique.

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<sup>678</sup> Argentine Forensic Anthropology Team 2007 *Mini Annual Report* (2007) 12.

<sup>679</sup> Supra (note 476 above) ICRC/The Missing/10.2002/EN/3, 45.

<sup>680</sup> Supra (note 494 above).

The State of California's legislation regarding missing persons can be used as a model document to draft legislation for missing persons in South Africa, where the processes for investigation, and the collection and release of ante-mortem records, are specified<sup>681</sup>. The legislation supports California's central database that classifies a wide range of ante-mortem information. However, this programme may be ineffective if the other States in America each follow separate legislation and systems. A similar programme in the UK is proving to be successful<sup>682</sup>.

In South Africa, identification protocols will have to be cost-effective as forensic laboratories are few, DNA testing is expensive and time-consuming, the waiting list for DNA testing relating to criminal cases are long, and the number of unclaimed bodies is high. Routine DNA testing for human identification, even on a limited basis, may not be available for some time. If this is so, another credible, cost-effective identification technique should be introduced as a routine procedure of the human identification protocol. The general protocol currently used in forensic medicine includes the collection of photographs, fingerprints, any article on the deceased that may refer to identity, and a collection of DNA specimen with the hope that this may be processed. DNA sampling need not be done if simpler methods ensure positive identification, thereby reducing the load of the forensic laboratories. In this dissertation, a proposal is made that post-mortem X-rays of the head be taken routinely to complement the human identification protocol. These can be accompanied by any other post-mortem X-rays that could be relevant and useful for identification.

The forensic community must accept that DNA technology is a scarce resource for routine use. A continued expectation that this technology will be available simply disregards other cost-effective methods that are scientifically valid and credible. Implementation of an additional scientific technique into a human identification protocol will also release the overwhelmed national forensic laboratory of some of its burden by minimizing the number

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<sup>681</sup> Supra (note 621 above).

<sup>682</sup> Supra (note 657 above).

of requests for DNA analysis for unidentified deceased persons, thereby concentrating its efforts on criminal cases.

Having established the need for well-established, scientifically sound, and cost-effective techniques for identification, in the next chapter the writer presents the conceptual scientific framework for the use of frontal sinus identification as an additional technique to complement the human identification protocol.

## CHAPTER 5    FRONTAL SINUS IDENTIFICATION

### 5.1      Introduction

This chapter presents the technique of the comparison of the frontal sinus, as an enduring and consistent characteristic of the skull and seen in every standard skull X-ray taken, between X-rays taken in life and those taken after death, as a credible, cost-effective and proven method of personal identification,.

### 5.2      Radiology and human identification

Radiology is a branch of medicine that relates to the study of images<sup>683</sup> of the internal structures of the human body<sup>684</sup>. Its application in the field of forensic medicine was shown to be invaluable<sup>685</sup> and is used to complement the forensic autopsy examination<sup>686</sup>. Before the introduction of DNA identification technology, forensic pathologists and anatomists had relied upon radiology to verify identification of visually unrecognisable human remains<sup>687</sup>. Even today, in situations of mass disasters, the use of radiology is preferred over DNA technology to confirm identity where possible, to facilitate the quick release of bodies<sup>688</sup>.

#### 5.2.1    Principle of radiological identification of human remains

Radiological identification requires the study and comparison of ante-mortem and post-mortem images<sup>689</sup>. It involves the contrast of the outline and fine detail of anatomical

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<sup>683</sup> The word 'image' refers to radiographs that are commonly referred to as 'X-rays'.

<sup>684</sup> BG Brogdon *Forensic Radiology* (1998) 4.

<sup>685</sup> TA Morgan & MC Harris 'The Use of X-rays as an Aid to the Medico-legal Investigation' (1953) 1 *J of Forensic Medicine* 28; G Schmidt & D Kallieris 'Use of Radiographs in the Forensic Autopsy' (1982) 19 *International Forensic Science* 263.

<sup>686</sup> Brogdon (note 684 above) 35.

<sup>687</sup> WM Krogman & NY Iscan *The Human Skeleton in Forensic Medicine* (1986) 459; AC Singleton 'The Roentgenological Identification of Victims of the 'Noronic' Disaster'(1951) 66 *American J Roentgenology, Radium Therapy, Nuclear Medicine* 375.

<sup>688</sup> Brogdon (note 684 above) 199; T Kahana et al 'Radiographic Identification of Fragmentary Human Remains from a Mass Disaster' (1997) 18(1) *American J Forensic Med Pathology* 40; PJ Nye et al 'The Role of Radiology in the Oklahoma City Bombing' (1996) 200(2) *Radiology* 541. Mass disasters present with specific problems such as lack of storage space for bodies and the dilemma of decomposing bodies in countries that experience hot weather conditions.

<sup>689</sup> KT Evans & B Knight *Forensic Radiology* (1981) 4. Ante-mortem X-rays are taken during the living years of the individual whilst post-mortem X-rays are taken during the autopsy examination.

structures between both images<sup>690</sup>. Positive identification is achieved when the anatomical detail of the ante-mortem image and the post-mortem image show correspondence and exactness<sup>691</sup>. Past medical conditions<sup>692</sup>, surgery<sup>693</sup>, dental restorations and healed fractures add to this uniqueness and individuality of a person by leaving their permanent ‘scars’<sup>694</sup> on bone, which is visible on an X-ray image<sup>695</sup>. This technique was successfully used on many occasions<sup>696</sup>.

### 5.2.2 A limitation to radiological identification

Radiological identification is dependent on the availability of ante-mortem X-rays to compare with<sup>697</sup>. Currently, public hospitals destroy X-rays every five years due to a lack of storage space<sup>698</sup>, which itself indicates the large number of radiological examinations being performed at public institutions, and the potential of finding ante-mortem X-rays if looked for, and if these are not destroyed. Forensic medical experts concur that ante-mortem X-rays form an essential part of the forensic human identification procedure and should therefore be protected from destruction<sup>699</sup>.

### 5.2.3 The X-ray image

An X-ray is referred to as a ‘negative’ image because it displays the dense and solid parts of the human body such as bone and teeth as transparent areas on an X-ray film or, as white

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<sup>690</sup> Ibid.

<sup>691</sup> Evans & Knight (note 689 above).

<sup>692</sup> D Rougé et al ‘Radiographic Identification of Human Remains through Deformities and Anomalies of Post-cranial Bones: a Report of Two Cases’ (1993) 38(4) *J. Forensic Science* 997

<sup>693</sup> D Rougé et al ‘Identification of the Individuals Starting from the Osseous Remains: Interest of the Surgical Traces’ (1994) 37(7) *Newspaper of Forensic Medicine Medical Right* 571, 574.

<sup>694</sup> Writer’s emphasis.

<sup>695</sup> Brogdon (note 684 above) 160; W Martel et al ‘The Accuracy of Radiologic Identification of Humans Using Skeletal Landmarks: A Contribution to Forensic Pathology’ (1977) 124 *Radiology* 681.

<sup>696</sup> T. Healey ‘Identification from Radiographs’ (1983) 34(5) *Clinical Radiology* 589; NG Jablonski & SF Shum ‘Identification of Unknown Human Remains by Comparison of Ante-mortem and Post-mortem Radiographs’ (1989) 42 *Forensic Science International* 221; M Angyal & K Derczy ‘Personal Identification on the Basis of Ante-mortem and Post-mortem Radiographs’ (1998) 43(5) *J Forensic Science* 1089.

<sup>697</sup> Evans & Knight (note 689 above) 84.

<sup>698</sup> Supra (note 51 above).

<sup>699</sup> JF Edland ‘Some General Considerations on the Use of Diagnostic Imaging in Forensic Medicine’ in AE James (ed) *Legal Medicine with Special Reference to Diagnostic Imaging* (1980) 240.

areas on photographic paper<sup>700</sup>. On an X-ray film, areas that contain air appear as darkened or black areas. In a 'positive' image, the reverse is achieved<sup>701</sup>. An X-ray image is made up of a variety of tones of black, grey, and white<sup>702</sup>. An image with a large number of tones is described as showing better detail<sup>703</sup>, contrast<sup>704</sup> and sharpness<sup>705</sup>, which is also dependent on the part of the body that is being X-rayed<sup>706</sup>.

The skull, when X-rayed, illustrates good detail and contrast because it consists of structures that have a range of densities, namely, air in paranasal sinuses (around the nose) and mastoid (around the ear) areas, and thick and thinner areas of bone. The paranasal sinuses, especially the frontal sinuses (above the nose), show up particularly well since the edges or walls of the sinuses (white areas) greatly contrast with the air (black areas) that fills them and therefore show up as well demarcated areas on skull X-rays. In comparison to other parts of the human body, the skull is therefore extremely valuable in facilitating personal identification<sup>707</sup>.

### 5.3 X-rays of the skull

Apart from demonstrating the shape of the frontal sinuses in the forehead, the skull has several other reference points that can be used to verify identification. The shape of the maxillary<sup>708</sup>, sphenoid<sup>709</sup> and ethmoid<sup>710</sup> paranasal sinuses; the detail of the crowns, roots

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<sup>700</sup> DN Chesney & MO Chesney *Radiographic Photography* 3 ed (1976) 2.

<sup>701</sup> Ibid.

<sup>702</sup> Chesney & Chesney (note 697 above) 3.

<sup>703</sup> Chesney & Chesney (note 697 above) 263. The ability to demonstrate fine elements or lines that make up an image.

<sup>704</sup> Chesney & Chesney (note 697 above) 263. The difference between the brightness and darkness on a single image.

<sup>705</sup> Chesney & Chesney (note 697 above) 264. A well-defined or demarcated structure, that is the boundary between two structures of different densities.

<sup>706</sup> Chesney & Chesney (note 697 above) 288.

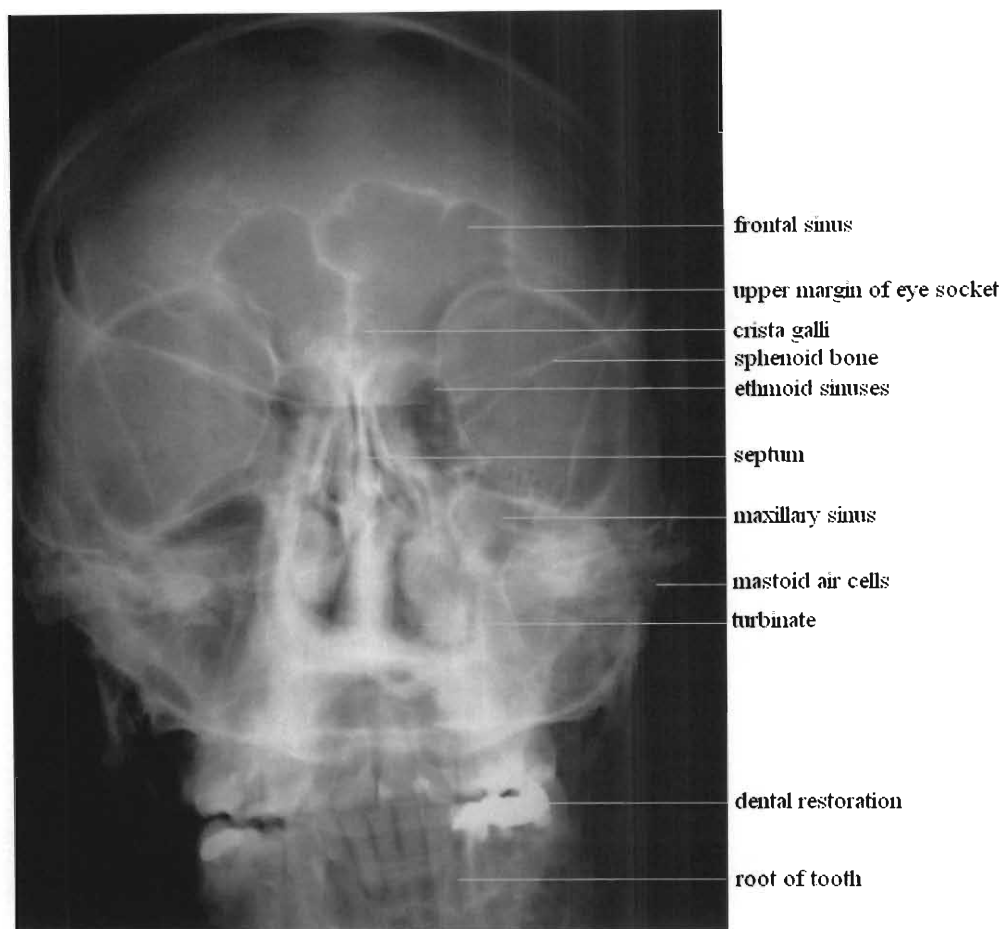
<sup>707</sup> DR Smith et al 'Identification of Human Skeletal Remains by Comparison of Bony Details of the Cranium using Computerized Tomographic (CT) Scans' (2002) 47(5) *J Forensic Science* 937.

<sup>708</sup> WD Gardner & WA Osburn *Anatomy of the Human Body* 3 ed (1978) 416. The maxillary sinuses are paired mucous lined air cavities in the maxilla (cheek bone) of the skull. In relation to the face, they are found beneath the cheeks, on either side of the nose.

<sup>709</sup> Gardner & Osburn (note 701 above). The sphenoid sinus is a single mucous lined air cavity found in the sphenoid bone of the skull. The sphenoid bone forms part of the floor of the skull, on which the brain sits.

<sup>710</sup> Gardner & Osburn (note 701 above) 414. The ethmoid sinuses are numerous mucous lined air cavities in the ethmoid bone of the skull. The ethmoid bone forms the roof of the nose and the inner walls of the eye

and internal anatomy of the teeth; the shape of the sella turcica (pituitary fossa)<sup>711</sup>, and the anatomy of the mastoid air cells<sup>712</sup> are just a few points that can be referred to when confirming an identity made by frontal sinuses<sup>713</sup>.



**Figure 1: A frontal view of a skull showing the outline of the frontal sinuses and dental restoration<sup>714</sup>**

sockets. In relation to the face, they are positioned in between the eyes, with the central septum (thin flat plate) of the nose forming a partition between the left and right sides of the air cells.

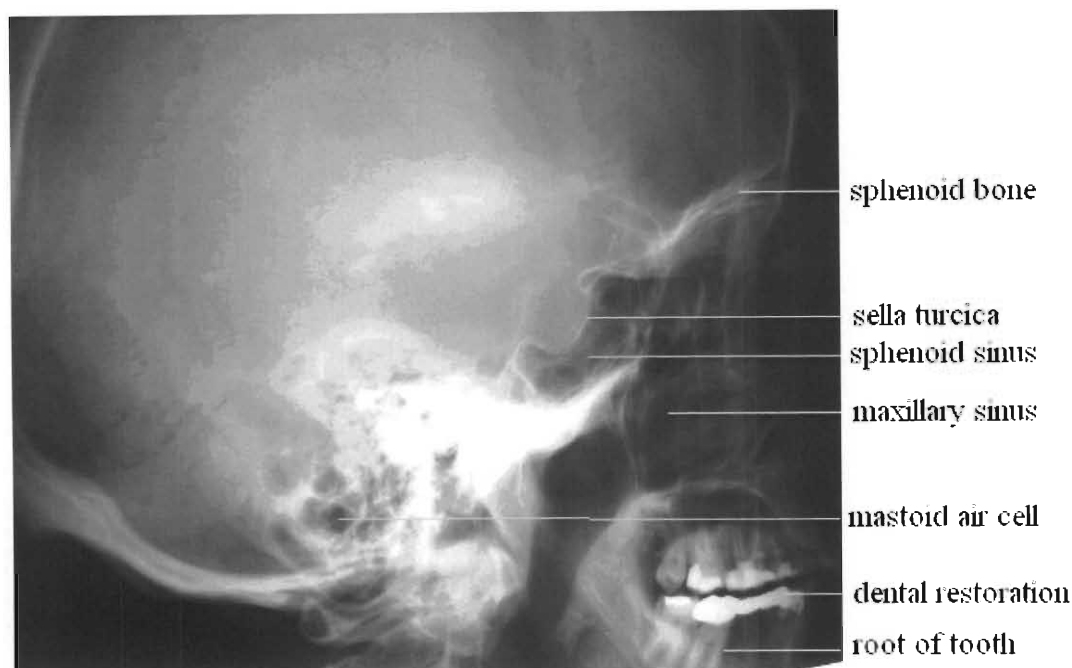
<sup>711</sup> Gardner & Osburn (note 701 above). 104. A central bony hollow ‘seat’ found in the floor of the skull in which the pituitary gland sits. This structure is seen on the profile view of the face, referred to ‘lateral view’ in medical terms.

<sup>712</sup> Gardner & Osburn (note 701 above) 101. Prominent bony processes that can be felt just behind the ear. The air cells in the mastoid processes have a ‘honeycomb’ appearance on an X-ray.

<sup>713</sup> Jablonski & Shum (note 696 above) 221.

<sup>714</sup> X-rays (Figures 1 and 2) provided for use in this paper with consent of a patient.





**Figure 2: A side view of the same skull in Fig. 1, showing a range of densities**

The Court has accepted the comparison of ante-mortem and post-mortem X-rays of the skull as being sufficiently accurate proof in positive identification<sup>715</sup>. The post-mortem examinations of two charred bodies found outside Adolf Hitler's bunker in Berlin were performed by Russian pathologists who omitted to include radiology as part of the examination. This oversight was described as the 'greatest omission in the history of forensic pathology'<sup>716</sup>. Post-mortem radiography of the skull would have facilitated positive identification as ante-mortem skull X-rays of Adolf Hitler were later found. The ante-mortem X-rays of Hitler revealed dental restorations, which matched the description noted by the pathologists. Although the pathologists' description was comprehensive, it was not sufficient verification to record in history that the body examined was without a doubt, that of Adolf Hitler himself<sup>717</sup>. Post-mortem X-rays would have confirmed identification, and offered some reconciliation and closure to victims of the Holocaust.

<sup>715</sup> AV Fattah & GT Mann 'Role of Radiology in Forensic Pathology' (1969) 9 *Med Science Law* 27. In 1968, the exhumed remains of a homicide victim were identified by an ante-mortem gunshot injury that caused a fracture deformity of the cheekbone of the victim's face.

<sup>716</sup> RF Sognnaes & F Strom 'The Odontological Identification of Adolf Hitler' (1973) 31 *Acta Odontologica Scandinavica* 43.

<sup>717</sup> Ibid.

### 5.3.1 The frequency of skull X-rays and feasibility of its use

Radiology forms an essential part of South Africa's healthcare system<sup>718</sup> and is equally available in many rural areas of South Africa<sup>719</sup> with teleradiology<sup>720</sup> reaching areas that were previously under-resourced<sup>721</sup>. It has gained significance in healthcare because it can offer a quick diagnosis especially in emergencies, its technique is non-invasive, and it has proven to be cost-effective<sup>722</sup>. Also, almost all forensic mortuaries in South Africa have access to radiology services, with many having their own radiology facilities<sup>723</sup>.

The advancement of imaging<sup>724</sup> technology, with the advent of computed tomography (CT) and magnetic resonance imaging (MRI) allows for the brain to be viewed, which was not possible in the recent past<sup>725</sup>. Imaging of the head has increased, especially with the increase in motor vehicle accidents and violence<sup>726</sup>.

The frontal sinus, its anatomy and application to human identification is discussed below.

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<sup>718</sup> JE Miller *Measuring the Move Towards Equity* (1997) 164.

<sup>719</sup> Cape Gateway 'New Medical Equipment to Improve Access to Quality Health Care at Public Facilities' (8 December 2005) Available at <http://www.capegateway.gov.za/eng/> [Accessed 2 November 2007].

<sup>720</sup> Teleradiology involves the electronic transmission of radiology images to a location where they can be retrieved by medical experts for an opinion on diagnosis.

<sup>721</sup> Health Systems Trust 'Rural Healthcare in KZN Goes Hi-Tech' (22 March 2001) available at <http://www.hst.org.za/index.php> [Accessed 2 November 2007].

<sup>722</sup> Department of Health 'Programme, Discussion and Feedback Formats for Specialty Focus Groups - Meeting of Urology Group' (October 2002) Available at <http://www.doh.gov.za> [Accessed 2 November 2007]. Interventional radiology has replaced many surgical procedures, thereby reducing morbidity and mortality.

<sup>723</sup> Communication with Dr T Naidoo

<sup>724</sup> The writer uses the word 'imaging' because images in radiology are also formed by use of other modalities, and not just X-rays. Images from MRI are formed by the use of a magnetic field created by magnets. However, this does not affect the viewing of the sinuses which are also visible on CT and MRI images.

<sup>725</sup> WW Orrison et al 'Blinded Comparison of Cranial CT and MR in Closed Head Injury Evaluation' (1994) 15 *American J Neuroradiology* 351.

<sup>726</sup> B Farham 'More About Head Injuries' (28 December 2006) [http://www.health.iafrica.com/illness\\_condition/neurology/](http://www.health.iafrica.com/illness_condition/neurology/) [Accessed 2 November 2007]; MJ Reed et al 'Can We Abolish Skull X-rays for Head Injury?' (2005) 90 *Archives of Disease in Childhood* 859, where the study showed that within a year, a single department performed head imaging on 1867 children between the ages of 1 to 14 years.

## 5.4 The frontal sinuses

### 5.4.1 Development and anatomy of the frontal sinuses

The frontal sinuses are one of four paranasal sinuses that are present in the forehead of the human skull<sup>727</sup>. Although they are not present at birth, they are believed to begin developing around the fourth foetal month, and are present at the end of the first year of life<sup>728</sup>. They can be seen on X-rays as spaces in the frontal bone of the skull<sup>729</sup>. They continue to grow larger in size, reaching its full size by the age of twenty<sup>730</sup>. The left and right sinuses grow separately of each other, which is why it is common to find that one side is larger than the other<sup>731</sup>. The larger sinus may cross over to the opposite side<sup>732</sup>.

### 5.4.2 Significance of the frontal sinuses

The frontal sinuses have no known purpose, and many theories regarding its function have been inconclusive<sup>733</sup>. However, it is often affected by infection caused by allergy and is referred to as sinusitis<sup>734</sup>. When this occurs, radiography is undertaken to observe the appearance of the sinuses and the skull<sup>735</sup>.

### 5.4.3 Literature review of research on frontal sinus identification

Radiologists and anatomists noticed that the shape and pattern of frontal sinuses was different for each individual<sup>736</sup>. In 1921, Schüller published his observation that the frontal

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<sup>727</sup> LB Lusted & TE Keats *Atlas of Roentgenographic Measurement* 4<sup>th</sup> ed (1981) 10.

<sup>728</sup> Ibid.

<sup>729</sup> MM Maresh 'Paranasal Sinuses from Birth to Late Adolescence' (1940) 60 *American J Diseases in Children* .55.

<sup>730</sup> Lusted & Keats (note 720 above) (1981) 10.

<sup>731</sup> Gardner & Osburn (note 701 above) 65. The growth of bone involves a process of absorption of existing bone and the laying down of new bone tissue to facilitate growth. In the case of the frontal sinuses, the left and right sides go through this process independently of each other, and will therefore not be of the same size and shape.

<sup>732</sup> Lusted & Keats (note 727 above).

<sup>733</sup> PL Blanton & LB Normon 'Eighteen Hundred Years of Controversy: The Paranasal Sinuses' (1969) 124 *American J of Anatomy* 135.

<sup>734</sup> The Cleaner 'South Africa: Statistics on Sinusitis' (28 September 2007) Available at <http://www.ceilingextraction.co.za/index.htm> [Accessed 2 November 2007]. South African medical insurers claim that South African citizens spend eight billion rands per year on medication for sinusitis.

<sup>735</sup> Farham (note 725 above).

<sup>736</sup> MH Crye 'Some Variations in the Frontal Sinuses' (1907) 48 *J.American .Medical.Association* 284, 289.

sinus configuration was different in every individual and that frontal sinus radiography would be useful in personal human identification<sup>737</sup>.

In 1927, Culbert and Law presented the first case where frontal sinus radiography was used to identify human remains found in India in 1925<sup>738</sup>. It was noted that although the frontal sinus pattern on the ante-mortem and post-mortem X-rays matched, 20 other points in the skull also matched, including the absence of the left mastoid process, due to surgery undertaken in 1922<sup>739</sup>. This case demonstrates that the presence of pathology or previous surgery provides even more features for comparison, making the identification more authentic.

In 1943, Schüller X-rayed 100 skulls and proposed a technique for describing the pattern formed by the frontal sinuses so that these could be classified for each individual<sup>740</sup>.

Experiments were undertaken to test the fact that the frontal sinuses are as unique as fingerprints in every individual<sup>741</sup>. Asherson studied 74 pairs of monozygotic (identical) and dizygotic (non-identical) twins, and found that frontal sinus morphology was different for each individual<sup>742</sup>. Kirk et al claim to have done the largest study, which included 39

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<sup>737</sup> Krogman & Iscan (note 687 above) 466. Krogman & Iscan discuss Schüller's original article which was published as: A Schüller 'Das röntgengam der stirnhohle: Ein hilfsmittel für die identitätsbestimmung von Schädlen' (1921) 55(11) *Monatschrift für Ohrenheilkunde und Laryngo-Rhinologie* 1617-1620 (trans L.Koerber).

<sup>738</sup> LW Culbert & FM Law 'Identification by Comparison of Roentgenograms' (1927) 88(21) *J of American Medical Association* 1634. An autopsy performed on a mutilated body retrieved from a river in India revealed that the body was that of a male who had surgery to his left mastoid during his lifetime. The body was shipped to New York in February 1926 where post-mortem X-rays matched ante-mortem X-rays of an American male who was reported missing in Burma in June 1925. Lawyers charged with the administration of the deceased's estate were convinced as to the identity of the mutilated body by the radiographic comparison.

<sup>739</sup> Ibid.

<sup>740</sup> A Schüller 'Note on the Identification of Skulls by X-ray Pictures of the Frontal Sinuses' (1943) 1 *Medical J of Australia* 554.

<sup>741</sup> AMP Harris et al 'The Frontal Sinus:Forensic Fingerprint? – A Pilot Study' (1987) 5 *J Forensic Odontostomatology* 9; FA Ribiero 'Standardised Measurements of Radiographic Films of the Frontal Sinuses: an Aid to Identifying Unknown Persons' (2000) 79:1 *Ear, Nose & Throat J* 26.

<sup>742</sup> N Asherson *Identification by Frontal Sinus Prints: A Forensic Medical Pilot Study* (1965). Four cases were rejected; three due to poor X-ray quality and one had no frontal sinuses.

cases<sup>743</sup>. Apart from 35 cases showing exactness in frontal sinus pattern, the study also showed that age, gender and the duration between the taking of the ante-mortem and post-mortem X-rays did not affect the ability to obtain a perfect match. The study also confirmed that the presence of pathology in frontal sinuses did not affect its shape, but provided additional unique markings to verify individuality<sup>744</sup>. Besides, any pathological changes of sinuses will be symptomatic, which will mean that regular X-rays may be done on the patient, indicating the existence of multiple ante-mortem X-rays for that patient, often at different health institutions.

A study was undertaken to determine whether ante-mortem and post-mortem radiographs taken under varying conditions, would be of value, considering that X-rays performed in a mortuary environment may be different from those taken in a hospital. Twenty-four skulls were X-rayed in positions that varied from the traditional technique of X-raying the head. The study demonstrated that positive frontal sinus identification was still possible, even when post-mortem X-rays were taken under different conditions<sup>745</sup>.

Another study tested the reliability of matching frontal sinus patterns by using observers that were inexperienced in interpreting X-rays. Ninety-nine of a hundred pairs of ante-mortem and post-mortem radiographs were successfully matched, even though X-ray technique was not perfect, thereby demonstrating the simplicity of sinus pattern matching<sup>746</sup>.

#### **5.4.4 Credibility of frontal sinuses in personal identification**

The description of the morphology of the frontal sinuses entails the observation of the bony detail and air spaces on an X-ray.

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<sup>743</sup> NJ Kirk et al 'Skeletal Identification Using the Frontal Sinus Region: A Retrospective Study of 39 Cases' (2002) 47(2) *J of Forensic Science* 318.

<sup>744</sup> Ibid 323.

<sup>745</sup> T Riepert et al 'Identification of Bodies by X-ray Image Comparison of the Skull Using the X-ray Simulation Program FoXSIS' (2001) 117 *Forensic Science International* 89.

<sup>746</sup> L Kullman et al 'Value of the Frontal Sinus in Identification of Unknown Persons' (1990) 8:1 *J Forensic Odontostomatology* 3.

Frontal sinus identification was used to verify identity in cases where the remains were decomposed<sup>747</sup>, charred<sup>748</sup>, and skeletal<sup>749</sup>, including the identification of two homicide victims<sup>750</sup>.

In a challenging case, two American journalists<sup>751</sup> who disappeared in Guatemala in March 1985, were killed and their bodies cremated in the hope that they will not be found, forensic scientists examined a cremation site and found bone fragments and a few teeth. A bone fragment was recognised to be part of the frontal bone of a skull. X-rays of the bone revealed a frontal sinus pattern that matched ante-mortem X-rays of one of the missing journalists. The teeth matched ante-mortem dental X-rays of the other journalist<sup>752</sup>.

In 1953, it was suggested that X-rays of the skull be taken routinely for every citizen of the United States of America as a technique for identification<sup>753</sup>. The technique is currently used for aircrew of the United States Air Force in case of an aviation tragedy<sup>754</sup>.

When the assassination of President John F. Kennedy of the USA was followed by claims that the autopsy physicians had conspired with other agencies within the government to

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<sup>747</sup> KJ Reichs & RBJ Dorion 'Quantified Comparison of Frontal Sinus Patterns by Means of Computed Tomography' (1993) 61 *Forensic Science International* 141; P Nambiar et al 'Anatomical Variability of the Frontal Sinuses and their Application in Forensic Identification' (1999) 12:1 *J of Clinical Anatomy* 16.

<sup>748</sup> DC Marlin et al 'Identification of Human Remains by Frontal Sinus Radiographs: A Series of Four Cases' (1991) 36(6) *J of Forensic Sciences* 1765, 1767.

<sup>749</sup> DH Ubelaker 'Positive Identification from the Radiographic Comparison of Frontal Sinus Patterns' in TA Rathburn & J Buikstra (eds) *Human Identification: Case Studies in Forensic Anthropology* (1984) 399; M Yoshino et al 'Classification System of Frontal Sinus Patterns by Radiography. Its Application to Identification of Unknown Skeletal Remains' (1987) 34 *Forensic Science International* 289.

<sup>750</sup> G Quatrehomme et al 'Identification by Frontal Sinus Pattern in Forensic Anthropology' (1996) 83(2) *J of Forensic Science International* 147.

<sup>751</sup> Supra (note 546 above) par 52(a). This case refers to the *Blake v Republic of Guatemala* case, where Nicholas Blake was the journalist identified by frontal sinus radiography. The Court accepted the Anthropological Forensic Report of the Smithsonian Institute that concluded Blake's identity by frontal sinus radiography.

<sup>752</sup> DW Owsley 'Identification of the Fragmentary, Burned Remains of Two United States Journalists Seven Years After Their Disappearance in Guatemala' (1993) 38:6 *J of Forensic Science* 1372, 1374.

<sup>753</sup> H Thorne & H Thyberg 'Identification of Children (or Adults) by Mass Miniature Radiography of the Cranium' (1953) 11(2) *Acta Odontol Scandinavica* 129.

<sup>754</sup> Evans & Knight (note 689 above) 13.

challenge evidence that showed that President Kennedy was publicly assassinated<sup>755</sup>, advocates of the conspiracy theory claimed that X-rays and photographs taken at post-mortem were not those of the President. However, ante-mortem X-ray films of the President revealed that the frontal sinus pattern matched the pattern found on the post-mortem X-rays<sup>756</sup>. It was stated that ‘the similarity in the shape of the sinus print patterns in the ante-mortem and post-mortem X-rays was sufficient to establish that they were of the same person on the basis of this trait alone’<sup>757</sup>. To verify this finding, it was additionally pointed out that the ‘post-mortem skull and torso X-rays matched available ante-mortem X-rays of the President in such a wealth of intricate morphological detail that there can be no reasonable doubt that they were in fact the X-rays of John F. Kennedy and no other person’<sup>758</sup>.

## 5.5 Conclusion

This method of pattern matching ante-mortem and post-mortem X-rays, where the shape and contours of the outline and the characteristics of the internal septal anatomy of the frontal sinuses is described, is simple and will therefore not require elaborate training of personnel. Sophisticated equipment is not required as the X-ray, if not already in a digital format, can be easily scanned and electronically mailed to a central database. Even if X-rays are of poor quality, to the trained eye, it is not difficult to assess these. However, a standard protocol of terminology for describing the morphology must be simple and familiar to all personnel involved. In the case of President John F. Kennedy, positive identification was confirmed by the pattern formed by the frontal sinuses of X-rays<sup>759</sup>.

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<sup>755</sup> LJ Levine ‘Identification of the Skull X-ray Films Taken During the Autopsy of President John F. Kennedy’ (7 September 1978) paras 153-176 in *Report to the Select Committee on Assassinations United States House of Representatives* (vol 1) 95<sup>th</sup> Congress, Washington, D.C.

<sup>756</sup> Ibid par 604

<sup>757</sup> Levine (note 755 above).

<sup>758</sup> Levine (note 755 above) par 610.

<sup>759</sup> Supra (note 757 above).

## **CHAPTER 6 PRACTICAL APPLICATION OF FRONTAL SINUS IDENTIFICATION TO A CASE STUDY**

### **6.1 A case of identification by frontal sinus comparison**

One early Saturday morning, a burnt-out vehicle was found near the north coast of Durban. The vehicle had presumably gone off the edge of the roadway late the previous evening, rolled over, landed in a ditch, and caught alight. When discovered, the police found the charred remains of a human body in the driver's position. The vehicle, which was extensively burnt and vaguely identifiable, was conveyed over to the nearest police station, and the body was taken to the police mortuary for examination<sup>760</sup>.

On the morning of the discovery, a missing person's report was also independently filed with the police by the family of a 38 year old woman who had been reported to have spent the previous evening at a bar with friends and then departed for home later during the night. The police directed the family to the mortuary to ascertain whether the deceased could have been the missing woman<sup>761</sup>.

The forensic pathologist, meanwhile, found the severely burnt remains to be a torso, with surface disintegration and the limbs charred down to shortened stumps. The face, including the anterior teeth, was burnt away deeply, making any facial feature recognition an impossible task and dental identification much less likely. Morphological appearances of the skull suggested that this was a Caucasoid person. There was little to assist with age determination. No remnants of clothing, jewellery, or other personal effects could be found on the torso, or in the vehicle. The general size of the torso suggested that the individual had been a lean person and of short stature. Gender could not be ascertained by external examination. However, the pathologist verified the remains to be that of a female on the basis of finding a uterus, cervix and upper vagina on internal examination. Routine autopsy procedure included X-ray examination of the body including the skull, and blood and tissue

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<sup>760</sup> Communication with the investigating officer, SAPS Verulam (1 November 2003). For purpose maintaining confidentiality, names and further identifier details will be omitted.

<sup>761</sup> Ibid.



collection for DNA studies for the purpose of ascertaining identity. X-ray of the face showed a well-depicted frontal sinus pattern<sup>762</sup>.

It was ascertained that the family members of the missing person, who had arrived at the mortuary, were in possession of skull X-rays of their relative, taken some 2 years earlier during episodes of chronic sinusitis. The autopsy X-rays and the ante-mortem X-rays produced by the family were referred to the present writer for opinion on whether these could confirm identity<sup>763</sup>.

The frontal sinuses on both sets of X-rays corresponded in pattern, shape and form, including in a multitude of other reference points, amounting to a confident match between the missing person and the deceased.

Although the family members were willing to have their blood specimens taken for DNA comparison analysis, the degree of confidence reported by the police on circumstantial and investigative grounds was reported to be adequate for release of the body to the family, and DNA testing was not pursued. In any event, the police lost the specimen taken for DNA analysis from the autopsy.

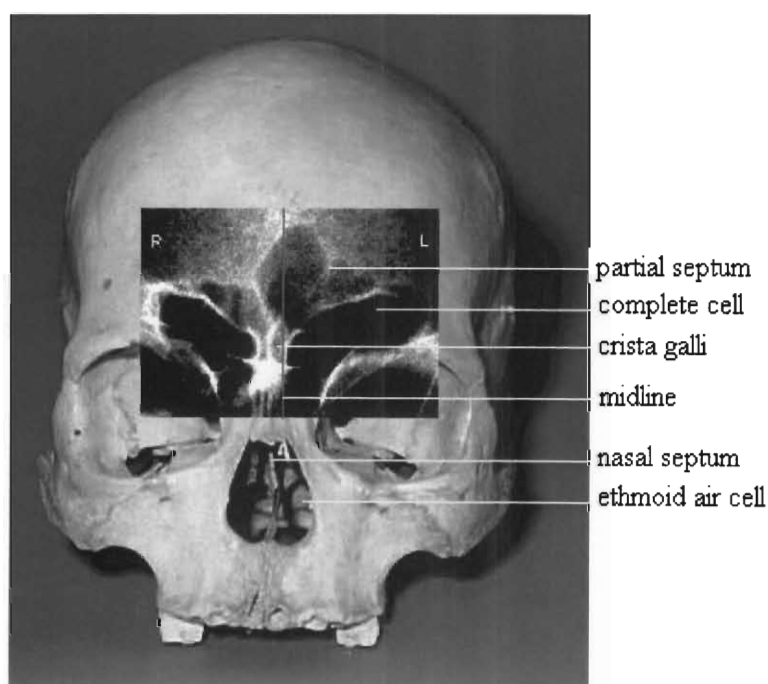
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<sup>762</sup> Communication with the forensic pathologist conducting the autopsy, and who referred the case to the writer for frontal sinus comparison.

<sup>763</sup> Ibid.

## 6.2 Analytic comparison of the ante- and post-mortem images

The two images are usually studied for the correspondence of shape, outline, configuration and individual points of concordance<sup>764</sup>. On a frontal view of the skull, the crista galli<sup>765</sup> is always seen in the middle of the forehead and can be used as a midline ‘marker’ to describe the frontal sinuses on the left and right of it.



**Figure 3: A frontal sinus X-ray superimposed upon a skull to indicate its position in relation to the crista galli and other parts of the skull**

<sup>764</sup> Figures 4 & 5 below.

<sup>765</sup> Gardner & Osburn (note 701 above) 104. The ‘crista galli’ denoted by (\*) is a sharp projection of bone that rises up from the floor of the skull onto which the brain sits. It is always visible on the ‘front’ view of a skull X-ray.

**6.2.1    Technique of ascertaining points of concordance**

The pattern formed by the frontal sinuses can be traced<sup>766</sup> to study the similarities and differences of its shape<sup>767</sup>. The ante-mortem and autopsy frontal view skull X-rays of the case in this instance are reproduced below with an explanation of the findings.

**KEY TO LABELS ON FIGURES:**

**R : Right side of skull**

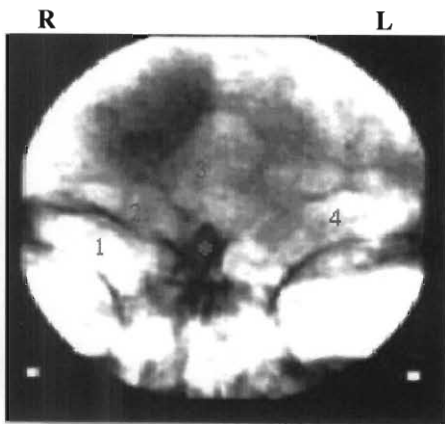
**L : Left side of skull**

**+ : partial septum**

**\* : crista galli**

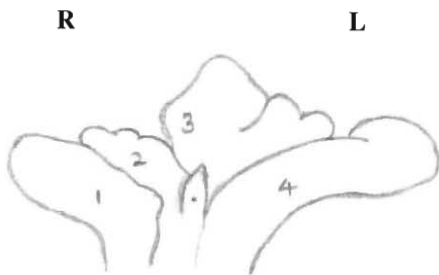


**Figure 4: Ante-mortem X-ray**



**Figure 5: Post-mortem X-ray**

The images of the ante-mortem and post-mortem sinus outlines are produced below.



**Figure 6: Ante-mortem tracing**



**Figure 7: Post-mortem tracing**

<sup>766</sup> Figures 6 & 7  
<sup>767</sup> Krogman & Iscan (note 687 above) 458. The shape of bones is often referred to as ‘morphology’ in anatomical terms.

### 6.2.2 Findings<sup>768</sup>

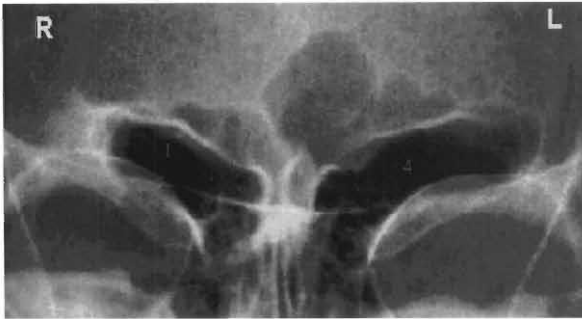


Figure 4: Ante-mortem X-ray

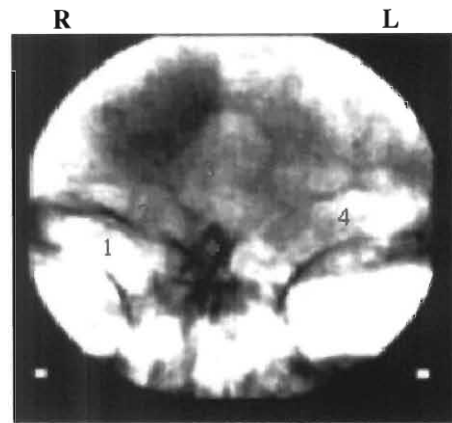


Figure 5: Post-mortem X-ray

The ante-mortem X-ray shows that there are four individual air-filled cells<sup>769</sup> or compartments labelled 1 to 4, two on each side of the crista galli<sup>770</sup>. The cell labelled '3', has a projection of bone<sup>771</sup> from its upper margin on the left hand side of the skull X-ray. This projection can be referred to as a 'partial septum'<sup>772</sup> as it does not traverse across the space to divide the cell into two. The crista galli appears as a pointed formation of bone with its pointed edge appearing to project itself into cell '3'. Cell '1' extends itself to the right and 'sits' above the right eye socket. Cell '2' is the smallest of all four cells, extends to the right and its upper edge has two scallops<sup>773</sup>. Cell '3' extends itself towards the left, although a smaller part of it overlaps a little to the right. Cell '3' also has 3 distinct scallops. Cell '4' is the largest compartment which 'sits' above the left eye socket and extends itself to the left. The minor bulges on the upper borders of cells '1' and '4' show exactness on both X-rays.

<sup>768</sup> The writer has reproduced Figs. 4 and 5 on this page for ease of reading.

<sup>769</sup> Krogman & Iscan (note 687 above) 466. A cell is a single compartment or cavity that is separated from the other cells by a thin 'wall' of bone, which is referred to as a septum.

<sup>770</sup> Figures 4, 5, 6, 7.

<sup>771</sup> Denoted as (+) on figures

<sup>772</sup> Krogman & Iscan (note 687 above) 470.

<sup>773</sup> Krogman & Iscan (note 687 above) 470. 'Scallop' is a descriptive term to describe a semi-circular bulge at the edges or rim of the sinus.

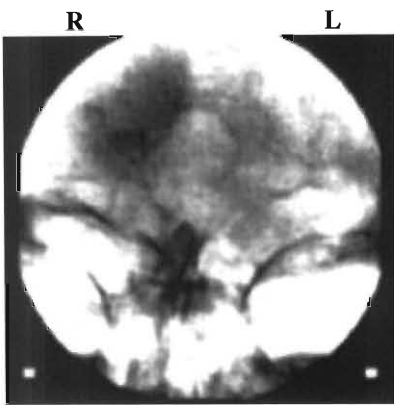
The frontal sinus pattern of the both sets of X-rays corresponds in pattern, shape and configuration, matching in a multiplicity of concordant points, amounting to a confident match between the missing person and the deceased.

**6.2.3 Discussion**

**6.2.3.1 Validity of comparison of ante-mortem and post-mortem images**



**Figure 8: Ante-mortem X-ray**



**Figure 9: Post-mortem X-ray**

The ante-mortem X-ray is a negative image with bone appearing white and air appearing black. In studying the ante-mortem X-ray, the image of the skull appears clear and ‘sharp’<sup>774</sup> with a large range of tones of black, grey and white offering good contrast. This is generally the appearance of X-rays taken under optimal conditions in a hospital setting where equipment is modern, and, where the patient is alive and is therefore able to cooperate with trained staff that perform the X-rays. Also the head is intact, with all of the structures within the head, namely dense bone and air-filled spaces offering good definition of fine detail.

The post-mortem image is a positive image with bone appearing as blackened areas while air appears white. In studying the post-mortem X-ray, the image does not appear to be as ‘sharp’ as the ante-mortem image, and there are several reasons for this. The fact that the limbs and teeth were incinerated suggests the intensity of the fire. Although the fire was not able to destroy the configuration and pattern of the frontal sinuses, it has to some extent

<sup>774</sup> Writer’s emphasis to describe the edges of bones appearing as fine demarcated lines.

degraded the skull bones, making them less dense and therefore not being able to record a wide range of tones and contrast on the post-mortem X-rays. In addition, the brain becomes coagulated as a consequence of the fire, thereby reducing the final contrast of the image where the recording of fine detail of bone is compromised against the background of a dense coagulated brain. As a result, it can be seen that the bone at the rim of the frontal sinus cells are not demonstrated as in the ante-mortem X-ray. Further, the equipment used to take the post-mortem image is less sophisticated than those found in a hospital setting. An added challenge is that the charred remains are not pliable and has to be X-rayed as it presents itself with ideal recording positions of the body being difficult to achieve.

Although this case presented with these numerous practical and technical challenges, the frontal sinuses remained intact, and scientific comparison was possible. The family were able to receive the remains of the deceased within a few hours after the autopsy, and funeral arrangements were made for the same day. In this case, the next-of-kin of the deceased were two teenage children whose father had died only a year earlier, and the pathologist recognised the sensitivity with which this case needed to be managed during the identification process, in that identification needed to be expedited urgently for the emotional well-being of the next-of-kin.

This case exemplifies the usual type of case scenario that occurs on a regular basis; either the specimens for DNA are misplaced or results are never forthcoming in good time, and that DNA analysis is hardly able to make a contribution to the case identification. Instances have occurred when the remains have been released to a family claimant without the requisite level of satisfaction that personal identification has been achieved, simply because DNA analysis is not pursued by an overworked and overwhelmed police investigator<sup>775</sup>. The danger is the fact that forensic pathologists, forensic scientists and police investigators develop a negative attitude and become socialised into accepting that the current state of DNA laboratory inadequacy and underperformance is the norm, and fail to look at

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<sup>775</sup> Supra (note 762 above). See also note 109 above.

alternative, equally scientific methods of confirming identity. In fact, the reality is that DNA analysis for identification alone does not enjoy a priority over criminal cases.

If the X-ray examination was omitted at autopsy, or if the pathologist failed to enquire about the availability of any existing X-rays, there would have been no other scientific proof of positive identification, as the delicate DNA sample was ultimately mislaid. In the case of DNA sampling where human tissue is degraded, in order to get a credible result, it is recommended that 'post-mortem specimens must be collected 48 hours after death in countries where climate temperatures are high'<sup>776</sup>.

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<sup>776</sup> Supra (note 487 above).

## **CHAPTER 7    FINAL CONCLUSION AND RECOMMENDATIONS**

At the conclusion of this discourse, the writer makes the following recommendations towards the resolution of the plight of the missing, and the burden of the unidentified deceased, in South Africa:

### **7.1        RECOMMENDATIONS**

#### **7.1.1    Missing persons**

It is important that the missing person be defined in legislation. In line with international principles, this would ensure the measure of protection and commitment that is deserved by this group of persons.

Legislation must include procedures to be followed by police for the initiation of prompt and efficient investigation of persons reported missing. Such procedure must include the search for the missing persons, dissemination of information by print and broadcast media announcements, poster/s, interviewing of witnesses, and an information officer to liaise with and report on progress to the families. There must be shift away from the unreasonable expectation that a family in distress initiate, and are left to labour on, with their own searching.

It is necessary for a specialised police unit to be involved in the search and conduct of investigations, and the collection of essential identifier information. This will include an understanding of which medical records are useful and where they could be found, and include the significance and value of X-rays, photographs, physical bodily characteristics, clothing and other personal effects.

The efficient procedure of submission of this data to a central databank<sup>777</sup> is necessary. Legislation should also be constructed to make it mandatory that all medical institutions and health care professionals release all pertinent medical information, within at least 10 days, on the request of a police official.

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<sup>777</sup> See chapter 7.1.3.below.



### **7.1.2 Unidentified bodies**

The legislation relating to dead human bodies needs to be reviewed to incorporate the establishment of individual identity as an obligation by those responsible for the processing of bodies. Procedure must include the examination of every body, collection, documentation and cataloguing of all identifier characteristics, and submission to the central database<sup>778</sup>. This must include a full set of fingerprints, full radiological examination, and specimens for DNA analysis, where applicable. If a body remains unidentified after full information processing and collation, the body should be metal-tagged, buried in individual marked and separate graves and not cremated, accessible to a subsequent exhumation and repatriation if later required.

Serious consideration should be given to the designation of an Unidentified and Unclaimed body as a Notifiable Death in Regulations under the National Health Act, in the same way as was done with Maternal Deaths<sup>779</sup>, thus ensuring mandatory reporting, investigation, documentation, processing and collation of information by the necessary authorities.

### **7.1.3 Information-gathering in a central database**

A central national database is essential for the processing and sharing of information, with staff trained to research and analyse information on the missing and unidentified from all reports and sources, for classification, reconciliation and matching.

### **7.1.4 Role of forensic medical examiners and scientists**

Extending the scope of their functions to include human identification will be in keeping with the United Nations expanded definition of the role of the forensic pathologist, which includes establishing personal identity with the objective of being able to return a body to its rightful next-of-kin, and that this role is not limited to unnatural deaths.

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<sup>778</sup> See chapter 7.1.3.below.

<sup>779</sup> Declaration of Medical Conditions to be Notifiable Medical Conditions under the Health Act 1997 (Act No. 63 of 1977). Government Gazette No. 18339 Vol. 388 (3 Oct 1997).

Forensic pathologists and scientists are scientific and impartial in their work. They should be involved at all levels in this process, and not leave the ascertainment of human identity to the initiative of police officials who are medically and scientifically untrained for this role, yet presently have the principal control and management of this process. Forensic pathologists should also be involved with the procedure of death inquiry at inquests and similar case conferences.

#### **7.1.5 Indigent persons**

The writer proposes that, for the historically disadvantaged to be protected, the ‘indigent and ‘destitute’ be categorised and referred to as the ‘internally displaced’, and suggests that South Africa adopt the United Nations *Guidelines for Internally Displaced Persons*, making the government accountable on an international level, to establish inquiries and fulfil the requirements towards such protected persons.

Municipalities, being responsible for the indigent in their localities, should provide identification documentation for these persons, as has been done for refugees, in order for them to be able to access social services. In the case of eventual identification and/or claim to a body, the removal and transportation, exhumation and burial of the body should be done at the expense of the State.

#### **7.1.6 Human identification**

It is essential, as much as it is sensible, to review the procedures in identification of the deceased. It is a necessary, prudent and simple approach, for bodies not readily identifiable by the standard means of clothing, physical characteristics by visual means, personal effects and photographs, to start with the simplest cost-effective methods, utilising what is readily available and economically-wise on the body itself and in our resources, such as fingerprints, X-rays, etc. The standard protocol or operating procedure should include X-rays of the body, especially of the head.

DNA, the value of which is not disputed, is expensive and resources and expertise rare, and should be restricted to those cases in which basic standard identification systems fail. DNA

should not be looked upon as the only credible method, and we should not have to wait for DNA results on every case to validate identification, delaying the final disposal of the dead.

The use of the technique of frontal sinus identification can be strengthened by full support and implementation by the forensic community.

#### **7.1.7 Legislation**

Legislation should quite clearly express that the unidentified and unclaimed corpse should neither be cremated nor donated to institutions without consent being obtained from the next-of-kin. The writer proposes that, in keeping with recommendations made by the Truth Commission, the South African Law Commission review Section 10 of the Human Tissue Act<sup>780</sup>, declaring this section invalid. The dissection, for research and study, of an unclaimed body should be clarified as a 'violation of the corpse', and the corresponding *Ethical Rule* of the Health Professions Council of South Africa<sup>781</sup>, be referred to.

Legislation should also be made to ensure that all pertinent medical records, including X-rays, not be destroyed, but periodically archived, perhaps by submission to an independent database linked to the population database at the Department of Home Affairs, with automatic and individual destruction of a record upon the legitimate registration of the death of each individual.

Regulations must encompass the recommendations of the TRC<sup>782</sup> in order to make these obligations legal.

It is suggested that a national policy, and a national plan of action, incorporating the above recommendations, be implemented.

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<sup>780</sup> 65 of 1983.

<sup>781</sup> Supra (note 138 above).

<sup>782</sup> Supra (notes 32-36 above).

## **7.2 FINAL CONCLUSION**

The preceding chapters of this paper have critically analysed the manner in which the plight of families of missing persons, and the dilemma of the authorities in respect of unidentified bodies, have thus far been provided for in this country.

The recommendations take international human rights principles into consideration; firstly, the rights of families of the missing to receive documented information about their missing next-of-kin and the satisfaction that their reports are adequately and holistically investigated, attended to and finalised, and secondly, the rights of families of deceased persons to be traced and found, notified, and to receive the bodies of their next-of-kin.

By review of prevailing circumstances, by parallel between South African legislation to comparable international guiding principles and instruments, and by contrast of local practice to best practice guidelines internationally, the writer has drawn attention to the deficiencies and inconsistencies, in both our legislation and in our policies and practices in South Africa, of this important test of our morality and human rights ethic, in respect of the manner in which basic human dignity is respected.

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