Exploring Unnatural Death Incidents among Muslims in the West-Metropole of Cape Town: A *Maqāṣid Al-Sharīʿah*-Based Retrospective Study

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Abstract

This study explores patterns of unnatural fatalities among Muslims in the West Metropole of Cape Town, South Africa, in 2019. Analysis of 4,205 autopsy reports, focusing on 313 Muslim deaths of which 241 were classified as unnatural, provides insight into an under-researched field. Using a qualitative *maqāṣid al-sharīʿah* (objectives of Islamic law) framework, the study examines gender distribution, age profiles, manners of death, and selected self-inflicted deaths. Key findings highlight distinctive demographic and circumstantial trends, with no significant difference between males and females in mechanisms of self-harm. The analysis integrates basic descriptive statistics with contextual interpretation of medico-legal case records and community realities. The prevalence of unnatural deaths underscores the need for further research to identify long-term patterns and underlying causes. The study also stresses the importance of documenting religious affiliation in medico-legal records and recommends adopting a *maqāṣid al-sharīʿah* perspective when formulating future community-based and policy responses to unnatural deaths within the Muslim population.

Keywords: autopsy reports, Cape Town, causes, *maqāṣid al-sharīʿah*, Muslims, unnatural death.

1. Introduction

When a disease is the cause of death, this is considered natural, whereas accidents, adverse healthcare events, suicides, and homicides are considered unnatural. Unnatural deaths are largely preventable and may affect young individuals, resulting in a significant loss of potential life. This study discusses unnatural deaths in Africa and specifically focuses on unnatural deaths in South Africa. The focus then turns to incidents of unnatural deaths in four countries with Muslim-majority populations, where accidents and homicides were the leading causes of death, with males outnumbering females.

The objectives, problem statement, and limitations of the study are explored in the following.

1.1 Islam's Sanctity of Life

Islam emphasises the sanctity of life and ranks the protection and preservation of life second only to the preservation and protection of religion. Many times, throughout the Qurʾān and in the *ḥadīth* of the Prophet Muhammad (peace be upon him), the sacredness of life is mentioned and highlighted. Allah asserts that life and death are His sole prerogatives and that life cannot be taken without His permission.

1) "No soul can die without Allah's consent." (Qurʾān 3:145)

2) "And it is impossible to die unless with Allah's permission and according to His decree." (Qurʾān 3:145)

In the Qurʾān, the sanctity of life and the gravity of the sin of taking a life, whether one's own or another's, are emphasised.

(1) "Do not take life, which Allah has made sacred, unless in accordance with justice." (Qurʾān 6:151)

1.2 Offences in Islam

The psychological characteristics of drug users and their surrounding communities, the economy, and even the safety and well-being of people and nations are negatively impacted by drug abuse. In many cases, drug abuse has a negative impact on the country's development efforts. In Cape Town, South Africa, it is a prevalent factor of moral concern and considered a source of social

deterioration among the Muslim population. As a result, protecting against drug abuse is equivalent to protection in the five general pillars of *maqāṣid*.

1.3 Suicide

According to the Qurʾān, nothing is more valuable than life. A believer has no right to commit suicide. In the Qurʾān, it is said, "And do not murder yourselves (nor kill one another). Allah is indeed most gracious to you." (Qurʾān 4:29).

Mental illnesses, such as depression and personality disorders, and alcohol and drug abuse-related behavioural issues, are the leading causes of suicide in South Africa.

It is useful to adopt the *maqāṣid al-sharīʿah* approach when addressing instances of suicide among the Muslim population in Cape Town, as these cases encroach on the respect for life enshrined in Islam and have become a menace to societal welfare among the Muslim community.

1.4 Road Traffic Accidents

Allah prohibits self-harm in *Sūrah al-Baqarah* (2:195): "And do not voluntarily bring about your own destruction. And do well, for Allah likes those who do good." Similarly, the Qurʾān states in *Sūrah al-An ʿām* (6: 151): "And kill not the life which Allah has forbidden except with justice". This is His command to humankind. Consequently, it may be argued from the passages that reckless behaviour, such as driving recklessly and dangerously, is forbidden for Muslims, and is considered a severe sin if it results in death.

Inconsiderate family members, irresponsible parents, and other family members are major contributors to social deprivation among adolescents. Some parents disregard both the obligation to love their children and their children's social well-being. Children require parental attention and affection. However, many parents who are, for instance, overly focused on their careers may neglect their children over time. As a result of parental neglect, youngsters who crave affection and attention may be inclined to engage in dangerous or deviant activities to alleviate boredom. Some children may even purposely engage in delinquency to attract their parents' attention. In light of these potential reasons that often lead to socioeconomic deprivation, the application of a *maqāṣid* approach in terms of the

protection of health, religion, and dignity becomes vital.

1.5 Burden of Unnatural Deaths in South Africa

South Africa has the highest number of unnatural deaths in Africa, with 59,935 injury-related deaths in 2018 and an overall death rate of 157.8 per 100,000 inhabitants. This rate exceeds the African continental average of 139.5 per 100,000 and is nearly double the global average of 86.9 per 100,000 ([Centres for Disease Control and Prevention [CDC], 2023]). Between 2010 and 2018, the proportion of deaths attributable to unnatural causes in South Africa increased steadily from 9% in 2010 to 11.9% in 2018 (Dougan, 2005).

The "Mortality and causes of death in South Africa" study conducted by Stats South Africa provides the distribution of unnatural causes of death by province in 2017. The Western Cape (13%) and KwaZulu-Natal (12%) had the highest rates of deaths due to unnatural causes. Northwest (9%) and Limpopo (8%) recorded the lowest percentage of deaths due to unnatural causes.

Over 1.5 million people die annually from preventable acts of violence, including 800,000 suicides, 50,000 homicides, and 300,000 deaths due to war. In 2018, 9% of the world's deaths were due to injury. Globally, more than 90% of these deaths occur in low and middle-income nations (CDC, 2006). Road traffic accidents account for the highest injury-related fatality rates.

The Western Cape Injury Mortality Profile for 2010-2016 illustrates changes in the age and gender specific injury mortality profiles for the Western Cape and its subdistricts between 2010 and 2016. Injuries accounted for 14% of all fatalities in the Western Cape in 2016, with over 80% affecting men aged 20–39 and children under the age of 5. In 2016, homicides accounted for 51% of all injury-related deaths. The homicide rate rose from 38 per 100,000 in 2010 to 52 per 100,000 in 2016 (Western Cape Injury Mortality Profile, n.d.).

Discussion of unnatural fatalities among religious minority groups in the Western Cape is often a taboo subject. Death, as the event that signifies the irreversible end of a person's life, plays an essential role in the life of a Muslim and the health surveillance of the community. The systematic collecting, analysis, and dissemination of mortality and cause of death data enable the monitoring of societal trends and

inform public health decision-making (CDC, 2006). The cause of death not only identifies the sickness or damage responsible for the fatality, but it is also a source for future prevention of similar deaths.

1.6 Objectives of the Study

The main objective of this study is to determine the nature of unnatural fatalities in 2019 among the Muslim community in the West Metropolis of the City of Cape Town, South Africa. Additionally, this study seeks to provide a detailed analysis of the specific attributes and features associated with these unnatural deaths.

1.7 Problem Statement

This study seeks to answer the question of how the minority Muslim population in the Cape Town West Metropolis area contributes to mortality statistics in South Africa. In simple terms, how, when, why, and who dies in this specific Muslim community.

Because few qualified Muslim forensic pathologists in the Western Province would be interested in such research, to date, there have been no similar studies carried out, and this has led to a lack of research on this topic. This study sheds light on the causes of death in the Cape Muslim community, explores the factors underlying these causes, and aims to determine how these causes may be dealt with and implement lifestyle changes to reduce mortality rates. The first step in developing targeted interventions to prevent unnatural deaths is to collect accurate statistics.

1.8 Limitations of the Study

To date, there has been no recorded study on the mortality rate of Muslims in non-Muslim majority nations, including South Africa. This is a retrospective study of Muslims whose deaths at the Salt River Mortuary in Cape Town were deemed unnatural from January 2019 to December 2019. The Salt River Forensic Mortuary is an N6-grade facility that performs between 3,500 and 4,500 medico-legal postmortems annually. This facility provides forensic pathology services to the entire West Metropolis of Cape Town, which is the most densely populated region in the Western Cape Province and is also home to the majority of South Africa's Muslim population.

This study's data was collected from the South African Division of Forensic Medicine's database using a Microsoft Excel spreadsheet.

The data was analysed by age, gender, and by time, manner, place, and cause of death. The lack of data regarding unnatural Muslim deaths in South Africa hinders its quantification and extrapolation for clinical and administrative applications, such as intervention and prevention planning within the Muslim community.

1.9 Research Questions

This study attempts to answer the following questions:

1. How has a minority Muslim population contributed to the mortality rate in the West Metropolis area of Cape Town in 2019?
2. What are the leading causes of unnatural death in the Muslim community in Cape Town?
3. What role does *maqāṣid al-sharīʿah* play in protecting Muslims' lives in cases of unnatural deaths?

2. Literature Review

In studies on unnatural causes of death, there is a clear absence of research on unnatural deaths among Muslims in South Africa. Because of this, a review of studies that focused on unnatural deaths in other contexts were necessary to locate this study.

2.1 Studies on Unnatural Deaths in Muslim-Majority Countries

Khan & Hossain (1970) conducted a study of the pattern of unnatural deaths in Bangladesh, which revealed that autopsies were performed by the Department of Forensic Medicine at Dhaka Medical College between January 1, 1996, and December 31, 2000. The ages, sexes, etc. of 10,436 recorded deaths were investigated. The study revealed that the total number of unnatural deaths was 9,413, with a higher proportion of males than females. According to the results, 77.22% of deaths were due to accidents, 14.02% to homicides, and 10.76% to suicide. Males were more susceptible to accidental and homicidal deaths, whereas females were more susceptible to suicide. The study concluded that a comprehensive strategy to prevent unnatural deaths among the Muslim population is necessary to reduce the number of such deaths.

In 2017, 119 medico-legal autopsies were performed over the course of the year in the city of Mardan in Pakistan. There were 97 men (81.51%) and 22 women (18.48%). Accidental deaths significantly

outnumbered homicidal and suicide deaths, at 58 (48.73%), 36 (30.25%) and 22 (18.48%), respectively. Most accidental deaths were caused by motor vehicle collisions, followed by firearms, and blunt or sharp weapons. Most victims, 72 (60.50%), were urban residents, followed by 47 (39.49%) rural residents (Aghamohammadi et al., 2017).

Another study of autopsy records from unnatural deaths conducted in January 2009 in Peshawar, Pakistan, revealed that firearms were the leading cause of death in 2,370 cases, followed by blunt force trauma (279 cases) and bomb blasts/explosives (167 cases). The study determined that the rate of unnatural deaths in Peshawar was extremely high. At the time of the study, the most common cause of death was homicide, and firearms were the most common weapon used. Implementing stringent laws to restrict illegal weapons was one of the study's recommendations. To further prevent the loss of life, the study also recommended increased surveillance in all areas of the city.

A cross-sectional study from Tehran, Iran, was performed on graduate students and deaths in their families from February to March 2014 (Kazemi et al., 2022). 11,315 (50.4% male) subjects were studied. The results regarding the death of relatives revealed that 360 deaths occurred (66.9% male) during the study period. 95 cases (26.4%) were cardiovascular disease, 64 (17.8%) were motor vehicle accidents, 41 (11.4%) were due to various cancers, 23 (6.4%) were unintentional injuries, and 22 (6.1%) were intentional injuries. Based on the study's findings, cardiovascular disease, motor vehicle accidents, various cancers, and injuries are among the leading causes of death in the sample population (Mortality in Middle East, 2022).

Intentional homicides (per 100,000 people) vary by country in Muslim-majority contexts. The country with the highest rate in the region is Iraq, at 10.07%. Other countries include Yemen (6.77%), Afghanistan (6.66%), and Pakistan (3.88%). The country with the lowest value among Muslim majority nations is Oman, with a value of 0.27%. The second lowest rate is in Saudi Arabia, at 1.27%. (Nunes, 2012).

2.2 Studies on Unnatural Death in South African Communities

Homicide is the second largest cause of unnatural deaths in the city of Cape Town (Duflou et al., 1988). The rate of 66,86 deaths per

100,000 people makes Cape Town the 19th deadliest city in the world (Ming & Carol Camp, 2018). Previous research has shown that sharp force trauma and weapons account for the bulk of homicides in Cape Town.

To date, there are no known studies that have examined unnatural deaths in the Cape Muslim community. On average, the literature on trauma-related deaths in South Africa emphasises the age and gender of the injured, the location of injuries, the location of the crime scene, and additional toxicological analysis of the victim's tissues. No mention of religious analysis appears in relevant studies. Similarly, there are no national studies that target specific demographic populations, such as the Muslim community in Cape Town.

A study by Lerer (1994) examined statistics of deaths caused by violence and injury in a South African metropolis to illustrate the value of secondary data sources in identifying injury reduction priorities. It was a cross-sectional investigation of police, forensic, and medico-legal laboratory (state mortuary) data. The study was conducted in Cape Town's metropolitan area in 1994. Almost 4,000 deaths were attributed to unnatural causes, including homicide, suicide, accidents, and other unknown causes. This study did not address religious or ethnic groups in the Cape Town metropolitan area.

Another study from The NIMSS (National Injury Mortality Surveillance System) is also a source of data, although it is limited to metropolitan regions like Cape Town, Johannesburg, Durban, and Port Elizabeth. The rate of accidental fatalities increased from 153 per 100,000 per year in 1996 to 260 per 100,000 per year in 2015. Estimates place the yearly number of unnatural fatalities in South Africa between 70,000 and 80,000, which accounts for between 12 and 15% of the total mortality rate (Matzopoulos, 2016). Between 2010 and 2018, the proportion of fatalities attributable to unnatural causes increased steadily from 9% in 2010 to 11.9% in 2018.

Alternatively, studies have sought to measure the presence of deaths across populations that experienced both natural and unnatural deaths, focusing on the differences between the two and identifying differences based on quantitative data.

The first nationally representative sample (52,493 cases) of injury-

related mortality in South Africa was in 2009. Using postmortem reports, the study found more than three times as many deaths from homicide and traffic injuries than other deaths recorded by vital registration for this period. The homicide rate was similar to the estimate for South Africa from global analysis, but road traffic and suicide rates were almost fourfold higher. The sample provides more accurate estimates and cause-specific profiles that are not available from other research (Matzopoulos et al., 2015).

One of the studies identified in the literature focused on the cause of death and premature mortality in Cape Town between 2001-2006. The study found that injuries, particularly homicide, are extremely high in the city of Cape Town. Injury mortality rates, particularly homicide and road traffic injuries, remain among the highest in the world. The homicide rates are significantly higher for men. Of particular concern are the high homicide and road traffic injury fatality rates among male youth and children aged 10-14. The study concluded that urgent attention needs to be given to identifying the risk factors involved in and developing strategies to prevent fatal injuries. In comparison, this study focused on deriving the risk factors in the Muslim population in Cape Town (Groenewald et al., 2017).

Other studies have explored unnatural causes of death in the general population or focused on a particular section of the population, like infants. Examples include “Retrospective study of the sudden unexpected death of infants in the Garden Route and Central Karoo districts of South Africa: Causes of death and epidemiological factors” (Winterbach et al., 2021), and “The medico-legal investigation of sudden, unexpected and/or unexplained infant deaths in South Africa: Where are we, and where are we going?” (Du Toit-Prinsloo et al., 2010).

South Africa has injury mortality rates that are more than double the world average, and in the Western Cape, murders and traffic accidents are among the top ten primary causes of premature death (SAPS, n.d.). Injury surveillance permits the tracking of temporal and demographic patterns, as well as the leading causes of mortality and disability resulting from violence and injuries. While information is accessible through national vital statistics, only the overall injury rate is given.

The strength of this study lies in its novel approach, which aimed to investigate the occurrences of common, unnatural deaths within the Muslim population in the West Metropolis of Cape Town. It is the first study of its kind conducted in South Africa.

3. Theoretical Framework and Methodology

The theoretical framework for this study includes the objectives of Islamic law, the sanctity of life in Islam, and approaches to various offences in Islam. This section describes the retrospective study design and elaborates on the population sampling and method used in the data collection.

3.1 Theoretical Framework: *Maqāṣid al-Sharīʿah*

Ibn Ashur Muhammed al-Tahir (Bulutlu, 2022) asserted that the general *maqāṣid* of Islamic law is to preserve "orderliness, equality, freedom, facilitation, and the maintenance of a pure natural disposition".

According to al-Tahir, internal or external issues such as the harmful effects of mass media, a lack of religious and moral education among society members, irresponsible family members, poverty, sexual promiscuity, and an individualistic culture contribute to social deprivation. Social well-being must be fostered and defended against factors that can be disruptive, such as social deprivation.

This study is based on *maqāṣid al-sharīʿah* as an analytical approach which draws on the ideas of scholars such as Auda (2021) and Kamali (2017) who offered an understanding of the preservation of religion, and *maṣlaḥah* (public interest) as fundamental organising principles of the *sharīʿah*.

The *sharī'ah* has five *maqāṣid*: the protection of life, property, health, religion, and dignity. In general, these goals fall into three categories: general *maqāṣid*, specialised *maqāṣid*, and partial *maqāṣid*. *Maqāṣid al-sharīʿah* refers to the objective established by Allah (Glory to Him, the Exalted) in each specified law, which is to achieve wealth and happiness in this life and the Hereafter.

3.1.1 General Maqāṣid (Overall Objectives)

The first dimension, general *maqāṣid*, refers to the fundamental and overarching objectives of Islamic law that apply to all aspects of human life. These objectives serve as the primary guiding principles

for the entire Islamic legal system and form the basis for the development and interpretation of Islamic laws. The five general *maqāṣid* are commonly known as the "Five Essentials" or "Five Necessities," and they are:

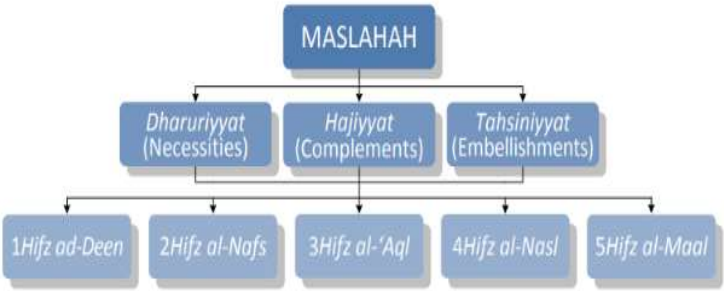
a. Preservation of religion (*hifz al-dīn*): Ensuring the protection and preservation of the Islamic faith, beliefs, and practices.

b. Preservation of life (*hifz al-nafs*): Safeguarding human life and promoting its wellbeing, as the sanctity of life is of utmost importance in Islam.

c. Preservation of intellect (*hifz al-ʿaql*): Nurturing and protecting human intellect and mental faculties to facilitate sound decision-making and understanding.

d. Preservation of lineage (*hifz al-nasl*): Ensuring the protection and preservation of family and societal structures.

e. Preservation of property (*hifz al-māl*): Safeguarding individual and communal property, ensuring economic stability and justice.



Classification of *Maṣlaḥah* (2016)

3.1.2 Partial *Maqāṣid* (Secondary Objectives)

The second dimension, partial *maqāṣid*, refers to specific objectives that are subsidiary to the general *maqāṣid* but still contribute to the overall welfare of society. These objectives are diverse and context-dependent, and they are derived from the general *maqāṣid* to address particular issues and challenges. Partial *maqāṣid* may vary across different times, places, and circumstances, and they play a vital role in facilitating flexibility and adaptability within Islamic law.

3.1.3 Specific *Maqāṣid* (Specialised Objectives)

The third dimension, specific *maqāṣid*, delves into the finer details of the law and focuses on the objectives of individual legal rulings

(*ahkām*). These objectives are specific to particular laws and regulations within Islamic jurisprudence, aiming to fulfil the broader objectives of the general *maqāṣid*. Understanding the specific *maqāṣid* helps to contextualise and apply Islamic legal rulings effectively.

Dr. Jasser Auda's multidimensional approach provides a comprehensive framework for grasping the principles of *maqāṣid al-sharīʿah*. It acknowledges the dynamic nature of Islamic law, its adaptability, and its commitment to promoting human welfare and preserving essential values across various dimensions of life. The approach highlights the interconnectedness of the general, partial, and specific *maqāṣid*, thereby enriching the philosophy of Islamic law and its practical applications in contemporary contexts.

3.2 Methodology

This study utilised a mixed methods approach, incorporating both qualitative and quantitative methods to investigate the issue of unnatural deaths within the Muslim community in Cape Town. The qualitative aspect involved content analysis of data extracted from the Western Cape Forensic Pathology Service database. All Muslim cases presented at the Salt River Mortuary from January 1, 2019, to December 31, 2019, were identified through the database and the computer administration system. The data set for this study, designed as an Excel sheet, captured essential information, including demographic details, religion of the deceased, date of death, manner of death (accident, suicide, homicide, etc.), and circumstances of the injury or death. Ancillary documentation, such as postmortem reports, police reports, and hospital folders, further complemented the primary data source to confirm the religious affiliation of the deceased. A qualitative content analysis allowed for a comprehensive understanding of the cases and their contextual factors in relation to *maqāṣid al-sharīʿah*. The latter emphasises the importance of preserving and protecting human life.

The quantitative phase of this study involved analysing the data obtained from the Western Cape Forensic Pathology's database using the STATA 13 software. Frequency distributions were generated for categorical data, facilitating a comprehensive examination of variable distributions. To assess the significance of differences within variables, Pearson's Goodness of Fit test was

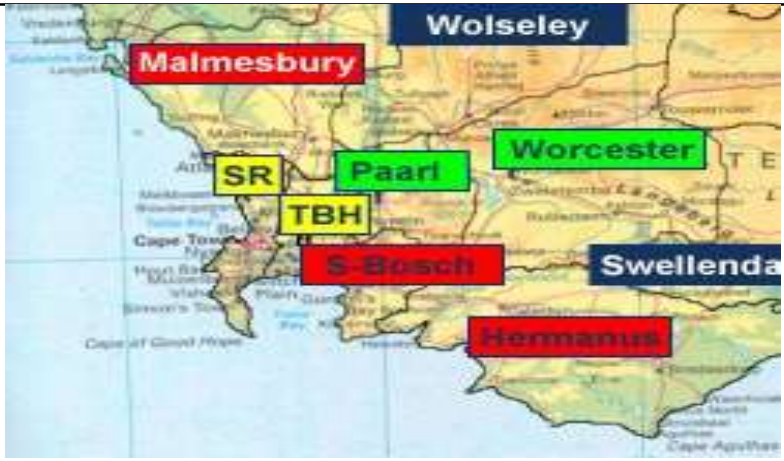
employed. Proportions among multiple groups were compared using Pearson's Chi-squared test, and when necessary, Fischer's exact test was applied. For numerical data, the Shapiro-Wilk test was utilised to determine normality. Non-parametric tests like the Wilcoxon Rank Sum test and the Kruskal Wallis test were employed to analyse differences among groups. The study's statistical objectives encompassed evaluating the prevalence of Muslim deaths in Cape Town, conducting a demographic analysis in relation to total mortuary intake and total unnatural deaths, and providing descriptive statistics regarding unnatural Muslim deaths. By integrating qualitative content analysis and quantitative statistical analysis, this study aimed to gain comprehensive insights into the occurrences of unnatural deaths within the Cape Muslim community, while also exploring the findings according to the ethical framework of *maqāṣid al-sharīʿah*, which emphasises the significance of preserving life in accordance with Islamic principles.

3.2.1 Study Design

This was a retrospective, qualitative study conducted in 2019, in the West Metropole area of Cape Town, serviced by the Salt River Mortuary. The mortuary is located at 34 Durham Avenue, Salt River, Cape Town, and is one of the largest mortuaries due to its high number of postmortems, which is rivalled only by the Tygerberg mortuary, which services the East Metropole of Cape Town. The Salt River Mortuary keeps accurate, up-to-date, and comprehensive coverage of medico-legal autopsies by utilising an Office Autopsy Database (OAD). The OAD was thoroughly scrutinised as part of this study to determine the number of Muslims who died in unnatural deaths in 2019.

3.2.2 Study Population

The sample population was all Muslim persons who died of unnatural causes in 2019 and had legally required a post-mortem examination at a medico-legal mortuary. This mortuary is maintained by the Western Cape Forensic Pathology Services as part of the provincial health department. Fetuses and Muslim deaths from natural causes were excluded once basic demographic information was captured. The data for this study was collated from the list of all medico-legal autopsies carried out in the Salt River Mortuary in 2019.



Salt River Academic Centre (SR) (M6 Academic) location
Picture 1, (List of Charts, Tables, and Pictures)

3.2.3 Sampling

The data for this study was drawn from the archives of the Salt River Mortuary, the University of Cape Town's Division of Forensic Medicine and Toxicology, and the Western Cape Forensic Pathology database. The collection frame was limited to a single year, 2019, and limited to the geographic area of the West Metropole of Cape Town in the Western Cape Province of South Africa. The Salt River Mortuary is classified as an academic institution due in part to the number of postmortem examinations performed, which ranges from 3,500 to 4,500 annually. The West Metropole area of Cape Town includes suburbs as far as Simonstown and Atlantis. The use of the Salt River Mortuary for the data collection frame was ideal, as it happens to service a significant Muslim population in South Africa. Christoph Haferburg (2000), in his study of Muslims in South Africa from the 1996 South African census database, indicated a total number of 553,717 Muslims in South Africa, which represents roughly 1.36% of the total population. In the Western Cape, the proportion of Muslims in relation to the provincial population is the highest, at 6.6%, followed by KwaZulu-Natal and Gauteng, both around 1.5%. In all the other provinces, the percentage is below 1% (Haferburg, 2000).

The justification for focusing on the Salt River Mortuary is that the area it serves contains the largest Muslim population in the Western Province, and it performs the largest number of postmortem

examinations in the Province. As noted, fetuses and Muslim deaths from natural causes were excluded once basic demographic information was captured.

3.2.4 Ethics and Human Subjects

This study did not involve any animal or human testing. There was an application to obtain ethics clearance made to the International Peace College of South Africa's Research Ethics Committee. Permission was granted by the Head of the Department of Forensic Medicine at the University of Cape Town's (UCT) Faculty of Health Sciences to use their private autopsy database for the study. (Please see the Appendix). UCT's Division of Forensic Medicine and Toxicology database (reference number HREC R036/2014) adheres to all ethical standards required by the South African National Department of Health. Due to the study's retrospective design, UCT's ethics committee was asked to waive the requirement for individual patient consent.

3.2.5 Data Collection

At the Salt River Mortuary, all Muslim cases were identified from their database. Data were collected for all Muslim cases that were presented at the mortuary from 00:00 on January 1, 2019, to 23:59 on 31 December 31, 2019. The data capture system that was used was an Excel spreadsheets. Relevant data was compiled by qualified, trained forensic medical practitioners who are authorised and qualified to complete the required paperwork following a postmortem examination.

The use of Excel spreadsheets captures the required data that is collected as part of routine post-mortem investigation procedures (Appendix 5). This includes recording demographic information (age, race, sex, religion) of the deceased, the date of death, manner of death (accident, suicide, homicide, etc.), and circumstances of the injury or death.

Mortuary records include register numbers that are collected as identifiers for administrative reference in the event of data capture errors. The primary source of the data for this study was the Western Cape Forensic Pathology database. The ancillary documentation included postmortem reports, police reports, and hospital records citing the manner of death, and confirmation that the deceased were

Muslims.

3.2.6 Two-Phase Data Collection

The research for this study was completed in two phases. In the first phase, the data from the OAD at the Salt River Mortuary for the year 2019 were assessed. All the cases admitted to the Salt River Mortuary in the year 2019 were scrutinised, and useful information for determining the unnatural deaths of Muslims was identified. Subsequently, in the second phase, all Muslim unnatural cases of death with identifiable demographics were extracted. The age categories for this study included neonate (less than 1 year), 1-9 years, 10 -19 years, 20 -29 years, 30 -39 years, 40 -49 years, 50 -59 years, 60 years, and above. I am an authorised user of the Salt River Mortuary's OAD and was well acquainted with the use of it and its information, so I did not need any special training.

3.2.7 Data Management and Quality Control

Data checks were incorporated into the data capture application. For example, consistency between the manner and cause of death, and accuracy of capturing the deceased's registration number. Data was collated into a Microsoft Excel 13 spreadsheet (Microsoft, USA) titled, "Office Autopsies 2019 - Muslim Deaths" for the purpose of descriptive analysis. There were no names recorded in the data capture; only the postmortem admission numbers were used as identification to maintain confidentiality.

4. Data Analysis

After refining the data obtained from the Salt River Mortuary's OAD, which was done by identifying the unnatural cases of death among Muslims, it was exported as an Excel spreadsheet and then analysed. I was the only data collector, extracting data from the information on the same day it was collected to minimise any discrepancies.

The data was analysed using the statistical package STATA 13 (Stata. Corp, TX, USA). Frequency distributions were developed for all categorical data. Differences in proportions within a variable were analysed for significance using Pearson's Goodness of Fit test. Proportions among multiple groups were analysed using Pearson's Chi-squared test, except where expected frequencies were less than five in 20% of cells, then Fischer's exact test was applied.

Numerical data were analysed with the Shapiro-Wilk test to determine if the distribution was normal. No data showed a normal distribution; therefore, differences between groups were analysed using the Wilcoxon Rank Sum test for two-group comparison and the Kruskal Wallis test for multiple-group comparison.

4.1 Statistical Objectives

1. Evaluate the prevalence of Muslim deaths in Cape Town according to the records at Salt River Mortuary between 1 January 2019 and 31 December 2019.

2. Provide demographic analysis in relation to total mortuary intake and total unnatural deaths.

3. Provide descriptive statistics of unnatural deaths of Muslims.

4.2 Results

A total of 4,205 autopsies were conducted at Salt River Mortuary in 2019. Of these, 1,020 (24.26%) were natural deaths; 2,625 (62.43%) were unnatural deaths, and 560 (13.32%) were undetermined or under investigation. A total of 313 autopsies were conducted on Muslim individuals in 2019. Of these, 72 (23%) were natural deaths and 241 (77%) were unnatural. The prevalence in terms of mortuary intake and unnatural death is shown in Table 1.

Table 1. Prevalence of Muslim deaths in 2019

Year	**N**	**Prevalence (% unnatural death)**	**Prevalence (% mortuary intake)**
Total Muslim deaths	313	11.92%	7.44%
Unnatural Muslim deaths	241	9.18%	5.73%

All further analysis is conducted on unnatural deaths only.

4.2.1 Demographics

4.2.1.1 Age and Sex

Overall mean age ± standard deviation: 34.64 ± 17.42

Overall median age: 31

Overall age range: 0 – 84 years

Table 2. Summary statistics for age by sex						
Sex	**N**	**Mean**	**SD**	**Med**	**Min**	**Max**
Female	36	41.67	23.49	37	0.17	84
Male	205	33.08	15.85	31	0	82

Age according to sex is not normally distributed; therefore, differences between sexes were assessed using the Wilcoxon Rank sum test. There is no significant difference between the median age of males and females (p=0.0526).

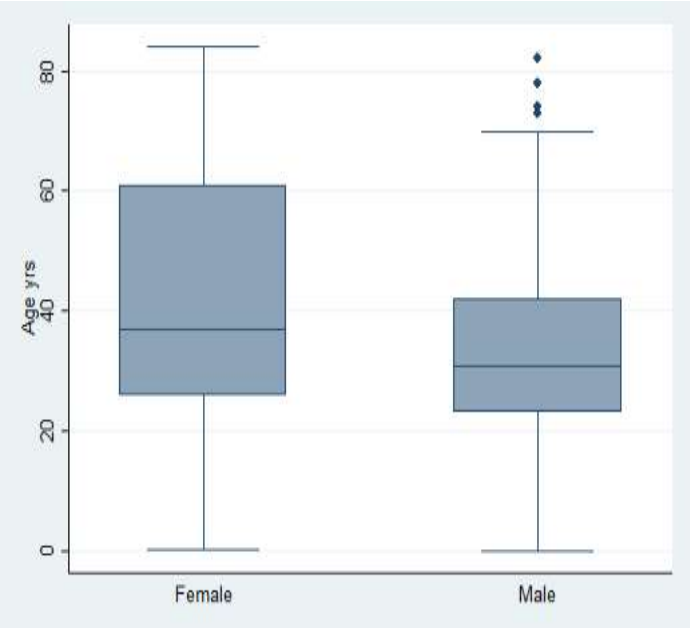


Fig 1. Box plot of age distribution between males and females

4.2.1.2 Age categories

Overall, a significant difference exists between the number of deceased individuals in each age group (p<0.001). The majority, 74 (30.71%), were aged 21-30 years.

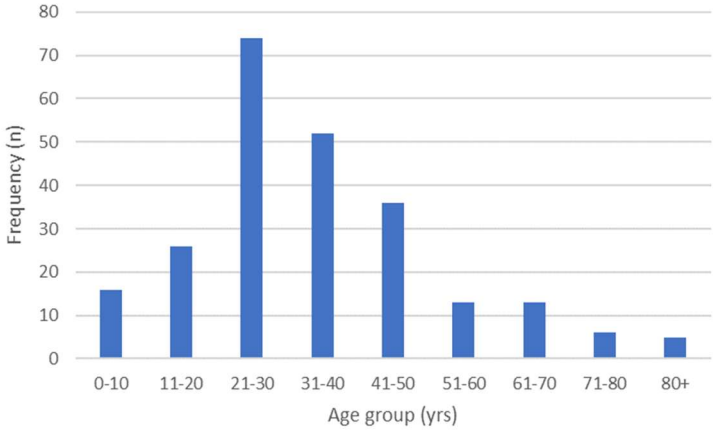


Fig 2. Frequency distribution of age groups

Table 3. Distribution of age groups by sex			
AGE (YEARS)	**Female N (%)**	**Male N (%)**	**Total N (%)**
< 10	3 (8.33%)	13 (6.34%)	16 (6.64%)
11-20	3 (8.33%)	23 (11.22%)	26 (10.79%)
21-30	8 (22.22%)	66 (32.2%)	74 (30.71%)
31-40	5 (13.89%)	47 (22.93%)	52 (21.58%)
41-50	5 (13.89%)	31 (15.12%)	36 (14.94%)
51-60	3 (8.33%)	10 (4.88%)	13 (5.39%)
61-70	3 (8.33%)	10 (4.88%)	13 (5.39%)
71-80	3 (8.33%)	3 (1.46%)	6 (2.49%)
>80	3 (8.33%)	2 (0.98%)	5 (2.07%)
Total	36	205	241

A significant difference exists between the distribution of age groups according to sex (p=0.023). Females were more evenly distributed across the age groups compared to males. The majority of males were between the ages of 21 and 40. While the majority of females were also between the ages of 21-30, a greater proportion of females were older than 61 compared to males.

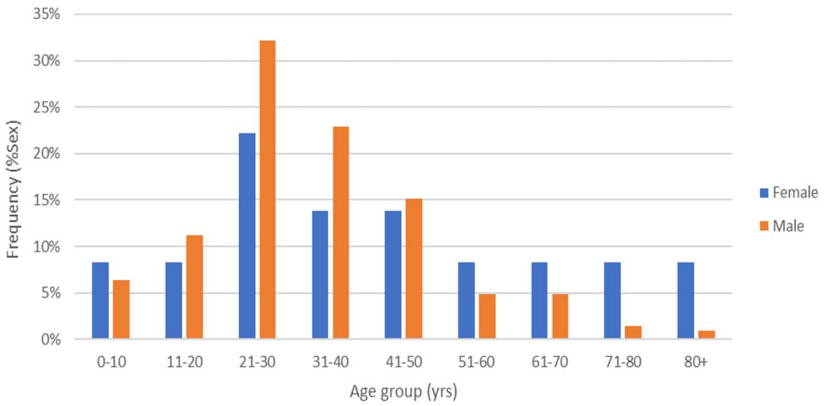


Fig 3. Percentage distribution of age groups by sex

4.2.2 Manner of death

Overall, the majority of deaths were caused by homicide (142; 58.92%). A significant difference exists in the distribution of the manner of death between sexes ($p<0.001$). A significantly greater proportion of males were involved in homicides compared to females. However, females were more likely to die from accidents or procedure-related deaths.

Table 4. Distribution of manner of death by sex

Manner of death	**Female N (%)**	**Male N (%)**	**Total N (%)**
Accident	10 (27.78%)	32 (15.61%)	42 (17.43%)
Homicide	9 (25.0%)	133 (64.88%)	142 (58.92%)
Procedure-related	6 (16.67%)	8 (3.90%)	14 (5.81%)
Suicide	3 (8.33%)	10 (4.88%)	13 (5.39%)
Undetermined/ Under Investigation	6 (16.67%)	20 (9.76%)	26 (10.79%)
Unknown	2 (5.56%)	2 (0.98%)	4 (1.66%)

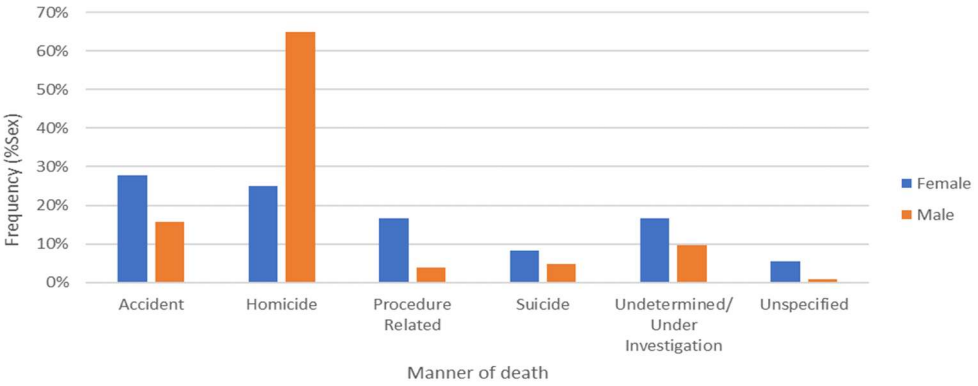


Fig 4. Percentage distribution of manner of death by sex

Significant differences were also noted in the age distribution among the different manners of death ($p<0.001$). Individuals who died in procedure-related deaths had a greater median age compared to other manners of death.

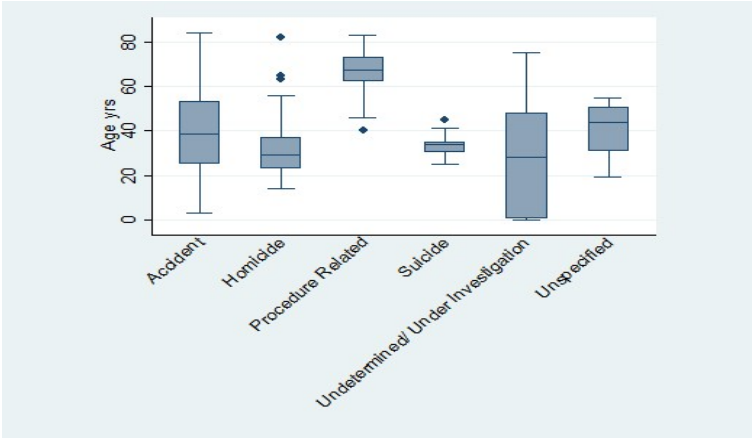


Fig 5. Box plot of age distribution among manner of death

Table 5. Summary statistics for age by the manner of death						
Manner of death	**N**	**Mean**	**SD**	**Med**	**Min**	**Max**
Accident	42	38.45	21.05	38.5	3	84
Homicide	142	31.33	11.51	29	14	82
Procedure Related	14	65.93	11.91	67.5	40	83
Suicide	13	33.08	5.81	34	25	45
Undetermined/ Under investigation	26	27.03	24.87	28	0	75
Not specified	4	40.5	15.33	44	19	55

4.2.3 Mechanism of death

Overall, the majority of deaths occurred as a result of road traffic accidents. A significant difference exists in the distribution of the mechanism of death between males and females ($p<0.001$). The majority of females died in fall-related accidents, followed by accidental burns. Men predominantly died in road traffic accidents.

For homicides, most victims suffered gunshots. A significant difference exists in the distribution of the mechanism of death between males and females ($p=0.038$). A significantly greater proportion of females were strangled compared to males.

For suicides, the majority of individuals died by hanging. No significant difference exists in the distribution of the mechanism of suicide between males and females ($p = 0.423$).

Table 6. Distribution of mechanism of death by manner of death and sex			
Mechanism of death	**Female N (%)**	**Male N (%)**	**Total N (%)**
Accident			
Burns	3 (33.33%)	2 (6.25%)	5 (12.2%)
Drowning	-	1 (3.13%)	1 (2.44%)
Electrocution	-	1 (3.13%)	1 (2.44%)
Fall	5 (55.56%)	2 (6.25%)	7 (17.07%)
Freak	-	1 (3.13%)	1 (2.44%)

RTA	1 (11.11%)	24 (75%)	25 (60.98%)
Shot	-	1 (3.13%)	1 (2.44%)
Homicide			
Strangulation	2 (22.22%)	1 (0.75%)	3 (2.11%)
Blunt Assault	-	4 (3.01%)	4 (2.82%)
Shot	6 (66.67%)	102 (76.69%)	108 (76.06%)
Stabbed	1 (11.11%)	24 (18.05%)	25 (17.61%)
Shot and stabbed	-	1 (0.75%)	1 (0.7%)
Under Investigation	2 (22.22%)	1 (0.75%)	3 (2.11%)
Suicide			
Hanging	2 (66.67%)	9 (90.0 %)	11 (84.62%)
Overdose	1 (33.33%)	1 (10.0%)	2 (15.38%)

4.3 Role of *Maqāṣid Sharīʿah* in Preserving Muslims' Lives

The objectives of the *maqāṣid al-sharīʿah* and the purpose of this research are intrinsically linked. The principles of *maqāṣid al-sharīʿah* are intended to prevent harm and increase benefits. Similarly, the fundamental purpose of this study is to identify and thus reduce harm; therefore, "harm reduction" is an inherently shared goal between *maqāṣid al-sharīʿah* and this study. The former accomplishes this by establishing laws of well-being, including laws of life preservation and mental health.

As noted, a significant number of Muslim fatalities in Cape Town are regularly due to unnatural causes, with road traffic accidents and homicides being the leading causes of death. Islam places great importance on the protection and preservation of life, and it considers the intentional killing of a believer as one of the gravest sins.

In cases of homicide, Islam retains the death penalty but also provides for an exceptional form of punishment in specific circumstances by considering the welfare of the deceased's family. This reflects Islam's emphasis on creating a society built on the spirit of true solidarity, where shedding the blood of a Muslim by another Muslim is forbidden.

Suicide is another alarming issue addressed in this study. Islam clearly prohibits suicide; the Qurʾān emphasises the sanctity of life, declaring that saving a life is akin to saving all of humanity. Nevertheless, the likelihood of suicide has increased in recent years,

including in the Muslim community, making it crucial to highlight *maqāṣid al-sharīʿah* and concern for life when addressing such cases to protect societal well-being.

Islam emphasises the sanctity of life and ranks the protection and preservation of life second only to the preservation and protection of religion. Throughout the Qurʾān and in the ḥadīth of the Prophet Muhammad (PBUH), the sacredness of life is repeatedly mentioned and emphasised. Allah asserts that life and death are His sole prerogative and that life cannot be stolen without His permission.

The general, specialised, and partial objectives of *maqāṣid al-sharīʿah* contribute to the preservation of life. Islam places a strong emphasis on promoting safety, caution, and responsible behaviour to prevent harm and protect individuals and communities.

4.3.1 General Maqāṣid (Overall Objectives)

One of the primary objectives of *maqāṣid al-sharīʿah* is to protect and promote essential human values. Related to this, the preservation of life is considered paramount. This principle is emphasised in the Qurʾān, where Allah places great importance on the sanctity of human life. One of the key verses that highlights this concept is found in *Sūrah al-Maʾidah* (5:32):

"Whoever kills a soul unless for a soul or corruption [done] in the land, it is as if he had slain mankind entirely. And whoever saves one, it is as if he had saved mankind entirely."

This verse underscores the gravity of taking a life unjustly and the profound virtue of saving even a single life; the latter is considered to be the same as if one has saved all of humanity. By emphasising the value of life, Islam provides a strong foundation for the protection and preservation of human life in all circumstances.

4.3.2 Specialised Maqāṣid (Specific Objectives)

Within the specialised objectives of *maqāṣid al-sharīʿah*, preservation of life is recognised as a primary objective. These specialised objectives aim to prevent harm and promote well-being. In cases of unnatural death, these objectives highlight the significance of avoiding actions or behaviours that may lead to fatal consequences, such as accidents or homicides.

The Islamic legal tradition places a strong emphasis on promoting safety, caution, and responsible behaviour to protect individuals and

communities from harm. For instance, Islam encourages things like adhering to traffic rules to prevent road accidents and observing measures to prevent violence and conflict, ultimately reducing the risk of unnatural deaths.

4.3.3 Partial Maqāṣid (Secondary Objectives)

The partial or secondary objectives of *maqāṣid al-sharīʿah* are subsidiary to the primary, general, and specialised objectives, but they still contribute to the overall preservation of life. For example, measures to ensure safety and security within a community, such as adequate infrastructure and law enforcement, are emphasised to reduce the risk of harm or death caused by violence, negligence, or unsafe conditions.

As noted, the sanctity of life in Islam is reiterated throughout the Qurʾān and the ḥadīth of the Prophet Muhammad. Life and death are considered Allah's prerogative, and taking a life unjustly is severely condemned.

Furthermore, this study addresses issues like drug misuse and social deprivation among adolescents, which also impact the preservation of life. *Maqāṣid al-sharīʿah* aims to protect health, religion, and dignity, thereby addressing these concerns within the Islamic framework.

Overall, by adhering to the principles of *maqāṣid al-sharīʿah* and emphasising the sanctity of life, Muslims can work towards reducing instances of unnatural deaths and promote a society based on compassion, care, and respect for all individuals.

5. Conclusion

Unnatural causes of death reflect the prevalence of crime, violence, and safety in South Africa. Because these are acts related to interpersonal and other forms of violence, the findings of this study help inform Cape Town's Muslim population about the consequences of violent acts committed in their community. Mortality from unnatural causes has fluctuated over time among South Africa's Muslim community. Homicides accounted for the vast majority of fatalities in this study. The distribution of causes of death between the sexes differs significantly. Males were involved in far more killings than females, but females were more likely to die in accidents or during medical treatments.

There were also considerable differences in age. The distribution of mortality is according to various causes. Procedure-related deaths were shown to have a greater median age than other causes of mortality. Many people were killed as a result of traffic accidents. The distribution of causes of death also differs significantly between males and females. The leading cause of mortality for women is falling, followed by accidental burning, whereas the leading cause of death for males is road traffic accidents.

The vast majority of homicide victims were killed by gunshot wounds. Among homicides, the distribution of causes of death differs significantly between males and females. Women were strangled at a far higher rate than men. In cases of suicide, the majority of people died by hanging. There is no discernible difference in the distribution of suicide methods between males and females, nor is there a significant disparity between males and females who died of suicide.

More than three times as many instances in the study died of unnatural causes, showing a huge need for greater research and examination of unnatural deaths in the Cape Muslim community. The report underlines the high rate of intimate relationship violence and violent homicide in the Muslim population.

To avoid further rises in mortality, sex-specific programs and interventions should be developed. Finally, because unnatural causes of mortality are largely preventable through the promotion of healthy lifestyle and behavioural habits, these should be priority areas of concern, as should further investigation into the *maqāṣid al-sharīʿah* approach as a potential remedy for unnatural deaths.

In conclusion, it can be stated that if *qiyas* (reasoning by analogy) is diligently used according to the *Sharīʿah*, it has the potential to reduce the incidence of murder and other crimes, thereby maintaining the stability of society by enforcing reform of the offender in the form of forgiveness or reconciliation. A heart that fears Allah will most likely refrain from violence.

6. Recommendation

Future studies should strive to uncover the causes of unnatural deaths to aid in the development of interventions and preventive efforts. The disproportionately high mortality rate of males in their 20s should be prioritised. It will also be fascinating in the future to evaluate the Muslim population's death patterns over 10 years.

Additional analysis is required to account for rural versus urban contexts, socioeconomic characteristics, level of education, and poverty for such a study to be useful.

Maqāṣid al-sharīʿah could play an essential role in non-Islamic states' public policy by preserving people's lives, property, health, religion, and dignity. State governments could also include *maqāṣid al-sharīʿah*-based outlooks in their policy-making processes.

The goal of a policy-making process based on *maqāṣid al-sharīʿah* is to eradicate and regulate community issues. Social well-being is a concerted effort to address community needs and expand social mobility opportunities.

(1) The formation of an Islamic society in which members contribute to a designated fund to generate cash to repay the debts of those who were killed.

(2) The Muslim community's establishment of a special fund to assist drivers renewing their licenses. This fund may also contribute to the families of those who were killed as a result of motorist negligence.

3) Establishment of a social committee or financial group whose sole purpose is to pay the *diyah* (financial compensation paid to the families of victims of murder) on behalf of the poor.

4) Future in-depth studies of the various causes of morbidity of Muslims in Cape Town and South Africa.

Taking a human life without justification is the most heinous form of violent crime in Islam. The Islamic countermeasures against various forms of violence are effective and pragmatic and embody the qualities of flexibility and enduring applicability that can be implemented today.

References

Access NCBI through the World Wide Web (WWW). (2022). Mortality in Middle East ,75–75. https://doi.org/10.1007/bf02821338.

Access NCBI through the World Wide Web (WWW). (1995) Molecular Biotechnology, 3(1), 75–75. https://doi.org/10.1007/bf02821338.

Aghamohammadi S, Kazemi E, Khosravi A, Kazemeini H. The Trend of Ten Leading Causes of Death in the Islamic Republic of Iran, 2006- 2011. irje 2017; 12 (4) :1-11

Ascarya, S. R., & Sukman, R. (2016). Measuring the Islamicity of Islamic Bank in Indonesia and other countries based on Shari'ah objectives. Centre for Central Banking Research and Education. Jakarta.

Auda, J. (2021, December 17). Maqasid Methodology for Re-Envisioning Islamic Higher Education. Journal of Contemporary Maqasid Studies, 1(1), 31–58. https://doi.org/10.52100/jcms.v1i1.58

Bulutlu, Y. (2022). Sections of Maqasid and Maslahat in Muhammad Tahir bin Ashur. Bingöl Üniversitesi Sosyal Bilimler Enstitüsü Dergisi. https://doi.org/10.29029/busbed.1129804

Centers for Disease Control and Prevention (CDC). (2023). CDC yellow book 2024. New York, NY: Oxford University Press.

Centers for Disease Control and Prevention (CDC), 2006, Mathers et al., 2005.

Dougan, S. (2005). Mortality and causes of death in South Africa, 1997-2003: findings from death notifications. Weekly Releases (1997–2007), 10(13). https://doi.org/10.2807/esw.10.13.02674-en

Duflou, J. A. L., Lamont, D. L., & Knobel, G. J. (1988). Homicide in Cape Town, South Africa. The American Journal of Forensic Medicine and Pathology, 9(4), 290–294. https://doi.org/10.1097/00000433-198812000-00004.

Du Toit-Prinsloo, L., Dempers, J. J., Wadee, S. A., & Saayman, G.

(2010). The medico-legal investigation of sudden, unexpected and/or unexplained infant deaths in South Africa: where are we—and where are we going? Forensic Science, Medicine, and Pathology, 7(1), 14–20. https://doi.org/10.1007/s12024-010-9184-7

Groenewald, P., Neethling, I., Evans, J., Azevedo, V., Naledi, T., Matzopoulos, R., Nannan, N., Daniels, J., & Bradshaw, D. (2017). Mortality trends in the City of Cape Town between 2001 and 2013: Reducing inequities in health. South African Medical Journal, 107(12), 1091. https://doi.org/10.7196/samj.2017.v107i12.12458

Haferburg, C. (2000). How many Muslims are there in South Africa.

Islam, M. N., & Islam, M. N. (2003). Pattern of unnatural death in a city mortuary: a 10-year retrospective study. Legal Medicine, 5, S354–S356. https://doi.org/10.1016/s1344-6223(02)00131-1

Islam, T. (2022). Expansion of Maqasid thought beyond Maqasid al-Shariah: Maqasid al-Quran as a new paradigm. Hamdard Islamicus, 45(4). https://doi.org/10.57144/hi.v45i4.514

Kamali, M. H. (2017). Actualization (Taf'il) of the Higher Purposes (Maqasid) of Shari'ah. Islam and Civilizational Renewal, 8(3), 295–321. https://doi.org/10.12816/0042922

Kazemi, E., Khosravi, A., Aghamohamadi, S., Shariat, M., & Kazemeini, H. (2021). Trends in premature mortality in the Islamic Republic of Iran: probability of dying between ages 30 and 70 years. Eastern Mediterranean Health Journal, 27(1), 33–40. https://doi.org/10.26719/emhj.20.067

Khan, M. B. H., & Hossain, M. M. (1970). Study on Unnatural Death Patterns in Dhaka City. Anwer Khan Modern Medical College Journal, 2(2), 18–20. https://doi.org/10.3329/akmmcj.v2i2.8167

Lerer B L, Matzopoulos, Phillips R.1997). Violence and injury mortality in the Cape Town metropole, 1994: South African Medical Journal, 87(3), 1091. https://doi.org/10.7196/samj.1994/.v107i12.12458

Matzopoulos, R. (2016). Violent Deaths In SA: The 2003 National Injury Mortality Surveillance System. South African Crime

Quarterly, 13. https://doi.org/10.17159/2413-3108/2005/v0i13a1009

Matzopoulos, R., Prinsloo, M., Pillay-van Wyk, V., Gwebushe, N., Mathews, S., Martin, L. J., Laubscher, R., Abrahams, N., Msemburi, W., Lombard, C., & Bradshaw, D. (2015). Injury-related mortality in South Africa: a retrospective descriptive study of postmortem investigations. Bulletin of the World Health Organization, 93(5), 303–313. https://doi.org/10.2471/blt.14.145771

Ming, Y., & Carol Camp, Y. (2018). A Comparative Study of the World's Most Dangerous Cities: Violence as the Ultimate Public Heath Challenge. Insights of Anthropology, 2(1). https://doi.org/10.36959/763/487

Mohadi, M. (2023). Interview with Jasser Auda. Journal of Contemporary Maqasid Studies, 2(1), 159–174. https://doi.org/10.52100/jcms.v2i1.100

Nunes, E. D. (2012). United Nations Office on Drugs and Crime (UNODC). Global Study on Homicide: Trends, Context, Data. Vienna: UNODC; 2011. Ciência & Saúde Coletiva, 17(12), 3447–3449. https://doi.org/10.1590/s1413-81232012001200029

Ridwan, M. (2021). Analysis of Maqasid al-Tasarrufat al-Maliyyah Muhammad al-Tahir ibn Ashur on the contract of al-ijarah al-Muntakiyah bi al-Tamlik (studies at PT. BRI Syariah KCP Ponorogo). Journal of Islamic Economics (JoIE), 1(2). https://doi.org/10.21154/joie.v1i2.3594

Services | SAPS (South African Police Service). (n.d.). Services | SAPS (South African Police Service). https://www.saps.gov.za/services/crimestats.php

Services | Stats Sa (Department of Statistics South Africa). https://www.statssa.gov.za/

Winterbach, M., Hattingh, C., & Heathfield, L. J. (2021). Retrospective study of sudden unexpected death of infants in the Garden Route and Central Karoo districts of South Africa: Causes of death and epidemiological factors. South African Journal of Child Health, 15(2), 74. https://doi.org/10.7196/sajch.2021.v15i2.01729

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