

## DISEASES AND CAUSES OF DEATH AMONG THE POPES

### ABSTRACT

The causes of death of popes are reviewed in the light of existing knowledge, and analysed in terms of four periods: First Period (64-604) Early Middle Ages (604-1054), Late Middle Ages and Renaissance (1054-1492), and Post-Renaissance (1492-2000). Among those who died of natural causes, multi-disease pathology was commonly present as is to be expected in an older population group, and acute terminal febrile illnesses, malaria, stroke, severe heart disease, gout or poly-arthritis, terminal kidney disease, gallstones, cancer, dysentery, the plague, lung infection, gangrene of a leg, abscesses, depression or debilitating psychiatric illness. Unnatural causes comprise *inter alia* assassination, death in prison or in exile, casualties of war or public violence, poisoning and stoning during street violence. This study covers the time period up to the year 2005.

### 1. INTRODUCTION

The word “pope” is derived from the Greek for “father”, the head of the family as well as of religious congregations. Thus senior priests and bishops were also addressed by this term in ancient times. From the 5<sup>th</sup> century AD it was increasingly applied to the Bishop of Rome, and after the 8<sup>th</sup> century exclusively so. As pope, the Bishop of Rome was head of the international Christian church. With the passage of time, events such as the schism with the Eastern Church (from the 6<sup>th</sup> century), the Reformation, and the royal revolt of the English Church in the 16<sup>th</sup> century, split Christianity into factions, with the consequence that the pope ultimately became the head of what we today term the Roman Catholic church.

Over the past two millennia the papacy has come full circle in terms of power and influence. In the 1<sup>st</sup> century AD it came into being under difficult circumstances as a purely spiritual institution with a limited sphere of influence. During the Middle Ages its status and in particular its secular power and its material wealth increased immensely, up to and including the Renaissance, after which the emphasis on spiritual leadership was gradually restored, so that today we again have popes who are purely religious leaders.<sup>1</sup>

1 Maxwell-Stuart (1997:7).

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There have been 263 popes in all, 78 of whom have been posthumously canonised as saints. There were also 39 “anti-popes” who acted unlawfully as popes, and two of these were also eventually canonised. Only four popes abdicated voluntarily. The overwhelming majority of the popes (194) were Italian (77 of them from Rome), but their number also included thirteen Frenchmen, fifteen Greeks, eight Germans, seven Syrians, three Sicilians, two Sardinians and two Spaniards. Two popes came from North Africa, and one each from England, Portugal, Holland, Poland, Palestine, Burgundy and Dalmatia. One pope was a Goth, and nine were of uncertain ancestry. The 13<sup>th</sup>-century story of a female Pope Joan is a complete fiction.

The diseases and causes of death of these popes, who varied as individuals from extremely pious and competent to immoral and corrupt, will now be analysed in terms of four periods:<sup>2</sup>

- i. the early period, with the establishment of the papacy (c. 64-604 AD);
- ii. the early Middle Ages (605-1054);
- iii. the later Middle Ages (1055-1492), and
- iv. the Renaissance and thereafter (1493-2005).

Table I summarises the statistics. As one would expect, personal information about the early popes is limited and not always reliable. Their deaths will be assessed as proceeding from natural or unnatural causes. Where no details are available, death will be recorded as due to natural causes.

2 As suggested by Maxwell-Stuart (1997:4-5).

Table I: Popes

Period	Number	Age (average)	Period of service (average and extremes)	Cause of death	
				Natural	Un-natural
Establishment: ± 64-604 (540 years)	64	Not available	8,4 years 8 <1 year (12,5%) longest 19 years	54	10
Early Middle Ages: 605-1054 (350 years)	87	39,3 years (average of 11 popes)	4,9 years 23 <1 year (26,1%) longest 23 years	76	11
Late Middle Ages: 1055-1492 (438 years)	61	59,1 years oldest: 85 years, youngest: 37 years	7,8 years 16 <1 year (26,2%) longest: 22 years	58	3
Renaissance and thereafter: 1493-2005 (512 years)	51	63,9 years oldest: 84 years, youngest: 37 years	10,0 years 8 <1 year (16%) longest: 32 years	50	1

## 2. PERSONAL DETAILS

### 2.1 The establishment of the Papacy: c. AD 64-604 (540 years)

The apostle Peter is traditionally regarded as the first leader or pope of the early Christian church as it continued to exist after Christ's death under extremely difficult circumstances, including persecution. In time an attempt was made to administer the church under the leadership of the pope (the Bishop of Rome) with Rome (the capital of the Roman Empire) as its seat. The Church grew with rapid strides after Constantine instituted a policy of universal religious toleration in 313. With the fall of Rome (476) and the establishment of Constantinople, the church was temporarily divided under Western and Eastern papacies, but by 604 the Roman pope had regained supremacy.

The 64 popes of this era served for an average of 8,4 years: eight for less than a year and Zephyrinus (198-217) for the lengthiest period (19 years). Ten of the popes were of Greek descent, two Sardinian, and two North African. One was German, one Syrian, one Palestinian

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(Jewish), and one a Goth. Five were of unknown descent, and the remainder were Italian.

### 2.1.1 Causes of death

- Unnatural causes

We have little reliable evidence pertaining to this era. According to tradition, 30 (47%) of the popes were martyrs, but this may be mere myth. There is a strong tradition in the church that Peter was crucified upside-down during Nero's reign of terror, between 64 and 68 AD. There is also strong evidence that Telesphorus, Fabianus, and Sixtus II died as martyrs for the faith in 136, 250 and 258 respectively. (Sixtus II was decapitated along with four senior churchmen in the time of Valerian.) Callistus I was a freed Greek slave who rose to the seat of Peter, but probably died violently during a revolt in Rome in 222. Cornelius (253) and Pontianus (255) died in captivity, the latter as an exile in Sardinia after having been forced to abdicate.

Eusebius was also sent into exile by the emperor and died a lonely death in 310. Silverius, too, was exiled as a result of the Eastern Roman emperor's scheming and died in 337 of starvation, while Benedict I apparently died as a result of famine during the siege of Rome in 579.

- Natural causes

Among the popes who died of natural causes, we know that the Gothic pope, Pelagius II died in 590 of an epidemic disease, probably bubonic plague, while Vigilius (Fig. 35) died of gallstones in 555 on a journey to Syracuse. Zosimus (415), Boniface (442) and Simplicius (438) underwent prolonged suffering from chronic ailments before they died, but no further details are available. John I (526) and Felix III (530) died of acute but unidentified diseases. Gregory I ("the Great") suffered for a long time from gout, recurrent fevers and terminal depression, and was unable to walk for a period before his death in 942. The causes of the deaths of the other popes are unknown.



Figure 35: Vigilius (537-555): died of gallstones.

## 2.2 The Early Middle Ages: 605-1054 (350 years)

At the beginning of the 7<sup>th</sup> century the papacy held a position of authority which it was able to maintain throughout this period of developmental stagnation in Europe. Constantinople and Islam, by contrast, were flourishing. This Eastern domination was neutralised in the 8<sup>th</sup> century when Charlemagne established the Holy Roman Empire in Europe. In addition to being a religious leader, the pope thereby gained significant secular powers. As the new millennium broke, however, Christianity was split in two by the mutual excommunication of the Western and Eastern churches (1054).

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The 87 popes of this period ruled on average for 4,9 years, 23 of them for less than a year, and Hadrian I (772-795) for as long as 23 years. The average age on accession (for the eleven popes whose details are known to us) was 39,3. There were five Greek popes, five Germans, five Syrians, four Silesians, one Dalmatian, and four of unknown nationality, while the rest were Italians. Their average lifespan was 46,6. The youngest, Gregory V (999) and John XII (964), died at 27 (the latter of a stroke suffered while committing adultery) while the oldest, Formosus (896) was 81. Two popes (18,2%) lived beyond their 80<sup>th</sup> birthday and five (45,5%) died at 40 or younger.

### 2.2.1 Causes of death

- Unnatural causes

Eleven popes (12,9%) died of unnatural causes. After a disagreement with the Byzantine emperor, Martin I was arrested, scourged and exiled. He died in 653 on the Crimean peninsula, of a combination of abuse, starvation and exposure. In 882 John VIII became the first papal victim of murder, when some of his staff first poisoned him and then beat him to death with cudgels. Hadrian III (885), Benedict IV (903), and Sergius IV (1012) were also probably murdered by their enemies. The unbalanced Steven VI was strangled in 896 during a prison riot, while Leo V was murdered in jail by an anti-pope in 903 after reigning for only a month. After a successful reign of fourteen years, John X died in 928 when dissatisfied members of the aristocracy suffocated him with a cushion. Steven IX, who had been raised to the seat of Peter by members of the aristocracy, was arrested in 942 by the same group and so severely tortured in prison that he died of his injuries. Benedict VI was strangled in jail in 974 on the instructions of an anti-pope. Boniface VII was responsible for the imprisonment of John XIV, who died in jail in 984 of exposure and possibly poisoning.

- Natural causes

Of the popes who died of natural causes during this period, we know that John V (686) and Leo IX (1054) had become chronically debilitated by an unknown illness, while Sisinnius (708) was so disfigured by gout that he could no longer eat. Conon, a Sicilian pope who reigned

for less than a year, was retarded and chronically ill at the time of his death in 687. Steven II (752), who was pope for only three days, and Sergius II (847) both died of what was probably a stroke. John XII, the illegitimate son of his predecessor Agapitus II, was unlawfully elected pope at the age of eighteen. He died nine years later (964), reputedly of a stroke brought on while committing adultery. Boniface VI (896) suffered from severe gout. John XV died of acute fever in 996, and both Gregory V (999) and Damasus (1048) were diagnosed as having died of malaria. Gregory VI was deposed on account of bribery a year after his accession, and died of an acute disease of unknown causation (1046). Nothing is known about the deaths of Theodore II (897), John XVII (1003) and John XVIII (1009). The remainder of the popes are said to have died of natural but undetermined causes.

### 2.3 The Late Middle Ages: 1055-1492 (438 years)

Estranged from the Eastern Christian Church, the Roman (Western) popes now embarked on a difficult period of political instability. Papal independence was threatened by the emperors of the Holy Roman Empire, by Islam, by the rulers of France and Sicily, and by internecine conflict within Italy. Between 1309 and 1377 the local conflict was so intense that the papal headquarters were moved to Avignon in France. At one stage during this nadir in the history of the church there were three opposing popes claiming to rule simultaneously. Scandalous behaviour, nepotism and the extensive sale of indulgences were the order of the day. The Inquisition acted with the utmost severity against alleged heretics and other opponents of the church. But the popes were also closely involved with the organisation of crusades to liberate the Holy Land from Islam, and between the 11<sup>th</sup> and the 13<sup>th</sup> centuries five such campaigns were launched, with varying degrees of success. By the end of the 15<sup>th</sup> century, however, there were some real signs of spiritual and secular recovery.

The 61 popes of this period ruled for an average of 7,8 years and acceded to the papal throne at an average age of 59,1. Sixteen of them (26,2%) ruled for less than a year, while Alexander III (1159-1181) had the longest reign (22 years). At 37, Innocent III (1216) was the youngest pope elected, and Celestine III the oldest, at 85. The average age at death was 66,3; the youngest, Victor II (1057), was 40 and

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the oldest, Celestine III (1198), was 92. Five popes (10,9%) lived to the age of 80 or more. Twelve popes were French, two German, and one each Spanish, English, Burgundian and Portuguese; the remainder were Italian.

### 2.3.1 Causes of death

- Unnatural causes

Only three popes died of unnatural causes during this period. Lucius III became personally involved in a war against the insurgent Roman population in 1145 and died as a result of injuries sustained when he was stoned. John XX, who had had a special study built in the Vatican, died in 1277 when its ceiling collapsed on him. Urban VI became involved in heated conflict with his French cardinals after the ending of the Avignon period — to the extent that he apparently became psychologically disturbed — and was poisoned in 1389.

- Natural causes

Among the popes whose deaths were natural, acute fever was the cause in the case of four (Victor II in 1057, Innocent III in 1216, Gregory X in 1276 and Pius II in 1464). Victor III (1118), Innocent V (1276) and Innocent VIII (1492) died after prolonged chronic illnesses. Nicholas III (1280), Honorius IV (1276), Innocent VII (1406), Martin V (1431), Paul II (1471) and Boniface IX (1404) probably died of apoplectic strokes. (The last-named pope also had stones in the bladder, and died after an argument with delegates of a rival anti-pope, who were accused of murder and released only after huge fines had been paid.)

Clement V (1314) suffered from cancer, Gregory XI (1378) had severe problems with stones in the bladder, and Benedict XI (1304) died of dysentery. Nicholas V (1455) survived attempted murder and apparently died of complications caused by gout. During his reign, Constantinople was taken by the Turks (1453) and the Eastern Church went into exile. Boniface VIII (1303) and Sixtus IV (1484) (Fig. 36) are recorded as having died of physical and mental exhaustion, although the latter also suffered from severe gout. The extremely pious 84-year-old Celestine (1294) abdicated due to a severe abscess (of unknown nature), and after fourteen years of service the 86-year-old Gregory





Figure 36: Sixtus IV (1471-1484), founder of Vatican library: died of physical and mental exhaustion, also suffered from severe gout.  
Fresco, Melozzi da Forli.

IX died of “old age”. Eight popes died of acute diseases of unknown cause: Steven IX (1058), Nicholas II (1061), Gelasius II (1119), Honorius II (1130), Urban III (1187), Celestine IV (1241 — after only seventeen days on the papal throne), Innocent IV (1254) and Hadrian

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V (1276). Urban V (1370) collapsed and died at the age of 60 while celebrating Mass in the cathedral, after having become ill shortly before.

### 2.4 The Renaissance and thereafter: 1493-2005 (512 years)

In the 15<sup>th</sup> century the secular power of the Roman church was at its zenith, but its spiritual power had reached a new nadir. The Borgia and Medici popes were particularly notorious for corruption and the abuse of power, but nevertheless facilitated the Renaissance by means of their support for science and the arts. Because of the Reformation in the 16<sup>th</sup> century, Protestantism came to pose strong opposition to the papal authority. Spiritual self-examination in the Vatican led to the Counter-Reformation. Over time, the secular power of the pope began to wane and by 1810 it had been given the *coup de grâce* by Napoleon. After the 19<sup>th</sup> century the Vatican returned to its original role, with the popes being tasked to provide spiritual guidance in the fast-changing modern era posing challenges such as globalisation, scientific development and telecommunication.

During this time there were 51 popes, the youngest (Leo X, 1513) being 37 and the oldest (Clement X) 79 at election; their average age was 63,9. Their periods of office varied from less than a year in the case of eight popes (16%) to 32 in the case of Pius IX (1846, aged 78), with an average of 10,0 years. One was Spanish, one Dutch, one Polish and the remainder Italian. Their average lifespan was 73,6 years; the youngest, Leo X (1521), was 45 when he died, and the oldest, Leo XIII (1903), was 92. Nineteen popes (36%) reached the age of 80 or more.

#### 2.4.1 Causes of death

Due to better documentation in later times more is known about this group than about the previous popes.

- Unnatural causes

Only one pope in this period probably died an unnatural death (in prison), namely Pius VI (1799), after Napoleon's conquest of the Papal states. According to tradition Leo X (1521) (Fig. 37) died after an anal abscess had been dressed with poisoned bandage, and Clement XIV (1774) was killed by oral poisoning, but these claims are probably false.



Figure 37: Leo X (1513-1521): died of terminal malaria; chronic anal abscess. Raphael, Uffizi Gallery, Florence.

- Natural causes

Natural causes led to the death of various popes during this period: Julius II (1513, fever); Clement VII (1534, suffered from a major anxiety neurosis); Pius IV (1565); Innocent IX (1591, reigned for only two months); Leo XI (1605, had been in ill health for some time and was pope for only a month); Gregory XV (1623), and Clement X (1676, died at the age of 85 after a prolonged illness with swelling in the lower limbs. Terminal malaria was diagnosed in the cases of Leo X (1521) who also had a chronic anal abscess; Sixtus V (1590), who had recurrent attacks of fever; Urban VII (1590), who ruled for only twelve

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days, and the infamous Borgia pope, Alexander VI (1503). Alexander was so obese that no suitable coffin could be found, and his corpse began to decompose before the burial. Rumours that he was poisoned are probably false. Chronic illnesses whose exact nature is unknown led to the deaths of Pius III (1503), who also suffered from gout; Innocent XIII (1734); Leo XII (1829); Pius VIII (1830), and John XVIII (1963). Stroke was the cause of death in the cases of Marcellus II (1555), who was physically debilitated and reigned for only 22 days; Paul V (1621), who died after the second attack; Clement IX (1669), and probably Clement XIII (1769), in whose case heart disease was probably a contributory factor. Heart disease probably also led to the death of Paul IV (1559) and was definitely the cause in the cases of Paul VI (1978), who also suffered from poly-arthritis, and John Paul I (1978), who was pope for only a month, and about whom rumours of poisoning, no doubt false, circulated. Gregory XIV (1591) died with gallstones reputed to weigh 70 grams. Alexander VIII (1667) suffered from severe pain in the area of the kidneys for the last year of his life. Other popes with kidney diseases included Innocent IX (1689), who had kidney-stones, gout and recurrent fever; Clement XII (1740), who was 88, blind, with hernias, gout and recurrent bladder infections, and Benedict XIV (1758), who had severe kidney disease followed by fatal pneumonia. Alexander VIII (1691) was 81 when he died as a result of gangrene in one leg. Clement XIV (1774) suffered in his last years from severe depression accompanied by a pathological fear of being murdered. There were rumours that he was poisoned, but the autopsy found no evidence.

The last pope, John Paul II survived an attempted murder in 1981 when he was shot in the abdomen. He died in 2005 (84 years old) from Parkinson's disease after a period of service of 27 years (the second longest in the history after Pius IX, 19<sup>th</sup> century).

## 2.5 Discussion

The available information indicates that the 263 popes who have reigned over the past two millennia were on average 59,3 year old at their election. (It was only possible to establish the ages of 123 popes, however.) Their average term of office was 7,3 years. The era with the longest average period of office (9,6 years) was the most recent: 1493-2000. Twenty-five popes (9,5%) served for less than a year, with the

shortest term being three days (Steven II, 757). The longest term was 32 years (Pius IX, 1846-1878).

The average lifespan of all the popes whose ages are known to us was 61,2. This figure rose from 46,6 in the early Middle Ages (only 12,5% of ages being known) to 66,3 in the late Middle Ages and 73,4 in the Renaissance and thereafter. The youngest was John XII (964), aged 27, and the oldest Celestine III (1198) and Leo XIII (1903), both 92. Since the Renaissance nineteen popes (36%) have reached the age of 80 or more, and the youngest died at 45.

- Unnatural causes

Our research indicates that 25 popes (9,5%) died of unnatural causes, most of them (18,5%) in the early period and the fewest (2,0%) in recent times. Information on the patients' medical histories is limited and the earliest details (prior to the Renaissance) are of dubious value. We could only establish that four of the 30 early popes (from the 1<sup>st</sup> to the 4<sup>th</sup> century AD) who were traditionally held to have died as martyrs for the faith were indeed martyred. The cause of death in five cases is unknown. The remaining popes died in riots or on the battlefield (three), or were cold-bloodedly murdered or executed (ten, nine of them in the early Middle Ages), or died in prison or in exile (seven), while one died after a ceiling collapsed on him.

- Natural causes

The natural causes of papal deaths were many and varied, but here again the early medical histories provide few details about disease, which renders detailed analysis impossible. In many cases, several medical conditions were mentioned. Twenty popes were recorded as having suffered from chronic illnesses and physical debilitation, without further details, while fourteen died after equally unidentified and unattributed acute diseases. In fourteen cases terminal fever is mentioned, and in a further four cases malaria is specifically diagnosed (one pope died after repeated bouts). The deaths of thirteen popes were attributed to stroke (one after a second attack, and one while committing adultery), but in only five cases was there any mention of terminal heart disease (three in the past 200 years). Five suffered from severe anxiety, nervous exhaustion or depression; one was retarded,

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and two died of “old age”. Nine popes suffered from gout or polyarthritis. In ancient times the concept of gout was often a generic name for joint pain due to various causes, and it therefore does not necessarily refer to abnormal uric acid metabolism.<sup>3</sup> Terminal kidney disease (or kidney pain) was diagnosed in the case of five popes, and two died of gall-stones. Severe lung pathologies were described in the cases of two popes, and two more had severe abscesses: one peri-anal, the other not specifically located. Gangrene of the leg, cancer, dysentery, bubonic plague and Parkinson’s disease were respectively responsible for the deaths of five popes.

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3 Spencer (1948:Appendix, pp. 463-5).