

Unexpected healings in Lourdes catholic sanctuary: an epidemiological review on the cases canonically acknowledged

Gerardo Iuliano*

Formerly Chairman U.O.S.D Malattie Demielinizzanti, Multiple Sclerosis Center, A.O.U. Ospedali Riuniti di Salerno, Salerno, Italy

Abstract

Background: At present the cures recorded in Lourdes, France, since 1858, the year of Bernadette Subirous' Visions, have been widely reviewed in literature, but never yet statistically appraised. We are trying an epidemiological evaluation of demographic, clinic, and historical distribution, starting, from the case series (70 patients, mostly pilgrims) presently acknowledged by both medical and ecclesiastic institutions (local Bishop).

Patients and methods: Population data are extremely difficult to obtain, because Lourdes is a destination for millions of pilgrims, whose average stay is about two days.

Variables were demographics, nationality and distance from Lourdes, religious status, clinical diagnoses and features, healing place, date of healing and of acknowledgement, medical institutions, and Pope at the times. Historical variables were local and mondial wars, politics (state and government) in France and European countries (Italy, Spain, Portugal, Germany, Austria, UK, Vatican), dictatorships (communism, fascism etc.) international conflicts (cold war, Islam fundamentalism, economic crises), religious events (Vatican Council II, similar events as Fatima and Medjugorje), and medical achievements (sanatoriums (1902), isoniazide (1952), antibiotics (1946)).

Data collected on a spreadsheet were examined statistically by ANOVA, frequency tables, multiple regression, and forecast models.

Results: Main hallmark and limitation of the paper is the group itself, resulting from a double selection, medical and ecclesial. Among significant results there are a progressive decrease but not a definite ending of the healings, time modification of the diagnoses, healing peaks linked to medical institutions, and historical data, as wars, international conflicts, ideologies, politics, and ecclesial events.

Discussion: The number of healings can be interpreted as expression of religious and faith need and research in the people. Canonical acknowledgements, clearly associated with ecclesial orientation of the moment, express the answer of Church to these needs.

The decrease of certifications seem mostly linked to outdated medical criteria, based on 18th century guidelines. An evidence-based approach should suggest, more than excluding "natural causes", to formulate levels of evidence and degrees of recommendation based on systematic reviews and statistics, limiting itself to indicate the probability of the event.

Further research should include healings not canonically acknowledged, and also not medically certified, either in Lourdes or in similar experiences, in christianism or in other religions.

Introduction

On February 11th 1858, Carnival day, in Lourdes, village of French Pyrenees, a fourteen years old girl of humble condition, Bernadette Subirous, states having seen, in a cave nearby, "something", more precisely "a Lady" which in subsequent apparitions qualifies as "The Immaculate Conception", asks Bernadette and bystanders to come to the grotto, drink and wash with the water sprang in one of the apparitions.

The reports of the apparitions don't mention sickness or miracles; nevertheless, many sick people visit the grotto starting to report unexpected healings, which multiply over time, so to need first the institution of a "Bureau des Constatations" (1883), then of a national scientific panel (1947), subsequently transformed in Comité Médical International de Lourdes - C.M.I.L. (1954).

In spite of the scientific interest, medical literature about this matter reports a single research article by questionnaires [1]; papers are mostly commentaries, anecdotal case reports, historical presentations [2-12] or critical revisions [13-18].

Some of them, moreover, well accurate and detailed [4,19], contain many data, and also some tables, from which (between 1858 and 1984,

***Correspondence to:** Gerardo Iuliano, Formerly Chairman U.O.S.D Malattie Demielinizzanti, Multiple Sclerosis Center, A.O.U. Ospedali Riuniti di Salerno, piazza P. Paoli 6, 84122 Salerno, Italy, Tel: +089225295; E-mail: geriu@tin.it

Key words: lourdes, cures, healing, religion, faith, epidemiology

Received: December 29, 2018; **Accepted:** January 18, 2019; **Published:** January 24, 2019

two millions sick pilgrims, 6000 healings certified by physicians, 64 canonically acknowledged) [4], is also possible, for example, a rough calculation of global prevalences (300/100000 healings certified, 3,2/100000 acknowledged by Church).

The most recent paper, very detailed [19], reports that "Despite the massive number of visitors and obvious importance of the Lourdes phenomenon even to the present day, there has as yet been no comprehensive analysis of the purported cures". The same paper reviews more than 400 healings, using "mostly archival materials, with particular emphasis on medical credibility in the present", suggesting "that the religious healing experienced by pilgrims may be part of a neuropsychiatric phenomenon amenable to further study with modern scientific methods".

Though the first step for a "modern scientific method" should be statistical epidemiology, besides the above reported papers, medical literature (Index Medicus - Pubmed) do not show, at present, published papers with associated keywords as "Lourdes", "faith" and "epidemiology"; at present there is not yet in literature an epidemiological statistical description of these phenomena.

Objectives

Aim of the project is going beyond critical revisions or credibility opinions, trying to give, as possible, an epidemiological reappraisal by statistical approach to the phenomenon of Lourdes cures, in their space and time distribution, starting, in the present paper, from the series presently acknowledged by ecclesial institution (local Bishop).

Patients and Methods

All the reported healings were medically examined, at first from a single physician (Dr. Vergez), later from Bureau Medical, at last also from CMIL (see above).

Most of them are usually attributed to natural causes or medical treatment; those now not explained by medical knowledge (at present more than 7000), are referred to the Bishop of the patient's diocese of origin, who is responsible for a possible canonical acknowledgement.

Guidelines are based on criteria the first formulation of which dates to the cardinal Prospero Lambertini (Pope Benedictus XIV, 1740-1758) [20].

Shortly, criteria are: 1 – severe sickness, not or poorly treatable; 2 – the disappeared phenomenon must not be at a last stage, after which it could spontaneously run out; 3 – incurability or poor response to treatment; 4– healing to be sudden and instantaneous; 5 – healing to be perfect and not partial of incomplete; 6 – no evolution or crisis recently preceding such as to be considered cause or contributory cause; 7 – no subsequent relapses.

An objective limitation is finding data on general population, extremely difficult to obtain, because since 1858 Lourdes has been a destination for millions of pilgrims, whose average stay is about two days. Included in this study are only patients whose healing, besides medical certification, has been also canonically acknowledged by ecclesial institution, between feb 11th, 1858 and feb 11th, 2018.

The official reports of the patients, exposed in the small museum of the Bureau des Constatations in Lourdes, and also published in italian on the web site of the Sanctuary (<https://www.lourdes-france.org/it/healings-e-miracoli>) have been examined.

Data have been entered in a spreadsheet (Microsoft Excel).

Main demographic data have been considered: age, sex, residence, nation, religious or secular status, distance from the Sanctuary.

Official data do not always report social and wedding status, schooling, job, and sons, entered when referred, but not examined.

Almost always reported is the site of the healing, which sometimes has not occurred in Lourdes, but has been anyway reported to the devotion to the Virgin, or to use of the water. Four variables have been included, not mutually exclusive: presence at Lourdes; presence at the grotto, use of water, bath in the pools of Sanctuary.

Clinical diagnoses are entered in the order they are formulated in the reports (trauma, inflammations, tuberculosis, rheumatic disease, necrosis, cancer, general diseases as underdevelopment or cachexia).

In addition to main disease, many additional diagnoses are reported when present, about sites (limbs, central nervous system (CNS), medulla or peripheric (PNS), eye, face, heart, abdomen, chest, endocrin system, skin, urinary and genital apparatus), or particular features (fistulas and ulcerations, paralysis or paresis). Also entered have been the year of healing, the year of acknowledgement, the interval between these, and moreover the Pope at the moment of healing and of acknowledgement, the physician in charge of the Bureau (dr Vergez (1858-82), St.Maclou (1883-1891), Boissarie (1882-1917), Le Bec (1918-1923), Marchand and Petit (1924-27), Vallet (1928-1947), Leuret (1948-54), Pellissier (1955-59), Olivieri (1960-72), Mangiapan (1973-90), Pilon (1991-96), Lassale (1997), Theillier (1998-2008), De Francis (2009-present), and the medical institution (single physician, Bureau, Comité National, CMIL).

Data have been compared, year by year, versus historical and environmental data easily deducible from manuals, as wars (mondial wars, local wars in Europe), politics (monarchy or republic, right or left government) in France and nearest countries (Italy, Spain, Germany, Austria, UK, Portugal, Vatican), and moreover dictatorships (communism, fascism, nazism, falangism and salazarism) political situations (cold war (1945-89), islamic fundamentalism (2001), economic crises (1929-40, 2008)) religious events (II Vatican Council (1963), Fatima (1917) Medjugorje (1981), and also medical achievements, as the institution of sanatoriums (1902), antibiotic age (1946), use of isoniazide (1952).

Statistics (ANOVA, Kruskal-Wallis, post hoc tests (LSD), multivariate analyses (multiple and logistic regression), chi-square tables, forecasting models as ARIMA and moving average) were performed by Epiinfo, Systat v.11, Statgraphics v.5.1 softwares.

Results and Comments

A – Demographics

The group under study includes 70 patients, 57 females and 13 males (tab.1); mean age at healing 33,6 years (2-68). Only the first patients were mostly locals; a great part, coming from pilgrimages, live far from Lourdes, and also abroad (mean distance 739 km (0-1761)).

Also due to this reason a reliable calculation of prevalence/incidence rates is not possible.

Residence countries are France (56), Italy (8), Belgium (3), Austria (1), Germany (1), and Switzerland (1). Official data do not always report social and wedding status, schooling, job, and sons. 17 patients are religious, 52 secular; age at healing do not show significant differences neither between sex, nor between religious status.

B – Clinic

Main diseases diagnosed are (tab.2a): tuberculosis (N=28); infectious and inflammatory diseases (24), cancer (6), trauma and postraumatic diseases (4), rheumatic disease (3), generalized diseases as underdevelopment or cachexia (3), necrosis (2).

Only tubercular disease are significantly more frequent in females (multiple regression $p=0.045$).

There is a single case of relapse (Budd-Chiari syndrome), after Bishop acknowledgement, which brought the patient to death sixteen years after the healing (1970).

Disorders (tab.2b) affect limbs (32 cases), CNS (20), medulla and PNS (11), with paralysis or paresis (18); abdomen (18), skin (16), with fistulas or ulcerations (19); lungs (10), eye (5), face (5), heart (4), urinary tract (3), genital apparatus (fem) (2), endocrine (2). Females show significantly higher frequency of limb localizations, paresis from medullary or peripheral lesions, skin diseases, in particular ulcerations and fistulas, and lung diseases (see also TBC, tab.2); statistic model (squared $R=0,238$) includes also, even without statistical significance, also rheumatic cardiopathies and abdominal diseases.

There are not statistical significancies in clinical data regarding religious status (data not tabulated). Temporal trend of the diseases has been examined by multiple regression; the frequency of traumas ($p=0.002$), infections ($p=0.000$), TBC ($p=0.000$) and abdominal troubles ($p=0.004$) significantly decreases in recent years; paresis and paralysis, on the contrary, show an increasing trend ($p=0.000$).

C – Geographical data

The place of healing (tab.3) has been examined as concerning sex, religious status and nationality. Nine healings took place far from Lourdes, eight using water, one even without. Healings maybe more emphasized, those occurred in the pools, are surprisingly less frequent, either in the whole group, or in greater subgroups:females (tab.3), secular, french (not tabulated).

The distance of the place of residence from Lourdes has been also correlated: - versus demographic data: multiple regression do not show sex, age and status differences.

- Versus time: a greater distance from Lourdes is significantly correlated with more recent years ($p=0.000$) and Popes ($p<0.01$), and also with a longer interval between healing and ecclesial acknowledgement ($p=0.001$).

- Versus healing site: a greater distance is significantly correlated with a lower use of water ($p=0.042$) and a higher frequency to the pools ($p=0.036$), globally less favorite (see above).
- Versus clinical data: patients with cancer ($p=0.046$), and cachexia ($p=0.02$) seem to come from further away, rheumatic diseases are closer to Lourdes; further away limbs disorders ($p=0.001$); nearer endocrinopathies ($p=0.003$), neurological ($p=0.017$) ed ocular diseases ($p=0.011$). Other pathologies do not show significant differences.

D – Historical data

The epidemic in question (because in the medical jargon this is an epidemic), today is going on for 160 years.

Many spontaneous healing reports, not subject of this study, are referred yearly to the Bureau for further medical examination; nevertheless, last medical certification gets back to 2008, and last ecclesial acknowledgement has been made public in February 2018.

The yearly number of healings (excluding years without events), is reported in Figure 1. The regression line including also years without events show a significant decreasing trend ($p=0.009$) of medically certified healings.

Peaks of healings clustered in subsequent years (1881-82, 1901-08, 1947-52), have been furtherly analyzed, dividing ages by twenty years (1=1858-77, 2=1878-97, etc.): the mean number of healings/twenty years shows positive and negative peaks: 1858-77=mean 0,4(SD 1,57); 1878-97=0,7500(0,96); 1898-1917=0,85(0,93); 1918-37=0,2(0,52); 1938-57=0,85(1,22); 1958-77=0,3(0,48); 1978-97=0,1(0,3); 1998-2017=0,05(0,22). In the twenties 1878-97, 1898-1907, and 1928-47. ANOVA is globally significant ($p=0.01$), and "post hoc" test show significance versus negative peaks (1918-37, and last forty years 1978-2017).

It is notable that the peaks are coincident with fiftieth anniversary and centenary of the apparitions.

Medical observation data are examined, concerning either physicians in charge to the Bureau, or institutions subsequently responsible for certification.

Physicians were, following each other, dr Vergez (1858-82, 25 years, 10 healings), St.Maclou (1883-1891, 9 years, 5 healings), Boissarie (1882 – 1917, 26 years, 25 healings), Le Bec (1918-1923, 6 years, no healings), Marchand and Petit (1924-27, 4 years, 1 healing), Vallet (1928-1947, 20 years, 9 healings), Leuret (1948-54, 7 years, 11 healings), Pellissier

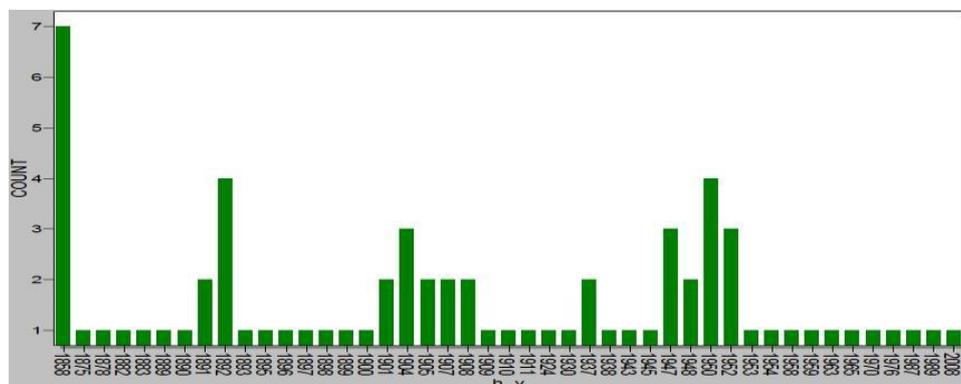


Figure 1. Healings—Heals by year (only years with event)

(1955-59, 5 years, 2 healings), Olivieri (1960-72, 13 years, 3 healings), Mangiapan (1973-90, 18 years, 3 healings), Pilon (1991-96, 6 years, no healings), Lassale (1997, 1 year no healings), Theillier (1998-2008, 11 years, 1 healing), De Franciscis (2009, 10 years, no healings).

ANOVA ($p=0.006$) shows significant peaks ($p<0.05$) under dr Boissarie (mean 1/year) and Leuret (mean 1.6/year)

About institution (ANOVA $p=0.000$), after a first time, when certification was made by a single physician (1858-82, 25 years, 10 healings), the longest epoch has been that of Bureau des Constatations (1883-1947, 65 years, 37 healings, $p<0.05$ only vs CMIL); the main peak of healings occurs in the few years of National Committee (1948-54, 7 years, 11 healings, $p<0.05$, see also above, dr. Leuret); subsequently replaced by CMIL (1955, 63 years, 9 healings).

Similar results show the number of healings versus the Pope at that time. Crude numbers are: Pius IX=9, Leo XIII=19, Pius X=12; Pius XI=5; Pius XII=17, John XXIII=2; Paul VI=3; John Paul II=2; Benedictus XVI=1. Year mean, by ANOVA, shows main significant peaks concern the pontificates of Leo XIII, Pius X, and Pius XII, similar to previous historical peaks. During the pontificate of Benedictus XV (1914-22) no healings nor acknowledgements are reported.

A quite different historical profile shows the number of ecclesial acknowledgements as compared to the healings (Figure 2).

ANOVA by twenties shows a significant peak only between 1898-1917 ($p<0.03$).

When comparison is made vs the Pope under whom ecclesial acknowledgement occurred, there is a complete lack of acknowledgements under Leo XIII, Benedictus XV, and Pius XI. Crude numbers are very different from those of the healings: Pius IX= 21 years, 9 healings, 7 acknowledgements; Leone XIII= 25, 19, 0; Pius X=11, 12, 33; Benedictus XV=8, 0, 0; Pius XI=17, 5, 0; Pius XII=19, 17, 15, John XXIII=5, 2, 5; Paul VI=15, 3, 4; John Paul II=27, 2, 3; Benedictus XVI=8, 1, 4.

Main peaks occur under Pius X (1903-14), and Pius XII (1939-58), but ANOVA show significancy only under Pius X (mean 3 acknowledgements/year, $p=0.001$), even more evident if compared with negative peaks, those without any acknowledgement: under the pontificate of Benedictus XV (1914-22) there were no healings, nor acknowledgements, but under that, very long, of Leo XIII (1878-1903) 19 healings had occurred, and 5 under Pius XI (1922-39) (see above).

Further considerations are possible examining by regression the interval between year of healing and of acknowledgement, which is progressively increasing in time ($p=0.004$) if calculated by year of acknowledgement.

There is an evident and significant association between Popes and interval: at the time of healing (ANOVA $p=0.0016$), interval is significantly shorter under Pius X ($p<0.04$ vs all), and longer under Paul VI ($p=0.03$ vs Pius XII), maybe due to increasing complexity of medical examinations (Bureau since 1905, National Committee since dal 1947, CMIL since 1952), but also under Leo XIII, in spite of the peak of healings, due not only to the traditional caution of ecclesial authority, but mostly to historical events at that time (see further).

At the time of acknowledgement (ANOVA $p=0.001$), besides the difference between Pius IX e Pius X ($p=0.047$), even more evident and significant is the increase of the interval under more recent pontificates (John Paul II and Benedictus XVI, $p=0.006$), due to the rescue of ancient dossiers (Tables 1-3).

It remains to compare healings, acknowledgements, and intervals versus main historical events occurred in the last 160 years.

Comparisons were made mainly by multiple regression with backward stepwise models.

A higher healing number is significantly associated to years of Italian monarchy (1861-1946, $p=0.001$), to wars in Germany ($p=0.022$), and to the so called "cold war" ($p=0.048$); a lower number is significantly correlated with French wars ($p=0.016$), and with antibiotic era (0.026).

The number of acknowledgements seems to show more significant historical correlations, though the model includes only one third of the possible variability (squared $r=0.342$): lower during German wars ($p=0.000$), and after Vatican Council II ($p=0.043$), higher during wars in Vatican ($p=0.002$), Portuguese monarchy ($p=0.003$), and conservative English governments ($p=0.018$), and also after the establishment in Europe of sanatoriums for the treatment of TBC ($p=0.001$); also significant in the model is Pope at acknowledgement ($p=0.049$, see also above).

Even more associations shows the interval between healing and acknowledgement, either vs historical or demographic variables: year ($p=0.000$), sex (higher in females, $p=0.034$), religious status (higher in seculars, $p=0.005$), physician ($p=0.001$), Pope, at healing and at acknowledgement ($p=0.000$), right dictatorships ($p<0.001$), but not communism or cold war, governments in many nations, sanatoriums ($p=0.000$), and Vatican Council II ($p=0.000$); the model seem to include almost all the variability (squared $r=0.986$).

Finally, forecasting models were used for 50 years prevision of healings and acknowledgements number; if the forecast is very low, confidence intervals remain still wide, and do not allow to confirm the previsions of Francois (19) about "extinction of cures".

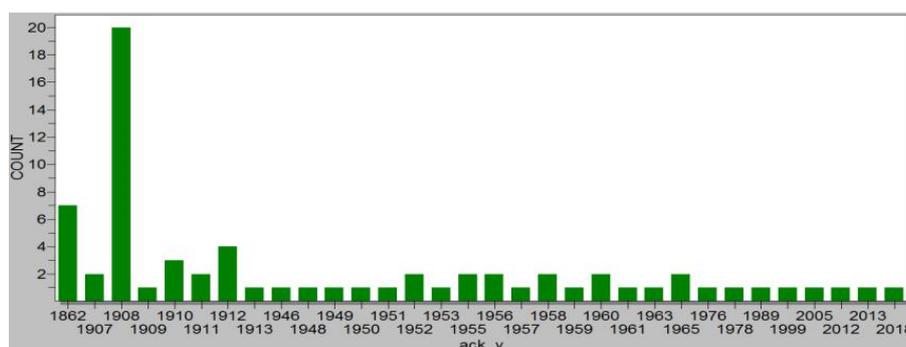


Figure 2. Ecclesial acknowledgements by year (only years with event)

Table 1. Demographics – age, sex, religious status, residence

Sex	N	Relig status		Age at healing			Residence (km)			Country					
		Sec	Rel	mean	m	M	mean	m	M	Aut	Bel	Fr	Ger	Ita	CH
F	57	43	14	31,9	12	68	662	0	1761	1	2	47	1	6	0
M	13	10	3	34,2	2	54	571	0	1187	0	1	9	0	2	1
Tot	70	53	17	33,6	2	68	645	0	1761	1	3	56	1	8	1

Table 2. Clinical pictures

A - clinical features - main pathology															
Sex	Trauma	Flog	Tbc	Reum	Nec	Neo	Gen	Tot							
F	2	18	26	3	2	4	2	57							
M	2	6	2	0	0	2	1	13							
Tot	4	24	28	3	2	6	3	70							
p*		p=0,045													
*=multiple regression, backward stepwise															
B-Clinical picture-localizations-other															
Sex	Limbs	CNS	Mid-per	Par	Add	Skin	Fist	Eye	Face	Heart	Chest	End	Uro	Genit	
F	25	14	10	13	16	15	16	3	4	4	10	2	3	2	
M	7	6	1	5	2	1	3	2	1	0	0	0	0	0	
Tot	32	20	11	18	18	16	19	5	5	4	10	2	3	2	
p*		p=0.004	p=0.032	p=0.049	p=0.072	p=0.021	p=0.043	p=0.059	p=0.009						
*= multiple regression, backward stepwise, squared R=0,238															

Table 3. Place and circumstances

Sex	N	Lourdes	Grotto	Water	Pools
		y;n	y;n	y;n	y;n
F	57	50;7	45;12	41;11	30;27*
M	13	11;2	11;2	10;3	7;6
Tot	70	61;9	56;14	51;19	37;33**

Mantell-Hanszel chi square *p=0,004; **p=0,01

Discussion

Main hallmark, but also main limitation of this paper, is the series itself, resulting from a double selection, medical, and ecclesial.

If the progressive decrease or historical modifications of disease frequency are trusted, frequency peaks of healings and even more of acknowledgements are strictly associated either with physicians or medical institutions, or with civil and ecclesial historical periods (fiftieth anniversary and centenary of apparitions, wars, international conflicts, ideologies, politics).

In these years, among Mondial and local wars, right, left, religious and anticlerical dictatorships, socialist models and capitalism, emigrations and immigration, democracies and corruption, politic and ideologic downfalls, supranationalism's and localisms, positivism and relativism, faith and atheism, also religions have fluctuated between rationalism and fundamentalism, and the idea itself of healing, grace, miracle, have changed, mostly after Vatican Council II [21].

Many data in this paper could be useful for historical and ecclesiological considerations; under medical and anthropological profile, despite the selection bias, the number of healings seems to express need, ask, research of God and Faith among people, and to mark the moments of religious revival, at least in Europe. Canonical acknowledgement, on the other side, is clearly a function of ecclesial orientation of the moment, and of religious and pastoral significance paid to the events; in other words, the answer of Catholic Church to these needs.

The term "unexpected", referred to healing, could not be appropriated; it is unexpected for medical prognosis, but actually it is more or less consciously desired by patients, and expected also

against hope. For physicians, ignoring this aspect means to give up its management.

Moreover, in a time in which words as "public health" or "recovery", also in medical jargon, seem replaced by terms as "performance" and "customer's satisfaction", subjective data paradoxically revive, and a scientific value may be attributed to concepts as "perceived healing".

Under this profile, though the decrease of healings seem well documented and significant, the statement about the "progressive extinction of Lourdes cures" [19] seem to be still premature, limited not only by statistics, but by the author itself, when includes tables (19, tab.2), reporting that, despite the collapse of acknowledgements, the dossiers started between 1991 and 2006, are almost double versus years 1972-90. The problem is not due to the infrequency of miracles: miracle is rare by itself, and in this case also talking about epidemics could not make sense. A problem is the medical certification, result of an evaluation progressively more rigorous and investigative, but based on clinical guidelines dated back to the Era of Enlightenment [20], very advanced for its age, but not formulated in the scientific field, as "canonistic", and overall, at present, in need of deep update.

Criteria as "lack of treatment", or "absence of scientific explanations at the moment" are no longer proposable, because contemporary research is able to postulate and discover in a very short time causalities or healing mechanisms not previously recognized, and seek, demonstrate and also produce personalized therapeutic tools, even in extreme cases, (see vaccines, monoclonal antibodies, gene therapy etc.) Nevertheless, statistical methodology and progressive implementation of evidence-based guidelines, which distinguish the most recent clinical work, should suggest, also in these cases, the formulation of different levels of evidence and degrees of recommendation, quantifying the "extraordinariness" not in absolute terms, but based on evidence [22], systematic revision of literature, and statistical probability.

More than excluding natural causes, physicians and scientists, to remain methodologically rigorous, should limit themselves to quantify the probability of the event and its variability.

Of course, the matter also concerns the formulation of the questions to the physician, to be reviewed according to the evolution of religiosity, and also of science, in more recent years.

On the other hand, the main criterium, i.e. the religious significance of a healing, which evaluation is strictly up to the Man of Faith, does not lose validity also in situations completely predictable from a scientific point of view.

Conclusions

The epidemic of unexpected healings, started in Lourdes about 160 years ago, do not seem to have come to an end. What seems to be finished may be better defined as a period, characterized by positivist medical attitude regarding the evaluation of healings.

This means, for Medicine, overcoming determinism, in a context of model-oriented science [23].

In the ecclesial sphere, this could encourage an update of the canonical questions posed to medicine as compared to the current ones, inspired by Enlightenment era concepts [20] and Aristotelian-Thomist philosophical models [24]. Such evolution, already started with Vatican Council II [21], is even more necessary because, as evident in many recent historical events, popular religiosity tends to re-emerge, and, when not recognized and accepted by the ecclesial institution, it often risks being assimilated to fundamentalist revivals.

However (and thanks to God), it is difficult for popular religiosity to risk extinction, at least until among people essential needs will survive, such as asking for something, or giving thanks; in other words, the need to feel loved by someone.

Consequently, it could be important, in the future, to widen epidemiological research first to healings ascertained by Bureau and/or CMIL, and not, or not yet, acknowledged; then, above all, to healings, graces and personal benefits without further medical follow up, and, possibly, to similar situations, in Christianity as in other religions [25].

References

- Lillie AK (2005) The practice of pilgrimage in palliative care: a case study of Lourdes. *Int J Palliat Nurs* 11: 234-9. [Crossref]
- Dichoso TJ (2015) Lourdes: A uniquely Catholic approach to medicine. *Linaere Q* 82: 8-12. [Crossref]
- Norheim AJ (2009) Miraculous cure in Lourdes? *Tidsskr Nor Laegeforen* 129: 1902-4. [Crossref]
- Dowling SJ (1984) Lourdes cures and their medical assessment. *J R Soc Med* 77: 634-8. [Crossref]
- Edwards CE (1961) The physician at Lourdes: reason and procedure. *Georgetown Med Bull* 15: 182-3. [Crossref]
- Fletcher AH (1958) Lourdes, 1858 to 1957. *Cent Afr J Med* 4: 446-50. [Crossref]
- Aubuchon M (1958) Lourdes, mecca in the mountains. *Hosp Prog* 39: 125-6. [Crossref]
- Koepchen A (1952) Lourdes. *Med Tech (Stuttg)* 14: 458-9. [Crossref]
- Ramos Baez P (1950) [Carrel and the miracles of Lourdes. (Comments)]. *Rev Med Cubana* 61: 617-42.
- Allbutt C (1910) Reflexions on faith healing. *Br Med J* 2: 1453-57.
- Boyd F (1910) Faith and healing. *Br Med J* 2: 464.
- Gasquet FA (1910) The Catholic Church and the Lourdes cures. *Br Med J* 2: 465-7. [Crossref]
- Wolffenbuttel E (1958) Psychosomatic medicine: indimensional medicine; further study on Lourdes. *Rev Bras Med* 15: 415-6. [Crossref]
- Morgan J (1952) Psychosomatic effects of a pilgrimage to Lourdes. *Med Tech (Stuttg)* 14: 457. [Crossref]
- Hornung H (1951) Psychosomatic effect of a pilgrimage to Lourdes. *Med Welt* 20: 904-5. [Crossref]
- Lidvall HF (1946) Neurologic studies of the "miracles" in Lourdes. *Sven Lakartidn* 61: 411-20. [Crossref]
- Cornet L (1958) Critical notes on the cures of Lourdes. *J Med Bord* 135: 1337-40. [Crossref]
- Siegmund G (1953) Medical investigation of Lourdes cures. *Hippocrates* 24: 329-32.
- François B, Sternberg EM, Fee E (2014) The Lourdes medical cures revisited. *J Hist Med Allied Sci* 69: 135-62. [Crossref]
- Lambertini P (Pope Benedictus XIV – 1740-58) De servorum Dei beatificatione et beatorum canonizatione. Libreria editrice vaticana, Roma, Città del Vaticano – 2010.
- Documenti del Concilio Vaticano II (2006) Costituzioni. Decreti. Dichiarazioni. III (Ed.), Paoline Editoriale Libri – Alba (CN) 2006. EAN: 9788831529860.
- Higgins JPT, Green S (editors) (2011) *Cochrane Handbook for Systematic Reviews of Interventions* Version 5.1.0 [updated March 2011]. The Cochrane Collaboration. Available from www.cochrane-handbook.org.
- Popper KR (2009) Poscritto alla Logica della scoperta scientifica. Il realismo e lo scopo della scienza, pag. 44, Il Saggiatore, Milano.
- Tommaso d'Aquino (2014) *Summa Theologica – Edizioni studio Domenicano*, Bologna.
- Congrès International CCMF - AMIL - Guérisons et Miracles - Lourdes 21-25/10/1993.