



Medical Problems of Way of St. James Pilgrimage

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Abstract

It appears that the El Camino pilgrimage route has become a long-distance trek and endurance test of the individual. The continuously increasing number of hikers demands more attention by travel medicine professionals. Analysis of the age groups of the pilgrims over recent years shows that the number of young pilgrims (< 30 years) is decreasing, but the number of middle-aged people (30–60 years) is slightly increasing, while the number of elderly people (> 60 years) is considerably increased. The leading cause of fatalities during the pilgrimage is ACS. The majority of the cardiac problems occur among the elderly people. The second most common cause of death is a traffic accident, and the third and fourth causes are a fatal exacerbation of the pilgrim's pre-existing disease and illnesses caused by the extreme temperature (hot and cold environment alike). The aforementioned data suggest that pre-travel advice should be an indispensable part of the preparation for the El Camino peregrination, especially for the patient with chronic disease and elderly people.

Keywords St. James Way · Pilgrimage · El Camino · Mortality of pilgrimage · Pre-travel advice · Travel medicine · Morbidity of pilgrimage

Introduction

The Way of St. James (“El Camino”) is one of the most popular pilgrimage destinations in Europe. Each year hundreds of thousands of people start this 800-km journey. It is a long trek, and a tourist's reason for making it may be religious or leisure related. The medical problems of El Camino pilgrims are similar to those of the Hajj pilgrims for many reasons, yet one can find several differences as well. Unfortunately—in contrast to the Hajj literature—very limited study has been made of the medical problems of the pilgrims of Way of St. James.

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Methods

Some exact data on the pilgrims are provided by the Pilgrims' Reception Office (PRO) in Santiago de Compostela (PRO 2017). Only those pilgrims are registered here who require 'credentials' (the official certificate achieved on the accomplishment of the St. James Way pilgrimage), but the proportion is estimated at 30% yearly (Rabe 2016). There are no exact figures available on those who die during the journey. Internet pages mention 178 cases, but only 149 of them have appraisable information (Amawalker 2017; Caminosantiago 2017). Many deaths considered 'unknown' could be attributable to acute coronary syndrome, for example, according to the circumstances described. The circumstances, age and cause of a pilgrim's death are frequently mentioned in obituaries or on the roadside memorials of Way of St. James. There are no reliable records available on the pilgrims' medical problems; therefore, the author has accepted the written information from different website forums and oral reports of pilgrims.

Results

Among the continuously increasing number of participants of Way of St. James, the number of non-religiously motivated pilgrims is more rapidly increasing (Fig. 1). We should note that the 2010 and 2016 were Jubilee of Mercy years; therefore, the number of religious pilgrims increased greatly in those years.

From the PRO data, the number of participants and the age distribution was surveyed. Contrary to the continuously increasing number of elderly people

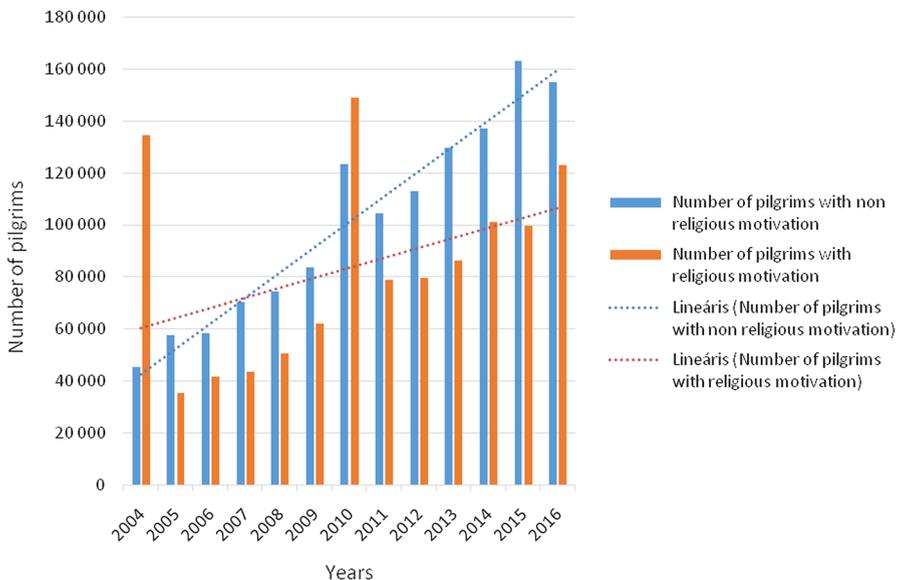


Fig. 1 Annual number of pilgrims with non-religious or religious motivation

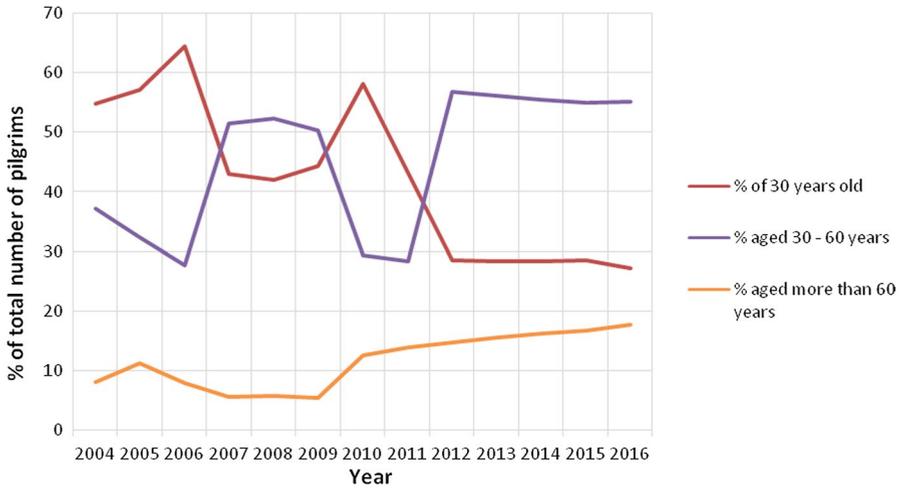


Fig. 2 Age distribution of pilgrims by year

Table 1 Cause of death in different age groups

Cause of death	> 30 years	Between 30 and 60 years	> 60 years	Total
Acute coronary syndrome or suspicion of ACS	–	25	37	62
Traffic accident	5	13	6	24
Pre-existing disease	1	3	3	7
Unknown, others	2	18	20	40
Homicide		2	1	3
Illness caused by extreme temperatures		3	1	4
Stroke		1	2	3
Drowning	2	1		3
Meningitis	1	1		2
Exhaustion			1	1
Total	11	67	71	149

(> 60 years), the number of young (<30 years) pilgrims is decreasing. The number of middle-aged pilgrims showed an inconsistent but increasing trend (Fig. 2).

The main cause of death was acute coronary syndrome (ACS), or the described circumstances suggested ACS. The second most frequent cause of death proved to be a traffic accident. The third was some pre-existing disease (Table 1).

Conclusions

Way of St. James, an important spiritual path, has slowly turned from pilgrimage to a long-distance trekking leisure activity. However, Christian pilgrims and non-religious hikers alike can suffer the same medical problems during their trip. Even minor ailments can cause serious problems during travel, and during long-distance trekking in particular.

‘You aren’t a real pilgrim without blisters, bedbugs and back pain’—says the proverb of El Camino. These are the common problems of long-distance hikers indeed, but seldom reported as a medical problem, and it is even more rare to find a pilgrim with these symptoms as an inpatient. This is why potentially serious problems can evade the notice of medical professionals, and one can find some—sometimes misleading—advice on the internet.

The poor hygienic circumstances result in dermatological problems, which are responsible for 4.5–5.5% of the medical problems during a pilgrimage (Mimesh et al. 2008). Obviously, the foot is the most loaded body part: onychomycosis, blisters and peritendinitis are common problems among the pilgrims. Foot care is essential for the diabetic patient—this issue must be stressed during pre-travel advice. Inappropriate self-treatment of a blister may result in erysipelas, which could mean the end of the pilgrimage. The common origin of back pain and ‘meralgia paresthetica’ is an overloaded or imbalanced backpack (Anderson et al. 2009). Excessively tight shoulder strips can cause axillary thrombosis (Schön et al. 2007; Kolodinsky and Brandschwei 1989).

The route is often very demanding: even at the beginning of the path pilgrims must surmount a height of 1400 m in the Pyrenees. More high mountain passes need to be completed before the pilgrim reaches Santiago de Compostela. On the other hand, the endless flat terrain without shade trees can lead to dehydration—besides heat stroke, fatigue and finally mental disturbances (Felkai and Kurimay 2017). A spiritual journey can relieve depression and anxiety (Morris 1982), but only if the traveller is physically well trained.

On the trans-Spanish peregrination, the exhausted hiker can meet various extremes of temperature: in the hills or in the night the cold can cause hypothermia. Dehydration, desiccation and different heat illnesses on the infinite green desert of Castilla can occur even in healthy hikers. Hypothermia as well as heat stroke can be found to be causes of death among the pilgrims.

The leading cause of death is acute coronary syndrome for both middle-aged and elderly pilgrims. Acute myocardial infarction and cardiac arrest are often reported by bystanders, but plenty of memorials mention such circumstances, or symptoms which could be referred to a type of ACS. Theoretically, healthy pilgrims will have a lower risk of ACS (Harris and Wolf 2013), even on a relatively short term the major cardiovascular risk factors will be decreased thanks to the exercise and probably to the dietary changes (Bemelmans et al. 2010). Even a little bit faster speed of walking (4.6 km/h) produces better results in increasing of HDL-c, but less decrease in LDL-c and total cholesterol in healthy people (Bemelmans et al. 2012).

But the untrained or overdriven persons may face fatal fatigue or circulation disturbances. The climbing of Camino's slopes or the exhausting long-distance hiking may easily result in circulatory overload and accompanying coronary ischaemia. The lonely wayfarer has no chance of receiving early cardiopulmonary resuscitation or cardiac intervention.

The second most frequent cause of the death on the Camino is a traffic accident. The trekking routes often cross roads, and sometimes the walkway continues on the tarmac, thus traffic accidents threaten not only 'bicigrinos' (cyclists) are estimated to make up 8% of the total number of pilgrims (Felkai 2018) but walkers as well. A more unusual cause of death is drowning—for which the explanation is very simple. According to tradition, the pilgrims should immerse themselves in the sea at the rocky Finisterra—in order to accomplish the pilgrimage. Unfortunately, the sea is unpredictable at the beach of this little town, and a pilgrim could be washed away.

The growing number of elderly pilgrims means a growing number of travellers with chronic diseases or multimorbidity problems. Many participants with severe medical problems (cardiomyopathy, hip replacements, implantation of stents, etc.) (Caldwell 2013) undertake the pilgrimage. Fortunately, the vast majority of the medical problems that occur during the pilgrimage can be prevented by careful pre-travel advice (Basnyat, 2002). The history of travel medicine is somehow the history of spreading of infectious disease by the movement of large amount of people (pilgrimage, military actions, etc.). That is why the Hajj pilgrimage—and, maybe the pilgrimage as a whole—demands a new subdiscipline of mass gathering medicine (Al Turkey 2016; Gautret et al. 2016). Because Spain is considered free from any endemic diseases—therefore no vaccination is needed—the pre-travel advice is often neglected. Less known fact is the endemia of leishmaniasis in Spain, with one of the highest transmission rates in the eastern region of the country—the area, where the 'French route' of the El Camino runs (Gil-Pietro et al. 2011). In order to establish a good practice of pre-travel advice, travel medicine specialists should pay attention to the aforementioned problems and—as the latter example suggests—to the use of personal protective measurements against sand fly exposure (Watkins et al. 2014). To understand better the medical problems of the El Camino pilgrims, we need more advanced and detailed studies with more precise data, and pre-travel medical advice should be provided routinely for them.

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Compliance with Ethical Standards

Conflict of interest The author declares that he has no conflict of interest.

Ethical Approval All procedures performed in this study did not involve any human participants, and the data retrieved were in accordance with the ethical standards of the institutional and national research committee and with the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. For this type of study, formal consent is not required.

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