

PSS32 Social and economic burden of skin disease in Europe. A narrative review of the literature

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Introduction

- Skin diseases (SD) are one of the most common human illness, occurring at all ages and affecting between 30% and 70% of individuals¹.
- The burden of SD on the patient and society is the result of a combination of their prevalence, their morbidity and mortality, the impact on patient's live, available treatments and associated costs². Across age groups, differences have been observed. Thus, eczema put a heavy burden on children, acne on teenagers and a mix of eczema, ulceration, non-melanoma skin cancer, infections and pruritus on the elderly².

Objective

- To assess social (morbidity and mortality) and economic (direct and indirect cost) burden related to SD in Europe, according to the literature.

Methods

- A narrative review of the literature was conducted.
- Electronic databases [MedLine/PubMed, MEDES, IBECS y CSIC-IME, Congress proceedings] and grey literature were searched to identify publications analyzing the burden related to SD in Europe, published in English or Spanish between 2006 and 2016.
- Spanish health policy strategies were reviewed and used as an example to determine those strategies adopted by a National Health Systems to manage SD in Europe.

Results

Global burden of skin disease

- In 2010 SD were the 4th leading cause of nonfatal burden worldwide, expressed as years lost due to disability (YLD) [Europe: median YLD/100.000 individuals: 416-493 (men) and 477-547 (women)], and the 18th cause of health burden taking to account health loss due to premature death (disability-adjusted life years, DALY) (Table 1)¹.

Table 1. YLDs and DALYs ranks¹

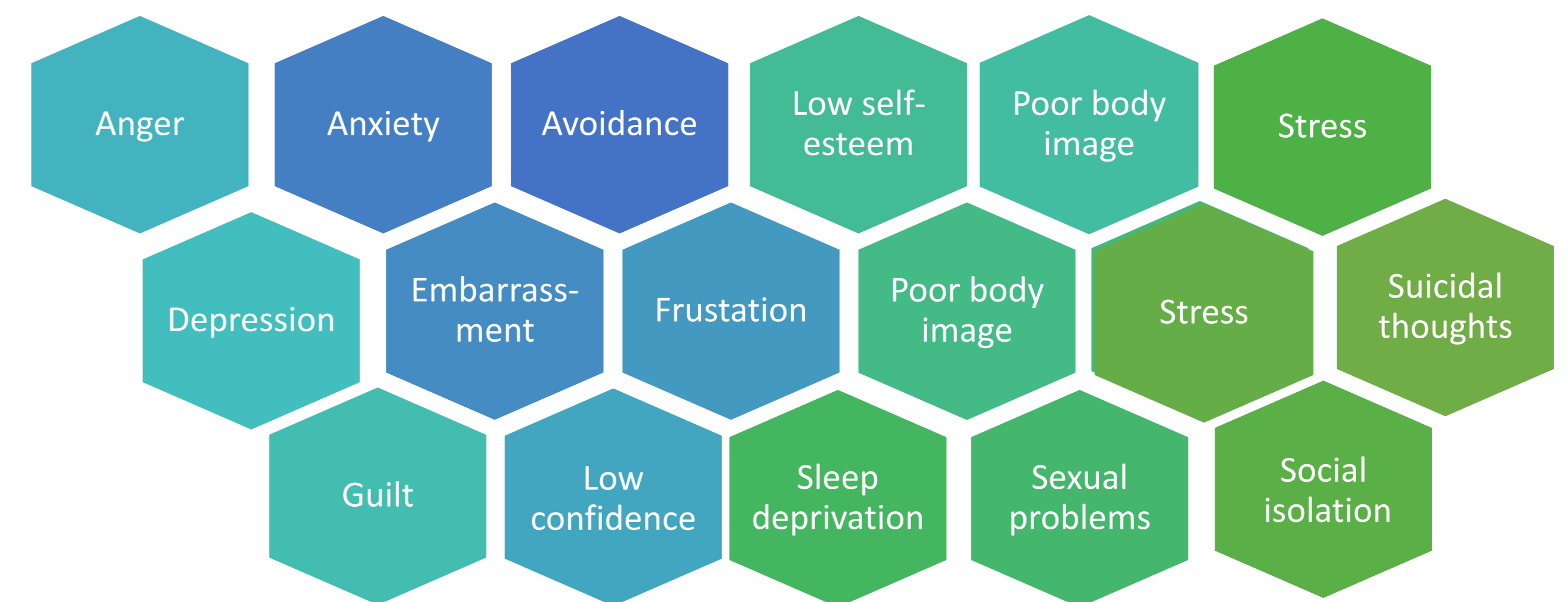
Cause	Global YLDs	YLD rank	Cause	Global DALYs	DALY rank
Low back pain	80,666,896	1	Ischemic heart disease	129,800,000	1
Major depressive disorder	63,239,334	2	Lower respiratory infections	115,200,000	2
Iron-deficiency anemia	42,505,250	3	Cerebrovascular disease	102,200,000	3
Skin conditions*	33,717,725	4	Diarrheal diseases	89,523,909	4
Neck pain	32,650,797	5	Malaria	82,688,806	5
COPD	29,420,262	6	HIV/AIDS	81,549,177	6
Other musculoskeletal disorders	28,247,230	7	Low back pain	80,666,896	7
Anxiety disorders	26,847,326	8	Preterm birth complications	76,979,669	8
Migraine	22,362,507	9	COPD	76,778,819	9
Diabetes mellitus	20,791,397	10	Road injury	75,487,102	10
Falls	19,479,581	11	Major depressive disorder	63,239,334	11
Osteoarthritis	17,148,545	12	Neonatal encephalopathy	50,162,510	12
Drug use disorders	16,434,052	13	Tuberculosis	49,399,351	13
Other hearing loss	15,824,531	14	Diabetes mellitus	46,857,136	14
Asthma	13,843,163	15	Iron-deficiency anemia	45,349,897	15
Alcohol use disorders	13,838,157	16	Sepsis and other infections of the newborn baby	44,236,488	16
Road injury	13,489,949	17	Congenital anomalies	38,890,019	17
Schizophrenia	12,975,089	18	Skin conditions*	36,921,995	18
Bipolar affective disorder	12,878,832	19	Self-harm	36,654,590	19
Dysthymia	11,091,105	20	Falls	35,405,935	20

YLD: years lost due to disability, DALY: disability-adjusted life year; COPD: Chronic obstructive pulmonary disease.* Skin conditions were considered collectively.

Skin disease and patients' health related quality of life

- SD also affect the patients' health related quality of life, mainly emotional component.
- Nearly 30% of SD patients have clinically significant levels of distress being, stress, anxiety, anger, depression, shame, social isolation, low self-esteem and embarrassment the main psychological problems (Figure 1)³.

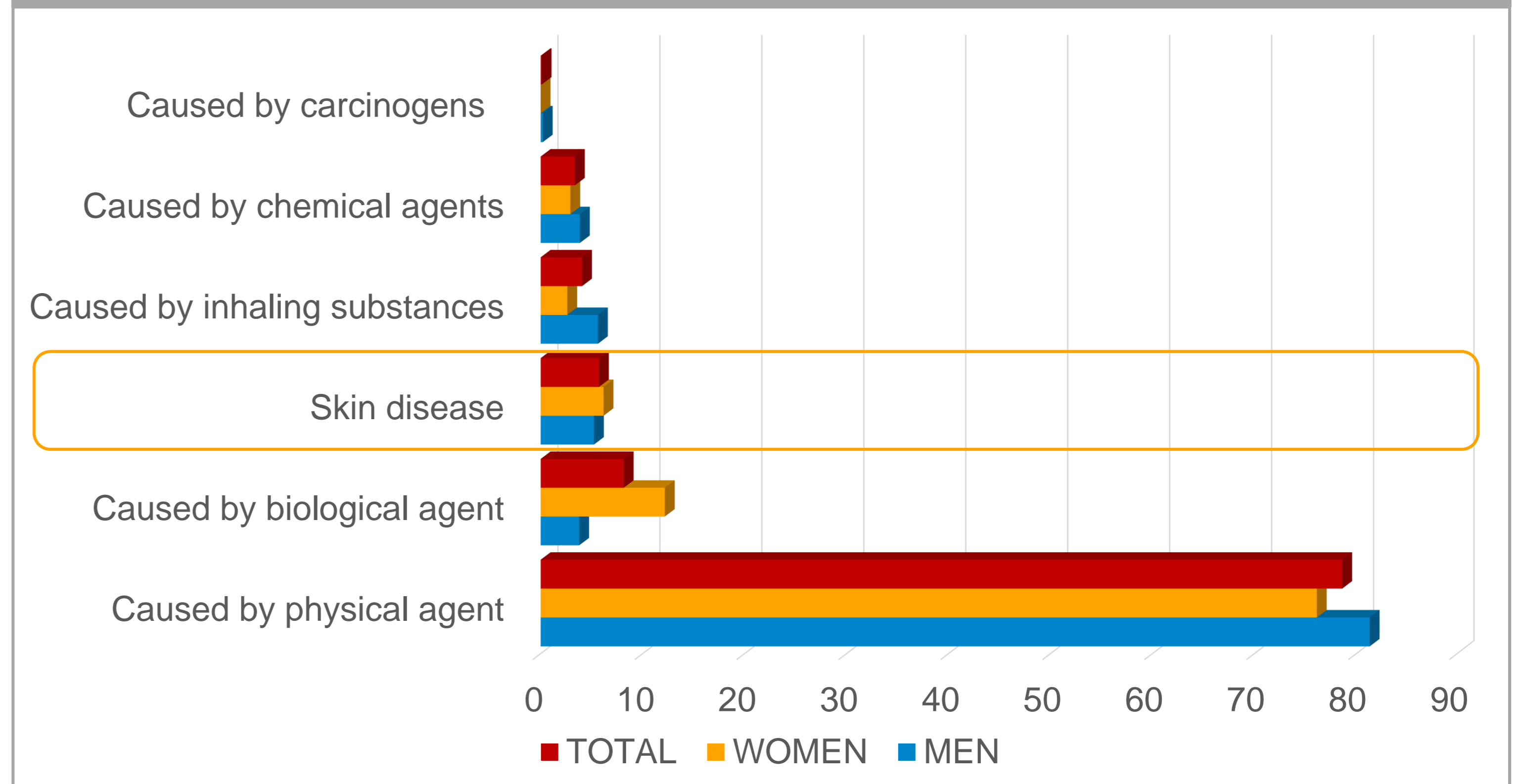
Figure 1. Psychological and social problems related to skin conditions



Skin disease: health-care resource use and work productivity

- Between 12.4%-20% of primary care visits were related to SD^{4,5} and around 17% of SD patients required to visit the specialist⁶.
- Skin lesions, psoriasis and eczema were the SDs that required a greater number of visits to the specialist⁷.
- SD were related to 30% of occupational disease, being the cost associated to loss of productivity of these patients 5 billion of €/year⁸.
- In Spain, during 2014, SD were the 3rd cause of medical reports of sickness leave related to occupational disease⁹ (Figure 2).

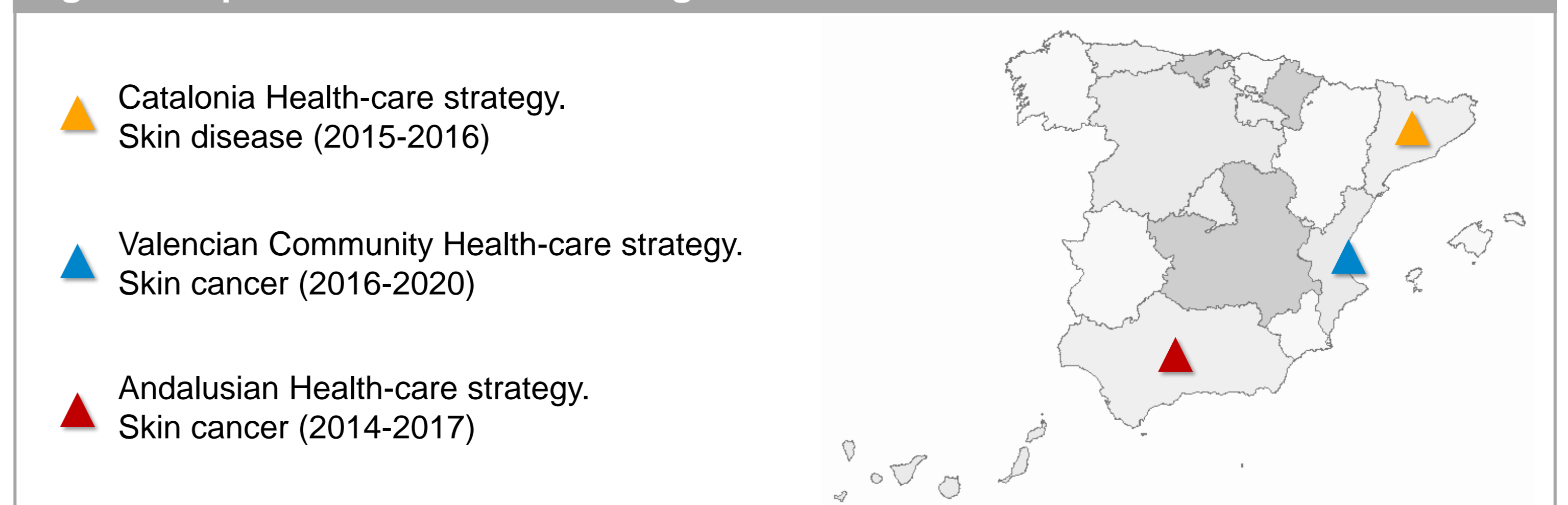
Figure 2. Distribution of medical reports of sickness leave (% of patients)



Skin disease in the Spanish health care strategies

- In Spain, out of the 19 health care strategies being currently in force in the different regions, only 3 propose actions related to SD (Figure 3).

Figure 3. Spanish health care strategies related to skin disease or skin cancer



Conclusions

The burden of SD in Europe is high, mainly associated to the loss of productivity and patient's emotional impact. The results highlight the need to include SD in prevention and management health policies, in order to improve patients' management.

References

- [1] Hay et al. J Invest Dermatol (2014) 134; 1527-34; [2] Hollestein et al. J Invest Dermatol (2014);134(6):1499-501; [3] Green et al. Nursing Standard (2010) 25(9): 48-56; [4] Thompson. Dermatological Nurs (2009) 8(1): 1-5; [5] Ayer & Burrows. Postgrad Med J (2006) 82(970): 500-6; [6] Verhoeven et al. Ann Fam Med (2008) 6(4): 349-54; [7] Schofield et al. (2009) Cent. Evid. Based Dermatology UK; [8] StanDerm. (2015); [9] CEPROSS and PANOTRATSS. Annual report 2014 (2015).