

Letter

European trends in the frequency of original research in acne vulgaris, rosacea, dermatitis, psoriasis, skin cancer, and skin infections, 1970-2010

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**Abstract**

We analyzed trends in the frequency of original publications into common dermatologic topics in two premier European journals, the *British Journal of Dermatology* and the *Journal of the European Academy of Dermatology and Venereology*. Most notably, we found that psoriasis publications peaked around the mid-to-late 1980's as well as demonstrated an upward trend since the 21<sup>st</sup> century. Skin cancer research witnessed a gradual increase in the frequency of publications since 1970. These findings were consistent with a prior study analyzing trends in two American dermatology journals. We attempted to analyze these results from a historical perspective as well as provide an outlook on the future of research into these common dermatologic topics.

**Introduction**

In our prior study, we analyzed trends in the frequency of original publications into common dermatologic topics in two American journals, the *Journal of the American Academy of Dermatology (JAAD)* and *Archives of Dermatology* (now known as *JAMA Dermatology*) [1]. With our results, we attempted to provide a historical commentary as well as an outlook on future directions in the field. As a follow-up, we have performed the same analysis in two premier European journals.

**Methods**

In November-December 2013, we conducted a search of the MEDLINE database limited to the *British Journal of Dermatology (BJD)* and the *Journal of the European Academy of Dermatology and Venereology (JEADV)* in the calendar years of 1970, 1975, 1980, 1985, 1990, 1995, 2000, 2005, and 2010. Only original articles were considered. The subject matter was based on the most common dermatologic diagnoses [2]: acne vulgaris/rosacea, skin cancer (basal cell carcinoma, squamous cell carcinoma, and melanoma), dermatitis (atopic dermatitis, contact dermatitis, and seborrheic dermatitis), psoriasis, and skin infections (bacterial,

viral, or fungal infections of the skin, mucous membranes, hair, or nails). Articles were reviewed by two independent investigators and included if all the specified criteria were satisfied.

## Results

A total of 684 original articles were included in the study. The topic that garnered the largest proportion of articles was psoriasis (40.4%), followed by dermatitis (22.8%), skin cancer (20.3%), skin infections (8.3%), and acne/rosacea (8.2%). Acne/rosacea research reached a peak in 1980 with a frequency of 20%, followed by a nadir of 3.6% in 1990, and composed 7.6% of articles in 2010. Skin cancer witnessed a gradual increase from 0% in 1970 to 17.9% in 1990 to 25.7% in 2010. Dermatitis decreased to 8.6% in 1980, followed by an increase up to 33.7% in 2000 and 22.2% in 2010. Psoriasis was almost always the most common topic of publication from 1970 to 2010, only eclipsed by dermatitis around 1995 to 2000. The relative frequency of psoriasis publications decreased from 60% in 1970 to 42.9% in 1990 to 39.2% in 2010. Original publications in skin infections remained fairly stable with a frequency of 10% in 1970, 7.1% in 1990, and 5.3% in 2010 (Figure 1).

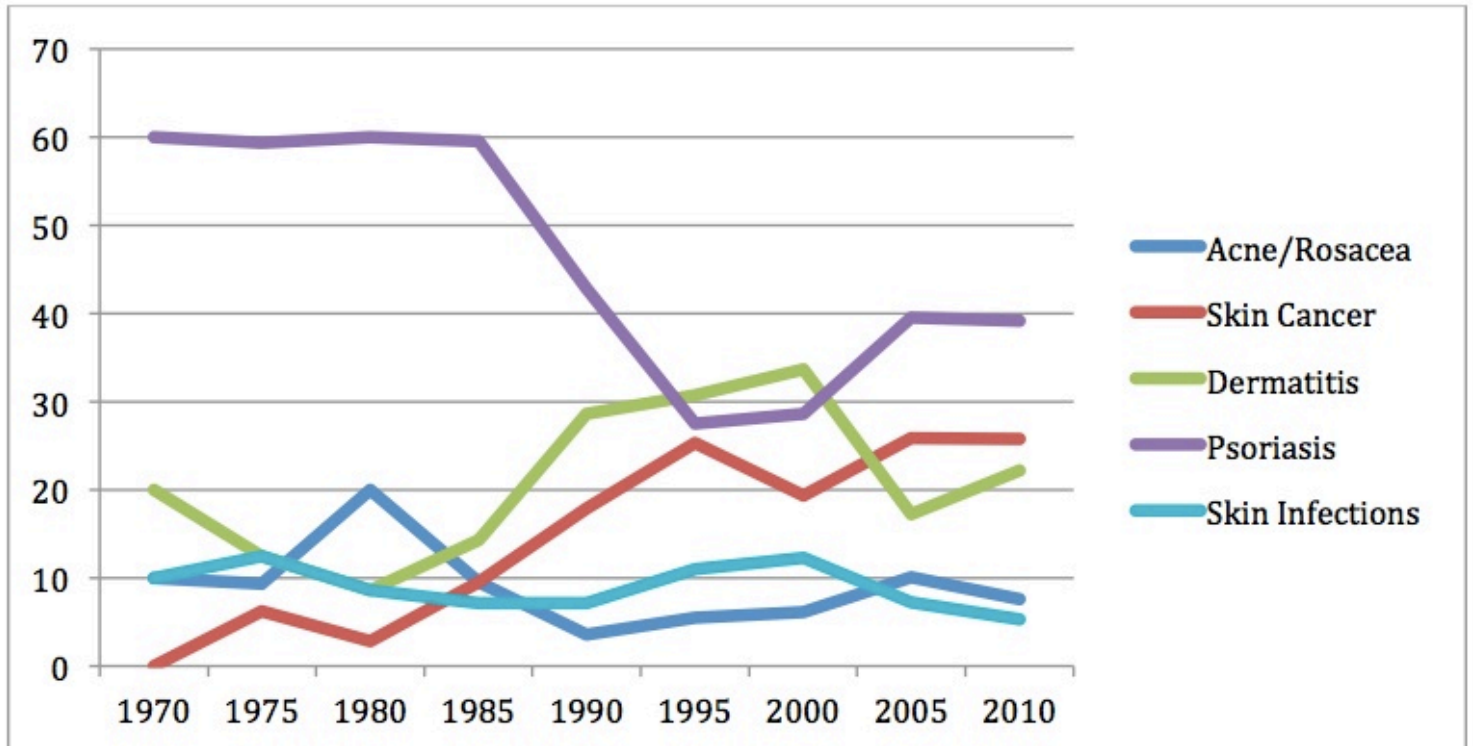


Figure 1. Frequency of research into common dermatologic topics in *BJD* and *JEADV* from 1970 to 2010

## Conclusions

In our study of American journals, we found that original psoriasis publications demonstrated a downward trend around 1990, followed by a steady increase since 2000 [1]. This was similarly seen in our European analysis, with the frequency of psoriasis publications decreasing from 1985 to 1995, followed by an increase in 2000. The decreasing trend from the mid-to-late 1980's may reflect a decline from a peak of active research dedicated to the immunologic basis of psoriasis, which was discovered around the late 1970's [3]. The subsequent increase in psoriasis research in 2000 can be attributed to the advent of highly effective biologic agents in psoriasis therapy at the beginning of the millennium.

Another similar finding between our two studies was the relatively linear increase in skin cancer publications since 1970. As melanoma and non-melanoma skin cancers largely affect Caucasian populations, these diseases are a major health burden in the United States and Europe. Epidemiologic studies have demonstrated a continual increase in the incidence of skin cancer in Europe [4,5] and the United States [6,7], and recent advances in targeted and immune-based therapies for melanoma have likely contributed to the upward trend in research [8].

We acknowledge limitations to our study. As the first publication of *JEADV* was in 1991, we relied solely on *BJD* for earlier years. Access to journal articles was limited by our university's subscriptions. We also analyzed every five years, which may not have been representative due to sampling error.

## References

1. Choi YM, Wu JJ. Trends in the frequency of original research in acne vulgaris, rosacea, dermatitis, psoriasis, skin cancer, and skin infections, 1970-2010. *Perm J*. Accepted for publication: June 2014.
2. Stern RS. Dermatologists and office-based care of dermatologic disease in the 21st century. *J Investig Dermatol Symp Proc* 2004 Mar;9(2):126-30. [PMID: 15083778]
3. Sabat R, Sterry W, Philipp S, Wolk K. Three decades of psoriasis research: where has it led us? *Clin Dermatol* 2007 Nov-Dec;25(6):504-9. [PMID: 18021885]
4. Trakatelli M, Ulrich C, Marmol VD, et al. Epidemiology of nonmelanoma skin cancer (NMSC) in Europe: accurate and comparable data are needed for effective public health monitoring and interventions. *Br J Dermatol* 2007 May;156 Suppl 3:1-7. [PMID: 17488399]
5. Holterhues C. Trends in incidence of cutaneous malignant melanoma in Europe: analysis of population based cancer registry data. *Melanoma Res* 2010 Jun;20:e3.
6. Rogers HW, Weinstock MA, Harris AR, et al. Incidence estimate of nonmelanoma skin cancer in the United States, 2006. *Arch Dermatol* 2010 Mar;146(3):283-7. [PMID: 20231499]
7. Jemal A, Saraiya M, Patel P, et al. Recent trends in cutaneous melanoma incidence and death rates in the United States, 1992-2006. *J Am Acad Dermatol* 2011 Nov;65(5 Suppl 1):17-25.e1-3. [PMID: 22018063]
8. Ascierto PA, Grimaldi AM, Acquavella N, et al. Future perspectives in melanoma research. Meeting report from the "Melanoma Bridge. Napoli, December 2nd-4th 2012". *J Transl Med* 2013 Jun 3;11:137. [PMID: 23731854]