

that are *best* not labelled as diseases. This definition of non-disease does not prohibit the opinion that aging is a disease. However, it appears irrational to think of something as a disease whilst also thinking that it was best not labelled as one. Thus, despite these two limitations, the BMJ study can be used to demonstrate that aging is not classified alongside other recognized diseases in the medical field.

2.2.1.2 *Surveying the Public, Health Professionals and Legislators on Disease*

A study from Finland by Tikkinen *et al.* provides a clearer picture of the medical perception of aging.¹ Again an opinion poll was taken on about 60 different states of being, with participants evaluating two claims: “(this state of being) is a disease” and “(this state of being) should be treated with public tax revenue.” The study consulted four groups: 1517 members of the general public, 56 members of parliament, 741 doctors and 966 nurses. Given our interest in aging and disease, we have focused on the results of the first claim; however, it is notable that a correlation exists between responses to the two claims.

Tikkinen and colleagues show that of the 60 conditions, there is considerable variation in opinion as to whether 43 of them constitute diseases. The classification of the remaining 17 cases is clearer, as more than 80% of respondents agree with each other. Here, twelve states are clearly seen as diseases, and five states are clearly not. Interestingly, aging is among the conditions that are clearly not seen as diseases, along with grief, homosexuality, wrinkles and smoking (Figure 2.1).

A strength of this study is the large sample size. Its results suggest that laypeople are slightly more likely than health professionals to see aging as pathological. This is despite the fact that health professionals are, if anything, more inclined than laypeople to classify states as diseases.^{1,23} But if clinicians do not view aging as a disease, what do they see it as instead? This question is particularly interesting as some states associated with aging (*e.g.* breast cancer, prostate cancer, deafness, adult onset diabetes) are viewed as diseases while others (*e.g.* insomnia, night-time urination, menopause, wrinkles) are not. Do healthcare professionals distinguish between pathological and non-pathological aging? To try to address this, we turned our attention to medical textbooks.

2.2.2 **Medical Textbook Analysis**

The BMJ survey and the Finnish study suggest that aging is best not labelled as a disease in medicine. However, as pointed out previously, the terminology is vague and there are connotations between chronological aging, age changes and senescence, as well as what constitutes normal and pathological in each of these areas. We suspect that the results of these surveys may partially reflect linguistic confusion. In particular, we argue that whilst chronological aging and many age changes are not pathological, senescence is a disease