

# 2. Types of graphics



### Recommendation

"If graphics are used as a supplement, then either pictograms or bar charts should be used."

Agreed: 10, Disagreed: 0, Abstentions: 3

Quality of the evidence: moderate quality

### Comment on the recommendation:

The Recommendation refers to the comparison of various types of graphics used for health information (e.g. pictograms, bar charts and pie charts).

In this comparison, positive effects for using pictograms and bar charts could be seen for the cognitive outcomes *understanding / risk perception* (in one out of two studies) and *comprehensibility / readability* (in one out of two studies). In one out of two studies, a positive effect for the outcome *knowledge* was shown for using pictograms and pie charts. In the other studies, there were no statistically significant differences.

Two studies showed a positive tendency towards bar charts and pictograms with regard to the affective outcomes *acceptance / attractiveness*.

## **Summary of the findings**

### Characteristics of the included studies

For this comparison, a total of four studies with 2,978 participants were included. The studies were carried out in the USA (7, 13, 16) and Canada (17). The participants were healthy people (7, 17) or patients of both sexes (13, 16) with an average age of over 49 years. The interventions consisted of information about benefits and risks of possible therapies (7, 13, 17) or of information gained from personalized risk presentations (16). Various graphics were compared, including pictograms, horizontal and vertical bar charts and also modified pictograph ("sparkplug") and "clock graphs".



### Results for the relevant outcomes

No positive effects for using pictograms and bar charts were seen for the outcomes understanding / risk perception and comprehensibility / readability (7, 16, 17). Regarding the outcome knowledge no relevant difference was found between pie charts, pictograms and bar charts (7, 13). A positive tendency for bar charts and pictograms was reported for the outcome acceptance / attractiveness (13, 16).