

# Analysis Of An After-Care Questionnaire In Allergic People To Dust Mites Using Anti-Dust Mites Bed Covers

Boukhattala Nabile, Bourgeon Solveig.

Laboratoire Protec'Som, Valognes, FRANCE

## Introduction

Dust mites allergy, by its frequency and its intensity has become a main preoccupation. There are numerous products on the market that get rid of them. Indeed, there are anti-dust mites bed covers which permit to isolate bedding elements (like anti-dust mites bed covers made with the help of a micro-woven cotton or a non woven polyester polyamide process). The process MWC allows compression of the fiber over its entire surface before weaving. A filtration level of a few microns is thus achieved, even with 100% cotton fibers.

The goal of the study was to assess in a declarative way, the symptoms felt by the patients and the impact of micro-woven cotton (MWC) and a non woven polyester polyamide (NWP) anti-dust mites bed covers on allergic volunteers to dust mites.

## Materials et methods

### Protocole:

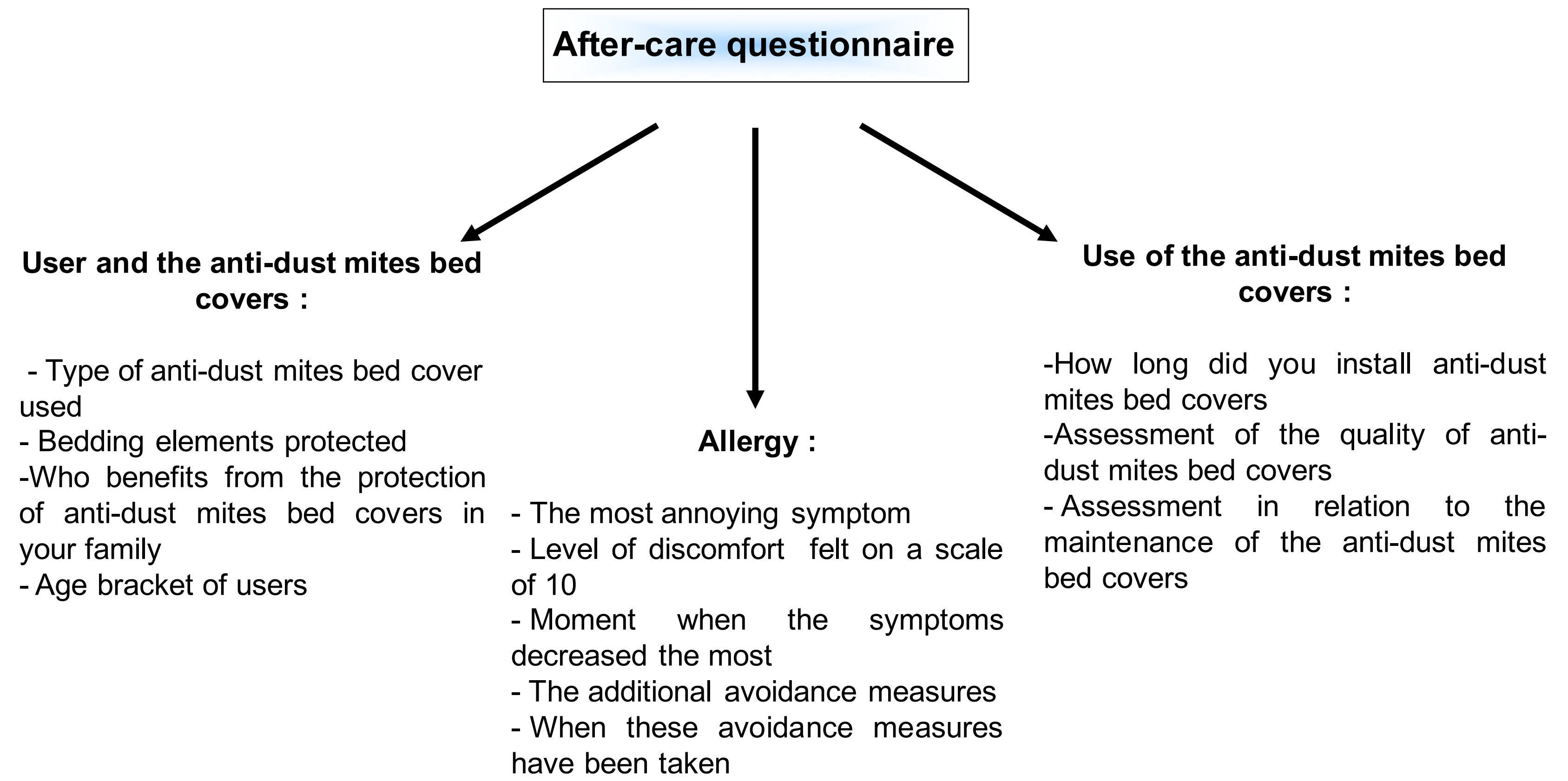
- This study is a descriptive survey based on an after-care questionnaire handed out to a group of 419 volunteers allergic to dust mites.

- A quality questionnaire has been sent, enclosed to each order, to every patient. This questionnaire proposed to each patient the later sending of an after-care questionnaire.

- Among patients having solicited this after-care questionnaire between September 2008 and October 2010, 419 questionnaires have been randomly sent on November 9th. Between November 22nd and December 2nd 2010, 150 questionnaires have been received - 109 of which have been used.

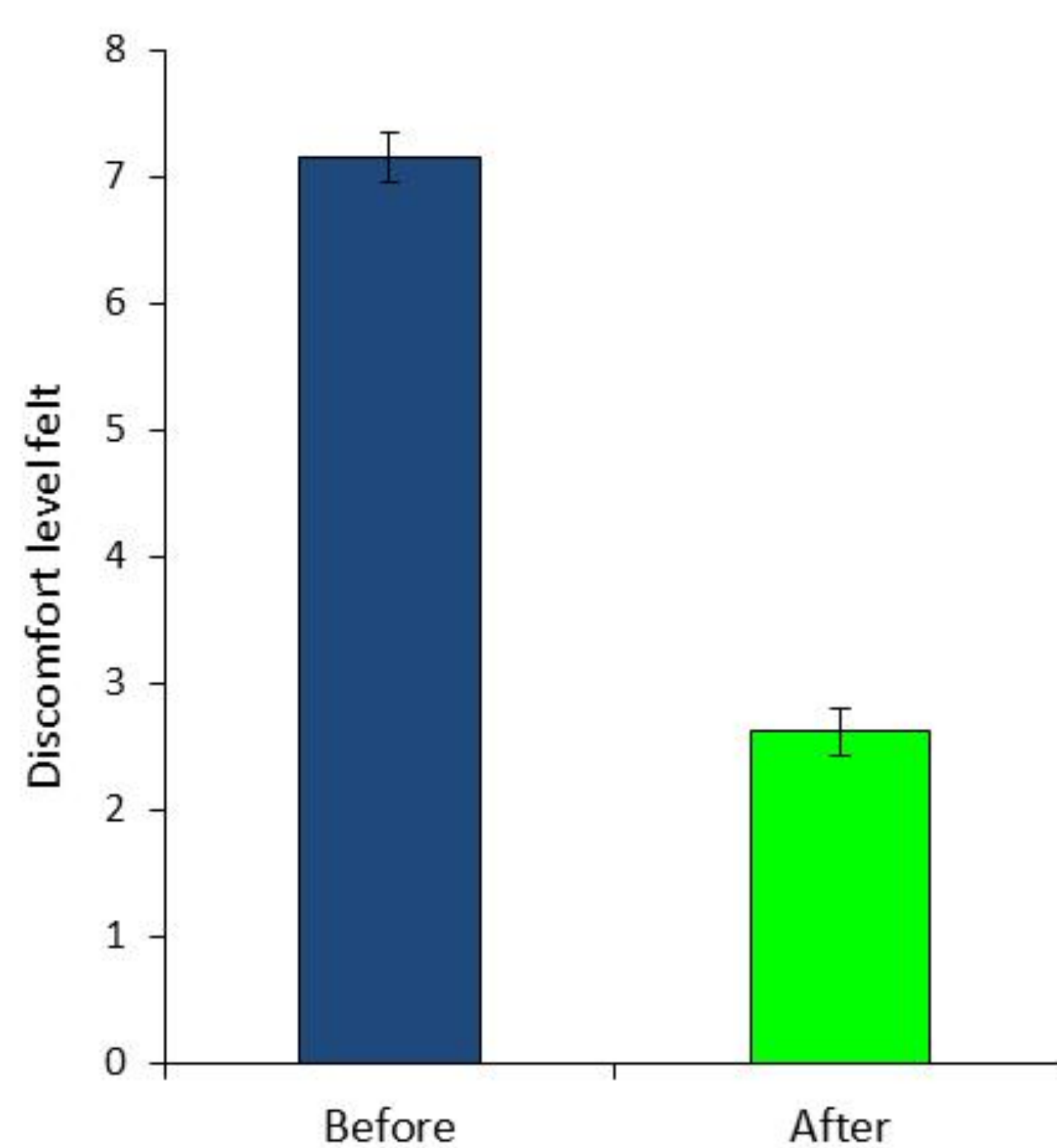
- The main criterion of exclusion was the lack of information. The inclusion criterion was the use by the volunteers of an anti-dust mites bed cover type MWC or NWP.

- Results have been compared by a two way ANOVA with a post-test of Bonferroni. A value of  $p < 0,05$  has been considered as significant.



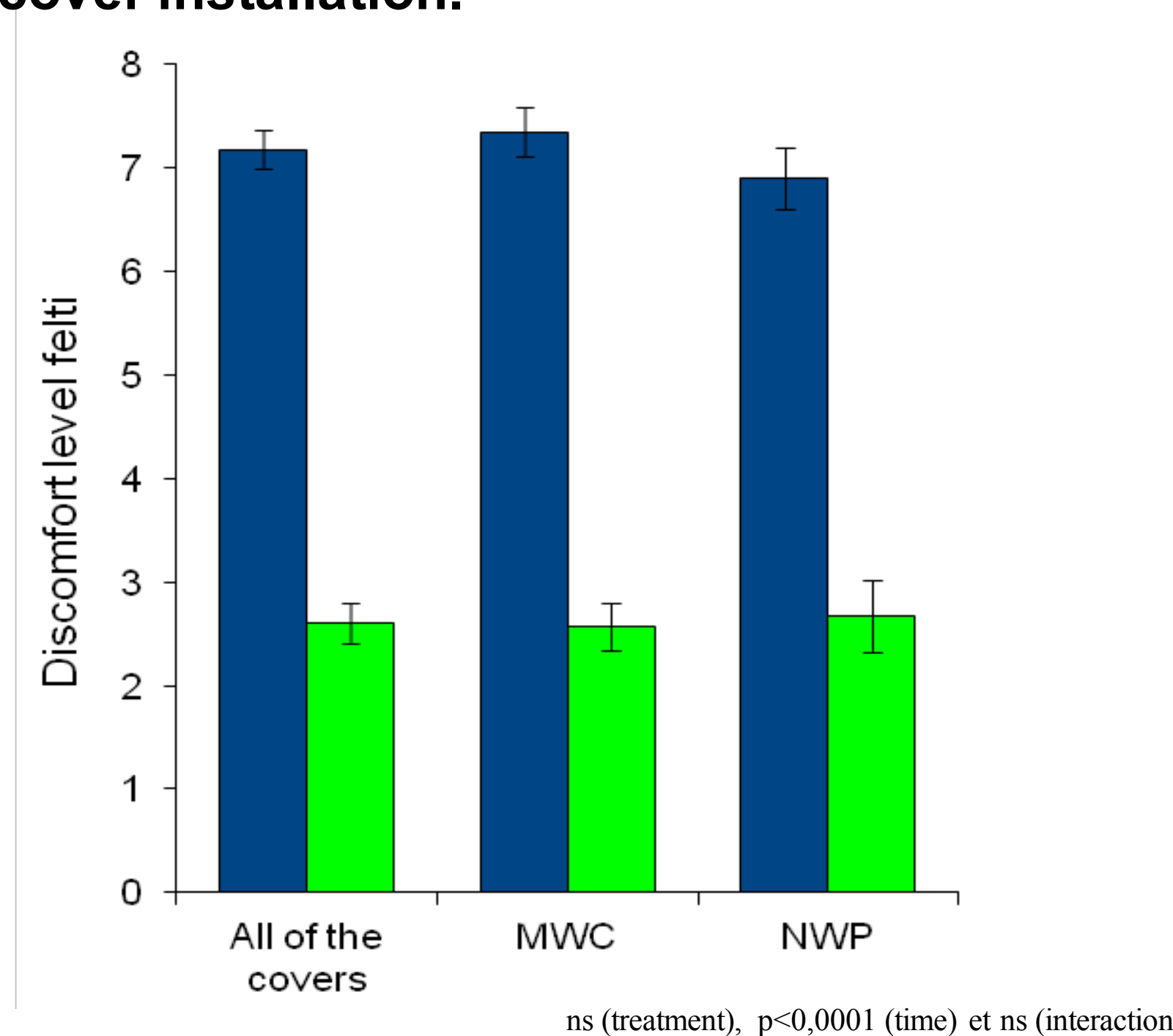
## Results

**Figure 1:** Variation of discomfort level felt before and after the anti-dust mites bed cover use.



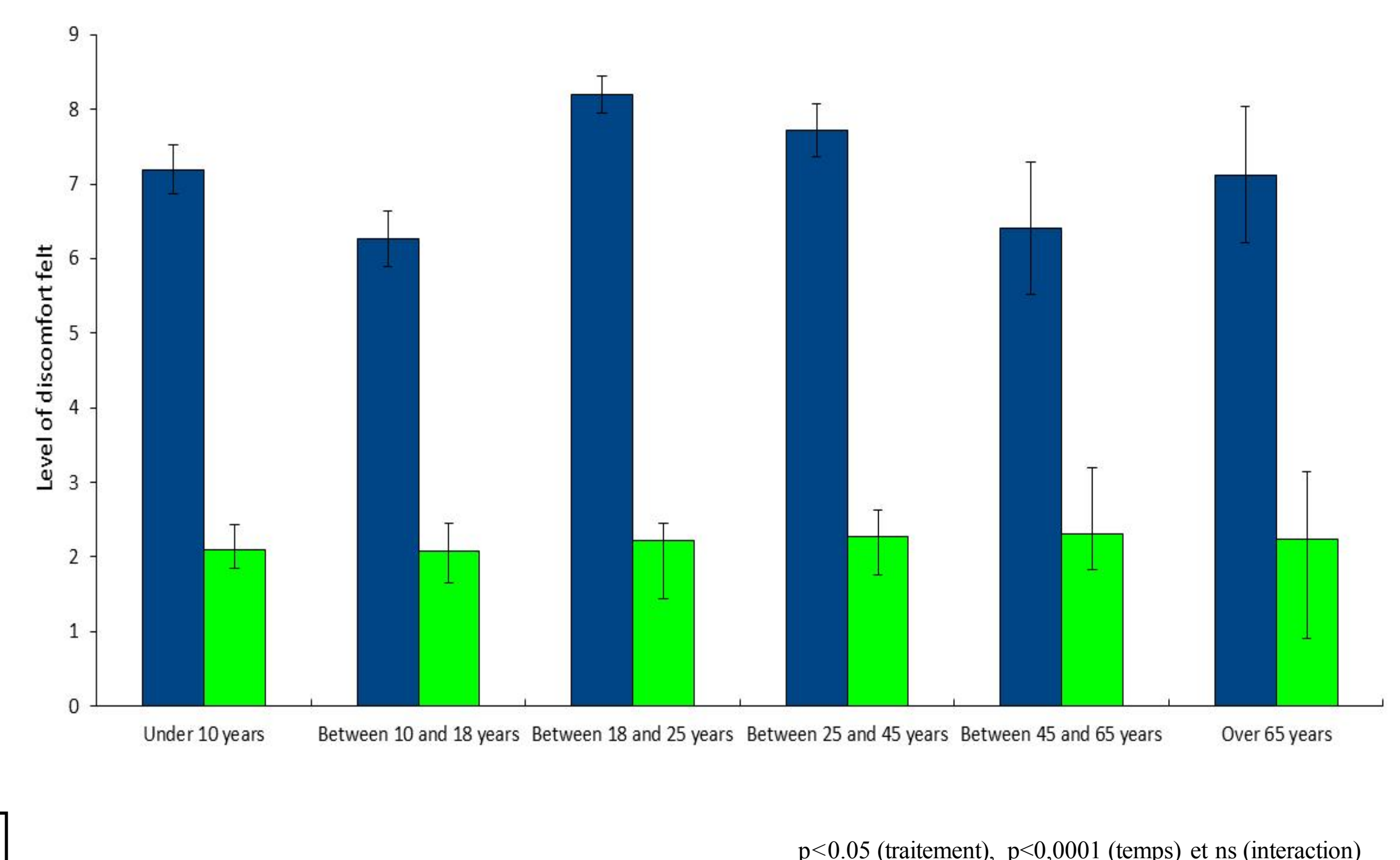
◆ The discomfort level felt by the allergic volunteers to dust mites has significantly decreased after the anti-dust mites bed cover use.

**Figure 2:** Variations of discomfort level felt according to the type of the anti-dust mites bed cover used before and after the anti-dust mites bed cover installation.



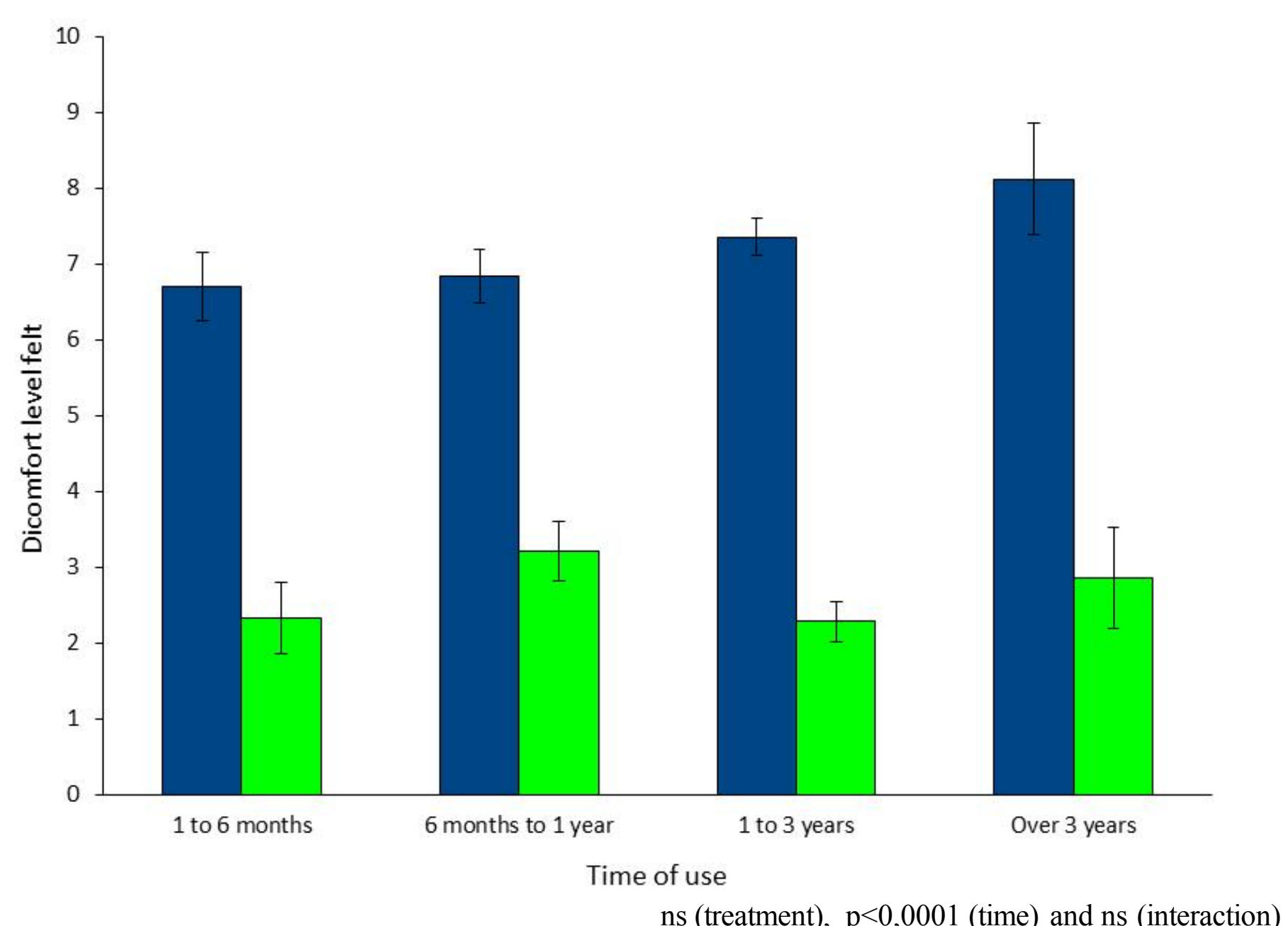
◆ The use of a anti-dust mites bed cover MWC or NWP reduces significantly and similarly the level of discomfort felt by the volunteers with a dust mites allergy.

**Figure 3:** Variations of discomfort level felt according to the age bracket before and after the use of anti-dust mites bed covers.



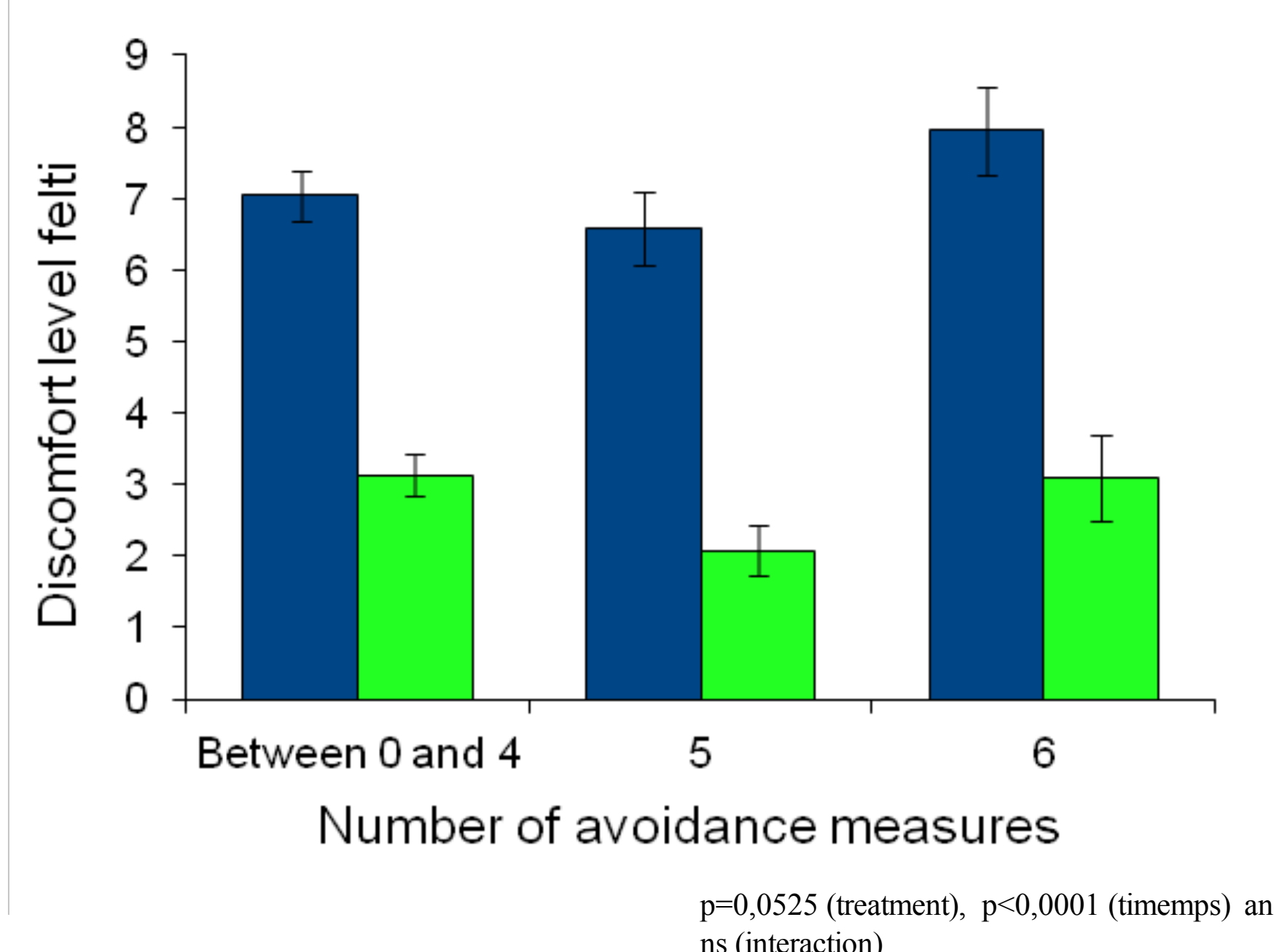
◆ The discomfort level felt is similar according to different age groups.

**Figure 4:** Variations of discomfort level felt according to the Term of Use before and after the anti-dust mites bed cover installation.



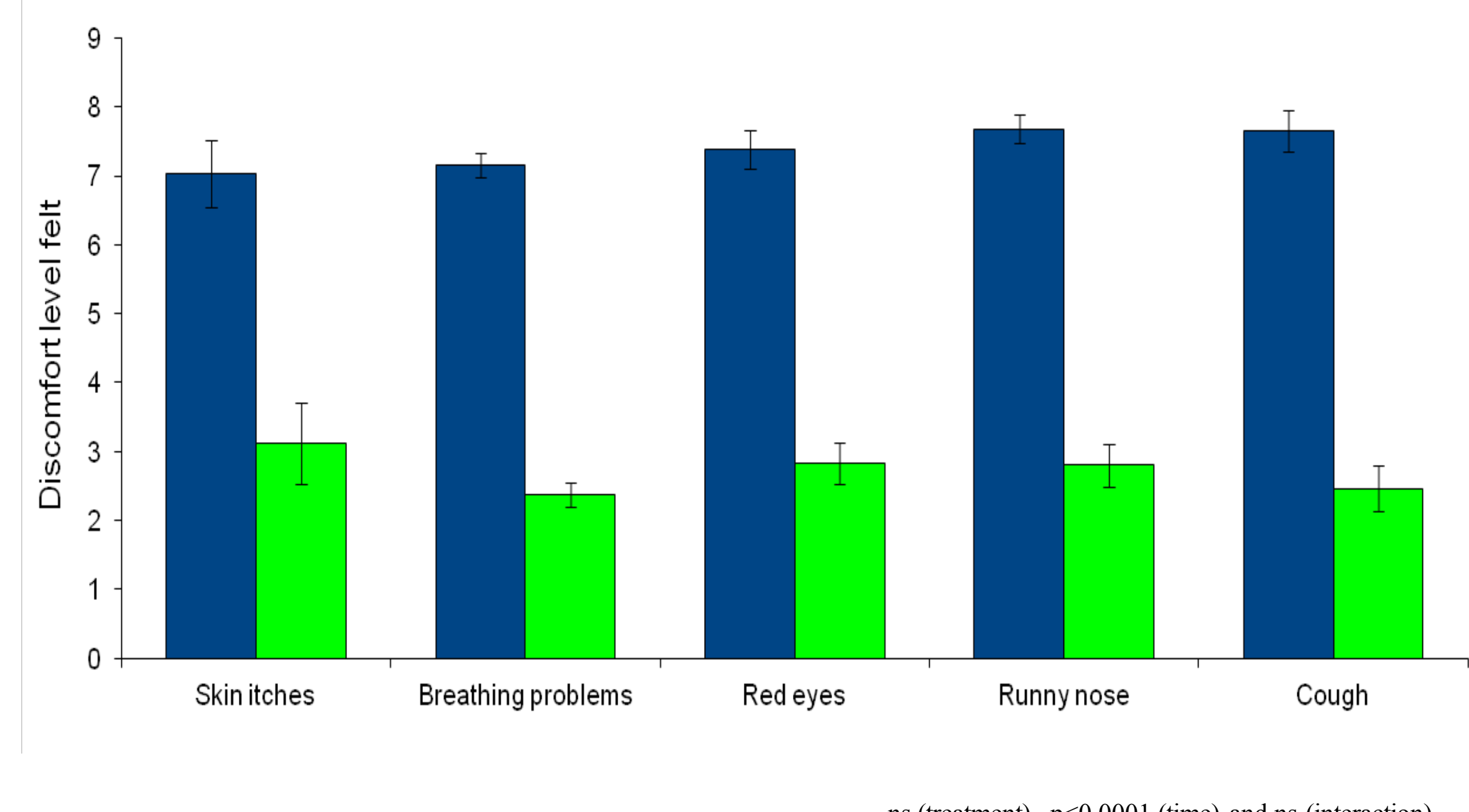
◆ The use of anti-dust mites bed covers over time does not cause changes on the lower level of discomfort. This indicates that the anti-dust mites bed covers keep the same efficiency over time.

**Figure 5:** Number of additional avoidance measures taken before and after the anti-dust mites bed cover installation.



◆ After the anti-dust mites bed cover use, the discomfort level felt has a trend to be lower when the number of additional avoidance taken by the volunteer increases

**Figure 6:** Symptoms experienced by volunteers allergic to dust mites before and after the anti-dust mites bed cover use.



◆ The discomfort level felt before the anti-dust mites bed cover use is similar whatever the symptom. The decline of the discomfort level is similar between the different groups.

## Conclusion

To conclude, we can say the analysis of after-care questionnaires shows the use of anti-dust mites bed cover permits to significantly reduce the symptoms felt by allergic patients to dust mites. Moreover, it underlines the fact that the use of MWP anti-dust mites bed cover or NWP anti-dust mites bed cover had a similar efficiency on the reduction of symptoms felt.