

# Effectiveness of an educational intervention to increase stroke awareness among high school students. Results from a prospective study in Tuscany during the academic year 2014-2015.

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**BACKGROUND** Unawareness of stroke, its risk factors and treatments may limit application of effective prevention and care.<sup>1</sup> Educating the youth on stroke is an effective strategy for future prevention, and a useful tool to spread stroke knowledge among families as well as in the community.<sup>2-4</sup> We aimed to evaluate actual knowledge of stroke and the effect of an educational intervention among high school students.

## METHODS

- Prospective evaluation of stroke knowledge in students of the fourth and fifth years in 10 high schools in Tuscany.
- Administration of a close-ended questionnaire on stroke knowledge, symptoms, risk factors, reaction to stroke, awareness of thrombolytic therapy and stroke units.
- Educational intervention: standardized presentation of about 1 hour focusing mainly on risk factors, stroke symptoms, reaction and therapy.
- After 3 months, the same questionnaire was re-administered to evaluate the long-term impact of the educational intervention.
- In collaboration with the Program 'Ictus: Comunicazione & Innovazione', funded by Ente Cassa di Risparmio di Firenze and with stroke patients' Association ALICe Tuscany.

## RESULTS

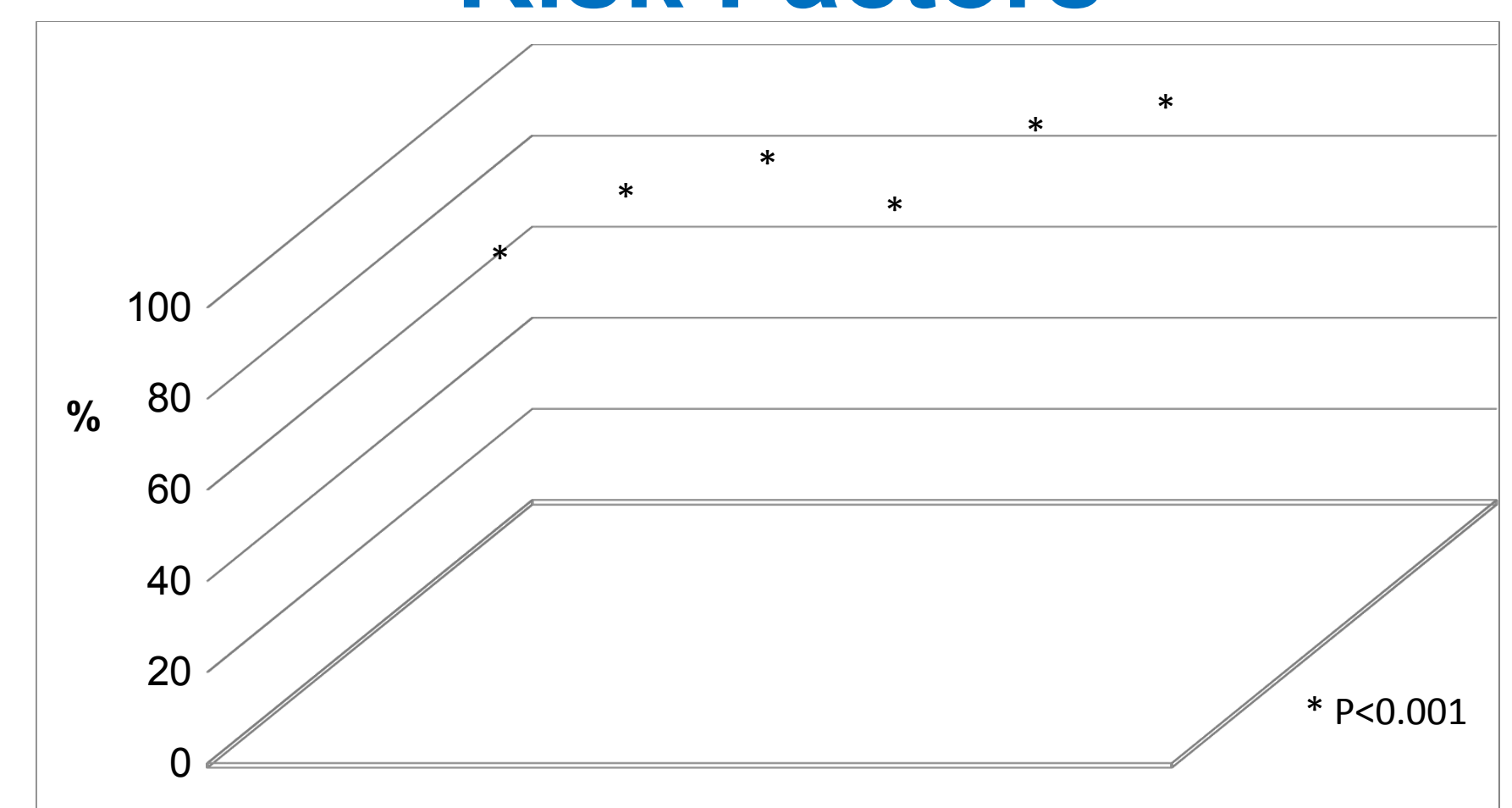
- Overall, 585 students (50.8% males) were enrolled. At both examinations, more than 90% of participants indicated stroke as a brain disease, involving old as well as young people.
- Baseline knowledge of stroke among high school students in Tuscany indicated a relatively good awareness of symptoms, and a fair awareness of some risk factors particularly relevant in young people, such as alcohol and smoking. A limited knowledge of thrombolysis and stroke units was also evidenced. Changes from baseline to follow-up are reported in Figures.

## CONCLUSIONS

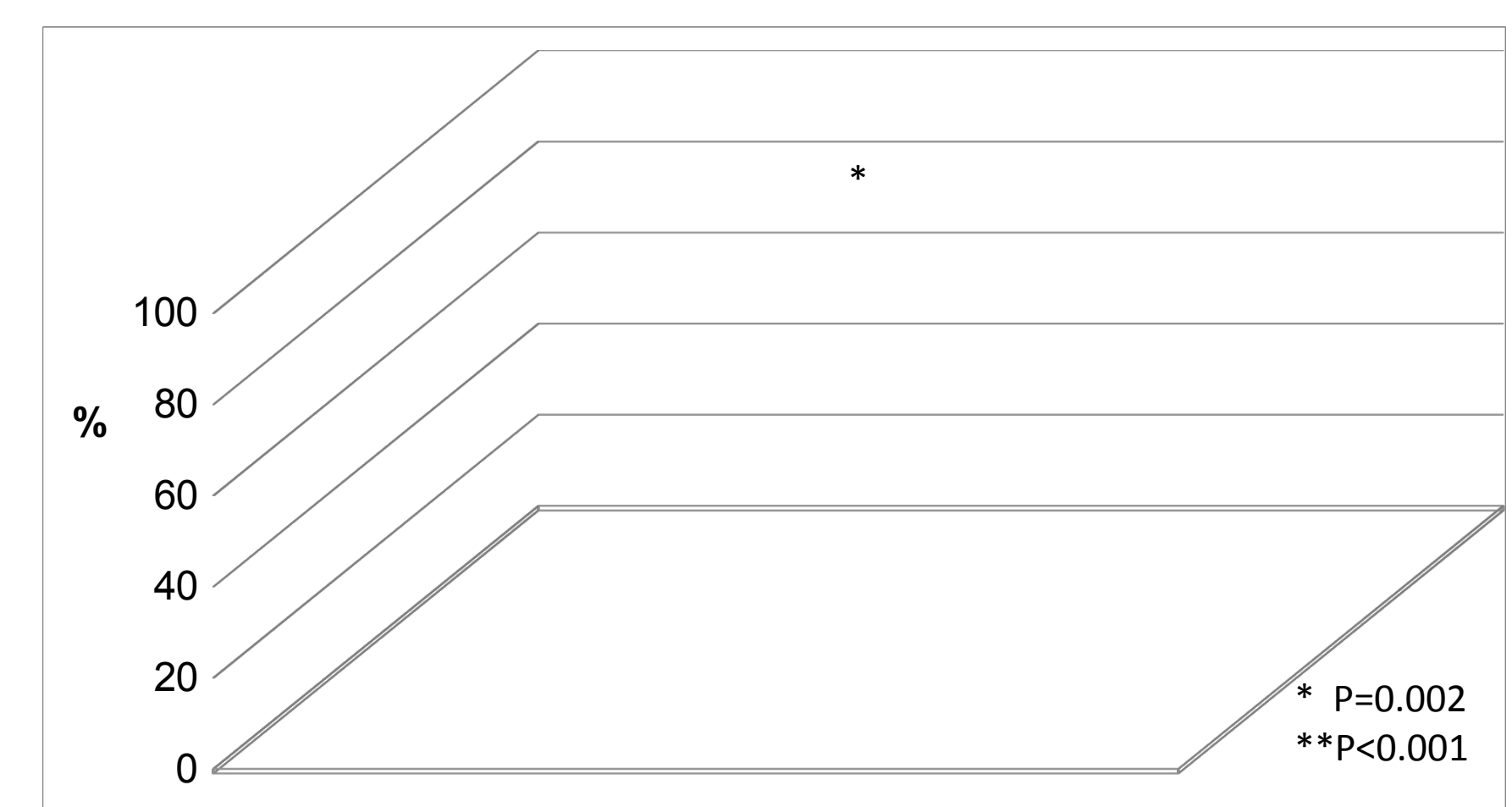
The comparison between the two examination indicated a global improvement of stroke awareness, which was dramatic for stroke units and thrombolysis, emphasizing the role of educational interventions in changing knowledge and behavior towards stroke in young populations.

## STROKE AWARENESS AMONG HIGH SCHOOL STUDENTS BEFORE AND AFTER THE EDUCATIONAL INTERVENTION

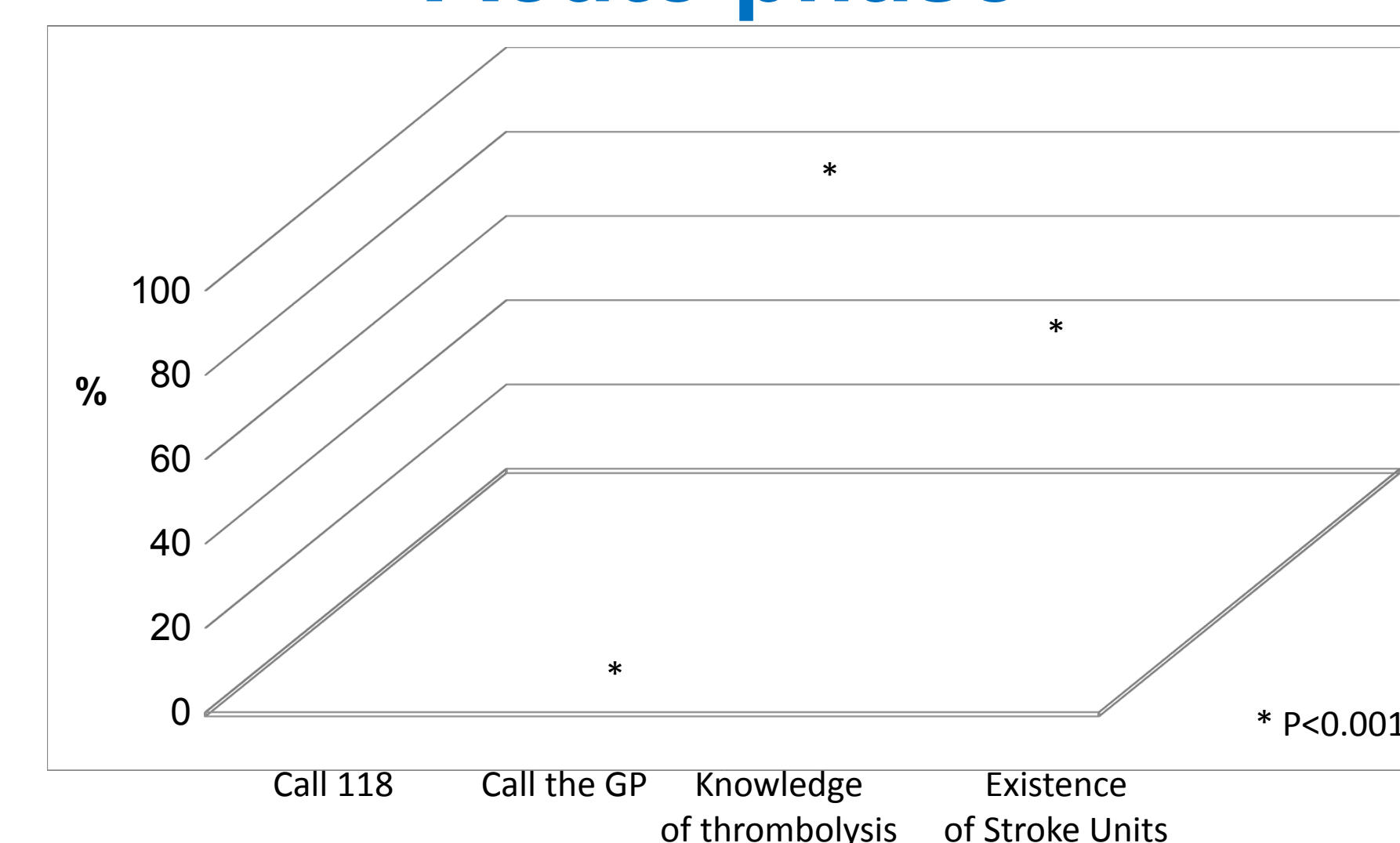
### Risk Factors



### Symptoms



### Acute phase



## REFERENCES

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