

# THE INFLUENCE OF CONTEXTUAL INFORMATION ON THE INTERPRETATION OF RADIOGRAPHS

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## Introduction

- The “diagnose” child abuse is based on different information sources.
- The provided information can potentially influence the interpretations of the multidisciplinary team.

**Aim:** Determine the influence of contextual information on our conclusions on non-accidental trauma of a radiograph of a fracture?

## Methods

### Design

9 clinical vignettes.

### Vignette

- Radiograph of a femur fracture.
- Randomly assigned clinical history.
- Two possible histories (non-abuse or abuse context).

Doctors are **subconsciously** **biased by contextual information** when interpreting radiographs, **regardless of specialty or amount of work experience.**



“The fracture on this radiographic image is ...	score
very much less probable	-2
less probable	-1
approximately equally probable [as]	0
more probable	1
very much more probable	2

... if child abuse was the cause, than if accidental trauma was the cause of the fracture.”

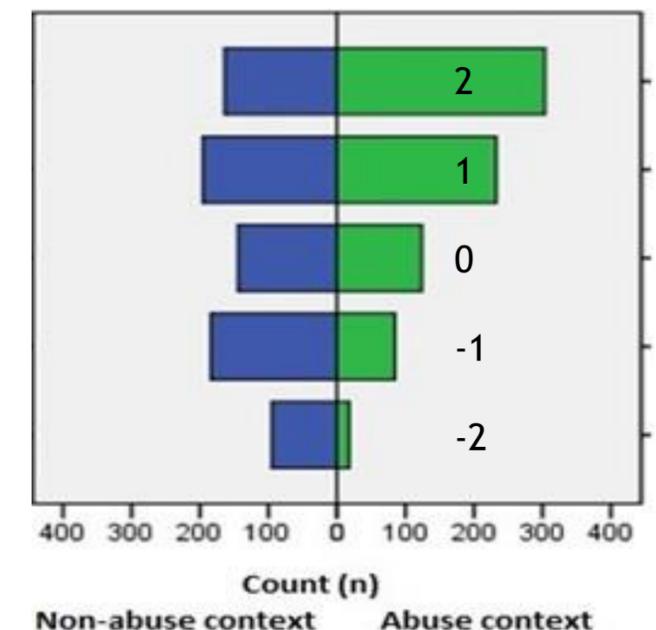
## Results

Non-abuse context mean  
0,19 (95%CI 0,10 - 0,28)

versus

p < 0.001

Abuse context mean 0,94  
(95%CI 0,86 - 1,02)



### References

- 1 Paine et al, Child Abuse & Neglect, 2018
- 2 Lindberg et al, J Pediatr, 2014