

Chronic pain concepts and provision in Swiss paediatricians: prevalence and experiences

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Background

Current studies suggest chronic pain (CP) prevalence rates in children and adolescents varying between 11-38% depending on methodology and origin of pain (1). Very few prevalence data on paediatric pain for Switzerland exists, such as self-reported data from the HBSC study, according to which ~14% youth (11-15 yrs.) experience daily and weekly headache or 13% neck pain (2). Overall prevalence and care provision data supporting the development of adequate care is lacking.

Definition of CP

Persisting or recurrent pain that has been lasting longer than three months. The aetiology of pain may be known, with contributing somatic or psychological factors, but it can also be of unknown origin (3).

Objectives of the study

1. Estimate the prevalence of chronic pain in children and adolescents in Switzerland based on patients seen by paediatricians in primary care
2. Assess care provision for chronic pain and professional experiences with chronic pain among paediatricians in Switzerland

Methods

Design: Cross sectional questionnaire study (online, languages GER, FR, IT)

Eligible for participation:

1595 paediatricians registered as currently working members of the Swiss Society of Paediatrics (SSP)

Questionnaire items

1. Sociodemographic, work-related characteristics, workplace characteristics, number of children seen per 3 months in paediatrician practices
2. Experience with CP, education in CP, comfort with treating patients with CP, estimated prevalence of patients with CP seen, measurement of pain intensity, referral patterns of patients with CP

Statistical analysis

Descriptive analysis. Prevalence calculations based on number of children with CP seen in the past 7 days and number of total patient visits per quartal (categorical answers with min, mean and max values), multiplied to represent the annual total. Multivariate analyses on characteristics of confidence and experience with CP.

Results

Study population: 337 participants (participation rate 21.1%)

70.4% females and 29.6% males

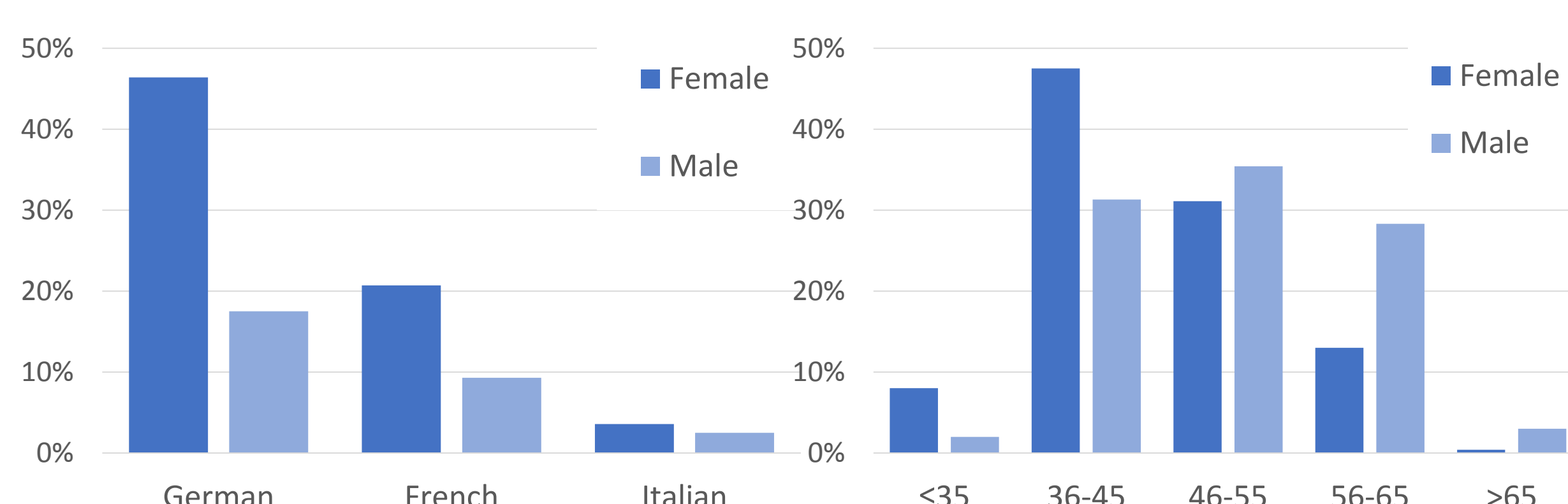


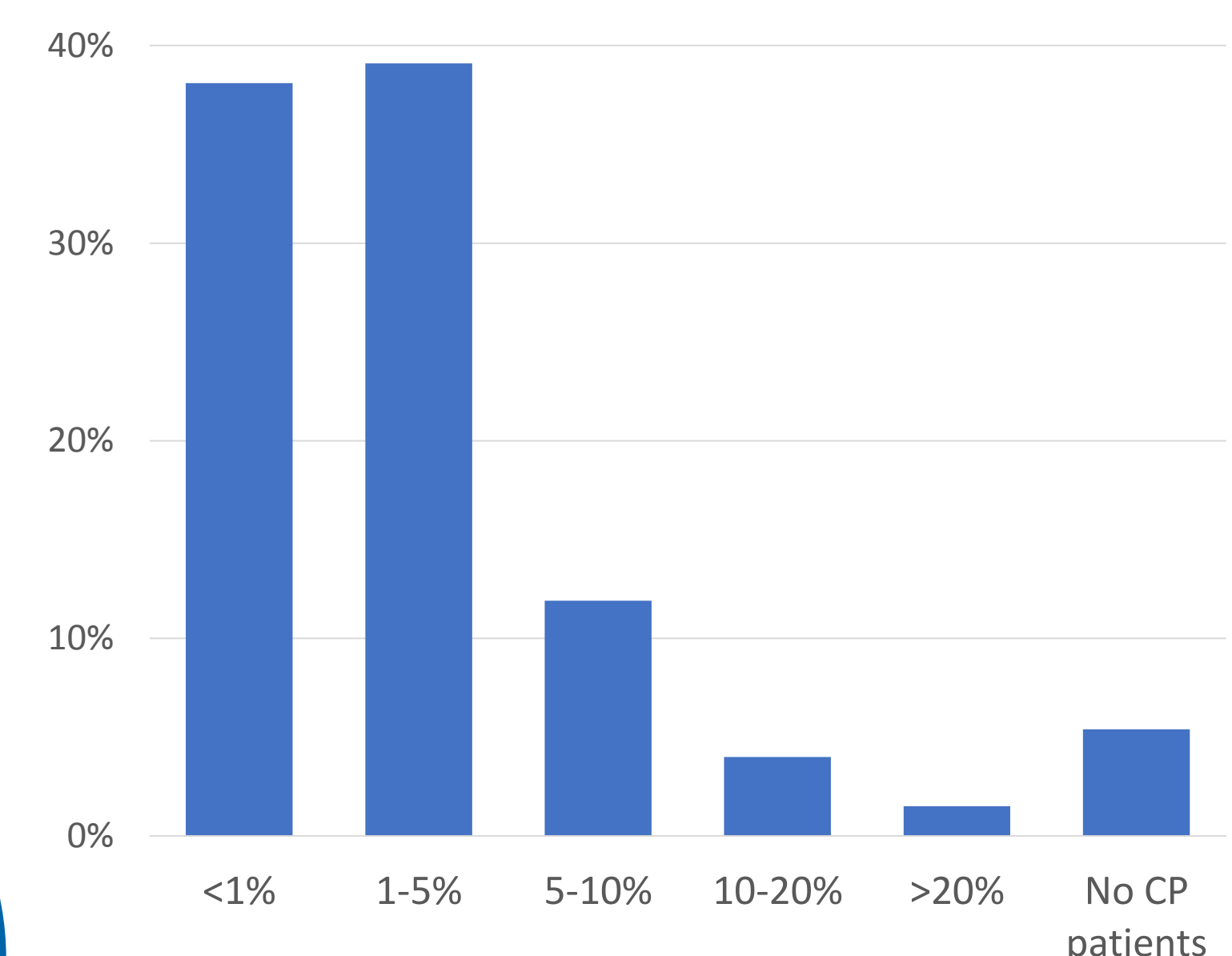
Figure 1 (left). Proportion of females and males in the German, French and Italian language regions
Figure 2 (right). Proportion of females and males by age group (N=337)

1. Prevalence of CP in paediatrician primary care

Participating paediatricians in private, single or group practices reported having treated 322 children or adolescents with CP in the last week. 60% agreed that the number of children seen in the past 7 days corresponds with a normal week (15% higher and 25% less than normal).

The calculated estimated prevalence in the primary paediatric practice is 3.35 % (2.54-3.89%)

Figure 3: Physicians report on percentage of children with CP among their patients (N=202)



The estimation corresponds to the number of CP prevalence in the pediatric practices (39% answered 1-5% prevalence)

Conclusion
In this sample of paediatrician 3.35% of patients are identified as patients with CP. The discrepancy to self-reported pain is high. Swiss paediatricians do not feel confident with treating CP. Correspondingly they rate their experiences and education low. More focus on educating Swiss paediatricians about CP and information on care options seems appropriate.

2. Confidence and experiences with CP

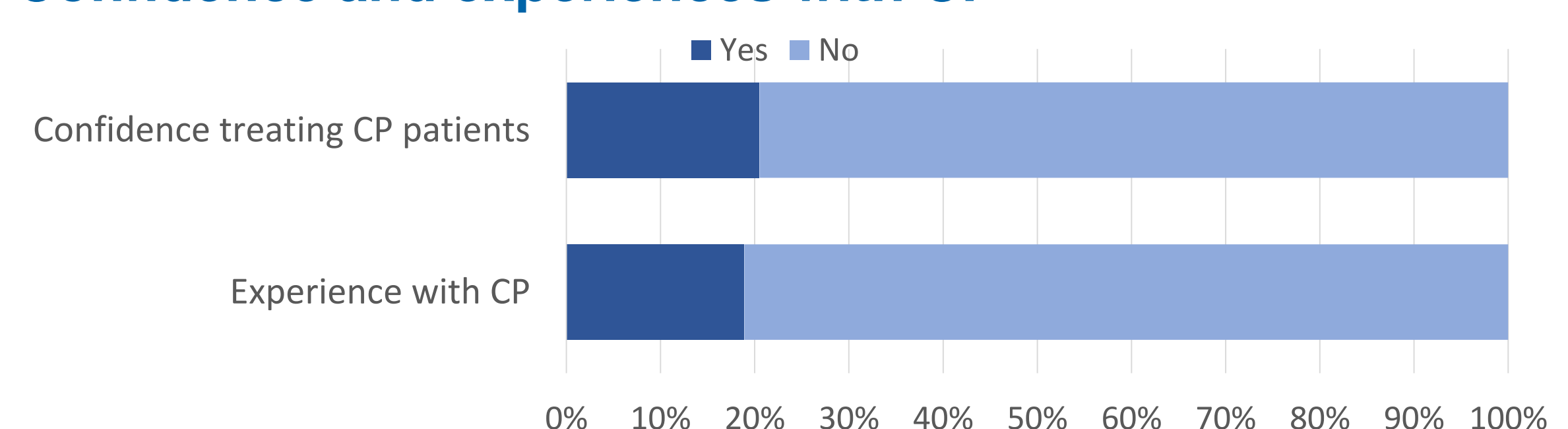


Figure 4. Confidence and experiences with CP (N=317)

Paediatricians report low confidence and experience with CP.

In multivariate analyses confidence and experience does not differ significantly by language region, sex or age of paediatrician.

3. Transferral to specialized paediatric pain clinics

37% (N=116) have transferred children to paediatric pain clinics in the last year. **9.5% (N=30) did not find specialized paediatric pain clinics a therapeutic option**

- half do not know any ambulatory pain consultations (N=14)
- a third say it is too far away for the patients (N=5) or have enough own resources (N=10)
- other reasons (non-specified N=10).

References

1. King S, Chambers CT, Huguet A, MacNevin RC, McGrath PJ, Parker L, et al. The epidemiology of chronic pain in children and adolescents revisited: a systematic review. PAIN. 2011;152(12):2729-38.
2. Unpublished, HBSC communication April/2019
3. Treede R-D, Rief W, Barke A, Aziz Q, Bennett MI, Benoliel R, et al. A classification of chronic pain for ICD-11. Pain. 2015;156(6):1003.

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