Background and aims Temperament in very preterm infants (VPI) has been rarely studied. We used a short version of the Bates Infant Characteristic Questionnaire (ICQ) to explore maternal reported child difficultness in an area-based cohort of Italian VPI.

Methods Study population included 1196 infants (response rate 85%). A medical examination was carried out to assess infants’ health and presence of disabilities. A postal maternal questionnaire was used to measure development and temperament. We used the sections corresponding to ‘Fussy-difficult’ and ‘Unadaptable’, with 12 items rated on a 7-point Likert-type scale. Higher scores indicate more problematic temperament. Statistical analysis included factor analysis and calculation of Cronbach's alpha. To assess validity, comparisons with sleep and eating problems reported by mothers independently from ICQ were carried out.

Results For this study only singleton born from Italian mothers were considered (n. 586); 55% were males, and 21% were below 28 weeks gestation. Forty infants (7%) had at least one severe disability. Mean ICQ score was 34.1 (SD 10.1), and median 33 (range 13–69). Factor loadings were comparable to the original English version, and internal consistency was satisfactory (alpha 0.88 for fussy-difficult and 0.71 for Unadaptable). Infants with difficulties getting to sleep, frequent night awakenings, and ‘picky eaters’ had significantly higher ICQ scores (p values <0.01).

Conclusion The short version of the ICQ may represent a quick and easily administered tool for the identification of difficult temperament traits in clinical and research settings.

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