INTRODUCTION

Childhood nocturnal enuresis (NE) is a common childhood disease. According to the International Children's Continence Society (ICCS) (Shah et al., 2018), NE is defined as intermittent urinary incontinence occurring at least twice a week during sleep over a period of more than 3 months in children at a minimum age of 5 years (Gomez Rincon, Leslie, & Lotfollahzadeh, 2020). It has been reported that the incidence rate of NE is 10% for children under 7 years old, 3.1% for children aged 11–12 years and 0.5%–1.7% for children aged 16–17 years (Kuwertz-Bröking & von Gontard, 2018; Y. Li et al., 2019). In China, the prevalence of NE varies by region, ranging from 4.07%–10.3% (Han et al., 2019; Miao & J., 2020; Wang et al., 2019), and it occurs more frequently in boys (Sarici et al., 2016). NE affects the social life of a child, and according to a survey, children with enuresis described bedwetting as the third most disruptive to their lives ranked only after divorce and parental conflict (Tai, Tai, Chang, & Huang, 2021). Although the disease does not cause acute harm to children, long-term nocturnal bed-wetting often begets a serious disease burden and psychological pressure on both children and their parents (Salehi, Yousefichaijan, Rafeel, & Mostajeran, 2016), resulting in anxiety and feelings of uncertainty (Jönson Ring, Nevéus, Markström, Arnrup, & Bazargani, 2017; Sinha & Raut, 2016).

Uncertainty in illness refers to the lack of the ability to judge events related to or predict the prognosis of the disease (Kerr & Haas, 2014). Parents’ uncertainty with regard to a specific illness stems from their desire to envision their child’s future (Santacroce, 2001). In cases when parents feel uncertain about the severity of the disease and the unpredictability of the future during the diagnosis stage of disease, the uncertainty typically intensifies further. This trend is
commonly observed in many patients and their family members (Hagen et al., 2015; MH, 1988). Illness uncertainty may make parents more inclined to adopt negative coping styles and behaviours and consequently affect the quality of life and the rehabilitation of paediatric patients (Jönson Ring et al., 2017; Yang et al., 2015).

2 | BACKGROUND

When their child is diagnosed with NE, parents experience considerable stressful events and are haunted by disbelief and emotional distress (e.g., anxiety and depression). Society and parents commonly expect children to achieve urinary continence by age six. This expectation increases as children age (Linde et al., 2021; Maternik, 2019). Many parents also rarely see substantial or sustained improvement in their children's bedwetting problem, leading to frustration and ambivalence (Tai, Tai, Chang, & Huang, 2017). Chang et al. found that children with NE struggled more academically and socially, and their parents experienced and exhibited more parenting stress (Chang, Ng, & Wong, 2002). Hamed et al. mentioned that parental perceptions, attitudes and responses to illness affect the development of children's diseases. Positive expectations in parents have similarly been associated with better health outcomes (Hamed, Fawzy, & Hamed, 2021). Therefore, in the medical process, it is very important to understand the parents' cognition and psychological pressure of the disease. However, at present, many studies have focused on the physical and mental health and social behaviour of children with NE (Hamed et al., 2021; Hu et al., 2021; Jönson Ring et al., 2017; Pavione Rodrigues Pereira et al., 2016; Salehi et al., 2016). In China, most of the current research focuses on the study of disease treatment (Q. Li et al., 2018; Wen, 2017; Xu et al., 2019), and few studies focus on the perception and psychology of parents of children with NE. This study aimed to investigate the level of uncertainty and anxiety in the parents of children with NE, analyse its influencing factors and provide expectations for future care.

3 | METHODS

3.1 | Design

The present study was designed as a descriptive, analytical study.

3.2 | Sample and procedure

In this cross-sectional study, parents of children (each reporting separately about their children) admitted to the paediatric surgery outpatient department of our hospital were invited to participate in the study by a questionnaire survey. The time frame of data collection was from February 2019–October 2020. Participants who (1) were age ≥18 years old and were the primary caregiver of the child; (2) had clear consciousness and normal expression and communication; and (3) were willing to participate in this survey and sign a written informed consent form were included in the study. The exclusion criteria were as follows: those who (1) had taken care of their children for less than 1 year; (2) suffered from severe mental illness or cognitive impairment; or (3) were unwilling to participate in the study. The sample size was calculated to give a 95% power level, a medium effect size (0.3) and a 0.05α value. This calculation was performed using G*Power software V3.0.10. The sample size also met the criteria, which recommends approximately five to 10 participants per independent variable item in validity studies (Ni, Chen, & Liu, 2010). As the questionnaire contains 11 independent variable items, the sample size range was selected from 55 to 110. Considering the rate of loss-to-follow-up and sampling error, the sample size was expanded by 1.5 times, and the final reference range was 137–275.

After the researcher explained the purpose and method of the survey in the outpatient clinic, participants completed the electronic questionnaire by themselves, and the researcher guided and answered questions on site to ensure the quality of the survey. A total of 250 questionnaires were distributed, and 247 valid questionnaires were returned, for an effective response rate of 98.8%.

3.3 | Measurement

3.3.1 | Demographics

The survey questionnaire was used to evaluate the parents' demographic characteristics, including age, gender, education level, work status, household income, place of residence and whether the child was an only child, the treatment time and the source of medical expense coverage.

3.3.2 | Parent perception of uncertainty scale (PPUS)

This self-evaluation scale is based on the theory of uncertainty in illness (H, 1983) and is used to determine the level of illness uncertainty in hospitalized patients or their family members. The Parent Perception of Uncertainty Scale has a Cronbach’s coefficient of 0.844 and content validity of 0.928 (Mai, Xie, Ma, Deng, & Dai, 2013). The scale has 28 items, such as ambiguity (11 items), lack of clarity (8 items), lack of information (5 items) and unpredictability (4 items). The scale uses the Likert 5-level scoring method, with a total score of 28–140. Each item is scored with a 5-point Likert scale ranging from 1 indicating strong disagreement to 5 indicating strong agreement with the item statement. Higher scores indicate a higher level of uncertainty in the parents of children with NE.

3.3.3 | Self-Rating anxiety scale (SAS)

This scale was used to evaluate the subjective feelings of anxiety patients (Zung, 1971). Each item is scored with a 5-point Likert scale.
determine the correlations between uncertainty in illness and anxiety. Linear regression analyses. Pearson correlation analysis was used to analyse the influencing factors in illness were analysed using univariate and multiple comparisons. The influencing factors for pairwise comparisons. The influencing factors of uncertainty in illness were analysed using univariate and multiple linear regression analyses. Pearson correlation analysis was used to determine the correlations between uncertainty in illness and anxiety. Statistical analyses were performed using SPSS, version 24.0 (Statistical Package for the Social Sciences, version 24.0, SPSS Inc.). Continuous measurement data are expressed as the mean±SD, and count data are expressed as the number of cases or composition ratio. Between-group comparisons were conducted using t tests and analysis of variance. Differential tests for continuous variables were performed using ANOVA, and Bonferroni or Dunnett T3 tests were performed for pairwise comparisons. The influencing factors of uncertainty in illness were analysed using univariate and multiple linear regression analyses. Pearson correlation analysis was used to determine the correlations between uncertainty in illness and anxiety. Data analysis

Statistical analyses were performed using SPSS, version 24.0 (Statistical Package for the Social Sciences, version 24.0, SPSS Inc.). Continuous measurement data are expressed as the mean±SD, and count data are expressed as the number of cases or composition ratio. Between-group comparisons were conducted using t tests and analysis of variance. Differential tests for continuous variables were performed using ANOVA, and Bonferroni or Dunnett T3 tests were performed for pairwise comparisons. The influencing factors of uncertainty in illness were analysed using univariate and multiple linear regression analyses. Pearson correlation analysis was used to determine the correlations between uncertainty in illness and anxiety. p < .05 indicated statistically significant results.

3.5 | Ethical considerations

The study was approved by the Ethics Committee of the West China Hospital of Sichuan University (ID 20190122). All participants were informed about the objectives, methods, risks and benefits of the research and provided written consent to participate. All patient information was kept confidential. In addition, parents were able to quit at any time of the study. Confidentiality and voluntary participation were ensured in accordance with the Helsinki Declaration.

4 | RESULTS

This study included 247 parents of children with NE. Among these parents were 60 fathers (24.3%) and 187 mothers (75.7%), and 57 parents were aged ≤30 years (23.1%) and 190 were aged >30 years (76.9%). In terms of education levels, 74 had a high school degree or below (30.0%), 85 had an associate degree (34.4%), 76 had a graduate-level degree (30.8%) and 12 had a postgraduate-level degree or above (4.9%). Most of the parents had jobs (74.1%) and lived in urban areas (76.1%). The household income of 107 patients was ≤$5,000/m (43.3%) and that of 140 patients was >$5,000/m (56.7%). Among these children were 165 boys (66.8%) and 82 girls (33.2%) aged between 3 and 15 years. As shown in Table 1, the total PPUS score was high among parents of children with NE (81.18 ± 10.82), and the anxiety score was 41.86 ± 9.20.

As shown in Table 2, the statistically significant grouping variables were education level, work status, family per capita income, family residence, age of children and treatment time of children. The PPUS score (80.03 ± 11.99) of parents who had a bachelor’s degree was lower than that of others (F = 8.255, p < .05), and the post hoc comparative analysis showed that the PPUS score of parents with a bachelor’s degree was significantly lower than that of parents below a high school or below degree and associate degree, and the difference was statistically significant (p < .05). The PPUS score of parents who were employed at the time of this study compared with those who were not employed was lower (83.32 ± 11.01 vs. 88.84 ± 10.46, t = −3.496, p < .05). The results show that the PPUS score of parents with a relatively higher household income was lower than those with a relatively lower household income (82.49 ± 11.26 vs. 87.71 ± 10.25, t = 3.749, p < .05). The PPUS score increased with the child’s age (F = 3.172, p < .05). The PPUS score of parents whose child’s age was ≥11 years was the highest (89.56 ± 12.17), and the post hoc comparative analysis showed that it was significantly higher than that of parents whose child’s age was ≤5 years (p < .05). There was a significant difference in the PPUS scores regardless of the children’s treatment time. The scores of the treatment time ≤3 months group were lower than those >3 months (84.27 ± 11.25 vs. 85.06 ± 11.08, t = −0.547, p < .05).

Variables (parents’ educational level, work status, family monthly income, family residence, child’s age and child’s treatment time) with statistical significance (p < .05) identified by univariate analysis were included as independent variables in the multiple linear regression model. The regression analysis results show that parents’ working status, family per capita monthly income, and children’s treatment time were the main influencing factors for parents’ disease uncertainty in children with NE (Table 3). Parents’ anxiety scores were positively correlated with disease state uncertainty, information uncertainty, and lack of information, as well as the total score of disease uncertainty (p < .05), but were not significantly correlated with the unpredictability dimension score (p > 0.05) (Table 4).

Table 1 Parental illness uncertainty and scores of various dimensions of children with nocturnal enuresis (N = 247)

| Item            | Score range | Minimum | Maximum | Score (R ± s) |
|-----------------|-------------|---------|---------|---------------|
| Ambiguity       | 11–55       | 16.00   | 53.00   | 33.88±6.77    |
| Lack of clarity | 8–40        | 10.00   | 32.00   | 22.08±3.82    |
| Lack of information | 5–25    | 7.00    | 22.00   | 15.80±2.32    |
| Unpredictability| 4–20        | 6.00    | 20.00   | 12.97±2.30    |
| Total PPUS score| 28–140      | 49.00   | 119.00  | 81.18±10.82   |

Abbreviation: PPUS, Parent Perception of Uncertainty Scale.
Mishel proposed that when the individual’s disease uncertainty score is greater than 50% of the highest score, there is a higher level of disease uncertainty (MH, 1988). The PPUS score (81.18 ± 10.82) determined in this study was greater than 50% of the total score, indicating a high level of uncertainty, consistent with the results of previous studies (Lin, Yeh, & Mishel, 2010; L. Zhao, Meng, & Huang, 2019b). In addition, the parent anxiety score (41.86 ± 9.20) was statistically higher than the Chinese norm (29.78 ± 10.07) (Zhang, 1998), similar to that reported by Qu Dan et al. (Qu & Wu, 2016).

Possible reasons for the higher levels of uncertainty and anxiety in these parents are listed below: (1) The pathogenesis of NE is complex and involves many factors, such as the central nervous system, circadian rhythm function, bladder function and genetics (Wright, 2020). Parents of affected children may have a lack of knowledge about the disease, incomplete information acquisition, or may not comprehend the information. (2) NE has a long course and high recurrence. Although approximately 15% of children with
NE are cured each year, enuresis symptoms continue to adulthood in approximately 0.5%–2% of children (Shen et al., 2014). This engenders a greater burden of care and psychological pressure on the parents of these children. (3) Parents must urge their children to adjust their work and rest habits, develop good urination (defecation) habits, standardize a urination diary, and follow doctors’ orders during the treatment, all of which can lead to increased disease uncertainty and anxiety.

The results of this study show that unemployed parents had higher scores of illness uncertainty than those with jobs. The possible reason is that compared with unemployed parents, parents with jobs have a more stable economic income and better access to medical resources, resulting in more ways to acquire more disease-related knowledge, better coping mechanisms, and improved ability to manage the disease (Wu, Wen, Li, & Lei, 2020; Yang et al., 2015). In addition, careers can contribute to a parent’s self-worth, thereby reducing their attention to their children’s illness and their illness uncertainty and anxiety. The results of this study indicate that the higher the family’s per capita monthly income is, the lower the illness uncertainty, which is consistent with existing research results (Zhao, Mao, & Li, 2019a). Because NE has a long course and treatment cycle, it requires substantial manpower and material and financial resources, which put pressure on the family economy. Furthermore, the family’s economic level will affect the choice of medical treatment and the cognition of the disease, thereby affecting the level of disease uncertainty (Perez et al., 2020). One interesting finding of the present research is that the longer a child’s treatment time is, the higher the level of parental uncertainty. Studies have shown that with longer treatment times, patients and/or their family members receive more and more comprehensive medical information, so the level of disease uncertainty is lower. However, due to the particularity of NE, the prolonged treatment time of children may be accompanied by a series of problems, such as recurrence, poor treatment effects and poor compliance. The treatment plan may generate more doubts and uncertainties, leading to an increase in the level of disease uncertainty. The finding emerging from the analysis is that the total scores of illness uncertainty and the dimensional scores of disease state uncertainty, information uncertainty, and lack of information were positively correlated with anxiety scores; that is, the higher the anxiety level, the higher the uncertainty level (Schiele, Emery, & Jackson, 2019).

In summary, the diagnosis, treatment and management of children with NE is a complex and long-term process. Medical staff should pay attention not only to the disease itself but also to the uncertainty and psychological state of the parents of children with NE.

### 6 | Limitation

This study has several limitations that should be considered. First, this study has a descriptive cross-sectional design; thus, further research is needed to test the scalability of PPUS throughout the disease trajectory and to explore the intervention methods for illness uncertainty and the scalability of PPUS in the whole disease trajectory. Second, a convenience sampling method was used. All parents were recruited from the paediatric surgery clinic of the same general hospital, and the group of participants may not be representative of the whole population of parents of children with NE in China.

### 7 | Conclusion

Parents’ uncertainty about the illness and anxiety of children with NE are at a high level. Working status, family per capita monthly income, and children’s treatment time were the main influencing factors for parents’ uncertainty in illness in children with NE. It is important to explore a disease follow-up management model that integrates medical and patient care and standardizes the
management of the disease throughout the entire process to improve the level of parental care of children and reduce their illness uncertainty and anxiety. In future research, qualitative research methods should be used to further explore the causes and influencing factors of parents’ illness uncertainty and anxiety in children with NE to provide a basis for formulating intervention programmes.

AUTHOR CONTRIBUTIONS
Wen-Jiao Huang: Conceptualization, Methodology, Software, Data curation, Writing- Original draft preparation. Yuan-Yuan Liang: Visualization, Investigation. Xue Ma: Supervision. Qian Yang: Software, Validation.

ACKNOWLEDGEMENT
We are thankful to the parents who participated in this study.

CONFLICTS OF INTEREST
The authors report no actual or potential conflicts of interest.

DATA AVAILABILITY STATEMENT
The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID
Wen-Jiao Huang https://orcid.org/0000-0003-4554-5605

REFERENCES
Chang, S. S., Ng, C. F., & Wong, S. N. (2002). Behavioural problems in children and parenting stress associated with primary nocturnal enuresis in Hong Kong. Acta Paediatrica, 91(4), 475–479. https://doi.org/10.1038/080352502317371742

Gomez Rincon, M., Leslie, S. W., & Lotfollahzadeh, S. (2020). Nocturnal enuresis. In StatPearls Pub. StatPearls Publishing.

Hagen, K. B., Aas, T., Lode, K., Gjerde, J., Lien, E., Kvaløy, J. T., Lash, T. L., Seilland, H., & Lind, R. (2015). Illness uncertainty in breast cancer patients: Validation of the 5-item short form of the Mishel uncertainty in illness scale. European Journal of Oncology Nursing, 19(2), 113–119. https://doi.org/10.1016/j.ejon.2014.10.009

Hamed, S. A., Fawzy, M., & Hamed, E. A. (2021). Behavioral problems in children with primary monosymptomatic nocturnal enuresis. Comprehensive Psychiatry, 104, 152208. https://doi.org/10.1016/j.comppsych.2020.152208

Han, Z., Wen, Y., Wang, X., Hua, C., Xu, P., & Wen, J. (2019). A survey on the prevalence of different subtypes of primary enuresis in children. Chinese Journal of Pediatric Surgery, 40(12), 1118–1122. https://doi.org/10.3760/cma.j.issn.0253-3006.2019.12.011

Hu, H. J., Zhang, Z. W., Liang, Y., Luo, Y. Y., Dou, Q. F., Song, C. P., Zhang, H. M., Zhao, Y., Tian, G. R., Zhang, K., Mao, Q. F., Song, J. G., Rittig, S., & Wen, J. G. (2021). Prevalence, risk factors, and psychological effects of primary nocturnal enuresis in Chinese young adults. International Neurotoiology Journal, 25(1), 84–92. https://doi.org/10.5213/inj.2040398.149

Jönsson Ring, I., Nevés, T., Markström, A., Arrnup, K., & Bazargani, F. (2017). Nocturnal enuresis impaired children’s quality of life and friendships. Acta Paediatrica, 106(5), 806–811. https://doi.org/10.1111/apa.13787

Kerr, A. M., & Haas, S. M. (2014). Parental uncertainty in illness: Managing uncertainty surrounding an “orphan” illness. Journal of Pediatric Nursing, 29(5), 393–400. https://doi.org/10.1016/j.jpned.2014.01.008

Kuwertz-Böninger, E., & von Gontard, A. (2018). Clinical management of nocturnal enuresis. Pediatric Nephrology, 33(7), 1145–1154. https://doi.org/10.1007/s00467-017-3778-1

Li, Q., Wen, Y. B., Zhang, R. L., Feng, J. J., He, X. F., & Wen, J. G. (2018). Analysis of urine flow rate and post-voiding residual urine volume results under first desire to void ver- sus strong desire to void. Journal of Clinical Pediatric Surgery, 17(7), 492–495. https://doi.org/10.3969/j.issn.1671-6353.2018.07.004

Li, Y., Wen, Y., Wang, Y., Wang, X., Shi, W., Yao, J. . . . , Wen, J. (2019). Incidence of primary nocturnal enuresis and related influencing factors in children in rural and urban areas in Henan Province. Journal of Clinical Pediatric, 18(10), 844–848. https://doi.org/10.3969/j.issn.1671-6353.2019.10.009

Lin, L., Yeh, C. H., & Mishel, M. H. (2010). Evaluation of a conceptual model based on Mishel’s theories of uncertainty in illness in a sample of Taiwanese parents of children with cancer: A cross-sectional questionnaire survey. International Journal of Nursing Studies, 47(12), 1510–1524. https://doi.org/10.1016/j.ijnurstu.2010.05.009

Linde, J. M., Ekelmans-Hogenkamp, J. L. A., Hofmeister, L., Koes-van Hattem, G., Steffens, M. G., Kloosterman-Eigenraam, F. J., Nijman, R. J. M., & Blanker, M. H. (2021). Parents’ expectations of the outpatient care for daytime urinary incontinence in children: A qualitative study. Journal of Pediatric Urology, 17(4), e471–e473.e477. https://doi.org/10.1016/j.jpuro.2021.05.026

Mai, J., Xie, W., Ma, C., Deng, Y., & Dai, L. (2013). Revision and preliminary application of Chinese version of parents scale of uncertainty in illness. Chinese Journal of Practical Nursing, 29(28), 46–50. https://doi.org/10.3760/cma.j.issn.1672-7088.2013.28.023

Maternik, M. (2019). Understanding of and misconceptions around monosymptomatic nocturnal enuresis: Findings from patient and physician surveys. Journal of Pediatric Urology, 15(1), 37.e31–37.e38. https://doi.org/10.1016/j.jpuro.2018.09.013

MH, M. (1988). Uncertainty in illness. Journal of Nursing Scholarship, 20(4), 225–232.

Miao, Q. F., & J., L. Y. (2020). Prevalence of nocturnal enuresis in children and adolescents aged 5 to 18 years in China. Chinese Journal of Evidence Based Pediatrics, 15(2), 81–86. https://doi.org/10.3969/j.issn.1673-5501.2020.02.001

Ni, P., Chen, J. L., & Liu, N. (2010). The sample size estimation in quantitative nursing research. Chinese Journal of Nursing, 45(4), 378–380.

Pavine Rodrigues Pereira, R., Nascimento Fagundes, S., Surry Lebl, A., Azevedo Soster, L., Machado, M. G., Koch, V. H., & Tanaka, C. (2016). Children with nocturnal enuresis have posture and balance disorders. Journal of Pediatric Urology, 12(4), 216.e1–216.e6. https://doi.org/10.1016/j.jpuro.2016.05.003

Perez, M. N., Traino, K. A., Bakula, D. M., Sharkey, C. M., Espeleta, H. C., Delozier, A. M., Mayes, S., McNallm, R., Chaney, J. M., & Mullins, L. L. (2020). Barriers to care in pediatric cancer: The role of illness uncertainty in relation to parent psychological distress. Psychooncology, 29(2), 304–310. https://doi.org/10.1002/pon.5248

Qu, D., & Wu, X. (2016). Study on correlation between disease uncertainty and anxiety of mothers of children with CHD before surgery. Modern Nursing, 22(28), 4074–4076. https://doi.org/10.3760/cma.j.issn.1674-2907.2016.28.019

Salehi, B., Yousefchajian, P., Rafiee, M., & Mostajeran, M. (2016). The relationship between child anxiety related disorders and primary nocturnal enuresis. Iranian Journal of Psychiatry and Behavioral Sciences, 10(2), e4462. https://doi.org/10.17795/ijpbs-4462
Santacroce, S. J. (2001). Measuring parental uncertainty during the diagnosis phase of serious illness in a child. *Journal of Pediatric Nursing*, 16(1), 3-12. https://doi.org/10.1053/jpdn.2001.20547

Sarici, H., Telli, O., Ozgur, B. C., Demirbas, A., Ozgur, S., & Karagoz, M. A. (2016). Prevalence of nocturnal enuresis and its influence on quality of life in school-aged children. *Journal of Pediatric Urology*, 12(3), 159.e151-159.e156. https://doi.org/10.1016/j.jpurol.2015.11.011

Schiele, S. E., Emery, C. F., & Jackson, J. L. (2019). The role of illness uncertainty in the relationship between disease knowledge and patient-reported outcomes among adolescents and adults with congenital heart disease. *Heart & Lung*, 48(4), 325-330. https://doi.org/10.1016/j.hrtlng.2018.10.026

Shah, S., Jafri, R. Z., Mobin, K., Mirza, N., Nanji, K., Jahangir, F., Patel, S. J., Ejaz, M. S., Qaiser, I., Iftikhar, H., Aziz, K., Khan, W., Maqbool, H. S., & Ahmed, H. (2018). Frequency and features of nocturnal enuresis in Pakistani children aged 5 to 16 years based on ICCS criteria: A multi-center cross-sectional study from Karachi, Pakistan. *BMC Family Practice*, 19(1), 198. https://doi.org/10.1186/s12875-018-0876-5

Shen, X., Liu, X., Yao, Y., Guo, W., Zhou, W., Ma, J., ... Xu, H. (2014). Chinese expert consensus on the management of children's nocturnal enuresis. *Journal dos Clinicos Pediatr*(10), 970-975. https://doi.org/10.3969/j.issn.1000-3606.2014.10.019

Sinha, R., & Raut, S. (2016). Management of nocturnal enuresis - myths and facts. *World Journal of Nephrology*, 5(4), 328-338. https://doi.org/10.5527/wjn.v5i4.328

Tai, T. T., Tai, B. T., Chang, Y. J., & Huang, K. H. (2017). Parental perception and factors associated with treatment strategies for primary nocturnal enuresis. *Journal of Pediatric Urology*, 13(3), 272.e271-272.e278. https://doi.org/10.1016/j.jpurol.2016.12.025

Tai, T. T., Tai, B. T., Chang, Y. J., & Huang, K. H. (2021). The importance of understanding parental perception when treating primary nocturnal enuresis: A topic review and an institutional experience. *Research and Reports in Urology*, 13, 679-690. https://doi.org/10.2147/rru.S323926

Wang, X. Z., Wen, Y. B., Shang, X. P., Wang, Y. H., Li, Y. W., Li, T. F., Li, S. L., Yang, J., Liu, Y. J., Lou, X. P., Zhou, W., Li, X., Zhang, J. J., Song, C. P., Jorgensen, C. S., Rittig, S., Bauer, S., Mosiello, G., Wang, Q. W., & Wen, J. G. (2019). The influence of delay elimination communication on the prevalence of primary nocturnal enuresis-a survey from mainland China. *Neurourology and Urodynamics*, 38(5), 1423-1429. https://doi.org/10.1002/nau.24002

Wen, J. G. (2017). The pathogenesis, diagnosis and treatment of enuresis. *Journal of Zhengzhou University (Medical Sciences)*, 52(6), 661-667. https://doi.org/10.13705/j.issn.1671-6825.2017.06.001

Wright, A. J. (2020). Nocturnal enuresis: A comorbid condition. *Jornal de Pediatría*, 96(3), 276-278. https://doi.org/10.1016/j.jped.2019.04.002

Wu, H., Wen, X., Li, Y., & Lei, H. (2020). Analysis of disease uncertainty and influencing factors in maintenance hemodialysis patients. *Journal of Qilu Nursing*, 26(13), 17-21. https://doi.org/10.3969/j.issn.1006-7256.2020.13.005

Xu, X. N., Hui, J. J., Chen, Q. H., Du, L. Y., Zhang, N., & Ma, H. W. (2019). A network meta-analysis of desmopression, alarm, and combination of both in the treatment of monosymptomatic nocturnal enuresis in children. *International Journal of Clinical Pediatrics*, 37(1), 55-62. 77. https://doi.org/10.3969/j.issn.1000-3606.2019.01.014

Yang, D. Y., Ye, J. J., Zhou, F., Li, J. J., Huang, Q. Y., & Wan, L. H. (2015). Relationship between uncertainty in illness, mood state and coping style in patients with temporomandibular disorders. *International Journal of Nursing Sciences*, 2(4), 361-365. https://doi.org/10.1016/j.ijnss.2015.11.003

Zhang, M. (1998). *Handbook of psychiatric assessment scale*. Hunan Science and Technology Press.

Zhao, H., Mao, J., & Li, J. (2019a). Analysis of uncertainty in illness status and influencing factors of COPD patients' families. *Nursing Research*, 33(8), 1390-1394. https://doi.org/10.12102/j.issn.1009-6493.2019.08.027

Zhao, L., Meng, J., & Huang, S. (2019b). Relationship among resilience, uncertainty in illness and subjective well-being in parents of children with congenital heart disease. *Journal of Guangxi Medical University*, 36(8), 1288-1291. https://doi.org/10.16190/j.cnki.45-1211/r2019.08.016

Zung, W. W. (1971). A rating instrument for anxiety disorders. *Psychosomatics*, 12(6), 371-379. https://doi.org/10.1016/s0033-3182(71)71479-0

---

**How to cite this article:** Huang, W.-J, Liang, Y.-Y, Yang, Q., & Ma, X. (2022). Nocturnal enuresis in children: Parents' perspectives. *Nursing Open*, 9, 2335-2341. https://doi.org/10.1002/nop2.1243