WHAT ARE THE EXPERIENCES OF DIETITIANS PROVIDING NUTRITIONAL CARE FOR PATIENTS WITH CYSTINOSIS?





Judith Erler judith.erler@postgrad.plymouth.ac.uk info@rundumsessen.at



Supervisor: Jen Carroll, MSc FHEA RD jennifer.carroll@plymouth.ac.uk



MSc Advanced Professional Practice in Dietetics

BACKGROUND: NUTRITION IN CYSTINOSIS

NUTRITIONAL CARE: HOW?

- "cystinosis [all fields]" on PubMed: 1,658 results (19/06/2022)
- ("cystinosis"[All Fields]) AND ("diet"[All Fields]) on PubMed: 36 results (07/07/2022)

> Acta Paediatr Scand. 1968 Sep;57(5):409-16. doi: 10.1111/j.1651-2227.1968.tb07313.x.

Dietary treatment of cystinosis

M S Acta Paediatr Scand. 1970 Nov;59(6):613-20. doi: 10.1111/j.1651-2227.1970.tb17695.x.

PM Treatment of cystinosis with a diet poor in cystine and methionine > Pediatr Nephrol. 1998 Jun;12(5):365-70. doi: 10.1007/s004670050467.

PMID: 5312270 DOI: 10.1111/j.

M F Christensen, J A Nielsen, O I Feeding problems in cystinosis

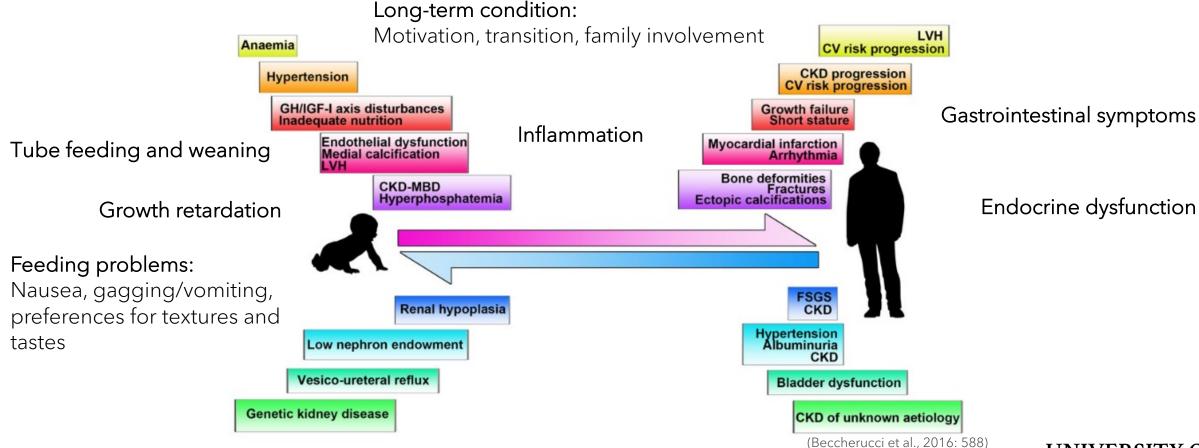
E Elenberg ¹, L L Norling, R E Kleinman, J R Ingelfinger

Affiliations + expand

PMID: 9686953 DOI: 10.1007/s004670050467







UNIVERSITY OF PLYMOUTH

RESEARCH QUESTION:

What are the experiences of dietitians who provide nutritional care for patients with cystinosis?

AIM:

To explore dietitians' experiences of current practice in the nutritional management of patients with cystinosis concluding with recommendations for best practice and service development.

OBJECTIVES:

- to explore dietitians' experiences of current nutritional management for patients with cystinosis
- to understand priorities in the dietetic consultations
- to explore potential obstacles and challenges when supporting patients with cystinosis from dietitians' perspectives
- to undertake thematic analysis to identify patterns or common themes in participants' experiences and responses
- to use the findings to support future development of dietetic services for patients with cystinosis



METHODOLOGY: QUALITATIVE DESCRIPTIVE STUDY

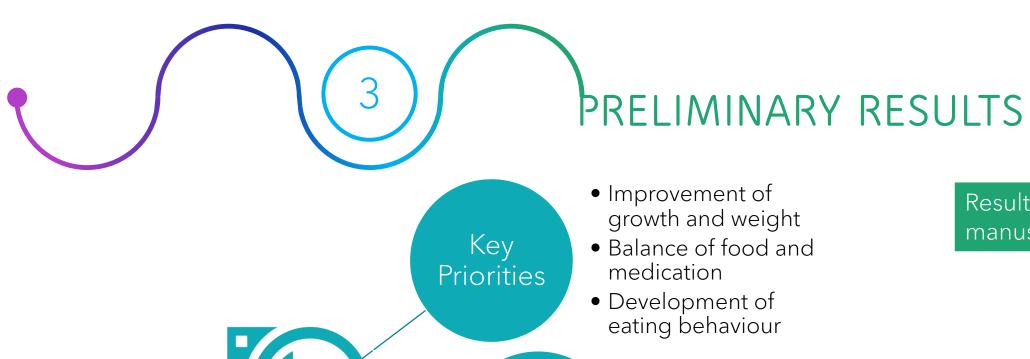
- To explore and understand the phenomenon of nutritional care and the perspectives of dietitians involved
- Lack of data: Describe perceptions with as little interpretation as possible

(Bradshaw, Atkinson and Doody, 2017)

METHODS: SEMI-STRUCTURED INTERVIEWS

- Piloted with a peer-review of the questionnaire
- Purposive and snowball sampling, Cystinosis
 Network Europe
- Intelligent verbatim transcription
- Inductive computer assisted thematic analysis, to identify and code relevant themes
- Sample size: n=6-10





Results may change, manuscript to follow.

Team
Support

- For dietitians: MDT
- For patients: Families, carers

,We have to be glad with small successes.'

Quality of Life

- Nutritional care: burden vs. selfmanagement
- Food intake and social development

UNIVERSITY OF PLYMOUTH

POINTS OF INTEREST

- Dietitians are aware of the severity of the disease focus on providing patients with sufficient energy despite more options, e.g., alleviating inflammatory processes linked to cystinosis
- Insufficient food intake: Metabolic, hormonal or cellsignalling contribution caused by cystinosis?
- Social and psychological factors: Children with cystinosis sometimes do not want to eat; dietitians experienced better food intake when children ate with their peers

(Elenberg et al. 1998; Ames and Thoene, 2022; Elmonem, Veys and Prencipe, 2022)

,I think these are the only things missing: Time and practical application. We've got everything else; we can do everything else.'



REFERENCES

Ames, E.G. and Thoene, J.G. (2022) 'Programmed Cell Death in Cystinosis', Cells, 11(4), p. 670. doi:10.3390/cells11040670.

Ariceta, G., Giordano, V. and Santos, F. (2019) 'Effects of Long-Term Cysteamine Treatment in Patients with Cystinosis', Pediatric Nephrology, 34(4), pp. 571–578. doi:10.1007/s00467-017-3856-4.

Bäumner, S. and Weber, L.T. (2018) 'Nephropathic Cystinosis: Symptoms, Treatment, and Perspectives of a Systemic Disease', Frontiers in Pediatrics, 6, p. 58. doi:10.3389/fped.2018.00058.

Becherucci, F., Roperto, R.M., Materassi, M. and Romagnani, P. (2016) 'Chronic Kidney Disease in Children', Clinical Kidney Journal, 9(4), pp. 583-591. doi:10.1093/ckj/sfw047.

Bradshaw, C., Atkinson, S. and Doody, O. (2017) 'Employing a Qualitative Description Approach in Health Care Research', Global Qualitative Nursing Research, 4, p. 233339361774228. doi:10.1177/2333393617742282.

Cystinosis Foundation UK (2013) 'What Is Cystinosis' Online available: https://www.cystinosis.org.uk/learn-more/what-is-cystinosis/, accessed 01/11/2021

Elenberg, E., Norling, L., Kleinman, R. and Ingelfinger, J. (1998) 'Feeding Problems in Cystinosis', Pediatric Nephrology, 12(5), pp. 365-370.

Elmonem, M.A., Veys, K.R., Soliman, N.A., van Dyck, M., van den Heuvel, L.P. and Levtchenko, E. (2016) 'Cystinosis: A Review', Orphanet Journal of Rare Diseases, 11(1), p. 47. doi:10.1186/s13023-016-0426-y.

Elmonem, M.A., Veys, K.R.P. and Prencipe, G. (2022) 'Nephropathic Cystinosis: Pathogenic Roles of Inflammation and Potential for New Therapies', Cells, 11(2), p. 190. doi:10.3390/cells11020190.

Urbano, F., Salgado, C., Leal, I., Vilarinho, L. and Simão, C. (2021) 'Infantile Nephropathic Cystinosis: Diagnosis and Treatment of a Systemic Disease', Portuguese Journal of Pediatrics, p. Vol. 52 N.o 4 (2021). doi:10.25754/PJP.2021.21307.





ANY QUESTIONS?



Judith Erler judith.erler@postgrad.plymouth.ac.uk info@rundumsessen.at



Supervisor: Jen Carroll, MSc FHEA RD jennifer.carroll@plymouth.ac.uk



MSc Advanced Professional Practice in Dietetics