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Disclosures

- Robyn Blackford
 - Consultant & Keto Ambassador - Nutricia
 - Consultant - Cerecin
 - Advisory board - Keto Hope Foundation
- Megan Keeler
 - Honorarium provided by Nutricia

None pose any conflict of interest for this presentation

The opinions reflected in this presentation are those of the speakers and independent of Nutricia North America

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Learning Objectives

- Discuss the multidisciplinary approach to ketogenic diet initiations
- Identify how the *Social Determinants of Health* (SDOH) play a part in the utilization of the ketogenic diet
- Learn how dietitians can elicit information to help patients overcome psychosocial barriers
- Enhance problem-solving skills through the discussion of a case study

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Ketogenic Diet Basics

- Variety of medical Ketogenic Diets
 - ▣ Classic Ketogenic Diet → 4:1 ratio
 - ▣ Modified Ketogenic Diet → 1:1, 2:1, 3:1 ratio
 - ▣ MCT Oil Diet → ~2:1 ratio using MCT fat
 - ▣ Modified Atkins Diet (MAD) → 20g CHO + Fats
 - ▣ Low Glycemic Index Treatment (LGIT) → <50 GI

Reference: Charlie Foundation for Ketogenic Therapies
<https://charlifoundation.org/diet-plans/> (accessed 5/16/24)

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Ketogenic Diet Clinic

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    graph LR
      A[Provider refers patient from clinic] --> B[Meet the team & learn more about the diet]
      B --> C[Start the diet inpatient/outpatient]
      C --> D[Follow Up Appt after 1 month]
      D --> E[Ongoing support]
      E --> B
  
```

Reference: Lurie Children's Hospital of Chicago
<https://www.luriechildrens.org/en/specialties-conditions/ketogenic-diet-program/> (accessed 5/16/24)

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Minimum KD Team Members

- According to ILAE (pub 2015)
 - ▣ MD – preferably neurologist familiar with KD
 - ▣ RD – trained in KD
- Familiar with all diets (KD, MCT, MAD, LGIT)
- Based on resources and comfort level, pick one

Kassoff EH, Al-Maski N, Curverka MC, et al. What are the minimum requirements for ketogenic diet services in resource-limited regions? Recommendations from the International League Against Epilepsy Task Force on Dietary Therapy. *Epilepsia*. 2015 Sep;56(9):1337-42. doi: 10.1111/epi.13303. Epub 2015 May 29. PMID: 26033161

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Large Ketogenic Diet Teams

- MD – epilepsy, neurology, medical director
- APN/RN – neuro provider, keto clinic
- Pharmacist – ad lib or part of the keto team
- RD – inpatient, outpatient
- Education Liaison
- Child Life Specialist
- Social Worker

Kossoff EH, Zupeco-Kania BA, Avvin S, et al. Optimal clinical management of children receiving dietary therapies for epilepsy: Updated recommendations of the International Ketogenic Diet Study Group. *Epilepsia Open*. 2018 May 21;9(2):175-189. doi: 10.1097/EPO.0000000000000110. PMID: 29861797. PMC-ID: PMC5883110

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Multidisciplinary Team

- Consensus Statement 2018
 - Rec for pre-diet evaluation:
 - “Child life specialist contact in advance of admission, if available”
- Make the hospitalization more comfortable
- Assess family needs, financial limitations, gather resources, and parent-to-parent support
- At our keto center, we find SW as a key piece to our multidisciplinary team

Kossoff EH, Sutter L, Doerrner SC, Haney CA, Turner Z. Impact of Child Life Services on Children and Families Admitted to Start the Ketogenic Diet. *J Child Neurol*. 2017 Aug 32(9):826-833. doi: 10.1177/0883073817708179. Epub 2017 May 8. PMID: 28462736

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Medical Social Worker

Help patients understand their condition, provide them with information about the resources available to them to cope with the emotional, financial, and social needs that arise with a diagnoses.

Duties:

- Addressing special needs or issues that exist with new admissions
- Assessing for needs to provide resources related to discharge from hospital or clinic
- Coordinating care of patients with complex needs that involve multiple services
- Handling illness related crisis with brief counseling interventions
- Connecting patients with financial and emotional resources



Training: Master's degrees and state licensed

Mayo Clinic College of Medicine and Science. "What does a medical social worker do?" <https://college.mayo.edu/academics/explore-health-care-careers/careers-a-z/medical-social-worker>. Accessed May 18, 2024

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Questions to Consider

- Why are some people healthier than others?
 - ▣ Genetics, health habits, medical care, social position, luck?
 - ▣ Are there other important factors that influence health?

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Questions to Consider

- What do you know about social determinants of health?
- What do you know about assessing social determinants of health in a clinical setting?

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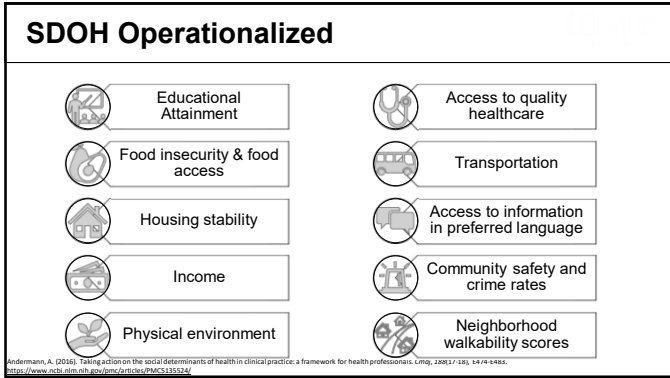
Social Determinants of Health

As defined by the World Health Organization, "the conditions in which people are born, grow, work, live, and age... as shaped by the distribution of money, power and resources at global, national and local levels."

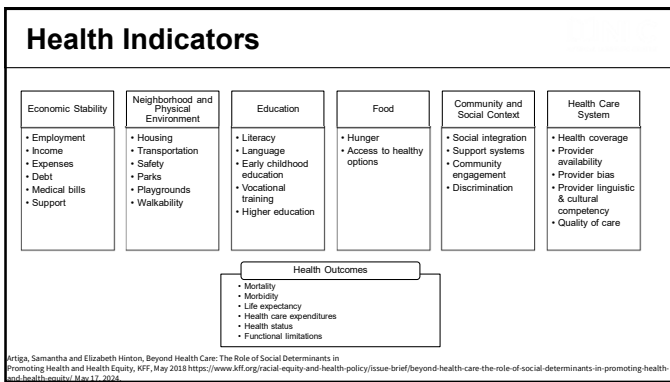


Andermann, A. (2016). Taking action on the social determinants of health in clinical practice: a framework for health professionals. *Cmaj*, 188(17-18), E474-E483. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5135524/>

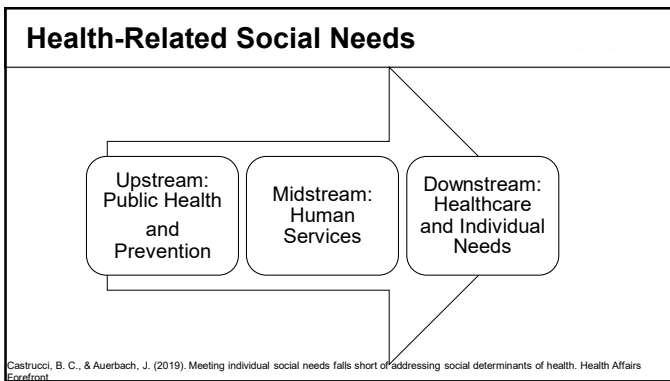
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Tying SDOH and KD Together

- Important to consider SDOH for families starting medical ketogenic diet
- Health indicators related to accessibility
 - food, health literacy, health coverage, quality of care

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- How do we address those needs?
- Where do we even start?



- With a conversation – we assess.

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Providing Opportunities...

- Better understanding of families – treating the whole person
- Build therapeutic relationship/mutual trust
- Identify areas to support patient/family well-being
- Identify barriers to access, adherence to care

Keating, Luke MA. Discussing social determinants of health with a patient. <https://www.jco.org/site/spotlights/discussing-social-determinants-of-health>. Accessed May 18, 2024.

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Sensitive Conversations – Provider Skills

Cultural Competency – Cultural Humility Motivational Interviewing Active Listening Empathic Inquiry Asset-based Trauma Informed

Sokol R, Austin A, Chandler C, Byrum E, Bouzquette J, Lancaster C, Dosi G, Dotson A, Urbaneva V, Singichetti B, Brevard K, Wright ST, Lanier P, Shanahan M. Screening Children for Social Determinants of Health: A Systematic Review. *Pediatrics*. 2019 Oct;144(4):e20191623. doi: 10.1542/peds.2019-1623. Epub 2019 Sep 23. PMID: 31548335. PMCID: PMC6999208.

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Best Practices

- 1 Explain why SDOH details are important
- 2 Do not make assumptions
- 3 Utilize open ended questions
- 4 Create space to discuss

Keating, Luke MA. Discussing social determinants of health with a patient. <https://www.ignivet.com/case-ignettes/discussing-social-determinants-of-health>. Accessed May 18, 2024.

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EMR Screening Questions

SOCIAL INFLUENCERS
Recent concerns: 1

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Possible Barriers for Keto Teams

- Competing job responsibilities
- Unfamiliarity with available community resources
 - Education regarding available resources
 - Understanding role of SW
- Time constraints
- Lack of organizational support
- Lack of skill to guide discussion
- Lack of assurance internal and community-based linkages will meet the identified need

Phillips, J., Richard, A., Meyer, K. M., Shikalla, M., Fogg, L. F., & Vondracek, H. (2020). Integrating the social determinants of health into nursing practice: Nurses' perspectives. *Journal of Nursing Scholarship*, 52(5), 497-505.
 Integrating the Social Determinants of Health into Nursing Practice: Nurses' Perspectives - PubMed (nih.gov)

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Possible Barriers for Families

Shame	Fear	Stigma
Effects of Trauma	Power Dynamics	Social and Cultural Norms

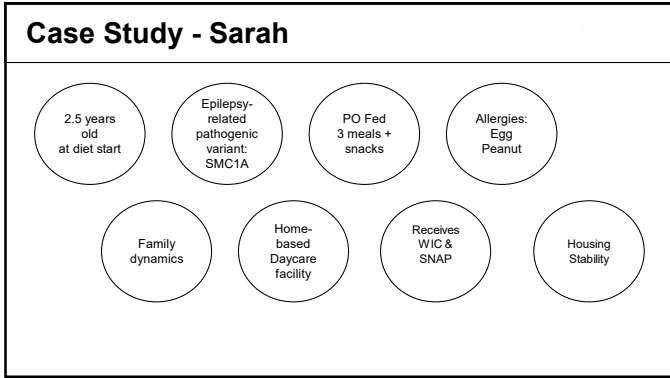
Keating, Luke MA. Discussing social determinants of health with a patient. <https://www.icmvidel.com/case-ignotes/discussing-social-determinants-of-health>. Accessed May 18, 2024.

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Resources Available to You:

- Social Work colleagues
- Other colleagues
- Care Coordinators
- Spiritual Care
- Foundations: Keto Hope, Charlie, Matthew's Friends

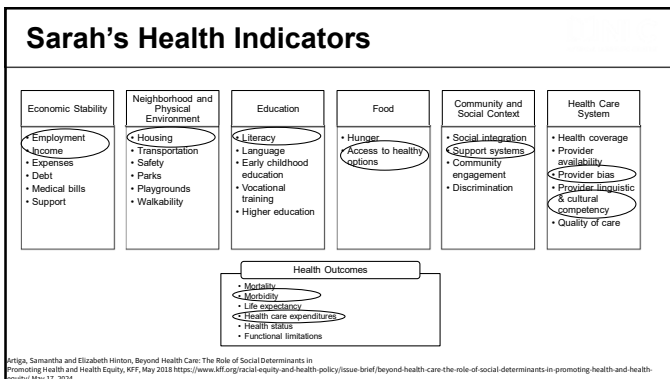
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- ### Case Study - Sarah
- Diet initiation
 - Inpatient start with ramp up to 3:1 ratio
 - People involved in diet start
 - Medical team
 - Family
 - Recognizing the determinants that are/will impact the diet (“red flags”)

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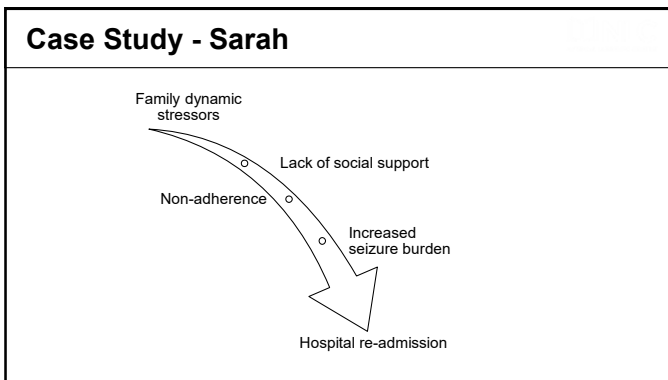
Sarah's Health Indicators -- EMR

SOCIAL INFLUENCERS

♥ Social Influencers of Health

- Food Insecurity** ⚡
Apr 15, 2024: Food Insecurity Present
- Housing Stability** ⚡
Apr 15, 2024: High Risk
- Financial Resource Strain** ⚡
Not on file
- Safety and Environment** ⚡
Apr 15, 2024: High Risk
- Transportation Needs** ⚡
Apr 15, 2024: No Transportation Needs
- Stress** ⚡
Not on file
- Caregiver Education and Work** ⚡
Not on file

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- ### Next Steps for Sarah
- | | |
|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Nutrition <ul style="list-style-type: none"> <input type="checkbox"/> Adherence <input type="checkbox"/> Health literacy <input type="checkbox"/> Quality of care | <ul style="list-style-type: none"> <input type="checkbox"/> Social Work <ul style="list-style-type: none"> <input type="checkbox"/> Social support <input type="checkbox"/> Provider bias <ul style="list-style-type: none"> <input type="checkbox"/> CPS <input type="checkbox"/> Concrete resources <input type="checkbox"/> Referrals |
|--|--|

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What Can Keto Teams Do?

- Increase awareness through education
- Use your resources – community, colleagues
- Build SDOH conversations into your assessments
- Be thoughtful about diet initiations
 - Planned versus urgent
- Shift from “fixer” mentality to supportive mentality

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Conversation Starters

- Have you ever worried that your food would run out before you were able to afford more?
- In the last year, how many places have you lived?
- Has lack of transportation kept you from medical appointments or from getting medications?
- How hard is it for you to pay for the basics like food, housing, medical care and heating?
- Do you ever need help understanding hospital materials?
- What concerns do you have about adhering to the KD?

Orr E, Whitney R, Nandeesha N, Kossoff EH, RamachandranNair R. Ketogenic Diet: Parental Experiences and Expectations. J Child Neurol. 2024 Jan;39(1):21-35-54. doi: 10.1177/08830738241227066. Epub 2024 Feb 5. PMID: 38314711. PMCID: PMC11083737

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Provider Upstream Education

- Community level work or volunteering
- Utilize data resources
 - CDC, National Center for Health Statistics
- Get involved with advocacy efforts
 - Academy of Nutrition and Dietetics
 - <https://www.eatright.org/action>
 - American Academy of Pediatrics – Division of State Government Affairs
 - <https://www.aap.org/en/advocacy/community-health-and-advocacy/>
 - American Medical Association
 - <https://www.ama-assn.org/health-care-advocacy>
- Take advantage of opportunities to learn about neighborhoods/communities and local resources

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Summary

- Importance of the multidisciplinary approach to a ketogenic diet
- Awareness of the Social Determinants of Health (SDOH) how they play a part in the utilization of a ketogenic diet
- RDs can elicit information to help patients overcome psychosocial barriers

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Thank you!

Questions?

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- The certificate will be emailed once the activity is approved.
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https://www.surveymonkey.com/r/SIOH_KD



Thank you!

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