Appendix B

Survey of physicians' opinion on probiotic therapy for antibiotic-associated diarrhea in children

Probiotics (definition):

Probiotics are live microorganisms intended to benefit the host when ingested in sufficient numbers. They are believed to promote healthy balance of gut microbiota through various mechanisms, including reducing colonization of pathogenic organisms through competitive inhibition of epithelial and mucosal adhesion. They are available in fermented foods (e.g., yogurts, drinks) and as supplements (e.g., capsule, powder).

Antibiotic associated diarrhea (definition):

☐ Treatment of non-specific diarrhea

Antibiotic associated diarrhea (AAD) is a condition in which diarrhea occurs after administration of antibiotics from initiation of therapy up to 8 weeks. C. difficile causes a small percentage of AAD. The published incidence of AAD in children ranges from 11% to 40%.

With regard to the definitions above, please answer the following questions:

1) If parents ask about use of probiotics, how do you respond?

□ I do not know enough about probiotics to make any recommendations

□ I only recommend probiotics for specific indications

□ I refer parents to other specialists or resources (please specify)

□ I do not recommend probiotics

□ Other (please specify)

□ Yes

□ No (If no, please skip to question number 5)

3) For what indications have you recommended probiotics?

□ Prevention of antibiotic-associated diarrhea

□ Prevention of non-specific diarrhea

□ Treatment of antibiotic-associated diarrhea

□Prevent	ion of viral respirato	ry tract infe	ctions			
□Other (p	olease specify)					
4) What type	of probiotics have y	ou recomme	ended? (Plea	se check a	ll that apply)	
□Foods o	containing naturally o	occurring pr	obiotics (e.g	., regular y	ogurt, Kimchi, Sa	uerkraut)
□Foods o	containing supplemen	ntal probioti	ics (e.g., Dan	Active ®,	Activia ®)	
	cic supplements (e.g ®, UltraFlora ®Child		®, Flora B	ABY®, Flo	orastor®, VSL #3	ß®, BioGaia®,
□I have a	ndvised probiotics bu	t not recom	mended any	specific p	roduct	
- Please spec	ify the indications in	which you h	ave recomm	nended the	ese types of probio	otics:
5) When cons	sidering probiotics to	prevent an	tibiotic-asso	ociated dia	rrhea in children,	do you think:
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Do not know
Probiotics are EFFECTIVE						
Probiotics are SAFE						
6) When cons	sidering probiotics to	treat antibi	iotic-associa	ted diarrh	ea in children, do	you think:
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Do not know
Probiotics are EFFECTIVE						
Probiotics are SAFE						

7) Please consider the information presented below Taking probiotics for antibiotic-associated diarrhea in children has:

Advantages

May be effective in prevention of antibioticassociated diarrhea in children

Disadvantages

Inconvenience: Must take daily during antibiotic therapy
Cost: \$20-\$55 per antibiotic course
Side effects: allergic reactions and other serious side effects are very rare. Mild abdominal discomfort and flatulence may occur.



According to a 2015 Cochrane systematic review, the incidence of antibiotic-associated diarrhea without probiotic therapy is 19%. I would consider probiotic prophylaxis if it would reduce the incidence rate from 19% to: (Please choose only one item)

NOTE:

 \Box 12% (NNT=13)

- Number needed to treat (NNT) = Number of cases that need to be treated to prevent one case of antibiotic-associated diarrhea
- Options are based on 95% confidence interval of probiotics effectiveness in prevention of pediatric antibiotic-associated diarrhea

□9% (NNT=10)
□7 %(NNT=8)
□ I would not consider probiotic therapy for prevention of antibiotic-associated diarrhea

8) Currently, there is a huge heterogeneity in clinical trials of pediatric acute diarrhea in terms of diarrhea definition and outcomes measured. We, therefore, aim to develop and validate an instrument to measure antibiotic-associated diarrhea in children to be used in future clinical trials. We would like to identify the most important and relevant outcomes to include in the instrument based on your opinions.

On a scale of 1-9, please rate the importance of each potential beneficial outcome when considering probiotics for prevention of pediatric antibiotic-associated diarrhea:

1= Not important at all (you do not feel it needs to be measured in clinical trials) 9= Critically important (you strongly believe it is important to measure in clinical trials)

	1	2	3	4	5	6	7	8	9
Stool frequency									
Stool consistency									
Duration of diarrhea									
Dehydration (determined by a scoring system)									
Effect on normal daily activities (e.g. eating, sleeping, playing)									
Child absence from day care or school									
Parental absence from work									
Need for hospitalization									
Need for outpatient or emergency department visit									
Need for rehydration (intravenous or oral in a health care facility)									

Some information about you and your practice:

9) Please indicate your gender:
□Female
□Male
10) Please check the category that defines your practice best:
☐ General pediatrician
\square Subspecialty pediatrician (please specify):
11) Year of graduation (from specialty):
12) Average number of patients with suspected antibiotic-associated diarrhea that you see in a typical month: