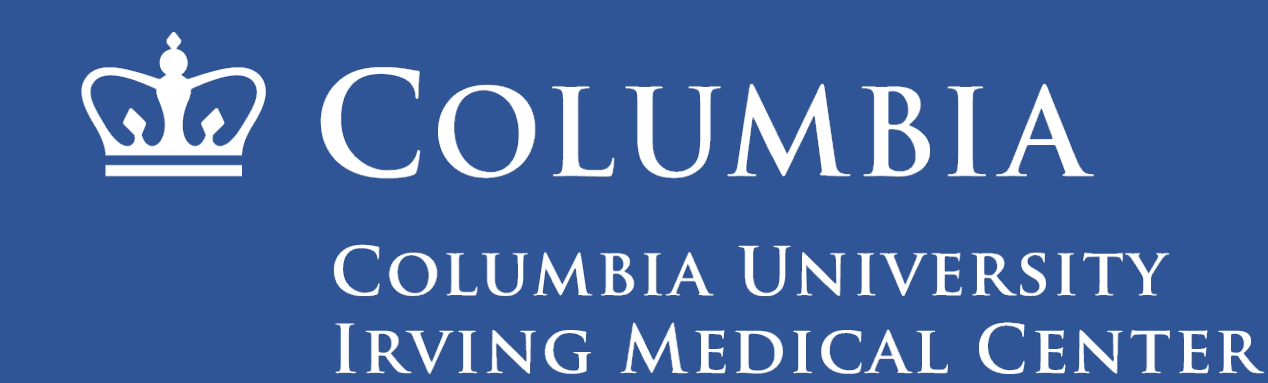


Analyzing Online Parenting Forum Discussions of Acute Otitis Media Treatment



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Introduction

- Acute otitis media (AOM) is a common pediatric ailment and is the leading cause of pediatric healthcare visits and antibiotic prescriptions in the United States annually.
- Although the American Academy of Pediatrics has published guidelines for AOM treatment in children, pediatric patients do not always receive care that adheres to the recommendations.
- The internet is a growing source of medical information and misinformation; the lay public is increasingly seeking health advice online.
- In this study, **we assessed and categorized the online conversation surrounding AOM in parenting forums.**

Methods

- The following three parenting forums were identified by searching “ear infection parenting forum” on Google in September 2022.
 - **Whattoexpect.com (WTE)**
 - **Babycenter.com (BC)**
 - **Reddit.com/r/NewParents (Reddit)**
- These forums were searched for the term “ear infection,” restricting the search to the prior 12 months.
- All posts that resulted from each website were randomized and the first 100 posts from each randomized list were analyzed for content about AOM.
- Irrelevant posts were discarded and replaced with new posts; this process was repeated until 100 posts were included or until a forum ran out of posts.
- Two independent reviewers **categorized each post according to multiple categories of diagnosis and treatment questions/comments** (Table 1).
- **Quality and reliability of each post were scored** by two independent reviewers using the modified DISCERN (mDISCERN) tool.

Results

- 100 WTE, 100 BC, and 28 Reddit posts were analyzed (Table 1).
- 15.8% of original posters asked whether a child had AOM, and 41.2% asked how to treat AOM.
- 2.2% of original posters asked whether to see a doctor.
- 13.6% of posts featured parents expressing mistrust in their pediatricians.
- 14.5% of posts featured commenters recommending antibiotics.
- 18.0% of posts featured commenters recommending remedies not supported by scientific literature.
- There were no comments by physicians in any of the analyzed posts.
- Average mDISCERN score (out of a possible 5) were 1.05 (SD 0.48), 1.07 (SD 0.27), and 1.07 (SD 0.40) for WTE, BC, and Reddit, respectively.

Discussion

- **Several posts included mistrust in the healthcare system.**
 - For example, a mother wrote that she was “starting to feel that [her pediatrician] was lazy and not taking [her] concerns seriously”
- **Several posts recommended treatments not supported by medical literature, for example:**
 - “an onion under the bed”
 - “garlic oil on a cotton ball in the ear”
 - “breast milk in the ear”
- **All posts scored low on measures of reliability/quality.** No post had any comments by physicians.
- **Many posts mentioned a positive experience with ear tubes.**
- Not all posts were misguided, and most, if not all, parents on these forums were acting out of a desire to provide the best care possible for their children.

Category	Characteristic	WTE (n=100)	BC (n=100)	Reddit (n=28)	Total (n=228)
1	Commenter mentioned AOM when original poster did not	2 (2)	55 (55)	1 (3.57)	58 (25.4)
2	Original poster asked whether child had AOM	22 (22)	7 (7)	7 (25)	36 (15.8)
3	Original poster asked how to treat AOM	59 (59)	22 (22)	13 (46.4)	94 (41.2)
4	Original poster asked whether to see a doctor	3 (3)	0 (0)	2 (7.14)	5 (2.2)
5	Mistrust in healthcare system	17 (17)	8 (8)	6 (21.4)	31 (13.6)
6	Comment on difference between ENT versus other doctor	8 (8)	5 (5)	1 (3.6)	14 (6.1)
7	Any commenter recommended antibiotics	17 (17)	12 (12)	4 (14.3)	33 (14.5)
8	Any commenter recommended supportive care	30 (30)	22 (22)	9 (32.1)	61 (26.8)
9	Any commenter recommended remedy not supported by scientific literature	24 (24)	15 (15)	2 (7.1)	41 (18.0)
10	Any commenter recommended or reported positive experience with ear tubes	25 (25)	18 (18)	7 (25)	50 (21.9)
11	Any commenter suggested seeing doctor	38 (38)	41 (41)	8 (28.6)	87 (38.2)

Table 1. Number of posts from each forum with each characteristic. N (%)

Conclusions

- There is large variation in how parents counsel each other among online forums, which generally containing low-quality information.
- Physicians might take these findings as an opportunity to disseminate accurate patient education online, including parenting forums and social media.



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