

# Anticipatory Guidance: A Cornerstone of Preventive Pediatric Dental Care

Dr. Muskan Mishra<sup>1\*</sup>, Dr. Sonal Gupta<sup>2</sup>, Dr. Jyoti Sharma<sup>3</sup>, Dr. Charu Aggarwal<sup>4</sup>, Dr. Akil Prawin S.S.<sup>5</sup>, Dr. Megha Priyadarshini<sup>6</sup>

<sup>1</sup>Post Graduate Student, Department of Paediatric and Preventive Dentistry, Kanti Devi Dental College and Hospital, Uttar Pradesh, India, Mob- 9045809841

<sup>2</sup>Head of the Department, Department of Paediatric and Preventive Dentistry, Kanti Devi Dental College and Hospital, Uttar Pradesh, India, Mob- 9837229077

<sup>3</sup>Reader, Department of Paediatric and Preventive Dentistry, Kanti Devi Dental College and Hospital, Uttar Pradesh, India, Mob- 9760272766

<sup>4</sup>Post Graduate Student, Department of Paediatric and Preventive Dentistry, Kanti Devi Dental College and Hospital, Uttar Pradesh, India, Mob- 9896220389

<sup>5</sup>Post Graduate Student, Department of Paediatric and Preventive Dentistry, Kanti Devi Dental College and Hospital, Uttar Pradesh, India, Mob-7010241285

<sup>6</sup>Post Graduate Student, Department of Paediatric and Preventive Dentistry, Kanti Devi Dental College and Hospital, Uttar Pradesh, India, Mob- 7760752218

**DOI:** <https://doi.org/10.36348/sjodr.2026.v11i01.002>

**Received:** 20.11.2025 | **Accepted:** 12.01.2026 | **Published:** 16.01.2026

**\*Corresponding author:** Dr. Muskan Mishra

Department of Paediatric and Preventive Dentistry, Kanti Devi Dental College and Hospital, Uttar Pradesh, India, 281006, Email: [mishramuskan22@gmail.com](mailto:mishramuskan22@gmail.com)

## Abstract

Anticipatory guidance (AG) is a cornerstone of preventive pediatric health care, emphasizing proactive, age-appropriate counseling to prepare parents and caregivers for children's upcoming developmental, behavioral, and health-related changes. In pediatric dentistry, AG plays a critical role in preventing early childhood caries, promoting healthy oral habits, reducing traumatic dental injuries, and establishing the concept of a dental home early in life. This scoping review aims to map the existing literature on anticipatory guidance with a particular focus on pediatric oral health, prenatal counseling, infancy, early childhood, and special health care needs. The review also identifies key domains of AG, historical evolution, clinical applications, and challenges to implementation. By synthesizing evidence from guidelines, policy documents, and empirical studies, this review highlights the importance of anticipatory guidance as an effective preventive strategy and underscores gaps for future research and clinical practice.

**Keywords:** Anticipatory Guidance, Pediatric Dentistry, Dental Home, Preventive Dentistry, Early Childhood Caries, Infant Oral Health.

**Copyright © 2026 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution **4.0 International License (CC BY-NC 4.0)** which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

## 1. INTRODUCTION

Prevention is a fundamental principle of modern health care. In pediatrics, health professionals strive not only to treat disease but also to anticipate and prevent potential problems before they arise [1]. Anticipatory guidance (AG) refers to the process of providing parents and caregivers with developmentally appropriate, timely information that prepares them for expected changes in a child's growth and development. Nowak and Casamassimo defined anticipatory guidance as the process of alerting parents to impending developmental changes, teaching them their role in

maximizing a child's potential, and identifying special needs at an early stage [2].

In pediatric dentistry, anticipatory guidance has emerged as an effective, prospective, and chronologically based counseling approach. Unlike traditional methods, AG emphasizes brief, focused messages tailored to the child's developmental stage, facilitating two-way communication between dental professionals and caregivers. The American Academy of Pediatric Dentistry (AAPD), in alignment with the American Dental Association (ADA), has developed age-specific anticipatory guidance recommendations to address oral development, nutrition, oral habits, fluoride

exposure, injury prevention, and psychosocial well-being [3].

Early childhood represents a critical window for establishing lifelong oral health behaviors. Parental education, particularly maternal oral health knowledge, has been shown to significantly influence a child's risk of early childhood caries (ECC), traumatic dental injuries, and oral habits. Despite advancements in preventive dentistry, ECC remains highly prevalent, especially in deciduous dentition, underscoring the need for early, structured, and consistent anticipatory guidance.

This scoping review aims to explore the breadth of literature related to anticipatory guidance, with particular emphasis on pediatric dentistry. It narrates the historical evolution, clinical applications across developmental stages, prenatal and postnatal counseling, and existing barriers to implementation, thereby emphasizing the relevance of AG in establishing a comprehensive dental home.

## 2. History of Anticipatory Guidance

Historically, parents relied heavily on extended family members for advice on child-rearing. However, sociological shifts beginning in the mid-20th century, including urbanization, workforce mobility, and nuclear family structures, reduced access to traditional sources of guidance [4]. Concurrently, health care systems became more complex, and continuity of care through family physicians declined.

In response to growing parental demand for structured preventive care, the American Academy of Pediatrics (AAP) introduced the first periodicity schedule for preventive child health care in 1967. This framework emphasized age-specific preventive services for children raised in otherwise healthy environments. The concept evolved further with the launch of the *Bright Futures* initiative in 1990, supported by multiple national organizations. Bright Futures aimed to promote comprehensive health supervision from infancy through adolescence using a developmental, chronological approach [5].

Anticipatory guidance became a central element of both the Bright Futures initiative and the medical home model. In pediatric dentistry, AG was formally introduced into the literature by Nowak and Casamassimo in 1995, marking a paradigm shift from treatment-oriented care to preventive, family-centered oral health supervision.

### Applying Anticipatory Guidance in Pediatric Dentistry:

Over the past few decades, pediatric dentistry has experienced a substantial transformation, moving away from a predominantly curative model toward one that prioritizes prevention and health promotion. During

the 1990s and early 2000s, growing scientific evidence and public health initiatives highlighted the importance of early intervention in oral health care. This shift emphasized strategies such as early risk assessment, appropriate fluoride exposure, the use of pit-and-fissure sealants, and individualized recall schedules based on a child's caries risk, thereby reinforcing a preventive approach to pediatric oral health [6].

Central to this evolution has been the incorporation of anticipatory guidance into pediatric dental practice. The American Academy of Pediatric Dentistry (AAPD) has played a pivotal role in formalizing this approach through the development of comprehensive guidelines addressing preventive dental services, periodicity of examinations, and age-specific oral health counseling. Since their initial introduction in 1991, these guidelines have undergone regular revisions to reflect advances in research, changes in disease patterns, and emerging best practices, demonstrating the dynamic nature of anticipatory guidance within pediatric dentistry [3].

The concept of anticipatory guidance was first explicitly introduced into the dental literature by Nowak and Casamassimo in the mid-1990s, who underscored its value in facilitating early dental intervention and promoting parental involvement in preventive care. Their work emphasized the importance of preparing caregivers for anticipated developmental changes and potential oral health challenges, rather than responding to disease after its onset. This preventive philosophy was further strengthened by the development of *Bright Futures in Practice: Oral Health*, which provided one of the earliest structured, risk-based frameworks for oral health supervision from infancy through adolescence. This initiative reinforced the integration of oral health within broader pediatric health promotion efforts [5].

A key milestone in the application of anticipatory guidance was the re-evaluation of the timing of the first dental visit. Traditionally, dental evaluation was delayed until three years of age; however, evidence presented by Nowak supported the recommendation for an initial dental visit by one year of age. This earlier timing allows for timely caries risk assessment, caregiver education, and the establishment of preventive behaviors during a critical period of oral development. Building on these principles, the concept of the "dental home" was subsequently introduced, adapting the medical home model to dentistry.<sup>7</sup> The dental home emphasizes continuity of care, accessibility, family-centered practice, and ongoing anticipatory guidance as essential elements of comprehensive pediatric oral health care.

Together, these developments illustrate how anticipatory guidance has become an integral component of contemporary pediatric dentistry. By shifting the focus toward prevention, early intervention, and caregiver education, anticipatory guidance supports improved oral

health outcomes and aligns pediatric dental care with holistic models of child health and development.

### 3. METHODOLOGY

This scoping review follows established methodological frameworks for scoping studies, aiming to map key concepts, types of evidence, and gaps in research related to anticipatory guidance. Literature sources include peer-reviewed articles, professional guidelines (AAPD, ADA, AAP), policy documents, and narrative reviews related to pediatric dentistry and preventive health care.

#### 4. Anticipatory Guidance in Prenatal Counseling

Anticipatory guidance should ideally begin during pregnancy. Prenatal counseling provides an opportunity to establish a trusting relationship between health professionals and expectant parents, enabling early education on oral hygiene, nutrition, and risk factors that may affect both maternal and infant oral health.

Hormonal changes during pregnancy increase susceptibility to gingivitis and periodontal disease, which have been associated with adverse pregnancy outcomes such as preterm birth and low birth weight [8]. Prenatal AG emphasizes plaque control, professional dental care, safe dental treatment during pregnancy, and the prevention of bacterial transmission from mother to infant.

Guidelines recommend counseling expectant mothers on healthy dietary practices, fluoride exposure, avoidance of sugary snacks, and discouraging behaviors that facilitate vertical transmission of cariogenic bacteria, such as sharing utensils. Prenatal anticipatory guidance lays the foundation for establishing a dental home soon after birth.

#### 5. Anticipatory Guidance across Developmental Stages

##### 5.1 Anticipatory Guidance for Children's Dental Health

Anticipatory guidance constitutes a cornerstone of preventive pediatric dentistry, emphasizing age-appropriate counseling that prepares parents and caregivers for expected developmental changes and potential oral health challenges. By addressing risk factors before disease onset, anticipatory guidance supports the establishment of lifelong healthy oral habits and reduces the burden of early childhood oral diseases [9].

##### 5.2 Infancy: Birth to 6 Months

The foundations of a child's oral health are established even before tooth eruption. Maternal oral health plays a critical role during this period, as vertical transmission of cariogenic bacteria—particularly *Streptococcus mutans*—from caregiver to infant has been well documented [10]. This phenomenon, often

described as maternally derived mutans streptococci disease, underscores the importance of considering infant oral care within the context of the mother–child dyad. Evidence demonstrates a direct relationship between caregiver bacterial load and caries prevalence in children, highlighting the need for comprehensive maternal oral health care during the perinatal period [11].

Anticipatory guidance during early infancy focuses on parental education and prevention. Caregivers should be informed about scheduling the first dental visit within six months of the eruption of the first primary tooth and no later than 12 months of age. Establishing a dental home during infancy facilitates individualized risk assessment, continuity of care, and early preventive interventions, particularly for children with special health care needs [12].

Parents are encouraged to become familiar with the normal appearance of their infant's oral tissues to enable early detection of abnormalities. Dental professionals play a key role in educating caregivers through visual aids and demonstrations [13]. Counseling during this period also emphasizes safe feeding practices, including avoiding bottle propping, refraining from putting infants to sleep with bottles or sippy cups containing fermentable carbohydrates, and discouraging behaviors that promote saliva-mediated bacterial transmission, such as sharing utensils or cleaning pacifiers with the mouth. Fluoride supplementation may be considered for infants aged six months and older, based on caries risk assessment and local water fluoride levels.

##### 5.3 Late Infancy: 6 to 12 Months

The eruption of the first primary tooth, typically occurring between six and nine months of age, marks a critical milestone in oral development. This period represents an optimal window for initiating primary prevention strategies. Although early dental visits were traditionally deferred until three years of age, contemporary evidence supports the recommendation for an initial oral evaluation by the first birthday [14]. Delaying care may allow inappropriate feeding practices and poor oral hygiene habits to compromise oral health before professional intervention occurs.

Anticipatory guidance during this stage focuses on comprehensive oral examination, caries risk assessment, and caregiver counseling. Parents should receive instruction on age-appropriate oral hygiene practices, including cleaning erupted teeth with a soft toothbrush and a smear of fluoridated toothpaste. Dietary counseling addresses the introduction of complementary foods, limiting the frequency of sugar exposure, and promoting healthy feeding routines. Guidance also includes injury prevention strategies, counseling on non-nutritive sucking habits, and assessment of fluoride exposure from all sources [15].

Early dental visits provide an opportunity to reinforce preventive behaviors, identify emerging oral diseases, and establish recall intervals tailored to the child's individual risk profile.

#### 5.4 Toddlerhood: 12 to 24 Months

Between 12 and 24 months of age, the primary dentition continues to develop, occlusal relationships are established, and children experience increasing mobility and independence. This period is associated with heightened risk for early childhood caries (ECC), a rapidly progressing condition often linked to prolonged bottle or breast feeding and frequent exposure to fermentable carbohydrates [16].

Anticipatory guidance during toddlerhood emphasizes monitoring dental development, reinforcing oral hygiene practices, and continued caries risk reassessment. Establishment of a dental home by 12 months of age enables early dietary counseling, which is critical in preventing ECC. Parents are advised to limit the frequency of sugary foods and beverages, transition from bottles to cups, and avoid nocturnal feeding practices that promote prolonged acid exposure [17].

In addition to oral health counseling, anticipatory guidance addresses broader developmental domains, including motor, language, cognitive, and social development. Behavioral guidance supports the

management of emerging independence, tantrums, and the development of self-feeding skills, while ensuring safety and injury prevention.

#### 5.5 Early Childhood: 2 to 6 Years

The preschool years are characterized by rapid physical growth, social development, and increasing autonomy. Oral health guidance during this stage builds upon earlier preventive efforts, with continued emphasis on supervised tooth brushing using fluoridated toothpaste, regular dental visits, and dietary moderation.

Parents should be informed that young children lack the fine motor skills required for effective tooth brushing and therefore require ongoing supervision. Anticipatory guidance also includes counseling on pit-and-fissure sealants for caries-susceptible teeth, prevention of orofacial trauma, and early identification of developing malocclusions, speech concerns, and oral habits [18].

Beyond oral health, anticipatory guidance during this period integrates behavioral management, nutrition, sleep hygiene, screen time regulation, and school readiness. A holistic approach that aligns oral health with overall child development reinforces the role of pediatric dentistry within comprehensive health supervision.

**Table 1: Age-wise Anticipatory Guidance for Pediatric Oral Health**

Age Group	Key Oral Health Focus	Anticipatory Guidance –Key Points
<b>Birth–6 months</b>	Prevention & caregiver education	<ul style="list-style-type: none"> <li>• Emphasize maternal oral health to reduce vertical transmission of <i>Mutans streptococci</i></li> <li>• Clean gums with soft cloth after feeds</li> <li>• Avoid saliva sharing (utensils, pacifiers)</li> <li>• Counsel parents regarding first dental visit by 6 months after first tooth eruption</li> </ul>
<b>6–12 months</b>	Primary tooth eruption & early prevention	<ul style="list-style-type: none"> <li>• Establish dental home by 12 months</li> <li>• Begin brushing erupted teeth with soft brush and smear of fluoridated toothpaste</li> <li>• Assess caries risk and fluoride exposure (water, formula)</li> <li>• Avoid bottle/sippy cup at bedtime</li> <li>• Provide injury-prevention counseling</li> </ul>
<b>12–24 months</b>	Completion of primary dentition	<ul style="list-style-type: none"> <li>• Brush twice daily with smear (grain-of-rice sized) fluoridated toothpaste</li> <li>• Wean from bottle; encourage cup use</li> <li>• Limit frequency of fermentable carbohydrates</li> <li>• Topical fluoride application based on caries risk</li> <li>• Counsel on non-nutritive habits and fluoride toxicity</li> </ul>
<b>2–6 years</b>	Early mixed dentition & habit formation	<ul style="list-style-type: none"> <li>• Brush twice daily with pea-sized fluoridated toothpaste under parental supervision</li> <li>• Introduce flossing when contacts close</li> <li>• Apply pit-and-fissure sealants on caries-susceptible teeth</li> <li>• Reinforce diet counseling and regular dental visits</li> <li>• Assess occlusion, speech, and risk of orofacial trauma</li> </ul>

#### 6. Role of Fluorides in Anticipatory Guidance

Fluorides play a pivotal role in the prevention of dental caries and form an essential component of

anticipatory guidance in pediatric dentistry. Anticipatory guidance related to fluoride aims to educate parents and caregivers about appropriate fluoride exposure,

balancing caries prevention with the avoidance of dental fluorosis.

Systemic fluorides contribute to the development of stronger tooth enamel during the tooth-forming years, whereas topical fluorides enhance enamel remineralization and inhibit bacterial metabolism after tooth eruption. Community water fluoridation remains the most effective and equitable method of delivering systemic fluoride. In areas where fluoridated water is unavailable or inadequate, fluoride supplementation may be recommended based on individual caries risk assessment and local water fluoride levels [18].

Anticipatory guidance emphasizes the use of age-appropriate fluoride toothpaste. Parents should be counseled to use a smear or rice-sized amount of fluoridated toothpaste for children under three years of age and a pea-sized amount for children aged three to six years, with supervised brushing to minimize ingestion. Professional topical fluoride applications, such as varnishes and gels, are particularly beneficial for children at high risk for caries, including those with special health care needs.

Through anticipatory guidance, Dental professionals can address and correct myths about fluoride safety, emphasize evidence-based guidelines, and help ensure appropriate fluoride exposure customized to the child's age, developmental stage, and individual caries risk.

## 7. Dental Anomalies and Developmental Variations

Anticipatory guidance plays a crucial role in the early identification and management of dental anomalies. Educating parents about normal patterns of tooth eruption and development enables early recognition of deviations that may affect function, aesthetics, and psychosocial well-being.

Anomalies in the number of teeth, such as hypodontia, oligodontia, and hyperdontia, are among the most commonly encountered developmental conditions.

Early detection through clinical examination and appropriate radiographic assessment allows timely intervention and interdisciplinary management involving pediatric dentists, orthodontists, and, when necessary, prosthodontists [19].

Developmental anomalies of tooth structure, including enamel hypoplasia, amelogenesis imperfecta, and dentinogenesis imperfecta, increase susceptibility to caries, tooth sensitivity, and fracture. Anticipatory guidance for caregivers focuses on preventive strategies, such as enhanced oral hygiene practices, topical fluoride use, dietary counseling, and regular dental monitoring [20]. By integrating anticipatory guidance into routine dental visits, clinicians can reduce the long-term impact of dental anomalies and support optimal oral health outcomes.

## 8. Oral Habits and Traumatic Injuries

Oral habits are a common feature of childhood development and may exert significant influence on dentofacial growth when persistent. Anticipatory guidance equips parents with knowledge regarding the natural progression of habits and appropriate timing for intervention.

Non-nutritive sucking habits, including thumb sucking and pacifier use, are considered normal during infancy and early toddlerhood. However, persistence beyond three to four years of age may result in malocclusion, anterior open bite, and maxillary constriction [21]. Anticipatory guidance encourages positive reinforcement, habit substitution strategies, and gradual cessation rather than punitive approaches.

Other habits such as tongue thrusting, mouth breathing, nail biting, and bruxism may contribute to occlusal discrepancies, speech difficulties, and temporomandibular discomfort. Early identification and referral to appropriate specialists, including speech therapists or orthodontists, form an integral part of preventive counseling [22].

**Table 2: Common Oral Habits in Children and Key Anticipatory Guidance Points**

Oral Habit	Age of Concern	Dental Effects	Important Anticipatory Guidance Points
<b>Thumb / Digit Sucking</b>	Normal $\leq 3$ years Concern $> 3-4$ years	Anterior open bite, proclination of maxillary incisors, maxillary constriction	<ul style="list-style-type: none"> <li>Habit is physiological in infancy</li> <li>Discontinuation before eruption of permanent teeth prevents malocclusion</li> <li>Use positive reinforcement and reminder therapy</li> <li>Habit-breaking appliances only if persistent</li> </ul>
<b>Pacifier Use</b>	Normal $\leq 2$ years Concern $> 2-3$ years	Open bite, posterior crossbite, altered arch form	<ul style="list-style-type: none"> <li>Encourage gradual weaning by 12–18 months</li> <li>Limit duration and frequency of use</li> <li>Avoid sweetened pacifiers</li> <li>Substitute comfort objects if needed</li> </ul>
<b>Tongue Thrusting</b>	Concern if persists $> 3$ years	Anterior open bite, spacing, speech problems	<ul style="list-style-type: none"> <li>Early identification during routine dental visits</li> <li>Teach proper tongue posture</li> <li>Refer to speech therapist/orthodontist if persistent</li> </ul>
<b>Mouth Breathing</b>	Chronic habit at any age	Gingivitis, dry mouth, long-face	<ul style="list-style-type: none"> <li>Identify and manage underlying causes (allergy, adenoids)</li> <li>Encourage nasal breathing</li> </ul>



Oral Habit	Age of Concern	Dental Effects	Important Anticipatory Guidance Points
		syndrome, malocclusion	• Refer to pediatrician/ENT if indicated
<b>Nail Biting (Onychophagia)</b>	School-age children	Tooth wear, TMJ strain, soft tissue trauma	• Usually stress-related • Encourage behavior modification and stress reduction • Rarely requires dental intervention
<b>Bruxism (Teeth Grinding)</b>	Common in preschool age	Attrition, jaw pain, headaches	• Often self-limiting • Reassure parents in mild cases • Night guard indicated only in severe or persistent cases

Traumatic dental injuries are prevalent in early childhood due to developing motor coordination. Anticipatory guidance addresses injury prevention through environmental modification, supervision, use of protective gear such as mouthguards, and caregiver

education on emergency management of dental trauma. Prompt and informed responses to injuries significantly improve prognosis and reduce long-term complications [23, 24].

**Table 3: Oral Injuries in Children – Risk, Prevention, and Key Management Points:**

Type / Situation	Common Age Group	Risk Factors	Important Anticipatory Guidance Points
<b>Falls &amp; Trauma to Primary Teeth</b>	18–30 months	Poor balance, walking instability	• Close supervision near furniture and stairs • Use safety gates and childproofing • Avoid infant walkers
<b>Road Traffic Injuries</b>	All ages	Improper seating, lack of restraints	• Use age-appropriate car safety seats • Avoid placing infants in shopping carts
<b>Sports-related Injuries</b>	>5 years	Cycling, contact sports	• Use helmets for bicycles/tricycles • Mouthguards for contact and non-contact sports
<b>Tooth Fracture</b>	All ages	Falls, sports accidents	• Rinse mouth with water • Cold compress for swelling • Preserve fractured fragment if possible
<b>Tooth Avulsion – Permanent Tooth</b>	School-age children	Severe trauma	• Replant immediately or store in milk/saliva • Seek dental care within 30 minutes
<b>Tooth Avulsion – Primary Tooth</b>	Toddlers	Falls	• Do NOT reimplant • Dental evaluation mandatory
<b>Soft Tissue Injuries (Lip, Tongue, Cheek)</b>	All ages	Falls, sharp objects	• Apply pressure to stop bleeding • Cold compress • Seek care if bleeding persists >10 min
<b>Jaw Injuries</b>	Older children	High-impact trauma	• Immobilize jaw • Immediate referral to emergency care
<b>Child Abuse-related Oral Trauma</b>	Any age	Neglect, abuse	• Suspect non-accidental injury if pattern inconsistent • Mandatory reporting by health professionals
<b>Emergency Preparedness</b>	All ages	Lack of awareness	• Parents should have dentist's emergency contact • Educate caregivers on basic dental first aid

## 9. Anticipatory Guidance for Children with Special Health Care Needs

Children with special health care needs (CSHCN) present unique challenges that necessitate individualized anticipatory guidance. These children often have increased susceptibility to dental caries, periodontal disease, traumatic injuries, and oral habits due to medical conditions, medication use, physical limitations, or cognitive impairments.

Anticipatory guidance for CSHCN emphasizes caregiver education, preventive strategies, and early establishment of a dental home. Counseling includes tailored oral hygiene techniques, modified dietary

advice, fluoride recommendations, and behavior management strategies. Collaboration with medical professionals ensures comprehensive, coordinated care [24].

Additionally, anticipatory guidance addresses psychosocial factors, caregiver stress, and transition planning as children age. Flexible appointment scheduling, desensitization visits, and adaptive communication techniques enhance access to dental care and improve oral health outcomes for this vulnerable population.

## 10. Challenges and Barriers to Implementation

Despite its proven benefits, the effective implementation of anticipatory guidance faces multiple challenges at provider, caregiver, and system levels. Time constraints during clinical encounters often limit the depth and consistency of counseling. Variations in caregiver literacy, language proficiency, and cultural beliefs may further hinder understanding and adherence to recommendations [25].

Socioeconomic barriers, including limited access to dental care, financial constraints, and lack of transportation, disproportionately affect underserved populations. Additionally, misinformation from non-professional sources and caregiver stress can undermine preventive efforts.

Health system limitations, such as workforce shortages and inadequate integration of oral health into primary care, also impede widespread adoption of anticipatory guidance. Addressing these barriers requires interdisciplinary collaboration, culturally sensitive communication, use of visual and digital educational tools, and policy-level support to promote preventive oral health services.

## 11. CONCLUSION

Anticipatory guidance is a vital, evidence-based preventive strategy in pediatric dentistry. By providing timely, developmentally appropriate counseling, AG empowers caregivers, reduces disease burden, and promotes lifelong oral health. Integrating anticipatory guidance into routine dental care strengthens the dental home model and aligns pediatric dentistry with holistic child health principles. Future research should focus on standardized delivery models, effectiveness across diverse populations, and integration into interdisciplinary care frameworks.

**Conflict of Interest Statement:** Authors disclose no potential conflicts of interest.

**Funding:** This work is not financed.

**Ethics Statement:** Not Applicable.

**Acknowledgements:** NIL.

## REFERENCES

1. Stickler GB, Simmons PS. Pediatricians' preferences for anticipatory guidance topics compared with parental anxieties. *Clinical pediatrics*. 1995 Jul;34(7):384-7.
2. Nowak AJ, Casamassimo PS. Using anticipatory guidance to provide: Early dental intervention. *The Journal of the American Dental Association*. 1995 Aug 1;126(8):1156-63.
3. American Academy of Pediatric Dentistry. Periodicity of examination, preventive dental services, anticipatory guidance/ counseling, and oral treatment for infants, children, and adolescents. *The Reference Manual of Pediatric Dentistry*. Chicago, Ill.: American Academy of Pediatric Dentistry; 2023:288-300.
4. Morrongiello BA, Hillier L, Bass M. 'What I said' versus 'what you heard': a comparison of physicians' and parents' reporting of anticipatory guidance on child safety issues. *Injury Prevention*. 1995 Dec 1;1(4):223-7.
5. American Academy of Pediatrics. Bright futures guidelines for health supervision of infants, children, and adolescents.
6. Ismail A, Razak IA, Ab-Murat N. The impact of anticipatory guidance on early childhood caries: a quasi-experimental study. *BMC oral health*. 2018 Dec;18:1-8.
7. Sánchez OM, Childers NK. Anticipatory guidance in infant oral health: rationale and recommendations. *American Family Physician*. 2000 Jan 1;61(1):115-20.
8. Harrison RL, Veronneau J, Leroux B. Effectiveness of maternal counseling in reducing caries in Cree children. *Journal of Dental Research*. 2012 Nov;91(11):1032-7.
9. Barkin SL, Scheindlin B, Brown C, Ip E, Finch S, Wasserman RC. Anticipatory guidance topics: are more better?. *Ambulatory Pediatrics*. 2005 Nov 1;5(6):372-6.
10. Saied-Moallemi Z, Virtanen JI, Ghofranipour F, Murtomaa H. Influence of mothers' oral health knowledge and attitudes on their children's dental health. *European Archives of Paediatric Dentistry*. 2008 Jun;9:79-83.
11. Medeiros PB, Otero SA, Frencken JE, Bronkhorst EM, Leal SC. Effectiveness of an oral health program for mothers and their infants. *International Journal of Paediatric Dentistry*. 2015 Jan;25(1):29-34.
12. Hale KJ. Oral health risk assessment timing and establishment of the dental home. *Pediatrics*. 2003 May 1;111(5 Pt 1):1113-6.
13. Nowak AJ, Casamassimo PS. The dental home: a primary care oral health concept. *The Journal of the American Dental Association*. 2002 Jan 1;133(1):93-8.
14. American Academy of Pediatric Dentistry. Periodicity of examination, preventive dental services, anticipatory guidance/ counseling, and oral treatment for infants, children, and adolescents. *The Reference Manual of Pediatric Dentistry*. Chicago, Ill.: American Academy of Pediatric Dentistry; 2023:288-300.
15. Pendrys DG. An anticipatory guidance program may help prevent severe early childhood caries, but more research is needed. *Journal of Evidence Based Dental Practice*. 2011 Mar 1;11(1):43-5.
16. Gonçalves Farias D, Coelho Leal S, Ayrton de Toledo O, Faber J, Cristina Barreto Bezerra A. Effect of oral anticipatory guidance on oral health and oral hygiene practices in preschool children.

- Journal of Clinical Pediatric Dentistry. 2006 Sep 1;30(1):23-8.
17. Sharma A, Jayaprakash R, Rajasekharan S, Sharma SS. Anticipatory guidance in pediatric dentistry. IOSR Journal of Dental and Medical Sciences. 2014;13(12):13-7.
  18. Wei YH, Lin CH, Yang SN, Wu CY, Yang YN, Tey SL, Su YT. Execution of anticipatory guidance and the knowledge and practice gap among caregivers in Southern Taiwan: A retrospective study. Journal of the Formosan Medical Association. 2023 Dec 1;122(12):1282-95.
  19. Bakhurji EA, Al-Saif HM, Al-Shehri MA, Al-Ghamdi KM, Hassan MM. Infant oral healthcare and anticipatory guidance practices among dentists in a pediatric care shortage area. International Journal of Dentistry. 2021;2021(1):6645279.
  20. Stringham P. Violence anticipatory guidance. Pediatric Clinics of North America. 1998 Apr 1;45(2):439-48.
  21. Kumar Raghav MD, Sharma R. Foreign bodies in children's teeth: anticipatory guidance recommendations for the dental professional.
  22. Peddecord KM, Wang W, Wang L, Ralston K, Ly E, Friedman L, Curtis CR, Sawyer MH. Adolescents' self-reported recall of anticipatory guidance provided during well-visits at nine medical clinics in San Diego, California, 2009–2011. Journal of Adolescent Health. 2016 Mar 1;58(3):267-75.
  23. Nelson CS, Higman SM, Sia C, McFarlane E, Fuddy L, Duggan AK. Medical homes for at-risk children: parental reports of clinician-parent relationships, anticipatory guidance, and behavior changes. Pediatrics. 2005 Jan 1;115(1):48-56.
  24. Galuska DA, Fulton JE, Powell KE, Burgeson CR, Pratt M, Elster A, Griesemer BA. Pediatrician counseling about preventive health topics: results from the Physicians' Practices Survey, 1998–1999. Pediatrics. 2002 May 1;109(5):e83-.
  25. Roter DL, Hall JA, Katz NR. Patient-physician communication: a descriptive summary of the literature. Patient Education and Counseling. 1988 Oct 1;12(2):99-119.