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· 临床研究 ·

欠发达地区慢性牙周炎患者口腔健康管理困境：一项描述性现象学研究

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【摘要】目的 探讨欠发达地区慢性牙周炎的系统性管理困境, 为实现口腔健康公平提供切实可行的路径。**方法** 本研究已通过单位医学伦理委员会审查批准, 并获得研究参与者的书面知情同意。基于文献和理论的综合设计制定访谈提纲, 采用目的抽样法, 选取2025年11月至2026年2月于南方医科大学口腔医院就诊的20例籍贯为欠发达地区的慢性牙周炎患者进行半结构式访谈, 样本量由数据饱和度确定, 数据分析采用Colaizzi 7步分析法。**结果** 通过对20名研究参与者的访谈, 共提炼出3个核心主题, 涵盖8个子主题: 个体认知行为困境(认知局限与被动应对、低效且流于形式的自我管理、经济与心理的双重就医阻力); 系统与环境的结构性障碍(基层医疗能力的信任危机、医疗保障的有限缓冲作用及其局限); 健康赋权与支持体系需求(权威知识与管理技能指导、优质专科医疗资源的可及性期盼、持续性与提醒式远程支持)。**结论** 欠发达地区慢性牙周炎患者面临着由认知水平有限、健康行为依从性差、基层诊疗服务能力薄弱、医保覆盖不均衡以及优质专科医疗资源不足共同构成的多维困境。建议通过创新健康教育提升患者认知水平, 强化基层牙周防治能力; 优先将牙周基础治疗纳入门诊统筹或慢病管理以及构建基于数字技术的远程医疗支持体系。

【关键词】 慢性牙周炎; 口腔健康; 健康素养; 医疗资源可及性; 质性研究; 现象学研究; 自我护理; 健康行为

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Oral health management dilemmas affecting patients with chronic periodontitis in underdeveloped regions: a descriptive phenomenological study

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【Abstract】Objective To deeply explore the systemic management dilemmas affecting patients with chronic periodontitis in underdeveloped regions, providing practical pathways for achieving oral health equity. **Methods** This study has been reviewed and approved by the Medical Ethics Committee, and written informed consent was obtained from the participants. Based on a comprehensive design integrating literature review and theory, an interview guide was developed. Using purposive sampling, semi-structured interviews were conducted with 20 patients diagnosed with

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chronic periodontitis who were from underdeveloped regions and attended the Stomatological Hospital of Southern Medical University between November 2025 and February 2026. The sample size was determined by data saturation. Data analysis employed Colaizzi's seven-step method. **Results** Through interview with 20 participants, three core themes were extracted, encompassing eight sub-themes: individual cognitive - behavioral dilemmas (cognitive limitations and passive coping, inefficient and superficial self-management, and economic and psychological barriers to seeking care); systemic and environmental structural obstacles (distrust in primary healthcare capabilities, and the limited buffering effect and constraints of medical insurance); and the need for health empowerment and support systems (authoritative knowledge and management skill guidance, aspirations for access to high-quality specialized medical resources, and sustained and reminder-based remote support). **Conclusion** Patients with chronic periodontitis in underdeveloped regions face a multidimensional dilemma composed of limited health literacy, poor adherence to health behaviors, weak primary care service capacity, uneven medical insurance coverage, and insufficient high-quality specialized medical resources. Patients' health literacy should be advanced through innovative health education, primary care capacity should be strengthened for periodontal disease prevention and treatment, and it is recommended to prioritize the inclusion of initial periodontal therapy in outpatient coordination or chronic disease management, and a remote medical support system based on digital technology should be established.

【Key words】 chronic periodontitis; oral health; health literacy; healthcare resource accessibility; qualitative research; phenomenological study; self-care; health behavior

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慢性牙周炎是一种累及牙齿支持组织的慢性炎症性疾病,临床表现为牙龈出血、牙周袋形成及牙槽骨吸收,病情严重时可导致牙齿松动甚至脱落^[1]。该病患率在全球范围内逐年上升,且存在明显的地域差异,低中等收入国家的患病率高于高收入国家^[2-3]。患者普遍对牙周疾病的病因与防治认知不足,导致多数病例长期未获得规范干预^[4]。研究证实,慢性牙周炎作为系统性炎症的重要来源,可显著增加颈动脉粥样硬化等心血管事件的发生风险,并与多种系统性疾病存在双向关系^[5-6]。世界卫生组织在全球口腔健康战略(2022—2030)中将慢性牙周病列为重点防控疾病,原因在于其深刻认识到口腔健康是整体健康和生活质量不可或缺的组成部分^[7]。然而,由于基层牙周专业诊疗资源匮乏,以及在公共卫生政策和筹资机制上的众多结构性瓶颈^[8],我国欠发达地区近一半的慢性病患者无法获得基本医疗卫生服务,这些患者的规范性治疗与康复管理面临诸多困境,严重影响该群体的生活质量与远期健康^[9-10]。本研究旨在基于描述性现象学研究方法,深入探索并阐释欠发达地区慢性牙周炎患者在口腔健康管理过程中的生活体验与主观意义构建,为突破欠发达地区慢性牙周炎的系统性管理困境提供切实可行的路径。

1 对象与方法

1.1 研究对象

本研究于2025年11月至2026年2月在南方医科大学口腔医院开展,已获得医院医学伦理委员会审查批准(批号:NYKQ-EC[2025]28),符合《赫尔辛基宣言》的伦理原则,所有研究参与者在访谈前均已获知研究目的及录音/文字记录的必要性,并于参与研究前签署了书面知情同意书。此外,研究参与者的姓名均以数字编号代替,其个人信息及访谈数据完全匿名。

本研究采用目的抽样法,遵循最大差异化原则。根据《中华人民共和国国民经济和社会发展的第十四个五年规划和2035年远景目标纲要》中提及的城市群,将其中人均GDP低于全国平均水平60%的城市视为欠发达地区^[11]。所有参与者依据户籍地所在县/乡的人均GDP、医疗资源密度等指标进行筛选。纳入标准:①根据2018年牙周病和植体周病国际新分类^[12]诊断为临床分期I~IV期的慢性牙周炎者;②年龄≥18岁;③具有欠发达地区农村常住户口,目前居住在当地或者在户口所在地之外的城镇地区居住不满1年的居民;④意识清楚,认知和语言沟通能力正常。排除标准:①口腔颌面部存在急/慢性炎症者;②合并严重心脑血管等全身性疾病者;③认知功能受损,无法正常沟通。

样本量的确定遵循数据饱和原则^[13]。即当访谈中受访者的信息或见解重复出现,且在资料分析过程中无新信息产生时,则停止数据收集。

1.2 研究方法

1.2.1 制定访谈提纲 在系统回顾健康行为领域相关文献的基础上,本研究整合了健康信念模型、社会认知理论及信息—动机—行为技巧模型等理论框架,旨在全面覆盖研究对象可能面临的认知、行为与环境因素。提纲初稿经由专家咨询和课题组研讨修订后形成,旨在保障访谈问题的开放性与适用性,从而形成最终访谈提纲:①您最早是怎么发现自己牙齿/牙龈有问题的?当时您有哪些不舒服的感觉(如出血、肿痛、口臭、松动等)?那时您是怎么理解这些问题的?它们给您的生活带来了哪些影响?②您因为牙齿/牙龈问题接受过哪些治疗?是什么原因促使您采取这些方法?它们的效果如何?请您分别举例说明。③您平时在家是怎么照顾自己的牙齿和牙龈的(刷牙习惯、工具选择、方法、频率等)?为什么采用这些方法?它们的效果如何?请您分别展开说说。④您在管理牙齿/牙龈健康的过程中,曾遇到过哪些困难或挑战(如治疗费用、地理与交通不便、当地医疗技术落后、牙齿保健知识缺乏等)?这些困难或挑战给您带来了哪些不好的影响?请您举例说明。⑤当牙龈状态发生变化的时候(如出血、肿痛、口臭、松动等),您是如何应对的?请谈谈您的原因。⑥您觉得就农村现有的医疗条件和环境而言,在牙周炎的日常管理、就医或诊治上有哪些不便之处?您认为应该如何改进或需要相关专业人员提供怎样的支持或帮助?请您举例说明。

1.2.2 资料收集方法 研究团队依据受访者的便利性安排访谈时间,并将采访地点选择在独立、安静且私密的环境中,以保证研究参与者能够专注、自由且充分地表达自己的经历和想法。在访谈之前,由研究人员向研究参与者介绍研究内容、目的及个人信息保密原则,与研究参与者建立信任关系,并强调回答无对错之分,以降低社会期望偏倚。若同意参与,参与者需签署知情同意书并允许录音;此外,单次访谈时长控制在20~40 min。访谈采用中文进行,并全程由一名研究人员执行。该研究人员系该院牙周病科护士,并在访谈前接受了规范的定性研究方法培训,掌握了基本的访谈技巧及其实施细则。此外,对关键事件进行回访以验证信息的准确性,减少回忆偏倚。本研究

未预设固定样本量,传统上,研究者依赖“数据饱和”(data saturation)原则,即持续收集数据直到新信息不再出现,但该概念的定义和应用存在不一致性。为弥补这一不足,Roberts等^[14]提出了“信息力”(information power)模型,指出样本量并非固定数字,而是取决于5个要素:研究目标、样本特异性、已有理论的应用、对话质量以及分析策略。样本所含信息越丰富,所需研究参与者越少。Chepp等^[15]通过实证研究进一步表明,质性访谈的充足性应以“显著性饱和”(saturation in salience)衡量,即获取最突出、最普遍的主题,而非穷尽所有可能的条目,这同样不依赖统计推断。当访谈数据达到饱和,没有新数据产生时,终止访谈^[13]。

1.2.3 资料分析方法 资料收集与分析工作同步开展。由一名研究人员对访谈内容进行逐字转录,经另一名研究人员复核后,以最大限度减少转录过程中的信息损耗,确保内容准确。使用 Nvivo 12.0 对文本资料进行初步整理。采用 Colaizzi 7 步分析法进行资料分析^[16],主题的提炼基于数据驱动,而非预设理论框架,步骤包括:①反复阅读并沉浸在访谈数据中;②提取所有与口腔健康管理相关的语句;③从上述语句中提炼有价值片段;④寻找共同点,形成结果性主题;⑤结合口腔健康管理情境对主题进行详细阐释;⑥整合分析结果,详尽描述患者口腔健康管理的本质结构;⑦向受访者求证研究结果。资料分析由两名研究者分别独立进行,并在团队中反复讨论、比较,确定各主题的逻辑性和可靠性,确保主题的提炼忠实于原始资料,意见不一致时经课题组共同讨论后形成最终结果。

2 结果

本研究共招募20例符合条件的患者,全部完成访谈,无失访和数据缺失,所有联系到的患者均符合条件并同意参与。平均年龄(35.8 ± 12.4)岁,范围21~61岁。其中男性8例(40.0%),女性12例(60.0%);教育程度方面,小学1例(5.0%),初中8例(40.0%),高中5例(25.0%),中专3例(15.0%),大专3例(15.0%);婚姻状况为已婚11例(55.0%),未婚9例(45.0%);在牙周临床分期方面,Stage I/II期(轻中度牙周破坏)患者12例(60.0%),Stage III/IV期(重度牙周破坏)患者8例(40.0%)。在牙周分级方面,Grade A(缓慢进展)患者5例(25.0%),Grade B(中度进展)患者12例(60.0%),Grade C(快

速进展)患者3例(15.0%)。共提炼出3个核心主题,涵盖8个子主题:个体认知行为困境(认知局限与被动应对、低效且流于形式的自我管理、经济与心理的双重就医阻力);系统与环境的结构性障碍(基层医疗能力的信任危机、医疗保障的有限缓冲

作用及其局限);健康赋权与支持体系需求(权威知识与管理技能指导、优质专科医疗资源的可及性期盼、持续性与提醒式远程支持)。本研究的访谈主题分析见表1。

表1 欠发达地区慢性牙周炎患者口腔健康管理困境的访谈主题分析

Table 1 Thematic analysis of interviews on oral health management difficulties among periodontitis patients in underdeveloped regions

Theme	Sub-theme	Core content	Representative quotes
Individual cognitive and behavioral barriers	① Cognitive limitations and passive responses	Patients' understanding of periodontal disease is limited to traditional concepts such as "having excessive internal heat" or "insufficient brushing," lacking insight into its nature as a chronic infectious disease and its systemic impact. Healthcare-seeking behavior is triggered only by severe symptoms, without preventive management.	N2: "When it swells, I think it's excessive internal heat, so I drink some herbal tea." N5: "Maybe I brush too hard, causing the gums to bleed." N4: "This tooth chipped off. If it hadn't broken, I wouldn't have come to see a dentist."
	② Inefficient and superficial self-management	Brushing is performed in a perfunctory manner (insufficient duration, unscientific methods). Oral hygiene relies solely on brushing and rinsing, with no knowledge or use of interdental cleaning tools such as dental floss or interdental brushes.	N5: "I brush by feel, quite casually." N10: "After lunch, I rinse my mouth. I basically never use floss or toothpicks."
	③ Economic and psychological barriers to seeking care	Treatment costs, especially for complex procedures, pose a significant financial burden. Fear and worry create a psychological barrier, leading patients to endure symptoms rather than actively seek care.	N11: "Previously, it was just a small problem, but due to limited local medical resources and family financial difficulties, it has developed to this point." N16: "If it's only tartar without pain or discomfort, I'll keep putting it off. I've always wanted to come but never actually did."
Systemic and environmental structural barriers	① Distrust in primary care capabilities	Patients distrust primary care facilities due to outdated equipment, limited technical capacity, and a narrow range of treatments (mainly extractions), leading to a pattern of bypassing local clinics in favor of distant, larger hospitals despite it taking more time and incurring a greater cost.	N6: "The small-town clinic uses just one machine for everything. I naturally feel distrustful and wouldn't try going there." N6: "I'm afraid the clinic is unprofessional and irregular... I'd rather spend hours on the bus to come here for dental care."
	② Limited buffering effect of medical insurance and its constraints	Basic medical insurance partially covers basic procedures such as extractions and simple fillings, providing some relief. However, coverage for systematic periodontal treatments (such as scaling and implants) is limited or has very low reimbursement rates, leaving patients with heavy out-of-pocket expenses.	N14: "Now I have medical insurance. With partial reimbursement, I think the treatment price is acceptable. Without it, it would be very expensive." N13: "I wish dental care could be cheaper. Even after insurance, I still find it a bit high, and I need follow-up treatment, which is still quite expensive."
Health empowerment and support system needs	① Authoritative knowledge and self-management skill guidance	Patients expect clinicians to provide concrete, actionable, and personalized oral care guidance during consultations. They also express a strong need for accessible community health education materials.	N18: "I might need the doctor to give me advice on how to maintain my teeth daily." N4: "Does the hospital or community have oral care materials? This knowledge is fragmented in daily life; I need a systematic one."
	② Aspiration for accessible, high-quality specialist care	Patients want reliable, professional periodontal care locally. They expect primary care providers to serve as holistic health "gatekeepers" who offer comprehensive assessments and treatment plans rather than only extractions.	N11: "In our rural small place, they can't handle it well. Now that I'm working, I want to go to a specialized dental hospital to get my teeth fixed." N5: "After I describe my symptoms, I hope they can assess my teeth holistically based on the symptoms and then give me a corresponding plan."

续表1
continue table 1

Theme	Sub-theme	Core content	Representative quotes
	③ Continuous and reminder-based remote support	Patients desire periodic follow-up reminders, ongoing supervision and consultation, and a stable, supportive patient-provider relationship to overcome inertia and reinforce self-management behaviors.	N11: "I follow the hospital's official account on my phone. I want to get some relevant oral care knowledge. From now on, I will pay more attention to my teeth and see a dentist promptly when problems arise." N18: "I hope the doctor can give me more advice based on my teeth during the visit, not just fix the problem when it occurs."

3 讨论

本研究基于现象学视角,深入剖析了欠发达地区慢性牙周炎患者在口腔健康管理中所面临的多维困境。

访谈结果显示,个体层面认知的局限性与行为的无效性是导致管理失败的重要原因。Chalabaev 等^[17]的研究指出,过度依赖个体认知模型会限制健康行为干预的有效性,尤其对脆弱人群更为明显^[17]。此外,研究发现,这一问题的根源可能在于欠发达地区口腔健康信息生态的失衡^[18]。访谈数据显示,普遍存在将牙周病归因于“上火”或“刷牙不力”的患者群体,这一现象不能简单归因于患者的科学知识欠缺。它深刻反映了在欠发达地区,科学、权威的口腔健康信息在公共传播渠道中的严重缺位^[19]。当乡镇卫生院、村卫生室等基层医疗机构未能有效履行健康教育职能时,源于生活经验的传统观念便成为患者形成疾病认知的主要框架^[20]。这一现象可以通过健康信念模型(health belief model, HBM)得到解释,即患者由于缺乏对疾病严重性和自身易感性的准确认知,同时低估预防行为的益处,导致其采取消极的健康管理策略^[21]。具体而言,患者因认知偏差无法认识到牙周炎作为慢性感染性疾病的渐进性与系统性危害,进而导致其早期干预和规范管理的动机不足。因此,患者的被动就医和形式化的自我清洁行为,应视为在特定信息环境约束下的一种适应性行为选择。Chawak 等^[22]提出解决欠发达地区慢性牙周炎问题需要采取差异化的干预策略。一方面,不仅应将基层医疗机构作为口腔健康信息的核心传播媒介,还要通过标准化培训提升村医整体的口腔健康教育能力;另一方面,需要开发符合欠发达地区居民认知特点和文化背景的健康教育材料,并采用当地方言和可视化形式进行知识传播,以此构建一个支持性信息环境,为打破认知

行为困境提供必要基础。

在系统层面,基层医疗的服务能力短板与医保政策的激励导向偏差,共同构筑了阻碍患者获得有效服务的结构性壁垒,并固化了其认知与行为困境^[23-24]。一方面,患者因认为基层医疗机构“设备简陋”“只会拔牙”而普遍缺乏信任^[25],并因此形成“舍近求远”的就医模式。这直接反映了我国口腔医疗资源分布的严重失衡现状。东部地区口腔医生集聚度较高,中西部地区集聚度较低,尤其是农村等地理位置偏远地区^[26]。这种资源配置的严重倾斜,导致基层医疗机构长期陷入设备更新滞后、专业人才匮乏的发展困境^[27]。患者对医疗机构的信任危机会增加其就医的直接成本(如交通、时间)和间接成本(如误工、失业等),更重要的是,它可能使患者在疾病早期无法获得及时、规范的干预,导致牙周炎进行性加重。研究表明,及时清除菌斑、牙石和积极治疗牙周炎可有效控制和逆转其造成的身心损害^[28]。然而,基层诊疗能力缺失会导致患者错过最佳治疗时机,最终对健康结局产生不利影响^[29]。因此,亟须通过“县管乡用”等人才培养机制,强化基层口腔诊疗能力建设,同时建立分级转诊制度,确保患者在恰当的时间获得适宜的治疗。

另一方面,当前大部分国家和地区基本医疗保险尚未将口腔门诊治疗费用纳入统筹支付范围,且商业保险的补充不足^[30-31]。牙周病的高发病率、低就诊率、低口腔医疗保险覆盖率,给个人、家庭和社会带来了沉重的疾病经济负担^[32-33]。牙周病造成了沉重的全球疾病负担,且该负担主要集中于中低收入国家^[34]。由于这些国家的口腔公共卫生体系往往较为薄弱,治疗费用主要依赖个人自付,这可能增加家庭经济负担,甚至引发因病致贫和因病返贫的风险,对社会经济和家庭经济状况构成一定挑战^[35]。牙周病是导致成人牙齿缺失

的主要原因之一,过早缺失牙齿会显著影响患者的咀嚼功能和营养摄入,进而增加全身性疾病风险。对于孕妇和老人等弱势群体而言,这种影响尤为严重和复杂^[36-37]。有研究表明,牙周病还与妊娠期糖尿病、早产、低出生体重等不良妊娠结局密切相关^[38]。值得注意的是,牙周病负担高度集中在65岁以上老年人群^[39]。这一分布差异不仅反映了地区间社会经济条件和饮食习惯的影响,也提示实际中老年人群的实际患病情况可能被低估^[40]。因此,应优先将牙周基础治疗纳入门诊慢病管理,通过提高报销比例引导医患双方选择更符合长期健康利益的治疗方案。同时,可考虑将报销与治疗效果挂钩,激励医疗机构提供高质量的口腔健康管理服务。

本研究发现,欠发达地区慢性牙周炎患者对基层优质服务与持续性支持存在迫切需求,这与许多中低收入国家面临的情况类似^[10]。慢性牙周炎的管理需注重患者教育和个性化支持,通过提升患者对牙齿保留的重视,促使吸烟者因牙齿健康问题而选择戒烟,这证明了在基层护理中融入行为改变策略的有效性^[41]。我国欠发达地区牙周炎的管理可借鉴其核心理念,率先培养一批专注于牙周病预防、基础治疗和健康教育的“口腔健康专员”,并将其嵌入到现有的乡镇卫生院体系中。此外,数字健康技术可为持续性、提醒式远程支持提供兼具成本效益优势的解决方案。Idris等^[42]研究表明,数字生活方式改变项目可能为人们提供一种新途径,帮助人们获得健康理念的建议和支持。通过智能机构建的提醒系统(如定期推送口腔卫生指导、复诊提醒或戒烟支持),可强化持续性护理,且成本效益显著,我国可借鉴此模式,依托已高度普及的智能手机,构建低成本的数字支持系统。同时,通过“专业人力下沉,数字技术支撑”的协同作用,缓解欠发达地区专科医疗资源地理可及性的问题,还可通过建立稳定的医患关系和持续的行为督导,帮助患者突破认知和行为的双重困境,真正实现从被动治疗到主动管理的转变^[43]。

本研究严格遵循质性研究范式,其认识论基础与量化研究存在本质区别,因此并未采用亦无需进行基于统计功效的样本量计算或假设检验。作为质性访谈研究,本研究的优势在于深入探讨了受访者的真实体验与复杂意义,但同时也需明确其方法论边界。质性研究不采用统计学分析

(如假设检验、回归分析等),这与量化研究存在本质区别。Roberts^[14]等强调,信息力模型是质性研究样本量判断的核心工具,而非统计功效。理论驱动的访谈研究可通过预先设定的饱和标准(如初始样本量和停止标准)来确保分析的充分性,无需涉及统计检验。

但是,本研究具有一定的局限性,由于本研究对象均来自同一医院,尽管其户籍隶属国内欠发达地区,但能够舍近求远前往大城市就诊,这本身就意味着该群体在健康意识、经济能力或社会资本方面可能强于当地平均水平。这种因就医可及性导致的样本选择性,本质上是一种“空间—社会”双重偏倚:最基层、最弱势、完全放弃治疗的患者声音极可能被系统性地遗漏。此外,即便是采用响应者驱动抽样等试图校正偏倚的方法,若主要假设不满足,结果仍无法推广到目标人群。因此,本研究的样本具有“显性”与“隐性”的双重选择性:显性方面是户籍地域的限定,隐性方面是就医行为背后的社会分层。未来研究有必要结合社区或基层医疗机构的视角,或采用两步法等更细致的身份识别策略,以更全面地纳入不同社会阶层的患者体验。

【Author contributions】 Liu Z, Wei SY designed the study, conducted literature search and analysis, developed the interview guide, performed interviews and transcription, analyzed data (responsible for coding scheme development, thematic coding, and theme extraction), implemented quality control (research reflexivity journals and member checking), and wrote the manuscript. Guo Y, Hu ML selected the topic and supervised the research, performed interviews, contributed to data collection and analysis (participated in coding discussion and review), managed data files, and prepared and submitted ethical review documents. Ni J, Ding Y, Liu N supervised the research, designed and prepared the study (supervised research methodology and ethical design), reviewed and revised the manuscript, managed data files, and oversaw the overall structure and key points of the manuscript. All authors read and approved the final manuscript as submitted.

【Ethics statement】 The study adhered to the tenets of the Declaration of Helsinki and was approved by the Medical Ethics Committee of Stomatological Hospital, Southern Medical University (No. NYKQ-EC-[2025]28), and written informed consent was obtained from all participants.

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