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Factors associated with irregular dental checkups or refraining from regular dental treatment.

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Abstract:

Introduction: Routine dental examination is important for early diagnosis and treatment of dental problems in order to improve quality of life and avoid costly future treatments. Regular dental checkups also decreases dental anxiety among individuals

Methodology: This descriptive cross-sectional study was conducted at the department of Operative dentistry, Altamash institute of dental medicines from 15 August'2021 to 11 November'2021. 204 participants were interviewed using well-constructed questionnaire regarding factors associated with irregular dental checkups and refrainment from regular dental treatment.

Objective: To identify factors associated with irregular dental checkups or refraining from regular dental treatment.

Results: Among 204 participants, 79 (38.73%) were male and 125 (61.27%) were female. Results showed that 47.55% of individuals were aware that dental hygiene improved overall quality of life, only 42.6% of participants visited a dental clinic for a general check-up, whereas 57.35% only received dental treatment when they were in pain.

Conclusion: Major factor leading to irregularity for dental checkup, is financial constraint.

Keywords: Dental checkup, Dentist, Dental treatment, Oral health.

Introduction:

Routine dental examination is important for early diagnosis and treatment of dental problems in order to improve quality of life and avoid costly future treatments. Regular dental check-up also decrease dental anxiety among individuals. Dentist's work with the patients to ease their pain, discomfort, and other dental concerns. However, it is necessary to identify any dental concern early, addressed timely and prevented from becoming a serious issue. A blighted natural tooth is rightfully appraised as a general health issue as it hampers aesthetics, mastication, and overall systemic health exceedingly. Postponing dental visits can have detrimental effects on the oral health and overall wellbeing of the patient. Regular dental checkups are important because these help keep the oral cavity healthy. Regular dental visits are advised every 6 months

or as recommended by a dental professional. A regular dental visit consists of examination and oral prophylaxis. Contrary to the recommendation common practice to make dental appointments only when oral health poses to be an issue. Health organizations have since set standards aimed at preventing dental problems. Consistent oral hygiene, regular check-ups, are two buttresses of preventative dentistry.

Factors that are associated with irregular dental checkup or refrainment of regular dental treatment have been investigated in our study. These factors include dental anxiety, financial constraint, time consumption during dental visit, lack of transportation, arbitrary reason, lack of instrumental support, communication issue and unavailability of affordable dentists. People also consider dentists expensive to some extent due to misapprehensions

related to the emolument charged by this profession. Another reason could be the fact that people don't consider dental visits a necessity unless a problem arises. In other words, dental visits are usually associated with cure rather than prevention. Irregularities in dental checkup and refrainment from dental treatment can also be associated with oral impacts on daily performances. Lack of education related dental services (all dental services) leads to misconceptions in a society which result is dental anxiety and the lack of oral hygiene education make it highly probable for patients to refrain from seeking dental treatment. 9,9

Objective:

To identify factors associated with irregular dental checkups or refraining from regular dental treatment.

Methodology:

This descriptive cross-sectional study was conducted at the department of Operative Dentistry, Altamash Institute of Dental Medicine from 15 August 2021 to 11 November 2021 after approval from Institutional review committee. Participants approached using e-mail, and asked to fill the selfadministered questionnaire. 230 participants responded, incompletely filled questionnaire were rejected and finally data of 204 participants was available for analysis. The individuals participating in the study were informed of the voluntary, anonymous and non-obligatory nature of the study being conducted. Consent was taken prior the participation of the individuals in the study. The limitation of our study was that since we conducted an online survey which is structured questionnaire that is completed by individuals over the internet generally by a filling out a form, it did not target individuals who had no internet access and those who could not read and understand English language. Questionnaire designed with an aim to investigate different determinants that may be associated with the refrainment from dental treatment and irregular dental check-ups. These includes dental anxiety, time consumption during dental visit, lack of transportation availability, arbitrary reasons, lack of instrumental support, communication issues, unavailability of affordable dentists and alternative conceptions. Data was analysed using SPSS version 20. Among 204 participants, 79 (38.73%) were male and 125 (61.27%) were female.

Results:

During this study we investigate the factors associated with irregular dental checkups or refrainment from regular dental treatment in relation to gender, age, education, marital status, financial status, availability, employment status, and overall awareness. The factors that we investigated in our study and propounded in our questionnaire were dental anxiety, time consumption during dental visit, lack of transportation availability, arbitrary reasons, lack of instrumental support, communication issue, unavailability of afforda-

ble dentists and alternative conceptions.

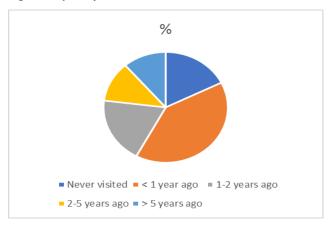
Study was carried out on 204 individuals, out of which, 79 (38.73%) were male and 125 (61.27%) were female. People were further divided based on their age groups, educational and work status tabulated in Table 1.

Table No 1: Demographic Details

	%	n
Below 18 years	6.86	18
18-25 years	72.06	147
26-45 years	11.76	24
46-65 years	7.35	15
Above 65	1.96	4
No formal education	1.47	3
Less than matric	6.86	14
Matric/O Levels	8.33	17
Intermediate/ A Levels	39.22	80
Bachelors	37.25	76
Postgraduate/Masters	6.86	15
Employed	35.29	72
Unemployed	64.71	132

Evaluation revealed that out of 204 participants, 131 (64.22%) participants had no pattern of definite frequency of visitation. 38 (18.63%) visited a dental clinic once a year, 30 (14.71%) every six months and 5 (2.45%) visited every three months. Our survey also highlights the frequency of dental visits which is featured in fig 1.

Fig 1: Frequency of Dental visits.



Through this research we sought to investigate the reasons behind infrequent dental visits or refrainment from regular dental treatment with regards to the inconvenience faced by the participants. We further scrutinized these factors through our questionnaire. A factor that was explored was the time consumption at a dental visit. Results showed 54 (26.47%) individuals regard dental visits as fairly time con-

suming whilst 55 (26.96%) disagree and 95(46.57%) participants were neutral. Additionally, the survey also proves that 25 (12.25%) participants are apprehensive of a dental clinic because of the procedures, while 91 (44.61%) participants had qualms about dental visits to some extent, and 88 (43.14%) individuals participating in the survey did not fear the visits at all. Another issue that was brought up was the financial aspect of dental treatment. Dental treatment was considered to be expensive by 179 people (87.75%) while only 25 people (12.25%) believed otherwise. Subjects were further inquired as to the causes of the financial burden of treatment presented in Table 2.

Table No 2: Causes of the financial burden of treatment presented

Causes	%	Count
Because dental materials can be expensive	25.98	53
Because dentists want to make money	23.53	48
Because dental equip- ment is expensive	32.84	67
No regulation from the government	13.73	28

With regards to easy access to a dentist, 158 subjects (77.25%) agreed to easy accessibility, whereas 46 subjects (22.55%) did not. The latter were further asked to specify the reasons for lack of accessibility which are presented in Table 3.

Table No 3: Reasons for lack of accessibility

Cause	%	Count
Availability	13.24	27
Financial Issues	24.51	50
Transportation	5.88	12

Our investigation delved deeper to find if individuals know the effect of dental treatment on the quality of life. 87 (42.65%) participants agree that dental treatment can improve the overall quality of life, while 20(9.80%) participants are not of the same opinion. The highest number of participants, 97(47.55%), believe that dental treatment impact quality of life positively only to some extent. When inquired how many of the subjects were aware that routine dental checkups are required twice a year, out of 204 participants 144 responded they were aware, and 60 individuals were unaware. The reasons specified by those that were unaware are tabulated in Table 4.

Table No 4:Awareness about effects of dental treatment

Reasons	%	Count
No emotional support	3.4	7
No instrumental support	5.39	11
Financial reasons	16.67	34
Being an informal caregiver of the family	7.35	15
Fear	9.31	19
Gag	2.45	5
Hygiene	3.43	7

The participants were questioned if they were aware of the fact that the oral health is related to general health and the lack of it can result in a number of diseases. The 12 participants were aware, however 32 were not. Furthermore, the participants of the survey were inquired about their overall oral hygiene and health 81 (39.71%) believed their oral hygiene and health is good, 28 (13.73%) thought it is bad and 95 (46.57) believed it is satisfactory. We also wanted to investigate if there was a language barrier between patients and the dentists. 134 (65.69%) never face communication issues, 59 (65.69%) tended to sometimes find it difficult to communicate, and 19 (9.31%) always faced a communication barrier. Lastly, 87 out of 204 individuals believe that a visit to the dentist is only required when in pain and 117 (57.35%) disagree to the notion.

Discussion:

Dental visits are important to maintain overall oral health, prevent oral diseases and examination for signs of mouth cancer, as well as head and neck cancer. Visiting a dental hygienists help prevent oral diseases and treat gum diseases along with providing guidance for proper home care. When it comes to oral health it is important to remain proactive and visit the dentist regularly so that they can catch any issue early, before it becomes a problem. There are several factors that are associated with irregular dental checkup or refrainment of regular dental treatment have been explored in our study. These factors include dental anxiety, financial crisis, time consumption during dental visit, lack of transportation, arbitrary reason, lack of instrumental support, communication issue and unavailability of affordable dentists. People also consider dental treatment a luxury that cannot be afforded by everyone due to misapprehensions related to the emolument charged by a dentist.

Another reason could be the fact that people associate den- costs. 12 Dental anxiety while not the leading but was one of tal visits with prevention rather than cure. Dental appoint- the major factors associated with irregular dental checkups ments should not only be made when there is a predica- or refrainment from regular dental treatment. Dental anxiement that needs to be addressed. The American Dental As- ty is fear, anxiety or stress associated with a dental setting. sociation (ADA) states that "the most effective way to en- Being scared to visit the dentist can result in delaying or sure optimal oral health is to prevent oral disease before it avoiding dental treatment. Dental instruments in a dental starts. "Majority of the individuals participating in our study setting in general can play a major triggering dental anxiewhile aware of the fact that's it is required to visit a dentist ty. When dental anxiety and phobia result in avoidance of at least twice a year and oral health can be related to other dental care. Mental health conditions including generalized diseases and general health, had no definite frequency of anxiety disorder and post-traumatic stress disorder (PTSD) dental visitation. Routine dental examination is important can increase the risk of a person experiencing dental anxiefor early diagnosis and treatment of dental problems. The ty. ¹³Patients' anticipatory experience of anxiety is usually 1993 United Kingdom Child Dental Health Survey showed higher than the anxiety experience after having undergone that children who only visited a dentist when seeking a cure treatment. Dental anxiety and phobia can impact a person's had more decayed and filled teeth and also more extracted quality of life, and acts as an obstacle in the way of better teeth than children who went to the dentist for routine den- oral health. It is the duty of a dentist to manage these patal checkup aiming for prevention of oral diseases. Another tients with the best of their resources and ability, as a subsurvey targeting adults showed that individuals who visited stantial proportion of the population suffers from anxiety a dentist for regular dental checkup had almost half as many and fear. ¹⁴Dental professionals, therefore, have a major role teeth missing as compared to those who visited the dentist in the management and prevention of dental anxiety and only when they faced a dental concern. ¹⁰In our study we dental phobia among dental patients. ¹⁵While these were investigated the reason behind the refrainment of regular factors associated with irregular dental checkups or refraindental checkups and it was concluded that major contributing factors were; the time consumed while visiting a dentist, dental anxiety to some extent and one of the major and highlighted factor was overall expenses during dental visitation. The participants were further questioned about the reason they thought dental visits were costly and it was observed that majority thought it was because dental equipment is expensive. It was also discerned that the dental treatment of majority of the participants was self-funded and was not covered by the government or their health insurance. Not majority but a fair number of participants also agreed with the statement that dental visits were only needed when in pain. Dental visits are considered time consuming since dental issues are mainly tackled when an issue arises shaping dentals visits to be time consuming and expensive. The importance of the common practice of preventive dentistry is not highlighted enough. Regular dental visits can prevent oral issues from emerging and help avoid timeconsuming and expensive dental procedures. It is widely acknowledged that dental cost is a major factor for preventing patients from accessing dental services. Patients consider dental treatment to be expensive and openly acknowledge that this is a key reason for postponing dental appointments or the non-attendance of patients. Participants resented the high dental charges and also the fact that dental visits were in majority of the cases completely self-funded. 1,11 A Citizens Advice survey found that 43 per cent of their clients had not had a dental check-up in the previous 12 months since they could not afford the

ing from regular dental treatment that were concluded in our research; it was observed that by highlighting the importance of preventive dentistry and spreading awareness about the importance of regular dental checkups and dental treatment patients can encouraged to be more upfront and self-aware when it comes to their oral health.

Conclusion:

Major factor leading to irregularity for dental checkup, is financial constraint. In contrast to widely held belief, we did not find dental anxiety as major factor for irregular dental visits.

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References:

- Shahrabani S. Factors affecting oral examinations and dental treatments among older adults in Israel. Isr J Health Policy Res. 2019 May 10;8(1):43. doi: 10.1186/ s13584-019-0312-x. PMID: 31077257; PMCID: PMC6511173.
- Smyth JS. Some problems of dental treatment. Part 2. Treatment avoidance: some differences between regular and irregular patients. Aust Dent J. 1994 Feb;39 (1):50-4.
- Sheiham A. Oral health, general health and quality of life. Bull World Health Organ. 2005;83(9):644.
- Hajek A, Kretzler B, König H-H. Factors Associated with Dental Service Use Based on the Andersen Model: A

- Systematic Review. International Journal of Environmental Research and Public Health. 2021; 18(5):2491.
- Aarabi G, Valdez R, Spinler K, et al. Determinants of Postponed Dental Visits Due to Costs: Evidence from the Survey of Health, Ageing, and Retirement in Germany. Int J Environ Res Public Health. 2019;16(18):3344. Published 2019 Sep 10. doi:10.3390/ijerph16183344
- Hajek A, De Bock F, Huebl L, Kretzler B, König HH. Postponed Dental Visits during the COVID-19 Pandemic and their Correlates. Evidence from the Nationally Representative COVID-19 Snapshot Monitoring in Germany (COSMO). Healthcare (Basel). 2021;9(1):50. Published 2021 Jan 5. doi:10.3390/healthcare9010050
- Gülcan F, Ekbäck G, Ordell S, Klock KS, Lie SA, Åstrøm AN. Exploring the association of dental care utilization with oral impacts on daily performances (OIDP) - a prospective study of ageing people in Norway and Sweden. Acta Odontol Scand. 2018 Jan;76(1):21-29.
- 8. Gulzaib, Hussain P, Anjum Q.A, Iqbal Zahid. Oral hygiene awareness among the patients visiting the dental centers of a rural area of the province Punjab, Pakistan.
- 9. Biomedica.2017;33(1):20-24.
- Khan SA, Dawani N, Bilal S. Perceptions and myths regarding oral health care amongst strata of low socio economic community in Karachi, Pakistan. J Pak Med Assoc. 2012 Nov;62(11):1198-203.
- Kay EJ. How often should we go to the dentist? BMJ. 1999
 Jul 24;319(7204):204-5. doi: 10.1136/bmj.319.7204.204.
 PMID: 10417062; PMCID: PMC1116309.
- 12. Land, T. What patients think of dental services. Br Dent J.2000;189:21–24.
- Hill, K., White, D., Morris, A. et al. National evaluation of personal dental services: a qualitative investigation into patients' perceptions of dental services. Br Dent J 195, 654–656 (2003). https://doi.org/10.1038/sj.bdj.4810784
- 14. Appukuttan DP. Strategies to manage patients with dental anxiety and dental phobia: literature review. Clin Cosmet Investig Dent. Mar 2016; 8:35-50.
- 15. Caltabiano, M.L., Croker, F., Page, L. et al. Dental anxiety in patients attending a student dental clinic. BMC Oral Health 18, 48 (2018).
- Minja, Irene & Kahabuka, Febronia. Dental Anxiety and Its Consequences to Oral Health Care Attendance and Delivery. 2019. 10.5772/intechopen. 82175.