VOLUME 1 - 2009
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International Journal of Collaborative Research on Internal Medicine & Public Health

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Molecular screening for tuberculosis on DNA isolated from microscopic smeared slides

Sayantan Das*

Department of Biotechnology, Adamas University, Barasat, Kolkata, West Bengal, India

***Corresponding author:** Sayantan Das, Department of Biotechnology, Adamas University, Barasat, Kolkata, West Bengal, India, Email: sayantan220998@gmail.com

Keywords: Neuropathy; Kidney disease; Public Health; Associated Factors

Commentry

Tuberculosis (TB) is a genuine general medical condition in non-industrial nations and has been deteriorated by HIV co-contamination and the rise of multidrug-resistant (MDR) and extensive drug-resistant (XDR) strains of Mycobacterium tuberculosis. MDR-TB is brought about by strains that are impervious to at any rate rifampicin (RIF) and isoniazid (INH); XDR-TB is brought about by strains that are impervious to RIF and INH, and have additionally gained protection from fluoroquinolones and to one of the second-line injectable medications: kanamycin, capreomycin, or amikacin [1].

In most high TB trouble nations with restricted assets, sputum smear microscopy is utilized as the main strategy for TB conclusion; this procedure is basic, quick, and financially savvy. In any case, its explicitness and affectability stay low, and the reproducibility of AFB slide perception results relies upon human factors (the specialist), lab aptitude, and the affectability of the method.

When the DNA has been secluded, it is steady, permitting other sub-atomic tests to be performed, for example, PCR and sequencing. Because of the straightforwardness of DNA extraction from material scratched off ZN smear microscopy slides, there is additionally no requirement for exceptional framework. At the point when applied to TB sputum smear magnifying lens slides, the procedure can be utilized to recognize TB, recognize M. tuberculosis and different mycobacteria, recognize drug opposition changes, or genotype the strains [2]. While the IS6110 succession has generally been the PCR focus of decision for genotyping on ZN slides, other hereditary markers, for example, the DR groupings utilized for the spoligotyping have likewise been portrayed. Moreover, coupling these intensification strategies with sequencing is additionally practical, yet frequently still requires a settled PCR.

Sub-atomic procedures have the benefit of being a lot quicker than culture-based strategies and reduction the deferral for TB finding. Studies have demonstrated that PCR utilizing DNA removed from ZN slides is an attainable option for the identification of M. tuberculosis and diminishes the turnaround time for results. The chance of getting DNA from spreads utilized in far off settings could be a decent option for the more fast finding of TB and medication obstruction [3]. Distributed examinations have exhibited that DNA recuperated from slides can be utilized to analyze and genotype TB, and to distinguish drug obstruction. This framework could be a decent demonstrative option for TB finding in distant regions. It could likewise permit new disease to be recognized from reactivation in backslide situations when the slide from the primary contamination has been put away. It could likewise be utilized for the observation of medication opposition by public TB control programs in low-pay nations, where capacity and the transportation of clinical examples are restricted.

The smear microscopy slides made and gathered or documented preceding the improvement of AFB methods speak to a colossal library and an uncommon wellspring of data on the worldwide history and development of TB transmission, opposition, and spread. These could be abused and divulged utilizing sub-atomic strategies. Most of distributed data on DNA from smear microscopy slides depends on review examines. The chance of performing sub-atomic composing followed by quality

sequencing with put away slides will permit review sub-atomic the study of disease transmission examination [4]. For example, with regards to the current One Health idea, it very well may be utilized to decide the commonness of M. bovis in a populace living in high ox-like TB occurrence setting to assess the weight of this zoonosis on general wellbeing. More fundamental exploration concentrates on strain genotypes circling inside a nation, phylogeny, and phylogeography would now be able to be encouraged and are conceivable, as the utilization of recorded ZN slides of as long as 11 years has been reported.

Taking everything into account, stained smear microscopy slides can be a protected framework for the transportation of sputum examples from far off wellbeing places to reference TB research facilities and permits further sub-atomic TB or MDR-TB identification. This could help in the fast determination and hence opportune administration of TB patients. The plausibility of atomic composing with slides will likewise permit enormous scope drug opposition reviews and sub-atomic the study of disease transmission considers [5]. Be that as it may, this framework actually needs concentrates on cost-adequacy to assess its achievability in low-and center pay nations for public TB programs. With the fast advancement of cutting edge sequencing devices and strategies and reduction in costs, this may speak to an amazing future atomic stockpiling framework apparatus.

Recently, in about 70-80 percent of patients with primary membranous nephropathy, an antibody causing most cases of membranous nephropathy was detected and identified as anti-PLA2R is found in the kidney and/or bloodstream. The phospholipase A2 receptor (the antigen) binds to the anti-PLA2R antibody (short for anti-phospholipase A2 receptor antibody). A protein present in the kidney philtre is the phospholipase A2 receptor, specifically within a cell called the podocyte that makes up part of this philtre.

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Int J Collab Res Intern Med Public Health 2021; 13(1): 1040.

Awards 2021

International Journal of
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Editorial

About Pain Management | October 28-29,2020 | Chicago, USA

Ziba Farajzadegan

Isfahan Medical Sciences University

Eligibility: The Hilaris Scientific Service Achievement Award is open to all Individuals who had a significant contribution in the sector, and engage themselves into innovative research, Services and product development. Candidate should have minimum 15+ years of experience in the core research or relevant field. It is applicable for the candidates of Public services, Government service, or Private sectors also.

Basis for Judging: Selection will be on the basis of individual accomplishments, quality & standards of research,/ services, innovation in terms of serving public domains, scope of the research/ service for the society beyond the boundary of the organization or company.

Nomination: We invite online applications from desired candidates, self-nomination or nominated by colleagues/ organizations (both private & public sectors).

Presentation: This award will be presented at Pain Medicine and Pain Management 2020 Conference, Date & venue.

HILARIS RESEARCH CONTRIBUTION AWARD:

The Hilaris Research Contribution Award seeks to recognize Professionals (Academic, Research, Business)/ Organizations for their significant Research & Development activities and contribution to the Pain Medicine and Pain Management 2020 sector. We recognize and appreciate your Research contribution that has demonstrated a big difference in the society, & impacted individuals live.

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The Hilaris Emerging Researcher Award category is to recognize and promote young professionals, Research Scholars starting their career in Research and innovation, which shows a huge potential for the future. Though this awards we encourage and appreciate the young budding minds to involve deeply into the research activities in the sector of Pain Medicine and Pain Management 2020 and innovate or discover new product and services. Our Pain Medicine and Pain Management 2020 Conference will provide the best platform to represent yourself in front of global experts and network with other peers to expand your horizon.

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This award recognizes the best poster presentation given during an event to encourage students and recent graduates to present their original research. Recipient of this award will be selected by the judge of the poster session. An award-winning poster will be evaluated on demonstration content and clarity, modernity of approach, communication criteria and scientific aspects. It will also be based on layout, insights, analysis and results characterization. The awardee will be felicitated after the of the culmination poster session.

HILARIS OUTSTANDING SPEAKER AWARD:

The aim of the Hilaris Outstanding Speaker Award is to recognize individuals presenting an oral sessions/ research papers, projects, strategies at the respective conferences. Outstanding paper will be selected among all the presentations at the conferences, evaluated by the expert committee. Maximum 3 presenters will be awarded based on the score evaluated by the expert committee.

HILARIS BEST POSTER AWARD (STUDENT & FACULTY):

Hilaris Outstanding Speaker Award is to recognize best research poster presented at the Pain Medicine and Pain Management 2020 Conference. This Award seeks to encourage and motivate Researchers, Research scholars, and Faculty members for their dedication and achievement in the field.

HILARIS OUTSTANDING STUDENT THESIS AWARD:

Hilaris Outstanding Student Thesis Award seeks to recognize the best Graduate theses (Masters/Ph.D./Post Doctorate) in the topics covered under the scope of the Pain Medicine and Pain Management 2020 conference. This awards aims to encourage the young scholars to achieve excellence in the field of Research & Innovation.

International Journal of
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Editorial

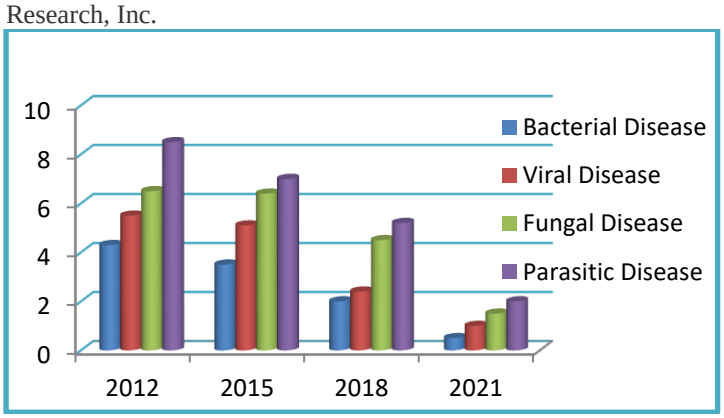
Market Analysis Report for Global Infections 2020 scheduled at Singapore during 28-29 September, 2020

Vivek Kamath

AML Program Director, Digital Banking SME & API Strategist

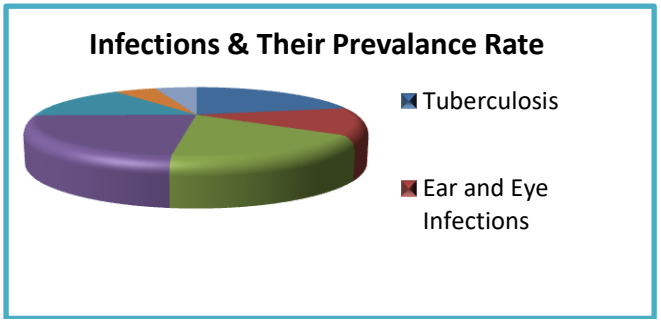
Infectious Diseases conferences would offer a powerful global forum to encourage dialogue on the advancements related to prevention, cure and rehabilitation of infections related diseases.'

The international infectious diseases market is considered being a record of irresistible illnesses centers around the momentum inclines inside the irresistible infections helpful and demonstrative market, industry increment drivers, unrivaled treatment. The International Infectious Diseases market is considered being record of irresistible illnesses centers around the momentum inclines inside the irresistible infections helpful and demonstrative market, industry increment drivers, unrivaled treatment choices and restrictions. It gives commercial center projections to the moving toward years. It contains an assessment of these days' patterns in age for illness guess and treatment. The global infectious disease medical specialty market is anticipated to surpass extra than US$ 21.00 Billion through 2022 at a CAGR of 100% within the given gauge timeframe. The overall marketplace for irresistible illness symptomatic, antibody, and cure things came to $108.4 billion out of 2015. Furthermore, the scope of $126.2 billion of every 2016 and $183.2 billion out of 2021, showing a compound yearly increment rate (CAGR) of 7.7% from 2016 to 2021 and the worldwide commercial center for best 6 irresistible affliction is required to reach USD 86.2 billion by method for 2025, in venture with another record with the guide of Grand View Research, Inc.



The commercial center is generally pushed by means of developing amount of Human Immunodeficiency Virus (HIV), Human Papillomavirus (HPV), TB, and hepatitis examples all inclusive. Government and private organizations are making a venture firmly inside the social insurance region to forestall, analyze, and manage irresistible illnesses; developing speculations for development of new tablets to treat irresistible ailments, and expanding amount of activities for developing insight about those conditions are foreseen to strengthen the market at some phase in the gauge length. Moreover, developing amount of patent lapses and access of conventional tablets inside the commercial center are relied upon to development the call for irresistible malady therapeutics because of their low expenses. Likewise, accessibility of pay for visualization and treatment of those diseases and loosened circulation of prescription by means of producers in regions with high occurrence of those disorders are factors additionally foreseen to push the commercial center blast. Be that as it may, low entrance charge of hostile to infective and accessibility of enormous wide assortment of fake medications are foreseen to restriction the commercial center blast for the term of the gauge length. Infections related Associations Worldwide:

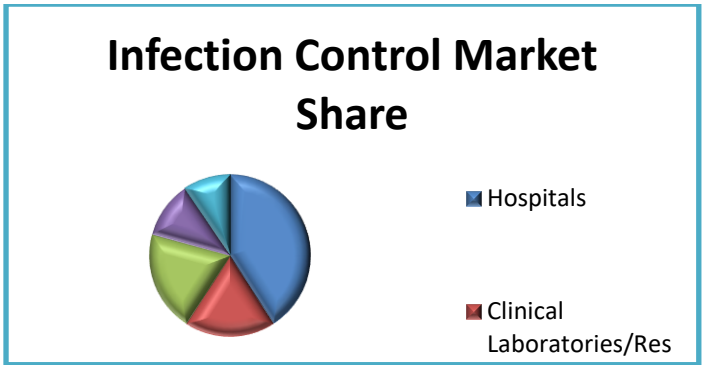
- Association for Professionals in Infection Control and Epidemiology
- Centers for Disease Control and Prevention
- Infectious Diseases Society of America
- National Institute of Allergy and Infectious Diseases
- World Health Organization
- National Institute of Allergy and Infectious Diseases
- Centers for Disease Control and Prevention
- Directors of Health Promotion and Education
- National Foundation for Infectious Diseases
- National Institute of Allergy and Infectious Diseases



Top Hospitals across Global:

- Nuffield Health Bristol Hospital – The Chesterfield – Bristol, U.K.
- Upper River Valley Hospital – New Brunswick, Canada
- Hackensack University Medical Centre – Hackensack, New Jersey
- Legacy Salmon Creek Medical Centre – Portland,

Washington
- Wooridul Spine Hospital – Seoul, South Korea
- Houston Methodist Hospital – Houston, Texas
- Hartford Hospital – Hartford, Connecticut
- University of Pittsburgh Medical Centre – Pittsburgh, Pennsylvania
- University of Texas MD Anderson Cancer Centre – Houston, Texas
- UCLA Health: Ronald Reagan UCLA Medical Centre – Los Angeles, California
- Mercy San Juan Medical Centre – Carmichael, California
- Massachusetts General Hospital – Boston, Massachusetts
- Ramkhamhaengs Hospital – Bangkok, Thailand



The urbanization of the human people is on the peril of transmission of numerous irresistible advertisers. Right now, >80% of individuals live in developing nations, rising event of irresistible infirmities, developing use to upgrade the entrance cost of cures of these ailments, developing undertakings and making awareness around medicines and finding of those circumstances, and developing logical preliminary research for development of late pills are no doubt to be the components chargeable for blast of this commercial center. Nonetheless, absence of learning and medications for these disarranges and low appropriations of cures are elements to restriction the development in the coming years.

Several Pathology manufacturers and businesses are analysed in the report considering their business and manufacture operations. The report comprises of fundamental details of their staple sources, industrial developments, distribution networks, manufacture processes, methodologies, plant locations, production capacities, estimating structure, value chain, industry supply chain, and product specifications. The study tends to contain all necessary details concerning microbiologists and physician’s production and development through said explorations.

Jessica
Program Manager | Global Infections 2020
Email id: globalinfections@asiameets.com
Phone No.: 44-203-7690-972
WhatsApp No.: 32-466-903-064

International Journal of
Collaborative Research on Internal Medicine & Public Health

Editorial

Neurology 2021 Market Analysis

JPN Mishra

Central University of Gujarat, India; Email: jpnmishra@cug.ac.in

Neurology focuses on broad array of disorders and cure of brain and connecting neurons. According to the latest survey conducted by WHO, it is revealed that Neurological Disorders encompassing Stroke, Alzheimer & Dementia, Epilepsy and many more accounts for more than 12% of deaths worldwide on an average and it is also predicted that the number of disability – adjusted life years vanished due to Neurological disorders are expected to accelerate from 95 million globally in 2015 to 103 million by 2030.Moreover, the worldwide cost of neurological squeal solitary estimated in 2010 was US$ 2.5 trillion and it is assumed that the value will spike to over US$ 6 trillion by 2030. Over the past 25 years, the burden of neurological disorders has been increased substantially. Neurological disorders are the leading cause of death and disability in the world today. The most prevalent neurological disorders were:
Headache Cases (about 1,500 million)
Migraine (about 1,000 million)
Medication overuse headaches (about 60 million)
Alzheimer's disease and dementia (about 46 million)
Between 1990 and 2015, the number of deaths from neurological disorders increased by 36.7%, and the number of DALYs by 7.4%. The rates of cases per 100,000 people increased in Parkinson's disease (by 15.7%), Alzheimer's disease (2.4%), motor neuron disease (3.1%), and brain and nervous system cancers (8.9%). Higher rates of prevalence of neurological disorders in rural areas, 6-8 million people with epilepsy and high case fatality rates of stroke (27-42%) call for urgent strategies in India
The global neuroscience market was valued at around USD 26,350 million in the year 2016 and it is expected to reach approximately USD 34,800 million by 2024. The global neuroscience market is expected to exhibit a CAGR of more than 3.5% between 2017 and 2024.

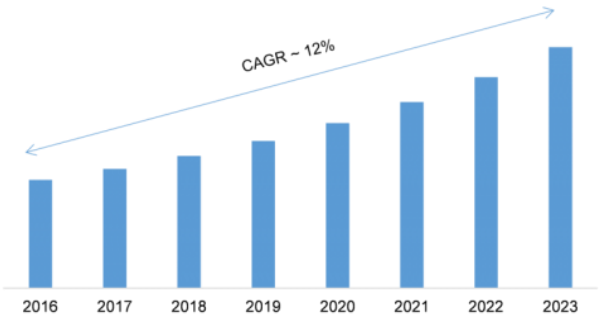
Importance & Scope:

Neurology today holds a position in the various medical centers of the world which varies from complete nonexistence to high and complex development. Invasion of the field of neurology by different types of clinicians, the rapid development of psychiatry, the late appearance of neurosurgery and the important recent advances in neurophysiology and neuro-anatomy, all help to account for this variability and demand a reconsideration of the scope of neurology. A survey of neurology, neurosurgery and neuropathology as they are to be found in various centers of learning today supports this view. From the time that neurology first emerged as a specialty, it has suffered a progressive reduction in scope.

Neuromarketing Technology:

Neuromarketing is the incorporation of neuroscience with day to day market activities in order to identify and study consumer behavior and perception, based on cognitive and affective response to marketing inducements. The first step of neuromarketing includes the accumulation of information about how the target market would respond if a new product penetrates the market.
Neuroscience is beneficial in interpreting and studying the consumer perceptions and has played a vital role in enhancing behavioral predictions of consumers. Neuroscience allows research firms and marketing companies to concentrate and customize their services according to customer expectations. Accurate product positioning can be devised with the help of neuroscience to access the brain functions of the customer.
The neuromarketing technology is differentiated by technology, solutions, and end user. Based on technology, the neuromarketing technology market is sub-segmented into functional magnetic resonance imaging (fMRI), electroencephalography (EEG), Eye tracking, Positron emission tomography (PET), and magneto encephalography (MEG). Furthermore, the solutions segment is sub divided into customer experience, people engagement, and product development.

The global Neuromarketing technology Market is expected to reach USD 100 million by 2023 growing at a 12% CAGR over the forecast period 2017-2023.



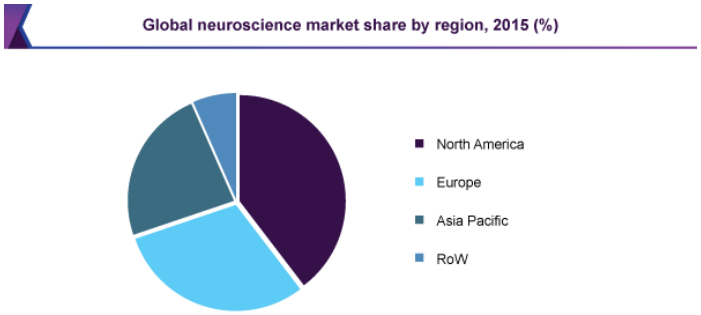
Neuromarketing technology is further divided on the basis of end user that includes retail, healthcare, food & beverage, and consumer electronics.

Regional Analysis:

Geographically, the neuromarketing technology is categorized into five different regions such as North America, Asia Pacific, Europe and the Rest of the World.

North America is expected to be a prominent region in the neuromarketing technology market over forecast period. The U.S. is the leading country in the region owing to increase in number of solution providers of neuroscience technology.

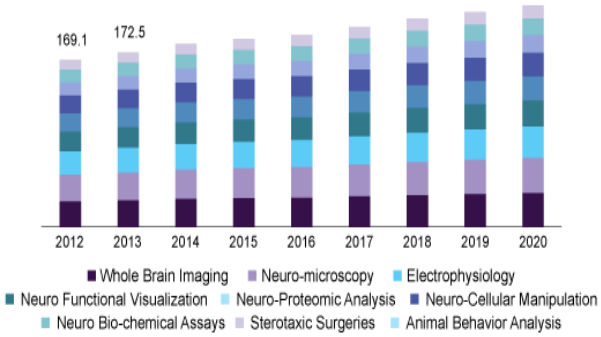
However, the U.S has a highly advanced technological infrastructure which has made them early adopters of technology and has encouraged many companies to the study consumer behavior effectively. In the light of these factors, the neuromarketing technology market is anticipated to be driven over the review period 2017-2023. Europe is also estimated to have a significant growth in the neuromarketing technology market over the next few years. With compare to China and Japan, Asia Pacific is expected to emerge as the fastest growing regional market owing to the owing to constantly improving healthcare system and presence of significant target population in the region.



Market Growth of Neuroscience:

The global neuroscience market size was valued at USD 28.42 billion in 2016 and is expected to grow at a CAGR of 3.1% over the forecast period. High influencing factors, such as on-going brain mapping research and investigation projects, neuroscience-based initiatives by government bodies and technological advances in tools and algorithms that are implemented in neuroscience space are expected to propel the market growth.

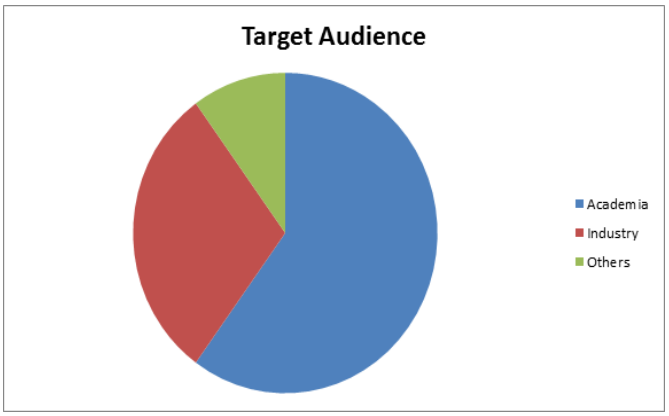
Neuroscience Market size by technology 2012-2020 (USD Million):



Target Audience:

Directors, Neurologist, Neurosurgeons, Psychiatrist, Head of department, Professors and Students from Academia in the research of Neuroscience.

Academia 60%
Industry 30%
Others 10%



Related Associations and Societies:

- Neuropathy Association
- The brain & behaviour research foundation
- Alzheimer's Association
- American Academy of Neurology
- European Neurological Societies
- World Federation of Neurology
- Spanish Society of Neurology
- Hilarescere Foundation in Italy
- Italian MS society in Italy
- Southern Clinical Neurological Society
- ESNR European Society of Neuroradiology
- Vision sciences society

Related Companies/Industries:

- Outpost Medicine
- Quanterix
- Innovasive Devices
- Alencure Biotech
- Quanterix
- Brainomix
- Alexion Pharmaceuticals
- Genomind
- Akili Interactive Labs
- Grifols
- UCB S.A
- Siemens Medical Solutions USA, Inc.
- Xenon Pharmaceuticals Inc
- Centogene
- Eisai
- Janssen Global Services
- Biogen
- Bausch Health Companies Inc.
- La Renon Corporate House
- Assertio

Oral Health and dental treatment of adults with disability, a problem and solution

Maxwell Christopher Graham Manley*

Department of Dental, The Royal Hospital for Neuro-disability, London, United Kingdom

***Corresponding author:** Dr. Maxwell Christopher Graham Manley, Consultant in Special Care Dentistry/ Head of Dental Department. The Royal Hospital for Neuro-disability, West Hill, Putney, London. United Kingdom; Email: mcgmanley@gmail.com

Abstract

People with disability have a poorer level of oral health than those who do not have a disability. This may be partly due to reasons of reduction in preventive care but also lesser opportunities for the provision of restorative dentistry. The use of a special management technique using intravenous conscious sedation provides a valuable opportunity to open doors that can help reduce the inequality that is experienced by people with disability.

Keywords: Dental treatment problems; Conscious sedation; Oral health; Disability

Introduction

People with disability have a poorer oral health than those who do not have a disability [1]. For some this is partly due to problems in maintaining good oral hygiene as a result of their limitation in manual dexterity. The importance of dietary control with the frequent intake of sugary foods may not be fully appreciated by those whose cognitive ability and communication skills are reduced [2]. These issues of prevention are important, however for people with a disability the opportunities for treatment are also reduced [3].

For many people with disability all aspects of dental treatment may be provided in the conventional form using local anaesthetic and careful gentle patient management. However for some individuals with challenging behaviour and or movement features dental care will be difficult perhaps resulting in undiagnosed oral health problems. For these reasons some degree of pharmacological intervention may be required. This can vary from general anaesthesia to conscious sedation. General anaesthesia for dental treatment can now only be provided in the UK in a hospital environment.

Complex restorative treatment and or periodontal treatment may require a course of visits and as multiple sessions of general anaesthetic should be avoided these options are generally not advisable. Even the provision of non-complex fillings may be overridden by the risk of further problems resulting in possible dental pain if the decay is extensive. An extraction removes this risk and is a decision that the surgeon may make in the patients best interest particularly for challenging patients for whom the possibility of dental pain can have serious behavioural consequences

As an alternative Intravenous conscious sedation can provide for people with disability an increased chance of having their teeth restored rather than simply extracted [4]. Evidence providing the option of conscious sedation strongly supports this alternative [5,6]. Intravenous conscious sedation can be provided by a single dental surgeon acting as an operator/sedationist within a primary care dental surgery assisted by a trained nurse. This enables the opportunity for a range of different treatment options to be provided safely over a series of appointments thereby potentially ensuring an improved standard of dental care.

Demonstration

Research has demonstrated the value of this technique for a number of reasons: Conscious sedation can be less expensive, more readily available as well as providing restorative dentistry rather than extractions.

Complex treatment and preventive periodontal care can be provided over a series of appointments. An

example shows the provision of a bridge to replace lower anterior teeth of an adult with severe choreic movements as a result of Huntington's disease [7] (Figures 1-3).

Figure 1: Patient showing missing lower anterior teeth.

Figure 2: Showing restoration of the lower anterior gap with a bridge.

Figure 3: Showing Bridge in place.

Conscious sedation makes available the possibility of investigations or treatments by other medical disciplines thereby enabling a truly holistic approach for the person with a disability This is shown by the case of an adult with severe brain injury [8]who had a variety of investigations over several years whilst having dental care using intravenous conscious sedation. (ie Blood taking, removal of cranial clips post-surgery, examination and syringing of ears, removal of ear wax, podiatry) Other cases have also demonstrated the value that intravenous sedation provides in holistic care [9]

The technique can and is readily available provided by a trained dental practitioner and dental nurse in a community general dental practice. For the adult with severe disability this may be more acceptable than attending a large busy hospital department.

Conclusion

Training in the use of intravenous conscious sedation, is required urgently and to be more widely available particularly for those specialists treating people with disability.

An urgent need to commission and fund an appropriate dental service for adults with disability

Disability is a functional limitation with regard to a particular activity. Handicap refers to a disadvantage in filling a role in life relative to a peer group. It is the responsibility of the dental profession to decide if it wants to provide a handicap or prevent one?

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