



THE JOURNAL OF **THE BRITISH INTERNATIONAL DOCTORS' ASSOCIATION** Issue No.2, Volume 30. Digital Edition, July 2024 www.bidaonline.co.uk



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Evaluating Diabetes and Cardiovascular Disease Risk at Health Melas in Preston and Burnley: Promoting Lifestyle Changes, Enhancing Healthcare Management, and Providing Hands-On Experience for Students.

An interview with Dr. Chaand Nagpaul. Ending the Endo-Ignorance.

7th BIDA National Oncology Conference 2024 – Full Report and Images.

Save the Date! – Tackling Obesity in Greater Manchester 2024 Conference Notification.



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Editoria

Prof Amit Sinha FRCS (Tr&Orth) Consultant Orthopaedic Surgeon Media & Communication Lead, BIDA Editor, BIDA Journal.

Change of political scene

Would the Labour government bring in a fresh breath of optimism or do we continue to live in the same chaos as before. The initial prospects for 'Build an NHS fit for the future' seem promising. Investment alone won't be enough to tackle the problems facing the NHS; it must go hand in hand with fundamental reform. The NHS should not just be a sickness service but be able to focus on preventative measures in the community. This begins at home, schools, the community and the Primary care centres. This requires a massive remodelling of the social care and the primary care facilities. It will not be easy to deal with the mental health epidemic the country is facing at present. Are we expecting miracles?

Suspension of Dr Sarah Beth

The GMC as our regulator abides by its principles that doctors have submitted themselves to the rule of law and should uphold a higher standard than ordinary citizens. Dr Benn felt that it was her moral duty to stand her ground to raise concerns about climate emergency, which is a health emergency too. This argument supports the ethos of putting patient's health foremost, which is why she was protesting at the Kingsbury Oil Terminal as part of a Just Stop Oil campaign. She was arrested and ended up in jail. The MPTS found her guilty of contempt of court for breaching a civil injunction. Her fitness to practice has been suspended for 6 months. Should a peaceful protest for a worthy cause be considered as grave professional misconduct? Will her opinion change after the end of the suspension period? I don't think so.

Physician Associates

The RCGP now advise that all recruitment of PAs into UK general practice be halted Is the tide regarding opinion of Physician Associates slowly turning following the recent survey of RCGP members? End of June the RCGP survey of more than 5000 GPs and GP trainees responded raising concerns about patient safety and 50% were aware of specific examples of safety being compromised by misdiagnosis, inappropriate treatment plans, or poor communication. More than 36% said that they believed there was no safe role for PAs in general practice.

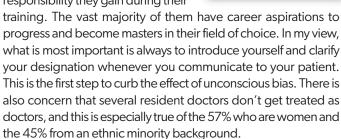
BIDA had urged the government to step back and consider our views, audit and evaluate the whole programme. We have debated and written to the government twice about this.

The ambition of the government was always to use them as medical role substitutes according to the HEE's Workforce Plan for England. The BMA and now the RCGP team are developing a scope of practice and supervision for PAs.

Junior doctors - Resident doctors

At the recent annual representative meeting in Belfast, BMA members voted to rename "junior doctors" as "resident doctors." The name proposed earlier by Prof Scarlett McNally was "Post graduate doctors". In my personal view, this new name is more appropriate. However, you are entitled to your views. What is in a

name or a title? Doctors work very hard and should be valued for the knowledge, skills, experience, and responsibility they gain during their



Articles

This issue is special with an article on the medicinal value of Honey. It is superbly complied by Drs Elhadi and Katira. Made out of the nectar of flowers, honey has unique and distinctive multiple potential benefits for health.

Another thought provoking article is from Prof Rajeev Gupta who is pioneering the concept of integrating Ayurvedic principles with Western medicine. This aims a promise of a more holistic, preventive, and patient-centred approach to healthcare. This will promote more understanding between individuals and their well-being and in turn increase awareness of prevention of further illness.

The research article by a team from the University of Lancashire about the Health Mela is yet another attempt to bring healthcare to the doorstep of the community. It provides an excellent opportunity for early detection and management of chronic conditions. It also aims to empower people to take charge of their physical and mental wellbeing.

Dr Chaand Nagpaul stands out as a role model for all doctors of international origin. His professional life has been dedicated to support doctors and fight for racial equality in medicine. The interview is a very interesting read.

The proceedings of the National Oncology Conference at Christie's Hospital at Manchester indicate that it was a resounding success. Thank you Prof C R Selvasekar and his team. BIDA continues to organise educational conferences and welcomes everyone at their divisional educational sessions.

At present BIDA's elections are in progress. The results will be announced soon. We are also waiting for the finals of the BIDA cricket match between the teams of North East Division and Stoke Division, which is scheduled for Sunday 18th August.

'Ever Tried. Ever failed. No matter. Try again. Fail again. Fail better'. Samuel Beckett

Best wishes,

Amit Sinha

Editor, BIDA Journal



National President's Report

Dear BIDA Friends,

I would like to inform BIDA family that I will not be standing as National President in the ensuing elections. I have represented BIDA as National Chairman for 7 years and National President for 3 years. In the last 10 years, as a team we have continued to make BIDA stronger and worked for equality and justice for all doctors in the NHS. We have established BIDA Student Wing and have a very active BIDA Junior Doctors' wing. We campaigned in national campaigns including retrospective changes in visa rules, the Dr. Bawa Garba reinstatement case, etc.

We have continued to work with all key stakeholders including GMC, CQC and Royal Colleges in IMG issues. We regularly conducted a number of conferences, and changed the BIDA National Conference to a subject oriented workshops.

I will continue to work as Executive Committee member supporting the team. I am also involved in work with the Centre of Race Equality in Medicine as its interim Chair.

I want to pay tribute to Dr. Jenny Vaughan who passed away recently.

Dr. Vaughan supported a number of IMG's, and was awarded BIDA's National Award.

I look forward to seeing many of you at BIDA's National Conference in October

Prof Chandra Kanneganti C.B.E.

National President, BIDA.



Dear BIDA Members,

I hope you and your loved ones are keeping well. We are at the beginning of a new political chapter for our country. The new Labour government has taken office with an overwhelming majority. The Labour Party, in its manifesto, had alluded to fixing the NHS which includes long waiting times and Junior Doctors' pay issues. It is encouraging to see that the new Health Secretary has opened talks with BMA Junior Doctors to resolve this long running pay dispute. BIDA would urge both sides to come to a pragmatic solution which will be in the best interests of our patients. We sincerely hope that the new government will go on to address NHS waiting times, NHS staffing and NHS funding issues.

Here at BIDA, we are amid a hectic schedule. As I write this report, we are in the middle of our election process, organising the National Conference, organising our International Scientific

Congress and our ARM/AGM, amongst other things.

I would like to congratulate the organising committee of BIDA's Annual Oncology Conference that took place last month. There was an

excellent attendance, with very encouraging feedback from the delegates.

The current edition of BIDA Journal once again has a perfect mix of various medical fields that ensures there is something to read for everyone.



National Chairman, BIDA.



Instructions for Authors

BIDA Journal is a peer-reviewed journal. We welcome original articles from physicians, surgeons and medical students from any part of the world. These include review articles, scientific articles, case reports, audits and letters to the Editor. Please visit BIDA's website for instructions.

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G.P. Forum Chairperson's Report

Dear BIDA Members.

I extend my heartfelt thanks for your unwavering support over the years. Serving as the G.P. Chair of BIDA has been an immensely rewarding experience, and it has been a privilege to represent such a dedicated group of professionals.

GPC England has proactively reached out to the newly appointed Secretary of State for Health and Social Care, Wes Streeting MP, expressing our willingness to collaborate on revitalizing general practice in England. In our communication, we highlighted the critical issues facing our sector, such as the loss of more than 2,000 GP practices and the departure of over 5,000 "home-grown" GPs over the past 14 years, representing a significant investment of taxpayer money estimated at £2-3 billion. Additionally, the number of registered patients has surged by 6.4 million in the past five years, resulting in an 18% increase in the average number of patients per full-time equivalent, fully qualified GP, now standing at over 2,300. To address these challenges and improve access to general practice, we have proposed several key initiatives to Mr. Streeting. We seek a commitment to a GP-led continuity of care model for NHS general practice in England, supported by a minimal general practice investment standard, and we aim to collaborate with the BMA's GPs committee to establish a Family Doctor Charter by 2025. It is essential to ensure safe GP to patient list size ratios to manage workloads effectively and ensure patient safety. Additionally, we advocate for real-term reinvestment in general practice to retain and restore GP numbers, ensuring continuity of care for the population.



The urgency of these measures is underscored by the findings of the GP Patient Survey 2024, published yesterday. The survey underscores the pressing need to focus on general practice. Echoing this sentiment, the Nuffield Trust remarked, "Today's results show that if the new government is truly aiming to fix a broken NHS, it must prioritize fixing general practice."

Once again, I am grateful for your continued support and the opportunity to serve as your Chair. As I am leaving now and will not be standing again for election, this will be my last report. Together, we have driven positive change and worked towards a sustainable future for general practice in England.

Warm regards,

Dr Preeti Shukla

Chair, BIDA G.P. Forum.

BIDA Student Wing Chair's Report

Dear BIDA Members.

As President of the British International Doctors' Association Student Wing (BIDA SW), I am immensely proud of the dedication and achievements demonstrated by our team over the past few months. The collaborative efforts of our members have led to substantial progress in our outreach, social media presence, and educational initiatives, making this period one of notable growth and increased engagement.

Our outreach team has continued to expand our network of representatives in medical schools nationwide. Under the leadership of our Co-Vice President Arefeh, and with the dedicated support of our marketing team, we successfully recruited a new cohort of enthusiastic representatives. Regular virtual meetings and workshops have ensured these reps are well-equipped to promote BIDA SW's mission effectively. Our social media team, also managed by our amazing Arefeh, has excelled in amplifying our presence. We have seen a remarkable increase in engagement, particularly around our Annual Conference and educational sessions. The team's efforts in creating and distributing engaging promotional materials across various platforms have significantly boosted our visibility. Their close collaboration with the teaching team has ensured that our promotional activities are well-aligned with our event schedules.

Since our last report, we have organized and delivered a diverse range of high-quality educational sessions. Our teaching series, led by Lok and Amin, has been a standout success, with seven sessions completed and three more planned. Additionally, we have offered specialized sessions on ENT (Ear, Nose, and Throat),

breast pathologies, paediatrics and history taking, all of which have been well-received by our attendees.

The success of our Annual Conference is particularly noteworthy. Thanks to the meticulous



planning and hard work of Paarth and Renee, the event attracted a significant number of participants and fostered valuable knowledge exchange and networking opportunities. The positive reception of the conference underscores BIDA SW's growing influence and impact. Our increased engagement across all activities is a testament to the effectiveness of our strategies and the commitment of our team.

Looking ahead, we have exciting plans to build on our recent achievements. We will continue our paediatrics series and explore new topics based on member feedback. Collaborations with external experts and guest speakers are being considered to further enhance our educational offerings. Our representative network will be expanded further, focusing on underrepresented medical schools, and our social media strategy will incorporate more multimedia content, including videos and live streams, to better engage with our audience.

Thank you to all our representatives, the executive team, and members for their unwavering commitment.

Aya Hammad

President, BIDA Student Wing

The medicinal Honey value of Honey

Dr Mohamed Elhadi Foundation Doctor, Department of Cardiology, Whiston Hospital, Prescot, UK. **Dr Ravish Katira** Consultant Cardiologist & Clinical Director, St Helens and Knowsley Teaching Hospitals NHS Trust.

Abstract

Honey has been an integral part of the human diet since early times. Not only was it used as a source of energy, but it was also used for medicinal purposes. It contains biochemically active ingredients like enzymes, phenolic acids, and flavonoids, giving it powerful antioxidant properties. Honey has shown that it can influence serum lipids by increasing high-density lipoproteincholesterol and lowering total low-density lipoproteincholesterol, total cholesterol, and triglycerides. It has been shown that it can improve insulin sensitivity via regulating adiponectin levels as well as reduce the oxidative damage done in diabetes, which ultimately leads to its complications. It has also been shown that honey can play a role in reducing body mass index despite being a calorie-dense food. Honey demonstrated systemic effects like cardiovascular, respiratory, gastrointestinal, and neurological benefits. It was shown that it has wound healing and anti-inflammatory potency. It also can resist cancer formation in animal experiments.

Introduction

The consumption of honey has been ongoing since the beginning of time, not only for nutritional but also for medicinal purposes such as wound healing due to its soothing effect in addition to the environmental barrier that it creates, allowing for wound healing. (1,9) A study done by Ranzato et al. suggests that honey enhances activation of keratinocyte re-epithelialization. (21) It is naturally made by bees from the nectar of flowers, which is enzymatically transformed into honey (10). There is evidence that honey exerts anti-inflammatory, antioxidant, anti-bacterial, gastrointestinal, cardiovascular, anti-diabetic, and anti-carcinogenic protective effects. (1, 10) Honey does have a unique characteristic in the sense that it can be stored at room temperature with no need for refrigeration. (1) Honey is highly saturated in carbohydrates. It also contains a number of active ingredients, such as proteins, enzymes, antioxidants, minerals, and vitamins. Thus, giving it a distinctive feature that can be utilized in the field of medicine. The aim of this article is to explore the health benefits of honey while also exploring its potential side effects.

Chemical Structure

The constitution of honey is complex in nature and has at least more than 181 substances, depending on the source. It is mainly made up of fructose and glucose (38% and 31%, respectively). Figure 1 shows the components of honey. It also contains several other constituents, such as enzymes, vitamins, proteins, amino acids, and minerals. Honey exhibits antioxidant properties due to phenolic acids, flavonoids, and certain enzymes like glucose oxidase and catalase. (1)

Carbohydrates make up 95% of the dry weight of honey. It is mainly made up of fructose, glucose, and disaccharides calculated as maltose as it makes up the majority of the

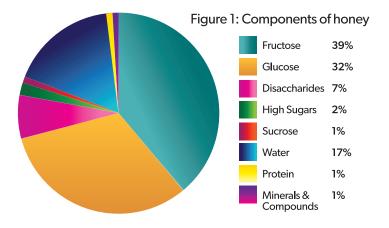


Table 1: Minerals found in Honey.

Minerals in honey in 100g in ranges			
Potassium (K)	10-470 mg		
Calcium (Ca)	4-30 mg		
Sodium (Na)	0.6-40 mg		
Phosphorus (Po4)	2-60 mg		
Magnesium (Mg)	0.7-13 mg		
Iron (Fe)	1-3.4 mg		
Zinc (Zn)	0.2-0.5 mg		
Chlorine	2-20 mg		
Copper (Cu)	0.01-0.1		

disaccharides, though kojibiose, cellobiose, and many more disaccharides are present in honey. Proteins make up 0.5% of honey, along with enzymes and amino acids. The main enzymes found are amylase, invertase, and glucose oxidase, which help breakdown large sugar molecules into small sugar units.

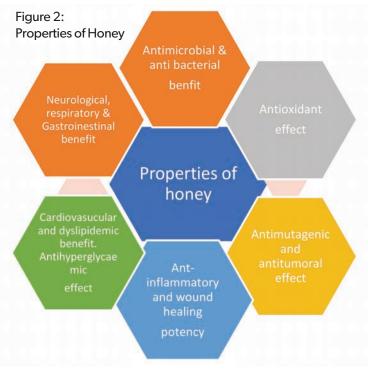
Additionally, amino acids are found in honey, but they only account for less than 1% of the total, and that is mainly proline, which is more than 50% of the total amino acids present in honey. Vitamin content is minimal; however, it contains vitamins K, B1, B2, and B6. Trace elements are also found, such as but not limited to: aluminium, calcium, magnesium, potassium, sodium, zinc, copper, and iron (Table 1). $^{(1,11)}$

Honey also contains polyphenols that exhibit antioxidant and antibacterial properties, these are benzoic acids, cinnamic acids

(both known as phenolic acids), and flavonoids like apigenin, genistein, and chrysin, which can have varying distributions in honey depending on its floral origin. (1) It is known that highly active reactive oxygen species (ROS) are generated via physiological processes in the body. Without the antioxidant activity, it can cause damage on the cellular level to proteins such as deoxyribonucleic acid (DNA) and interact with the cell membrane, particularly the lipid part. The various beneficial effects of honey are shown in figure 2.

Antioxidant Property

Honey has several physiological benefits, one of which is its antimicrobial effect. It does that through its high osmolarity, low pH (3.9), and the chemical effect of hydrogen peroxide. Additionally, honey does exhibit a non-peroxide antimicrobial effect through the action of lysozymes, phenolic acids, and flavonoids. Moreover, polyphenols such as flavonoids and



phenolic acids work alongside other enzymes such as catalase and glucose oxidase, as well as compounds such as ascorbic acid, all of which enable honey to have powerful antioxidant capacity. Several studies have shown that honey causes an increase in antioxidants and reduction properties of serum when it is ingested in a dose of 1.5 g/kg body weight. (1) Another study conducted also showed that honey at a dose of 1.2 g/kg increases antioxidant agents in the blood such as vitamin C (47%), beta-carotene (3%) uric acid (12%), and glutathione reductase (7%).(1)

The antioxidant activity of honey is variable depending on its floral origin. However, it was noted that antioxidant activity can be enhanced using high-pressure processing (HPP). This was shown in a study carried out by Nour et al. using HPP with ambient temperature for 10 minutes can cause an enhancement of up to 30%. (7)

Gastrointestinal and antibacterial benefits:

Honey exhibits a bactericidal effect against several enteropathogenic organisms. It also improved the duration of diarrhoea in patients with bacterial gastroenteritis caused by enteropathogenic microbes. (1) The mean recovery time of gastroenteritis dramatically improved in patients aged between 8 days and 11 years, according to a study done by Haffajee and Moosa.^(1, 14) Due to the anti-inflammatory and anti-bacterial properties of honey, it may be helpful in the treatment of periodontal diseases, stomatitis, halitosis, and pharyngitis. (22) Honey has been shown to have an antibacterial effect by the invitro method; it was able to inhibit growth against several organisms such as E. coli, S. enterocolitis, and S. dysenteriae but not C. jejuni. (16) The results were much more exaggerated with E. coli in comparison to the latter bacteria when the results were compared to antibiotics such as amoxicillin and gentamicin. (16)

Cancer & anti-inflammatory benefit:

Honey possesses antimutagenic activity. Several floral sources of honey were tested, and they all possessed the ability to inhibit 3-Amino-1,4-dimethyl-5H-pyrido [4,3-b] indole (Trp-p1). This demonstrates honey does possess an antitumoral effect. (1) Al Waili and Boni have concluded that after ingestion of 70g of honey, the average plasma concentrations of thromboxane B2 (TXA B2), prostaglandin (2-alpha), and prostaglandin E (2) were significantly reduced by 48%, 50%, and 63 % respectively (1). Tumour implantation in rats has been significantly reduced via the application of the tumour pre- and postoperatively, thus suggesting the possibility that honey can exert an anti-metastatic effect (12). Honey has been shown to exhibit apoptotic activity via depolarization of the mitochondrial membrane and its ability to induce the expression of genes like P53. (15)

Honey was also shown to have an antitumoral and anti-inflammatory effect in a study that was conducted on rats and showed a substantial reduction in tumour implantation via the application of honey pre- and post-operation⁽¹⁾. This is likely secondary to cytotoxic H2O2, COX2 inhibition, and dampening of the effect of ROS, thereby reducing the inflammatory-induced burst (1). It has also been shown that honey can promote wound healing by minimising scar size, which is driven by its anti-inflammatory and antibacterial effects. (1)

Neurological benefit:

Honey plays a role in neurological conditions. It has the potential to reduce oxidative damage to the central nervous system. Polyphenols found in honey have been found to have a neuroprotective effect. (15) Additionally, they play a role in the reduction of inflammation in the hippocampus and, thus, can prevent neurological disorders related to memory as well as improve memory formation of memory. (15) A study performed by Moses Atanda Akanmu et al. on albino mice showed that honey possesses significant anxiolytic, analgesic, hypnotic, anticonvulsion, and antidepressant effects. (14) A study was performed by F.A. Al-Himyari on more than 2000 individuals who were randomly assorted into a treatment group with honey vs. a placebo over a 5-year period. It showed evidence supporting honey having cognitive protection properties, as only 95 individuals receiving honey developed dementia in comparison to 394 individuals receiving a placebo. (19)

Respiratory benefit:

Studies show the benefits of honey as an anti-tussive, achieving results similar to, if not better than, anti-tussive chemicals. The mechanism is thought to be due to honey's ability to improve bronchial epithelial function as well as a reduction in the viscosity of bronchial secretions⁽²²⁾. Aerosolized honey showed improvement in chronic airway inflammation as seen in asthma

Table 2: Studies of honey on human and animal subjects

Author et al	Number participants / animals	Dose of honey & floral origin	Results	Potential Limitations associated with the study
Mina Hemmati et al (Animal study) ⁽²⁾	35 Wister rats were randomly divided into five groups. Diabetic and nondiabetic control groups fed honey (1g vs. 2 g/kg) and a glibenclamide-treated group	1g and 2g/kgJujube lant area	 There was a significant reduction in FBS, Lp(a), total cholesterol, non-HDL-C, TAGs, AIP, and serum MDA. Weight loss was noted, as were increased adiponectin levels in diabetic rats. 	 Sample size is small. The duration of the study was only 3 weeks. Only male rats are tested for the effects of honey.
Suhana Samat et al (Animal study) (20)	30 seven-week-old male Sprague-Dawley rats Subdivided into 5 groups. Normal control (NC), HFD, HFD Gelam Honey, HFD Acacia Honey, and HFD treated with orlistat	Gelam honeyAcacia honeyNo specific dose.	Reduction in glucose, TAGs, and cholesterol when compared to HFD. Leptin, Resistin, liver enzymes and renal function seen improvements when compared to HFD. Results were also comparable to those of orlistat, with the added benefit of a lowered hepatotoxic effect. an increase in adiponectin levels with a reduction in excess weight gain.	 Sample size is small. The study is limited to male subjects. There was no randomization into specific groups. It is unclear whether the same dose of honey was used. The duration was limited to 8 weeks.
Alia MB Al-Tamimi et al (Human study) ⁽⁸⁾	32 healthy participants participated in honey vs sucrose trial.	1.2g/KgClover honey	 Reduction in energy intake and TAGs No significant change in insulin total LDL, HDL-C or weight. 	 Sample size is small. Variation in food habit and consumption The amount consumed is likely not reproducible daily. The cohort used were healthy individuals. The duration was only 4 weeks
Mohsen Bahrami et al (Human study) ⁽³⁾	48 type 2 diabetic patients were randomly assigned to the honey and control groups.	 1g/kg/day for 2 weeks with incremental increase of 0.5g every 2 weeks. Oral natural honey of multifloral origin 	 Significant reduction in body weight, total cholesterol (TC), LDL-C and TAGs and an increase in HDL-C in the honey group. No significant difference was noted in FBS in between groups. (P < 0.01) Significant increase in HbA1c. 	 Sample size is small. Not standardising diet, physical activity, and consumption of calories between groups. The study failed to account for a placebo group that had a substance similar to honey.
N. Yaghoobi et al (Human study) ⁽⁴⁾	60 overweight or obese participants were randomly assigned to an experiment group.	 70g of honey vs 70 g of sucrose per day Natural unprocessed honey. 	 Significant reduction was noted in the honey group, particularly in BMI and FBG in subjects with normal parameters, with non-significant reduction of TC, TAGs, CRP and increased HDL-C. Additionally, a significant reduction in TAGs and hs-CRP in individuals with elevated parameters Non-significant mild improvement in body weight. 	 Sample size is small. There is no standardization of diet regimes, medications, or exercise. The duration of the study was only 4 weeks.
Karsten Muñstedt et al (Human study) ⁽⁵⁾	60 participants with hypercholesterolemia were randomly assigned to receive either 75 g of honey or 75 g of sucrose.	 75g/day. Poly-floral mixed-blossom honey 	Generally, there was no reduction in serum LDL-C. Positive effects were only seen in women. This was noted as women taking sucrose had an increase in LDL-in comparison to honey.	The duration was very short (2 weeks). It included patients who were taking statins as well as those who were not. It also did not account for compliance with medication. Sample size was small.
Yusmaindah Jayadi et al (Human study) ⁽⁶⁾	46 individuals with central obesity non randomly assorted into treatment and control group. Each is receiving obesity education with the addition of honey to the treatment group only.	 70 g / day Honey derived from Apis melifera (western honeybee) 	A significant reduction in total and LDL cholesterol was noted in the intervention group (which consumed 4000 g or more of honey) and in the control group. No changes in TAGs noted. TC decreased significantly as did LDL and HDL cholesterol in the control group.	 The biggest disadvantage of this quasi-experimental design is that it has no randomization. Additionally it cannot eliminate possibility of co-founding bias. Sample size is small. No separation of result between genders The study doesn't necessarily elaborate on whether adherence to the contents given in obesity education was maintained.



in rabbits. It was noted that inflammatory cell infiltration was reduced as well as the hampering of goblet cell hyperplasia; in theory, this can lead to a reduction in mucous secretion. (17)

Cardiovascular benefit:

Honey may potentially replicate its effect in humans as it has been shown to increase high density lipoprotein-C (HDL-C), reduce triacylglycerols (TAGs), very low-density lipoprotein (VLDL), cholesterol, and low-density lipoprotein-cholesterol (LDL-C) in diabetic rats. Additionally, it was able to exert a protective cardiovascular effect via a reduction in the coronary risk index. (18) There may be evidence that points towards honey possessing a significant diuretic effect, which can potentially play a role in hypertension alongside the formation of nitric oxide as well as promoting arterial smooth muscle relaxation. (18)

Honey reduced total cholesterol as well as LDL-C, TAGs, C-reactive protein (CRP), and body weight. Additionally, it increased HDL-C. This effect was more dramatic in patients with elevated cardiovascular risk factors. (1)

Mina et al. (Table 2) explored the effects of honey on lipoprotein a (Lp(a)) and low levels of adiponectin as well as the antioxidant ability of honey (via the reduction in serum malondialdehyde (MDA)) and atherogenic index of plasma (AIP) in rats that were subdivided into nondiabetic control and diabetic control groups as well as honey fed vs. glibenclamide treated rats. In essence, Lp (a) is a cholesterol-rich compound, while adiponectin regulates insulin sensitivity (2). Their study showed that the administration of honey can improve lipid profiles as well as adiponectin levels. This has resulted in a significant reduction in fasting blood sugar (FBS), serum TAGs, total cholesterol, and non-HDL-C levels, as well as a decreased atherogenic index of

plasma (AIP). The study also showed that treatment with honey reduced levels of malondialdehyde (MDA), which is highly toxic and leads to oxidative stress and, as such, may play a role in both the pathogenesis and complications of diabetes. (2)

Mohsen et al. (Table 2) performed a randomized control trial for 8 weeks to test the effect of honey on specific metrics in diabetic patients. Their study included 48 patients, 13 of whom were men and 35 women. One group was given honey, and the other was considered the control group, receiving no honey. Results showed that fasting blood glucose (FBS) changes between both groups were only borderline significant. Conversely, there was a significant reduction in weight, total cholesterol, LDL cholesterol, LDL/HDL-cholesterol, and TAGs. However, HBA1c, HDL cholesterol, and ALT increased. HBA1c could not be accurately assessed as there was no previous measurement to compare it to. (3)

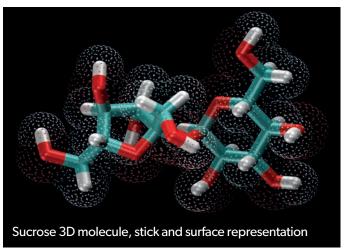
A study conducted by Suhana Samat et al. (Table 2) showed the benefits of 2 different types of honey in preventing significant weight gain in rats compared to the high-fat diet (HFD) group, which gained more weight. Additionally, the adiposity percentage index was lower in obese rats fed Gelam honey. (20) Furthermore, BMI and Lee's index were lower in both the Gelam and Acacia honey fed groups when compared to the HFD group. Honey-fed obese rats were shown to have significantly lower glucose, TAGs, and cholesterol levels when compared to HFD. (20) There is evidence that honey in this study has shown hepatoprotective and renal protective abilities when compared to the HFD group. (20) There was a marked difference in ALP, ALT, and creatinine between these groups. (20)

Yaghoobi et al. (Table 2) conducted a 4-week randomised clinical trial on 60 individuals who are either overweight or obese and were split into a honey-treated group and a sucrose-treated

group. Again, results were very similar to the previous studies, and honey caused a significant reduction of BMI and FBG in subjects with normal values, non-significantly reduced total cholesterol, TAGs, and CRP, and increased HDL-C. This is in comparison to the subjects with elevated variables, which showed a significant reduction in serum TAGs, CRP, total cholesterol, and LDL-c, and a mild, nonsignificant reduction in weight.(4)

In another study done by Karsten Munstedt (Table 2), the authors attempted to see the effect of honey (polyfloral rather than unifloral) on serum cholesterol and lipid values on 60 individuals after 2 weeks. Their study showed that honey did not significantly reduce serum LDL in males; however, it did have an antihypercholesterolemic effect when compared to the honey-like solution (identical composition like water content, glucose, and fructose concentration) in women. (5) Thus, women may benefit from substituting honey for sugar in their diet.

A study was conducted by Yusmaindah et al. (Table 2) to test the ability of honey to change lipid profiles in individuals with central obesity. The study was nonrandomized and had a quasiexperimental design. It included 46 people assorted into 2 groups, one of which received honey for 2 months along with obesity education and the other just obesity education. It showed that consumption of more than 4kg of honey in that period showed a significant reduction in total cholesterol, LDL cholesterol, and HDL cholesterol. However, it had no significant effect on TAGs.(6)



A randomised study was conducted by Alia et al. to explore if honey adversely affects blood lipids in adults. Their study had 40 individuals, randomly assorted into either the honey group or sucrose group over a 1-month period. The outcome of the study showed that consumption of honey at 1.2 g/kg body weight resulted in modest but positive dietary and TAG effects with no overall positive lipid effect. (8) Interestingly, it also showed that there is a notable reduction in energy intake in the honey group, showing lower TAG levels but with no changes to total LDL and HDL-C in either group or between groups. (8)

Adverse effects:

Some adverse effects can be associated with honey, such as the fact that spore forming Clostridium botulinum can remain alive in honey and increase the risk of infantile botulism. (18) It is true that honey increases blood sugar levels, which may, in theory, be problematic in diabetic patients or individuals with impaired fasting blood glucose levels. Fructose, which is naturally occurring in honey, can increase TAGs, which can play a role in obesity and, as such, increase the risk of cardiovascular disease (18).

Honey is a naturally occurring substance. It has several chemically active ingredients that possess several potential therapeutic effects on a multitude of diseases. Several studies have shown its ability to exert an anti-bacterial and anti-inflammatory effect as well as an anti-tumoral benefit. Moreover, it has been shown to have cardiovascular, gastrointestinal, neurological, and respiratory benefits. However, larger human studies need to be conducted to further explore the benefits of honey. Additionally, it seems that different types of honey of different floral origins may possess variable characteristics and effects, and as such, further research in this field is required to draw an accurate conclusion.

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Integrative Approaches in Patient Care - Bridging the Gaps in Western Medicine and Ayurveda



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Abstract

The integration of Western medicine and Ayurveda represents a paradigm shift in healthcare, aiming to blend the precision of modern clinical practices with the holistic traditions of ancient Indian medicine. This approach is increasingly recognized for its potential to offer a more comprehensive and personalised healthcare model. Western medicine, with its focus on evidencebased, technological interventions, excels in managing acute and severe conditions through medications, surgeries, and other interventions. Ayurveda contributes a preventative, personcentred approach, emphasising balance and natural therapies. Integrative approaches focus on combining these strengths to enhance patient outcomes, particularly in chronic disease management, preventive health, and mental wellness. However, integration faces challenges such as differing standards of evidence, regulatory disparities, and cultural variances. This paper explores how integrative care can bridge these gaps, the challenges it faces, and the potential benefits for patient care.

Introduction

Modern healthcare systems predominantly follow the principles of Western medicine, focusing on the diagnosis and treatment of diseases primarily through pharmacological interventions and surgical procedures. While this approach has significantly advanced patient care, leading to remarkable achievements in treating acute conditions and managing chronic illnesses, (1,2) it often overlooks the individual's overall well-being and preventive care. Conversely, Ayurveda, a traditional system of medicine originating in India over 5,000 years ago, emphasises balance and harmony between the mind, body, and environment. It focuses on disease prevention, lifestyle modifications, and the use of herbal remedies, aiming for holistic well-being. (3)

opportunity to enhance healthcare by combining the diseasecentred approach of the latter with the health-centred

The integration of Ayurveda with Western medicine presents an

perspective of the former. (4,5). In fact, integrative approaches in patient care, particularly in bridging the gaps between Western medicine and Ayurveda, represent a holistic path towards more comprehensive healthcare solutions. This fusion aims to combine the precision and advancements of Western medicine with the holistic and preventive aspects of Ayurveda to enhance patient outcomes and promote overall wellness. Here, we explore how these two diverse systems can coexist and complement each other, the challenges they face, and the benefits they offer.

Numerous studies have highlighted the benefits of integrating Ayurveda with Western medicine. A systematic review by Sharma et al. (2017) demonstrated that patients with chronic conditions such as arthritis and diabetes showed significant improvement in symptoms and quality of life when Avurvedic practices were incorporated alongside conventional treatments. (6) Similarly, research found that recovery times in patients undergoing surgical procedures were reduced when Ayurvedic interventions were used in conjunction with standard postoperative care. (7) To further explore the potential of this integrative approach, we propose a mixed-methods research design, including both quantitative and qualitative analyses. Clinical trials will assess the efficacy and safety of combining Ayurvedic treatments with conventional medical practices in managing specific conditions. Simultaneously, interviews and surveys among healthcare professionals and patients will explore perceptions, experiences, and outcomes related to this integrated care model.

Gaps in western medicine that can be filled by **Avurveda**

Western medicine, characterised by its evidence-based approach, focuses on the diagnosis and treatment of diseases primarily through drugs, surgery, and other forms of intervention. It excels in acute care, emergency treatments, and managing complex diseases using state-of-the-art technology. In contrast, Ayurveda, an ancient Indian medical system, emphasises balance





among body, mind, and spirit. It utilises natural remedies, dietary changes, yoga, and meditation to prevent illness and treat health conditions by addressing their root causes rather than just symptoms. Ayurveda considers the unique constitution of each individual, tailoring treatments to the patient's specific needs.

Integrating Ayurveda with Western medicine can address several gaps in current healthcare practices. Firstly, the preventive and holistic nature of Ayurveda can complement the acute care focus of Western medicine, potentially reducing the incidence and severity of chronic diseases. (8) Secondly, Ayurvedic practices can enhance patient well-being and satisfaction by addressing psychological, social, and environmental factors influencing health. Finally, this integration can offer more personalised care options, respecting patient preferences and cultural backgrounds. Challenges to this integrative approach include regulatory hurdles, the need for standardised training for healthcare professionals in both systems, and the establishment of evidence-based guidelines for combined treatments.

Western medicine, with its robust infrastructure and evidencebased methodologies, excels in acute care, surgical interventions, and management of chronic diseases through pharmacological therapies. However, several gaps within this system can be effectively addressed by integrating principles and practices from Ayurveda. These gaps include:

1. Preventive Care

Western medicine often focuses on treating diseases after they have manifested rather than preventing them. Ayurveda, on the other hand, places a significant emphasis on daily routines, dietary guidelines, and lifestyle modifications aimed at preventing disease and maintaining health. (9) In fact, Ayurveda places a strong emphasis on nutrition and dietary practices tailored to individual needs, which can prevent and manage diseases. For example, Ayurveda identifies foods that can aggravate or pacify specific doshas (body energies: Vata, Pitta, Kapha), which can be used to customize dietary plans that complement Western treatments, particularly for metabolic and digestive disorders. (10) By integrating Ayurvedic principles like proper diet, lifestyle adjustments, and stress management, healthcare providers can offer strategies that help prevent chronic diseases, which are prevalent in Western societies.

2. Holistic Patient Care

The approach in Western medicine is typically disease-centric, sometimes overlooking the patient's mental, emotional, and spiritual well-being. Ayurveda provides a holistic model of care that considers the individual's physical, psychological, and spiritual health, offering a comprehensive approach that can fill this gap. (11) Lifestyle is a cornerstone of Ayurvedic medicine, with recommendations that go beyond physical health to include spiritual and emotional well-being. By incorporating these holistic lifestyle changes, such as sleep hygiene, daily routines (Dinacharya), and seasonal routines (Ritucharya), patients may experience improved management of chronic diseases like hypertension and diabetes, areas where lifestyle is known to have a significant impact. (12) Integrating Ayurvedic holistic practices can help address the root causes of illnesses, leading to more personalised and effective care. (13,14)

3. Management of Chronic Conditions

While Western medicine offers numerous treatments for chronic conditions, patients often face side effects or may not achieve complete relief.(15) Ayurveda offers alternative and complementary treatments, including herbal medicines, yoga, and meditation, which can be used alongside conventional therapies to manage symptoms, reduce side effects, and improve quality of life for patients with chronic illnesses. (16) Techniques such as massage (Abhyanga), detoxification (Panchakarma), and other forms of bodywork are designed to reduce stress, manage pain, and eliminate toxins from the body. These practices can be particularly useful in Western palliative care settings or as part of rehabilitation programs to enhance the recovery process and improve quality of life.

4. Personalised Medicine

The largely one-size-fits-all approach of Western medicine may not effectively address individual differences in patient health and disease manifestations. (17) Ayurveda is inherently personalised, with treatments and recommendations tailored to an individual's unique constitution (Prakriti) and current state of health (Vikriti). This approach can help in creating more effective and individualised treatment plans. (18) Ayurveda's use of herbal medicine provides a vast resource of natural products that can be explored for their health benefits. While care must be taken to ensure they do not interact adversely with conventional

Table 1: Ayurvedic remedies used for mental health, their active components, their general mechanisms of action, and similar pharmaceutical medications

Ayurvedic Medicine	Active Principle	Mechanism of Action	Similar Pharmaceutical Medicine
Ashwagandha	Withanolides	Reduces cortisol levels, modulates stress responses ²²	Benzodiazepines (for anxiety)
Brahmi (Bacopa)	Bacosides	Enhances neurotransmission, neuroprotective ^{23, 24}	SSRIs (for depression)
Jatamansi	Jatamansone	Enhances GABAergic activity, neuroprotective ^{25, 26}	SSRIs, Benzodiazepines
Sarpagandha	Reserpine	Antihypertensive, ^{27, 28} sedative, can deplete monoamines	Antihypertensive drugs, Antipsychotics
Tagara (Valerian)*	Valerenic acid	Increases GABA levels ²⁹	Benzodiazepines (for insomnia)
Vacha	β-asarone	Cognitive enhancement, possible modulation of dopamine ³⁰	Antipsychotics, Stimulants

Table 2: Ayurvedic medicines commonly used for musculoskeletal health issues, along with their active principles, mechanisms of action, and their similarities to conventional pharmaceutical medicines:

Ayurvedic Medicine	Active Principle	Mechanism of Action	Similar Pharmaceutical Medicine
Ashwagandha	Withanolides	Anti-inflammatory, strengthens muscles and bones ^{33,34}	NSAIDs, Muscle relaxants
Guggulu	Guggulsterones	Anti-inflammatory, promotes bone and joint health ^{35,36}	NSAIDs, Corticosteroids
Shallaki	Boswellic acids	Anti-inflammatory, analgesic for joint pains ^{37,38}	NSAIDs, Anti-inflammatory drugs
Nirgundi	Nishindine, Acubin	Anti-inflammatory, analgesic ^{39,40,41}	NSAIDs, Analgesics
Rasna	Alpinia galanga, Volatile oils	Anti-inflammatory, analgesic in arthritis ^{42,43}	NSAIDs, Analgesics
Erandmool	Ricin, Ricinine	Analgesic, anti-inflammatory, ⁴⁴ laxative ⁴⁵	NSAIDs, Muscle relaxants

medications, these herbs could offer alternative or complementary options for patients looking to manage conditions with fewer side effects. (19) Incorporating Ayurveda can also lead to a more patient-centred approach, where treatments are adjusted to fit the patient's unique physical and emotional conditions. This empowers patients by involving them in health decision-making, fostering a sense of control over their health outcomes. Combining Western and Ayurvedic approaches can offer patients a more personalised care regimen, potentially leading to better adherence and outcomes. For example, a cancer patient might receive chemotherapy to target the disease directly alongside Ayurvedic treatments to support overall vitality and mitigate side effects.

5. Mental Health Addressed

Mental health is an area where Western medicine often relies heavily on pharmacotherapy. Ayurveda offers a rich tradition of psychological and spiritual practices, including meditation, yoga, and Pranayama (breath control techniques), that can complement pharmacological treatments to support mental health and well-being. (20) Ayurveda's approach to mental health includes not only meditation and yoga but also herbal treatments and specific dietary recommendations to balance mind and body. (21) These can be particularly effective when integrated with psychotherapy and pharmacological treatments in Western medicine, offering a more rounded approach to mental health issues such as PTSD, anxiety disorders, and depression. Here are some examples of Ayurvedic medicines that can be used for mental health problems and their mechanism of action.

Ashwagandha (Withania somnifera): Often used in Ayurveda for stress, anxiety, and to improve overall vitality. It is similar in its calming effect to benzodiazepines but is generally considered to have fewer side effects. Brahmi (Bacopa monnieri): Commonly used for improving memory and cognitive functions. It enhances synaptic communication and is often compared to selective serotonin reuptake inhibitors (SSRIs) used in depression due to its mood-enhancing effects. Jatamansi (Nardostachys jatamansi): This root is used for its sedative properties and can enhance the neurotransmitter GABA, similar to the action of SSRIs and benzodiazepines. Sarpagandha (Rauvolfia serpentina): Contains reserpine, a compound historically used in Western medicine to treat high blood pressure and psychotic symptoms. Tagara (Valeriana wallichii): Known for its sedative properties, useful in treating insomnia and anxiety, much like the role of benzodiazepines. Vacha (Acorus calamus): Used for cognitive enhancement and mood disorders; it influences dopamine systems similar to some antipsychotics and stimulant medications.

We clearly need to remember that no one is advising Ayurveda to substitute western medical treatment, the intention is to think about and reduce the need of pharmaceutical agents if possible.

6. Pharmaceutical Dependency and Side Effects

The reliance on pharmaceuticals in Western medicine can lead to issues such as pharmaceutical drug dependency and adverse side effects. Ayurveda provides a wide array of natural remedies and treatments that can serve as alternatives or complements to conventional drugs, potentially reducing dependency and minimising side effects. (31) Ayurveda may reduce the reliance on certain pharmaceuticals, especially in the management of pain and chronic inflammation, where long-term use of Western drugs can lead to significant side effects. For instance, turmeric — a commonly used spice in Ayurvedic medicine — has been studied for its potent anti-inflammatory properties and can be used to complement Western antiinflammatory drugs. (32)

Many chronic inflammatory conditions have no cure and are dependent on anti-inflammatory agents. Here is an example of some of the agents that can be used to spare pharmaceutical drug dependency.

Ashwagandha (Withania somnifera): Known for reducing inflammation and enhancing muscle strength, it is commonly used to treat conditions like arthritis and muscle weakness, similar to the role of muscle relaxants and NSAIDs. Guggulu (Commiphora wightii): Renowned for its potent anti-inflammatory properties, Guggulu is often used in Ayurveda for arthritis and other inflammatory conditions affecting joints and bones, akin to NSAIDs and corticosteroids. Shallaki (Boswellia serrata): This herb is specifically known for reducing joint swelling and pain, making it a natural counterpart to NSAIDs used for similar conditions. Nirgundi (Vitex negundo): Frequently used for its analgesic and anti-inflammatory effects, particularly effective in conditions like arthritis, comparable to NSAIDs and general analgesics. Rasna (Pluchea lanceolata): Applied both topically and orally in Ayurveda for its anti-inflammatory and analgesic effects, especially in arthritis and muscular pains, similar to NSAIDs. Erandmool (Ricinus communis): Besides its use as a laxative, it's



also noted for its analgesic and anti-inflammatory effects in the treatment of musculoskeletal disorders, paralleling NSAIDs and muscle relaxants.

This synergy of the western medicine and Ayurveda systems can lead to improved health outcomes by reducing reliance on pharmaceuticals, enhancing disease prevention, and promoting a balanced approach to diet and lifestyle. (46) As this integrative practice continues to develop, it holds the potential to transform patient care by offering more holistic, effective, and personalised healthcare solutions.

7. Patient Empowerment and Education

Western medical practices sometimes lack in actively involving patients in their care and in educating them about their health. Ayurveda emphasises patient empowerment through education on diet, lifestyle, and self-care practices, fostering a proactive role in maintaining health and preventing disease. (47) By addressing these gaps, the integration of Ayurveda into Western medical practices can offer a more balanced, comprehensive, and patient-centred approach to healthcare. (48) This integration not only enhances the effectiveness of treatments but also aligns with a growing demand among patients for more natural, holistic, and personalised healthcare options.

8. Impact on Bio-social and environmental health

Western medicine often operates within the confines of the individual's biological and physiological health, occasionally underemphasizing the broader determinants of health, such as environmental and social factors. Ayurveda inherently recognizes the interconnection between individuals and their environment, emphasising the importance of living in harmony with nature and society. (49) It advocates for a lifestyle that respects seasonal cycles and ecological balance, promoting health practices that can mitigate the impact of environmental and social stressors on individual health. This perspective can encourage Western medicine to adopt a more comprehensive approach to health, considering the broader context of patients' lives in treatment plans. (50)

9. Nutritional and Digestive Health

Nutrition is another area where Western medicine's approach can be somewhat limited, often focusing on macro- and micronutrient recommendations without considering the individual's digestive capacity or the energetic properties of foods. Ayurveda offers a rich tradition of nutritional science, emphasising the role of digestion in health and disease. (51) It includes detailed guidelines on dietary choices based on individual constitution, seasonal variations, and the unique qualities of foods. (52) By integrating these principles, Western medicine can enhance its nutritional guidance to support not only physical health but also digestive wellness, which is seen as the cornerstone of vitality and immunity in Ayurveda. (53) Ayurveda in fact provides a unique perspective on nutrition that includes not only the nutritional content of foods but also how they affect individual doshas. This can be integrated with Western dietary

science, which focuses on calories, vitamins, and minerals, to create comprehensive, personalised eating plans that enhance health and prevent disease. Also Ayurveda uses a wide range of herbs and spices that are often lacking in Western diets. These can supplement Western nutritional plans, providing additional micronutrients and health benefits, such as improved digestion and metabolic enhancement.

10. Aging and Longevity

Western medicine has made significant advancements in extending life expectancy, yet the focus is often on the later stages of life, sometimes neglecting the quality of life and holistic well-being in ageing. Ayurveda provides a comprehensive framework for Rasayana (rejuvenation) therapies, which are aimed at promoting vitality, immunity, mental clarity, and longevity. (54) These practices, including specific diets, herbal supplements, and lifestyle modifications, focus on maintaining health and vitality throughout the ageing process. (55,56) Integrating such Ayurvedic practices can offer Western medicine new approaches to ageing that emphasise preventive care, wellness, and the holistic quality of life. Both Ayurveda and Western medicine offer techniques to enhance mobility, mental function, and energy levels in older adults. Integrative approaches can combine physical therapy and surgical interventions from Western medicine with Ayurvedic treatments like massage, tailored exercise routines, and lifestyle adjustments to enhance overall quality of life. Ayurvedic practices such as using herbal supplements and specific dietary regimens can provide natural anti-aging benefits. These methods aim to detoxify the body and nourish it at a cellular level, which can complement Western antiaging treatments such as hormone replacement therapy and nutritional supplements.

11. Stress Management

In the fast-paced modern world, stress is a pervasive challenge,

with Western medicine often offering limited solutions outside of pharmacological interventions. Ayurveda proposes a multifaceted approach to managing stress, incorporating meditation, yoga, herbal treatments, and lifestyle changes that aim to balance the mind, body, and spirit. (57) These practices not only help in managing stress but also in preventing its negative impacts on health. (58) By adopting these holistic stress management techniques, Western healthcare can offer patients more effective tools for coping with stress. Techniques such as yoga and meditation improve the mind-body connection, promoting relaxation and reducing the physiological impacts of stress, such as high blood pressure and cortisol levels. These practices can be integrated into Western lifestyle recommendations for a holistic approach to mental health. Ayurveda emphasises personalised treatment plans based on individual constitution (dosha), lifestyle, and emotional state, providing tailored strategies for stress management. This can be integrated with Western therapeutic techniques such as cognitive-behavioural therapy (CBT) to create a comprehensive treatment plan that addresses both the symptoms and root causes of stress.

12. Chronic diseases and Immune System Modulation

Western medicine's approach to immune modulation is often reactive, focusing on vaccination and treatment of autoimmune diseases without a strategy for naturally enhancing immune function. Ayurveda offers insights into enhancing immunity through natural means, including dietary adjustments, herbal preparations, and lifestyle practices that promote optimal immune function. (59) These practices, grounded in the concept of strengthening the body's innate healing capabilities, can complement Western approaches to immune health, offering a proactive and natural strategy for enhancing resistance to diseases. (60) Chronic conditions such as diabetes, arthritis, and heart disease can benefit from a combination of Western and Ayurvedic approaches. While Western medicine can control symptoms and manage acute episodes through medications and surgeries, Ayurveda offers adjunct therapies such as herbal remedies and Panchakarma (detoxifying treatments), which may help reduce the dependency on pharmaceuticals and improve quality of life.

The integration of Ayurvedic principles and practices into Western medicine holds the promise of a more holistic, preventive, and patient-centred approach to healthcare. By filling the gaps identified in preventive care, holistic patient care, chronic condition management, personalised medicine, mental health, environmental health, nutritional guidance, ageing, stress management, and immune system modulation, this integrative approach can significantly enhance health outcomes. (61) Moving forward, collaborative research, education, and policy development are essential to overcome barriers and fully realise the potential of this synergy. The ultimate goal is to foster a healthcare system that not only treats illness but also promotes wellness, resilience, and a harmonious balance between the individual and their environment.

The future of Integration

In integrating Ayurveda with Western medicine, it is crucial to ensure that both approaches are used in complement, under the guidance of qualified health professionals from both fields. This integration can provide a more comprehensive, effective, and personalised healthcare system. The future of integrating Western medicine and Ayurveda in patient care however hinges on several key initiatives.

- Research and Development: Rigorous clinical trials and observational studies are needed to validate the efficacy and safety of Ayurvedic treatments when used in conjunction with Western medicine. (62) Such research should adhere to international standards for clinical study design, ensuring robust, reproducible results. It is expected that the foreseeable future will see more rigorous scientific research into Ayurvedic practices and remedies, supported by increased funding and interest from both public and private sectors. This research will aim to validate the efficacy and safety of Ayurvedic treatments within the framework of evidence-based medicine, potentially leading to broader acceptance and integration.
- Education and Training: Educational institutions may develop curricula that include both Western and Ayurvedic medicine, training new generations of healthcare providers in an integrative approach. This dual training can facilitate better understanding and collaboration between practitioners from both backgrounds. Developing such curricula that incorporate training in both Western and Ayurvedic medicines for healthcare professionals is important for integration and better patient care. This interdisciplinary education can foster a deeper understanding of both systems, enabling practitioners to offer more comprehensive care options to patients. (63)



- *Policy and Regulation:* As interest in integrative medicine grows, there will be a push to establish clearer regulatory frameworks that can govern the safe practice of combining Ayurvedic and Western treatments. Establishing regulatory frameworks that recognise and integrate Ayurvedic practices within mainstream healthcare systems is essential. (64) This includes the standardisation of Ayurvedic treatment modalities, quality control of herbal medicines, and guidelines for integrative practice. (65,66) This also includes standardising Ayurvedic practices and ensuring they meet safety and efficacy standards comparable to those in Western medicine.
- Cultural Competence: Encouraging cultural sensitivity and competence among healthcare providers can enhance patientprovider communication, improve patient satisfaction, and increase the acceptance of integrative care models. Understanding and respecting the cultural origins and philosophies underlying Ayurveda can facilitate its integration into Western healthcare settings. (67)
- Patient-Centred Care: The core of integrative healthcare should be the provision of patient-centred care. This approach respects the patient's values, needs, and preferences, and supports their overall well-being. (68) By incorporating Ayurvedic principles that emphasise the holistic aspects of health, healthcare providers can offer more personalised and effective care plans. Technology will play a crucial role in connecting the systems and methodologies which will harness integrating diagnostic tools and treatment methods from both systems. Innovations like digital health records that include alternative medicine approaches alongside conventional medicine, as well as Al-driven diagnostic and treatment planning tools that incorporate Ayurvedic concepts, would help effective delivery of the health care.

Challenges and Considerations

Bridging the cultural and philosophical gaps between Western and Ayurvedic medicine remains a significant challenge. Western medicine is often seen as interventionist and based on rapid, measurable results, whereas Ayurveda focuses on balance, prevention, and the slow improvement of overall health. Reconciling these approaches requires both mutual respect and a deep understanding of the underlying philosophies. Ayurveda should never be seen as a replacement for western medicine and vice versa as each has its place. The integration of Ayurveda with Western medicine must be approached carefully, with a clear scientific understanding and respect for both modalities. Collaboration between healthcare providers trained in both fields is essential to ensure safety, particularly in relation to the use of herbal supplements and their interactions with conventional drugs. Moreover, clinical research into Ayurvedic practices can help validate and refine their use in contemporary medical practice.

We know that despite the potential benefits, the integration of Western medicine and Ayurveda faces several challenges. These include:

- Evidence Gap: One of the primary barriers to the integration of Ayurveda with Western medicine is the perceived lack of rigorous scientific evidence supporting Ayurvedic treatments. (69) Bridging this gap requires highquality research studies that can withstand the scrutiny of the global scientific community. (70)
- Cultural and Philosophical Differences: The fundamental

- differences in the philosophical underpinnings of Western medicine and Ayurveda can pose challenges in their integration. (71) Finding common ground while respecting the unique contributions of each system is necessary for successful integration. (72)
- Regulatory Hurdles: The regulation of Ayurvedic medicines and practices varies significantly across countries. (73) Developing standardised regulatory frameworks that ensure the safety, efficacy, and quality of Ayurvedic treatments is essential for their acceptance and integration into mainstream healthcare. (74)
- Professional Acceptance: The acceptance of Ayurvedic practices by healthcare professionals trained in Western medicine can be hindered by scepticism and a lack of understanding. Increasing awareness and providing evidence-based education on the benefits of integrative approaches can mitigate these issues.

The integration of Western medicine and Ayurveda is an evolving field that promises to enrich healthcare practices by offering a more holistic, patient-centred approach. While the path forward includes significant challenges - particularly in terms of standardisation, regulation, and cultural integration - the potential benefits for patient outcomes and healthcare systems globally are substantial. Addressing these challenges thoughtfully will be key to the successful integration of these diverse medical traditions.

Conclusion

Integrating Western medicine and Ayurveda offers a promising avenue for enhancing healthcare delivery by combining the acute and precise treatments of Western medicine with the preventive and holistic approaches of Ayurveda. This integrative model not only promises improved outcomes in chronic disease management and preventive health but also introduces a comprehensive framework for mental health by incorporating stress management and lifestyle modifications. The challenges of evidence standardisation, regulatory acceptance, and cultural integration need to be addressed through collaborative research, education, and policy development. As we move forward, a concerted effort in these areas can help to realise the full potential of a truly integrative healthcare system that is capable of addressing the diverse needs of global populations, thus contributing significantly to the evolution of more effective, holistic, and personalised patient care.

The integration of Western medicine and Ayurveda offers a holistic approach to patient care that harnesses the strengths of both systems. Achieving this integration requires concerted efforts in research, education, regulation, and cultural competence. By addressing these challenges, healthcare systems can move towards a more holistic, patient-centred model of care that promotes health and well-being beyond the absence of disease. As we advance, it is imperative to maintain a dialogue between practitioners of both systems, fostering collaboration that benefits patients and enriches healthcare practices globally. In fact, the integration of Western medicine and Ayurveda represents a promising avenue for enhancing patient care. By combining the strengths of both systems, healthcare can become more comprehensive, preventive, personalised, and holistic. Further research and collaboration among healthcare professionals, researchers, and policymakers are essential to overcome challenges and fully realise the potential of this integrative model.

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Background

Tinnitus is the perception of sound without an external source (1). Symptoms can be unilateral or bilateral, present with or without hearing loss, and resemble ringing, hissing, whistling, humming, buzzing, chirping, or clicking sounds. Tinnitus is further described as pulsatile tinnitus (PT) or non-pulsatile tinnitus (NPT)⁽²⁾. PT is defined as a repetitive, auditory perception that imitates the patient's cardiac rhythm (3) this is further characterised as synchronous and non-synchronous (4). NPT is described as a continuous ringing sensation and is thought to have a considerable subjective component⁽⁵⁾ Tinnitus is most prevalent between the ages of 40 and 70 years, having roughly equal prevalence in men and women (6).

The increased availability and access to magnetic resonance imaging (MRI) has led to increased imaging requests for patients with tinnitus. Requests often do not state the type causing magnetic resonance imaging internal auditory meatus (MRI IAM) requests to be performed to screen for vestibular schwannoma (7). The National institute of clinical excellence (NICE) guidance NG155 outlines the appropriate imaging to be requested

Figure 2: Graph to show the difference in compliance to NICE guidelines (NG155) pre- and post- proforma implementation.

100

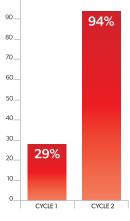


Figure 3: Table to show patient aae. mean, range and aender

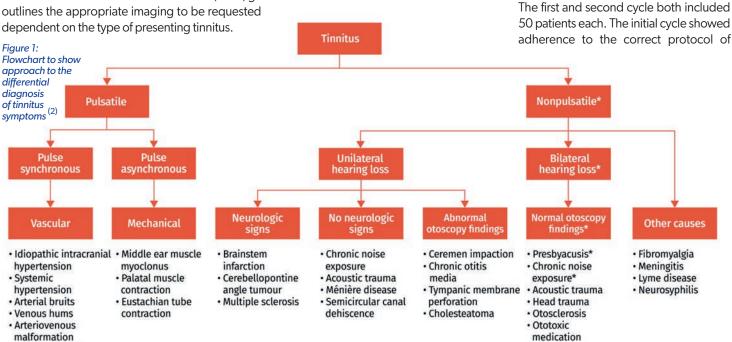
distribution.

	CYCLE 1	CYCLE 2
No. of patients	50	50
Mean Age	57.76	56.46
Age Range	18-88	14-81
Male	20	27
Female	30	23

A retrospective review of 50 patients having undergone MRI IAM imaging requests with tinnitus in the request (cycle 1) were compared with 50 patients having undergone MRI or CT imaging with tinnitus in the request (cycle 2) between October 2022 and May 2023. Data was taken from the local radiology information system.

Results

50 patients each. The initial cycle showed adherence to the correct protocol of



Aim

The objective is to investigate the difference in compliance to appropriate imaging when implementing a proforma requiring information on tinnitus type; PT and NPT in requests relating to tinnitus.

Methodology

Vascular tumours

NICE guidance differs for PT and NPT. In synchronous PT magnetic resonance angiogram (MRA) or MRI head, neck and temporal bone and internal auditory meatus (IAM) is advised if audiological assessment is normal. Or contrast-enhanced computed tomography (CT) of head, neck, temporal bone and IAM if the patient is unable to tolerate MRA or MRI. In non-synchronous PT MRI of the head is advised, if this is not tolerated contrast enhanced CT is advised ⁽⁴⁾.

IMRI IAM is advised in patients with NPT who have associated neurological, otological or head and neck signs and symptoms. If they are unable to have MRI IAM, CT IAM is offered. MRI IAM is to be considered for patients with unilateral or asymmetrical NPT who have no associated neurological, audiological, otological or head and neck signs and symptoms. If they are unable to have MRI IAM, CT IAM is to be considered (4).

12/50. Adherence to the correct protocol and respective imaging increased to 94% following the implementation of the new proforma.

Conclusion

Integration of prerequisite information in the form of a proforma when requesting imaging in relation to tinnitus has led to a significant increase in compliance. This meaningful change improved clinical effectiveness and patient experience. Also, allowing for a reduced need for repeat scans using a different imaging modality. Ultimately, improving department workflow and expenditure.

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Evaluating Diabetes and Cardiovascular Disease Risk at

Health Melas

in Preston and Burnley:

Promoting Lifestyle Changes, Enhancing Healthcare Management, and Providing Hands-On Experience for Students.

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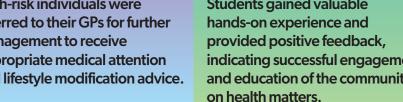
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Highlights:

The Health Melas in Preston and **Burnley effectively identified** undiagnosed health conditions in participants, highlighting the importance of regular community health screenings.

High-risk individuals were referred to their GPs for further management to receive appropriate medical attention and lifestyle modification advice. Students gained valuable hands-on experience and provided positive feedback, indicating successful engagement and education of the community



Abstract

Background: Community health events such as Health Melas are critical in identifying undiagnosed health conditions and promoting public health. This study evaluates the effectiveness of Health Melas in evaluating diabetes and cardiovascular disease (CVD) risk in Preston and Burnley. It also explores the dual benefits of these events in enhancing healthcare management and providing practical training forstudents.

Methods: The Health Mela 2024, a collaborative effort between the National Forum for Health and Well-being (NFHW) and the University of Central Lancashire (UCLan) School of Medicine and Dentistry, was conducted in Preston on April 13 and in Burnley on May 11. A total of 170 participants in Preston and 71 in Burnley utilised the health screening facilities at the health mela. Data analysis was performed on 149 complete datasets in Preston and 56 in Burnley. Participants underwent assessments, including anthropometric measurements, blood pressure, and blood biochemistry. We gathered student feedback through a comprehensive questionnaire to evaluate how the Health Melas have influenced their practical experience.

Results: Out of the 205 participants analysed, 64 were healthy, 48 had previously diagnosed conditions, and 93 were newly diagnosed with conditions including obesity, dyslipidaemia, hypertension, and diabetes. Specifically, 20 participants were newly identified as obese, 41 had dyslipidaemia, 20 had

hypertension, and 12 had diabetes. High diabetes risk was noted in 37 participants, and elevated CVD risk was found in 36 participants. All newly diagnosed individuals were referred to their General Practitioners (GPs) for further management. Students reported significant improvements in clinical skills and community health understanding.

Conclusion: The Health Melas in Preston and Burnley successfully identified many undiagnosed diabetes and CVD cases, underscoring the importance of community health screenings. These events facilitated the early detection and management of chronic conditions and provided invaluable hands-on experience for students. Future initiatives should incorporate long-term follow-up and leverage technology to enhance the sustainability and impact of community health interventions.

Introduction

Health Melas have become increasingly popular for community health outreach, particularly in regions with diverse populations and varying access to healthcare services. (1,2) These events offer a unique opportunity to assess and address the health needs of communities, focusing on preventive measures and early detection of chronic diseases. This study focuses on the Health Melas conducted in Preston and Burnley, aiming to evaluate the risk of diabetes and CVD among attendees, refer them to general



practitioners (GPs) for healthcare management, and promote lifestyle modifications.

As a team from the University of Central Lancashire (UCLan), we joined the Health Mela this year, 2024. We are grateful for an opportunity given by the National Forum for Health and Wealth Being (NFHW) to participate in this Health Mela. It was our first year of experience with the Health Mela team. We had an excellent experience working with the Health Mela team. It was a grand platform that involved local communities, health organisations, and exhibitors. We encouraged all the visitors to get health checks done and to avail themselves of the information given at various exhibitor stalls. It was an excellent way to reach the local communities to promote general health and improve their awareness of health-related issues in a friendly environment. Additionally, the Health Mela event provided invaluable hands-on experience for students, bridging the gap between theoretical knowledge and practical application.

Diabetes is one of the most common chronic diseases in the UK, and its prevalence is increasing. (3) A close link exists between diabetes and CVD, which is the most prevalent cause of morbidity and mortality in diabetic patients. (4,5) Diabetes and CVDs are significant public health concerns worldwide, with increasing prevalence and substantial impacts on morbidity and mortality rates. (4,5) Early detection and management of these conditions are crucial in reducing their burden. (6) Health Melas serve as a practical platform for screening large numbers of individuals, identifying high-risk individuals, and connecting them with appropriate healthcare services. (1,2,7)

In the United Kingdom, areas such as Preston and Burnley have diverse populations with varying levels of access to healthcare. Health Melas in these regions not only facilitate early detection of diabetes and CVD but also play a crucial role in educating the community about healthy lifestyles and preventive healthcare. Participants receive immediate feedback on their health status and are guided towards making necessary lifestyle changes, potentially reducing the long-term burden on the healthcare system. (8,9)

Furthermore, Health Melas offer significant benefits to students. These events provide a real-world environment where student trainees can practice their clinical skills, engage with diverse patient populations, and understand the practical aspects of community health initiatives. This hands-on experience is invaluable in shaping competent and compassionate healthcare professionals better equipped to address the needs of the communities they serve. (10,11)

While the Health Melas conducted in Preston and Burnley have demonstrated potential in screening for diabetes and cardiovascular disease (CVD) risk, a significant gap exists in the literature regarding the feedback from students participating in these events. Specifically, there is limited understanding of how these experiences impact students' practical skills, confidence in clinical procedures, and knowledge of community health needs. Exploring this aspect could provide valuable insights into the educational benefits of Health Melas and help improve the design of future events to serve both the community and the trainees better.

This study aims to evaluate the effectiveness of Health Melas in Preston and Burnley in identifying individuals at risk for diabetes and CVD, referring them to GPs for further management, and encouraging lifestyle modifications. It will also explore the benefits these events offer students, enhancing their practical skills and understanding of community health.

Methodology

The National Forum for Health and Well-being (NFHW) (http://www.nfhw.org.uk) is a registered charity (1159443). The Trustees of the NFHW have permitted this research paper to be published on the condition that it is credited to the NFHW in all publications. Additionally, the Trustees grant permission for the NHS England (NHSE) to share and publish this research paper as part of their toolkit.

This study aims to evaluate the effectiveness of Health Melas conducted in Preston and Burnley in assessing the risk of diabetes and CVDs and their impact on healthcare management, lifestyle modifications, and students' practical skills and community health understanding.

Participants volunteered from the local communities of Preston and Burnley through advertisements in community centres, local newspapers, social media, and healthcare facilities. The study included adults aged 18 and above who were willing to participate and provide informed consent. Individuals with known severe chronic illnesses that require immediate medical attention beyond primary care were excluded during the registration process.

Screening Procedure

Upon arrival at the Health Mela, participants registered and provided informed consent. Participants were assigned unique identifiers to maintain confidentiality.

Anthropomorphic Measurements

Height and Weight:

Height was measured using a stadiometer, and weight was measured using a calibrated digital scale. Body Mass Index (BMI) to assess central obesity was calculated using the formula: $BMI = weight (kg) / height (m^2).$

Blood Pressure Assessments

Blood pressure was measured using an automated sphygmomanometer. Participants were seated and rested for at least 5 minutes before measurement. Three readings were taken at 1minute intervals, and the average of the three readings was recorded.

Blood biochemistry:

A small blood sample was collected via finger prick. Random blood glucose levels and lipid profiles (total cholesterol and HDL) were measured using a portable glucose meter and lipid profile analyser. Appropriate adjustments were made during the analysis.

Student Feedback:

Students involved in the Health Mela were instructed to complete a feedback form regarding their experience, practical skills gained, confidence in clinical procedures, and understanding of community health needs.

Data Analysis

Quantitative Analysis:

Descriptive statistics summarised demographic data, anthropometric measurements, blood pressure and blood biochemistry.

Qualitative Analysis:

Student feedback was analysed thematically to identify common themes and insights regarding the Health Mela experience in Table 2.

Referral and Follow-up:

Data on the number of participants referred to GPs for further management was collected. Follow-up surveys will be conducted after six months to assess the impact of the Health Mela on participants' healthcare management and lifestyle modifications.

This comprehensive methodology provides a detailed evaluation of Health Mela's effectiveness in identifying and managing diabetes and CVD risk, promoting lifestyle changes, and enhancing students' practical skills and community health understanding.

Results

A total of 241 individuals availed themselves of the health screening facilities offered at these events, which was made possible with the invaluable assistance of student volunteers from Year 1 and Year 2 Medical, AUC Medicine, Pharmacy, and Biomedical Science programs from the University of Central lancashire (UCLan). These dedicated students, eager to contribute to the community, had been diligently improving their soft clinical skills in preparation for the event over the preceding week. Activities included practising communication skills, history-taking, vital parameter measurements, and data recording. Alongside clinicians, students provided cardiovascular risk analysis and personalised advice to attendees, fostering a positive rapport evident in the smiling faces of students and community members.

Data analysis was conducted on a complete dataset comprising 205 participants, with 36 individuals excluded due to missing data. Of these, 64 were healthy (50 from Preston and 14 from Burnley), and 48 had previously diagnosed conditions (43 from Preston and 5 from Burnley). The events led to 93 new diagnoses, including 20 cases of obesity (10 from each location), 41 cases of dyslipidaemia (26 from Preston and 15 from Burnley), 20 cases of hypertension (11 from Preston and 9 from Burnley), and 12 cases of diabetes (9 from Preston and 3 from Burnley). Additionally, 37 participants were identified with

Table 1: Summary of Health Assessments and Diagnoses

Category	Preston Mela	Burnley Mela	Combined Total
Total Participants	170	71	241
Excluded Due to Missing Data	21	15	36
Total Analyzed Participants	149	56	205
Healthy Individuals	50	14	64
Previously Diagnosed Conditions	43	5	48
Newly Diagnosed Conditions	56	37	93
 Newly Diagnosed with Obesity 	10	10	20
 Newly Diagnosed with Dyslipidaemia 	26	15	41
 Newly Diagnosed with Hypertension 	11	9	20
 Newly Diagnosed with Diabetes 	9	3	12
High Diabetes Risk	22	15	37
High CVD Risk	19	17	36
Referred to GPs	37	37	74
Previously Diagnosed (No Referral)	43	5	48

Table 2: Students feedback on their experience, practical skills gained, confidence in clinical procedures

Qu	estion	Response Options	Number of Responses (n=35)
1.	Did you find the Health Mela event	Yes, very much	35
	informative and engaging?	Somewhat	0
	3 3 3	Not really	0
		Notatall	0
2.	What was part of the Health Mela event you enjoyed the most?	Health screenings and assessments	29
	(Select all that apply)	Technical demonstrations	15
		Health talks during the breakfast meeting	10
		Exhibits and displays of health products and services	18
3.	Did you think interacting with the patient	Yes, very much	31
	during the Health Mela will help you	Somewhat	4
	in your future placements?	Not really	0
		Not at all	0
4.	On a scale of 1 to 5, how would you rate your	5	21
	communication skills when interacting with	4	13
	individuals from diverse cultural backgrounds	3	3
	during the Health Mela?	2	0
		1	0
5.	How comfortable were you working as a	5	31
	team member during the Health Mela?	4	3
	Please rate on a scale of 1 to 5.?	3	1
		2	0
		1	0
6.	On a scale of 1 to 5, how would you rate	5	29
	your understanding of the roles and	4	6
	responsibilities of different professionals	3	0
	involved in the Health Mela?	2	0
		1	0
7.	Did you feel the information provided	Yes, very much	32
	at the Health Mela event was helpful	Somewhat	3
	and relevant to your health and well-being?	Not really	0
		Not at all	0
8.	How likely are you to change your lifestyle	Very likely	14
	based on the information and resources	Somewhat likely	17
	provided at the Health Mela event?	Neither likely nor unlikely	4
		Somewhat unlikely	0
		Very unlikely	0
9.	How would you rate the overall organisation	Excellent	22
	and management of the Health Mela event?	Good	12
		Fair	0
		Poor	1
		Very poor	0
10.	Would you recommend the Health Mela	Yes, definitely	34
	event to your friends and family?	Maybe	1
		No, not really	0
		No, definitely not	0
11.	Overall, how would you rate your experience	5	30
	as a volunteer at the Health Mela?	4	5
	Please rate on a scale of 1 to 5.	3	0
		2	0
		1	0

a high risk of diabetes (22 from Preston and 15 from Burnley), and 36 were identified with a high risk of cardiovascular disease (19 from Preston and 17 from Burnley). Overall, 74 participants were referred to GPs for further evaluation (37 from each location). These findings underscore the Health Mela events' success in identifying undiagnosed conditions, assessing health risks, and facilitating referrals to healthcare providers, thereby contributing to better health outcomes for the participants.

Table 2 summarises the responses collected from students during the Health Mela event. This feedback provides valuable insights into the effectiveness and impact of the event, highlighting areas of success and potential improvement. Most students found the Health Mela event informative and engaging, with all 35 respondents selecting "Yes, very much." This indicates a strong positive reception



of the event's content and activities. Students were asked to choose their favourite parts of the event, with multiple responses allowed: Health screenings and assessments were the most favoured, followed by exhibits and displays. Most students (n=31) felt that interacting with patients during the Health Mela would benefit their future placements. Four more students found it helpful, indicating positive feedback on this aspect. The overall organisation and management of the event were rated from excellent to good, indicating that the event received predominantly high ratings. However, there is room for improvement in event management. Lastly, the overwhelming majority would recommend the event, highlighting its overall success and positive impact.

Discussion

The Health Melas held in Preston and Burnley provided a unique opportunity to assess the prevalence of diabetes and CVD risk among the local population. Healthcare teams at dedicated screening stations conducted various tests, including blood biochemistry measurements, blood pressure readings, and body mass index calculations.. This data allowed us to identify highrisk individuals for chronic conditions, enabling timely interventions and referrals to appropriate medical services. Furthermore, the melas served as an invaluable training ground for students, who gained hands-on experience in patient assessment, risk factor identification, and providing attendees with health education and lifestyle guidance.

The combined results from the Preston and Burnley Health Melas in 2024 highlight the critical role of community health screenings in identifying and managing undiagnosed health conditions. Out of the 205 participants analysed, 93 individuals were newly diagnosed with conditions such as obesity, dyslipidaemia,





hypertension, and diabetes. These findings underscore the prevalence of these conditions within the community and the importance of regular health screenings.

In Preston, 56 out of 149 participants (37.6%) were newly diagnosed with health conditions, whereas in Burnley, 37 out of 56 participants (66.1%) received new diagnoses. The combined data show a substantial proportion (45.4%) of participants had undiagnosed health issues, indicating a significant need for community health interventions. Dyslipidaemia was the most common new diagnosis (41 participants), followed by obesity (20 participants), hypertension (20 participants), and diabetes (12 participants). These findings align with existing literature highlighting the increasing prevalence of metabolic syndrome and cardiovascular risk factors in the general population. (1,2,7) The risk assessments identified 37 participants with a high risk of diabetes and 36 with elevated cardiovascular disease (CVD) risk. Early identification of these risks is crucial for implementing preventive measures and reducing long-term complications. (6,12,13)

All newly diagnosed participants were referred to their GPs for further management, emphasising the importance of follow-up care in managing chronic conditions. This referral process ensures participants receive appropriate medical attention and lifestyle modification advice to mitigate their health risks. The involvement of students from various programs (Medical, Pharmacy, and Biomedical Science) gave them practical experience in clinical skills, communication, and community health engagement. These experiences are essential in preparing future healthcare professionals to address public health challenges effectively. (1,13,14)

The student feedback from the Health Mela events provided a comprehensive understanding of participants' experiences and



perceptions. All 35 respondents found the Health Mela event highly informative and engaging. Health screenings and assessments were the most favoured activity, with 29 participants highlighting this as a critical benefit. This indicates a high level of interest in practical, hands-on health evaluations. Exhibits and displays showcasing health products and services attracted significant attention, with 18 participants selecting this option. This suggests that interactive displays and access to healthrelated products and services are valuable event components. Technical demonstrations and talks on various health topics during breakfast meetings were appreciated by 15 and 10 participants, respectively. These elements likely provided educational value and practical insights, complementing the screenings and assessments. Most participants felt their interactions with patients during the Health Mela would benefit their future placements. This overwhelmingly positive feedback indicates that these events effectively prepared participants for real-world medical scenarios and patient interactions, a critical aspect of medical education.

The student feedback from the Health Mela events highlights its success in providing engaging, informative, and practical healthrelated activities that align with existing literature. (10,11) The events also appear to positively impact student's preparedness for future medical placements and their likelihood of making lifestyle changes. To build on this success, future events could focus on maintaining high-quality health screenings and exhibits while addressing any logistical or organisational issues noted by the students. Additionally, ensuring clear communication and consistent feedback for all stations can help maintain high satisfaction levels and support student's learning experiences. Thus, the Health Mela events have proven to be a valuable initiative, effectively engaging students while fostering a supportive environment for their personal and professional growth.

Strengths, limitations and future directions:

The successful Health Mela 2024 events in Preston and Burnley emphasised the need for early detection and prevention of diabetes and CVD. Strengthening the collaboration between healthcare providers and community organisations will further empower residents to take proactive steps towards managing their health, fostering a holistic approach to combating these prevalent conditions.

Raising awareness about healthy behaviours is crucial in empowering individuals to participate actively in their health. By providing nutrition, physical activity, and stress management education, we equipped the community members with the knowledge and tools to adopt lifestyle changes that can significantly reduce their risk of diabetes and CVD. This holistic approach addresses the medical aspects of these conditions and empowers people to foster a more sustainable and transformative impact on overall health^(6,13,14).

During Health Melas, medical students and aspiring healthcare professionals were given invaluable opportunities to hone their clinical skills and develop crucial interprofessional collaboration abilities by directly engaging with the local community. This hands-on experience enhances the trainees' practical knowledge and fosters empathy and commitment to delivering holistic, patient-centred care.

Despite its strengths, this study has some limitations. The study primarily collects data during the event, providing a snapshot but not capturing long-term outcomes. While participants were

referred to general practitioners (GPs) for further management, the study does not systematically track follow-up visits or adherence to lifestyle modifications. This limits the ability to assess the long-term effectiveness of the Health Mela interventions. Feedback from students is based on self-reported data, which may be influenced by biases, impacting its accuracy and reliability.

Conclusion:

The successful execution of the Health Mela events in Preston and Burnley highlighted the importance of community health screenings in identifying and managing previously undiagnosed health conditions, thereby contributing better health outcomes. The events also provided valuable practical experience students, contributing to their professional development. Addressina the identified limitations and incorporating long-term follow-up strategies can further enhance the impact of these community health initiatives.



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An interview with Dr Chaand Nagpaul

A brief resumé

Dr Chaand Nagpaul was born in Kenya, and moved with his family to the UK in 1968. He was brought up in North and was trained London, Bartholomew's Hospital medical school, London.

Upon qualifying as a GP he became a partner at his practice in Stanmore, North London, where he has worked continuously for over three decades.

He has also dedicated his professional life representing and supporting doctors. He is past chair of the BMA GPs committee and was the first black and minority ethnic chair of the BMA Council from 2017 to 2022. As BMA chair, he represented doctors working in all disciplines across the UK, and he also led the medical profession through the challenges of the Covid pandemic.

He has long advocated for racial equality in medicine, and was one of the first national medical figures to publicly call out the disproportionate impact of COVID-19 on ethnic minority communities and healthcare workers and demanded a government inquiry to address this. He is a board member of the NHS Race and Health Observatory. He is also chair of the BMA's Forum for Racial and Ethnic Equality.

He is a Trustee of the charity Doctors in Distress and a member of the RCGP Council.

His national accolades include being awarded the CBE in 2015 for services to primary care, a Fellowship of the Royal College of General Practitioners, an Honorary Fellowship of the Faculty of Public Health. He is currently listed in the Health Service Journal's top 50 most influential ethnic minority leaders in the NHS, and in Eastern Eye's 100 most influential Asians in the UK.

His wife, Meena, is a also a GP. He has two children, a daughter who is a junior doctor, and a son who is at university.

What was your best career move?

Choosing general practice as a career. I've never looked back. It enables me to make use of the breadth of medical knowledge that I learnt at medical school in my daily life. It's especially rewarding to treat patients as people, recognising the inter-relatedness of their physical and mental health and their social context. General practice is by nature varied and diverse, and I learn something new every single day.

What motivated you to choose General **Practice?**

Curiously, as a medical student, I was initially set on becoming a hospital physician - that all changed in my fourth year at medical



school the day I walked into a GP surgery in North London for my general practice placement. I was struck in awe as I saw my GP tutor manage the entire textbook of medicine, from examining a newborn baby through to providing end-of-life care, and managing every spectrum of illness in between. That he treated patients as people not episodes of conditions, with continuity of care and the unparalleled trust that patients bestowed upon him, divulging secrets not even shared with their loved ones. This was quite unlike anything I had experienced in any hospital attachment. To me general practice seemed the most difficult and yet the most accomplished job in medicine when done well. From that day onwards, my mind was made up that I positively wanted to become a GP.

What was the best decision you made for your career?

Choosing to become a partner in my practice in Stanmore, North London, the day after qualifying as a GP. It was daunting to become a partner immediately after training, and I was thrown in the deep end, with my two senior partners offering me the job in order to lead the redevelopment of the building. I've been in the same practice 34 years on, in which I have overseen the practice expand to over three times its original size, from a semi-detached house to a bespoke modern multi-professional medical centre. It's been a special experience to have cared for patients from being newborn to now adults, as well as caring for families over

decades. It's also rewarding looking after a large multi-ethnic population, mainly South Asian. Being a partner has also allowed me opportunity to deliver change in the way the practice runs and operates, and we are forever looking at ways to become more productive, efficient, improve workload demand and patient care.

The other important decision I made was to represent doctors, by getting involved in medical politics and the BMA, in endeavouring to make positive change to the working lives of colleagues.

How did you get involved in medical politics?

By accident! I was not involved in nor had any ambitions in medical politics as a medical student nor a junior doctor, until my GP training year, when the Thatcher government imposed the internal market NHS reforms and a new GP contract in 1990. I was incensed feeling that it was introducing perverse commercial incentives in the way GPs cared for patients, and encouraged competition rather than collaboration.

I decided to attend a BMA conference as a newcomer, and passionately spoke out on stage against the government reforms. This resonated with delegates and the media, and I was encouraged thereafter to stand for the national BMA GPs committee which I was elected onto in 1996. That marked the beginning of my national medico-political career and I went on to chair the BMA GPs committee and thereafter BMA UK Council.

What were your main contributions whilst serving as Chair of the BMA GPs committee

I was elected as chair of the BMA GPs committee after punitive imposed changes to the GP contract by the then Health Secretary Jeremy Hunt and a breakdown of relations with the government. I managed to reopen negotiations and reverse 90% of the imposed changes within six months of my tenure, and also secured new investment into general practice, removed bureaucratic demands in the GP contract's quality and outcome framework, and also negotiated guaranteed payments for GP maternity and sickness leave, which was not the case before. I also negotiated changes to the hospital contract to avoid GPs being burdened with bureaucracy. I also actively publicised the pressures affecting general practice in the media to put pressure on politicians to address these.

What were the best decisions you took whilst serving as Chair of BMA?

The fact that I was the first ethnic minority chair of the BMA in its 190 year history was itself a proud moment - something I would have thought inconceivable when I first stepped into BMA House over 20 years previously, when there were no ethnic minority doctors holding the highest positions in the Association. The BMA has come a long way since and I'm pleased to see much greater diversity today in its leadership.

As the first ethnic minority Chair of the BMA in its 190 year history, I felt it my duty to pay tribute to and recognise the incredible contribution of overseas and ethnic minority doctors to the existence of our NHS.

Equally, I wanted the BMA to prioritise addressing racism affecting the profession, and I led a major survey that exposed the scale of disadvantage and poorer experience of ethnic minority doctors in our NHS. I helped organised the BMA's first ever Race Equality summit, and led the BMA's seminal Racism in Medicine research project in 2022. During the pandemic, I publicly challenged the government to address the disproportionate impact of Covid on ethnic minority doctors. I also set up the BMA's first Forum for Racial and Ethnic Equality, which has given voice and engagement to thousands more ethnic minority BMA members, and which I still chair.

I created a BMA IMG workstream, given the additional challenges that IMGs face, and I contributed to the development of the NHS standardised IMG induction programme in England. I was also clear that the BMA itself needed to improve and optimise its own member services to ethnic minority doctors, who are at greater risk of employment related difficulties, and which resulted in commissioning an independent review just before I concluded my tenure.

Notably I presided over the Covid pandemic during my tenure. I was propelled into almost daily media appearances on prime-time television, meetings with ministers and parliamentary enquiries as the nation grappled with the biggest public health crisis it faced in recent history. It was my duty to call out the government's lack of preparedness, shortages of PPE that put healthcare professionals at risk, the debacle of Test and Trace, and inadequate public health policies. My only purpose was to do right by the profession and safeguard the health of the population, and I did my best to speak out and challenge policies which I felt were likely to increase illness and death.

I am also proud to have led a major BMA project Caring, Supportive Collaborative, which defines a vision of an NHS that is properly resourced, with a culture rooted in learning not blame, and where all sectors of the NHS work collaboratively to each other's strengths. The project and its findings have been quoted and drawn upon by several stakeholders.

As BMA chair, I was also outspoken about the failings in the GMC's regulation of doctors, and its disproportionate adverse impact on ethnic minority doctors. I have openly called for wholesale reform of medical regulation, and wrote an article in the BMJ calling for root and branch reform of GMC processes.

On reflection, being BMA chair was the greatest professional privilege in my career. Although I'm a GP, I've always considered myself as part of one profession, and its been so inspiring to have spent time with and represented the entirety of our fantastic medical profession, who are working tirelessly across all sectors and in all specialties to serve the nation.

What are you doing now since concluding your BMA chair tenure?

I've returned to working substantially in my GP practice - it feels so rewarding to be "back home" practising the discipline I feel so proud to be a part of. After decades of trying to influence change at a national level, it is refreshing to make a more immediate difference as a GP on the ground. I continue to fight for investment and support for general practice as a RCGP Council member and chair of North West London Local Medical Committees network. I also represent LMCs on working groups in my Integrated Care Board - to improve digital transformation in primary care, eradicate the bureaucratic hurdles between primary and secondary care, and improving access. I remain committed to race equality as a board member of the NHS Race and Health Observatory and chair of the BMA Race Equality Forum. It's also a privilege to support the well-being of healthcare workers as a trustee of the laudable charity Doctors in Distress.

What is your view on work-life balance?

I became a doctor in an era where it was considered the norm to be "married to your job". I'm glad we have moved beyond those days - I think it is critical for doctors to combine work with protected space for personal interests, rest and recreation, and crucially to have quality time with their loved ones and friends. A sensible work life balance also improves your mental well-being, and enables you to be more productive and positive in your workplace.

Part of creating a work life balance, is learning organisational, time management and delegation skills.

What single change would you like to see made to the NHS?

Having an infrastructure and workforce that is equivalent to the norm in equivalent OECD nations. This is the root of the problems of our health service-it cannot be right that we continue to try and provide care with over 40,000 fewer doctors compared to equivalent nations, and with one third the hospital beds compared to nations like Germany, and with GPs seeing patients at 10-minute intervals, when it is routine in other nations to spend double that time.

What is your favourite book?

To Kill a Mockingbird by Harper Lee. It's had a lasting influence since I first read it as an adolescent, depicting the historic horrific racism against blacks in the USA, and a white lawyer's fight for justice on the behalf of a wrongly convicted black labourer, and being prepared to put his head above the parapet to stand up for what's right.

What are your views about BIDA?

BIDA has a very special place in my heart, since senior figures of the Overseas Doctors Association (as BIDA was known then) offered me support and encouragement from my earliest days of getting involved in medical politics in the 1990s. BIDA has also inspired me in its support and advocacy for our incredible talent of overseas doctors many of whom have worked against so much adversity and challenges to contribute to our health service. Whilst I was BMA Council chair I campaigned jointly with BIDA on so many important issues such as removing visa restrictions for overseas doctors to work in the NHS. I'm proud to have been a member of BIDA for decades, and it's been a privilege to have been a speaker at BIDA events and conferences throughout my career.

What advice would you give to your medical colleagues, who plan to retire from the NHS now?

For medical colleagues who are retiring because they have concluded their career tenure, I would say please enjoy this next phase in your life and do all the things you never had time to do whilst working! However, if you have time, think of ways in which you can contribute your wisdom and experience such as being a mentor.

However, what saddens me is that increasing numbers of colleagues are considering retiring prematurely before they would have wanted to, due to the pressures in the NHS and the negative experiences in their workplace., For them, I would ask that they seek support and advice widely- such as from the BMA or BIDA if they are members, and see if they can carry on working in different ways or roles so that the NHS doesn't fully lose their talent. Of course the solution to this is to address the root causes by creating a fair and rewarding working environment - a clear responsibility for government and policymakers.

What makes you really happy?

Spending quality time with my family and close friends, especially over a relaxed meal. I also feel so uplifted watching live music, and try and go out to concerts as often as I can – from large venues or festivals to intimate jazz clubs.

Do you ever get stressed? If you do, how do you deal with it?

Stress is part of being human, and inevitable as a doctor. What's important is for each of us to have strategies to manage it. For me, I find it invaluable to be able to share stressful issues with my wife or close friends - a problem shared is a problem halved. I also practise relaxation techniques. Music is my ultimate antidote, in particular listening to my hi-fi at full volume! I love all genres of music, from jazz to Bollywood and everything in between, and have a record collection of around 1000 LPs.

Where is your favourite destination in your travels and why?

I love going to India. Although I'm of Indian origin I've never lived there, but with most of my relatives living in Delhi, it's so emotionally enriching to spend time with them. My favourite destination in India is Rishikesh, in the foothills of the Himalayas on the banks of the Ganges. It has a serene, spiritual and timeless feel, in the midst of such natural beauty.



7th BIDA National **Oncology Conference** The Christie School of Oncology



The Education Centre, The Christie NHS Foundation Trust, Manchester M20 4BX Saturday 15th June 2024 – A brief report

Miss Archie Parekh Medical Student, University of Manchester.

Conference Opening and Welcome

We welcomed the clinicians to the 7th BIDA National Oncology Conference. The conference commenced with a warm welcome from **Prof Amit Sinha**, who highlighted the conference's focus on innovation in oncology and the importance of inter and multidisciplinary collaboration in advancing cancer care. He emphasised the theme of this year's conference and outlined the agenda for the day. Prof. Sinha also acknowledged the contributions of the sponsors and partners and expressed gratitude to the keynote speakers and panellists for their participation. The welcome remarks were concluded by encouraging attendees to participate in the discussions actively and to network with peers to share knowledge and experiences.

Dr Neil Bayman, Medical Director at the Christie, welcomed the attendees and the organising team for hosting this conference at the Christie.

Session 1

Prof C R Selvasekar, Consultant Colorectal Surgeon at the Christie, chaired Session 1 of our conference, welcoming 2 keynote speakers and an MDT.

The first keynote speech in this session was delivered by **Dr Sakthi** Karunanithi, Director of Public Health, Lancashire County Council, on Inequalities in cancer care. He focused his talk on cervical cancer. He shared the results of a single-centre audit for cancer incidence that showed increase in cervical cancer coverage when compared with breast cancer. Dr Karunanithi also spoke about how the rates of recognising cancer symptoms were lower in populations with higher rates of deprivation. An apposite discussion of the NHS cancer vaccine concluded the talk with hope for the future in terms of decreased incidence and increased survival of cervical cancer.





This talk was followed by a Breast MDT, facilitated by Ms Vidya Raghavan (Breast ISTP lead, RCS England). Panellists were Ms Vanessa Msosa (Breast Clinical Fellow), Dr Sai Pillarisetti (surgical trainee), Dr Anita Sharma (GP with specialist interest) and Dr Abbas Chittalia (Medical oncologist at the Christie). The panel discussion started off with a case presentation of breast cancer. A summary of the main discussion points is as follows:

- Managing breast cancer in the community and importance of screening.
- Breast screening uptake in different demographics (e.g. in **BAME** patients)
- Screening protocol for LGBTQIA+ patients registered as male, but with female biology
- Communication barriers and tackling misinformation

As a continuation of the last aforementioned point, Dr Pillarisetti shared his initiative, the Ushalakshmi breast cancer app information application, launched in India to support counselling of patients with breast cancer. This MDT received extensive audience participation as well. Mr Sekar brought up the parallels of increasing non-invasive therapeutics between colorectal and breast cancers. The audience furthered the MDT with discussions about breast cancer in males, and sharing data of a pilot mobile screening programme in Liverpool. This MDT raised some very important considerations with regards to the primary and secondary care facilitation for patients with breast cancer, one of the most curable and less morbid malignancies.

Session 1 was punctuated by a talk on the Future of the NHS by Prof. |S Bamrah CBE, Consultant Psychiatrist & Past Chair BAPIO. This talk started off with some fascinating statistics about the NHS, which is made up of 1.7 million healthcare professionals from >120 nationalities. The main challenges plunging into the future of the NHS were categorised as funding, staff, infrastructure and mental health care provision. The NHS only forms 11.3% of the UK's GDP. The healthcare systems of the USA, Germany and France account for 11.6%, 12.7% and 12.6% of the nation's GDP, respectively. Prof Bamrah also ventured into how party politics affect the NHS. The infrastructural frailty of the NHS was discussed using the recent cybersecurity attacks. As some possible solutions, he presented the idea of an Independent Officer for NHS policy and budgeting as an alternative to NHS reforms. Prof J S Bamrah concluded his speech by encouraging learnt optimism over learnt helplessness.

Session 2

Session 2 included 2 keynote speeches and 2 MDT discussions, chaired by Dr Anita Sharma, GPwSi Gynaecology & Chair, Woman Doctors' Forum, BIDA.







Mr Pragnesh Bhatt, Consultant Neurosurgeon and Deputy Director Faculty of Surgical Trainers, started this session with a talk on Recent Advances in Neuro-Oncology, specifically focusing on glioblastomas. These advances were described on 3 fronts:

- Classification: The WHO classification for glioblastoma use the presence and absence of methylation on chemoreceptors as a vital molecular marker.
- Imaging: Advancements in technology such as MR spectroscopy and diffusion tensor imaging may help reduce dependence on invasive procedures, i.e. biopsy, for confirmatory diagnostics.
- Treatment: Mr Bhatt talked about the advances of navigation in surgery using peri-operative aids like scanning (MRI or US) or the "pink-drink" (5-ALA). Some notable advancements have also been the popular awake craniotomy surgeries.

The Skin MDT, facilitated by Mr. K Gajanan, Plastic Surgeon, followed. Panellists included Prof. Agata Rembielak (Consultant Clinical Oncologist) Dr. Patricio Serra (Consultant Medical Oncologist) and Ms. Susy Pramod (TVN Lead). The MDT presented two cases; the first case focused on melanoma, discussing the balance between the potentially curative nature of immunotherapy and its toxicity. The second case involved basal cell carcinoma, a mild and common skin cancer treated by Mohs surgery when simple surgery was ineffective. The discussion expanded to the shift towards radiotherapy for non-melanomas while still being mindful of its side effects. The session concluded with protocols for managing malignant fungating wounds and improving patients' quality of life through good tissue viability and wound healing. An audience question about combined versus mono-immunotherapy protocols was addressed, with the recommendation of 4 cycles of combined treatment, followed by de-escalation to monotherapy, and a scan at 3 months.

Mr. Tim Aldrich, Assistant Director & Lead of the Regulatory

Reform Team at GMC, delivered the next keynote speech on *Regulatory Reform.* He addressed workplace legislation, the roles of physician associates and anaesthesia assistants, and updates on doctors' legislation, providing a comprehensive overview of current and future regulatory landscapes.

Dr Vishal Sharma, Chair BMA Consultant Committee gave a detailed analysis of the positive outcome of the negotiations of the consultant contract with the government. It was heartening to know that the outcome was accepted by the vast majority of the consultants.

The Lower GI MDT, facilitated by Mr. Aseem Jindal and chaired by Prof. C R Selvasekar (Consultant Colorectal Surgeon) and Dr. Jurges Hassan (Consultant Medical Oncologist), was a highly engaging session. It included an interactive guiz for medical students and a detailed presentation of a colorectal cancer case. Key topics included the presentation, investigations, prognostic models and treatment modalities. Advances in treatment were highlighted, noting the recent shift from chemotherapy as the mainstay to molecular profiling for immunotherapy based on mismatch repair gene mutations (e.g. Lynch syndrome). The session also discussed post-discharge stoma management as prompted by the audience. A thorough discussion on colorectal cancer in BAME populations, including cultural, social, and religious stigmas, as well as the impact on sexual health, underscored the need for culturally sensitive care practices.

Session 2 was followed by 3 oral presentations and poster presentation viewings, judged by Prof Sinha and Mr Gajanan.

Session 3

Session 3, exploring 2 keynote speeches and 1 MDT was chaired by Dr Vinod Gadiyar, Consultant Anaesthetist and Treasurer, BIDA.

Miss Meena Chagla, President, Association of Breast Surgery,







delivered a speech on Global Breast Cancer Burden - the need for education and training. Miss Chagla addressed the correlation between breast cancer mortality and lower socioeconomic status, particularly in BAME communities in the UK. She projected an estimated 40% rise in breast cancer incidence by 2040. Miss Chagla shared results from a Needs Analysis Study she her team conducted in Sub-Saharan Africa. The study revealed a 98% response rate, indicating high enthusiasm for healthcare improvement. The most prominent barriers to healthcare were cost and infrastructure, with 75% of respondents unable to afford bus fare to visit a doctor and a six-month waiting time for biopsies (compared to 28 days in the UK). Miss Chagla discussed training community healthcare providers to increase diagnostic specificity and designing a streamlined patient pathway to reduce the to increase diagnostic specificity and designed a new streamlined patient pathway so that only a few patients need to travel to the consultant. She also introduced "Project Bras," a support initiative for breast cancer patients, and a collaboration between the Association of Breast Cancer Surgeons UK and Ambuja (India) to provide training and needs analysis in Zimbabwe.

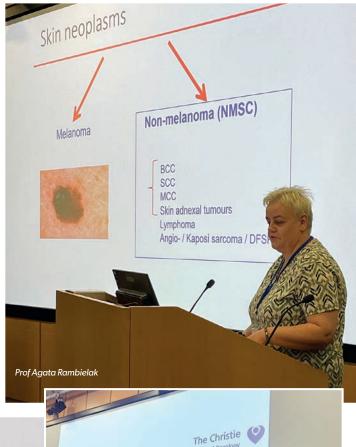
This was followed by another excellent session of the Haematology MDT led by the Facilitator, **Dr Nandani Sadasivam**, Consultant Haematology along with the Panellists consisting of **Dr** Vismay Desai, SAS Haematology and Ms. Archie Parekh, student at the University of Manchester.

The Keynote speech of *Improving* South Asian Screening Uptake, Cancer detection and Support by **Dr** Anil Jain, Consultant Radiologist, Chair Asian Cancer Support Group highlighted the need for collaborative approach to tackle the

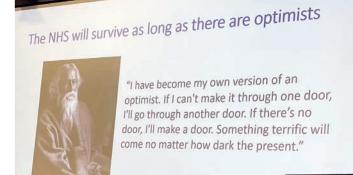




Prof | S Bamrah delivers a talk on the future of the NHS.







cultural issues, lack of communication, awareness and lack of access to the NHS that beleaquers this problem.

Session 4

This session was chaired by **Dr Shamim Rose**, GP at Liverpool.

Dr Sunil Kumar, Lifestyle Medicine Physician and a Specialist Anaesthetist gave the keynote speech of Self-care for Health care *Professionals.* This included comprehensive advice on strategies to enhance confidence, motivation and behaviours to care for the whole person and the wider community. This contributes to an integrated care which includes health, social care, exercise and the environment.

This included a sponsor's Session, 'Update on Pension', delivered by Mr Ollie Hill, the representative from Quilter Finance Limited.

The Keynote Speech by **Professor Rajiv Gupta**, a Consultant Paediatrician, on 'Integrating modern medicine with Alternative and complimentary medicine', was quite enlightening and fresh.

The integration of Ayurvedic principles and other Alternative therapies with practices into Western medicine holds the promise of a more holistic, preventive, and patient-centred approach to healthcare. Moving forward, collaborative research, education, and policy development are essential to overcome barriers and fully realise the potential of this synergy. The ultimate goal is to foster a healthcare system that not only treats illness but also promotes wellness, resilience, and a harmonious balance between the individual and their environment.



BIDA is extremely grateful for the support of these organisations for this Conference:









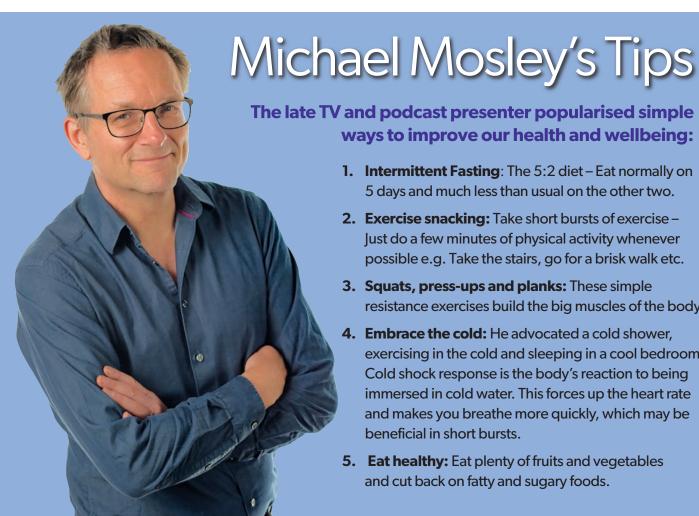








at the heart of healthcare



1. Intermittent Fasting: The 5:2 diet – Eat normally on 5 days and much less than usual on the other two.

2. Exercise snacking: Take short bursts of exercise – lust do a few minutes of physical activity whenever possible e.g. Take the stairs, go for a brisk walk etc.

3. Squats, press-ups and planks: These simple resistance exercises build the big muscles of the body.

4. Embrace the cold: He advocated a cold shower, exercising in the cold and sleeping in a cool bedroom. Cold shock response is the body's reaction to being immersed in cold water. This forces up the heart rate and makes you breathe more quickly, which may be beneficial in short bursts.

5. Eat healthy: Eat plenty of fruits and vegetables and cut back on fatty and sugary foods.

BIDA Awards

Dr Meena Thakur M.B.E.

Congratulations to Meenakshi Nagpaul for receiving the MBE honours in the Kings New Year's Honours list 2024 for services to the NHS.

Dr Thakur has been a GP partner at Honeypot Medical Centre, Stanmore, for nearly 30 years. Dr Thakur is also Clinical Director of Harrow East Primary Care Network, which is a collaborative of three GP practices serving 38,000+ patients in the Harrow East locality.

Meena set up the first Covid vaccination service in Harrow at The Hive, Barnet Football club in December 2020 which resulted in over 60,000 patients being vaccinated during the first few months, and which received national accolades. She facilitated the development of a team of volunteer community champions to protect the most vulnerable. She has championed the care of frail older patients, having led the development of the first virtual wards in Harrow, with specialist multidisciplinary teams caring for patients in their own homes and reducing avoidable hospital admissions. She has previously worked on projects with AGE UK Harrow, including a falls prevention service for the elderly with chair-based exercises and a "Home not Hospital Service". She has led initiatives to improve the health of the community's multi-ethnic population, including culturally sensitive approaches to improve the uptake of childhood immunisations and cervical screening.



Congratulations!





Congratulations to Prof Shiv Pande M.B.E. for receiving a Lifetime Achievement Award from the Royal College of **General Practitioners (R.C.G.P.)**

The award was presented to Prof Pande on 21st June 2024 at the R.C.G.P.'s Head Office, 30 Euston Square, London NW1 by Dr Richard Vautray, President of the R.C.G.P..



Dr Anita Sharma

Congratulations to Dr Anita Sharma, BIDA Woman's Forum Chair, on being recognised as one of "Oldham Borough's Most Inspirational Women".

Dr Sharma was presented with the award on 8th March 2024, the Woman's International Day. She has been leading the way fighting for endometriosis awareness and better health support for women.

A 6-year-old girl is brought to general practice by her mother, who reports that her daughter has had red, watery right eyes for the past three days. The mother mentions that the child has been rubbing her eyes frequently and that there is a clear, watery discharge, but no pus. Upon examination, the conjunctiva is red, but there are no other signs found. There is also mild swelling of the eyelids.

What is the most likely diagnosis?

- a) Bacterial conjunctivitis
- Viral conjunctivitis
- e) Blepharitis
- b) Allergic conjunctivitis
- d) Foreign body in the eye

A 16-year-old boy with a history of sickle cell disease presents to the emergency department with severe penile pain that began suddenly a few hours ago. His mother reports that he has had similar episodes in the past, but this one seems more intense and prolonged. On examination, the penis is swollen and tender to touch. The boy is afebrile and stable.

What is the most likely diagnosis?

- **Urinary Tract Infection**
- b) Balanitis
- Penile fracture
- d) Priapism due to sickle cell disease
- e) Epydidymitis
- A 45-year-old woman with a background history of rheumatoid arthritis, chronic pancreatitis and controlled type 1 diabetes is brought to the emergency department by her daughter. She has been experiencing severe fatigue, nausea, vomiting, and abdominal pain for the past two days. Today, she became disoriented and nearly fainted. On examination, she is found to have low blood pressure at 85/55 mmHg, a rapid heart rate of 120 beats per minute, and generalized muscle weakness. Her skin appears darker than usual, especially in the creases of her hands.

What is the most likely diagnosis?

- a) Diabetic ketoacidosis
- b) Acute gastroenteritis
- Addisonian crisis
- d) Sepsis
- e) Acute pancreatitis
- A 68-year-old man with background history of hypertension and atrial fibrillation presents to the emergency department with a 3-week history of worsening pain in his left foot that is present both at rest and activity. He also reports numbness and a cold sensation in the affected limb. On examination, the left foot is pale and cool to touch, with weak dorsalis pedis and posterior tibial pulses. There are non-healing ulcers on his toes, and capillary refill time is prolonged.

What is the most appropriate next step in the management of this patient's condition?

- Refer urgently to rheumatologist and initiate high-dose corticosteroids
- Initiate pain management and arrange for an urgent outpatient vascular surgery consultation
- Start anticoagulation therapy and monitor and reaccess
- d) Refer urgently to vascular surgery for Amputation
- Refer urgently to vascular surgery for revascularization
- A 45-year-old woman presents to the emergency department with severe 8 OUT OF 10, intermittent right flank pain that radiates to the lower abdomen and groin. She describes the pain as excruciating and states it began suddenly a few hours ago. She also reports nausea and has had one episode of vomiting. On examination, she is afebrile, but appears to be in significant distress due to pain. Urinalysis reveals microscopic haematuria, but no signs

Which of the following is the most likely cause of this woman's symptoms?

- Acute appendicitis
- b) Ectopic pregnancy
- **Urinary tract infection**
- d) Kidney calculi
- Ovarian torsion

Remembering...

Dr Narendra Singh MBE

3rd September 1939 - 3rd March 2024



It is with deep sadness we announce the passing of Dr Narendra Singh on Sunday, 3rd March 2024, at the age of 84 years old.

Originally from Delhi, India, Dr Singh was a beloved General Practitioner who dedicated 50 years to caring for the people of Burnley, East Lancashire. His dedication and leadership earned him "Northwest GP of the Year" in 2008 by the Royal College of General Practitioners. In 2012, Dr. Singh was honoured with an MBE by Her Majesty Queen Elizabeth II, in recognition for his service to the community.

Dr Singh earned admiration and respect within the medical fraternity and was a valued member of BIDA.

His absence leaves a huge void in the hearts of his family, friends, and to everyone who knew him. His legacy of compassion and kindness will endure, serving as a beacon of inspiration and hope.

Shasha Hazel Singh.

Dr Vallepur Rama Krishnan

Dr Vallepur Hanumanthappa Rama Krishnan was the topper of his batch at Bangalore University. In 1976 he began working psychiatry at the National Institute of Mental Health and Neurosciences in Bangalore. He then moved to Ireland and soon after became a consultant neuropsychiatrist in developmental neuro-psychiatry and psychiatry of learning disability (LD) at Hertfordshire Partnership NHS Foundation Trust at Little Plumstead, Norwich in 1993.

He was one of the pioneers who coined the phrase "new long stay" to describe a significant group of patients with Learning Difficulties, mental illness, and behavioural difficulties, who despite deinstitutionalisation, made their way back into hospitals.

He was a founding member of Research in Developmental Neuropsychiatry, (RADiANT), a network involving NHS Trusts, clinicians, patients, and family members.

Passionately committed to patient care and research, he was a diligent and meticulous clinician who had an endearing ability to speak truth to power, however unpalatable that truth was.

He touched the lives of thousands over his 40-year NHS career that continued after his formal retirement.

A friend who was unfailingly steadfast, a colleague who was always dependable and an advisor who was really as wise as he looked.

He passed away on 28th September 2023. He will be dearly missed.

Raj Vallepur (Son)

Remembering...

Dr Jenny Vaughan OBE

Our dear friend of BIDA, Dr Jenny Vaughan, passed away peacefully on 31st March 2024 (Easter Sunday) surrounded by her family. She had been battling breast cancer since

Jenny had been well known as a campaigner locally in West London, having prominent roles in the successful prevention of the closure of Charing Cross Hospital and the Ealing Hospital emergency department. She had also campaigned from within the BMA and as a council member of the Royal College of Physicians. However, Jenny rose to national prominence when she spearheaded the appeal against the conviction and imprisonment of Ealing consultant surgeon David Sellu. Despite having no legal training and against all odds, she doggedly pursued his cause to the High Court, which overturned his conviction in an unprecedented case. The legal team won a "Crime Team of the Year" award for this remarkable achievement and Jenny was subsequently invited to help reform the law on gross negligence manslaughter as applied to healthcare. She later became instrumental in aiding other doctors facing similar accusations, such as the well-publicised cases of Dr Hadiza Bawa-Garba and Dr Manjula Arora. Jenny's fearlessness was acknowledged by the BMA in their "Speaking Truth to Power" Award in 2018 and several other awards followed.

Even while undergoing unpleasant cancer treatments, Jenny continued to speak up for those facing prejudice or difficulties, especially internationally-trained medical graduates in the NHS and private sector. Many BIDA members are indebted to her for helping them directly, for encouraging them to keep going or for setting an example of what it means to stand up for one's principles.

Jenny co-founded and later chaired the Doctors Association UK (DAUK), an organisation dedicated to supporting doctors in difficulty and tackling discrimination in the healthcare sector.



She was a particularly strong voice during the Pandemic, challenging the government to supply PPE more readily to healthcare workers. With DAUK, Jenny also campaigned for a more just culture in the NHS and other healthcare organisations as co-lead of the "Learn not blame" initiative, also calling for reform of regulatory bodies such as the General Medical Council.

Jenny's outstanding impact on the medical community was recognised nationally in the New Year Honours List 2023 with an OBE for services to medicine, presented to her by Princess Anne on International Womens Day in March 2023.

Overall, lenny was a passionate advocate for those who could not find a voice, a fierce fighter against injustice, and a kind compassionate friend and colleague. Her strong Christian faith formed a foundation for every aspect of her life.

She leaves a husband Matt (a general surgeon) and two teenage boys.

Matt Dunckley FRCS (Jenny's husband).

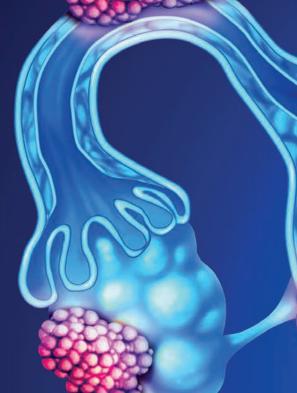


Ending the

Endo Ignorance



GPwSI in Gynaecology. Chair, BIDA Women Doctors' Forum.



It is a word that the public has heard and a term we as medics should be familiar with.

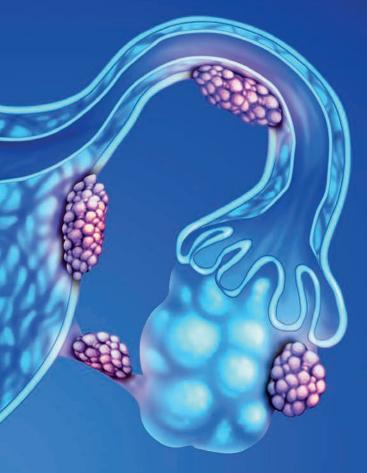
But endometriosis, a debilitating condition that affects 1 in 10 women of childbearing age, remains one of the most under-researched and misunderstood of all ailments. And some of the fault for that, is in our hands.

When I began Endometriosis Awareness North, I was acutely aware of the lack of real knowledge amongst the populace (hence the title). But a survey of



primary, secondary and community colleagues, revealed an alarming lack of understanding amongst our cohort, too.

Case studies confirmed this when they spoke of being told they were too young or old to have the condition, or were dismissed with penicillin when screaming in pain, reminded that this is normal during a menstrual cycle (it isn't) and even told they had made the whole thing up.



The issue with such a discarded condition, is that raising money to fund a proper response - together with training schemes and research projects - is problematic.

But our fledgling charity has touched a nerve and created an army of Endo-warriors (plus their families), to at least get the subject talked about. Ambassadors such as Courtney, who was left wheelchair bound due to constant bleeding or Siobhan who





spent two years isolated in her own home, have carried a torch, and made politicians such as the Mayor of Greater Manchester Andy Burnham, professional medical associations, and the media, listen.

We have of course, got some way to go. Small attitudinal surveys, presentations at conferences, broadcast interviews and awareness raising walks and other events are well and good, but they won't bring the societal change we are looking for.

Despite the lack of pennies, our small army is gold. And its aim is to make the yellow of endo awareness as important as the pink that is so synonymous with breast cancer. My mission is to raise awareness of this condition, promote education among professionals and public and raise funds for Research which is going on in University of Manchester under Professor Kay Marshall.



Sufferers such as Siobhan and Courtney, warriors helped me create this because our society did not rise to the challenge of the chronic curse of endometriosis, deserve so much better.

Support Endometriosis Awareness North, by visiting

www. endometriosis awarenessnorth .com

BIDA Quiz Answers

Q1. C. Viral conjunctivitis

Reasoning. Answer is viral conjunctivitis is characterized by red, watery eyes with a clear discharge The absence of pus support a viral cause. Bacterial conjunctivitis typically presents with purulent discharge, allergic conjunctivitis is usually bilateral and usually causes itching, a foreign body in the eye would likely cause acute irritation and a history of trauma which is not reported by the mother, and blepharitis generally presents with eyelid inflammation and crusting not a red watery eye.

Q2. D. Priapism due to sickle cell disease

Reasoning. Priapism, a painful and prolonged erection, is a common complication of sickle cell disease due to the blockage of blood vessels by sickled cells. The sudden onset of severe penile pain, history of sickle cell disease, and absence of trauma or infection strongly suggest this diagnosis. Balanitis involves inflammation and visible infection and would not be as acute, urinary tract infections typically present with dysuria and urinary symptoms and they patient may have fever, testicular torsion presents with acute scrotal pain, penile fracture is associated with trauma, and epididymitis usually causes scrotal pain and swelling, often with infection signs.

Q3. C. Addisonian crisis

Reasoning. An Addisonian crisis is characterized by severe fatigue, nausea, vomiting, abdominal pain, confusion, hypotension, and hyper-pigmentation. The patient's history of rheumatoid arthritis raises the possibility of adrenal insufficiency due to prolonged steroid use, possibly due to adrenal gland involvement or

medication effects. Diabetic ketoacidosis is another differential diagnosis, but it typically includes high blood glucose levels and ketones, acute gastroenteritis presents with gastrointestinal symptoms but not typically with systemic instability, sepsis would show signs of infection and systemic inflammation, and acute pancreatitis usually presents with severe abdominal pain radiating to the back without the hallmark signs of adrenal insufficiency as discussed above.

Q4. E. Refer urgently to vascular surgery for revascularization

Reasoning. Option E is the most appropriate next step for this patient presenting with symptoms of critical limb ischemia (CLI). While Option A and Option B do not address the immediate need for revascularization, Option C could be considered but is not sufficient alone to resolve CLI. Option D should only be considered if the limb is non-viable, but not as an initial approach. Thus, urgent revascularization is critical to restore blood flow, alleviate symptoms, and prevent limb loss.

Q5. D. Kidney calculi

Reasoning. The patient's presentation of severe, intermittent right flank pain radiating to the lower abdomen and groin, sudden onset of symptoms, nausea, vomiting, and microscopic hematuria without signs of infection, is highly indicative of kidney calculi (renal stones). This clinical picture is characteristic of renal colic caused by the movement of a stone through the urinary tract. Other options do not typically present with this combination of symptoms and urinalysis findings. Therefore, the most likely cause is D. Kidney calculi.













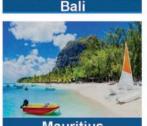


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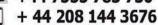






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