

bidā JOURNAL



THE JOURNAL OF THE BRITISH INTERNATIONAL DOCTORS' ASSOCIATION
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Health Mela – A novel way of health promotion? An interview with Prof. Romesh Gupta O.B.E.

A report on the proceedings of the 2023 Preston Health Mela.

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Vitamin D – A Retrospective. Antimicrobial Resistance – Are we losing the battle?

Engaging young adults and children in shaping the future of health programmes.




BIDA 2023 National Conference and Annual General Meeting Announcement.

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Editorial

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



Health Mela

This edition highlights the importance of empowering the public to take charge of their health and wellbeing. The concept is the brain-child of Prof Romesh Gupta OBE. His interview in this edition gives a glimpse of this vision. The National Forum of Health and Wellbeing have turned a novel idea into reality. Over the past 20 years the concept has taken roots and proven its worth. The main attraction at the Mela is the 'Health MOT' – a series of blood tests performed by the Blood drop team. There are other health related clinics as well. This is all done on the spot free of charge.

Joseph Watson and Prof Romesh Gupta and his colleagues had written two separate articles on the value of the Health Mela and presented scientific evidence. These have been reprinted in this edition with permission from the respective editorial offices. The Proceedings of the Health Mela held in Preston in March this year included in this edition once again confirms the popularity of such events. It brings medicine to the doorstep of the public.

Update on industrial action

Throughout May there have been several developments on industrial action in the NHS involving nurses, allied health professionals, junior and now senior doctors. Talks between the UK Government and the Junior Doctors' Committee never materialised. Junior doctors will now take part in what is thought to be the longest single period of industrial action in the history of the health service for five days in July. Industrial action in Scotland by junior doctors is now potentially just a few weeks away on 12 – 15th July. A resolution is urgently required. Meanwhile senior doctors in England are being consulted on taking their own industrial action over restoration of salaries to 2010 level.

BIDA supports these actions taken by the doctors, as they deserve to be paid appropriately. We encourage all parties to now come together to reach swift agreements and avoid strike action if at all possible.

Eligible staff on the Agenda for Change contract – which includes nurses, paramedics, 999 call handlers, midwives, security guards and cleaners – will receive a 5 per cent pay rise, backdated to April. As part of the deal, those eligible will also receive a one-off payment for last year and a so-called NHS backlog bonus for this year, the latter worth between £1,250 and £1,600. Unite members and those in the Royal College of Nursing (RCN) rejected this offer.

Update on GMC

The Employment Appeal Tribunal has allowed the GMC's appeal and

overturned the previous findings of the Employment Tribunal (ET) in case of Mr Omer Karim. This has been a disappointing turn of event as it means that a freshly constituted ET will conduct the whole process again. Williams review in 2018 into gross negligence manslaughter in healthcare included the central recommendation that 'the General Medical Council should have its right to appeal fitness to practise decisions by its Medical Practitioner Tribunal Service removed'. This month marks five years since the government committed to making this change. During the past five years, the GMC has used its power of appeal 24 times. BIDA along with a group of 18 healthcare organisations have united to urge the Government to deliver on its 2018 commitment to strip the General Medical Council (GMC) of its power to appeal Medical Practitioner Tribunal Service (MPTS) decisions before the end of this parliament.

Articles

Rajeev Gupta has penned a very interesting article on *Engaging Young Adults and Children in Shaping the Future of Health Programmes*. His article outlines the strategies and benefits of involvement at an early age in shaping their future, which is anticipated to lead in the future to positive health outcomes.

Dr David Grimes presents yet another candid perspective of the reluctance by the UK medical fraternity to value the importance of Vitamin D during the covid period. We must congratulate him for his persistent efforts to review articles from all over the world on this subject.

The Editorial board of BIDA Journal congratulates the Student Wing teaching team for their tremendous input towards education through their peer-teaching educational programme. By winning the Exceptional Educator prize, they have set up a benchmark.

John Raj, Public Forum Chair and Aarushi Dadhich did a splendid job in organising the "Bugs and Superbugs – Is it a lost battle?" webinar on 17th June. This edition includes the first prize-winner article of the John essay competition of this year.

"True success is not just about individual achievements but also about how we treat others and support others." Anonymous

Amit Sinha

Editor, BIDA Journal



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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Editorial Committee:

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Mr A. Sherfat
Mrs J Srinivasan
Mrs K. Upadhyay

Secretary:

Mrs Alison Sherratt

Editorial Address:

The Editor
BIDA Journal
Suite 6, Princess Chambers
2 Brown Street
Stockport
Cheshire
SK1 1RJ

Telephone:
0161-456 7828

E-mail:
amitani2000@yahoo.co.in
bida@btconnect.com

Website:
www.bidaonline.co.uk

National Chairman's Report

Dear Friends,

I hope you and all your loved ones are keeping well.

It is deeply regretful that the junior doctors pay dispute remains unresolved. And we have recently had another three days of strike action. What is worrying is that there appears to be no end in sight on this front with more junior doctors strikes planned throughout the year. Our consultant colleagues have balloted on the issue of strike action and we await the result of this ballot. I can only imagine the disruption this will cause to the delivery of essential healthcare in an already stretched NHS.

BIDA as an organisation once again urges the government to promptly resolve this junior doctors and consultants pay dispute so that there is no further disruption to patient care.

Arrangements for the 14th BIDA International Congress in November 2023 are in full swing. I am pleased to inform you that we have had a tremendous response from our members and we have filled all available places. Our National Conference and ARM / AGM is

scheduled for 30th September and 1st October. This year it will be hosted by Wigan Division. Please look out for further details from our social media platforms and e-mail. I would urge our members to register early.

We are coming to the end of Spring and entering Summer. The President's Cup cricket tournament has once again attracted a lot of attention and the schedule for all the matches is out.

As always, I hope you enjoy reading the current edition of BIDA Journal. Please do send your feedback and suggestions as this helps us to improve continuously.

Best wishes,

Dr Ashish Dhawan

National Chairman, BIDA.



National Secretary's Report

Dear BIDA Members,

You will be pleased to know that preparations for the Regional and National conferences and the ARM are in full swing. Hope you have put the dates in your diaries (Friday 29th September till Sunday 1st October) at the Mercure Haydock Hotel in Wigan. Our Wigan division team led by Drs Alka Trivedi, Leena Saxena and Shikha Pitalia have organised an educational evening followed by entertainment on the Friday. We have Drs Suresh Chandran, Anita Sharma and Ashish Dhawan the Co-conveners for the National conference on 30th September. The scientific committee have planned a wonderful programme with a fantastic array of esteemed speakers. I am sure the ARM/AGM on 1st October will again be as interesting as last years, which was attended by a record number of members.

I'll be sending the ARM/ Conference registration package to all members soon. This will remain heavily subsidised. I would encourage you all to attend and actively participate to raise the profile of BIDA.

We deeply regret and remain saddened with the suicide of Dr V Kumar in Birmingham recently. On behalf of BIDA I wish to convey our

sincere condolences to the family. BIDA along with BAPIO and BINA have written letters to the Secretary of State for health demanding to establish a Royal commission to securitise all the BME injustices over the years. We have supported the unfairness meted out to Dr Sudheer Shabir by the GMC. BIDA is a signatory along with 18 other leading UK healthcare organisations to remind the government that it is time for them to prioritise removal of GMC's power and the right of appeal against decisions made by the MPTS. Let's hope this happens.

Our membership remains healthy with new members joining in on a regular basis. I welcome them and urge them to write to me if there are any issues. I request members who joined last year to ensure they have filled in the direct debit forms so that their membership continues smoothly.

Mr Amit Sinha

National Secretary, BIDA.



BIDA A.G.M./A.R.M. 2023

Wigan BIDA Division

would like to welcome all BIDA members:

Friday 29th September: Division Scientific Meeting

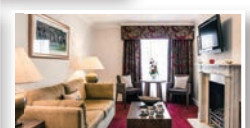
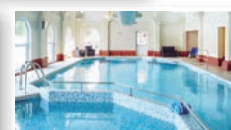
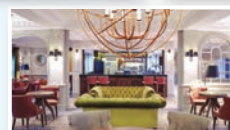
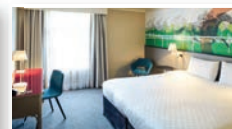
Saturday 30th September: National Conference

Sunday 1st October: BIDA A.G.M. / A.R.M.

at the Mercure Haydock Hotel,

Penny Lane, Haydock, St. Helens, Lancashire WA11 9SG

(All fully paid members are cordially invited to attend, but please note that prior notification to Central Office is required).



Junior Doctors' Forum Report

Dear BIDA Members,

It is a pleasure to write to you again and update you on the progress of the BIDA Junior Doctor Committee.

I would like to begin by welcoming Dr Alireza Sherafat to the BIDA JD Sub-Committee as our Academic & Research Lead. Dr Sherafat is an Academic FY1 doctor (Research) in the East Midlands and I have been working with him closely over the last few years since the inception of the Student Wing in 2020. I know him to be a humble, enthusiastic, and extremely talented individual whose contributions over the years have been immense. He played an integral role in establishing our very successful weekly teaching series at the Student Wing which he continues to supervise today and he has also contributed to the BIDA Journal as a member of the Editorial Board since 2021. I look forward to working with him to further support our members.

We also witnessed the 3rd round of industrial action by Junior Doctors where there was a complete walkout for 72 hours between the 14th and 17th of June. This marked another very successful round with doctors joining picket lines outside hospitals along with rallies in London and Manchester. BIDA stands in solidarity with our colleagues in the BMA and indeed Junior Doctors across the country

in the fight for full pay restoration after wages have faced a real terms pay cut of more than 25% since 2009. The retention of our workforce is the single most important factor to protect our NHS for future generations and we sincerely hope the government will engage in meaningful discussions to settle this dispute.

I believe it is also equally important to value and support the scores of minority ethnic doctors contributing to the NHS and I will be bringing this message to the upcoming BMA ARM where I look forward to engaging with colleagues and advocating for our fellow IMGs and international origin doctors.

Finally, we are continuing to strengthen our BIDA Clinical Attachment Portal by establishing new links and collaborations with several new partners and I look forward to updating you on our progress in the coming months.

Dr Sai Pillarisetti

Chair, BIDA Junior Doctors' Forum



G.P. Forum Chairperson's Report

Dear Members,

General practice has been under a lot of pressure, it was reflected in the recent LMC conference where representatives from all over UK gathered and discussed various issues.

Please see a brief report of LMC Conference Resolutions:

- Survival of General Practice:** The conference requests the BMA to support GPC UK in conducting FOI requests to determine the impact and cost of practice dispersal, mergers, and procurement, as well as the number of patients without a GP.
- GMC support for industrial action:** The conference thanks the GMC for supporting junior doctors' industrial action and demands the same pledge for GPs.
- Cost of living crisis:** The conference acknowledges the rising expenses and energy costs affecting GP practices and instructs GPC UK to negotiate support measures.
- Collapse of the NHS:** The conference calls for collaboration between GPCs, authorities, and stakeholders to ensure patients' access to private healthcare without requiring approval from their NHS GP and to improve follow-up care.
- GP Working Schedules:** The conference advocates for defining GP working schedules in terms of hours rather than sessions and collecting workforce data based on hours worked.
- The role of the Expert Generalist:** The conference recognizes the key role of GPs in primary care and demands merging the specialist register with the GP register.
- Primary Care:** The conference emphasizes that general practice is part of primary care and calls for appropriate recognition and funding.

8. Primary Care Doctors - Performers' List:

The conference asks GPC to reject the GMC's proposed changes allowing non-CCT holders to work as primary care doctors.

9. GP Recruitment and Retention:

The conference calls for efforts to attract medical students to general practice through financial incentives and support.

10. NHS Induction course for GP Trainees:

The conference highlights the need for a fully funded NHS induction course and extra reimbursement for trainers of GP trainees.

11. MRCGP Examination:

The conference asks for lobbying to ensure availability of examination sittings and funding for the first attempt at MRCGP examinations.

12. Professional Standards:

The conference recognizes the strain on GPs and calls for regulators to consider these pressures in complaint investigations, applauds a supportive appraisal process, and rejects mandatory commercial packages for appraisal evidence.

We continue to lobby the government for better working conditions and resourcing of general practice. Please feel free to get in touch if you have any questions and thanks for all your support

Dr Preeti Shukla

Chair, BIDA G.P. Forum



Public Health Forum Chair's Event Report

Event No: 002

Title: **ANTIMICROBIAL RESISTANCE –
ARE WE LOSING THE BATTLE?**

Date: 17/06/2023

Time: 11:00 AM – 1:00 PM

Platform: Microsoft Teams

Lead Organiser: Aarushi Dadhich/ John Raj

Executive Summary:

Recognising one of the most important topics in the 21st Century healthcare world, BIDA Public Health Forum organised an International John Snow Essay Writing Competition on “Antimicrobial Resistance - are we losing the battle?” along with a National Teaching Event on the Event Day online with Specialist People in the relevant fields providing light. We promoted the event via BIDA Platform as well as through social media and networking.

We received 39 excellent essays for the competition held online, following which an event day was held on June 17 2023. The topics covered were:

Bugs and Superbugs

Anti-microbial resistance issues in developing countries

Paediatric anti-microbial policies in the UK

The role of antibiotics in Orthopaedics infections

Past/Present/Future of AMR globally – is the NHS prepared for this?



Educational supremacy was established with Public Health Awareness which attracted a crowd of 30 plus. The event started with the welcome address given by our Public Health Chair – Dr John Raj, followed by presiding address by the BIDA National Chairman Dr Ashish Dhawan. The speaker introductions were alternated between Dr Dadhich and Dr Raj. The 1st topic - Bugs and Superbugs - was given by Dr Rashmi Gupta, followed by the talk on Anti-microbial resistance issues in developing countries by Dr K.V Leela. The 3rd topic on Paediatric anti-microbial policies in the UK was covered by Dr Lucy Hoskyns, followed by the 4th one on The Role of Antibiotics in Orthopaedics infections by Mr Vikram Kandhari. The final topic on The Past/Present/Future of AMR globally – is the NHS prepared for this? was given by Dr Silas Daniel Raj. We had an actively engaging participation from the delegates with regards to question and answers post the presentation for each topic. The judges for the essay writing competition were Mr. Amit Sinha, Prof. Dr K.V.Leela & Dr Rashmi Gupta. Judges note was given by Mr. Amit Sinha along with the announcement of the winners, and the programme ended with the vote of thanks given by Dr Aarushi Dadhich.

Dr J J Raj Muthiah

Chair, BIDA Public Health Forum

Dr Aarushi Dadhich

BIDA Public Health Forum

BIDA Student Wing Report

Inspiring Growth and Advocacy:

President's Report on the Impactful Year of the BIDA Student Wing

Dear BIDA Members,

It is with great honour that I reflect upon my tenure as the President of the BIDA Student Wing (SW) this year, where I had the privilege of collaborating with a group of enthusiastic future doctors and remarkable supervising mentors. This year has proven to be an extraordinary journey of collaboration, achievements, and development for our student community.

Our efforts began by expanding the Student Wing into a larger community, establishing a strong presence in universities across the four nations of the UK. By recruiting members and representatives from all medical schools, we successfully built on our vibrant community wherein numerous students actively participate in various activities, seek support whenever needed, and find opportunities for personal and professional growth. The Student Wing played a pivotal role in advocating for the mental well-being of international medical students and financial support for them. Our active involvement in creating new British Medical Association (BMA) policies has resulted in substantial progress in this regard. Additionally, we successfully organised the BIDA Student Wing National Conference 2023, which provided invaluable career guidance, networking, and support to our student body with over 200 attendance.

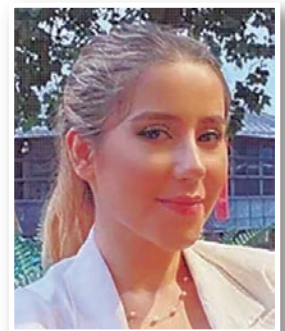
Additionally, by identifying the areas in which students faced difficulties, we took the proactive initiative of designing and organising a National Educational Programme for the 2022-2023 academic year that involved delivering regular weekly peer-teaching sessions to an active attendance

of over 1,600 delegates, encompassing a wide range of medical and surgical specialties. This endeavour aimed to provide all UK students with accessible resources that assist them in overcoming obstacles throughout their academic journey. Moreover, these sessions not only facilitated personal and professional development but also actively engaged students in the process of teaching, fostering a collaborative environment. As a testament to our dedication and success, the SW was honoured to receive the Exceptional Educator prize from MedAll. This prestigious award recognises healthcare organisations and their leaders who deliver accessible, high-quality teaching on a global scale.

In conclusion, serving as the President of the BIDA Student Wing has been a truly rewarding experience. I am immensely proud of our achievements and the positive impact SW has made on the student community. I am grateful for the unwavering support of my team, the dedication of our members and the supervision of our mentors, particularly Dr Sai Pillariseti, Dr Alireza Sherafat, Dr Sanjoy Bhattacharyya, Mr Amit Sinha, and Dr Chandra Kanneganti. Together, we have created a legacy of collaboration, progress, and support for future generations of medical students.

Negin Gholampoor

President, BIDA Student Wing



Celebrating Excellence in Medical Education

BIDA Student Wing National Educational Programme 2022-2023

The BIDA Student Wing is delighted to announce that the BIDA Student Wing (SW) has been awarded **The Exceptional Educator Prize by MedAll** for providing globally accessible, high-quality education. BIDA SW strives to support our members by providing them with the best opportunities and resources to prepare them for medical professions in the future. Facilitating the academic and educational development of our members was one of the core ideas behind the BIDA Student Wing during its inception in 2020. The SW established a vast and supportive teaching and learning network through collaborating with tutors from different institutions and levels.

Over the past year, we have built upon this success by designing an educational programme that addresses specific topic areas where students would benefit from further teaching. Through comprehensive evaluation surveys, we identified the gaps and subsequently provided regular teaching events and catch-up content to over 1,600 delegates across all UK universities. As a result, we received positive feedback and an excellent rating for the quality of our teaching content. Throughout the academic year, we organised four peer-teaching series on a variety of medical and surgical specialties, encompassing nearly 30 teaching sessions. These series included A to E Assessment in Emergencies, OSCE Data Interpretation, OSCE Specialty Teaching, MSK Teaching, and Mock Interviews for Applications to the Specialty Foundation Programme.

The organisation and delivery of teaching sessions involved a senior-year medical student, a supervising junior doctor, and a consultant in the related field, ensuring the quality of teaching. Some teachings were taught by junior doctors, some were taught by senior medical students under the supervision of senior doctors, while others were taught jointly by both a doctor and a student. Based on the teaching evaluation surveys, it was found that, on average, attendees reported a 45% improvement in their understanding of the topic after attending the sessions. Additionally, 95% of attendees reported finding the involvement of their peer medical students helpful in the teaching process.

We would also like to take this opportunity to extend our heartfelt gratitude for the

unwavering support of Mr. Sanjoy Bhattacharyya, who was instrumental in establishing the teaching series three years ago and has since actively supported, contributed, and engaged with our committee members for the various series and sessions. In addition, we would also like to thank Dr. Alireza Sherafat, Dr. Sai Pillarisetti, Mr. Sinha and Dr Chandra Kanneganti for their support over the years.

In February 2023, the BIDA Student Wing National Conference 2023, "Above and Beyond Medicine," was held. With our greatest appreciation to our speakers, delegates were able to discuss the medical field beyond traditional practice and learn about alternative career paths and opportunities for medical professionals. With over 200 registrations and 36 abstract submissions, we were ecstatic to display 15 poster presentations and four oral presentations. BIDA SW desires to continue organising our annual international conference and providing our members exceptional opportunities to interact with and learn from prominent professionals in their respective disciplines.

In conclusion, this year's educational programme was full of success and achievements for our student community. In the future, the BIDA SW will continue to operate and expand our educational programme involving student members as much as possible.

BIDA Student Wing Teaching Team:

Negin Gholampoor, *President*

Amir Hossien Sharif, *Vice President*

Rebecca On Yu Lee, *Teaching Series Lead*

Hossein Abdolmohammadpour Bonab, *Teaching Series Lead*

Parham Shojaei, *Teaching Series Lead*

Paarth Kishan Gupta, *Conference Chairman*

BRITISH INTERNATIONAL DOCTORS' ASSOCIATION
BIDA SW NATIONAL CONFERENCE 2023
ABOVE AND BEYOND MEDICINE

VIRTUAL CONFERENCE ON MEDALL
Saturday, 4th February, 9:30AM

PRIMARY SPONSOR **General Medical Council**

- One week to go
- 150+ registrations
- 35+ abstract submissions
- 10+ speakers

Registration link below www.bidasw.com

BRITISH INTERNATIONAL DOCTORS' ASSOCIATION
BIDA SW NATIONAL CONFERENCE 2023
ABOVE AND BEYOND MEDICINE

VIRTUAL CONFERENCE ON MEDALL
Saturday, 4th February, 9:30AM

KEYNOTE SPEAKERS

- Dr Chris Agbo**
President MANSAG
- Dr Preeti Shukla**
Chair BIDA GP Forum & General Practitioner
- Dr Asha Thomson MBE**
Speciality Oral and Maxillofacial Surgery, Senior Leadership Fellow East Anglia

Registration link below www.bidasw.com

BRITISH INTERNATIONAL DOCTORS' ASSOCIATION
BIDA SW NATIONAL CONFERENCE 2023
ABOVE AND BEYOND MEDICINE

VIRTUAL CONFERENCE ON MEDALL
Saturday, 4th February, 9:30AM

KEYNOTE SPEAKERS

- Prof Iqbal Singh CBE**
Chair, CESOP (Centre of Excellence in Safety for Older people)
- Dr Emma Runwick**
Current Deputy Chair of the BMA Council & Junior Doctor
- Dr Chand Nagpal CBE**
Chair, BMA National Forum of Racial and Ethnic Minority and GP

Registration link below www.bidasw.com

Empowering local communities to make lifestyle changes: is the Health Mela a potential solution?

Joseph Watson
Rajbhandari Satyan
Romesh Gupta
Martin Myers
Robert Campbell
Elizabeth Macphie

- ◆ This study suggests the Health Melas access South Asian populations and people from a lower Index of Health Deprivation and Disability.
- ◆ Health Melas are able to identify high rates of modifiable CVD risk factors along with a high proportion of attendees at intermediate to high risk of CVD.
- ◆ Community public health interventions in the style of the Health Mela could be feasible tools for accessing, screening and advising some communities at high risk of CVD.

Abstract

BACKGROUND Health Melas are community-led public health events held in the North West of England that provide health information and free health checks. This descriptive observational study evaluates whether Health Melas are able to identify undiagnosed cardiovascular disease (CVD) risk factors in hard-to-reach communities and encourage individuals to make lifestyle changes.

METHODS Attendees >18 years at three separate Health Melas in 2016–2017 were invited to participate in screening and counselling for CVD risk factors as part of a Health MOT. Information was collected about demographics, CVD risk factors, blood pressure, total cholesterol, blood sugar and attendees' feedback. QRISK2 scoring system was used to estimate CVD risk.

RESULTS 375 attendees completed a questionnaire. The highest proportion (36.9%) of attendees were from areas of the lowest Index of Health Deprivation and Disability quintile; 38.8% were of South Asian ethnicity. Of the attendees who were eligible for a free National Health Service Health Check, 9.1% had received one. Overall, 57.5% of all attendees had a QRISK2 score ≥10% (of whom 56.9% were not on statins), 92.2% of attendees believed the Health Mela will help them to make lifestyle changes, 98.2% said they had improved their understanding of their health, and 99.6% thought the Health Mela was useful. 73.6% of those who had received a previous Health MOT reported making lifestyle changes. There was a positive correlation between South Asian ethnicity and QRISK2 score.

CONCLUSION This study suggests the Health Melas successfully involve South Asian populations and people from a lower Index of Health Deprivation and Disability. Attendees felt the events were useful, improved understanding of their health needs and encouraged them to make lifestyle changes. High rates of modifiable CVD risk factors were newly identified and a high proportion of attendees were found to be at intermediate to high risk of CVD.

Introduction

There is a high prevalence of poor health behaviours in the UK. Almost one-sixth of all UK adults smoke¹; over three-fifths are overweight or obese²; and one-fifth drink excess alcohol.³ Poor health behaviours contribute to a plethora of diseases, the most significant of which is cardiovascular disease (CVD). CVD is the second biggest cause of death in the UK⁴ and the biggest cause of death worldwide.⁵

The primary intervention currently employed by the National Health Service (NHS) to identify individuals at high risk of CVD is the NHS Free Health Check. This service is offered to people aged 40–74 years

who do not have coronary heart disease, chronic kidney disease, diabetes, hypertension, atrial fibrillation, past transient ischaemic attack, hypercholesterolaemia, heart failure and peripheral arterial disease, and are not prescribed statins and were not found to be at high risk for CVD on a previous health check. This predominantly takes place in general practice surgeries and local pharmacies.⁶ Programme data for 2013–2018 (5-year cumulative)⁷ suggest that only 69.7% of the eligible population have been offered an NHS Health Check. Furthermore, of those offered, only 48.5% received one. This is significantly less than the target uptake of 75%.⁸ Common suggestions as to the reason for this include lack of awareness or knowledge, misunderstanding the purpose of the NHS Health Check, aversion to preventive medicine, time constraints, difficulties with access to general practices and doubts regarding pharmacies as appropriate settings.⁹

The South Asian population in particular are more likely to experience barriers to accessing healthcare¹⁰ and have a higher incidence of long-term illness and larger disparities in health compared with the general population.¹¹ This is especially the case for type 2 diabetes and CVD. Migrant South Asians have a fourfold higher risk of developing type 2 diabetes, develop diabetes from a younger age¹² and are at significantly higher risk of having a CVD event compared with Europeans.¹³

Started in 2001, the Health Mela aims to overcome these problems by taking healthcare services to these hard-to-reach people, particularly those from a South Asian background given the aforementioned risks of type 2 diabetes and CVD. The Health Mela does this in the format of free community events incorporating health checks, a health information fair and some form of entertainment such as a performance or workshop. They have been held in local community centres, schools and university grounds and usually take place all day on a Saturday. The Health Mela health check, referred to as a Health MOT (HMOT), uses a similar structure to the NHS Health Checks. It calculates a QRISK2 score which is then communicated to the attendee as their likelihood of having a cardiovascular event within the next 10 years. QRISK2 score is the current National Institute for Health and Care Excellence (NICE) recommended assessment tool for CVD.¹⁴ The word 'mela' is a South Asian term referring to a 'fair' or 'gathering'. Health Melas currently run in eight different locations in the North West of England and are sponsored by public and non-governmental organisation donations.

Two similar programmes of note are a screening programme for CVD in North London described by Rao et al¹⁵ and the South Asian Cardiovascular Health Assessment and Management Program (SA-

CHAMP) in Alberta, Canada described by Jones et al.¹⁶ Similar to the Health Mela, these programmes aimed to primarily screen South Asians for CVD risk factors. They recorded blood pressure, blood glucose and blood cholesterol levels as primary screening measures to determine QRISK2 scores. These studies provide support for the feasibility and value of screening and counselling South Asian communities for CVD risk factors like the Health Mela. The Health Mela hopes to build on these studies to implement a programme in a different geographical context (the North West of England), aiming to extend the programme to a wider audience and reach people from areas of poor health as well as those of South Asian ethnicity.

The last 10 years have seen a growing re-evaluation of public health interventions. The NHS Five Year Forward Plan (2014)¹⁷ states that *'the future health of millions of children, the sustainability of the NHS, and the economic prosperity of Britain all now depend on a radical upgrade in prevention and public health'* (p9). This is a reiteration of the NHS 2010–2015 Department of Health report,¹⁸ which advocated *'a paradigm shift in health – away from 'diagnose and treat' towards 'predict and prevent''* (p20).

The Health Mela is part of the practical and community-focused response to this directive.

The objectives of this study were the following:

- Assess participation of hard-to-reach communities in Health Melas, defined as South Asian communities and people living in areas with a poorer Index of Health Deprivation and Disability (IHD).
- Assess the utility of Health Melas at encouraging attendees to make lifestyle changes.
- Assess the utility of Health Melas to screen for undiagnosed risk factors, including raised blood pressure, raised blood glucose, raised cholesterol and QRISK2 score.

Methods

This descriptive observational study analyses data collected from attendees at three separate Health Melas from 2016 to 2017 (Preston 2016; Leyland 2016; Preston 2017). The events were open to the general public, free to attend and advertised through local schools, religious centres, community centres and posters. They took place in a local school (Leyland) and university hall (Preston). An HMOT form was completed by healthcare volunteers for every attendee who participated in a health check. Feedback questionnaires were handed out to every individual who completed a health check. The questionnaires were completed immediately after finishing the HMOT. All adults (≥ 18 years) who attended HMOT and completed a feedback questionnaire were included in the analysis. HMOTs were not limited to those eligible under the NHS Health Check inclusion criteria, but any adult who wished to receive health advice could attend. Any answer that was illegible or absent was recorded as missing.

The HMOT form included questions on demographics (name, date of birth, gender, ethnicity and general practitioner (GP) details), details of relevant lifestyle and medical history, as well as measurements recorded at the Health Mela. These were height and weight (from which body mass index was calculated), blood pressure (obtained with automatic blood pressure monitor), random glucose and total cholesterol (obtained via on-site finger-prick point-of-care testing), a calculated QRISK2 score, and the health goals and advice discussed during the consultation. Variation in measuring height and weight was reduced by giving the same instructions to each person being measured. This included asking them to remove coats and shoes beforehand. Inaccuracies in measuring blood pressure were reduced by repeating raised readings (systolic blood pressure ≥ 140 mm Hg). This also reduced the effect of abnormal results due to anxiety people may have felt at having their blood pressure measured. All point-of-care testing was verified, validated and

operated by volunteer clinical biochemists from Lancashire Teaching Hospitals Trust, all measuring and counselling were performed by trained medical students from the University of Manchester and the University of Central Lancashire, and all HMOT forms were reviewed by a supervising consultant clinician from Lancashire Teaching Hospitals Trust. For the purposes of this paper, CVD risk factors are described as suspected (contra diagnosed) due to measurements and counselling being performed by medical students, not registered practitioners. Concerning results were sent to the relevant GP for formal diagnosis and follow-up. A HMOT took approximately 30 min to complete.

The feedback questionnaire included questions on demographics (initials, date of birth, postcode and sex), previous attendance at a Health Mela, whether attendees made lifestyle changes after a previous HMOT, and a 5-point Likert scale of attendees' perception of the usefulness of the HMOT (strongly agree, agree, neutral, disagree, strongly disagree).

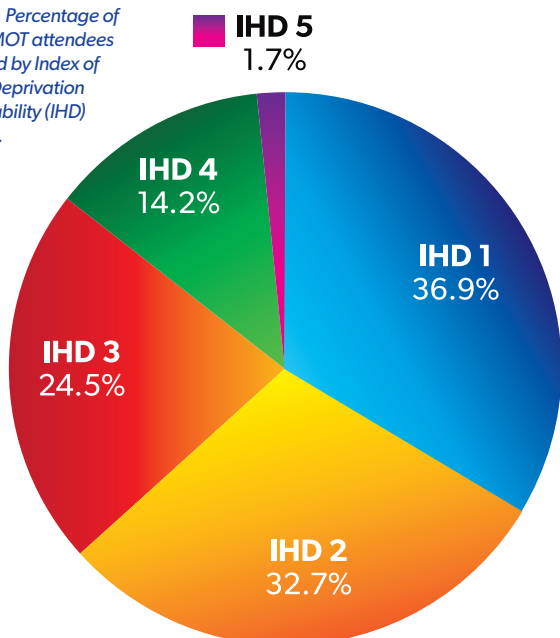
The questionnaire and HMOT form were matched using date of birth and initials which were recorded on both sheets. There were no forms with more than one match for date of birth and initials. Data were analysed using StatsDirect and GraphPad Prism. Not all forms were completed uniformly: ethnicities recorded as 'Hindu' were collated as South Asian; illegible or non-existent postcodes were recorded as missing. Analysis was primarily descriptive and used the frequencies and crosstabs functions of StatsDirect. A two-way analysis of variance using GraphPad Prism was performed to assess for possible interaction between ethnicity and IHD quintiles on QRISK2 score. Comparisons were only made between people of South Asian and white ethnicity, and people from IHD quintiles 1–4. This was because there were too few attendees of other ethnicities or IHD quintile 5 with complete data to compare reliably (most had a sample size of 1 or 0). Individuals with a known CVD risk factor or on treatment were excluded from analysis of that variable only. Health deprivation was assessed using the IHD. This was obtained by linking attendees' postcode to an associated ranked decile via the English Indices of Deprivation 2015 tool.¹⁹ Individuals were grouped into quintiles of health deprivation. Quintile 1 indicated that an individual was from an area of the most health deprivation and quintile 5 indicated an individual was from an area of least health deprivation. All results were recorded as percentages of the data set available for each variable.

Results

The results included data from a total of 375 people: 145 were from the Preston 2016 Health Mela, 148 were from the Preston 2017 Health Mela and 82 were from the Leyland 2016 Health Mela. Of these, 218 were female, 154 were male and 3 did not disclose their sex. Of the 375 people, 250 (67%) had at least one question or piece of data from their questionnaire or HMOT incorrectly completed or missing. The most common missing data were from feedback questions about attendees' perception of the event. Of the people attending 56.5% were white British, 38.8% were of South Asian ethnicity (Indian, Pakistani, Bangladeshi), and 5.8% were Afro-Caribbean, other white (other European or North American), Arab or other Asian ethnicity. The highest proportion (36.9%) came from areas with the worst level of health and disability, with fewer attendees coming from areas with better levels of health and disability (see figure 1). Only 1.7% of attendees came from areas in the fifth IHD quintile (the best levels of health and disability). Worsening health deprivation showed a positive trend with newly suspected CVD risk factors (see figure 2). On initial screening, 11.2% of attendees reported having diabetes, 21.8% reported hypertension and 22.5% reported being on statins.

Of the attendees reporting as healthy for a specific variable, 20.0% were identified as having raised systolic blood pressure (≥ 140 mm Hg), 2.2% had raised random blood glucose (≥ 11.1 mmol/L) and 20.4% had had raised cholesterol (≥ 5 mmol/L). In total, 57.5% of all

Figure 1: Percentage of Health MOT attendees arranged by Index of Health Deprivation and Disability (IHD) quintiles.



attendees ≥ 18 years had a QRISK2 score $\geq 10\%$ and 27.9% had a score $\geq 20\%$. If the NHS Health Check exclusion criteria were applied (40–74 years without known CVD risk factors and not on lipid-lowering therapy), 40.8% of attendees had a QRISK2 score $\geq 10\%$ and 13.4% had a score $\geq 20\%$ (see table 1). Of attendees under 84 with a QRISK2 score $\geq 10\%$, 110 (68.8%) were not prescribed statins.

The questionnaire showed that 99.6% of people either agreed or strongly agreed that the HMOT was useful; 98.2% of people either agreed or strongly agreed that the Health Mela and HMOT have helped them understand their health needs better; and 92.2% of people either agreed or strongly agreed that the Health Mela and HMOT will help them make lifestyle changes. Of the attendees who were eligible for a free NHS Health Check, 9.1% had received one. Of the people, 22.8% had attended a previous HMOT at a Health Mela event. No data were collected on how long ago they had attended these events; however, 73.6% reported making lifestyle changes (see table 2). Of these people, 30% had also attended a health check at either their GP or another healthcare service.

Analysis comparing the effect of ethnicity and IHD quintiles on QRISK2 score suggested attendees of South Asian ethnicity were significantly more likely to have a higher QRISK2 score when compared with attendees of white ethnicity ($p=0.019$) (see figure 3). There was no statistically significant correlation between higher QRISK2 scores and IHD quintiles ($p=0.746$). There was no interaction between ethnicity and IHD quintiles ($p=0.611$).

Table 1 Identifying CVD risk factors		
Variable identifying healthy individuals	Variable identifying individuals with abnormal readings	People, n (%)
Not prescribed antihypertensives (n=280)	Raised systolic blood pressure (≥ 140 mm Hg)	56 (20.0)
	Normal systolic blood pressure (< 140 mm Hg)	224 (80.0)
Reported absence of diabetes (n=320)	Finger-prick random glucose suggesting diabetes (≥ 11.1 mmol/L)	7 (2.2)
	Finger-prick random glucose suggesting impaired glucose tolerance (≥ 7.8 mmol/L)	20 (6.2)
	Finger-prick random glucose suggesting normal glucose (< 7.8 mmol/L)	293 (91.6)
Not prescribed statins (n=108)	High finger-prick total cholesterol (≥ 5.0 mmol/L)	22 (20.4)
	Normal finger-prick total cholesterol (< 5.0 mmol/L)	86 (79.6)
QRISK2 score All attendees > 18 years (n=301)	High risk ($\geq 20\%$)	84 (27.9)
	Moderate risk ($\geq 10\%$ – 19%)	89 (29.6)
	Low risk ($< 10\%$)	128 (42.5)
QRISK2 score Aged 40–74 without known CVD risk factors and not prescribed statins (n=142)	High risk ($\geq 20\%$)	19 (13.4)
	Moderate risk ($\geq 10\%$ – 19%)	58 (40.8)
	Low risk ($< 10\%$)	65 (45.8)

CVD, cardiovascular disease.

Discussion

Summary of results

Demographic data of attendees demonstrate that the Health Melas are accessing a high proportion of people of South Asian ethnicity (38.8%). This is in comparison with the local Lancashire population, where only 7.1% are from a South Asian background.²⁰ Additionally, the highest proportion of attendees were from areas with the worst health deprivation (36.9% were from IHD quintile 1). There was a trend when comparing health deprivation and newly suspected CVD risk factors. It showed that, in general, attendees from areas with worse health deprivation (lower IHD quintile) had more cases of newly suspected CVD risk factors (see figure 2).

The screening results suggested 27.9% of all attendees ≥ 18 years were at high risk of CVD (QRISK2 score $\geq 20\%$). When the NHS Health Check exclusion criteria were applied, 13.4% of the eligible

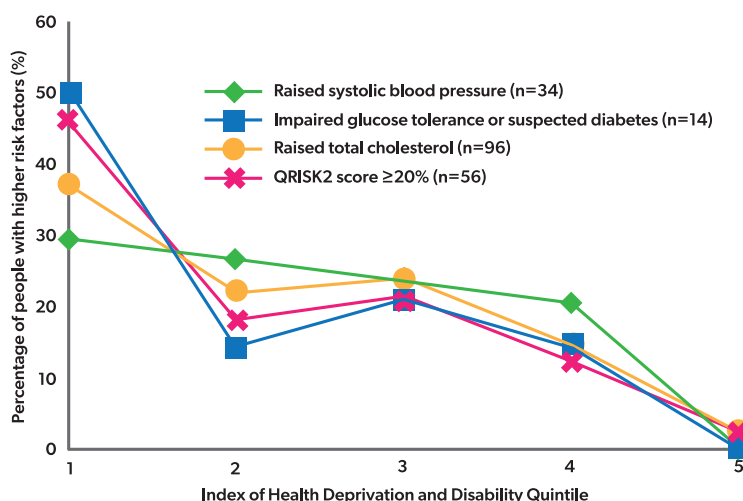


Figure 2: Comparison of new cardiovascular disease risk factors in relation to Index of Health Deprivation and Disability (IHD) quintiles.

population were at high risk of CVD. Unlike the NHS Health Check, all attendees over 18 years (contra 40–75 years) were offered an HMOT. This was for several reasons. First, it allowed the screening of those not on appropriate lipid-lowering therapy. NICE guidelines suggest all adults under the age of 84 with a QRISK2 score of greater than 10% should be on statins²¹; however, 68.8% of those screened were not. Second, most people attended as families and therefore it was culturally more appropriate for the whole adult family to participate in the HMOT together. The screening tools available were not appropriate for anyone under 18 years. Third, the programme hoped to provide and reiterate preventive health advice for all attendees, especially as they had exhibited interest in learning about health by nature of attending.

The Health Melas successfully identified new CVD risk factors in many attendees. The results suggested 20.0% of attendees had newly found raised blood pressure and 2.2% had raised blood sugar. For informal comparison, the NHS Health Checks report 12.9% of attendees being at high risk of CVD, 18.5% having newly reported high blood pressure and 0.6% having raised blood sugar.²²

Analysis of the results suggested attendees of South Asian ethnicity were more likely to have a higher QRISK2 score (see figure 3). Although statistically significant ($p=0.019$), the small sample size and large SD limit the value of this finding. Additionally,

Table 2 Key results of the feedback questionnaire

Questionnaire questions	Variables	People, n (%)
Was this HMOT useful?	Strongly agree	167 (70.8)
	Agree	68 (28.8)
	Neutral	1 (0.4)
	Disagree	0 (0.0)
	Strongly disagree	0 (0.0)
Has this HMOT increased your understanding of health? (n=230)	Strongly agree	142 (61.7)
	Agree	84 (36.5)
	Neutral	4 (1.8)
	Disagree	0 (0.0)
	Strongly disagree	0 (0.0)
Has this HMOT encouraged you to make lifestyle changes? (n=233)	Strongly agree	129 (55.3)
	Agree	86 (36.9)
	Neutral	16 (6.9)
	Disagree	0 (0.0)
	Strongly disagree	21 (9.0)
Have you made lifestyle changes after a previous Health MOT at a Health Mela?* (n=72)	Yes	53 (73.6) †
	No	19 (26.4)

* This question was only asked of those who had attended a previous Health Mela.

† 30% of these people had also had Health MOTs at their general practice or somewhere else.
HMOT, Health MOT.

comparisons were only made between people of South Asian and white ethnicity, and people from IHD quintiles 1–4. This was because there were too few attendees of other ethnicities or IHD quintile 5 with complete data to compare reliably. The small sample size also meant comparison of QRISK2 and ethnicity against IHD quintiles was likely underpowered to detect any meaningful difference ($p=0.746$ and $p=0.611$, respectively).

After receiving an HMOT and counselling at the Health Mela, almost all attendees thought the MOT had been useful (99.6%), improved understanding of their health needs (98.2%) and encouraged them to make lifestyle changes (92.2%). Additionally, almost three-quarters of people who had attended a previous HMOT at a Health Mela reported they had made lifestyle changes as a result (73.6%). This feedback suggests the intervention was well received by attendees and they felt previous HMOTs had encouraged them to make lifestyle changes.

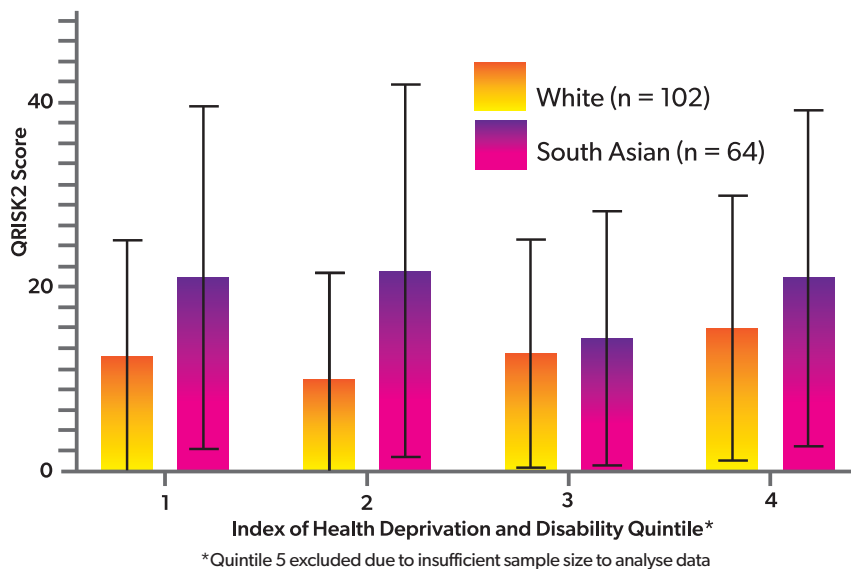


Figure 3: Comparison of the effect of ethnicity and Index of Health Deprivation and Disability quintiles on QRISK2 score.

These findings highlight the Health Mela's value in its ability to access populations who are at high risk of CVD and have a high prevalence of known and newly suspected CVD comorbidities. Additionally, of those eligible for an NHS Health Check, only 9.1% of attendees had had one, suggesting the Health Melas are screening people not currently accessing national health services.

Comparison with existing programmes

Two similar programmes of particular note are a screening programme for CVD at two Hindu temples in North London described by Rao et al¹⁵ and the SA-CHAMP screening South Asians at religious facilities in Alberta, Canada described by Jones et al.¹⁶ Similar to the Health Mela, both programmes aimed to screen South Asians for CVD risk factors and calculated a QRISK2 score for participants. However, these programmes exclusively screened South Asians, whereas the Health Mela did not.

There was a large difference in the proportion of attendees found to be at high risk of CVD between the programmes. This difference was likely influenced by the inclusion criteria by each study along with the difference in populations accessed. The programme described by Rao et al¹⁵ reported 15% of attendees having a $\geq 20\%$ estimated 10-year CVD risk, 40% had a $\geq 10\%$ risk, 0.5% had blood glucose levels in the diabetic range, 52% had elevated blood pressure and 49% raised cholesterol. Compared with the Health Mela, QRISK2 scores $\geq 10\%$ and suspected diabetes rates were lower, but rates of elevated blood pressure and raised cholesterol were higher. Their lower rates of QRISK2 scores $\geq 10\%$ were likely due to narrower selection criteria. They only have attendees 30–75 years not on lipid-lowering therapy, and without pre-existing cardiac or cerebrovascular disease, chronic kidney disease, serious mental illness or diabetes. When the Health Mela results were adjusted to these criteria, the QRISK2 scores $\geq 10\%$ were more similar (13.4% compared with 15%). The programme SA-CHAMP described by Jones et al¹⁶ reported 76% of attendees having a $\geq 20\%$ estimated 10-year CVD risk, 36% had elevated blood pressure, 58% had raised cholesterol and 23% reported diabetes. They did not report the total of those with $\geq 10\%$ risk. Again, this large discrepancy in results was likely influenced by their different inclusion criteria, which was much broader compared with Rao et al¹⁵ and the Health Mela; the study included all attendees over 45 years and did not exclude based on known CVD risk factors. Of the 375 attendees, 100 were rescreened after 6–13 months to assess change in risk factors and found a significant decrease in average total cholesterol but no change in blood pressure.

Overall, although unable to directly compare these three studies due to their variable inclusion criteria and populations, they provide support for the feasibility and value of screening and counselling South Asian communities for CVD risk factors.

Strengths and limitations

This is the first study to describe data from the Health Mela MOTs. Collaboration of data from both the questionnaires and HMOT forms provided multiple variables for cross-analysis; in total 23 variables were recorded from 375 people. It captures both quantitative and qualitative responses, including demographics, contextual information, views and opinions, and health indicators.

An important aspect of this evaluation is the analysis and comparison of variables against IHD quintiles. This has been a useful component to determine the type of populations accessing the HMOTs and the relative health and disability of the areas they come from. Linking patients' results back to their GP facilitated good transfer of care for patients with concerning results. This maximised the use of the screening results beyond the volunteer-led lifestyle

counselling and directed patients back into the health system for medical management.

However, the evidence used to determine whether the Health Melas are encouraging people to make lifestyle changes was obtained from subjective qualitative data. Although these data give us a good indicator of people's perception of the HMOT, they do not tell us how effective it is in terms of health outcomes. It is only those returning to a Health Mela who were asked if they had made changes, and this was a subjective response. It is possible that the positive responses given in the questionnaire were a reflection of attendees' experiences as a whole, for example whether they enjoyed the event, whether they were counselled in a polite and friendly way, or whether they appreciated the hard work the volunteers did, rather than its efficacy.

The novel use of community point-of-care testing was a key factor enabling the calculation of a QRISK2 score. However it was not possible to measure a timely high-density lipoprotein level and therefore a default of 1.4 was used instead. Similarly, haemoglobin A1c (HbA1c) is the preferred screening test for diabetes; however, due to cost and time, capillary blood glucose was used instead. There is large scope for development and accessibility of community point-of-care testing.

A further limitation may have been inaccuracies when measuring people's height, weight and blood pressure. Attempts were made to reduce inaccuracies in these measurements through various standardisation techniques, but these were unlikely to have been sufficient to completely remove variation in measurement taking and therefore accuracy of the results. Certain parts of the HMOT forms were completed by medical students and exhibited varying quality. Some had missing measurements or failed to record what health advice had been given. This may have been owing to the variety of students assisting, ranging from second to fourth year medical students.

Finally, the large amount of missing data meant that despite a total cohort of 375 people, the actual sample size for each variable was often smaller, especially when cross-tabulating several variables (67% of people had at least one missing piece of data). This resulted in the inability to directly compare raw numbers of people, but only compare relative percentages of each sample. The decision to include partial data sets stemmed from the fact that the variables were mostly analysed discretely and therefore complete exclusion would reduce overall sample size, underpowering the study and not using valid data that were available. However, the amount of missing data and discrete evaluation of variables reduce the accuracy and reliability of these results.

Recommendations for future work

This report includes data from three Health Melas; however, there are currently at least five Health Melas each year. Consistent data have only been collected since 2016 and not from all Health Melas. Future analysis of more Health Melas will lend more weight to the results. This will also open up the possibility of matching people between Health Melas in the same location each year to determine changes in their CVD risk over a year.

Follow-up of attendees 6 months after the Health Mela with a questionnaire, asking whether they have made lifestyle changes, would provide an indicator of how many people actually made the changes they agreed since the Health Mela.

A qualitative study assessing the advantages of community-based, volunteer-led screening for CVD in South Asian populations compared with NHS Health Checks could further build on this work.

Conclusion

This descriptive observational study suggests the Health Melas access South Asian populations, people from lower IHD and eligible individuals who have not previously attended an NHS Health Check.

The vast majority of attendees felt the events are useful, improved understanding of their health needs and encouraged them to make lifestyle changes. High rates of modifiable CVD risk factors including raised blood pressure, cholesterol and blood sugar were newly identified, along with a high proportion of attendees with an intermediate to high risk of a CVD event in the next 10 years. Attendees of South Asian ethnicity were found to be more likely to have a higher QRISK2 score. The reliability of these findings was limited by the descriptive nature of the results and the amount of missing data. Further research is needed to build on this work and determine whether community CVD screening and counselling interventions in this style affect health outcomes.

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Health Mela:

A novel way of health promotion?

Romesh Gupta
Abhay Vaidya
Robert Campbell
Abha Gupta
Satyan Rajbhandari

Abstract

South Asians living in the UK have higher prevalence of cardiovascular and metabolic disease, yet their access to health services is poor. The Health Mela is a culturally sensitive way of addressing this issue. In the Health Mela, various health and social service providers attend the South Asian community centre and inform them about various services available to them. They also provide facilities for instant health check-ups and offer health education with particular focus on prevention. Undergraduate medical students take an active role in this, which they value in improving their communication skills and awareness of various cultures and health beliefs. This model has been replicated in various part of the country.

The Mela is a free open day for the community. As the name implies, the Mela (Sanskrit for gathering or fair) is intended to be a family fun event. The event provides an opportunity to visit a number of health related information stands, engage with health professionals and seek information and guidance. This raises awareness regarding various health related issues such as diabetes, hypertension, stroke, arthritis, coronary artery disease, cancer and more. They also learn about the harm done to their health by the use of smoking, abuse of alcohol, illicit drugs, etc.

There is a wide range of participation in this Mela to make it a significant social event. Both the Acute Hospital and Primary Care Trust participate in this and display a number of stalls promoting healthy living and making people aware of various services they offer. In addition, the Social Services and other health related voluntary organisations have displays as well. Often a fire engine and an ambulance is present on the site and children as well as adults are advised regarding fire hazards and prevention, minimizing injuries with glass and bottles, first aid, basic life support etc. Most stalls are interactive and visitors can practice some of these procedures under expert guidance. The public thus has an opportunity to interact with all these organisations, know their roles and the services they provide.

The LGHFU believes in a holistic approach and the visitors are offered opportunities to participate in complementary therapies and exercise systems such as Yoga, Reiki, Reflexology, aerobic exercise, dance and 'keep fit' classes. The Mela positively promotes healthy living by demonstrating healthy diet, lifestyle and regular exercises.

The National Statistics 2001 survey showed that 7.9% of the UK population was from a non-white ethnic group, of which South Asians comprise around 4% (ONS, 2010). Most South Asians living in the UK come from India, Bangladesh, Pakistan and East Africa. There is a higher prevalence of common diseases such as diabetes, renal disease, cardiovascular disease and stroke at a young age in these communities, (HSCIC, 2010; Gholan et al, 2010; Randhawa, 2010; McKeigue et al 1991; Banerjee et al, 2010) yet their access to health services is poorer than that of the host communities (Merrell et al, 2006).

The 2006 Department of Health's white paper 'Our Health, Our Care, Our Say: a new direction for community services' (DoH, 2006) sets a new direction for the whole health and social care system ensuring that services are more personalised and that they fit into people's busy lives.

The Lancashire Gujarat Health Users' Forum (LGHUF) was launched in 2001. One of its main aims is to improve health through raising awareness amongst local communities by providing information, developing a partnership between local communities, health and social care organisations (commissioners and providers), and promoting healthy living, thereby empowering the local communities to take charge of their own health. Our model of community engagement with health-care providers was developed before the government's white paper. However it exemplifies its central idea that the health care services should be available within the community and should fit around busy lifestyles.

LGHUF has organised an annual Health Mela in Preston since 2002.



Key Points:

- ◆ South Asians have increased medical need but their access to the NHS is poor
- ◆ The Health Mela is a novel way of empowering South Asians by providing health information and check-ups at their community centre
- ◆ The Health Mela is good for medical students training in communication to raise their awareness of various cultural and health beliefs.

Children from nearby primary schools have been involved over the years and are made aware of the importance of healthy living. They are given information about healthy eating, oral hygiene and preventing accidents, and they are also encouraged to enter into health-related competitions with prizes to be won. One of the most popular stalls amongst children is the 'Teddy Bear's Hospital' where medical students explain various medical procedures to children who then encouraged to attempt performing these procedures on the teddy bears.

The main attraction at the Mela is the 'Health MOT' performed by laboratory team and medical students under the guidance of experienced consultant physicians. Any person interested in having a 'Health MOT' can have it done on the spot free of charge. They have their height, weight and blood pressure measured and the laboratory team measures random cholesterol and glucose. Junior doctors and medical students then provide one to one confidential personal advice and counseling based upon their risk factors and life style. They use various teaching aids like Cardiovascular Risk Calculation, Diabetes Risk Calculation, BMI Calculations to illustrate future risks and recommend changes in lifestyle. If any problem that needs medical attention is detected, the individual is referred to his/her own GP for further investigation and treatment. In short, it is an opportunity for a 'Health MOT' within the community in a friendly, familiar and non-threatening environment.

Over the last eight years, the Mela has been a regular feature in Preston's social calendar and has attracted several local, regional and national political and health leaders who have unanimously praised the concept and the way this message is delivered. Attendance has steadily increased from 599 in the year 2004 to 942 in 2009. While many visitors come every year to have lifestyle advice and a free Health MOT, about a quarter of the attendees each year are new. In one survey 80% of the visitors found the event informative and 94% said that they found the time spent at the Mela was valuable.

The Health Mela is held on Saturdays so that it is accessible to those who work during the week. The success of this model is demonstrated by ever increasing attendance as well as the satisfaction shown by the healthcare providers. The model has also received warm acknowledgement from the trainee doctors who have found the experience useful in developing their cross cultural communication and counseling skills, clinical expertise and awareness of health promotion (GMC, 2007).

In July of this year David Cameron introduced the idea of the 'Big Society' (Cameron, 2010) which includes social action, public service reform and community empowerment. We believe that the Health Mela is an outstanding example of the 'Big Society' at work. It empowers the community to engage with the health and social care organizations, seek information and challenge them. Organisations

also take this opportunity to seek feedback from local communities regarding the services they provide.

The Mela concept has been commended by several national leaders. Mr Surinder Sharma, National Director for Equality and Human Rights, Department of Health said: *'The Health Mela is a wonderful example of how working collaboratively can broaden access to relevant, targeted healthcare information for all of our diverse communities — something which we should all celebrate!'* Professor Ian Gilmore, President, Royal College of Physicians of London commented: *'I was struck by the enormous energy, commitment and enthusiasm at the Mela. This is also an invaluable tool for maintaining the health and well being of the wider community and relationships between those of different ethnic backgrounds.'*

This model of a Health Mela has shown that it is possible to engage with communities within their local centres, raise health awareness and provide health MOTs in a non-clinical environment. The Health Mela has succeeded over the years in empowering and engaging local communities and helped them to take charge of their own health. The event helps to develop a culture of openness where the various health related organisations can improve their service provisions based upon the feedback received. Communities can influence the shaping and delivery of services to meet their needs. The concept of partnership between the providers and community thus truly flourishes.

The Mela has run successfully in Chorley on several occasions and the University of Bolton has organized the first Health Mela in Bolton in 2009. We believe it is possible to extend this concept nationwide and thus help local communities to engage with their service commissioners and providers to achieve the best results in health promotion, education, prevention and treatment of diseases.

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Engaging Young Adults and Children in Shaping the Future of Health Programmes



Dr Rajeev Gupta MBBS, MRCP (UK), FRCPCH (UK), MD
Triple Accredited MBA (UK OUBS), AEQI, ACEI
Consultant Paediatrician, Barnsley Foundation Hospital, United Kingdom
Chairman Central Specialist Committee Royal College of Paediatrics & Child Health
Vice Chairman CESR Committee, Royal College of Paediatrics
Ex-Chairman Regional Consultant Committee BMA
Recent Chairman Regional Council British Medical Association

Abstract

With increasing healthcare costs and a growing focus on patient-centred care, engaging young adults and children in shaping the future of health programmes is crucial. This review examines strategies for involving these demographics in healthcare planning and highlights the potential benefits of their participation, particularly regarding cost improvement. A systematic search of the literature was conducted to identify studies examining the involvement of young adults and children in health programme development. The results suggest that their engagement can lead to more effective, efficient, and sustainable health programmes, ultimately reducing healthcare costs.

Introduction

In recent years, the concept of patient-centred care has gained considerable attention, emphasizing the importance of considering patients' needs, preferences, and values in healthcare decision-making⁽¹⁾. Engaging young adults and children in shaping health programmes can enhance the relevance and effectiveness of these initiatives, ultimately leading to improved health outcomes and cost savings⁽²⁾. We have recently done a Health Mela, which is a public engagement and health check event in the community. The event was done at Preston University on a weekend and was organised by National Forum for Health and Wellbeing (NFHW). We involved "A" level students in preparing posters on how they will give various health topics and how they think it will help shaping future health. Many students across the United Kingdom including those from Yorkshire, Derbyshire, Oxfordshire travelled to Preston University where the event was held. They displayed their poster and explained to the visitors of Health Mela. They had read about the topic, discussed with their teacher and family thus increasing the health education. All the candidates were given opportunity to present the topic to a panel of experienced consultants in the University Board room. All the students who presented were given feedback and encouragement on how they can involve themselves in shaping the future of health. All students and their parents were delighted for this innovative opportunity and their ability to contribute to shaping future health.

We have reviewed the literature and in this article we will discuss the strategies for involving young adults and children in healthcare planning, the potential benefits of their participation, and the impact on cost improvement.

Strategies for engaging young adults and children in health development

Collaborative design

Collaborative design, or co-design, involves the active participation of end-users in the development of healthcare programmes and services⁽³⁾. By incorporating the perspectives and insights of young adults and children, co-design can help ensure that health programmes are tailored to the unique needs of these populations. This approach has been demonstrated to result in more efficient, effective, and user-friendly healthcare interventions⁽⁴⁾. Our group of students are inspired to do health care projects with collaborative designs.

Youth advisory boards

Establishing youth advisory boards or councils can provide young adults and children with a platform to share their opinions, experiences, and ideas regarding healthcare programmes and policies⁽⁵⁾. These boards can facilitate meaningful input from young people, inform decision-making, and promote transparency and accountability within healthcare organizations⁽⁶⁾. Our group of "A" level students are keen to join medicine and join youth advisory boards and contribute to the voice of the community in shaping future health.

Technology and social media

Technology and social media platforms can be effective tools for





engaging young adults and children in health programme development⁽⁷⁾. Interactive websites, mobile applications, and online forums can facilitate communication and collaboration between healthcare professionals and young people, fostering the exchange of information and ideas. Additionally, social media can be used to raise awareness of health programmes and elicit feedback from young users⁽⁸⁾. Young adults and students are at the fore front of social media and we can use that power to engage the whole community in shaping a sustainable model of health that is fit for future.

Benefits of engaging young adults and children in health programme development

Improved relevance and effectiveness

By involving young adults and children in the design and implementation of health programmes, these initiatives can be tailored to their unique needs, preferences, and values. This customization can lead to more relevant and effective healthcare interventions, ultimately resulting in improved health outcomes for these populations⁽⁹⁾.

Enhanced patient satisfaction and engagement

When young adults and children feel that their opinions and experiences are valued, they are more likely to be satisfied with and engaged in their healthcare. Increased patient satisfaction can lead to better adherence to treatment plans and improved health outcomes⁽¹⁰⁾.

Cost improvement

Engaging young adults and children in health programme development can lead to cost savings by promoting the efficient allocation of resources, reducing the need for expensive medical interventions, and enhancing the sustainability of health programmes⁽¹¹⁾.

Conclusion

Involving young adults and children in shaping the future of health programmes is essential for promoting patient-centred care and achieving cost improvement. We had very positive experience although it was a small group of students, we will plan in advance for a larger

group. Those who came were extremely satisfied and inspired to do more. Strategies such as collaborative design, youth advisory boards, and technology-based platforms can facilitate the engagement of these demographics in healthcare planning. By incorporating their perspectives and insights, health programmes can become more effective, efficient, and sustainable, ultimately leading to improved health outcomes and reduced healthcare costs.

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A Vitamin D retrospective

Dr David S Grimes MD FRCP



I have been both disappointed and disheartened during the pandemic at the very negative attitude of our medical and political leaders in respect of Vitamin D and natural immunity. But there is a future to think of, and perhaps the importance of Vitamin D will be revealed to the population in the not too distant future.

When the pandemic of Covid-19 arrived in Europe in early 2020, we knew that it would be essential to optimise natural defensive immunity of the population. Although in 1968-69 we had to let the pandemic of "Hong Kong" flu take its course, fifty years later we had accumulated a great deal of research knowledge. In 2020 we knew how to optimise defensive immunity. We anticipated that as a result of the new knowledge and the correction of widespread Vitamin D deficiency, the deaths from Covid-19 would be very many fewer than during Hong Kong flu pandemic. This has turned out not to be the case: there were thought to have been about 50,000 Hong Kong flu deaths in 1968-69, but as of May 27th 2023 Worldometer reports 225,324 Covid-19 deaths in the UK.

By "we" I mean those people fortunate to have had a background in and knowledge of medical science. I was a young doctor, the resident medical officer (RMO) of the Manchester Royal Infirmary in 1968-69, and I remember the pandemic very clearly. I subsequently worked as a general internal physician and gastroenterologist in East Lancashire, but I absorbed the new knowledge of the vital importance of Vitamin D in activating defensive immunity. I was also aware of the disturbing extent of Vitamin D deficiency, especially among Black African and South Asian ethnic groups in the UK.

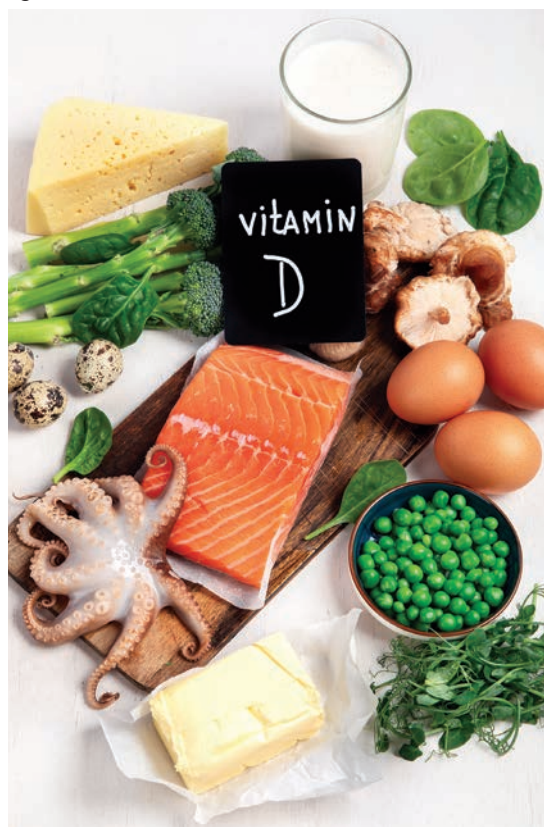
It turned out to be a naive assumption of mine that in 2020 public health and medical services would want to provide the very best of preventative medicine and treatment of the sick. The knowledge of the importance of Vitamin D was readily available, and it must have been known to public health doctors and the senior medical advisors of government. I was just an ordinary physician in an ordinary hospital in ordinary Lancashire, but as I had been able to absorb the medical scientific information, surely much more important physicians than I must also have absorbed it.

Perhaps I seriously underestimated the ignorance of medical scientists who should

have known more than I knew. The alternative view is that they deliberately ignored their existing knowledge of the importance of Vitamin D, and deliberately avoided reporting on the new knowledge that appeared during the pandemic.

Pre-pandemic knowledge

Vitamin D had been identified about one hundred years ago, initially through its evolutionary late function of bone maturation. Deficiency of vitamin D was demonstrated to



be the cause of rickets in young children, the result of serious atmospheric pollution together with an increasingly indoor life during the industrial revolution. Observation led to the recognition that rickets could be cured by removal of the children from the polluted industrial cities to the alpine villages of Austria, or to the coastal fishing villages of Scotland. The former provided vitamin D production by the action of the sun on the skin, the latter also by the consumption of oily fish, which obtain vitamin D from the oceanic food chain starting in plankton.

It is worth remembering that plankton evolved 1.5 billion years ago, but living at the surface of the oceans they were vulnerable to damage and death from solar UV radiation. They evolved two defensive mechanisms. One was diurnal vertical migration, in which they would sink to a protective depth during the day and rise to the surface during the night, this becoming a genetically controlled process.

The second protection became the synthesis of the oil molecule 7-dehydrocholesterol, abbreviated as 7-DHC. The important characteristic of 7-DHC is that it absorbs UV energy wavelength 290-315 nm, using the energy to break a specific bond in the molecule rather than it producing heat and radiation damage to the plankton. This sun-screen function is very effective. The by-product of the chemical change is a derivative molecule called cholecalciferol, that we generally know as vitamin D.

Plankton had no use for vitamin D, and it remained a molecule without a function for one billion years. During this important era, evolution was active in producing immunity, essential for further developments of animal life. Ultimately vitamin D gained a function in activating the new immunity cascade, and this was vital to protect against damage from pre-existing bacteria and viruses. The more complex forms of animal life that were to appear during the Cambrian explosion, the "biological big bang", 500 million years ago required this defensive immunity for survival. Fortunately for a fictitious episode of humankind, the invaders in HG Wells' "War of the Worlds" did not have the benefit of this immune mechanism and they soon succumbed to the micro-organisms with which we share this planet.

To condense a complex process, vitamin D acquired directly from solar UV acting on 7-DHC in our skin, or indirectly by mouth, is not biologically active. It passes in the bloodstream to the liver where a slow process takes place adding a hydroxyl (-OH) group to the molecule. It then returns to the blood as 25(OH)D, also known as calcifediol or calcidiol, and it circulates as a reservoir ready for use when it is needed. At times of

microbiological challenge, the cells of immunity, various immunocytes, take up 25(OH)D from the circulation and convert it by the addition of another -OH group into 1,25(OH)D, also known as calcitriol. This is the active form, which unlocks the complex vitamin D receptor (VDR) molecule, and as a result activates the genes that control the escalation of defensive immunity. An adequate blood level of 25(OH)D is essential for immunity to be maximal and maintained.

The slow process of the conversion of vitamin D into 25(OH)D, calcifediol, in the liver is satisfactory under normal circumstances. It can take up to two weeks for a single dose of vitamin D to reach a peak of 25(OH)D in the blood, but in nature it is a continuous process, at least during the summer months. However, if the partactivated 25(OH)D, calcifediol, is given by mouth, it does not require the liver hydroxylation stage and it reaches a high (normal) blood level after about two hours. This was first reported by Dr TCB Stamp of University College Hospital London in The Lancet July 20 1974 It was therefore known in advance of the pandemic and we have seen its remarkable importance in clinical studies from Spain, but no clinical use in the UK and other countries.

It had also been established that certain groups within our population, those living closer to the North Pole than to the Equator, are at particular risk of vitamin D deficiency, and thus of sub-optimal immunity. These are in particular citizens whose ethnic origin is in Africa and the Caribbean, or in South Asia, people with a dark skin that is inefficient at producing vitamin D. The pigment melanin in the skin is protective against radiation damage. It absorbs solar UV, which is therefore not available to the substrate 7-DHC. Also vulnerable are the elderly, whose dry skin does not synthesise sufficient 7-DHC to allow production of adequate amounts of vitamin D. Another group vulnerable to serious vitamin D deficiency are people who avoid exposure of the skin to the sun, usually for religious reasons. Finally the obese, in whom the oil vitamin D becomes trapped in the fat cells of the body.

These facts were known, and it was predicted that these groups would be particularly prone to the serious and perhaps fatal effects of the new virus responsible for Covid-19, to which we had no historical or inherited immunity. There was a way of helping people with an ethnic dark skin, the elderly, and the obese, and those who avoided the sun. It would have been possible to contact and provide them with vitamin D supplement, a process that was shown to be feasible in a study by Professor Adrian Martineau. It would however have

been much quicker to assume vitamin D deficiency (known to be widespread) and to correct it with a supplement in a dose that would be effective in the deficient but of no danger to those not deficient.

In practice, for reasons that are obscure, this did not happen. It was a callous denial of knowledge by public health bodies and medical organisations. When people developed Covid-19 symptoms and tested to be positive, they were told to go home and then to send for an ambulance only if they had difficulty breathing. How different the outcome might have been if the positive test and been followed by a single dose of vitamin D 100,000 units, a one month supply. Blood test for vitamin D level could also have been performed. The neglect of people with early proven Covid-19 can be viewed as criminal negligence of those responsible for public health.

But despite official disinterest or dismissal, clinical research into vitamin D and Covid-19 was undertaken in many parts of the world.

Clinical Research, 2020 to 2022

Clinical research, like all scientific research, starts with an observation. The next stage is that the observation must be reproduced, and by others. The observation is usually two variable characters that appear to be associated. This association must be consistent, with other of Sir Austin Bradford Hill's criteria of causation. We need to remind ourselves of these, as they are so important,

1. **Strength of association**
2. **Consistency**
3. **Specificity**
4. **Temporality**
5. **Biological gradient**
6. **Plausibility**
7. **Coherence**
8. **Experiment**
9. **Analogy**
10. **Reversibility (not always possible)**

I drew attention to Hill's Criteria in November 2020, demonstrating that they were fulfilled in respect of a causative role of vitamin D deficiency in Covid-19. Strictly speaking, vitamin D deficiency is not "the cause" of the disease but it is a factor that increases susceptibility to the disease, by disabling immunity. This important because a disease or an injury is generally a product of cause and susceptibility. Serious or fatal forms of the microbial diseases tuberculosis and Covid-19 are due to a combination of the specific micro-

organism, and the susceptibility factor of inadequate blood levels of vitamin D. AIDS also makes those affected susceptible to a variety of infections as a result of suppressed immunity.

In a similar way death from a road traffic accident is directly the result of trauma but also perhaps a susceptibility factor of a high level of alcohol in the blood. If government or public health officials want to reduce the number of deaths from road traffic accidents they must minimise susceptibility factors. There is an enforced maximum allowed blood level of alcohol in car drivers. Public health officials might similarly be expected to demand a minimum blood level of vitamin D, as a way of reducing susceptibility to microbial diseases. It is not happening, in a way that is as negligent as would be ignoring blood levels of alcohol in car drivers.

We can note at present that lessons have not been learned by our medical officials. For example in the British Medical Journal of May 13 2023 contained an article "What is the future for covid drugs and treatments?" There was no mention of optimising natural immunity by correction of vitamin D deficiency.

However not all of clinical medicine in the UK has been asleep. Supplementation of the population with vitamin D has improved during the pandemic, especially in ethnic minority groups, thanks to the initiatives of individual general medical practitioners, acting independently of government and WHO guidelines.

During the pandemic, which is now officially at an end, I have reviewed 38 papers concerning the benefits of vitamin D in the prevention and treatment of Covid-19.

Dr David Grimes

Dr David Grimes was a Consultant physician with interest in Gastroenterology at Blackburn. In addition to a busy clinical practice and an additional role as medical director of the hospital Trust, he developed a research interest in vitamin D. He was led into this by trying to understand the poor health of the population of Blackburn and especially of the South Asian ethnic people. He has remained frustrated that his conclusion of the vital role of extensive vitamin D deficiency was not taken seriously by colleagues with responsibility for public health.

The neglect of vitamin D has continued through the recent pandemic up to the present time. He has worked passionately to highlight the importance of Vitamin D and identified that of 26 working doctors who died from Covid-19 during the first few months of 2020, 25 were of South Asian or Black African ethnicity, but no-one in his previous Trust, no-one at the centre of the NHS, and no leaders of our medical organisations showed any interest.

Proceedings of the 2023

Preston Health Mela

(National Forum for Health & Wellbeing)

Theme: “Treating Chronic Conditions – A Holistic Approach.”

Mr Amit Sinha FRCS (Tr&Orth) Consultant Orthopaedic Surgeon Member, Steering Committee, NFHW

Introduction

The Health Mela concept was pioneered in 2001 as a way of engaging communities in health promotion and empowering people to take charge of their own health. The first event was held in Preston in 2002 and since then over 60 Melas have been held in various places in the North West, London, and international sites in India & Libya.

The 18th of March this year was a glorious day for the opening of the Health Mela. It was special as this was held after a gap of almost two years, “returning refreshed and energised from the recent covid-enforced seclusion”. For the past two years the Forum had held online Health Melas: everyone had looked forward to a fresh start this year.

Venue

The event was held in the Foster building of the University of Central Lancashire at Preston. This offered a huge central room for all the stalls and another hall for various other activities including Health MOTs and assessments with direct consultations with health personnel.



Breakfast Meeting

This meeting at the start of the day brings in experts from the medical profession and related disciplines, the community and social care to introduce the theme of the day and have presentations followed by open discussions about the chosen subject. This time the conversation focused on “Alternative Therapies” keeping the theme of “Treating Chronic Conditions – A Holistic Approach.”



The Chief Guest, Rt. Hon. Sir Mark Hendrick MP's arrival at 10 am was the start of the meeting. Prof Romesh Gupta OBE, the NFHW Chairman, welcomed everyone. The hall was packed with individuals and many

university students who were all very keen to listen. He reiterated the value of the Breakfast Meetings and noted how the Covid-19 pandemic had laid bare health inequalities in all different sections of society and had increased the suffering of those with chronic pain. He suggested that it is time for society to seek alternative therapies and reduce overdependence on the already burdened NHS. There is great value in Yoga, Tai Chi, Reiki, Reflexology, Meditation, Naturopathy, Homeopathic and Ayurvedic medicine for dealing with chronic pain and discomfort as well as improving general health.

This introduction was followed by short lectures from Prof S Senapati on Obesity, Mr Amit Sinha on *Disability and Chronic Pain in Orthopaedic Conditions* and Dr Rajeev Gupta on *Promoting Mental Health*. Prof Mohammed Munavvar talked about respiratory conditions; Mr Khushal Kumar gave a discourse on holistic medicine using naturopathy and Dr R Singh, a GP who studied Ayurvedic Medicine explained why she uses Ayurvedic principles to treat her patients. The discussions were short but very useful.



Inauguration

The Health Mela was inaugurated by the Chief guest, Rt Hon Sir Mark Hendrick MP of Preston at 11am. He kindly welcomed everyone and congratulated the Forum team.

This was followed by Councillor Neil Darby, Preston Mayor who offered his full support and welcomed the visitors to the city of Preston.

The inauguration was followed by the sparkle of the colourful Bollywood dancers, which elevated everyone's mood.

Mr Russell Hogarth, University of Central Lancashire Honorary Fellow and Community Ambassador, welcomed the visiting public to the university on behalf of UCLan.

Fellowship Awards

Sir Mark Hendrick MP received a National Forum for Health and Wellbeing fellowship award for his association, support and inspiration for over 20 years. This was presented by Prof Romesh Gupta, Chair NFWH, Ishwer Tailor, President GHS and Prof Alison Carr, Head of UCLan medical school.

Mr Nigel Farnworth, manager of the UCLan Creative Communities Group received a National Forum for Health and Wellbeing fellowship award in recognition of his NFWH support over many years. This was presented by Cllr Nigel Darby, Mayor of the City of Preston.

Stalls

There were close to 70 stalls in the huge hall staffed by representatives of the Transgender Society, Dementia Risk Group, Endometriosis Awareness North and many others related to health. The stalls were open for the public to pass on information and to discuss issues.

There were demonstrations of Reflexology techniques; Reiki masters from the Holistic Living Group delivered their sessions.

Over 1000 people attended the Preston Health Mela throughout the day and both halls were buzzing with people from the community. The feedback received was very positive. Many who had been to such Melas before were pleased to see another Health Mela and the first timers were amazed with the activities. They visited all areas of the Health Mela area and spent time talking to the exhibitors. It was an amazing atmosphere, seeing everyone networking, meeting different individuals, gathering information and learning from the exhibitors.

The Mela also had the support of the local NHS teaching hospitals who very kindly came along with an inflatable 'walkthrough' bowel that proved very popular with the visiting public.

The Preston Health Mela received tremendous press coverage from both the university and local news outlets, and generated a lot of interest throughout the day on social media.

Health Assessments

There were a number of points of contact for a Health MOT – a series of health tests. The most important was the point of care



Nigel Farnworth (4th left) is presented with his National Forum for Health and Wellbeing Fellowship Award by Councillor Nigel Darby, the Mayor of Preston.



Sir Mark Hendrick MP is presented with his National Forum for Health and Wellbeing Fellowship Award by Prof Romesh Gupta, Chair NFWH, Ishwer Tailor, President GHS and Prof Alison Carr, Head of UCLan medical school.

testing at the diagnostic open clinic. The purpose of this is to bring the hospital to the patient. The Blood Drop Team takes the laboratory to the patient using the Lab-in-a-Box technology. Fully qualified professional staff delivered testing for glucose and cholesterol (backed up with HbA1c and full lipid profiles where necessary) from a small blood drop from finger prick. The test is quick and convenient.

Blood pressure, height, weight and BMI are also measured and a personalised risk score is determined. These results are discussed with the individuals and advice given accordingly. A copy of the assessment is given to the patient and, if at risk, a copy is sent to their GP.

From the beginning, these Health Melas have identified a significant number of at-risk glucose and cholesterol levels. Undiagnosed diabetes and hypertension and undiagnosed risks of cardiovascular disease have also been picked up through these open clinics.

Dr Martin Myers, Consultant Clinical Biochemist and his Blood Drop team ran the pathology service. These health assessments are the cornerstone of the Health Melas as this community style intervention provides easy access, screening and free advice to the community.

Other related Health Clinics

The Smoothie bike and Teddy Bear clinic area was continually buzzing all day. Everyone from the exhibitors, members of the public and staff had managed to experience the benefits of the Smoothie Bike. The children loved the Teddy Bears.

There was an Oral Health clinic as well.

There were a number of stations run by doctors, medical students and physiotherapists where anyone could sit and discuss their physical or mental health issues. Medical students from UCLAN and doctors and other healthcare professionals volunteered to run the Health MOT and assessments.

School Students' Presentations

Another highlight of the event was presentations by school students from all over the UK who made posters on various medical topics such as Antibiotic Resistance, Personal Hygiene, Alzheimer's Disease, Autosomal Dominant Polycystic Kidney Disease and many others. There were 11 students who presented their posters, their efforts were recognised and they were congratulated for their wonderful presentations.

Acknowledgements

The success of these Health Melas is a combined effort of all the volunteers from NFWH, UCLAN, GHS (Gujarat Hindu Society), the Creative Communities Group, the Rotary Club and friends and family as well as the Exhibitors and a number of organisations who participated in the event. The planning and coordination of the Executive and the Steering committee members - notably Chairman Prof Romesh Gupta; Mr Russell Hogarth, the Community Engagement Officer; Mr Ravindra Shah, events co-ordinator; Mr Ishwer Tailor, Treasurer; Prof Robert Campbell, Head of research team; Mrs Sarifa Kabir, Secretary; Derek Ormerod, press officer, and Dr Martin Myers, Dr Rajeev Gupta, Dr Arun Vithlani, Dr Abhay Vaidya, Mrs Aideen Frediani, Ian Smith (Photography) and many others who have tirelessly worked for the success of the event - will go a long way to establish the importance of these Health Melas for the benefit of the community.



Testimonial from Sir Mark Hendrick M.P.

"It was great to see mela-goers proactively engaged in seeking health and wellbeing advice. I am very proud that this event has been running successfully in my constituency for over twenty years and the fantastic public health advice that is delivered to different sections of society. It was pleasing to see that more young people were involved in the health mela this year."

In memory of Derek Ormerod, 1934 – 2023

Soon after the event, sadly Derek Ormerod passed away. The NFWH team, friends of NFWH and partner organisations will miss him greatly.



An interview with

Prof. Romesh Gupta OBE MD FRCP MBA

Professor Romesh Gupta graduated in India. After working as Associate Professor of Medicine in the division of geriatric medicine in Edmonton, Canada he was, for nearly three decades, a consultant physician at the Lancashire Teaching Hospitals NHS Foundation Trust (LTHTr), where he led the stroke services.

He played a leading role in several organisations such as the NHS, Department of Health, Royal College of Physician, NCAS, GMC, CHI, BMA, ODA, and BAPIO.

In 2000 he founded the National Forum of Health & Wellbeing (NFHW) in Preston. His academic achievements have been widely recognised by, amongst others, the University of Bolton where he is Honorary Professor and Head of the Centre for Research into Health and Wellbeing, and by the University of Central Lancashire where he holds an Honorary Professorship in the School of Medicine. He received the Gold Award for Clinical Excellence from the Department of Health (DoH). Her Majesty Queen Elizabeth II, in recognition of his services to medicine and the community of Lancashire, awarded him an O.B.E. in 2008.

What was your best career move?

Whilst working as a Senior Registrar at Hope Hospital in Manchester, I was invited to join the University of Alberta in Canada as Associate Professor of Medicine. Rather than settling in the North America I decided to return to work in the NHS. This was indeed my best career move.

What was the best decision you made for your career?

The best decision was doing an MBA from Open University to develop "Management skills in Health Services". This enabled me to influence policy decisions and to work with the management team in a different way by understanding their language and communicating effectively with them. The modules of MBA included managing public services, HR management and creative management. These skills gave me the capability to develop policies for workforce particularly for the overseas graduates coming to the UK and impart effective communication, coaching, mentoring, appraisal and revalidation. I played a significant role in introducing mentoring for doctors and dentists in the NHS.

What motivated you to set up the National Forum for Health & Wellbeing?

As a Consultant I became active in the activities of the Overseas Doctors Association (ODA now BIDA) and served in different roles including Deputy Secretary, Chairman of the Hospital Doctors' Forum and National Vice Chairman. This gave the opportunity of representing the ODA at various NHS related organisations including Department of Health. My involvement with the DoH's working group dealing with ethnic minority health issues motivated me to improve awareness and access to health and wellbeing services by ethnic minorities.

In addition, I have been an active member of the Rotary International for several decades, held several executive positions in the organisation and been actively involved in community service for which I was awarded the Paul Harris Fellowship.

It was in early 2000 that the Gujarat Hindu Society (GHS) of Preston received matching grants from national lottery to build a new community centre. At the completion of the project I had a meeting with Mr Ishwer Tailor, President of GHS and other colleagues. The group established the Lancashire Gujarat Health Users Forum now known as NFHW, a registered charity. This initiated the start of the health seminars and Health Melas by engaging communities and empowering them to improve their health and wellbeing awareness. Melas were held in the GHS Preston, various community centres, Universities, and schools all over the nation.

As governor of the Lancashire Teaching Hospitals NHS Foundation Trust and secondary care specialist of Bolton CCG, I tried to implement policies that promoted community health awareness and empowerment.

What is your view on work-life balance?

Work life balance was the single reason I returned to the UK where work-life balance is better. My wife was trained as a GP but chose community health to ensure our children and the family get undivided attention.

I vehemently believe that work efficiency is improved with a better work life balance.

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

In my view there is a gross mismatch between the expectations of the public and the affordability of the NHS. The government should draw plans to improve public awareness and manage expectations matching with the resources.

What new technology or development would you like to see in the modern NHS?

The NHS has, over the years seen many scientific and technical developments. However, in my view development of HR is lacking. The NHS is the biggest employer with an enormous manpower requiring substantial investment. Unfortunately managers, doctors and health care workers are not working in harmony. I would like to see the HR development for all the arms of the NHS to work together, respect and understand each other.

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

Once a physician retires, I do not approve of them going back to work again as they are taking up places that are best left for the younger fresh generation to step in. In my opinion, following retirement they should find ways to contribute to the improvement of the health and wellbeing of the community. They could consider taking up mentoring and advisory roles with various health and educational organisations.

What makes you really happy?

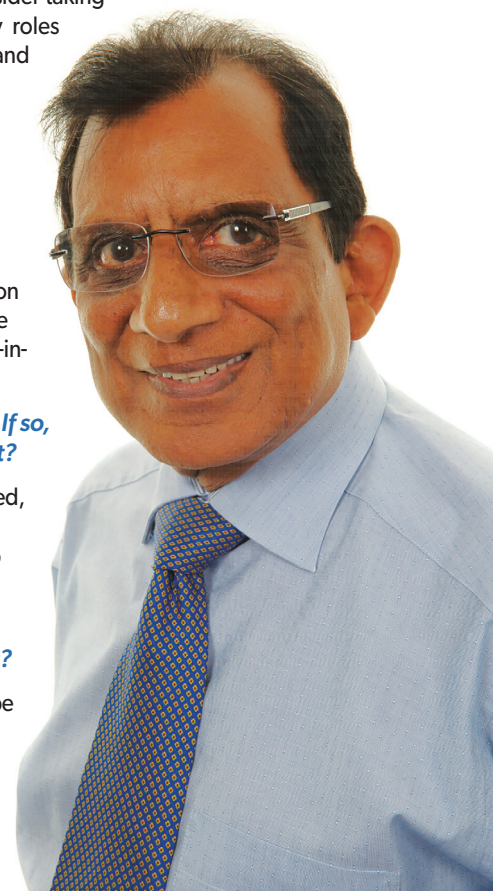
It makes me happy networking with people because I learn by conversing. I enjoy mentoring younger generation and advising them to become better professionals and well-informed individuals.

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

Stress is natural. If I am stressed, I usually try to change the situation. If I can't, then I stop worrying about it.

Where is your favourite destination in your travels?

South Africa, particularly Cape Town and surrounding vineyards for their amazing scenery and natural beauty.



BIDA News

Around the Divisions

Bolton BIDA Division

Bolton BIDA Division held a scientific meeting at their Bolton venue on 15th March 2023. There were lectures from **Prof Ambar Basu FRCP**, Consultant Physician in Diabetes and Endocrinology, on 'Diabetes NICE guidelines update'; **Dr Abhishek Kumar MRCP**, Consultant Cardiologist, on 'Diabetes and Heart Failure', and **Dr Anjani Kumar FRCP** on 'Diabetes and Chronic Kidney disease'.

Southport & Ormskirk BIDA Division

A face-2-face educational meeting was organised by the Southport & Ormskirk Division on 26th April 2023. **Dr Ravish Katira**, Consultant Cardiologist at St. Helens & Knowsley NHS Teaching Hospitals, delivered a talk on 'A Stepwise approach to lipid management'. There were 35 BIDA members from the Northwest who attended this interactive educational session. The session was very well received and was followed by dinner.



Conference on NHS and Clinical Issues

This was organised by the South West & South Central Divisions of BAPIO at Reading on 20th May 2023. This was an excellent conference with several educational topics and a discussion following a talk given by **Dr Arun Baksi** on

Establishing an independent security panel with statutory powers. **Amit Sinha**, BIDA National Secretary was invited as a guest panel speaker for a lively discussion on 'The Medical workforce crisis in the NHS', along with **Dr Chaand Nagpaul CBE**, **Prof Parag Singhal** and others.



Medical Quiz

- 1 Q1-A 32-year-old female patient presents with neck pain and swelling. She looks very agitated, and her observations indicate that she has tachycardia (Heart rate 110). She is not known to have any chronic conditions. However, she has recovered from a recent upper respiratory tract infection. Blood tests have showed TSH: 0.2 mU/L and Free T4: 42 pmol/L. What is the main diagnosis to consider?
 - a) Thyroid cancer
 - b) Graves' disease
 - c) Lymphoma
 - d) Hashimoto thyroiditis
 - e) de Quervain's thyroiditis
- 2 A 56-year-old male patient with background of hypertension and type 2 diabetes was started on a new medication to control his chronic conditions. He came to clinic for a routine review after a few months of the new medication being started. He has complained of 6 kg weight gain. Which medication would have resulted in this weight gain?
 - a) Amlodipine
 - b) Atorvastatin
 - c) Metformin
 - d) Gliclazide
 - e) Losartan
- 3 A 41-year-old lady with background of multiple sclerosis complains of severe leg cramps. What is the best treatment to offer her as the first line management?
 - a) Paracetamol
 - b) Prednisolone
 - c) Diazepam
 - d) Baclofen
 - e) Lorazepam
- 4 A 64-year-old male patient was noted to have a positive FIT test as part of the national bowel cancer screening programme. He had endoscopic and radiological investigations. His case was referred to the local Colorectal MDT and he was diagnosed to have a low rectal malignancy. What is the surgical management of the condition?
 - a) Left hemicolectomy
 - b) Sigmoid colectomy
 - c) Low anterior resection
 - d) Hartmann's procedure
 - e) Right hemicolectomy

Answers on page 25

Antimicrobial Resistance

– Are we losing the battle?

Anvay Dadhich 1st Year Medical Student, Jawarharlal Nehru Medical College, Ajmer, India

I come from a family of doctors in India, and while growing up I was well versed with common antibiotics and their indications. I very clearly remember going to a medical store and asking for a paracetamol and the salesperson asked me “Do you have a fever?” I replied “No, I have got a sore throat”. He went to the back of the shop and came with a box of Azithromycin, saying “Well, in that case, you should take these antibiotics”. I informed him that I had visited a doctor and he hadn’t prescribed me antibiotics. “We treat sore throats more than a doctor”, he replied.

I realised the problem that day, it is deep rooted in our community.

Antimicrobial resistance (AMR) has emerged as one of the principal public health problems of the 21st century that threatens the effective prevention and treatment of an ever-increasing range of infections caused by bacteria, parasites, viruses, and fungi no longer susceptible to the common medicines used to treat them.

The problem of AMR is especially urgent regarding antibiotic resistance in bacteria. Over several decades, to varying degrees, bacteria causing common or severe infections have developed resistance to each new antibiotic coming to the market. Faced with this reality, the need for action to avert a developing global crisis in health care is imperative.

The World Health Organization (WHO) has long recognised the need for an improved and coordinated global effort to contain AMR. In 2001, the WHO Global Strategy for Containment of Antimicrobial Resistance has provided a framework of interventions to slow the emergence and reduce the spread of antimicrobial-resistant microorganisms.

In 2012, WHO published The Evolving Threat of Antimicrobial Resistance – Options for Action proposing a combination of interventions that include strengthening health systems and surveillance; improving use of antimicrobials in hospitals and in community; infection prevention and control; encouraging the development of appropriate new drugs and vaccines; and political commitment.

What is Antimicrobial Resistance (AMR)?

Antimicrobial Resistance (AMR) occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death. As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective and infections become increasingly difficult or impossible to treat.

Impact

India

As per NHI, India carries one of the largest burdens of drug-

resistant pathogens worldwide, including the highest burden of multidrug-resistant tuberculosis, alarmingly high resistance among Gram-negative and Gram-positive bacteria even to newer antimicrobials such as carbapenems and faropenem since its introduction in 2010 (Figs 1 & 2). Regional studies report high AMR among pathogens such as *Salmonella typhi*, *Shigella*, *Pseudomonas*, and *Acinetobacter*. Annually, more than 50,000 new-borns are estimated to die from sepsis due to pathogens resistant to first-line antibiotics. While exact population burden estimates are not available, neonates and elderly are thought to be worse affected. Two million deaths are projected to occur in India due to AMR by the year 2050. It is no surprise that emergence of enzyme New Delhi metallo-β-lactamase (NDM-1), named after the national capital of India, in 2008 rapidly spread to other countries. The present article reviews the progress in addressing AMR in India after 10 years of the emergence of NDM-1.

Fig 1: Antibiotic resistance of *Klebsiella pneumoniae* in India

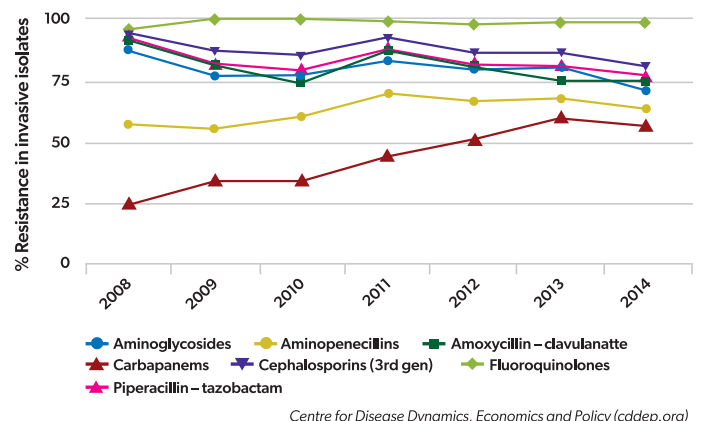
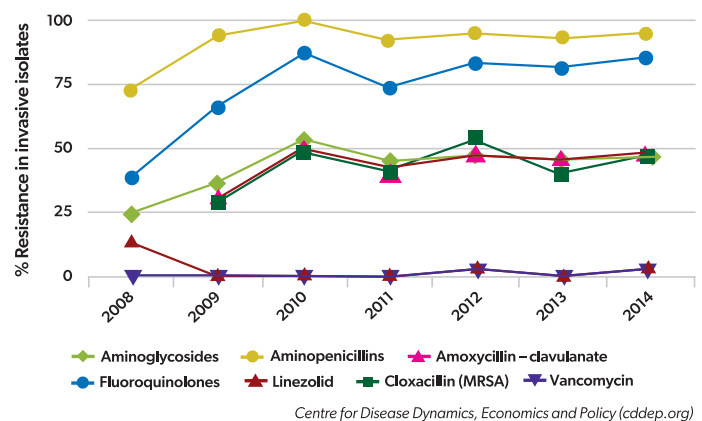


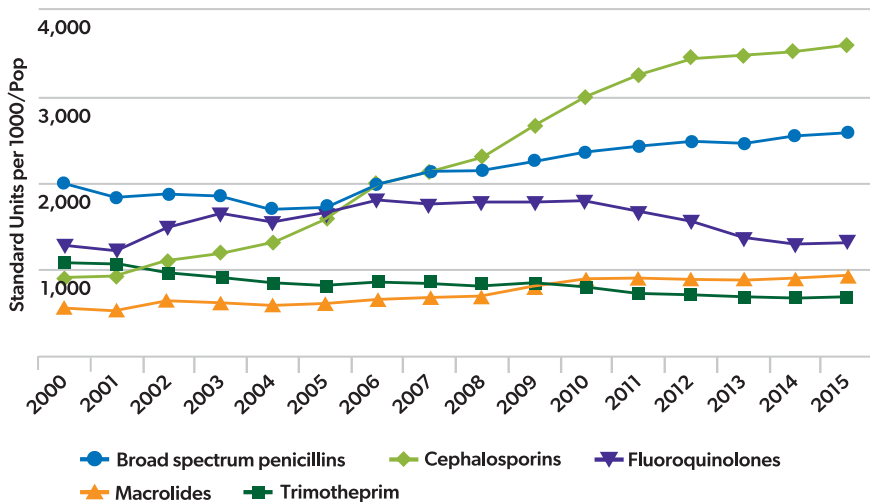
Fig 2: Antibiotic Resistance of *Staphylococcus aureus* in India



The high burden of AMR in India is driven by multiple factors. Antibiotic over-prescription is driven by a poor understanding of its dangers and contribution to AMR on the part of the provider as well as patients who lack knowledge regarding appropriate anti-

Fig 3: Antibiotic Use in India

Source: IMS Health



Centre for Disease Dynamics, Economics and Policy (cddep.org)

biotic use (Fig 3). In addition, pharmacists who are often the first point of care, dispense antibiotics without a physician prescription, offer alternative antibiotics even when patients present with a prescription. Within the hospitals lack of monitoring of antibiotic use is one of the major factors driving the spread of resistance. Health system factors are also at fault. Doctors routinely receive compensation from pharmaceutical companies in exchange for antibiotic prescriptions. Alarming rates of resistance have been reported in animal isolates of human pathogens, but the evidence is insufficient to make national estimates.

India spends only 4.7% of its total Gross Domestic Product on health, with government share only one-fourth (1.15%) of it, makes the task massive. One study found the median cost of treatment of a resistant bacterial infection to be more than a year wages of a rural worker.

World

The impact of antibiotic resistance in terms of mortality and of the public health cost is quite difficult to estimate, and there are few studies addressing this issue. The US Centre for Disease Control and Prevention (CDC) conservatively estimated that, in the US, more than two million people every year are affected with antibiotic-resistant infections, with at least 23 000 dying as a result of the infection.

In Europe each year, the number of infections and deaths due to the most frequent multidrug-resistant bacteria (*S. aureus*, *Escherichia coli*, *Enterococcus faecium*, *Streptococcus pneumoniae*, *Klebsiella pneumoniae* and *Pseudomonas aeruginosa*) was estimated at ~400 000 and 25 000, respectively, in 2007.

Also the economic impact of antibiotic resistance is difficult to quantify, as several types of consequences must be taken into account. Increased resistance leads to elevated costs associated with more expensive antibiotics (when infections become resistant to first-line antimicrobials, treatment has to be switched to second- or third-line drugs, which are nearly always more expensive), specialised equipment, and longer hospital stay and isolation procedures for the patients. Societal costs include death and loss of productivity.

5 Facts to know about AMR

- Antimicrobial resistance occurs when germs defeat the drugs designed to kill them, called antibiotics or antifungals. It does NOT mean your body is resistant to antibiotics or anti-fungals.
- Antimicrobial resistance can affect people at any stage of life. Infections caused by resistant germs are difficult - sometimes impossible - to treat. In many cases, these infections require extended hospital stays, additional follow-up doctor visits, and the use of treatments that may be costly and potentially toxic.
- You can take steps to reduce your risk of getting an infection. For example, healthy habits can protect you from infections and help stop germs from spreading. Get recommended vaccines, keep hands and wounds clean, and take good care of chronic conditions, like diabetes.
- Antibiotics and antifungals do not work on viruses, such as colds and the flu. These drugs save lives. But, anytime they are used, they can lead to side effects and antimicrobial resistance. If you have been taking these drugs, tell your doctor if you have three or more diarrhoea episodes in 24 hours.
- Antimicrobial resistance has been found in all regions of the world. Modern trade and travel mean it can move easily across borders, and can spread in places like hospitals, farms, the community, and the environment.

Conclusion

AMR is a global public health threat that requires urgent action. The misuse and overuse of antimicrobial drugs have contributed to the emergence and spread of resistant microorganisms, leading to higher healthcare costs, prolonged hospital stays, and increased morbidity and mortality rates. Addressing AMR requires a multi-faceted approach that involves policymakers, healthcare providers, patients, and the general public. By working together, we can preserve the effectiveness of antimicrobial drugs and protect public health.

AMR is a complex problem that requires a united multisectoral approach. The One Health approach brings together multiple sectors and stakeholders engaged in human, terrestrial and aquatic animal and plant health, food and feed production and the environment to communicate and work together in the design and implementation of programmes, policies, legislation and research to attain better public health outcomes.

Greater innovation and investment is required in operational research, and in research and development of new antimicrobial medicines, vaccines, and diagnostic tools especially those targeting the critical gram-negative bacteria such as carbapenem-resistant Enterobacteriaceae and *Acinetobacter baumannii*. The launch of the Antimicrobial Resistance Multi Partner Trust Fund (AMR MPTF), the Global Antibiotic Research & Development Partnership (GARDP), AMR Action Fund and other funds and initiatives could fill a major funding gap. Various governments are piloting reimbursement models including Sweden, Germany, the USA and the United Kingdom. More initiatives are needed to find lasting solutions.

Actions taken in INDIA so far: (Source NHI)

Over the past 8 years, national commitment to address AMR has steadily increased. The momentum can be seen from the increased research focus, where more than 50% (2184) of the 4220 articles indexed in PubMed for “AMR India” and 68 of the 77 articles resulting from “antibiotic stewardship India” searches were published in the past 5 years.

The national situation was very well aligned to Kingdon's three-stream policy window model that led to major policy changes in India. In the model, for a policy change to occur, three “streams” must flow together: one – problem (in need of attention), two – policy (available solutions), and three – politics (recognition of the problem by politicians). National and international attention was brought to the issue with the emergence of NDM-1; global examples of successful strategies were available to address the problem.

The first major step toward tackling this problem was taken in the form of a National Task Force on AMR Containment in 2010 followed by the adoption of National Policy for Containment of AMR, the Jaipur Declaration and the inclusion of antimicrobial containment in the 12th 5-year plan in 2011. However, this policy made little progress due to difficulties in implementation.

Further progress was made with the active involvement of the Indian Council of Medical Research (ICMR), and the adoption of the “Chennai Declaration” at the second annual conference of the Clinical Infectious Disease Society at Chennai on August 24, 2012. This was the first-ever meeting of medical societies in India on this issue. The declaration provided a roadmap to tackle the challenges of AMR from an Indian perspective. The declaration has had an unprecedented impact at national and international arena. ICMR established a national surveillance network of laboratories at tertiary medical academic centres.

The political commitment came from the Prime Minister himself. Public education came to the forefront with the Prime Minister directly addressing the nation in his 2016 radio address, highlighting the issue of antibiotic resistance and the launch of the “Red Line” campaign. A red line on the antibiotic packaging is aimed to draw public attention to the dangers of its misuse and has been lauded internationally.

The Government recently adopted a National Action Plan (NAP) on AMR in 2017. The strategic objectives of NAP-AMR are aligned

with the global action plan based on national needs and priorities. In addition to the five priorities of Global Action Plan on AMR, India has a sixth priority dealing with India's leadership on AMR. Six strategic priorities have been identified under the NAP-AMR: (i) improving awareness and understanding of AMR through effective communication, education, and training; (ii) strengthening knowledge and evidence through surveillance; (iii) reducing the incidence of infection through effective infection prevention and control; (iv) optimizing the use of antimicrobial agents in health, animals, and food; (v) promoting investments for AMR activities, research, and innovations; and (vi) strengthening India's leadership on AMR.

Global Action Plan on Antimicrobial Resistance (GAP)

Globally, countries committed to the framework set out in the Global Action Plan (GAP) 2015 on AMR during the 2015 World Health Assembly and committed to the development and implementation of multisectoral national action plans. It was subsequently endorsed by the Governing Bodies of the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE). To ensure global progress, countries need to ensure costing and implementation of national action plans across sectors to ensure sustainable progress. Prior to the endorsement of the GAP in 2015, global efforts to contain AMR included the WHO global strategy for containment of Antimicrobial Resistance developed in 2001 which provides a framework of interventions to slow the emergence and reduce the spread of AMR.

Antimicrobial resistance is a global issue which needs to be taken very seriously. If we need a solution for AMR we need all the stakeholders on the table willing to fight for the change and the cause.

Together we can fight this battle !!!!

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BIDA Public Health Seminar

The International John Snow Essay writing competition 2023

“Antimicrobial resistance – Are we losing the battle?”

Winners

- 1st: **Anvay Dadhich**
1st Year Medical School, Jawarharlal Nehru Medical College, Ajmer, India
- 2nd: **Carol Ann Georgie & Vishvapriya A.**
Final Year Medical students. SRM Medical College Hospital and Research Centre, Tamil Nadu, India
- 3rd: **Srinaath Ramanatha & S.A. Jayanth**
2nd Year Medical Students, SRM Medical College Hospital and Research Centre, Tamil Nadu, India

Runners-Up

- 1st: **Manyata Atul Goswami & Shruti Popat**
2nd Year Medical students, SRM Medical College Hospital and Research Centre, Tamil Nadu, India
- 2nd: **Dr Gautham Krishna**
Foundation Year 2 St Peter's Hospital NHS Trust, London, UK

Medical Quiz Answers

- 1 Correct answer is e) de Quervain's thyroiditis**
Blood results in the presence of neck pain point towards de Quervain's thyroiditis (1)
- 2 Correct answer is d) Gliclazide**
Weight gain is a side effect of Gliclazide (2).
- 3 Correct answer is d) Baclofen**
Baclofen and Gabapentin are recommended for management of leg cramps in patients with Multiple Sclerosis (3)
- 4 Correct answer is c) Low anterior resection**
Low anterior resection is the surgical management of low rectal cancer (4).

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Congratulations!



Dr Sunil Sapre

A huge honour. Dr Sapre was selected to be an official Table Tennis Umpire for the "Special Olympics WORLD GAMES, Berlin 2023", which took place between 17-25 June in the German capital city. Dr. Sapre is pictured above at the Games venue.

BIDA Sports

Programme for 2023

- 1. President's Cup Cricket Tournament**
First round matches on 25 June, semi finals on 2 July, and final in August (at a venue to be confirmed).

Watch the BIDA website for further details

- 2. Badminton and Table Tennis** in the winter: Divisions are requested to send in names of any interested competitors. Further details to be announced.
- 3. BIDA Golf Tournament**
Planned to take place before BIDA's Annual General Meeting in Wigan on 1st October.

Did You Know...?

Is weight a matter of personal choice? The cost of obesity.

New research from Imperial College, London looked at the extra costs incurred in the care of those who are overweight or obese. 75 years ago, at the outset of the NHS, less than 1% of the population were overweight. That number now, according to the House of Commons Library, is 64% of adults, and 22% of children aged 5. Using the figures from the Imperial team this means that the NHS is spending an extra £16 billion per year on obesity, about 10% of the overall budget (The Times, May 2023)

Did You Know...?

The Open AI Chatbot

ChatGPT is an artificial intelligence (AI) application that uses state-of-the-art language processing AI. It can perform a vast number of tasks, from writing poetry and explaining complex quantum mechanics, to translating language and writing research articles with a human-like understanding and legitimacy. Since its initial release to the public in November 2022, ChatGPT has garnered considerable attention due to its ability to mimic the patterns of human language, and it has attracted billion-dollar investments from Microsoft and PricewaterhouseCoopers. The scope of ChatGPT and other large language models appears infinite, but there are several important limitations.

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Vietnam & Cambodia



Egypt



Bali



Jordan



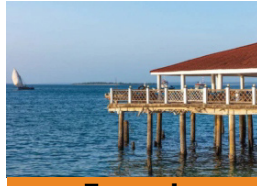
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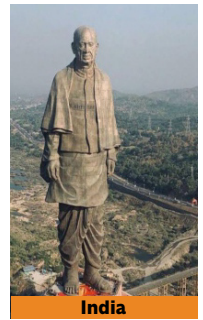
Japan



Kenya



Dubai



India

14th BIDA International Congress



Vietnam & Cambodia, November 2023