



My Journey in Medicine and Endocrinology

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Consultant in Diabetes and Endocrinology Norfolk and Norwich University Hospitals









Who is This Strange Man?

- I was born in Alwar, Rajasthan, but moved to the UK before the age of 1
- I went to a comprehensive school where my brother and I were some of the very, very few non-white pupils
- Being the child of Indian parents we were pushed hard to succeed academically







Me – Aged About 18











My Academic Journey

 I didn't do too well at my A levels..... but I still got into medical school – eventually









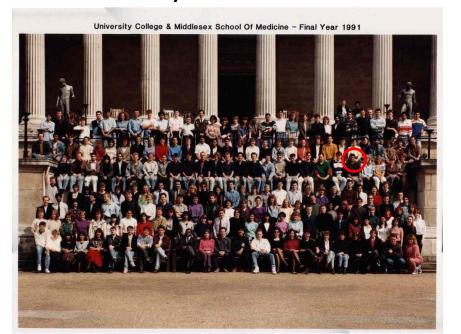




My Academic Journey

 I didn't do too well at my A levels.... but I still got into medical school – eventually











A Bit of Background

- I trained at the Middlesex and graduated in 1991
- I did not get 'on scheme' house office posts and so did stand alone jobs at Basildon and Brighton
- Then went back to Basildon for 2 years as an SHO
- Then went to the Whittington to do a post in ITU and cardiology – during which time I got married (arranged) and got my MRCP

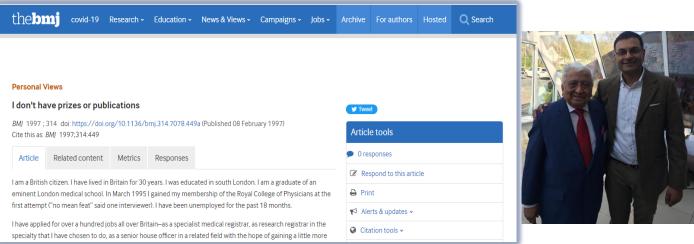






A Bit of Background

- Came to the end of that post without a job to go to
- I was unemployed for over a year trying to find a job and was a locum in D&E on the Isle of Wight for much of that time









Background

- I trained in D&E in South Thames, and was a part time GP for 2 years in the evenings
 - All the while wanting to be an intensivist
- 1991 1998 I only worked in DGHs
- I took time out to do ITU and anaesthetics
- I did an MSc in diabetes

The prophylactic use of low dose dopamine for the prevention of radio opaque contrast media induced acute renal failure in diabetic patients with pre-existing renal impairment undergoing trans femoral angiography.

A comparison between the currently used dose with a lower dose of dopamine.

An MSc Thesis







My Initial Research Idea.....

Was thought of by someone else

The New England Journal of Medicine

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VOLUME 345 NOVEMBER 8, 2001 **NUMBER 19**



INTENSIVE INSULIN THERAPY IN CRITICALLY ILL PATIENTS

GREET VAN DEN BERGHE, M.D., PH.D., PIETER WOUTERS, M.Sc., FRANK WEEKERS, M.D., CHARLES VERWAEST, M.I. Frans Bruyninckx, M.D., Miet Schetz, M.D., Ph.D., Dirk Vlasselaers, M.D., Patrick Ferdinande, M.D., Ph.I. PETER LAUWERS, M.D., AND ROGER BOUILLON, M.D., Ph.D.





However

- In my reading, one name kept cropping up
- I emailed him for help and sent him a copy of my CV
- Sree Nair at Mayo Clinic, Rochester, MN, rang me the next day and said he had a job for me









Mayo Clinic – 2001 to 2003

 DHEA research – in adrenalectomized women and elderly men and women

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812

OCTOBER 19, 2006

VOL. 355 NO. 16

DHEA in Elderly Women and DHEA or Testosterone in Elderly Men

K. Sreekumaran Nair, M.D., Ph.D., Robert A. Rizza, M.D., Peter O'Brien, Ph.D., Ketan Dhatariya, M.D., M.R.C.P., Kevin R. Short, Ph.D., Ajay Nehra, M.D., Janet L. Vittone, M.D., George G. Klee, M.D., Ananda Basu, M.D., Rita Basu, M.D., Claudio Cobelli, Ph.D., Gianna Toffolo, Ph.D., Chiara Dalla Man, Ph.D., Donald J. Tindall, Ph.D., L. Joseph Melton, III, M.D., Ph.D., Glenn E. Smith, Ph.D., Sundeep Khosla, M.D., and Michael D. Jensen, M.D.







A Couple of Degrees and a Few Papers





Norwich

- Larrived in 2004
- My senior colleague who was the research lead told me 'chose 1 small subject area and stick to it'
- I chose to stick to diabetes and endocrinology
 - Adrenal, pituitary, thyroid, gonads, pancreas, eyes
 - General medicine







Feet

- I took over the foot clinic in 2007
- It is now one of the largest in the UK
- So far we have published (on average) 3-4 papers per vear
- We are a 'go to' centre for foot research in the UK
- I'm on the International Working Group for the Diabetic Foot Guideline writing group
- Catherine Gooday, the principal podiatrist, has just been awarded her PhD

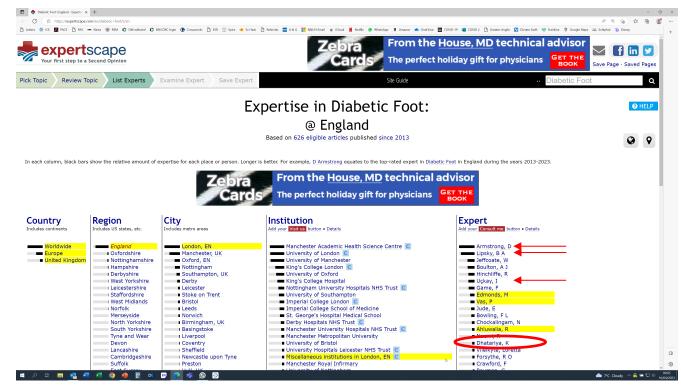






Norwich Medical

Number 15 in England for Diabetic Foot Expertise











Norwich Medical

Things – Collaborations with the University

- Norfolk Diabetes Prevention Study
- **Flavinols**
- Dementia
- Eyes

JAMA Internal Medicine | Original Investigation

Lifestyle Intervention With or Without Lay Volunteers to Prevent Type 2 Diabetes in People With Impaired Fasting Glucose and/or Nondiabetic Hyperglycemia

A Randomized Clinical Trial

Michael Sampson, MD; Allan Clark, PhD; Max Bachmann, PhD; Nikki Garner, MPhil; Lisa Irvine, PhD; Amanda Howe, MD; Colin Greaves, PhD; Sara Auckland, PhD; Jane Smith, PhD; Jeremy Turner, DPhil; Dave Rea; Gerry Rayman, MD; Ketan Dhatariya, PhD; W. Garry John, PhD; Garry Barton, PhD; Rebecca Usher, MSc; Clare Ferns; Melanie Pascale, PhD; for the Norfolk Diabetes Prevention Study (NDPS) Group

The effects of hypoglycaemia and dementia on cardiovascular events, falls and fractures and all-cause mortality in older individuals: A retrospective cohort study

Katharina Mattishent MRCP¹ | Kathryn Richardson PhD² | Ketan Dhatariya PhD³

IR George M. Savva PhD⁴ | Chris Fox MD¹ | Yoon K. Loke MD¹

Chronic Ingestion of Flavan-3-ols and Isoflavones Improves Insulin Sensitivity and Lipoprotein Status and Attenuates **Estimated 10-Year CVD Risk in Medicated Postmenopausal Women** With Type 2 Diabetes

A 1-year, double-blind, randomized, controlled trial

Peter I. Curtis, php1 MIKE SAMPSON, MD2 IOHN POTTER, MD1

KETAN DHATARIYA, MD² PAUL A. KROON, PHD AEDÍN CASSIDY, PHD

he global prevalence of diabetes is increasing, with recent predictions suggesting that complications of diabetes ecounts for 7% of all-cause mortality and

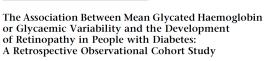
https://doi.org/10.1007/s13300-022-01241-z

ORIGINAL RESEARCH

The Association Between Glycaemic Control, Renal **Function and Post-operative Ophthalmic** Complications in People With Diabetes Undergoing Cataract Surgery—A Single-Centre Retrospective Analysis

· Ian Nunnev · Ketan K.



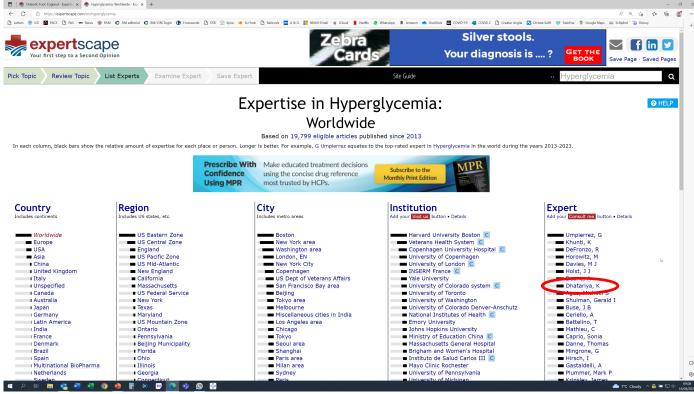


Ketan Dhatariya 60 · Alexander Humberstone · Abul Hasnat Rebecca Wright · Morgan Lujan · Ian Nunney

Diabetes Ther (2021) 12:2755-2766

ORIGINAL RESEARCH

Number 8 in the World for Hyperglycaemia











A Few Other Achievements

- From June 2023 I'll be the Chair of the Association of British Clinical Diabetologists (ABCD)
- Since 2016 I've been the Chair of the 'Exit' exam in D&E (and was the chair of the European exam as well)
- I'm the immediate past president of the diabetes and endocrine section of the Royal Society of Medicine







A Few Other Achievements

- I'm an associate editor on Diabetic Medicine and BMJ Diabetes
- I am on the research advisory boards for ABCD and DRWF
- I've guest edited editions of the Journal of Diabetes Science and Technology and also Metabolism and Target Organ Damage







Research Achievements

- Chair of the Data Safety Monitoring Board of 6 studies
- Adjudicator in large multinational studies (got to go to FDA)
- Local PI for dozens of commercial studies, and National lead for a current study (also a member of the global panel)









Inpatient Diabetes

- I chair the Joint British Diabetes Societies for Inpatient Care
- Guidelines downloaded over 1 million times
- Used globally
- https://abcd.care/joint-british-diabetes-societies-jbdsinpatient-care-group





Admissions av

NHS Foundation Trust

JBDS 01

JBDS 02

JBDS 03

JBDS 04

JBDS 05

JBDS 06

JBDS 07

JBDS 08

JBDS 09

JBDS 10

JBDS 11

JBDS 12

What Guidelines are Those Then?

| | Titlet Galdellies are illest |
|---|---|
| | |
| • | The hospital management of hypoglycaemia in adults with diabetes mellitus |

- The management of diabetic ketoacidosis in adults
- Management of adults with diabetes undergoing surgery and elective procedures: improving standards
- Self-management of diabetes in hospital
- Glycaemic management during the inpatient enteral feeding of stroke patients with diabetes*
- The management of the hyperosmolar hyperglycaemic state (HHS) in adults with diabetes
- Management Type "JBDS Guidelines" into Google

The use of var

- Discharge planning for adult inpatients with diabetes
- Management of adults with diabetes on the haemodialysis unit
- Management of glycaemic control in pregnant women with diabetes on obstetric wards and delivery units

The management of diabetes in adults and children with psychiatric disorders in inpatient settings*

- A good inpatient diabetes service
- Inpatient care of the frail older adult with diabetes
- Diabetes at the front door
- Diabetes in people living with cancer
- Diabetes related devices in the hospital*





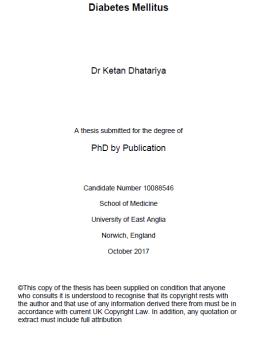
Being worked on





PhD





The Management of Hospital In-patients with



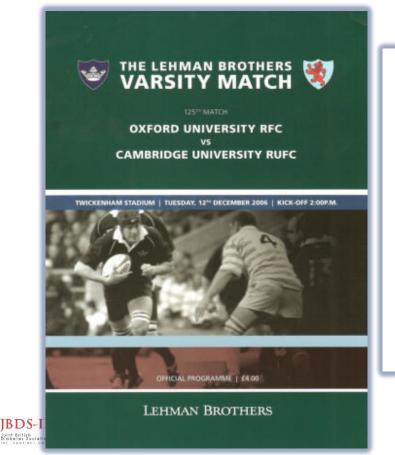




Norfolk and Norwich University Hospitals WHS

NHS Foundation Trust

Diabetic Ketoacidosis



Diabetic ketoacidosis

the substantial morbidity and mortality arising from

trolyte disturbances.

used can vary.

the acid-base imbalance, profound fluid loss, and elec-

Current guidelines written by diabetes specialists

from the United States and the United Kingdom

recommend initial replacement of fluids and electro-

lytes and intravenous insulin.12 The fluid advocated

in these guidelines is 0.9% saline. However, people

may be treated by emergency and intensive care doc-

tors as well as diabetes specialists, and the type of fluid

Saline should be used for fluid replacement rather than Hartmann's solution



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Competing interests: None declared.

Provenance and peer review: Non-commissioned; externally peer

BMJ 2007;334:1284-5 doi: 10.1136/bmj.39237.661111.80

1284

Diabetic ketoacidosis is a life threatening condition monly prefer to use Hartmann's solution (sodium caused by insulin deprivation or inadequate use of lactate intravenous infusion).3 Subsequent care is insulin in people with type 1 (or occasionally type usually delivered by the diabetes team, who pre-2) diabetes mellitus. Precipitants include deliberate fer to use 0.9% saline. The conflict arises because insulin omission, intercurrent illness, surgery, trauma, guidelines for fluid replacement in the acute setalcohol, late presentation of previously undetected ting are written by diabetes specialists, 1 2 whereas type 1 diabetes, and the use of drugs that alter carbono widely accepted guidelines have been written hydrate metabolism.1 People with diabetic ketoacidoby emergency or intensive care doctors for fluid sis need swift intervention by specialists because of replacement in diabetic ketoacidosis.

> For decades, 0.9% saline has been the fluid of choice for diabetic ketoacidosis, and its use continues to be advocated in modern textbooks on diabetes.4 Early studies on diabetic ketoacidosis in the 1970s used 0.9% saline,5 and this approach was reinforced a decade later.6 However, giving patients large amounts of chloride can cause a hyperchloraemic metabolic acidosis,3 7 so administration of 0.9% saline for diabetic ketoacidosis could potentially worsen the metabolic acidosis. Thus, 0.9% saline may be the fluid of choice simply because evidence for the efficacy of other fluids is lacking. The question of which fluid

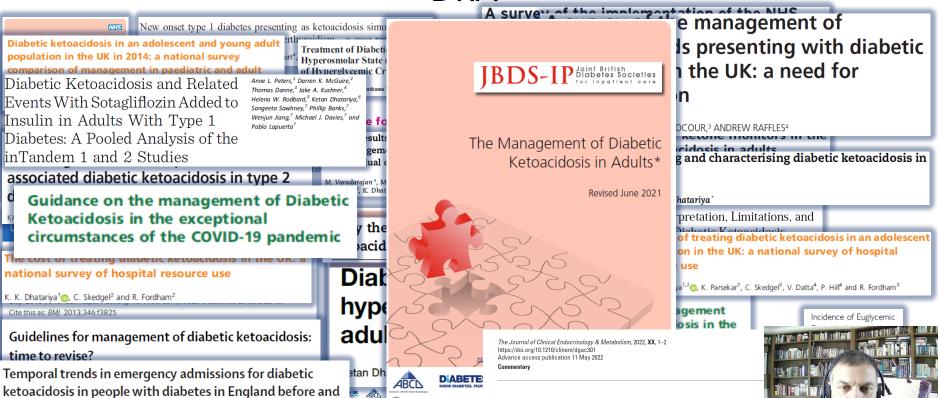
During the first few hours of hospital admission many people with diabetic ketoacidosis are treated by emergency or intensive care doctors who com-

replacement is op ketoacidosis is, the

Potential Role of Ultrafast-acting Insulii Treatment of Diabetic Ketoacidosis

Theocharis Koufakis, 1. Ketan K. Dhatariya, 2.3,4 and Kalliopi Kots

DKA



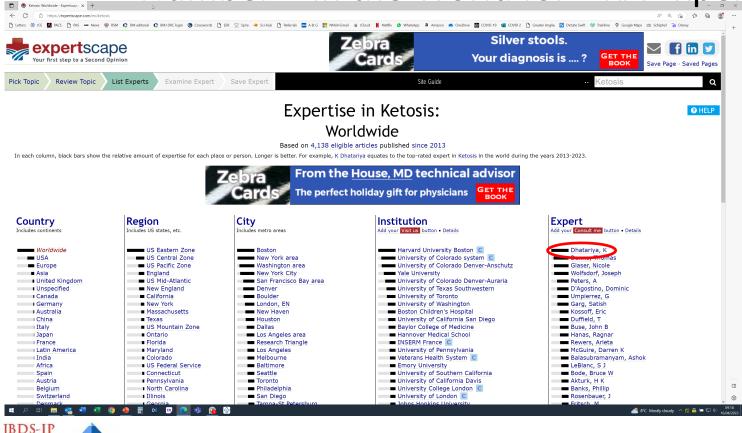
Royal College of Physicians

Diabetes Societies

during the COVID-19 pandemic: a population-based study

Shivani Misra, Emma Barron, Eszter Vamos, Stephen Thomas, Ketan Dhatariya, Partha Kar, Bob Young, Kamlesh Khunti, Jonathan Valabhji

Scholumber 1 in the World for DKA Expertise



ABC <u>Ketosis: Worldwide - Expertscape.com</u> − Accessed 16th April 2023





Hot off the Press

 I'm part of the writing group of the update for the American Diabetes Association consensus document on the

management of hyperglycaemic crises

Reviews/Commentaries/ADA Statements

Hyperglycemic Crises in Adult Patients With Diabetes

ABBAS E. KITABCHI, PHD, MD¹
GUILLERMO E. UMPIERREZ, MD²

JOHN M. MILES, MD³
IOSEPH N. FISHER, MD¹

glucose utilization by peripheral tissues (12–17). This is magnified by transient

Guidelines for management of diabetic ketoacidosis: time to revise?









Barriers and Opportunities

- I have (almost) never had any dedicated research time or funding
- Everything has been done in my own time
- Despite having a full time NHS job, I have added something to PubMed every 5 weeks since 2004, with an H-index of 43, i-10 of 117
- I've been named in the top 2% of scientists worldwide for citations and publications annually since 2019





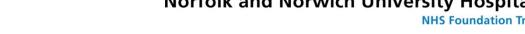
The Future of Diabetes and Endocrinology

- Is very, very bright the rise in the numbers of people with diabetes means you'll never be out of a job
- The pharmaceutical products coming in the pipeline are astounding
- It is the science of diabetes and the intellectual aspects of endocrinology (which is applied physiology) that remains so interesting









What Does This Mean For YOU?

- Always remain enthusiastic and committed
- Try and spot gaps in the market in the subjects that you really enjoy and exploit them
- You need a supportive family
- All of this takes time, dedication, commitment and BRAVERY











My Journey in Medicine and Endocrinology

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@ABCDiab





