

The horror and the pity: Obesity and diabetes

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Editorial

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Something less beguiling for a horror-story addict than the emergence of obesity would be hard to imagine. Start by reading the 27 August 2011 issue of the *Lancet*. One article predicts that the obesity rate in the UK will make the tremendous leap from the 25% it is today to 40% by 2030, when its consequences will cost the National Health Service in the UK an extra £2 billion a year. Add to this that more recently researchers reported the body mass index (see illustration of its origin of on page 272), which is used to determine adiposity, underestimates the number of people currently classified as obese by 39%¹ and it's not difficult to succumb to obesophobia (see the Box on page 264). After reading the *Lancet* you might move on to Peretti's² article published in the *Guardian* in June this year. Peretti explains that on average people in the UK are 19 kg heavier than they were in the mid-60s. We are not exercising less but we need to exercise more to counteract our change in diet. The main cause for the increase in obesity, which is also associated with an increased risk of many other disorders most notably diabetes type 2, is that we are consuming large quantities of high-fructose corn syrup. This supplement was surreptitiously introduced into our diet by the food industry in the 1970s. Peretti's article recounts a riveting and plausible theory of the political-industrial conspiracy that allowed this disaster to happen.

Next you should read this issue of *Medical Writing*. You could be forgiven though for asking why, however fascinating and horrific, a medical writing journal should devote an entire issue to obesity and type 2 diabetes. Unlike clinical trials related to cancer and paediatrics featured in recent issues of *MEW*, diabetes trials do not have sensitive and unique features that affect the preparation of reports on the procedures and results. But, with the incidence of obesity and diabetes set to soar, medical writers are bound to find themselves writing more and more about obesity and diabetes in the future. Accumulating knowledge of the diseases we write about is important. The GATE principles, which define the interaction between medical writers and authors, require that writers

have sufficient expertise in the topic or field.³ Nevertheless, an editor at *Gastroenterology* has stated that in her experience professional medical writers often have only limited knowledge of the diseases they write about.⁴

Another reason for focussing on diabetes is personal. I started my career in medical writing as managing editor of *Diabetologia* and before I pass on the editorship of *Medical Writing* to Phillip Leventhal, I am keen to highlight obesity and diabetes type 2 as diseases we should all be vitally concerned about.

The pity is that both diseases are largely preventable through diet and physical exercise. An obvious question, then, is why we don't act in our own best interests: eat sensibly and exercise sufficiently to avoid the dire consequences that we are fully aware of. It's a question that Diana Raffelsbauer asks in her article on obesity. Together with Melanie Price she also examines the evolution and causes of obesity: the contribution made by genetic factors, a lack of physical exercise, and 'toxic food environment'. Did you know that while the price of the flagship healthy food, fruit and vegetables, increased by 118% in the USA between 1985 and 2000, the cost of carbonated soft drinks, which are particularly fattening, only went up by 20% over the same period? Or were you aware that, according to the latest research, genetic susceptibility to obesity is modifiable? In these two comprehensive articles you will also learn about the frustrating and recurring cycle of new anti-obesity drugs entering the market only to be withdrawn when their side effects emerge. As a result, the invasive bariatric surgical procedure, which is reviewed in Diana's article, is still the most successful treatment for moderate and severe obesity.

Laura Cascales gives us an overview of the anti-diabetic drugs traditionally prescribed to control diabetes 2. Unfortunately, they have their problems too, not least that (with the exception of metformin) they cause patients to do the last thing they want to do: gain weight. New incretin-based therapies are now being developed that seem to circumvent the undesirable effects associated with current therapies

and they could herald a new era in the treatment of diabetes, subject to the outcome of long-term safety studies.

Somewhat surprisingly, despite increasing emphasis on the need for exercise, the extent of its importance for maintaining good health appears to have been underestimated and the underlying mechanisms are still not clearly understood. In a fascinating article in this issue, Donal Gorman explains how exercise affects the body and discusses why its study is set to make a major contribution to our knowledge of chronic diseases in the coming decade. Association studies have already linked over 30 chronic diseases to inactivity. A phase has now been reached in physical inactivity research when its relationship to the causes of chronic diseases needs to be investigated in clinical trials. Enter the medical writer!

Two articles in this issue focus on important new initiatives that are currently at the consultation stage and have been undertaken to tackle the obesity and diabetes pandemic. Peter Schwarz's article outlines the Global Diabetes Survey initiative in reply to the United Nations' proclamation that national plans for prevention and control of diabetes need to be developed and monitored to ensure a high quality of diabetes management throughout the world. You as a medical writer are invited to contribute as a stakeholder in this initiative.

EURADIA, the Alliance for European Diabetes Research, is running a consultation process on the development of the European Platform for Clinical Research in Diabetes (EPCRD). The European Union has established the European Council for Health Research, which is roughly modelled on the National Institutes of Health in the USA, for the better co-ordination of medical research in the European Union and to provide common resources and an overarching science policy. EURADIA is concerned that the forthcoming European Commission Research Framework Programme (Horizon 2020) will allocate sufficient funding to diabetes research in Europe. Sarah Hills works with EURADIA and explains in her article in this issue how Europe is falling behind the USA in clinical research. She stresses that without greater investment in diabetes research towards improved prevention and more effective care, total costs will become prohibitive as a result of increasing numbers of people with diabetes and ageing of the European population. EURADIA has proposed the EPCRD model to co-ordinate European clinical research in diabetes

and offer common resources, training, and standardised protocols.

Phobias

It is fairly easy to guess that obesophobia means a fear of becoming fat. Pyrexiphobia, however, is not a fear of Pyrex dishes but of fever. You can find an amazing list of phobias at <http://www.indianchild.com/phobias.htm> Don't miss the footnote at the end warning you that after seeing the list you may have developed a fear of words, which is called logophobia.

I felt that it was very important to publish an explanation of copyright in this issue because with the changeover of publishers questions have arisen from the membership, which call for an independent and clear account of reasons, rights, and obligations surrounding copyright. I am therefore pleased to include Pippa Smart's informative article on the topic in this issue.

These are the last articles I have commissioned and reviewed for *Medical Writing*. They are excellent articles and I am pleased to be ending my 8 years as editor of the journal on this high note. I would like to take this opportunity to thank all the authors who have freely given their time to writing articles for the medical writing community over these past years. I am also very grateful to all those people who have been closely associated with the journal as columnists, section editors, and copy editors. Without their essential contributions EMWA would not have the thriving journal it has today. Finally, thanks to Phillip Leventhal for taking over the editorship and my best wishes to him in carrying the journal forward into a bright future.

References

1. Shah NR, Braverman ER. Measuring adiposity in patients: the utility of body mass index (BMI), percent body fat, and leptin. *PLoS ONE* 2012;7(4): e33308. doi:10.1371/journal.pone.0033308.
2. Peretti J. Why our food is making us fat. <http://www.guardian.co.uk/business/2012/jun/11/why-our-food-is-making-us-fat?INTCMP=SRCH>
3. Daskalopoulou SS, Mikhailidis DP. The involvement of professional medical writers in medical publications. *Curr Med Res Opin* 2005;21:307-10.
4. Lok AS. Authorship: who should be included and how should it be determined? *Gastroenterology* 2011;141(3): 786-8.