MUSINGS

She lost her battle with cancer a little over a year later and left her family bereft in her absence. She was 48. For my brother and me, my mother formed the crux of our family, the point of contact in regards to our stricter, far more rigid father. Her death affected our family dynamics in a way that seems irreparable.

My mother was one amongst many other women who suffer in silence just so that they don't inconvenience their family in any way whatsoever. They ignore their health in the name of family or the busy world that they've devoted their whole lives creating.

This has been the case with women in the past who simply did not know how to value themselves, some might say. I only wish that were true. After a small surgery, a very close friend found out that her ultrasonography reports were not completely normal. There was evidence of stone-like mass near her kidney. As she thought that they were only small stones, she neglected this matter for around three months. She couldn't

UPASHANA SALAM

take the time out from work and family and it wasn't such a big deal anyway, she informed us. When the pain was unbearable, a visit to the doctor proved that she was suffering from tumor. Thankfully, it was benign and a surgery was all that was needed. But the pain that she has had to suffer overshadows everything else.

This International Women's Day, we need to make a promise to ourselves. We need to pledge that our health will be our top priority. We need to ensure that the women around us are aware of their health rights, they realize how important their health and life is to their families. More than anything else, your family needs you. A yearly health check-up is a must. Don't be a martyr without a cause. That will serve no purpose, whatsoever.



What a Piece of Work is Man

The trouble with men is that they aren't women

AMITAVA KAR

omen are crazy, men are stupid. And the main reason women are crazy is that men are stupid. If you don't agree that men are stupid just check the newspapers. Ninety nine percent of the truly horrifying things going on in this world were initiated, established, perpetrated, enabled or continued by men.

Women have good reasons to be nuts. To begin with, they are smaller. So they get slapped, punched, and abused by men on a regular basis.

Another major problem for women is that they have to look



good all the time. Or at least they are led by men to think they do. And looking one's female best requires a lot of things. They have to buy and wear an unbelievably bewildering amount of garments. And let's not even begin to talk

about shoes—especially, high heels that damage a woman's feet, ankles, and knees, but make her behind look great.

And this obsession with appearance has only one purpose. It is supposed to lead to

romance and someday, a wedding. The man takes a wife, the woman is given away, and everyone stands around hoping she gets pregnant immediately.

Think of how fulfilling that can be. After all, now she has a baby,

the job where she gets less than men for the same work, does not rise beyond a certain level of the company and gets harassed by some old moron. And just by virtue of being

a baby she gets to practically

iron, do the shopping and

entertain the guest. She is a

raise alone. And if she decides to

be a stay-at home mom, she gets

to cook, clean, scrub, wash, dry,

housewife, an unpaid domestic

That's the old model, though.

In the new model, she gets a job

cash. But somehow, she still ends

servant after she gets home from

so she can bring home some

up being an unpaid domestic

women, they get many treats from Mother Nature as well. They are obvious and hardly require description.

But in exchange for all these abuses from man and nature, what is the woman's pay-off?

Well, many men are quite willing to open the door for her. Isn't that something?

* The title has been taken from Shakespeare's Hamlet.

Interview with DR LISA ACKERLEY, Professorial Fellow, RSPH, Visiting Professor, University of Salford, Managing Director, Hygiene Audit Systems Ltd

Tell us a bit about RSPH & its work globally?

The Royal Society for Public Health is an independent, multi-disciplinary charity, dedicated to the promotion and protection of collective human health and wellbeing. With stakeholders including healthcare workforce, charities, community groups, public health specialists and local and national government bodies, we have a global outlook and many international members.

What brings RSPH to WONCA conference in Dhaka?

The Lifebuoy "Help a child reach 5" is the first campaign to be accredited by the RSPH, and as there are so many successful Lifebuoy projects being undertaken in Bangladesh, this conference is a very good opportunity to talk about the value of the campaign and of course, the value of hand-washing.

Could you elaborate a bit on germ protection & role of hand wash with

Diarrhoea causes 4 percent of deaths globally, and there are around 4 billion cases of diarrhea world-wide. Three to five million cases of respiratory diseases occur every year around the world, resulting in between 250,000-500,000 deaths. We know that globally every year 1.7m

children die before their fifth birthdays from preventable infectious illnesses such as diarrhoea and pneumonia.

I am passionate that everyone should wash their hands regularly, and particularly at the right time - the Unilever School of 5 teaches children to wash their hands before meals, after using the toilet and before going to bed.

Child Reach 5 Campaign. Could you briefly tell us about this endorsement?

The RSPH reviewed the formulation of the Lifebuoy range of soap, body wash and hand-sanitiser, they examined the accuracy of its advertising claims and benchmarked the educational hand hygiene campaign. They also reviewed research around the behaviour change which Lifebuoy designed the format of their outreach educational work. After examining all these things, the accreditation for the Lifebuoy "Help a Child Reach 5 Campaign" was given.

Because people can't see microorganisms or germs, it is sometimes hard

RSPH has endorsed the Lifebuoy Help a

programme and looked at the evidence on

Since you are here for family physician conference, any recommendation you'd have for creating a healthy family/ society in Bangladesh?

to discuss how germs can cause infection,



PHOTO COURTESY: UNILEVER

and the importance of washing germs off our hands, so media campaigns using the glow in the dark powder can be very effective to visually demonstrate the "journey of the germ."

Doctors may want to display easy-toread posters in the waiting room. If there is a toilet at the surgery or anywhere the public go for health care, then the back of the door is a great place to leave a message about hand washing!

What could schools do?

In the Zambian school, the children have to line up and wash their hands in front of the prefect or teacher before being allowed into the dining hall. This is a really good idea. I would like to see hand washing with soap before kids come in from the playground as well – their hands get very dirty when playing which is fine, but best to get rid of the germs before sitting down for lessons.

PARTICLES

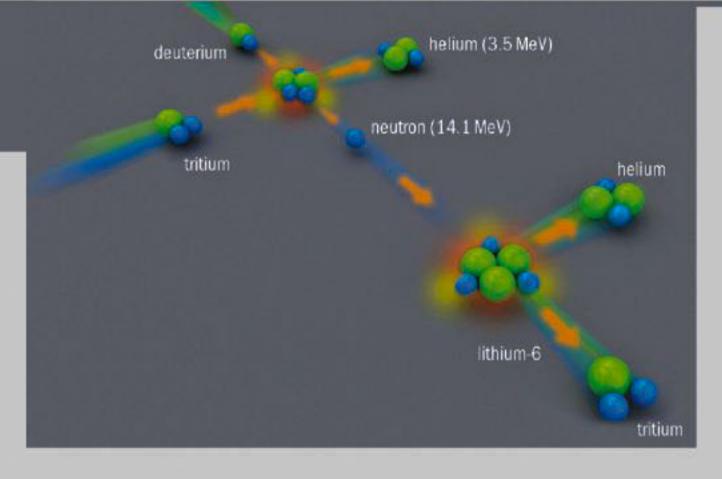
NUCLEAR FUSION

The Holy Grail of Energy

QUAMRUL HAIDER

ver wondere how the Sun could have been shining for 4.55 billion years, radiating immense amounts of energy into space? How does the Sun produce the energy that will keep it shining for another 5 billion years? The energy source that powers the Sun is a "fusion reactor" buried at its center, where the nuclear reactions convert hydrogen into helium, accompanied by the release of huge amounts of energy.

Nuclear fusion, the holy grail of energy, is a process in which two lighter nuclei are fused together to produce a heavier nucleus. In the process, a good deal of energy is released, three to four times greater than the energy released by fission reactions that are at the heart of today's nuclear power plants. The simplest reaction in which enormous amount of energy will be released is the fusion of the hydrogen isotopes



deuterium and tritium producing helium and a neutron Isotopes are different forms of a nucleus containing equal numbers of protons but different numbers of

Deuterium is found aplenty in ocean water. The amount is prodigious (33 milligrams per liter of water), enough to last for billions of years. Naturally occurring tritium, on the other hand, is extremely rare. Nevertheless, it can be produced inside a reactor by neutron activation of lithium, the other raw material for fusion found in brines, minerals and clays. Because of the abundance of fusion fuel, the amount of energy that can be released in controlled fusion reactions is virtually unlimited.

The scientists and engineers at Lockheed working on the fusion reactor acknowledge that the project is still in its nascent stage, and many key engineering challenges have to be overcome before a viable prototype can be built. Nonetheless, they are cautiously optimistic that an operational fusion reactor with enough energy output to power a small city, yet small enough to fit on the back of a truck, can be built before the end of this decade.

There are many advantages of fusion reactors. They will produce copious amount of electric power, five times more than the amount of energy it will need to heat the fusing nuclei to the desired temperature, without effecting the environment.

Unlike fission, fusion will have a low burden of waste. The by-products of fusion reaction are helium, a harmless gas used to inflate children's balloons, and neutrons. Some radioactive wastes will be produced though, but their inventory is much less than those from fission and they will be short-lived.

A fascinating application for the abundant energy that fusion may provide is the "fusion torch," a star-hot flame or high temperature plasma into which all waste materials—liquid sewage or solid industrial refuse—could be dumped.

Good things in life don't come cheap. Once fusion reactors become a reality, they will provide the setting for a better world in our own time.

The writer is Professor of Physics at Fordham University, New York.