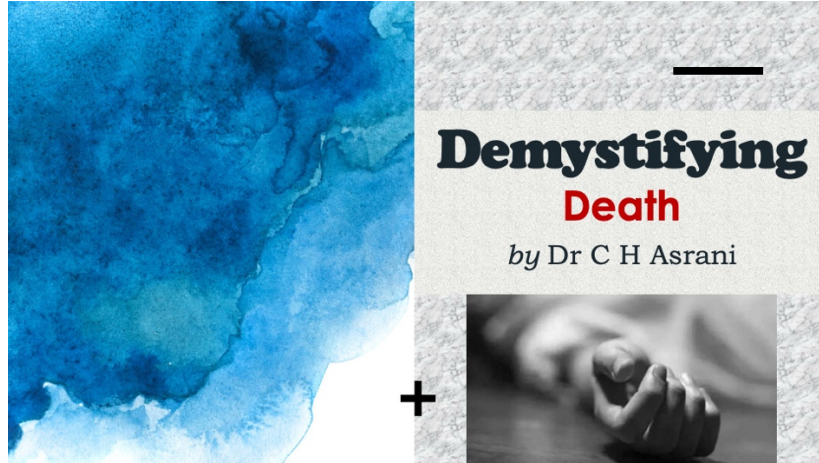


Death is destined.

**How we face our destiny, is our KARMA!**



After the above philosophical quote, I saw in a temple, let me begin Demystifying.

Death is the irreversible cessation of all biological functions that sustain an organism. For humans, death can also be defined as the irreversible cessation of functioning of the whole brain, including the brainstem.

Lately, there have been thousands of reports of, so called, SUDDEN DEATH – without accident, without serious trauma. Two examples:

A 34-year male, attending a seminar, just rolled over and was declared 'Brought Dead'.

A 48-year female, no co-morbidities, feels giddy and collapses – declared dead!

Families thus affected as well as those in insurance industry have been struggling to unravel the mystery of such Sudden Death.

**Is such sudden death possible? The answer is NO!**

Why? You may ask.

Human body has an amazing Vital Organ Reserve.

- 1/10<sup>th</sup> of ONE kidney is ENOUGH to sustain life
- 2/3<sup>rd</sup> of heart may be non-functional, yet the patient lives!
- One lung can be removed surgically, yet patient can be near normal & even run and jog!
- One may start panting after walking a few steps BUT still alive.
- There are several illnesses, but only one DEATH!
- Death is a great teacher!
- Death tells about ailments the individual had!

I must share here, although it may sound morbid, the best teaching we had in medical colleges was attending a 'Death Conference', where all seniors would discuss 'How a particular death could have been avoided?'

#### *What causes death?*

1. Accidents, acts of terrorism, suicide etc
2. Infections: Acute infections that kill over short period – pneumonia, other lower respiratory tract infection (LRTI), diarrhoeal diseases, vector borne infections (dengue, malaria, leptospirosis), hepatitis, meningitis, typhoid etc
  - Epidemics/ Pandemics e.g. Covid
  - Infections that kill over LONG TERM
    - Tuberculosis
    - Hepatitis B/ C
    - HIV
3. Death after prolonged sickness
  - Sequel (after effect) of acute illness/ injury
  - Infections with a long-drawn course
  - Rheumatic Heart Disease
  - Hepatitis B, C
  - HIV
  - Tuberculosis
4. Non-communicable Diseases (NCD)/ Chronic ailments – a NCD takes on an average 10-15 years from establishment of disease till death. There are, of course, several instances of morbidity i.e. hospitalization for related complications.  
Most NCDs viz. diabetes mellitus, hypertension and lipid abnormalities affect one or more of Target Organs (Brain, heart, kidneys, eyes, lungs).

So either hypertension or diabetes mellitus alone or in combination are notorious for their association with coronary artery disease, heart attack, stroke and chronic kidney failure.

Other NCDs are:

- Cancer
- Obesity
- Substance abuse
  - Alcohol
  - Tobacco
  - Drugs of pleasure

It is essential to know that all NCDs are:

- are slow growing.
- Have multiple factors in causation (lifestyle ailments)
- are silent Killers – **SO CALLED** sudden deaths.
- Cause chronic, irreversible, changes in the body and major clinical events, at times fatal, affecting Target Organs
- They cripple/ disable more than they kill.

The plus side is that they are ALL:

- Predictable
- Preventable
- Manageable

*By judicious life style management.*

*How do we prevent, so called, sudden deaths?*

Keep a watch on risk factors:

- For many diseases, the disease agent is still unidentified, eg coronary heart disease, cancer, peptic ulcer, mental illness etc.
- Where the disease agent is not firmly established, the cause is generally discussed in terms of “risk factors”.
- A Risk factor is a variable that has been recognized to increase the chances of getting a particular illness.

The risk factors are:

- Non modifiable
  - The unmodifiable risk factors such as age, sex, race, family history and genetic factors are not subject to change.
  - They act more as signals in alerting health professionals and other personnel to the possible outcome.
  - Actuarial professional may use them to make mortality tables.
- Modifiable
  - The modifiable risk factors such as obesity, hypertension, diabetes mellitus, dyslipidemia, cancer, alcoholism, tobacco consumption etc are within our reach to modify
  - They act as major variable in underwriting in alerting insurance professionals and other personnel to the possible future.
  - Actuarial professionals also use them to make mortality tables

Hypertension: a MAJOR RISK factor for

- Cerebro Vascular Disease (Stroke)
- Coronary Heart Disease (ACS/ MI)
- Kidney failure
- LVF/ CCF
- Irreversible Blindness

Diabetes: a MAJOR RISK factor for

- Cerebro Vascular Disease (Stroke)
- Coronary Heart Disease (ACS/ MI)
- Kidney failure
- LVF
- Foot amputation/ Irreversible blindness
- Infections/ Septicaemia

Finally, causes of death can be summarized

- Inborn or congenital problem, manifesting late → never sudden death
- Infections → never sudden death
- Metabolic issues → never sudden death

- ❑ Injury → only possibility of sudden death
- ❑ Degeneration → never sudden death
- ❑ New growth (Cancer) → never sudden death

**Our Karma is our lifestyle management; that will shape how we meet our destiny – on our own two feet or moribund?**