Dr.Samar's set of slides 1 Summary: (do not memorize any numbers from this set of slides ONLY, there arent any questions about numbers for dr/Samar's midterm material but there are for the new material)

definition of health: a state of complete physical, mental, and social well-being and not merely the absence of disease

- -physical and mental health are INTERdependent
- -health and disease can exist and be mutually exclusive if the definition of health is defined restrictively
- -world wide indicators of health and disease: poverty and low-level of education
- -reproductive health: addresses the reproductive processes, functions and system at all stages of life
- -promotion and prevention depend on: social determinants, health services and genetics of the individual
- -reproductive health >> morbidity and mortality, prevention and promotion, maternal and child health
- -maternal heath >> during pregnancy
- -MHC >> family planning, preconception, prenatal, postnatal
- Goals of MHC: education, health promotion, screening, intervention to reduce risk factors
- -prenatal: during pregnancy
- -post-natal care: most important is family planning
- -time after delivery (first 24hrs) is the most important for maternal deaths as it accounts for 2/3rds of them
- pregnancy complications are the leading cause of maternal death among women of reproductive age
- less than 1% of maternal deaths happen in developed countries
- a child is 10x more likely to die in the first two years if there was a maternal death
- most infant deaths are in the first week of birth of during delivery, 37% of infant deaths occur in the first month
- maternal death due to >> HIV, malaria, TB and bad maternal conditions
- -Maternal death includes direct and indirect causes of death such as cancer while pregnancy-related death only includes DIRECT causes
- -DALY: disability adjusted life years, measure of overall disease burden, expressed as the number of years lost due to ill-health, disability or early death
- subsaharan africa has the most maternal deaths while europe and canada has the least
- obstructive hemorrhage is the number one cause of maternal death
- risk factors for maternal death: frequency and spacing of births, nutrition, age,

stature, medical support, access to treatment, management in health care system, infections like malaria

- -most maternal deaths are preventable
- -45% of infected mothers transmit HIV to their baby

66% of child deaths can be prevented if affordable health care interventions were taken

-each year over 10mil children die under the age of 5

from POVERTY (most important), under-nutrition/malnutrition, high fertility and short birth intervals

- -infant mortality is an important indicator of maternal health, measured per 1000 LIVE births
- -neonatal death occurs in the first 28 days while postnatal occurs in between 28days-1year
- -very Low birth weight < 1.5kg while low birth weight < 2.5kg
- -leading cause of neonatal death: birth defects, disorders of gestation, L.B.W and pregnancy complications
- -most deaths are preventable >> preterm birth = L.B.W which accounts for 20% of deaths
- -75% of infant deaths happen in the first week
- -perinatal deaths is the most sensitive indicator for childs mortality
- -fetal death>> complications of pregnancy

abortion: first 28weeks of gestation

- -alcohol + smoking >> increase fetal mortality greatly
- screening is very important for high risk groups
- under 5 mortality rate is measured per 1000 deaths
- after 1 year, children usually die from malnutrition, poverty, house conditions etc , this is mostly in developing countries
- -in developed children usually die from infectious diseases
- well-baby clinic is important
- pneumonia + diarrhea >> 40% of child deaths, 62% overall infectious for uNDER-5MORTALITY
- 2/3rds of all neonatal deaths are L.B.W infants
- -36% of all NEONATAL deaths are infectious
- Millenium goal 4:reduce child deaths by 2/3ds
- -millenium goal 5: reduce maternal deaths by 3/4ths (from 1990-2015)
- ^^goals not being achieved
- re-emerging diseases of maternal and child health; HIV, TB, cholera, swine flu
- -most important prevention of child death is vaccination
- -tetanus toxoids used in home-delivery
- malaria is very dangerous during pregnancy

- -Hollistic approach: social determinants >> risk factors >> morbidity >> mortality
- 99% of all maternal deaths are in developing countries
- -nearly 99% of neonatal deaths are in LOW income countries

(set 2 is excluded for the final)

Samar set of slides #3 Summary

(set 4 will be posted tomorrow)

- NCD : leading killer today
- 80% of NC Deaths occur in low and middle-income countries
- 9mil deaths<NCDS before 60yrs
- Men and women affected equally
- 63% of all deaths in 2008 were due to NCDs, majority were CVD, diabetes, cancer and chronic respiratory diseases
- NCD mostly due to: tobacco use, physical inactivity, unhealthy diet and use of alcohol
- In 2008: leading cause of death was CVD 48%, cancer 21% followed by respiratory diseases then diabetes
- Behavioral risk factors responsible for 80% of Circulatory diseases, which means they can be prevented
- CVD more than half of all deaths across European region
- CVD risk factors: genetics, foundation laid in early-life, socioeconomic group, mental health, diet, physical activity, tobacco, alcohol, diabetes, globalization and urbanization
- Prevention of CVD: risk factors, screening, providing effective and affordable treatment, prevention by 1) less cholesterol ingestion (most effective 2-4% of mortality reduction) 2) smoking 3) reducing diastolic blood pressure
- Treatment of CVD: drugs for people with high risk factors
- Cancer: person's genetic make-up + one of these 1) physical carcinogen e.g. radiation 2) chemical e.g. vinyl chloride 3) biological: h.pylori
- High income countries leading cause of cancer death: lung- men , breast women
- Low and middle income countries, depends on the place, e.g. sub-saharan africa: cervical cancer leading cause (no screening over there)
- Cancer risk factors: tobacco, diet, physical activity, alcohol, infections, radiation and environmental, occupational exposures
- WHOS cancer policy pillars: 1) prevention 2) early detection 3) screening 4)treatment 5)palliative care

- -1/3 of cancers are preventable, 1.3 of cancers when early detected can be treated, the rest should get palliative care
- National cancer control: public health program to reduce cancer incidence and mortality, improve cancer patients quality of life, through systemic and equitable implementation of evidence based strategies for the 5 pillars ^, making best use of resources available
- Chronic respiratory diseases: smoking 71% of all lung cancers and 42% of all chronic resp. diseases, highest prevalence in European region: 29%
- More than half of children in Europe are exposed to second-hand smoking, asthma is the most common chronic disease among children
- 12% of infant deaths due to respiratory diseases from indoor pollution, damp, poor housing and social conditions, poor indoor air quality and inadequate housing hygiene
- Asthma can occur antenatally (showing importance of pregnant women's conditions)
- Ozone pollution causes breathing difficulties and triggers asthma symptoms, causes lung, heart diseases and many premature deaths
- Uk, turkey, ireland: first countries to make public places 100% smoke free
- Diabetes: risk of dying among people with diabetes is at least double the risk of their peers without
- Emerging epidemic of diabetes traced back to overweight, obesity and physical inactivity
- Diabetes is predicted to become 7th cause of death in world by 2030, with total deaths rising by more than 50% in the next 10yrs
- 80% of diabetic deaths are in low and middle-income countries
- In developed countries most people with diabetes are over 64 while in developing between 32-64yrs
- Diabetes is the leading cause of kidney failure 10-20% of deaths from kidney failure, responsible for 1/3 of end-stage renal disease
- Diabetes increases risk of heart disease and stroke, 50% die from this
- Prevention of diabetes: physical activity, diet, early diagnosis, treatment lowering blood sugar, tobacco cessation
- Obesity: prevalence tripled since the 1980s, rising among children especially
- obesity increases risk of NCDS, it is a co-morbidity factor with increasing body weight
- Underweight < 18.5, normal 18.5-24.9, pre-obese 25-29.9, obese more than 30 (BMI)
- Now obesity is found in low-and middle income countries too not just in high like in the 1980s
- 40million preschool children: overweight>> more likely to become obese adults

with NCDS

- 65% of world's population live in a country where overweight and obesity kills more people than underweight, this includes all high and middle income countries - (Globally: 44% of diabetes, 23% of CVDs and 7-41% of cancers) are from obesity

Dr.Samar's set of slides #4 Summary

4 NCDs (CVD, cancer, Respiratory diseases and Diabetes) in eastern Mediterranean region account for 52% of all deaths and 47% of disease burden - 2005, 75% of them are due to the conventional risk factors

Physical inactivity is the highest risk factor, diabetes is the least

Diabetes is highest in syria, hypertension highest in iraq, obesity

+hypercholestermia highest in kuwait, smoking highest in - jordan, lowest physical activity - kuwait, SYRIA NOT SUDAN has the lowest intake of fruits and vegies Amputations 10 times more common with diabetics, first cause of amputation (trauma)

Diabetics are 20times more likely to develop blindness

Prevalence of undiagnosed ncd risk in oman mostly due to hypercholesrolaemia 96%

In EMR, cancer is the 4th ranked cause of death after CVD, infectious diseases, injuries

Cancer kills more than hiv,tb and malaria combined in EMR

Goal of minister of health: annually reduction of chronic disease death rate by 2%, will save 2.3 deaths

There are many programs for cancer in EM countries but they are at different levels of development, in almost all countries, cancer is detected late >> more cost + mortality

Access to cancer treatment is limited, also to palliative care

Regional strategy: establish national cancer control committee, develop and implement NCCP which is done by: primary prevention, early detection, diagnosis and treatment, palliative care, registries and research

DPAS= global strategy on diet and physical activity and health/WHA204, only Oman has adopted it.

Implementing DPAS= reduction in mortality plus morbidity of NCDs and their risk factors

Physical activity in EM region not exercised due to cultural thoughts and lack of opportunities and places

Health promotion, prevention, and care services should be provided at the same place. Population use of PHC is 80%

NCD interventions must cover complete spectrums of health needs

Conclusions of health challenges=7 1. lack of reliable data for advocacy

- 2. resources funding
- 3. political instability
- 4. supportive environment
- 5. focus on training hath professionals
- 6. lack of guidelines
- 7. community perception

NCDs worldwide is 59%

Lowest in subsaharan africa

Epidemiological transition in low and middle income countries due to population ageing, urbanization, and change in risk factors

107 countries collected useable information on causes of death however 55 countries had no info on adult mortality (42 in subsaharan africa)

females died more from noncommunicable than males and from communicable too while males died from injuries more than females

the highest mortality was in africa with the highest cause of death being communicable

lowest mortality rates were recorded in high income countries, mostly dying from noncommunicable diseases

DALY in developing areas/NCDS will increase by 2020 more than infectious diseases

injuries will also increase from 1990 to 2020 but more slowly than NCDs 1 billion tobacco smokers today compared with 20th century total 0.1 billion Total mortality decline in england wales due to infectious diseases, most drastic decline was within the first two age groups up to 44yrs old