# NHS SCREENING PROGRAMMES

By Dr Elango Sathiyamoorthy (MBBS, Cert ClinEd, FHEA, MRCGP)

#### **SCREENING**

- PICK UP ON EARLY SIGNS OF SERIOUS CONDITIONS (SUCH AS CANCER)
- BEFORE PATIENT HAS SYMPTOMS
- ACCEPTABLY DETECTED & TREATED WITH POSITIVE OUTCOMES
- SCREENING IS NOT PERFECT & CAN HAVE FALSE POSITIVES & NEGATIVES

#### Wilson-Jungner Criteria

- The condition being screened for should be an important health problem
- The natural history of the condition should be well understood
- There should be a detectable early stage
- Treatment at an early stage should be of more benefit than at a later stage
- A suitable test should be devised for the early stage
- The test should be acceptable
- Intervals for repeating the test should be determined
- Adequate health service provision should be made for the extra clinical workload resulting from screening
- The risks, both physical and psychological, should be less than the benefits
- The costs should be balanced against the benefits
- An Expert group called UK NSC advises NHS on which screening programmes to offer

## NATIONAL SCREENING PROGRAMMES

- 1 AAA (Abdominal Aortic Aneurysm) Screening
- 2 Bowel Cancer Screening
- 3 Breast Cancer Screening
- 4 Cervical Cancer Screening
- 5 Diabetic Eye Screening
- 6 Screening for Pregnant Women
- 7 Screening for Newborn Babies

#### Time to Interact

- Split into groups to cover the screening topics
- Consider the Wilson-Jungner criteria for the screening programmes available.
- Age groups and demographics
- Benefits and Risks
- Treatment/Management
- Any experiences so far
- 20 minutes and then pick a spokesperson to present

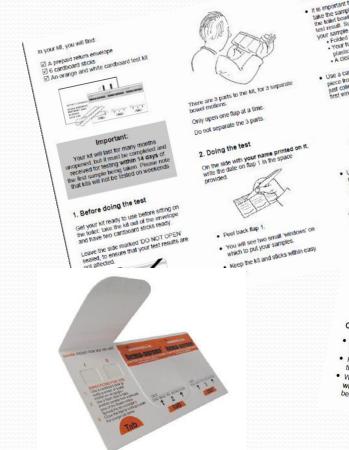
#### **AAA** screening

- Available for all men >65 (looking for enlarged blood vessel in abdomen)
- Ultrasound test is simple, painless and non-invasive
- Results are available straight away
- 3 outcomes:
- Normal no further scans necessary
- Small to Medium enlargement further surveillance scans needed
- Enlarged (>5.5cm) referral to Vascular Surgeon for possible Surgery

#### Bowel cancer screening

- 1 in 20 people will get bowel cancer in lifetime
- Available to all Men & Women between 60-74 (every 2 years (home testing kit)
- FOB sample kit sent to patient, collected at home, sent to lab, results in 2 weeks
- Bowel scope screening (flexible sigmoidoscopy) for ages 55 patients
- Anyone with abnormal bowel symptoms should speak to a clinician
  not to wait for screening
- If aged over 75, can ask for a home testing kit every 2 years
- 3 types of results Normal, Polyps found or Cancer found
- Patients with abnormal screening are offered a Colonoscopy (invasive)

## Bowel screening – the kit



3. Collecting the first sample It is important that the bowel motion you It is important that the bower morror yo take the sample from has not leave in the loade bowl, as this could affect the test result. Suggested ways to catch lest resur. Suryusanan may your sample are. Folded pieces of toilet paper a Folded pieces of toilet paper Your hand covered in a small

- plastic bag A clean disposable container Use a cardboard stick to take a small -vition you have piece from the bowe just collected. Spre first window.
  - Close the flap, and tuck it under the orange tab to keep secure.
    - Do not leave the kit in a warm place, or in direct sunlight, as this could spoil it. Wash your hands after use.

#### 5. Collecting the second sample Write the date on flap 2.

- Repeat the test using the two windows DO
- 6. Collecting the third sample
  - Write the date on flap 3.
- Repeat the test using the two windows

Note: Your samples do not need to be taken from three bowel motions in a row, but they must be from three separate motions

#### Checklist

- Have you put samples on all six
- Have you written the date on all
- Will the kit be received for testing within 14 days of the first sample

If the answer is NO to any of the checklist questions, please contact the programme hub for advice: Freephone 0800 707 60 60, Textphone 18001 0800

If the answer is YES to all of the checklist questions, put the kit in the prepaid envelope, seal it, and put it in the post. The envelope meets postal regulations, and is safe to send. But negurations, and is sale to serio, but please make sure it is clean, in order to

#### Any questions?

Contact the programme hub on FREEPHONE 0800 707 60 60 Textphone 18001 0800 707 60 60

Calls will be dealt with in strictest confidence. Please do not feel embarrassed to ask for information or advice. Staff are there to help you.

This leaflet is also available in braille, audio CD and BSL DVD format.





Store the kit away from sunlight and heat

Cancer Screening Programmes

NHS Bowel Cancer Screening Programme



This leaflet explains how to use the kit. Please read carefully.

#### Breast cancer screening

- 1 in 8 women in UK are diagnosed with breast cancer during lifetime
- All Women between age of 50-70 (every 3 years)
- Women over 70 can request (up to every 3 years) as well can self refer
- Involves a Mammogram (non-invasive but can be uncomfortable X-Ray)
- If abnormal may need to see a specialist and have further tests
- High risk women need to be assessed and may be monitored differently
- Should not replace women being 'breast cancer aware' and regularly selfexamining
- Benefits Screening saves about 1 life from breast cancer for every 200 women screened, Early detection, Better chance of survival, reduced chance of mastectomy or chemotherapy
- Risks Overtreatment (4000 women each year), unnecessary distress (1 in 25 women called back and of those, 1 in 4 are diagnosed with breast cancer), Missed diagnosis 1 in 2500, Radiation

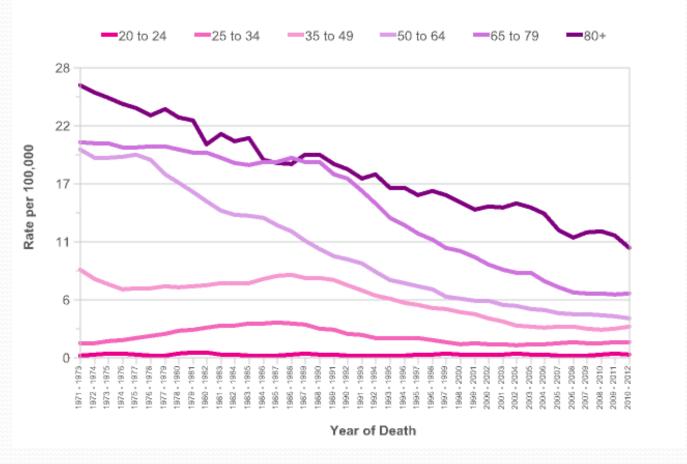
### **BREAK**



#### Cervical cancer screening

- 3200 new cervical cancer cases in the UK every year, 10 year survival 63%, 99.8% are preventable.
- Available to Women between 25 -64
- Every 3 years for 25-49 and every 5 years for 50-64
- Cervical smear is an invasive test carried out at your GP surgery
- Test looks for abnormal cells and HPV and results available in a few weeks
- If abnormal patient will be invited for a Colposcopy (invasive)
- HPV vaccination started in 2008 for young females
- Women with abnormal symptoms should consult a Clinician and not wait for next smear test

## Why do younger women not have screening?



Source: Cancer Research UK Cervical cancer age statistics

### Diabetic Eye Screening

- Announced in 2003, by 2008 local screening programmes covered whole country
- For diabetics over the age of 12
- Annual screening
- Looking for diabetic retinopathy
- Visual acuity checked
- Eye drops used for pupil dilation patients advised not to drive
- Diabetic retinopathy is the most common cause of sight loss in the working age population – screening has potential to save more than 400 people per year in England from blindness

#### Screening in Pregnancy

- Screening for infectious diseases (Hep B, HIV and syphilis)
- Screening for Down's syndrome (21) (risk increases with age 20 (1 in 1500) and age 40 (1 in 100)), Patau's syndrome (13) 1 in 5000 and Edwards' syndrome (18) offered from 10-14 weeks
- Blood test and ultrasound scan, quadruple screening only for T21
- Further testing with amniocentesis (15<sup>th</sup> -20<sup>th</sup>) or chorionic villus sampling (11<sup>th</sup>-14<sup>th</sup>) more invasive Amnio risk of miscarriage 1 in 100, CVS risk 1 in 100-200
- NIPT (Non-invasive prenatal testing) 10-12 weeks checks baby's DNA within mother's blood – available privately, due to be available in NHS
- Screening for Sickle cell and thalassaemia (before 10 weeks)
- Screening for physical abnormalities (20 week scan) 11 conditions
- Anencephaly, open spina bifida, cleft lip, diaphragmatic hernia, gastrochisis, exomphalos, serious cardiac abnormalities, bilateral renal agenesis, lethal skeletal dysplasia, T18, T13

#### Screening for Newborn babies

- Physical examination (eyes, heart, hips and testes) (72hrs and 6 weeks)
- Hearing test (1<sup>st</sup> 4-5 weeks with Automated otoacoustic emission (AOAE) (if failed – then automated auditory brainstem response (AABR))
- Blood spot test 9 conditions, day 5 (sometimes days 6-8)
- Sickle cell disease (1 in 2000)
- Cystic Fibrosis (1 in 2500)
- Congenital hypothyroidism (1 in 3000)
- Inherited Metabolic diseases (Phenylketonuria (PKU), medium chain acyl CoA dehrydrogenase deficiency (MCADD), maple syrup urine disease (MSUD), isovaleric acidaemia (IVA), glutaric aciduria type 1 (GA1), homocystinuria(pyridoxine unresponsive) (HCU)
- PKU or MCADD 1 in 10000
- Others are rarer 1 in 100000 to 150000
- PIL available on NHS UK Website

- Only Cervical screening is carried out by GP surgery, the other screening programmes are led by National centres
- Following web-sites have useful information:
- https://www.gov.uk/topic/population-screeningprogrammes
- https://www.macmillan.org.uk/search/search.html
  ?query=screening
- https://www.nhs.uk/conditions/nhs-screening/

#### Quiz time

- 1. What is the name of the screening criteria used? (1 mark)
- 2. At which age is the AAA screen carried out in? (1 mark)
- 3. What are the 2 screening methods for bowel cancer? (2 marks)
- 4. What yearly intervals is the cervical smear carried out in? (2 marks)
- 5. Name 3 anomalies that the 20 weeks scan in pregnancy screens for (3 marks)
- 6. What modality is used for assessment in breast screening? (1 mark)
- 7. How often is the diabetic eye screening offered? (1 mark)
- 8. Name 3 conditions that the Newborn screening looks for (3 marks)
- 9. What is my surname? (1 mark)
- Total Out of 15 Marks

#### Answers

- 1. Wilson Junger Criteria
- 2.65
- 3. FOB (Home screening kit also acceptable) and Flexible Sigmoidoscopy (2 marks)
- 4. Age 25-50 (3 yearly) and 50-65 (5 yearly) (2 marks)
- 5. Anencephaly, open spina bifida, cleft lip, diaphragmatic hernia, gastrochisis, exomphalos, serious cardiac abnormalities, bilateral renal agenesis, lethal skeletal dysplasia, T18, T13 (3 marks)
- 6. Mammogram (X-Ray)
- 7. Annually (1 yearly)
- 8. Sickle Cell, Cystic Fibrosis, Congenital Hypothyroidism, (Any of the Metabolic disorders mentioned) (3 marks)
- 9. SATHIYAMOORTHY

### Any questions?