The National Oesophago-gastric Cancer Awareness Campaign-
*a locality outcome analysis from County Durham*

Anjan Dhar
DM, MD, FRCPE, AGAF, MBBS (Hons.),
Cert. Med. Ed

*Reader in Medicine, Durham University*
*Consultant Gastroenterologist*

Oesophageal Adenocarcinoma is one of the fastest growing cancers in the UK

---

**Oesophageal Cancer (C15): 1979-2012**
Observed and Projected Age-standardized incidence rates, by Sex, UK

**One, Five and Ten Year Cancer Prevalence, UK**

<table>
<thead>
<tr>
<th></th>
<th>1 Year Prevalence</th>
<th>5 Year Prevalence</th>
<th>10 Year Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td>2,964</td>
<td>5,727</td>
<td>6,978</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>1,418</td>
<td>2,868</td>
<td>3,674</td>
</tr>
<tr>
<td><strong>Persons</strong></td>
<td>4,382</td>
<td>8,595</td>
<td>10,652</td>
</tr>
</tbody>
</table>
OG cancer is a big killer

What is already known on this subject

- Oesophageal and Gastric Cancers are 13th and 16th commonest cancers in the UK.
- Every year 6900 pts are diagnosed with Oesophageal and 5700 pts with gastric cancer; 10,000 pts die annually.
- Current UK referral guidelines for gastroscopy focus on alarm symptoms
- These symptoms have poor sensitivity and specificity for early cancer and are associated with advanced disease
- Survival of Advanced Oesophago-gastric cancer is <10% over 5 years
OG cancer campaign

• The UK National Be Clear on Cancer (BCOC) campaign for oesophago-gastric (OG) cancer carries the key messages of

• The campaign ran from 26/1/2015-22/2/2015

2013-14 National and regional Pilots

• The Pilot Campaigns (2013-14) revealed
  – 4.7% referrals resulting in OG cancer diagnosis
  – 9% increase in OG cancer diagnosis with campaign compared to non-campaign period, predominantly in the age group of 60-69 years
  – 45-52% increase in referrals, more for men.

National Cancer Intelligence Network
Be Clear on Cancer: Oesophago-gastric cancer awareness regional pilot campaign: Interim evaluation report
Aims of the current study

• To assess the effectiveness of the OG cancer campaign in detection of OG Cancers in South Durham (Darlington Memorial and Bishop Auckland Hospitals)

• To analyse the Service impact of the Campaign on the workload in Endoscopy Units during the campaign esp. for routine GP referrals
Methods

- Upper GI endoscopy data captured as additions to gastroscopy waiting lists over 2 periods:
  - During OG campaign – Feb/March 2015
  - 4 months after campaign – June/July 2015

- Data included all new referrals from GPs for upper gastrointestinal symptoms only.

- **Exclusion criteria**: Variceal screening, Barrett’s surveillance, pts already under secondary care

Results (1)

Patient demographics

- 406 pts analysed over the 2 periods
- 283 GP referrals during campaign period compared to 123 during the non-campaign period (2.2 times increase)
Results (2)
Referrals by age

- Highest referral rates in 61-80yrs.

![2WW referrals by age](chart)

Results (3)
Sex distribution

- More females referred during both periods

![Gender distribution for 2WW referrals](chart)
Results (4)
OG Cancer Diagnosis

- **Cancers detected:**
  - **Campaign period:** 1 Oesophageal squamous cell carcinoma, 1 gastric adenocarcinoma (1.4% of 2WW referrals)
  - **Non-campaign period:** 1 gastric adenocarcinoma (0.81% of 2WW referrals)
  - Presenting Symptoms: Dysphagia and weight loss or dyspepsia with weight loss.
  - 2 non-OG cancers were picked up during non-campaign 2WW referral (normal OGD, abnormal imaging- lymphoma, metastatic adenocarcinoma of unknown origin).

Impact on endoscopy unit workload

- **Impact on waiting times:**
  - **Urgent referrals:** No impact, average waiting time 29-42 days for both periods.
  - **Routine referrals:** Increase in average waiting time from 29-42 days (non-campaign period) to **43-56 days** (campaign period).
Similar results from other areas

- Barking, Redbridge and Havering (Kabir et al, BSG 2016 abstract)
  - 36.5% increase in mean monthly 2WW referrals post campaign
  - Av 20 endoscopies per week increase post campaign
  - 47 OG cancers pre campaign and 38 post campaign

Why are our results different?

- Diminishing returns with successive campaigns
- Areas with low GP referrals associated with increase in diagnosis following a campaign – variability predicted between regions where awareness has already been increased
Can we make things better?

- Developing a better risk assessment tool (RAT) for Upper GI Cancers like the Willie Hamilton RAT for Colorectal Cancer
- Identifying a high risk population for selective screening.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Symptoms</th>
<th>Stomach</th>
<th>Upper GI</th>
<th>Lower GI</th>
<th>Polyps</th>
<th>Fistula</th>
<th>Carcinoma</th>
<th>Vascular Malformation</th>
<th>Haemorrhage</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.F.</td>
<td>0.42</td>
<td>1.04</td>
<td>1.04</td>
<td>1.02</td>
<td>1.12</td>
<td>1.06</td>
<td>1.06</td>
<td>1.02</td>
<td>0.97</td>
</tr>
<tr>
<td>RAT</td>
<td>0.34</td>
<td>0.97</td>
<td>0.95</td>
<td>0.92</td>
<td>0.96</td>
<td>0.99</td>
<td>1.01</td>
<td>1.01</td>
<td>1.02</td>
</tr>
</tbody>
</table>

Conclusion

- A national OG cancer awareness campaign produces a 2.2 times increase in referrals for gastroscopy.
- Significant impact on routine endoscopy waiting times.
- The OG cancer diagnosis yield is small. Predicted cost per cancer diagnosed is well over £30,000 (NICE approved QALY threshold for affordability of an investigation)
- Cost benefit of the campaign is unaffordable for Early OG cancer diagnosis in the present form.