# **UCSF**

# **UC San Francisco Previously Published Works**

## **Title**

The Relationship between Lung Cancer Stigma and Patient Reported Outcomes

## **Permalink**

https://escholarship.org/uc/item/8dt5t0nv

# **Journal**

JOURNAL OF THORACIC ONCOLOGY, 12(1)

#### **ISSN**

1556-0864

## **Authors**

Maguire, Roma Lewis, Liane Mcphelim, John et al.

#### **Publication Date**

2017

## DOI

10.1016/j.jtho.2016.11.311

Peer reviewed

#### OA14.07

The Relationship between Lung Cancer Stigma and Patient Reported Outcomes



Roma Maguire,<sup>1</sup> <u>Liane Lewis</u>,<sup>1</sup> John Mcphelim,<sup>2</sup> Janine Cataldo,<sup>3</sup> Robert Milroy,<sup>4</sup> Kirstie Woods,<sup>2</sup> Maureen Perham<sup>4</sup> <sup>1</sup>School of Health Sciences, University of Surrey, Glasgow/United Kingdom, <sup>2</sup>Hairmyres Hospital, Glasgow/United Kingdom, <sup>3</sup>Physiological Nursing, University of California, San Francisco, San Francisco/CA/United States of America, <sup>4</sup>NHS Greater Glasgow & Clyde, Glasgow/United Kingdom

**Background:** Patients with lung cancer (LC) report lower quality of life (QoL) and higher levels of psychological distress compared to other cancer populations (Hewitt et al, 2013). Lung cancer stigma (LCS) may in part explain these findings. Evidence from studies in the Unites States has shown associations between LCS and lower QoL, higher symptom burden and higher levels of anxiety and depression (Cataldo et al, 2013). Whether these associations exist in people diagnosed with LC in the United Kingdom is unknown. Therefore this study explored the prevalence of LCS and its relationship with patient outcomes as well as QoL in a Scottish population.

**Methods:** This study was a cross-sectional study. Patients (n=201) diagnosed with LC were recruited by health care professionals at follow-up clinics at four hospitals in Scotland. Participants completed questionnaires to collect demographic data and assess perceived LCS, QoL, symptom severity and level of depression. Clinical data was collected by case note review. Bivariate correlations were performed to investigate the relationships between stigma, demographics, and patient outcomes. Multiple regression further explored the individual contributions of LCS on symptom burden and quality of life.

**Results:** Participants had a mean age of 69 years (range 41-89 years), 46.8% were males, 92.0% were ever smokers, 17.9% current smokers. The mean LCS score was 53.1 (SD=14.1, range 31-124,). There were significant correlations between higher LCS and age (r=-0.28, p<0.001), being a current smoker (r= 0.17, p<0.05), deprivation index (r=0.15, p<0.05) depression (r=0.40, p<0.001), symptom burden (r=2.60, p<0.001), and QoL (r=-0.52, p<0.001). Multiple regression revealed an overall model that explained 30.6% of the total variance of stigma (F=14.82, p<0.001). Perceived stigma also accounted for significant unique variance in QoL (4.3%, p<0.001) and depression (3.6%, p<0.001) above and beyond that accounted for by relevant variables. No contribution of stigma on symptom burden was found.

Conclusion: Stigma was correlated with depression, and QoL. Therefore, it is expected that depression and stigma share some of the explanation of variance of QoL. Nevertheless, stigma was found to have a unique contribution on QoL, and on depression. With this in mind, management of patients with LC could determine the patients' experience of stigma to tailor treatment plans to improve QoL and psychosocial outcomes. Being younger was correlated with higher LCS. This might reflect changed attitudes toward smoking due to changed marketing strategies in the 1960s.

**Keywords:** Lung Cancer Stigma, patient reported outcomes, quality of life, supportive care

#### OA15.01

Limited Resection Trial for Pulmonary Sub-solid Nodules: Case Selection Based on High Resolution CT: Outcome at Median Follow-up of 105 Months



Junji Yoshida,<sup>1</sup> Genichiro Ishii,<sup>2</sup> Kanji Nagai,<sup>1</sup>
Tomoyuki Hishida,<sup>1</sup> Keiju Aokage,<sup>1</sup>
Masahiro Tsuboi,<sup>1</sup> Hiroyuki Ito,<sup>3</sup> Tomoyuki Yokose,<sup>4</sup>
Haruhiko Nakayama,<sup>3</sup> Kouzo Yamada<sup>5 1</sup>Division of
Thoracic Surgery, Department of Thoracic Oncology,
National Cancer Center Hospital East, Kashiwa/Japan,
<sup>2</sup>Division of Pathology, National Cancer Center Hospital
East, Kashiwa/Japan, <sup>3</sup>Department of Thoracic Surgery,
Kanagawa Cancer Center, Yokohama/Japan, <sup>4</sup>Division of
Pathology, Kanagawa Cancer Center, Yokohama/Japan,
<sup>5</sup>Department of Thoracic Oncology, Kanagawa Cancer
Center, Yokohama/Japan

**Background:** The objective of this study is to confirm limited resection efficacy as radical surgery in patients with minimally invasive lung cancer as indicated by high-resolution (HR) computed tomography (CT), and to confirm intraoperative cytology as a negative margin indicator and reliable margin non-recurrence predictor.

**Methods:** Enrollment required patients with a tumor  $\leq 2$  cm in diameter, diagnosed or suspected as a clinical T1N0M0 carcinoma in the lung periphery based on a CT scan. They had to have a HRCT scan indicating a subsolid nodule with tumor disappearance ratio; TDR  $\geq 0.5$ . (TDR = 1- DM/DL; DM: maximum tumor diameter on mediastinal settings, DL: maximum tumor diameter on lung settings). Patients unfit for lobectomy and systematic lymph node dissection were excluded. We performed a wedge or segmental resection. The used stapling cartridges were washed with saline, which was cytologically evaluated. If cytology was cancer positive, additional margin was resected, and cytologic examination repeated. If the second exam was positive, a routine