



Claudia Kohring, Jakob Holstiege, Manas K. Akmatov, Lotte Dammertz, Joachim Heuer, Dominik von Stillfried, Jörg Bätzing
Central Research Institute of Ambulatory Health Care in Germany, Berlin

BACKGROUND

Research indicates that a substantial proportion of cancer patients has psycho-oncological care needs. However, recent study results of utilization of outpatient health care by newly diagnosed patients with breast (BC), prostate (PC), colorectal (CRC) or lung (LC) cancer yielded that only between one and four percent of these patients had contact to neurological and psychotherapeutic specialists. So far, only limited data are available on the utilization of psychotherapeutic health care by newly diagnosed oncological patients in the statutory health insurance (SHI) system in Germany.

OBJECTIVES

The study aims **A)** to examine regional variations of BC, PC, CRC and LC incidence and **B)** to investigate the utilization of neurological and psychotherapeutic healthcare by patients with a new diagnose of cancer in Germany.

METHODS

Data & study population:

Nationwide outpatient claims data of SHI-physicians from 2010-2019, SHI insureds 15 years and older (N=61,335,784 in 2017)

Analyses:

A) Age-standardized cumulative incidence of BC (C50), PC (C61), CRC (C18-C20) and LC (C33-C34) on district level (n=402), ref.: German population 2019
B) Proportion of the incident cancer patients (A) with contact to neurological or psychotherapeutic specialist in the year of diagnosis or the following two years (2017-2019). Contacts were included if either the cancer diagnosis (C18-C20, C33-C34, C50, C61 or Z85) or a possibly cancer-related diagnosis of mental or behavioral disorder (F30-F39, F40-F43, F45, F60, F61 or F69) was documented. Proportions were calculated on level of spatial planning regions (SPR, Raumordnungsregionen, n=96).

RESULTS

A) Cumulative incidence of breast, prostate, colorectal and lung cancer

Overall, 176,911 patients with a new diagnosis of BC, PC, CRC or LC were identified in 2017. Age-standardized cumulative incidence (CI) per 100,000 patients of all four cancer types varied considerably on district level (n=402). For BC, CI varied by a factor of 3.4 between 75 (Pirmasens, Rhineland-Palatinate) and 252 patients (Stade, Lower-Saxony) (fig. 1a). PC incidence ranged between 72 (Baden-Baden) and 447 patients (Heidenheim, both Baden-Wuerttemberg) (fig. 1b). For CRC, CI was between 29 (Heidelberg, Baden-Wuerttemberg) and 128 patients (Rendsburg-Eckernfoerde, Schleswig-Holstein) (fig. 1c). LC incidence varied between 25 (Erlangen-Hoechststadt, Bavaria) and 131 patients (Wilhelmshaven, Lower-Saxony) (fig. 1d).

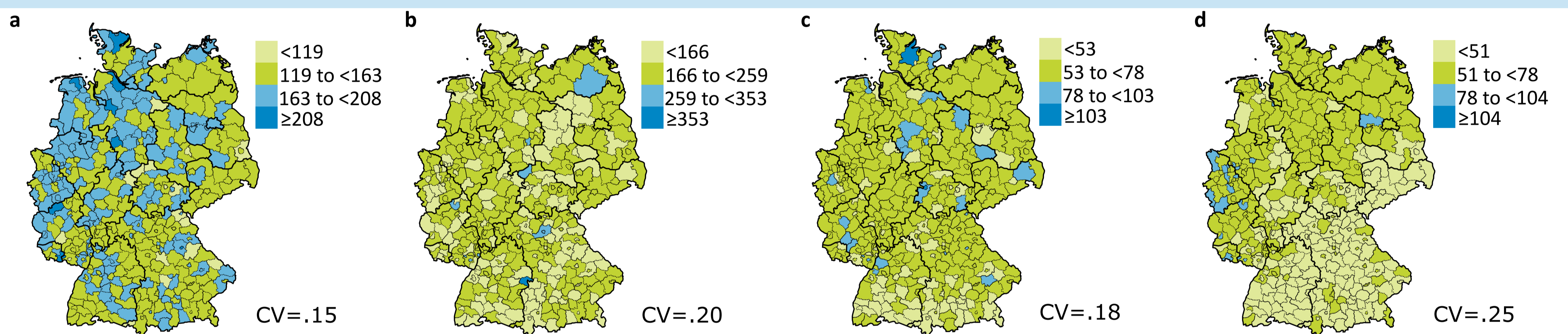


Figure 1. Age-standardized cumulative incidence per 100,000 patients of breast (a), prostate (b), colorectal (c) and lung (d) cancer on level of German districts (n=402, territorial status 2011) in 2017 including coefficients of variation (CV).

B) Patients with contact to a neurological or psychotherapeutic specialist after new cancer diagnosis

Proportions of patients with BC, PC, CRC or LC who consulted a neurological or psychotherapeutic specialist in either the year of cancer diagnosis or the two following years varied by a factor of 2.9 between 6.1% (Altmark, Saxony-Anhalt) and 17.8% (Berlin) on SPR-level (fig. 2a). Sex-stratified analyses showed considerable differences between female (BC, CRC, LC) and male (PC, CRC, LC) cancer patients (fig. 2b and 2c): For women, proportions ranged between 8.1% (Suedheide, Lower-Saxony) and 23.1% (Berlin). For men, proportions varied between 4.2% (Schleswig-Holstein Mitte) and 12.1% (Berlin). There are cancer-specific differences for women and men with CRC or LC as well. The main reason for the marked disparity in the pooled analysis, though, is the proportion of women with BC who appeared to have the highest proportions.

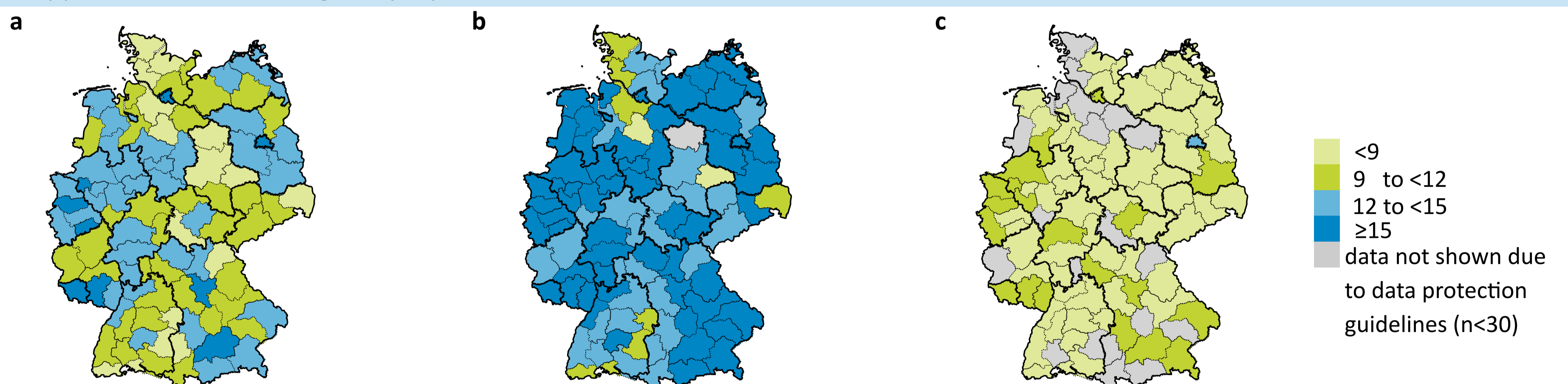


Figure 2. Proportions (in percent, %) of incident patients with BC, PC, CRC or LC (a), women with BC, CRC or LC (b) and men with PC, CRC, LC (c) with contact to a SHI-accredited neurological or psychotherapeutic specialist between 2017 to 2019 on level of German spatial planning regions (n=96, territorial status 2011)

DISCUSSION

Our results show pronounced regional differences for the CI of the studied cancer types as well as for the utilization of neurological or psychotherapeutic health care by oncological patients in the first years after disease onset. Furthermore, there are substantial differences between women and men seeking neurological or psychotherapeutic health care. This might be an indicator for undertreatment of cancer patients' needs of psycho-oncological care. The extent of possible undertreatment varies not only between regions, but also between women and men.