

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. based on the epidemiological transition level (ETL) of states/UTs. ETL is defined as the ratio of DALYs due to communicable, maternal, neonatal and nutritional diseases versus NCDs and injuries. **Results:** The total NCDs-related deaths across all the states/UT was reported to be 348/100,000 (251-446/100,000) in 1990 and 440/100,000 (265-704/100,000) in 2017. The NCDs-related death rate was high in >40 years age group. Similarly, the NCDs-related DALYs was reported to be 17,862/100,000 (14,534-21,982/100,000) in 1990 and 19,051/100,000 (14,219-23,818/100,000) in 2017. An increase in the overall NCDs' burden was observed across states from 1990–2017, irrespective of their ETL status; however, it was higher in states with high ETL status. In 2017, the highest burden of NCDs was reported in Kerala, followed by Karnataka, and Tamil Nadu. **Conclusions:** NCDs pose major public health issue with varied burden across different states in India. With increasing NCDs' burden, the most affected states/UTs need more effective health policy intervention in India.

PMU9

BRAND-SWITCHING BEHAVIOR FOLLOWING THE IMPLEMENTATION OF A 63% TAX INCREASE ON CIGARETTES IN TAIWAN



Chang LC,¹ Chen PC,² Hsu C,¹ Lee YC¹

¹National Yang-Ming University, Taipei, Taiwan, ²University of Taipei, Taipei, Taiwan

Objectives: : This study sought to identify instances of brand-switching behavior amongsmokers in Taiwan following a large tax increase. We also investigated the factors underlying the observed behavioral changes. Methods: :Data were obtained from a nationwide survey monitoring tobacco use among individuals over age 15 in Taiwan. The dependent variable was cigarette brand-switching, defined as the ability to report on the prices of two different brands before and after the 2017 tax increase. Smokers who reported switching to a more expensive brand (1.46%) were excluded, as this was deemed irrational behavior. Analysis was conducted using logistic regression adjusted for gender, age, personal monthly income, marital status, educational attainment, work, knowledge of smoking hazards, quitting experience, main cigarette price before tax increase, exposure to second-hand smoke in the household, advice from medical staff to quit, smoking volume, and awareness of services to assist in quitting. Results: :We found that 4.48% of current smokers switched to a less expensive cigarette brand following the tax increase. Smokers who were using relatively expensive cigarettes before the tax increase (OR=2.46) were more likely than those using moderately priced cigarettes to switch to a less expensive brand after the tax increase. The subgroups that were more likely to switch to a less expensive brand included current smokers who were male (OR=3.57), had exposure to secondhand smoke (OR=3.61), or were aware of services to assist in quitting (OR=3.61). Those who were less likely to switch included current smokers who were married (OR=0.24), had college or graduate degree (OR=0.40), or received advice from medical staff to guit (OR=0.56), Conclusions: We found that relatively few individuals switched to less expensive products after a substantial increase in tobacco tax. Those who switched were from all walks of life; i.e., not only the economically disadvantaged.

PMU10

REPRESENTATIVENESS OF A NATIONAL PATIENT-REPORTED SURVEY IN KOREA: THE KOREA NATIONAL HEALTH AND WELLNESS SURVEY

Jung S,¹ Pomerantz D,² Lee L,³ Chen Y,⁴ Singh SS⁴ ¹Kantar, Seoul, South Korea, ²Kantar, Ambler, PA, USA, ³Kantar, San Mateo, CA, USA, ⁴Kantar, Singapore, Singapore

Objectives: National statistics on the epidemiology and health outcomes associated with various conditions are difficult to obtain in Korea. This study aims to assess the representativeness of a patient-reported survey compared with existing epidemiological data on prominent chronic diseases and mental health conditions. Methods: The data source was the 2020 Korea National Health and Wellness Survey (NHWS) (N=20,108). The NHWS is a self-reported, internet-based survey administered to the adult population of Korea. A random stratified sampling framework was implemented, with age and gender strata, to ensure the final NHWS sample reflects the demographic composition of the Korean population. Existing epidemiological information was obtained through literature reviews. The prevalence of depression and anxiety were measured using validated instruments such as Patient Health Questionnaire (PHQ-9) and General Anxiety Disorder (GAD-7) within NHWS. Results: For certain conditions, large differences in prevalence between NHWS and the literature were found (Chronic obstructive pulmonary disease: 0.9% vs. 15.5%; Rheumatoid Arthritis (RA): 3.5% vs. 0.7%; Ankylosing Spondylitis: 4.0% vs. 0.1%; Depression 17.0% vs.6.7%). However, other conditions were generally similar between NHWS and the literature (e.g., Overactive bladder: 5.6% vs. 5.2%; Hepatitis B: 3.3% vs. 3.0%; Asthma: 2.6% vs. 3.1%). The prevalence of major depression (as screened by PHQ-9 score>10) was 17% in NHWS whereas the literature reported 6.7%. However, the prevalence of moderate/severe anxiety were similar between NHWS as screened by GAD-7 and the literature (8.4% vs. 8.7%). Conclusions: Patient-reported data can provide useful epidemiological estimates as well as valuable health outcome data across various conditions as such data sources are scarce in Korea. Differences in prevalence between NHWS and those reported in the literature may arise from respondents' stated (i.e., self-report) or unstated (i.e., not known to self but was screened by validated instruments) awareness of disease and diagnosis. Further comparisons between the NHWS and other population-based studies are needed.

PMU11

CURRENT STATUS OF THE USE OF PRESCRIPTION OPIOIDS IN KOREAN ELDERLY PATIENTS: AN ANALYSIS OF THE HEALTH INSURANCE REVIEW AND ASSESSMENT SERVICE-AGED PATIENT SAMPLE DATA



Pusan National University, Busan, Korea, Republic of (South)

Objectives: To investigate the use of prescription opioids in Korean elderly patients using the Health Insurance Review and Assessment Service-Aged Patient Sample (HIRA-APS) data. Methods: We conducted a cross-sectional study using 2014-2016 HIRA-APS data, a representative sample of patients aged ≥65 in Korea (20% of elderly patients). For each year, cancer patients and non-cancer pain (NCP) patients (osteoarthritis, back/neck pain, osteoporosis, or headache/migraine) were identified and their opioid prescriptions (buprenorphine, fentanyl, hydrocodone, hydromorphone, morphine, oxycodone, and pethidine) were analyzed. Total yearly dose in population was calculated as the sum of opioid dose prescribed in the year divided by number of individuals in HIRA-APS data. Utilization pattern was measured by the number of prescriptions, opioid types, days supplied, and daily and yearly dose calculated by defined daily dose (DDD). Results: Between 2014 and 2016, the total yearly dose of opioids in HIRA-APS population increased in both cancer patients and NCP patients (715–1184 and 286–321 DDD/1000 population, respectively). Opioid utilization per patient was slightly increased or stable during the study period (days supplied: 38.3– 39.1 and 15.4-17.4 days; mean daily dose: 0.32-0.30 and 0.19-0.18 DDD; mean yearly dose: 22.3-34.6 and 5.1-5.3 DDD; in cancer patients and NCP patients, respectively). Proportion of patients prescribed opioids has slightly decreased in cancer patients (34.7-33.8%), while it has increased in NCP patients (9.8-10.7%). In 2016, pethidine was the most commonly prescribed opioid in both cancer (21.0%) and NCP patients (30.1%), followed by morphine short-acting and fentanyl long-acting in cancer patients and buprenorphine in NCP patients. Among NCP patients, 73.4% had multiple pain types and 19.5% had back/neck pain. Conclusions: Total yearly dose of prescription opioids in Korean elderly patients has increased between 2014 and 2016, while the utilization per patient was generally stable over that period.

PMU12

HOW ARE QUARANTINE IMPACTING ON THE HEALTH-RELATED OUALITY OF LIFE?

Ramos-Goñi JM,¹ Oppe M,¹ Rand K,¹ Cuervo J,¹ Estévez-Carrillo A,¹ Crespo C²

¹Axentiva Solutions, Tacoronte, Spain, ²Axentiva Solutions, TACORONTE, Spain

Objectives: In order to limit the spread of Covid-19, many countries, Spain included, have implemented unprecedented restrictions, such as quarantines, curfew, isolation, school closings, restricted opening hours in stores, business closures, etc. On March 15th 2020, the Spanish government implemented "nationwide lockdown" (general curfew) for at least the end of April. The impact of such measures on the (HR)QoL of the general public is unknown. Our study aim was assed the changes of utilities through quarantine in Spain. Methods: We implemented a quota based online survey starting previous of lockdown with two follow-ups within the curfew using EQ-5D-5L (rounds sample size was 500 adults). For each round, we asked HRQoL, Age, gender and region. Results comparing the pre-quarantine survey and the two first in-quarantine surveys were analyses overall and stratified by age, sex and prevalence information of Covid-19 by region from government sources. This information was compared with previous data from the national health survey conducted in 2011-2012 as a "normal situation" information. Results: Sample size was representative of Spanish population by age, gender and region. Slightly less than half of the respondents were female (47.78%). Elderly respondents were 13.3%. 40-60 age responders were43.1% and less 40 years responders were 43.6%. 26% of respondents resided in more affected regions (300 cases per 100.000 hab.). Nonsignificant results were found when comparing the evolution of HRQL over the different follow-ups within the quarantine period. About 50% of participants reported Anxiety/depression (AD) problems. Females reported more AD problems than males. The percentage of population reporting AD problems in a "normal situation" is 15%. Conclusions: Our results shown that while there is no evidence supporting a decrease of HRQL over the quarantine period. However, there is a clear decrease when comparing with a normal situation.

Multiple Diseases - Health Policy & Regulatory

PMU13

DEFINING THE ROLL OUT STRATEGY FOR UHC BENEFITS: PHILHEALTH'S BENEFIT DEVELOPMENT PLAN Papelo (1⁻¹ Stein D² Dutta A² Santillan M³ Tan C⁴ Moreno A⁴

 Panelo CI,¹ Stein D,² Dutta A,² Santillan M,³ Tan C,⁴ Moreno A,⁴

 David Reyes MR,³ Caampued M⁵

 ¹USAID's ProtectHealth/Palladium, Manila, Philippines, ²Palladium LLC,

Washington DC, DC, USA, ³Philippines Health Insurance Corporation, Pasig City, Philippines, ⁴USAID's ProtectHealth/Palladium, Mandaluyong, Philippines, ⁵Alliance for Improving Health Outcomes, Quezon City, Philippines

The Philippine Health Insurance Corporation is developing its Benefit Development Plan (BDP) that describes the strategic roll out of various benefits for universal health coverage (UHC). The BDP also defines the process and sets the criteria for the review and introduction of social health insurance benefits.

