Journals in Medicine

Annals of Internal Medicine

Volume 154, Number 7
April 5, 2011

Using Additional Information on Working Hours to Predict Coronary Heart Disease: A Cohort Study

M. Kivimäki et al.

Background: Long working hours are associated with increased risk for coronary heart disease (CHD). Adding information on long hours to traditional risk factors for CHD may help to improve risk prediction for this condition. *Objective*: To examine whether information on long working hours improves the ability of the Framingham risk model to predict CHD in a low-risk, employed population. *Design*: Cohort study with baseline medical examination performed between 1991 and 1993 and prospective follow-up for incident CHD performed until 2004. *Setting*: Civil service departments in London (the Whitehall II study). *Participants*: 7095 adults (2109 women and 4986 men) aged 39 to 62 years working full-time without CHD at baseline. *Measurements*: Working hours and the Framingham risk score were measured at baseline. Coronary death and nonfatal myocardial infarction were ascertained from medical screenings every 5 years, hospital data, and registry linkage. *Results*: 192 participants had incident CHD during a median 12.3-year follow-up. After adjustment for their Framingham risk score, participants working 11 hours or more per day had a 1.67-fold (95% CI, 1.10- to 2.55-fold) increased risk for CHD compared with participants working 7 to 8 hours per day. Adding working hours to the Framingham risk score led to a net reclassification improvement of 4.7% (P = 0.034) due to better identification of persons who later developed CHD (sensitivity gain). *Limitation*: The findings may not be generalizable to populations with a larger proportion of high-risk persons and were not validated in an independent cohort. *Conclusion*: Information on working hours may improve risk prediction of CHD on the basis of the Framingham risk score in low-risk, working populations. *Primary Funding Source*: Medical Research Council; British Heart Foundation; Bupa Foundation; and the National Heart, Lung, and Blood Institute and National Institute on Aging of the National Institutes of Health.

Volume 154, Number 8
April 19, 2011

Professionalism in the Digital Age

A. Mostaghimi and B. H. Crotty

The increased use of social media by physicians, combined with the ease of finding information online, can blur personal and work identities, posing new considerations for physician professionalism in the information age. A professional approach is imperative in this digital age in order to maintain confidentiality, honesty, and trust in the medical profession. Although the ability of physicians to use online social networks, blogs, and media sites for personal and professional reasons should be preserved, a proactive approach is recommended that includes actively managing one's online presence and making informed choices about disclosure. The development of a "dual-citizenship" approach to online social media that separates public and private personae would allow physicians to both leverage networks for professional connections and maintain privacy in other aspects. Although social media posts by physicians enable direct communication with readers, all posts should be considered public and special consideration for patient privacy is necessary.

Archives of Internal Medicine

Volume 171, Number 7
April 11, 2011

Physicians Recommend Different Treatments for Patients Than They Would Choose for Themselves

P.A. Ubel, A.M. Angott, and B.J. Zikmund-Fisher

Background: Patients facing difficult decisions often ask physicians for recommendations. However, little is known regarding the ways that physicians' decisions are influenced by the act of making a recommendation. *Methods*: We surveyed 2 representative samples of US primary care physicians—general internists and family medicine specialists listed in the American Medical Association Physician Masterfile—and presented each with 1 of 2 clinical scenarios. Both involved 2 treatment alternatives, 1 of which yielded a better chance of surviving a fatal illness but at the cost of potentially experiencing unpleasant adverse effects. We randomized physicians to indicate which treatment they would choose if they were the patient or they were recommending a treatment to a patient. *Results*: Among those asked to consider our colon cancer scenario (n=242), 37.8% chose the treatment with a higher death rate for themselves but only 24.5% recommended this treatment to a hypothetical patient (χ^2_1)=4.67, P=.03). Among those receiving our avian influenza scenario (n=698), 62.9% chose the outcome with the higher death rate for themselves but only 48.5% recommended this for patients (χ^2_1=14.56, P<.001). *Conclusions*: The act of making a recommendation changes the ways that physicians think regarding medical choices. Better understanding of this thought process will help determine when or whether recommendations improve decision making.

Archives of Surgery

Published online
April 18, 2011

High Mortality in Surgical Patients with Do-Not-Resuscitate Orders: Analysis of 8256 Patients

H. Kazaure, S. Roman, and J.A. Sosa

Objective: To evaluate outcomes of patients who undergo surgery with a do-not-resuscitate (DNR) order. *Design*: Retrospective cohort study. *Setting*: More than 120 hospitals participating in the American College of Surgeons National Surgical Quality Improvement Program from 2005 to 2008. *Patients*: There were 4128 adult DNR patients and 4128 age-matched and procedure-matched non-DNR patients. *Main Outcome Measures*: Outcomes were occurrence of 1 or more postoperative complications, reoperation, death within 30 days of surgery, total time in the operating room, and length of stay. The χ^2 test was used for categorical variables and *t* and Wilcoxon tests were used for continuous variables. Multivariate logistic regression was done to determine independent risk factors associated with mortality in DNR patients. *Results*: Most DNR patients were white (81.5%), female (58.2%), and elderly (mean age, 79 years). Compared with non-DNR patients, DNR patients experienced longer length of stay (36% increase; P<.001) and higher complication (26.4% vs 31%; P<.001) and mortality (8.4% vs 23.1%; P<.001) rates. Nearly 63% of DNR patients underwent nonemergent procedures; they sustained a 16.6% mortality rate. After risk adjustment, DNR status remained an independent predictor of mortality (odds ratio, 2.2; 95% confidence interval, 1.8–2.8). American Society of Anes-thesiologists class 3 to 5, age older than 65 years, and preoperative sepsis were among independent risk factors associated with mortality in DNR patients. *Conclusions*: Surgical patients with DNR orders have significant comorbidities; many sustain postoperative complications, and nearly 1 in 4 die within

30 days of surgery. Do-not-resuscitate status appears to be an independent risk factor for poor surgical outcome.

British Medical Journal

Volume 342, Article d1580
March 22, 2011

Impact of Reduction in Working Hours for Doctors in Training on Postgraduate Medical Education and Patients' Outcomes: Systematic Review

S.R. Moonesinghe et al.

Objective: To determine whether a reduction in working hours of doctors in postgraduate medical training has had an effect on objective measures of medical education and clinical outcome. *Design*: Systematic review. *Data Sources*: Medline, Embase, ISI Web of Science, Google Scholar, ERIC, and SIGLE were searched without language restriction for articles published between 1990 and December 2010. Reference lists and citations of selected articles. *Study Selection*: Studies that assessed the impact of a change in duty hours using any objective measure of outcome related to postgraduate medical training, patient safety, or clinical outcome. Any study design was eligible for inclusion. *Results*: 72 studies were eligible for inclusion: 38 reporting training outcomes, 31 reporting outcomes in patients, and three reporting both. A reduction in working hours from greater than 80 hours a week (in accordance with US recommendations) does not seem to have adversely affected patient safety and has had limited effect on postgraduate training. Reports on the impact of European legislation limiting working hours to less than 56 or 48 a week are of poor quality and have conflicting results, meaning that firm conclusions cannot be made. *Conclusions*: Reducing working hours to less than 80 a week has not adversely affected outcomes in patient or postgraduate training in the US. The impact of reducing hours to less than 56 or 48 a week in the UK has not yet been sufficiently evaluated in high quality studies. Further work is required, particularly in the European Union, using large multicentre evaluations of the impact of duty hours' legislation on objective educational and clinical outcomes.

Volume 342, Article d2151
April 21, 2011

Risk of Non-Fatal Venous Thromboembolism in Women Using Oral Contraceptives Containing Drospirenone Compared with Women Using Oral Contraceptives Containing Levonorgestrel: Case-Control Study Using United States Claims Data

S.S. Jick and R.K. Hernandez

Objective: To compare the risk of non-fatal venous thromboembolism in women receiving oral contraceptives containing drospirenone with that in women receiving oral contraceptives containing levonorgestrel. *Design*: Nested case-control and cohort study. *Setting*: The study was based on information from PharMetrics, a United States based company that collects information on claims paid by managed care plans. *Participants*: The study encompassed all women aged 15 to 44 years who received an oral contraceptive containing either drospirenone or levonorgestrel after 1 January 2002. Cases were women with current use of a study oral contraceptive and a diagnosis of venous thromboembolism in the absence of identifiable clinical risk factors (idiopathic venous thromboembolism). Up to four controls were matched to each case by age and calendar time. *Main Outcome Measures*: Odds ratios comparing the risk of non-fatal venous thromboembolism in users of the two contraceptives; incidence rates and rate ratios of non-fatal venous thromboembolism for users of each of the study contraceptives. *Results*: 186 newly diagnosed, idiopathic cases of venous thromboembolism were identified in the study population and matched with 681 controls. In the case-control analysis, the conditional odds ratio for venous thromboembolism comparing use of

oral contraceptives containing drospirenone with use of those containing levonorgestrel was 2.3 (95% confidence interval 1.6 to 3.2). The incidence rates for venous thromboembolism in the study population were 30.8 (95% confidence interval 25.6 to 36.8) per 100,000 woman years among users of oral contraceptives containing drospirenone and 12.5 (9.61 to 15.9) per 100,000 woman years among users of oral contraceptives containing levonorgestrel. The age adjusted incidence rate ratio for venous thromboembolism for current use of oral contraceptives containing drospirenone compared with those containing levonorgestrel was 2.8 (2.1 to 3.8). *Conclusions*: The risk of non-fatal venous thromboembolism among users of oral contraceptives containing drospirenone seems to be around twice that of users of oral contraceptives containing levonorgestrel, after the effects of potential confounders and prescribing biases have been taken into account.

Journal of the American Geriatric Society

Volume 59, Number 5
May 2011

Decision-Making and Outcomes of Feeding Tube Insertion: A Five-State Study

J.M. Teno et al.

Objectives: To examine family members' perceptions of decision-making and outcomes of feeding tubes. *Design*: Mortality follow-back survey. Sample weights were used to account for oversampling and survey design. A multivariate model examined the association between feeding tube use and overall quality of care rating regarding the last week of life. *Setting*: Nursing homes, hospitals, and assisted living facilities. *Participants*: Respondents whose relative had died from dementia in five states with varying feeding tube use. *Measurements*: Respondents were asked about discussions, decision-making, and outcomes related to their loved ones' feeding problems. *Results*: Of 486 family members surveyed, representing 9,652 relatives dying from dementia, 10.8% reported that the decedent had a feeding tube, 17.6% made a decision not to use a feeding tube, and 71.6% reported that there was no decision about feeding tubes. Of respondents for decedents with a feeding tube, 13.7% stated that there was no discussion about feeding tube insertion, and 41.6% reported a discussion that was shorter than 15 minutes. The risks associated with feeding tube insertion were not discussed in one-third of the cases, 51.8% felt that the healthcare provider was strongly in favor of feeding tube insertion, and 12.6% felt pressured by the physician to insert a feeding tube. The decedent was often physically (25.9%) or pharmacologically restrained (29.2%). Respondents whose loved ones died with a feeding tube were less likely to report excellent end-of-life care (adjusted odds ratio = 0.42, 95% confidence interval = 0.18–0.97) than those who were not. *Conclusion*: Based on the perceptions of bereaved family members, important opportunities exist to improve decision-making in feeding tube insertion.

Journal of the American Medical Association

Volume 305, Number 14
April 13, 2011

Genital Shedding of Herpes Simplex Virus among Symptomatic and Asymptomatic Persons with HSV-2 Infection

E. Tronstein et al.

Context: Since herpes simplex virus type 2 (HSV-2) antibody tests have become commercially available, an increasing number of persons have learned that they have genital herpes through serologic testing. The course of natural history of HSV-2 in asymptomatic, seropositive persons is uncertain. *Objective*: To evaluate the virologic and clinical course of HSV genital shedding among individuals with symptomatic and asymptomatic HSV-2

infection. *Design, Setting, and Participants*: Cohort of 498 immunocompetent HSV-2-seropositive persons enrolled in prospective studies of genital HSV shedding at the University of Washington Virology Research Clinic, Seattle, and Westover Heights Clinic, Portland, Oregon, between March 1992 and April 2008. Each participant obtained daily self-collected swabs of genital secretions for at least 30 days. *Main Outcome Measures*: The rate of viral shedding measured by quantitative real-time fluorescence polymerase chain reaction for HSV DNA from genital swabs. *Results*: Herpes simplex virus type 2 was detected on 4753 of 23,683 days (20.1%; 95% confidence interval [CI], 18.3%–22.0%) in 410 persons with symptomatic genital HSV-2 infection compared with 519 of 5070 days (10.2%; 95% CI, 7.7%–13.6%) in 88 persons with asymptomatic infection (P < .001). Subclinical shedding rates were higher in persons with symptomatic infection compared with asymptomatic infection (2708 of 20,735 days [13.1%; 95% CI, 11.5%–14.6%) vs 434 of 4929 days [8.8%; 95% CI, 6.3%–11.5%]) (P < .001). However, the amount of HSV detected during subclinical shedding episodes was similar (median, 4.3 [interquartile range, 3.1–5.6] $\log_{10}$ copies in the symptomatic infection group vs 4.2 [interquartile range, 2.9–5.5] in the asymptomatic infection group, P = .27). Days with lesions accounted for 2045 of 4753 days (43.0%; 95% CI, 39.8%–46.5%) with genital viral shedding among persons with symptomatic genital HSV-2 infection compared with 85 of 519 days (16.4%; 95% CI, 11.2%–23.9%) among persons with asymptomatic infection (P < .001). *Conclusions*: Persons with asymptomatic HSV-2 infection shed virus in the genital tract less frequently than persons with symptomatic infection, but much of the difference is attributable to less frequent genital lesions because lesions are accompanied by frequent viral shedding.

Volume 305, Number 17
May 4, 2011

Fatal and Nonfatal Outcomes, Incidence of Hypertension, and Blood Pressure Changes in Relation to Urinary Sodium Excretion

K. Stolarz-Skrzypek et al.

Context: Extrapolations from observational studies and short-term intervention trials suggest that population-wide moderation of salt intake might reduce cardiovascular events. *Objective*: To assess whether 24-hour urinary sodium excretion predicts blood pressure (BP) and health outcomes. *Design, Setting, and Participants*: Prospective population study, involving 3681 participants without cardiovascular disease (CVD) who are members of families that were randomly enrolled in the Flemish Study on Genes, Environment, and Health Outcomes (1985–2004) or in the European Project on Genes in Hypertension (1999–2001). Of 3681 participants without CVD, 2096 were normotensive at baseline and 1499 had BP and sodium excretion measured at baseline and last follow-up (2005–2008). *Main Outcome Measures*: Incidence of mortality and morbidity and association between changes in BP and sodium excretion. Multivariable-adjusted hazard ratios (HRs) express the risk in tertiles of sodium excretion relative to average risk in the whole study population. *Results*: Among 3681 participants followed up for a median 7.9 years, CVD deaths decreased across increasing tertiles of 24-hour sodium excretion, from 50 deaths in the low (mean, 107 mmol), 24 in the medium (mean, 168 mmol), and 10 in the high excretion group (mean, 260 mmol; P < .001), resulting in respective death rates of 4.1% (95% confidence interval [CI], 3.5%–4.7%), 1.9% (95% CI, 1.5%–2.3%), and 0.8% (95% CI, 0.5%–1.1%). In multivariable-adjusted analyses, this inverse association retained significance (P = .02): the HR in the low tertile was 1.56 (95% CI, 1.02-2.36; P = .04). Baseline sodium excretion predicted neither total mortality (P = .10) nor fatal combined with nonfatal CVD events (P = .55). Among 2096 participants followed up for 6.5 years,

the risk of hypertension did not increase across increasing tertiles (P=.93). Incident hypertension was 187 (27.0%; HR, 1.00; 95% CI, 0.87–1.16) in the low, 190 (26.6%; HR, 1.02; 95% CI, 0.89–1.16) in the medium, and 175 (25.4%; HR, 0.98; 95% CI, 0.86–1.12) in the high sodium excretion group. In 1499 participants followed up for 6.1 years, systolic blood pressure increased by 0.37 mm Hg per year (P<.001), whereas sodium excretion did not change (-.45 mmol per year, P=.15). However, in multivariable-adjusted analyses, a 100-mmol increase in sodium excretion was associated with 1.71 mm Hg increase in systolic blood pressure (P<.001) but no change in diastolic BP. *Conclusions*: In this population-based cohort, systolic blood pressure, but not diastolic pressure, changes over time aligned with change in sodium excretion, but this association did not translate into a higher risk of hypertension or CVD complications. Lower sodium excretion was associated with higher CVD mortality.

Journal of General Internal Medicine

Volume 26, Number 4
April 2011

Code Status Discussions between Attending Hospitalist Physicians and Medical Patients at Hospital Admission

W. G. Anderson et al.

Background: Bioethicists and professional associations give specific recommendations for discussing cardiopulmonary resuscitation (CPR). *Objective*: To determine whether attending hospitalist physicians' discussions meet these recommendations. *Design*: Cross-sectional observational study on the medical services at two hospitals within a university system between August 2008 and March 2009. *Participants*: Attending hospitalist physicians and patients who were able to communicate verbally about their medical care. *Main Measures*: We identified code status discussions in audio-recorded admission encounters via physician survey and review of encounter transcripts. A quantitative content analysis was performed to determine whether discussions included elements recommended by bioethicists and professional associations. Two coders independently coded all discussions; Cohen's kappa was 0.64–1 for all reported elements. *Key Results*: Audio-recordings of 80 patients' admission encounters with 27 physicians were obtained. Eleven physicians discussed code status in 19 encounters. Discussions were more frequent in seriously ill patients (OR 4, 95% CI 1.2–14.6), yet 66% of seriously ill patients had no discussion. The median length of the code status discussions was 1 min (range 0.2–8.2). Prognosis was discussed with code status in only one of the encounters. Discussions of patients' preferences focused on the use of life-sustaining interventions as opposed to larger life goals. Descriptions of CPR as an intervention used medical jargon, and the indication for CPR was framed in general, as opposed to patient-specific scenarios. No physician quantitatively estimated the outcome of or provided a recommendation about the use of CPR. *Conclusions*: Code status was not discussed with many seriously ill patients. Discussions were brief, and did not include elements that bioethicists and professional associations recommend to promote patient autonomy. Local and national guidelines, research, and clinical practice changes are needed to clarify and systematize with whom and how CPR is discussed at hospital admission.

Neurology

Volume 76, Number 18
May 3, 2011

Midlife Overweight and Obesity Increase Late-Life Dementia Risk: A Population-Based Twin Study

W. L. Xu et al.

Objective: The relation of overweight to dementia is controversial. We aimed to examine the association of midlife overweight

and obesity with dementia, Alzheimer disease (AD), and vascular dementia (VaD) in late life, and to verify the hypothesis that genetic and early-life environmental factors contribute to the observed association. *Methods*: From the Swedish Twin Registry, 8,534 twin individuals aged ≥65 (mean age 74.4) were assessed to detect dementia cases (DSM-IV criteria). Height and weight at midlife (mean age 43.4) were available in the Registry. Data were analyzed as follows: 1) unmatched case-control analysis for all twins using generalized estimating equation (GEE) models and 2) cotwin matched case-control approach for dementia-discordant twin pairs by conditional logistic regression taking into account lifespan vascular disorders and diabetes. *Results*: Among all participants, dementia was diagnosed in 350 subjects, and 114 persons had questionable dementia. Overweight (body mass index [BMI] >25–30) and obesity (BMI>30) at midlife were present in 2,541 (29.8%) individuals. In fully adjusted GEE models, compared with normal BMI (20–25), overweight and obesity at midlife were related to dementia with odds ratios (ORs) (95% CIs) of 1.71 (1.30–2.25) and 3.88 (2.12–7.11), respectively. Conditional logistic regression analysis in 137 dementia-discordant twin pairs led to an attenuated midlife BMI-dementia association. The difference in ORs from the GEE and the matched case-control analysis was statistically significant (p=0.019). *Conclusions*: Both overweight and obesity at midlife independently increase the risk of dementia, AD, and VaD. Genetic and early-life environmental factors may contribute to the midlife high adiposity-dementia association.

New England Journal of Medicine

Volume 364, Number 11
March 17, 2011

A Randomized Trial of Prenatal versus Postnatal Repair of Myelomeningocele

N. S. Adzick et al.

Background: Prenatal repair of myelomeningocele, the most common form of spina bifida, may result in better neurologic function than repair deferred until after delivery. We compared outcomes of in utero repair with standard postnatal repair. *Methods*: We randomly assigned eligible women to undergo either prenatal surgery before 26 weeks of gestation or standard postnatal repair. One primary outcome was a composite of fetal or neonatal death or the need for placement of a cerebrospinal fluid shunt by the age of 12 months. Another primary outcome at 30 months was a composite of mental development and motor function. *Results*: The trial was stopped for efficacy of prenatal surgery after the recruitment of 183 of a planned 200 patients. This report is based on results in 158 patients whose children were evaluated at 12 months. The first primary outcome occurred in 68% of the infants in the prenatal-surgery group and in 98% of those in the postnatal-surgery group (relative risk, 0.70; 97.7% confidence interval [CI], 0.58 to 0.84; P < 0.001). Actual rates of shunt placement were 40% in the prenatal-surgery group and 82% in the postnatal-surgery group (relative risk, 0.48; 97.7% CI, 0.36 to 0.64; P<0.001). Prenatal surgery also resulted in improvement in the composite score for mental development and motor function at 30 months (P=0.007) and in improvement in several secondary outcomes, including hindbrain herniation by 12 months and ambulation by 30 months. However, prenatal surgery was associated with an increased risk of preterm delivery and uterine dehiscence

at delivery. *Conclusions*: Prenatal surgery for myelomeningocele reduced the need for shunting and improved motor outcomes at 30 months but was associated with maternal and fetal risks.

Volume 364, Number 14
April 7, 2011

Functional Disability 5 Years after Acute Respiratory Distress Syndrome

M. S. Herridge et al.

Background: There have been few detailed, in-person interviews and examinations to obtain follow-up data on 5-year outcomes among survivors of the acute respiratory distress syndrome (ARDS). *Methods*: We evaluated 109 survivors of ARDS at 3, 6, and 12 months and at 2, 3, 4, and 5 years after discharge from the intensive care unit. At each visit, patients were interviewed and examined; underwent pulmonary-function tests, the 6-minute walk test, resting and exercise oximetry, chest imaging, and a quality-of-life evaluation; and reported their use of health care services. *Results*: At 5 years, the median 6-minute walk distance was 436 m (76% of predicted distance) and the Physical Component Score on the Medical Outcomes Study 36-Item Short-Form Health Survey was 41 (mean norm score matched for age and sex, 50). With respect to this score, younger patients had a greater rate of recovery than older patients, but neither group returned to normal predicted levels of physical function at 5 years. Pulmonary function was normal to near-normal. A constellation of other physical and psychological problems developed or persisted in patients and family caregivers for up to 5 years. Patients with more coexisting illnesses incurred greater 5-year costs. *Conclusions*: Exercise limitation, physical and psychological sequelae, decreased physical quality of life, and increased costs and use of health care services are important legacies of severe lung injury.

Volume 364, Number 16
April 21, 2011

Decompressive Craniectomy in Diffuse Traumatic Brain Injury

D. J. Cooper et al.

Background: It is unclear whether decompressive craniectomy improves the functional outcome in patients with severe traumatic brain injury and refractory raised intracranial pressure. *Methods*: From December 2002 through April 2010, we randomly assigned 155 adults with severe diffuse traumatic brain injury and intracranial hypertension that was refractory to first-tier therapies to undergo either bifrontotemporoparietal decompressive craniectomy or standard care. The original primary outcome was an unfavorable outcome (a composite of death, vegetative state, or severe disability), as evaluated on the Extended Glasgow Outcome Scale 6 months after the injury. The final primary outcome was the score on the Extended Glasgow Outcome Scale at 6 months. *Results*: Patients in the craniectomy group, as compared with those in the standard-care group, had less time with intracranial pressures above the treatment threshold ($P<0.001$), fewer interventions for increased intracranial pressure ($P<0.02$ for all comparisons), and fewer days in the intensive care unit (ICU) ($P<0.001$). However, patients undergoing craniectomy had worse scores on the Extended Glasgow Outcome Scale than those receiving standard care (odds ratio for a worse score in the craniectomy group, 1.84; 95% confidence interval [CI], 1.05 to 3.24; $P=0.03$) and a greater risk of an unfavorable outcome (odds ratio, 2.21; 95% CI, 1.14 to 4.26; $P=0.02$). Rates of death at 6 months were similar in the craniectomy group (19%) and the standard-care group (18%). *Conclusions*: In adults with severe diffuse traumatic brain injury and refractory intracranial hypertension, early bifrontotemporoparietal decompressive craniectomy decreased intracranial pressure and the length of stay in the ICU but was associated with more unfavorable outcomes.

Pediatrics

Volume 127, Number 3
March 2011

The Scope of Nonsuicidal Self-Injury on YouTube

S. P. Lewis et al.

Objective: Nonsuicidal self-injury, the deliberate destruction of one's body tissue (eg, self-cutting, burning) without suicidal intent, has consistent rates ranging from 14% to 24% among youth and young adults. With more youth using video-sharing Web sites (eg, YouTube), this study examined the accessibility and scope of nonsuicidal self-injury videos online. *Methods*: Using YouTube's search engine (and the following key words: "self-injury" and "self-harm"), the 50 most viewed character (ie, with a live individual) and noncharacter videos (100 total) were selected and examined across key quantitative and qualitative variables. *Results*: The top 100 videos analyzed were viewed over 2 million times, and most (80%) were accessible to a general audience. Viewers rated the videos positively (M=4.61; SD: 0.61 out of 5.0) and selected videos as a favorite over 12000 times. The videos' tones were largely factual or educational (53%) or melancholic (51%). Explicit imagery of self-injury was common. Specifically, 90% of noncharacter videos had nonsuicidal self-injury photographs, whereas 28% of character videos had in-action nonsuicidal self-injury. For both, cutting was the most common method. Many videos (58%) do not warn about this content. *Conclusions*: The nature of nonsuicidal self-injury videos on YouTube may foster normalization of nonsuicidal self-injury and may reinforce the behavior through regular viewing of nonsuicidal self-injury-themed videos. Graphic videos showing nonsuicidal self-injury are frequently accessed and received positively by viewers. These videos largely provide nonsuicidal self-injury information and/or express a hopeless or melancholic message. Professionals working with youth and young adults who enact nonsuicidal self-injury need to be aware of the scope and nature of nonsuicidal self-injury on YouTube.