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Inside

In This Issue

This issue of the *Residents' Journal* focuses on the theme of psychiatry and the media. Holly S. Peek, M.D., M.P.H., examines the evidence for exposure to violent video games as a risk factor for violence in children. Rajiv Radhakrishnan, M.B.B.S., M.D., discusses the role of the media with regard to substance use among adolescents and young adults. In a review article, Dorothy Chyung, M.D., investigates evidence regarding the relationship between suicide and its depiction in mass media. Lubna Grewal, M.D., discusses how mentally ill persons are portrayed in television dramas. Daniel Bristow, M.D., comments on the role of psychiatrists as advisors to the media. Lastly, Katherine Winner, M.D., and Matthew Baker, D.O., outline the unique ethical dilemmas pertaining to psychiatrists using social media.

Editorial

Molding the Future of Health Care

Arshya Vahabzadeh, M.D.
Editor-in-Chief

As the academic year and also my tenure as Editor-in-Chief draws to a close, I have had time to reflect on the past and our collective future. As residents and medical students, we serve on the continually shifting frontline of medicine. The changes in health care that lie before us grant us an opportunity to ensure that they are both positive and helpful to our patients. New models of health care delivery, the increased insurance coverage of Americans, and our collective will can bring about safer and more accessible health care systems. Our daily experiences already provide us with an intimate knowledge of the hurdles our patients face. Be under no illusion how useful our opinions, experiences, and suggestions can be in helping to craft the future of health care. One of our core skills as psychiatrists is that we are exceptionally skilled in listening to the concerns of others and also making sure that our own message is heard. Our skills are particularly valuable in bringing together our colleagues, administrators, and patients to impart positive change. I encourage you all to read, learn, and engage in health care leadership roles within your own institutions and the wider medical community.

We serve on the continually shifting frontline of medicine.

Carpe Diem.

Playing With Violence: Are Violent Video Games a Risk Factor for Violent Behaviors in Children?

Holly S. Peek, M.D., M.P.H.

Youth violence is a significant public health problem in the United States, negatively affecting individuals, families, and communities (1). Because of increased violence caused by youths in the 1980s and 1990s, the Surgeon General's report on youth violence in 2001 outlined the magnitude and causes of youth violence, as well as methods of prevention (2). Although exposure to violence on television was cited as a risk factor for violent behaviors with a small effect size, according to the American Academy of Pediatrics, it is also "the single most easily remediable contributing factor" (1).

Television, movies, and their link to aggressive and violent behaviors in children have been extensively studied over the past several decades (3, 4). Based on evidence from these studies, six prominent medical groups, including the APA and the American Academy of Child and Adolescent Psychiatry, made a congressional joint statement regarding the negative effect of violent media on children and that further called for more research on the link between violence and video games (5).

Additionally, in January 2013, President Barack Obama presented to Congress 23 executive actions to curb violence, including a request for more research on the "links between video games, media images, and violence" (6).

The purpose of the present review is to examine the evidence for exposure to violent video games as a risk factor for violence in children, the theoretical explanation of this risk factor, the controversy of the evidence, and considerations for clinicians and public health policy makers.

Violent Video Games as a Risk Factor for Aggressive Behaviors

First developed in the 1970s, video games are a relatively new form of mass media. Violent video games became popular in the 1990s, and technology has advanced such that games have the capability of being realistically graphic (7). Video game units are now in 83% of homes with children, and on any given day, 52% of children and youths ages 8–18 play video games, with the average use being 65 minutes per day for ages 8–10 (8).

Experimental studies demonstrate that exposing children to violent video games increases the likelihood that they will behave aggressively immediately afterward (9). For example, Irwin and Gross (10) reported that boys who had played a violent video game subsequently played more aggressively with their peers by hitting, shoving, pinching, and kicking more than those who played a nonviolent video game. Other studies have found similar effects on more aggressive thoughts and beliefs after playing violent video games (9).

Cross-sectional studies do not measure causation as well as experimental studies, but they do indicate a correlation and possible evidence for the causal process (8). For example, a survey of 8th- and 9th-grade students showed a correlation between the amount of time playing violent video games and the likelihood of being in a physical fight, arguing with teachers, and poor school performance (11). In a study of 227 adolescents in two juvenile delinquent centers, playing violent video games and/or having a preference for violent video games was correlated with delinquency and violence even when controlled for antisocial personality traits (12). These findings suggest that exposure to violent video games may be one risk factor for delinquency or violent criminal behavior, although the nature of these studies cannot determine causality. In general, a majority of cross-sectional studies have shown that children who play violent video games tend to behave more aggressively (8, 9).

There have been two major meta-analyses conducted, both of which concluded that exposure to violent video games is associated with higher levels of aggression. In 2001, Anderson and Bushman (7) reported that exposure to violent video games is associated with increased aggressive behavior, aggressive cognition, aggressive affect, and increased physiological arousal, as well as decreasing prosocial behavior, all with a mild to moderate effect size. However, there were very few longitudinal studies included in the analysis, making it difficult to link the long-term effects of playing violent video games to violent behaviors.

The other meta-analysis, published in 2010, responded to criticism of the initial study (13). This subsequent review reported similar results but included newly available, longitudinal studies to demonstrate long-term harmful outcomes. Experimental studies yielded the largest effect sizes, while longitudinal studies yielded the smallest effect sizes, yet still showed significance especially for aggressive behavior, aggressive cognition, and decreased empathy.

Theoretical Explanation of the Risk Factor

Social-cognitive models are used to explain influences of violent video games on violent behaviors in both the short- and long-term. These effects involve priming of aggressive concepts, arousal, and imitation of behaviors (9). Primed concepts make behaviors linked to them more likely, and therefore violent video games can prime more aggressive concepts (9). Physical and emotional arousal after playing a violent video game can cause a person to perceive subsequent neutral social stimuli to be aggressive, thereby causing a more aggressive response (9). Long-term effects can be caused by desensitization of emotional processes. Initially, exposure to violent

media innately causes an increased heart rate, perspiration, and self-reported discomfort after exposure. However, after repeated exposure to media violence, children begin to not have this negative response, becoming desensitized (9).

The general aggression model is a social-cognitive model used to help understand the effects of violent media. Based on this model, aggressive acts are largely based on the formation of aggression-related scripts and schemas. The greater a person is exposed to violent stimuli, such as repeated violent video game playing, the more aggressive scripts and schemas are formed, which leads to a more aggressive personality and more aggressive behaviors (7).

Children learn how to respond to events in their social environment through day-to-day observations and interactions with other people, both real and through the media. Each violent media exposure can act as a learning trial, thus contributing to the development of more aggressive behaviors (8, 9).

The Controversy

The causal relationship between violent video games and violent behaviors in children generates a contentious argument because researchers on both sides of the debate disagree on the research methodologies and results (14, 15). There is disagreement on several key points, including theoretical explanations for their findings.

Critics argue that social-cognitive models, such as the general aggression model, do not truly reflect the relationship between violent video games and aggression. The general aggression model does not take into account genetics, temperament, or family environmental influences; instead, this model implies that individuals can begin with no pre-existing motivation toward violent behavior and acquire it through repeated exposure to violent media. These critics suggest that violent behavior is largely innate, and the relationship between violent video games and violent behavior is incidental (16). Instead, through the "catalyst" model, a violence-prone personality occurs through genetic predisposition that leads to an aggressive temperament. This is further modulated by environmental factors, such as family violence. Times of stress can act as a "catalyst" for violent behavior for those who are predisposed. Violent video games can act as a "stylistic catalyst," meaning if a person with a predisposition for violent behavior decides to act violently, he or she may mimic the violence seen in the media (16).

Evidence that supports more biologically or innate-based models, such as the "catalyst" model, include cross-sectional studies that have found trait aggression, family violence, and male gender to be a better predictor of violent crime than exposure to violent video games (16). A prospective study of children ages 10–14 found that depressive symptoms and antisocial traits were a strong predictor of serious aggression and violence, while violent media exposure was not (17).

Considerations for Public Health and Mental Health Practitioners

Violent media viewing may explain only a small portion of an individual's risk for developing violent behavior; however, considering the social significance of such risk, it is important to consider public health approaches to curb this problem (9).

Censorship of violent media using rating systems in television, films, and video games has been used with limited success. Studies have shown that a large portion of children have seen age-restricted movies containing violence, can easily override parental controls on television, and download violent material off the Internet (18). Ninety-four percent of video games rated by the video game industry as appropriate for teens are described as containing violence, and 90% of teen parents do not check ratings on games before purchase (7, 8).

Because of the limited success of censorship of violent media for children, shifting the public health intervention to education is important. Policy makers should advocate for media awareness as part of school curricula. Parents should be made aware of the risks associated with children viewing violent imagery and assist children in understanding violent imagery that is appropriate to their development level. Mental health professionals can offer advice to parents and children on how to critically appraise violence in the media in terms of realism, justification, and consequences (18).

Conclusions

Despite the controversial evidence on both sides of this debate, many would agree that all children are affected in some way by media violence, with some more susceptible to behaving violently than others based on their individual cognitions, genetic predispositions, and social environment (18). Research is still limited regarding a longitudinal link between violent video games and real-world violence, making it necessary to further investigate this issue. In the meantime, it is necessary to educate parents and youths regarding critical appraisal of violence in the media. Although exposure to violence in the media is a small risk factor among several larger risk factors, it is perhaps one of the most remediable through education.

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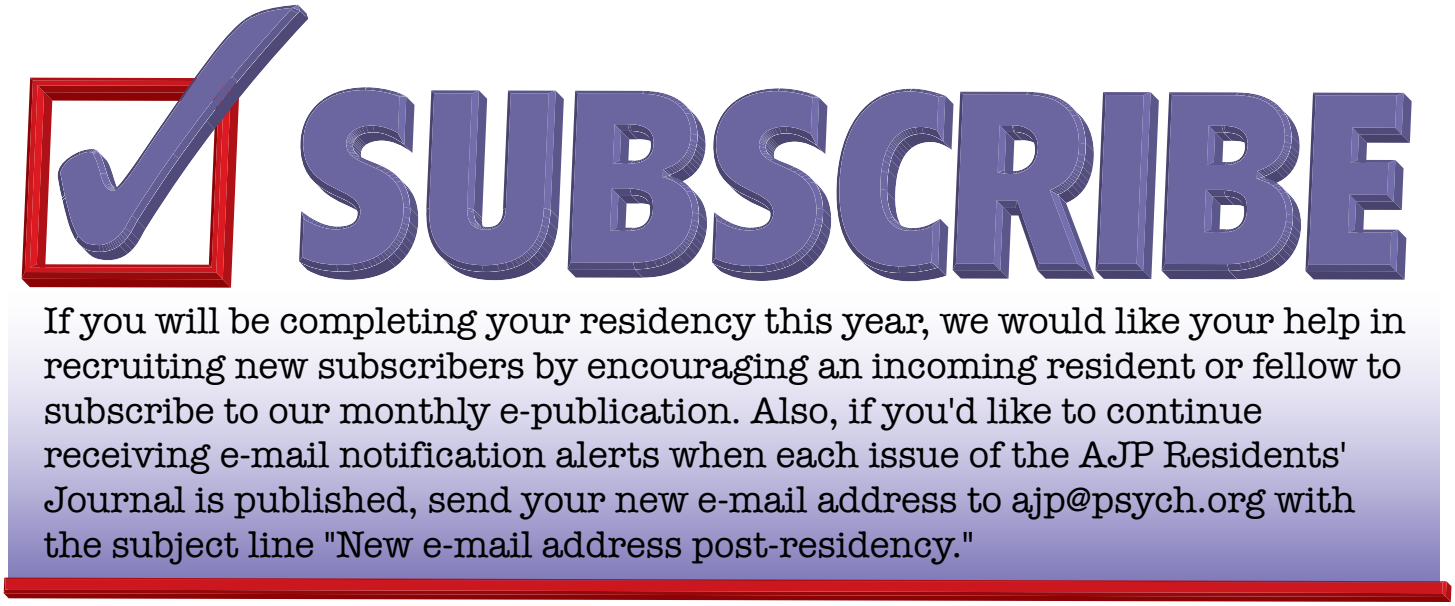

The Role of Media in Substance Use Among Adolescents and Young Adults

Rajiv Radhakrishnan, M.B.B.S., M.D.

Substance-related and addictive disorders are among the most common psychiatric disorders in the general population. As per the 2012 National Survey on Drug Use and Health among Americans >12 years old, an estimated 9.2% of the population (23.9 million) had used an illicit drug during the past month, 52.1% had consumed alcohol, and 26.7% were current tobacco users (1). Cannabis was the most common illicit drug reported. Alcohol, cannabis, and other illicit substance use has substantial implications for global burden of disease and health care costs (2), accounting for >18% of fatal motor vehicle accidents, 49% of drug-related emergency department visits, 25% of violent crimes, increased risk of blood-borne diseases such as HIV, a worse course for psychiatric disorders and a significant proportion of suicide, unintentional injury, and homicide.

The age at initiation of alcohol, cannabis, and other illicit substance use has a significant impact on progression to substance use disorder. Previous epidemiological studies have found that within a decade of alcohol, cannabis, or cocaine use, 12% of individuals develop alcohol dependence, 8% cannabis dependence, and 16% cocaine dependence (3). Approximately one-third to one-half of daily nicotine smokers develop nicotine dependence.

Teenagers and young adults in the United States are exposed to 8.5 hours per day, on average, of different forms of media, including television, film, music, and the Internet (4). Hence, the role of media in substance use disorder as it pertains to adolescents and young adults is of special interest.

Portrayal of Substance Use in the Media

Advertisements.

The alcohol and tobacco industries invest staggering amounts of funding in advertisements and promotional activities. In 2005, alcohol manufactures spent $3 billion, while in 2010, the tobacco industry spent about $8.05 billion and $444.2 million in advertisements and promotional activities for cigarettes and smokeless tobacco products, respectively.

By 2003, the alcohol industry voluntarily agreed not to advertise on television programs where >30% of the audience is expected to be <21 years old. However, a Centers for Disease Control and Prevention report in 2013 indicated that 23.7% of alcohol advertisements exceeded the industry threshold (5). The introduction of restrictions on tobacco advertisements and smoke-free laws has led the tobacco industry to increasingly promote noncombustible tobacco products, such as electronic cigarettes and Swedish-style snus, among both smokers and nonsmokers.

Film, television, and video games.

There is concern that the media disproportionately portrays substance use as a normative behavior and fails to convey the long-term consequences of substance use. The portrayal of alcohol and tobacco use is frequent in top-grossing adult films and also in animated films and teen flicks. Studies indicate that about 98% of top-grossing films and 43% of G-rated animated films contain references supporting tobacco use, while 96% of top-grossing films and 47% of G-rated animated films contain references supporting alcohol use (6, 7). Previous studies have found that only one-third of top-grossing films included any reference that discouraged the use of tobacco or alcohol (6), and very few animated films contained a message that a character should stop smoking. Furthermore, one study reported that no films during the time frame for which study data were collected contained messages about restricting consumption of alcohol (7). Among teen flicks, one in five teen characters are shown drinking, characters seldom refuse invitations to use alcohol or drugs, and the consequences of substance use are infrequently depicted (8).

Music lyrics, videos, and music events.

Teenagers spend on average 3 hours per day listening to music and watching music videos (4). They are exposed to drug references in the lyrics of songs (e.g., *Cocaine*, *Comfortably Numb*, *Me and My Drank*), the depiction of substance use in music videos, and a subculture that uses psychedelic drugs during music events and views substance use as normative behavior. The lyrics of about one-third of songs contain explicit reference to drugs and glorify drug, tobacco, and alcohol use. Similarly, about one-third of music videos portray alcohol use, with rap music videos featuring the highest content of alcohol or tobacco use among all genres (9). Teenagers are also more likely to model the behavior of celebrity musicians and movie stars, who form idols for 75% of young adults.

News, Internet, and other forms of media.

The Internet has exposed teenagers to the perils of online advertising (such as beer "advergames"), drug-related videos, drug marketing strategies, and social networking. The vast majority of websites that sell tobacco products online do not have age verification procedures. In a survey of more than 1,000 14–20 year-olds, 2% reported purchasing alcohol online, while 12% reported knowing a friend who did so (10). Social networking sites have resulted in a proliferation of the display of drug and alcohol content on personal web pages, with about 40% of profiles featuring references to drug abuse (11). Online drug forums (such as Erowid.com) contain explicit personal accounts of drug use by drug enthusiasts or "psychonauts" in a manner that provokes curiosity and glorifies drug use.

Effect of Media Portrayal on Initiation of Substance Use

The effect of media exposure to pro-drug messages has been examined in multiple longitudinal studies. The conclusions of these studies are correlational and do not necessarily imply causality. However, the 2012 U.S. Surgeon General's report concluded that tobacco advertisements and promotional activities led to the initiation and continuation of tobacco use among adolescents. A review of 19 longitudinal studies found that nonsmoking adolescents who were more aware of tobacco advertising, or more receptive to it, were more likely to have experimented with cigarettes or to have become smokers by the time of follow-up (12). One longitudinal study found that exposure to smoking in movies during the teen years (specifically grades 5–8) predicted smoking initiation 1–8 years later (13). Exposure to pro-tobacco advertisements over the Internet or at retail stores has resulted in an increase in experimentation with snus and electronic cigarettes (14).

Similar results are seen in longitudinal studies examining the effect of exposure to alcohol marketing (15). In a study of 3,890 students in grades 7–10, exposure to alcohol advertisements and/or liking of those advertisements in 7th grade were predictive of later alcohol use (16). Two systematic reviews that included seven cohort studies (17) and 13 longitudinal studies (15), respectively, concluded that exposure to alcohol advertisements resulted in greater likelihood of alcohol initiation (15, 17) and heavier drinking among existing drinkers, in a dose-response fashion (15). Cannabis is the most frequent illicit drug seen in movies (e.g., the *Pineapple Express*). Another study found that watching R-rated movies was associated with a six-fold increased risk of cannabis use (18). Exposure to music is also associated with increased use of cannabis. Media reports indicate increasing rates of use of prescription drug concoctions such as purple drank and sizzurup and of synthetic drugs such as spice, K2, and bath salts among teenagers.

A major concern with regard to early initiation of cannabis and prescription drug use is that this may serve as a "gateway" to other illicit drugs, such as cocaine and heroin. There is also growing literature demonstrating that adolescence is a critical period of brain development, and exposure to drugs such as cannabis could play a role in the emergence of psychosis or mood disorders.

Effect of Antidrug Media Campaigns on Adolescent Substance Use

A Cochrane review of media campaigns for the prevention of illicit drug use in young people comprising 23 studies, including 12 randomized controlled trials, found no effect of media campaign interventions on reducing substance use (19).

There is some evidence that mass media can prevent initiation of smoking in young people; however, the evidence is not strong and contains a number of methodological flaws. A Cochrane review of studies that used mass media to target smoking among young adults <25 years old found that only three of seven randomized controlled trials concluded that mass media campaign messages of reasonable intensity reduced the smoking behavior of young people (20).

Role of Media in Stigma, in Public Education, and as a Teaching Tool

The portrayal of substance use in movies often contains inaccurate descriptions and myths regarding addiction. The common myths perpetuated in Hollywood movies include 1) notions that "love" can cure addiction (e.g., the *Lost Weekend*), 2) notions that discontinuation of drug use without medical assistance (i.e., "quitting cold turkey") does not carry serious risks (e.g., *Trainspotting*), and 3) the stereotype of the "addicted homicidal maniac"(e.g., *Nil by Mouth*).

Movies can also serve as a means to educate the public and to convey complex concepts to psychiatry residents. A list of movies on substance use disorder that are useful as teaching tools is presented in Table 1.

The American Academy of Child and Adolescent Psychiatry recommends that parents teach children to view media critically; make the choice of programs a family dialogue; choose programs that reflect parental values, portray clear moral issues, identify positive role models, and foster richness of imagination; limit the amount of time a child spends online or watching television; and use parental control features to monitor content that children access.

TABLE 1. Movies Recommended as Teaching Tools for Residents and Medical Students[a]

Alcohol use
Barfly (1987)
Born on the Fourth of July (1989)
Days of Wine and Roses (1962)
Go Ask Alice (1973)
Drunks (1995)
Fire Within (1963)
Ironweed (1987)
Leaving Las Vegas (1995)
Long Day's Journey into Night (1962)
Lost Weekend (1945)
Tender Mercies (1983)
Trees Lounge (1996)
Under the Volcano (1984)
Verdict (1982)
Illicit drug use
21 Grams (2003)
Born on the Fourth of July (1989)
Christiane F. (1981)
Clean and Sober (1988)
Drugstore Cowboy (1989)
Long Day's Journey into Night (1962)
Platoon (1986)
Pulp Fiction (1994)
Quitting (2001)
Requiem for a Dream (2000)
Sid and Nancy (1986)
Traffic (2000)
Trainspotting (1996)

[a] The movies listed are described by Wedding et al. (see reference 21).

Conclusions

The media plays a diverse role in substance use disorder among adolescents, including framing their knowledge and attitudes toward drug use, moderating drug initiation and progression to substance use disorder, providing access to drugs, and serving as an educational tool. While media portrayal of pro-drug messages has a significant effect on the initiation of drug use and progression to substance use disorder, antidrug social media messages have failed to show similar impact on preventing substance use. The extent to which the media has perpetuated modern day life brings with it challenges, such as greater access to alcohol, tobacco products, prescription medications, and synthetic drugs. This underscores the need to educate parents and teenagers regarding the role of the media in substance use disorder.

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Suicide and Reporting in Mass Media

Dorothy Chyung, M.D.

For many decades, media depictions of suicide and suicide attempts have been a cause for concern. Suicide is a significant psychiatric and public health problem. It is not surprising that there is some influence of the media on people's thoughts and behaviors. Although it is unrealistic to censor all potentially negative depictions of suicide in the media, it is important to consider our responsibility to patients and the health of the general population using our understanding of the role of the media and potential interventions. The purpose of the present article is to review the evidence regarding the relationship between suicide and its depiction in mass media.

Effects of Media on Suicide Rates

In 1774, Goethe wrote a popular novel titled *The Sorrows of Young Werther*, which is about a young artist whose object of affection marries another, leading him to ultimately kill himself. Supposedly, following the publication of the book, the first "copycat" suicides occurred, leading to the ban of the book in some areas of Europe (1). In spite of this, the idea that suicide could be linked to suggestion, or "imitation," was believed to be irrelevant or inconclusive on a population level until 1974, when Phillips coined the term "Werther effect" (1). He reported that there was an increase in suicide in the United Kingdom and in the United States following the publication of suicide stories in newspapers from 1947 to 1968 (1).

Furthermore, Gould (2) reviewed studies examining the media's influence on suicidal behavior and found that most of the studies demonstrated that extensive newspaper or television coverage of suicides is associated with an increase in the rate of suicide. There was even evidence to support a decrease in suicides when newspapers went on strike. These studies were conducted in the United States, Australia, and some European and East Asian countries. Pirkis and Blood (3) also reviewed the literature and determined that an association existed between media coverage of suicides and actual suicides. They concluded that the relationship was causal based on the consistency, strength, temporality, specificity, and coherence of the evidence. They found this to be the case for newspapers, television, and books, with insufficient evidence regarding the Internet.

However, the Werther effect is not without criticism. Sisask and Varnik (4) point toward the possibility of reporting bias. In their systematic review of media portrayal of suicide and suicide-related outcomes, published in 2012, they identified only a few studies that reported no association. All of these studies were published before 1990, suggesting a possible bias in favor of publishing studies with positive findings in more recent years. According to Stack's quantitative review (5), research based on television stories was 79% less likely to result in findings of an association with suicide, compared with research based on print stories. Stack concluded that this was a result of the much briefer duration of exposure to the story and details through television, compared with that of newspapers. He also found less likelihood of a copycat effect during the Great Depression, compared with after World War II, which he attributed to limited circulation of newspapers and a larger segment of the population without television at the time.

In contrast, a review of fictional depictions of suicide is significantly more inconclusive, ranging from a significant association to an indeterminate association to no association at all (2). These studies considered stories on television, in films, and in written vignettes. Similarly, Pirkis and Blood (3) were less able to determine causality based on fictional depictions. Another review found that studies based on nonfictional stories, compared with fictional stories, were 14.3 times more likely to identify an association with suicide (6). This may be a result of the significant variability of the fictional representations and the setting in which the media was viewed.

More recently, Niederkrotenthaler et al. (7) proposed the idea of a "Papageno effect": a protective effect of media on suicide. This name was based on the character in Mozart's opera *The Magic Flute* who becomes suicidal over losing his love but is saved when some spirits intervene. Niederkrotenthaler et al. found that media reports of suicidal ideation without an attempt and reports of overcoming the suicidal crisis were associated with a decrease in suicide rates. They argued that this may be a result of the promotion of positive coping mechanisms that often accompanied these stories. Similarly, another study found that stories focused on negative definitions of suicide were 99% less likely to report an association with suicide (5).

Individual Risk Factors for Media Influence

The association of suicide stories and completed suicides is strongest among teenagers, whose suicide rate decreased the most during the aforementioned newspaper strike (2). Adolescents and young adults also have a higher risk of suicide following exposure to a suicide (8). They are believed to be more susceptible to the suicide or behavioral contagion theory, through imitative learning or decreasing one's restraint. This model is based on the theory that the impact of the media on suicide is moderated by the role of the person with suicidality, of the vulnerable audience, and of the environment (8).

Although reports of gender differences have been mixed, Stack found that studies focusing on female suicides were 4.89 times more likely to report an association (5).

Pirkis and Blood reported that the association was stronger when the subject of the story was admired or similar to the observer (e.g., demographic similarities) (9). Similarly, Stack reported an increased likelihood of association, by 5.27 times, if the story involved an entertainment or politi-

cal celebrity (5). This corresponds with the theory of differential identification, which posits that a learned behavior is more likely based on the degree of identification between the model and observer, particularly when the model is revered, which is known as vertical identification (6).

Another hypothesis is that the individuals affected are already suicidal and are "pushed over the edge" by media coverage. Stack conceptualized this occurrence as a dose response; that is, increased exposure confers greater risk and is more positively, rather than negatively, reinforcing (6). This corresponds to a symbolic interactionist theory, in which more receptive (i.e., depressed or impulsive) people would be more responsive. Some studies conducted in Taiwan have found that people with depression or a history of suicidality are more susceptible to media influence (10).

Overall, the effect of the media on suicide is probably smaller than that of other psychosocial risk factors (4). Interestingly, the individuals who are affected are not necessarily the typical high-risk individuals (white, unmarried, unemployed elderly men), particularly given the vulnerability of youths.

Media Factors Influencing Suicide

Pirkis and Blood reported that the association of media and suicide was related to the quantity of coverage and the prominence of the story (9). When a description of the suicide method was involved, this was associated with an increase in suicidal behavior using this method. They also found that this effect peaked within the first 3 days and waned by week 2, although others have reported an effect for up to 1 year.

As a result, there has been a push toward creating guidelines for responsible journalism, although with little consistency, evidence, or enforcement. The primary evidence comes from Vienna, where media guidelines and a campaign were launched in 1987 with regard to the reporting of suicides on subways. Following the creation of the country's subway system in 1978, suicide rates increased, as did media reporting of these events. Following the change in media reporting, there was a decrease in suicides, especially in the number of subway suicides and attempts, which decreased by more than 80% (11). There has been some debate about the necessity of such media guidelines and whether they can be helpful in the reporting of suicide, resulting in differences in specific recommendations. One review suggested that journalists' opinions and use of such guidelines are low (12).

Because of methodological obstacles and the low base rate of completed suicide, there is little published data on whether the creation of media guidelines will decrease suicide attempts; rather, they are based on "common sense" (13). School-based postevent interventions have also been recommended, with little evidence of their effectiveness but no reported harmful effects. There are no guidelines for fictional depictions of suicide in films, novels, etc.

Conclusions

There is a significant evidence base supporting an association between media reports of nonfictional suicides and suicidal behavior. This is particularly true when the media story has significant media coverage, is about a public figure, and specifies a method of suicide. Young adults and those receptive to the news are more vulnerable. Given the confirmation of this relationship between the media and suicide, research efforts should be directed toward better understanding the relevant components of stories and when prevention is in order. A recent Cochrane review showed a limited and unclear effect of media on reducing mental health-related stigma, largely because of insufficient evidence (14). It seems that it is more difficult to prove a beneficial effect of mass media regarding mental illness than a negative one. This may also prove to be the case for suicide prevention as it relates to news reporting on suicide stories, although it seems reasonable to make an effort to examine the degree of negative effect. To date, the research focus has been more on aspects of the "causal" aspects of media and how to change these, but a better understanding of vulnerable individuals' characteristics could be applied in clinical practice and may help with individual outcomes.

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Commentary

Television Reality: Perceptions of Mental Health in the Media

Lubna Grewal, M.D.

Television has captured many unforgettable historic moments and beautifully articulated the deep emotions felt. Unfortunately, that skilled articulation has not always extended to the mental health field. Qualitative content analysis conducted at the University of North Carolina at Asheville examined representation of mental illness in prime time television (1). Results showed that the mentally ill are portrayed as violent, as having a negative quality of life, and as having a negative impact on society. In some instances, the mentally ill can be portrayed more poorly than nonmentally ill violent criminals, a comparison originating from a stereotypical link between crime and mental illness.

These findings make prime time crime dramas particularly interesting to examine. *Dexter*, for example, is a twisted drama about Dexter Morgan, a vigilante serial killer who doubles as a blood splatter analyst for Miami homicide. Although psychological trauma is a vividly depicted central theme, treatment is wholly neglected. As a toddler, Dexter witnesses the gruesome murder of his drug-addicted mother. His adoptive sister is kidnapped and nearly murdered more than once. Most plainly, Dexter is a functioning serial killer. However, none of this merits the suggestion that someone could (or should) help. This is most clearly highlighted after Dexter's infant son witnesses his mother's murder, and Dexter seeks a psychologist's opinion, hoping to dispel a secret fear that his son shares his fate.

We should demand a more constructive image.

The psychologist definitively states that age precluded his son from any issue, implying her own irrelevancy. Disregarding treatment may be damaging, but using it to undermine itself seems to be a fatal wound.

In contrast, *Law & Order: Special Victims Unit* seems to represent an encouraging example in its embrace of mental health. The show's forensic psychiatrist comes off as personable, intelligent, and compassionate. Like in *Dexter*, mental illness is found in both protagonists and antagonists. However, in *Law & Order* treatment is not neglected, but it is exclusively applied to the antagonists. Detective Elliot Stabler's well-demarcated anger problem is reiterated for seasons but is never treated. Detective Olivia Benson struggles with posttraumatic stress disorder after her attempted rape, but she dismisses repeated requests that she should seek help. Both detectives begrudgingly attend evaluations mandated by supervisors, with no benefit felt. Meanwhile, criminals are hauled off to Bellevue. Treatment is broadly present in the show, but it is only intended for the violent mentally ill criminals.

There is uplifting progress in a more nuanced, relatable representation of mental illness. However, the value of this progress remains dubious without also honoring treatment. In fact, this more accurate representation only intensifies the need for psychiatric care to be equally authentic. With realistically flawed protagonists, their heroic defining moment shifts toward their fantastical ability to succeed despite these flaws, reciprocally disparaging the everyday people who seek treatment to improve. As mental health professionals, we should demand a more constructive image. Whether in our role as media liaisons, as consultants to the community, or even within the political infrastructure, we must work to change the message so that active and treatment-naive patients alike feel empowered, not impoverished, by their ability to ask for help.

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The author thanks Drs. Holly Peek and Josh Wool for their assistance.

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Commentary

The Psychiatrist as Advisor to the Media

Daniel Bristow, M.D.

News stories often mention mental illness in a negative and inaccurate way, typically overestimating the unpredictability and dangerousness of people with mental disorders. Research suggests that the public is much more likely to encounter a news story about a person with mental illness committing a violent crime than a story of a mentally ill person succeeding in his or her daily life (1). Since most members of the public receive much of their education about mental illness from the media (2), they can easily be misinformed. Negative stories about persons with mental disorders have the power to perpetuate stigma (3) and possibly even negatively affect the way the public views mental health practitioners.

As a former radio broadcaster with experience in news casting, I watch and listen to the news differently since becoming a psychiatry resident. Lately, I have noticed a concerning trend in newscasts. On several occasions, I have heard reporters recount violent acts perpetrated by someone only to follow these tragic descriptions with a statement that the suspect was not known to have a mental illness, as though all aberrant or criminal behavior stems from a mental illness. Hearing these repeated negative conceptions about mental illness can prevent people with mental illness from seeking needed treatment and can lead to discrimination, resulting in poor access to adequate housing and employment.

When the news makes inaccurate associations, the psychiatrist has the opportunity and duty to educate the public about mental illness and its treatments. Psychiatric treatment can improve and save lives, yet the public's perception can be quite different. Through surveys conducted in Australia, Jorm et al. (4) found that respondents were much more likely to rate a counselor or general practitioner as more helpful to a person experiencing symptoms of depression or schizophrenia than a psychiatrist or psychologist. This finding highlights the public's general lack of knowledge of the job of the mental health professional.

The psychiatrist has the opportunity and duty to educate the public about mental illness and its treatments.

Yet even when psychiatrists contribute expert information to journalists for news stories, the journalist has the power to ultimately decide how that information is used in the story to make it more "newsworthy" (5). The result, again, does not always present the topic of mental illness or its treatment in a positive manner. With this in mind, how does the psychiatrist attempt to correct misperceptions about mental illness and give the public accurate information when media misrepresentations pervade modern society?

We can write the stories ourselves or submit letters to editors to correct the misinformation we see in the media. These corrections can be useful, but they are not always published or considered newsworthy. When this is the case, our greater goal is to get to know the journalists who report on mental illness and help them to see that a person's recovery despite mental illness is a much more newsworthy story than sensationalizing and exploiting those with mental illness.

Dr. Bristow is a fourth-year resident in the Department of Psychiatry, Oregon Health and Science University, Portland, Ore.

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Case Report

Scientology and Involuntary Commitment

Robin Bershader, D.O.
B. Samaiya Mushtaq, B.A.
Abhinav Saxena, M.D.

Under the First Amendment to the U.S. Constitution, patients have the legal right to refuse medical treatment if they believe that the treatment conflicts with their religious beliefs. We report the case of a patient suffering from persecutory delusions who felt that acceptance of psychiatric recommendations would interfere with his role in the Church of Scientology.

Case

"Mr. A" is a 62-year-old man with no psychiatric history who presented to the emergency department after an overdose of fenbendazole, diphenhydramine, and flunazine that occurred while transitioning to a respite care facility. His ingestion resulted in respiratory failure, altered mental status, medical intensive care unit admission, and transfer for involuntary psychiatric hospitalization.

The patient's initial history was limited by guarded behavior believed to be fostered by his religious beliefs in Scientology. He previously adhered to an extensive regimen of vitamins and homeopathic supplements for the treatment of hyperlipidemia. For unclear reasons, he abruptly discontinued this regimen and subsequently developed persecutory delusions approximately 1 week later. He became fixated on planning an upcoming event and relayed concerns to his friends that members of a local gang and others were intertwined in a plot to cause him harm.

He sought home-based spiritual assistance from religious peers, which consisted of a rigid diet, body cleansings, and long interviews. While receiving spiritual assistance, Mr. A's condition deteriorated, and he became increasingly paranoid and soon began to suspect that he was being poisoned. Fearful of the food he was required to eat during the home-based treatment, he left his home and ran to a park nearby but was eventually found by family and friends. He was subsequently hospitalized for grave disability and psychosis and spent 3 days in an inpatient psychiatric facility where he refused all medications and interventions.

Upon resolution of his psychosis, Mr. A was discharged into the care of family members and transferred to a respite program in his state. At the respite facility, he felt overwhelmed by the expectations and regulations and intentionally overdosed. Following his suicide attempt, he was again hospitalized involuntarily, this time for danger to self, and again refused all psychotropic medications and psychotherapy. He reported that acceptance of psychiatric recommendations and engagement in therapy would prevent him from expanding his role within the Church.

Through conversations with the patient, collateral, and further research, it was discovered that the respite facility was founded on the principles of Scientology. Eventually, his case went to a commitment hearing, which was granted. However, it was decided that the administration of intravenous or intramuscular medications would be a violation of the patient's First Amendment rights to freedom of religious expression. Ultimately, following discussions with the patient and collateral information obtained from staff and the owner of the respite facility, it was decided that Mr. A no longer posed an immediate risk of self-harm, and therefore involuntary commitment was no longer warranted. The decision was made to transfer the patient back to the respite facility. Upon discharge, he was advised to return in the event of recurrent suicidality, and the importance of careful supervision, as well as the need for further psychiatric management at the respite facility, was emphasized. At the time of discharge, he was cognitively organized and denied suicidal ideations. He stated that he was looking forward to returning to the respite center for treatment. Both the facility and the patient declined to respond to follow-up correspondence.

Discussion

In our view, the patient's opposition to psychiatric treatment because of his religious faith greatly complicated this case. Psychiatrists are rarely able to treat populations who oppose psychiatric treatment based on religious doctrine, and therefore physician knowledge of their mental health is limited. The treatment that the patient in this case received at the respite facility and by his religious peers included aspects of the introspection rundown modality used by the Church of Scientology for psychosis. Introspection rundown, developed by the founder of Scientology, L. Ron Hubbard, isolates the patient physically, emotionally, and mentally in order to rid the psychotic symptoms viewed as spiritual disruptions. A secondary tenet of the introspection rundown is the proclamation that it eliminates the need for psychiatry.

Mental health practitioners within the Church of Scientology are considered auditors; however, published literature and qualifications for these practitioners is inconsistent. The auditors conduct interviews with the preclears (patients), similar to the therapist-patient relationship, and help them to achieve extroversion, an externally focused worldview devoid of internal psychosis, as described by Hubbard (1, also see reference 2). In the present case, the balance between patient disclosure required to provide adequate care and the patient's right to his religious beliefs conflicted. While opposition to psychiatric treatment is a strong force among some religions, providing adequate psychiatric treatment while mutually respecting patient autonomy re-

quires an understanding of the patient's mental health practices, beliefs, and expectations. Furthermore, the patient does have the constitutional right to decline treatment if he or she feels that treatment will interfere with his or her religious faith.

Dr. Bershader is a third-year resident in the Department of Psychiatry, Vanderbilt University Medical Center, Nashville. Samaiya Bushra Mushtaq is a fourth-year medical student, Vanderbilt University School of Medicine. Dr. Saxena is a fourth-year resident and Chief of Inpatient Psychiatry, Vanderbilt University Medical Center.

Some facts, names, and circumstances of this case have been changed to protect the patient's privacy.

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Commentary

Perils and Pitfalls for Psychiatrists Using Social Media

Katherine Winner, M.D.
Matthew Baker, D.O.

Gone are the days of patients relying solely on a doctor to make sense of their ailments. Patients are embracing the Internet and social media to help them navigate their medical experience, often "googling" their symptoms, treatments, and even their physicians before they present to the clinic. Practitioners must be prepared to face the unique situations that may result as the increased use of the Internet and social media create ethical dilemmas without easy answers.

One ethical concern that can be easily breached on social media is patient confidentiality and privacy. When one "posts" to social media, that information is permanent and public. With this in mind, a physician should avoid writing anything about a patient on the Internet. Even vague medical comments can be problematic, since they could unwittingly be taken as medical advice, leading to a patient-physician relationship. If there is an unfavorable outcome as of this advice, it could leave one legally liable (1).

In psychiatry, the patient-physician relationship is a particularly important aspect of treatment. Psychiatrists are taught to be mindful of boundary crossings that may lead to more serious boundary violations. Although most psychiatrists would agree that socializing with patients should be avoided, these lines become blurred with the use of social media. Facebook, Twitter, and other social sites allow people to interact without actually socializing. Our instinct may be to deny a patient's "friend request" in social media; however, this action may cause unspoken conflict in the patient-physician relationship. It may be helpful for the psychiatrist, and therapeutic for the patient, to explore the issue during an appointment and discuss the rationale behind the decision to reject a friend request. The American Medical Association (AMA) code of medical ethics recommends that physicians separate personal and professional content online, which may help provide a more comfortable distinction in patient-physician interactions in social media (2).

Increased use of the Internet and social media create ethical dilemmas without easy answers.

In recent years, media reports regarding high-profile shootings have explored expectations of the protective role of psychiatrists. Following the 2012 movie theater shooting in Aurora, Colo., news media discussed the responsibility of the patient's psychiatrist, introducing the question as to whether the psychiatrist could have done more to protect the victims. Psychiatrists have a duty to alert and protect others from risk of imminent harm, as described in the Tarasoff ruling, but to what extent should psychiatrists investigate their concerns? Should a psychiatrist be held negligent for not checking a patient's Facebook to ensure that no suicidal or homicidal messages were left, or might this be considered a breach of privacy? At present, there are no guidelines by the APA or the AMA. Because of the lack of guidance on these issues, it may be best to limit these online searches to situations when safety is a significant concern and the patient's report is unreliable (3).

Tomorrow's psychiatrists will practice in an increasingly computerized world with new and unique ethical dilemmas. Attention to the fundamentals of the patient-physician relationship will help in the consideration of these difficult ethical questions.

Dr. Winner is a fifth-year Child and Adolescent Psychiatry Fellow at Wright State University, Dayton, Ohio. Dr. Baker is a fourth-year Child and Adolescent Psychiatry Fellow, Wright State University.

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TEST YOUR KNOWLEDGE

In preparation for the PRITE and ABPN Board examinations, test your knowledge with the following questions. (answers will appear in the next issue)

In preparation for the PRITE and ABPN Board examinations, test your knowledge with the following questions (answers will appear in the next issue). This month's questions are courtesy of David Hsu, M.D., a fellow in geriatric psychiatry at Massachusetts General Hospital/McLean/Harvard, Boston, and Associate Editor of the Residents Journal.

Question #1.
Presently, which intervention below has the best chance of preventing Alzheimer's disease in the next 5 years?

A. Antiamyloid vaccine
B. Gamma-secretase inhibitors
C. Cholinesterase inhibitors
D. Beta-secretase inhibitors
E. Antiamyloid monoclonal antibody

Questions #2.
Which antidepressant has been shown to decrease Alzheimer pathology in mice and humans?

A. Citalopram
B. Sertraline
C. Venlafaxine
D. Fluoxetine
E. Paroxetine

ANSWERS TO MAY QUESTIONS

Question #1.

Answer: A. Parkinsonism

Finger tapping is the fourth component of the motor examination in the United Parkinson's Disease Rating Scale. Asking a patient to perform finger tapping with the index finger and thumb 10 times each side and seeing whether the rate decreases is a reliable measure of parkinsonism.

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Question #2.

Answer: E. All of the above

All of the signs listed are part of the standard Bush-Francis Catatonia Rating Scale, in which there are 23 signs of catatonia. It has been the most reliable and commonly used scale to assess for catatonia. Catatonia is often related to mood disorders and delirium, and it can be encountered in the general medical setting.

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We are currently seeking residents who are interested in submitting Board-style questions to appear in the Test Your Knowledge feature. Selected residents will receive acknowledgment in the issue in which their questions are featured.
Submissions should include the following:
1. Two to three Board review-style questions with four to five answer choices.
2. Answers should be complete and include detailed explanations with references from pertinent peer-reviewed journals, textbooks, or reference manuals.
***Please direct all inquiries to ajp@psych.org.**

Author Information for *The Residents' Journal* Submissions

The Residents' Journal accepts manuscripts authored by medical students, resident physicians, and fellows; manuscripts authored by members of faculty cannot be accepted. To submit a manuscript, please visit http://mc.manuscriptcentral.com/appi-ajp, and select "Residents" in the manuscript type field.

1. **Commentary:** Generally includes descriptions of recent events, opinion pieces, or narratives. Limited to 500 words and five references.
2. **Treatment in Psychiatry:** This article type begins with a brief, common clinical vignette and involves a description of the evaluation and management of a clinical scenario that house officers frequently encounter. This article type should also include 2-4 multiple choice questions based on the article's content. Limited to 1,500 words, 15 references, and one figure.
3. **Clinical Case Conference:** A presentation and discussion of an unusual clinical event. Limited to 1,250 words, 10 references, and one figure.
4. **Original Research:** Reports of novel observations and research. Limited to 1,250 words, 10 references, and two figures.
5. **Review Article:** A clinically relevant review focused on educating the resident physician. Limited to 1,500 words, 20 references, and one figure.
6. **Letters to the Editor:** Limited to 250 words (including 3 references) and three authors. Comments on articles published in *The Residents' Journal* will be considered for publication if received within 1 month of publication of the original article.
7. **Book Review:** Limited to 500 words and 3 references.

Abstracts: Articles should not include an abstract.

Upcoming Themes

Please note that we will consider articles outside of the theme.

Addiction Psychiatry

If you have a submission related to this theme, contact the Section Editor, Juliet Muzere, D.O. (jmuzere@gmail.com).

Psychopharmacology and Therapeutics

If you have a submission related to this theme, contact the Section Editor, Rajiv Radhakrishnan, M.B.B.S., M.D. (rajivr79@yahoo.com).