Increasing Emergency Department visits for adolescent and teen mental health emergencies
What is the relationship to smartphone use/ social media?

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Statistics

Suicide attempts by 13-18 y/o increased by 23 percent between 2010-2016.
Completed suicides increased by 31 percent.

Suicide is the second leading cause of death 15-24 y/o
Unintentional injury is leading cause of death in 15-24 y/o
Homicide is the 3rd leading cause of death

In 2010-there were 4867 suicides 10-24 y/o
In 2016-there were 6159

ED visits (both adult and pediatric) from 2006-2014 increased 15%
In that same time period mental health and substance use visits increased by 44%

ED visits for mental health emergencies for children between the years 2012-2016 rose by 50%-that includes anxiety, depressive symptoms, drug use.
50 % increase in 4 years

Similar trends are occurring in Northern VA

Rise in the number of adolescent/teens presenting for mental health complaints noted 2012-2013

Includes anxiety, depression, self harm behaviors, suicidal ideation, suicide attempts, substance abuse complaints
Increasing trends for adolescent/teen depression/anxiety/suicide are being seen around the country.
Rates began to rise around the same time frame.

Dr. Jean Twenge -Professor of psychology, San Diego state University.

She has done research in generational cultural changes.

Her research pointed to abrupt change in teen behaviors and mental health crisis around 2011-2012.

She describes the rapidity of this cultural change in teenage depression, anxiety, and suicide as "staggering"

Dr Twenge found in 2012, majority of people owned a smartphone and by 2014, 73% of teens owned a cell phone.

With the smartphone, the amount of time that teens spent on-line, on social media platforms, on messaging apps all skyrocketed.

She concluded that the rise in these mental health problems are directly related to use of cell phone.

Subsequent studies seem to point to a causal relationship

Why does smartphone usage lead to these mental heath effects?

The smartphone allowed extended periods of time on-line, communicating through social media to be done in isolation.

The portability of the phone allowed the phone into the bathroom, in the bedroom, to any corner of the house, any time of the day or night-all done in isolation.

Even when kids are together, they are "communicating" more often with their phones and not with traditional forms of communication.

And the smartphone in the car while driving has led to increasing incidents of deadly distracted driving

Twenge believes the more time that teens spend alone and on-line, the less time they spend on activities that are known to benefit mental health. Activities with family, involvement in sports or volunteer activities, personal face to face interactions in general.

More research has confirmed this association of smart phone use and teen anxiety, depression, and suicide

Recent research has focused on the effect of smartphone use and lack of sleep.

The use of smartphones and other back lit device use at night time demonstrate negative effect on the pineal glad.

Pineal gland is important in regulating melatonin release (a sleep regulating hormone).

Blue light from electronic screens suppress melatonin release from the pineal gland, increases alertness, and can reset the circadian rhythm .

Recent studies have have shown that the same patterns of brain neurotransmitter (GABA and Dopamine) release seen in substance addiction pathways are similarly activated in smartphone and internet addiction behaviors.

"Internet addiction" is currently used under ICD-10 code of "other" behavioral addiction for insurance billing purposes.

Gaming disorder is now officially recognized as a mental health disorder by the World Health Organization.

The staggering increase in pornography addiction is also directly related to the widespread availability of smartphones

Two factors-
1. Social isolation
2. Sleep disruption

Both related to smartphone usage, are both well known contributing factors for depression, anxiety, and suicide.

Research seems to show greater than 2/hrs per day is associated with an increased risk for experiencing depression, anxiety and SI

In 2018, two very large shareholders of Apple stock, alarmed by all the research that was coming out about the negative effects of the iPhone on teenage mental health, sent an unprecedented letter to Apple executives demanding that the company come up with a way for parents to restrict kids cell phone usage and study the effects that their product is having on adolescent and teen mental health.

The process of mental health evaluation when patients present to the ED for a mental health complaint:

Mental health complaints include depression, anxiety, suicidal thoughts, self harm behaviors, drug and alcohol abuse

Most patients (under 18) are brought in by parents for evaluation

There has been a significant increase in the number of patients brought in by law enforcement under ECOs (emergency custody order) and TDOs (temporary detention order). Most of these cases involve aggressive or threatening behaviors in the home. Home environment becomes unsafe.

There has also been an increase in the number of adolescent/teens referred to the Emergency Department who are currently inpatients in a psychiatric facility. Even while in the psychiatric facility they are attempting some self harm behavior that requires medical care.

Medical screening exams are done upon arrival to the Emergency Department.

Any medical emergencies are treated (treatment for self cutting, drug overdoses, etc). Many patients require medical admissions to stabilize condition.

If patients are medically stabilized in the ED and do not require medical admission, then they are evaluated by a psychiatric social worker (PSW), psychiatric nurse, or occasionally a psychologist, or LCSW who has some mental health training.

During the day, the evaluations are done in person in the ED

Due to increasing demand for evaluations, in the later evenings, interviews are done by Skyping from an off site facility. (Telepsyc). Goal of these evaluation is to determine if it is safe for the patient to go home to the family or the need for inpatient psychiatric treatment

If the evaluation concludes that the patient will requires inpatient treatment, then insurance company is contacted and search for an inpatient psychiatric bed is initiated.

Process takes 8-48 hours.

Half of patients will need to be admitted to facilities in Maryland or southern parts of the state due to lack of local psychiatric beds in the area

Psychiatric units are increasingly closed due to capacity

Role of the ED physician is to ensure that the patient is medically stable and to ensure that the final psychiatric recommendations are in the best interest of the patient and the family.

Personal observations

My contact with the patient is usually limited, both in time and scope.

I ask specific questions about events that precipitated the ED visit.

Personal questions about school, family, activities cell phone usage, social media use.

Do they have any affiliation with a church or church activities volunteer activities?

Common denominators:

Virtually every patient encountered for a mental health crisis over the past six years, from age 12 and up has a cell phone.

90% of patients say that cell phone use played a role in the current problem (eg., parents restricted cell phone, took away cell phone, a girl sexted a picture of herself and it was shared at school, constant cyber bullying leading to a depressive symptoms and suicidal thoughts, suicide)

50% of patients presenting with depressive or anxiety complaints- the precipitating event that brought them to the ED for the symptoms were related to a text message, a social media post or notification (break up with a girlfriend, a defriending, or a dislike on a Instagram or snapchat account)

Small minority of patients have interest in physical outside activities (hiking, biking, etc)

Few are involved in organized sports activities, after school clubs, musical instruments

Very few of the older teens have summer jobs.

Fewer teens are interested in getting their driver's license

Even fewer pray, attend church or have any family members that attend church.

Less then 10 % say they have family meals together.

Virtually none are involved in consistent volunteer activities.

Parents, most often are unaware of the nature or the scope of their child's problem.

Number of factors contributing to this-parents themselves are distracted, smart phone

Children do not seek advice from their parents for their problems.

Adolescents and teenagers have a virtual "family" of friends and followers on social media who are giving them advice. They look to social media for self validation.

Adolescents/teens are confused often hopeless.

Little sense of any self worth or inherent dignity.

There is no belief in anything greater or higher then themselves

Their smartphone has become their lifeline.

When left alone with their smartphones for hours and hours a day, their lives are now consumed by a "virtual" world of text messaging, scrolling through social medial posts and you tube videos

Adolescents are often unable to "disassociate" themselves from the false reality of social media.

Because there is no other source of "truth" for them they are lost in a profound sense of inadequacy and failure.

What is the answer?

In medicine, the problem is a lack of psychiatric beds, shortage of trained therapists and psychiatrists. Insurance coverage for mental illness needs overhaul.

Society has promoted anti-bullying campaigns for schools starting in preschool, teach tolerance and diversity

In the family, parental controls need to start BEFORE the smartphone.

Do not give child smartphone before high school

Set time limits. There are many applications and software programs available that can limit, monitor, and record smartphone usage. (K9 Webprotection, Net Nanny, Ourpact, mSpy, WebWatcher, Accountability software -Covenant eyes)

No cell phone use during meals, at restaurants

Don't let kids take smartphones to bed

Have a central "charging station" in the kitchen or office.
Turn off WiFI connection in the evening.

Most homework and teacher communication is now done online or with school issued laptops. Be aware of what's on the laptops

What else can we do?

Sitting down together for dinner is the best opportunity to know whats going on in their lives; TV together

Know your kids friends, their families.
Encourage your kids to get together with their friends.
Challenge them to “phone fast”

Encourage your kids to get involved in sports, school activities; consistent volunteer activity.

Mindful of own activity on the phone-they watch everything you do.

Most importantly-prayer, prayer as individuals, as families and in communities.

Trust that we have laid a strong foundation. Surrender to and trust in God’s providential care. His plan for our children is better then any plan we have envisioned for our children.

Implore the BVM for her guidance and protection. Pray that she leads each and everyone of our children, her children, to her Son Jesus Christ where we find truth and eternal joy.