Adolescent suicide and antidepressants

I run the Inpatient Adolescent Psychiatry Service in Wichita for KUSM-W Department of Psychiatry and Behavioral Sciences and teach medical students and residents rotating through this service. The goal is to provide a quality experience in the care of adolescents with behavioral disturbances and their families to the medical students and residents by teaching them how to diagnose psychopathology in adolescents and how to work with them and their families. A critical facet of this work is the establishment of a biopsychosocial treatment plan which includes the family and addresses the biopsychosocial issues for each specific patient.

Much has been written about adolescent suicide. There has recently been the addition of black box warnings to the package insert for most of the newer antidepressants about the risk of suicide during treatments with these agents, particularly early in the treatment (i.e., the first several weeks). The addition of this black box warning has caused considerable anxiety about such treatments among families and treatment providers, particularly primary care physicians who may be uncomfortable treating adolescents with psychiatric illnesses and their families. So what are health care providers to do?

First, be aware that there has been a documented decrease in youth suicide rates in the United States since the introduction of SSRIs. Second, a meta-analysis of clinical trials in children and adolescents on nine different antidepressants, including both SSRIs and non-SSRI antidepressants, found the rate of suicidality (increased suicidal thinking or increased suicide attempts but not completed suicides) was 4% in children and adolescents on an active antidepressant compared to 2% on a placebo, or in other words, a 2% higher rate. The risk was independent of the underlying diagnosis of the patients, meaning that suicidality was present in patients being treated for depression or anxiety. As mentioned above, the meta-analysis included several antidepressants from different pharmacological classes and each antidepressant did not contribute equally to the signal. Paroxetine and venlafaxine contributed the most, whereas others such as fluoxetine and sertraline contribute little or none. Nevertheless, a black box warning was added to the package insert for all of these medications on the basis of class labeling (i.e., antidepressants as a class).

There are many theories about why antidepressants might increase the risk of suicidal thinking or suicide attempts early in treatment including:

a) worsening of suicide ideation (which was present before)

b) “activation syndrome” with patients becoming agitated, irritable, jittery, aggressive, hostile, more impulsive and/or emotionally labile
c) akathisia to hypomania or mania
d) switch to hypomania or mania
e) improving depression - We have known about the phenomenon long before the newer antidepressants (i.e., SSRI’s and SNRIs) were marketed. This phenomenon is where the patient’s physical symptoms of depression (particularly lack of energy) improve before their emotional and cognitive symptoms improve. f) lack of response to the antidepressant.

The latter two possible explanations are an admonition to health care providers that starting an antidepressant is alone not sufficient. These medications take time to work. During the vulnerable period between starting the antidepressant and the improvement of depression, the patient remains at risk for suicide. For this reason, the patient needs to be assessed on a frequent basis after starting an antidepressant (weekly) rather than waiting several weeks for the return visit. Unfortunately, insurers have encouraged more frequent visits. The FDA warning was in part in response to this fact.

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So what are health care providers to do when they make the diagnosis of MDD or anxiety disorder and believe that the benefits of medication outweigh the risks?

1. Inform patients and their family about the risks and benefits of treatment versus doing nothing (not treating the depression). In my clinical experience, parents understand numbers - 2% placebo, 4% medication, untreated depression - 15% lifetime risk. Give the patients and their family written information to take home.

2. The best patient is the educated patient (and family). Make sure that you inform them about the symptoms of akathisia, activation syndromes, hypomania. If the patient and family know what to look for and what to inform you about, then they will inform you.

3. Identify what symptoms you are treating with medication and what are the expectations in terms of time to respond.

4. Carefully document the entire process. What you tell the patient and parents, your clinical judgment about starting medication and the informed consent.

5. Use first line agents - SSRIs - especially agents that are FDA approved to be used in adolescents. Prozac (depression), Zoloft (anxiety). Use Paxil and Effexor as alternatives in adolescence.

6. Monitor patients closely. The FDA has made the following recommendations for monitoring patients once they are started on an antidepressant.

- Follow weekly for the first four weeks, then
- Follow every two weeks for the next two months, then
- Monthly
- And finally at least once every three months with phone contact.

The risk is lower in adolescents treated for more than six months compared to those treated for less than two months, consistent with the fact that the increase early in treatment may be due to incomplete response of the depressive syndrome and thus is a vulnerable time requiring closer follow-up.

So what else are health care providers to do?

1) Do a comprehensive evaluation.

2) Evaluate for suicidality before treatment.

3) Keep in mind that antidepressants may increase the risk of suicidal ideation and behavior in children and adolescents.

4) Inform patients and parents of the risks and benefits of using antidepressants.

5) Inform of possible triggers for increased suicidality while on medication as discussed above.

Follow and monitor patients closely, especially the first six months.

Disclosure - this is information based on the review of literature.

Antidepressant and Suicide Risk in Adults

Dr. Perales gives a nice discussion of re-accreditation to the Kansas University School of Medicine for the maximum term of eight years, according to Barbara Atkinson, MD, Executive Dean. The LCME cited several areas of strength in the School of Medicine’s program, including leadership, library services and information technology resources, engaged students and faculty, and the Office of Medical Education’s efforts to monitor and coordinate educational initiatives.

The School of Medicine has engaged in several projects in preparation for the LCME review, which took place in October, 2005. These projects included a move toward a block-style curriculum for the initial two years of the program and the refinement of an electronic system for gathering data on the types and volume of patients seen by students in their third year. These efforts contributed to the School’s success in earning a favorable review by the accrediting body. "This is great news, indeed," said Dr. Atkinson.

Antidepressant and Suicide Risk in Adults

By: Brian Schmidt, Medical Student Coordinator

The Liaison Committee on Medical Education (LCME), a national accrediting body for medical schools, recently granted re-accreditation to the Kansas University School of Medicine for the maximum term of eight years, according to Barbara Atkinson, MD, Executive Dean. The LCME cited several areas of strength in the School of Medicine’s program, including leadership, library services and information technology resources, engaged students and faculty, and the Office of Medical Education’s efforts to monitor and coordinate educational initiatives.

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Antidepressant and Suicide Risk in Adults

By: Mary Spachek

You are looking for inventive ways to get published? Have you developed lectures or seminars for medical students and residents? Here is a great way to gain recognition for your work in the wider medical education community ...

MedEdPORTAL will serve as a central repository of high quality educational materials such as 

MedEdPORTAL is a peer-reviewed online resource created by the Association of American Medical Colleges (AAMC).

MedEdPORTAL will be implemented in three phases through 2005 and 2006. During Phase I (March-November 2005) non-Web-based educational materials and those that are available on external Web sites, will be peer-reviewed, referenced, and linked on the MedEdPORTAL site. Faculty may submit their Web sites or educational materials at anytime for peer review and if accepted, the resource will be referenced in the MedEdPORTAL system as a peer reviewed resource.

In Phase II (November 2005 - November 2006), a new database will replace the current Cube application and users will be able to search the database using keywords. In Phase III (November 2006) the final MedEdPORTAL database will host the actual resources and authors will be able to download resources. The MedEdPORTAL Web address is www.aamc.org/mededportal.

Individuals interested in submitting educational materials for peer review can review the peer review guidelines and download the submission form from the following MedEdPORTAL Web page: www.aamc.org/meded/mededportal/publish.htm

The AAMC announced in April 2005 the MedEdPORTAL, a peer-reviewed online resource created by the Association of American Medical Colleges (AAMC). The AAMC, announced in April 2005 the launch of MedEdPORTAL, a Web-based tool that promotes collaboration across disciplines and institutions by facilitating the exchange of peer reviewed educational materials, knowledge, and solutions.
Serious degree but will be substantially involved and poorer outcomes for patients, their families, and the state as a whole.

• The transition between inpatient stay and outpatient follow-up will be complicated with a significant likelihood for patients dropping through the gaps between the inpatient and the outpatient providers.

• It will place a substantial burden on the perspective, consider how the current mental health system would work if applied to any other major medical problem. In this scenario, the current system is the large state psychiatric hospitals located on the prairie removed from large urban populations. The 1890s component is the closure or downsizing of those facilities and replacing them with mental health clinics (MHC). While these approaches made some sense in their day, the system has not kept up with reality largely due to a failure of our elected officials to keep abreast of the times and to plan appropriately.

• To put the current system in perspective, consider how the current mental health system would work if applied to any other major medical problem. In this system, the health system is divided into two components: (a) outpatient clinics (e.g. MHC) in the urban areas, and (b) inpatient services remote from the largest urban populations, particularly the Metropolitan Statistical Area of Sedgwick County with its approximately 600,000 Kansans. If you are reasonably healthy, this system works OK, but when you get ill and need inpatient care, you will have to be transported miles from where you live.

Consider that you have just had a heart attack. You are loaded into an ambulance and transported 150 miles away to your inpatient care ward. Would we tolerate such a system for our loved ones who suffered a heart attack? I don’t think so. Yet, that is what Kansas did for those loved ones who suffered a serious exacerbation of a psychiatric illness.

Some will say: That isn’t the case now – the person in Sedgwick County can be taken to Via Christi. For now that is true. However, it may not remain true if the current problems are not soon addressed as outlined below.

In 1990, there were seven inpatient services in Sedgwick County, with more than 350 beds. Today, there is one, the Via Christi inpatient psychiatric facility, with about 100 beds. Unfortunately, this reduction is not due to tremendous advances making inpatient psychiatric care outdated. While advances in psychiatric care have been made, they have not been sufficient to account for this decrease in inpatient facilities. Instead, the loss of these inpatient psychiatric facilities has been due to money. The funding for such care has steadily eroded over the last 15 years. More and more citizens in general are uninsured, and that is particularly true for those with psychiatric illnesses because these illnesses are the greatest cause of social disability. The inability to get adequate care leads to an increase in disability, dysfunctional families, homelessness, substance abuse, and suicide.

While the uninsured are growing, the state has been closing state hospitals and downsizing beds in the state facilities that have remained open. At the same time, the state has failed to provide funding to private community hospitals such as Via Christi which provide needed inpatient psychiatric care to the indigent. While those community hospitals, to their credit, have picked up the slack in needed services, they have in doing so enabled the state to be dysfunctional in terms of the provision of an appropriate system for psychiatric health care.

The problem is that Via Christi and other such private community hospitals have to meet their budgets. These hospitals have reported substantial losses for their psychiatric inpatient service over the decade. For this reason, their financial ability to continue to provide such services appears precarious.

They are not alone. Private psychiatric health care providers have also found it financially difficult to provide inpatient psychiatric services. For this reason, 85% of the psychiatric inpatients in Sedgwick County are cared for by either the KUSM-W Department of Psychiatry and Behavioral Sciences through its teaching services or through COMCARE (the community mental health care clinic for Sedgwick County) inpatient service.

This situation first reached a crisis eight years ago when the number of psychiatric beds was drastically reduced in Sedgwick County. A 1990 state merger of psychiatric hospitals and opening of VIA Christi psychiatric inpatient service to replace the loss of psychiatric beds in Sedgwick County was then much more difficult to meet the need. As a result, the KUSM-W Department of Psychiatry and Behavioral Sciences took over this service completely. However, the mission of the department is the education of medical students and residents and not the provision of unlimited, unsanctioned inpatient services. Nevertheless, the department was aware of the need and the distinct possibility that the Via Christi inpatient service might be unable to continue without the department stepping in to help.

The department thus knows first hand the problems with unfunded care, receiving only 23 cents for every dollar of services rendered to citizens of central Kansas. In 2000, 23 cents is less than the selling expenses are taken out. Removing those expenses, the department receives about 10 cents for every dollar billed. One does not have to be an astute business person to realize that is not a sustainable model.

So what if Sedgwick County had no inpatient psychiatric facility? That means most citizens of this region of Kansas would have to be transported 150 miles away to either Larned or Osawatomie State Hospital. However, those hospitals are not able to provide the level of care currently provided in Sedgwick County because they are not near a major full-fledged medical center with advanced imaging and other diagnostic tests. After all, the psychiatric emergencies are sometimes due to an unrecognized general medical condition such as a brain tumor. The alternatives to transporting to state hospitals would be incarceration (a return to the 18th century approach to psychiatric service delivery) or on the streets or the cemetery. In fact, all of those happen today.

The transportation to state hospitals 150 miles away will have multiple serious implications:

• It will separate the patient and their families.

• It will place a substantial burden on the system of provision of psychiatric services, the state needs to support inpatient beds in urban centers for its citizens suffering from acute exacerbations of psychiatric illnesses but with no means to pay for them.

So why have we not developed a better plan? As usual, they are mainly economic. First, the possibility of putting state inpatient beds in urban centers immediately raises the concern about the closure of the existing state hospitals which have been in their small communities for over 100 years and which are considered vital to the economic base of those communities. However, closure of those facilities is not the necessary outcome for the following reasons:

1. There are plenty of small communities in Kansas which are not large enough to have state beds. For these communities, the two existing state hospitals will remain the place where such care is delivered.

2. The state beds in urban centers will be for those individuals who only need short lengths of stay (14 days or less) to resolve their acute illness or acute exacerbations of their chronic illness. Patients who need longer inpatient treatment will be transported to the state hospital when that decision is made.

In this plan, the urban psychiatric state beds will provide acute care in the community for the large number of patients who do not need more than a few days in the hospital to resolve the acute exacerbation. Those who need longer care will be transported to the large but remote state hospitals as is done now.

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