

Data Show a Younger, Smaller Pool of Physicians

BY JANE ANDERSON

More young physicians are entering the workforce than previously thought while fewer older physicians are remaining active, making the physician workforce younger on average, both now and in the future, a recent study of census data showed.

The workforce analysis, which challenges conclusions drawn from the American Medical Association (AMA) Physician Masterfile dataset that is commonly used to calculate physician workforce numbers, ultimately could indicate ways to make the Masterfile data more accurate, according to the study's lead author, Douglas O. Staiger, Ph.D., the John French Professor of Economics at Dartmouth College in Hanover, N.H.

"Workforce projections rely on accurate estimates of the current number of physicians as a starting point," Dr. Staiger said in an interview. "Without more accurate estimates of the size and age distribution of the current workforce, projections of physician supply, requirements, and potential shortages may mislead policy makers as they try to anticipate and prepare for the health care needs of the population."

The study, by researchers at Dartmouth College, the U.S. Congressional Budget Office, and the center for interdisciplinary health workforce studies at Vanderbilt University Medical Center in Nashville, Tenn., compared physician workforce estimates and supply projections using AMA Masterfile data with estimates and projections from the U.S. Census Bureau Current Population Survey (CPS). They sought to determine the annual number of physicians working at least 20 hours per week in 10-year age categories. Recent workforce trends were used to project future physician supply by age, the authors said.

The analysis showed that in an aver-

age year, the census data estimated 67,000 (or 10%) fewer active physicians than did the AMA's Masterfile, almost entirely because the census data found fewer active physicians aged 55 years and older. In addition, the census data estimated up to 17,000 more young physicians (aged 25-34 years) than did the Masterfile (JAMA 2009;302:1674-80).

Projections using the AMA's Masterfile indicate that there will be about 1,050,000 physicians in practice in 2020, whereas census data estimates indicate that there will be only 957,000 physicians in practice then, with a smaller percentage older than age 65.

"Delays in reporting when physicians enter and exit the workforce appear to lead to an underestimate of younger physicians and an overestimate of older physicians in the Masterfile," said Dr. Staiger. Surveys such as the CPS cannot replace the Masterfile because they lack geographic and specialty detail, but they provide benchmark data that could be used to adjust estimates based on Masterfile data and that could be important as policy makers struggle to deal with workforce issues, he said.

The study was funded by a grant from the National Institute on Aging. No financial disclosures for any of the authors were reported.

In an editorial, Thomas C. Ricketts, Ph.D, a researcher at the North Carolina Rural Health Research and Policy Analysis Center in Chapel Hill, noted that the health care reform debate highlights how physician supply is linked to universal access and cost issues. "Having accurate estimates for determining not only the number of physicians, but also current and future physician workforce requirements and capabilities for delivering primary and specialty care, will be essential for achieving and sustaining effective health care reform," he wrote (JAMA 2009;302:1701-2). ■

STATEMENT OF OWNERSHIP, MANAGEMENT and CIRCULATION (Required by 39 U.S.C. 3685). 1. Publication title: CLINICAL PSYCHIATRY NEWS. 2. Publication No. 0270-6644. 3. Filing date: October 01, 2009. 4. Issue frequency: Monthly. 5. No. of issues published annually: 12. 6. Annual subscription price: \$103.00. 7. Complete mailing address of known office of publication: International Medical News Group, 60 Columbia Rd., Bldg. B, Morristown, NJ 07960. 8. Complete mailing address of headquarters or general business office of publisher: International Medical News Group, 60 Columbia Rd., Bldg. B, Morristown, NJ 07960. 9. Full names and complete mailing addresses of Publisher, Editor, and Managing Editor: President, Alan J. Imhoff, IMNG, 60 Columbia Rd., Bldg. B, Morristown, NJ 07960, Editor, Mary Jo M. Dales, IMNG, 5635 Fishers Lane, Suite 6000, Rockville, MD 20852, Managing Editor, Gina L. Henderson, IMNG, 5635 Fishers Lane, Suite 6000, Rockville, MD 20852. 10. Owner: Elsevier Inc., 360 Park Ave. South, New York, NY 10010. 11. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None. 12. Tax Status: Not applicable. 13. Publication title: CLINICAL PSYCHIATRY NEWS. 14. Issue date for circulation data below: September 2009. 15. Extent and nature of circulation; Average no. copies each issue during preceding 12 months. a. Total number of copies: 38,500. b. Legitimate paid and/or requested distribution. (1) Individual Paid/Requested Mail subscriptions stated on PS Form 3541: 18,978. (2) Copies requested by employers for distribution to employees by name or position stated on PS Form 3541: 154. (3) Sales through dealers and carriers, street vendors, counter sales, and other paid distribu-

tion outside USPS: 0. (4) Requested copies distributed by other mail classes through the USPS: 165. c. Total paid and/or requested circulation: 19,297. d. Nonrequested distribution. (1) Nonrequested mail subscriptions stated on PS Form 3541: 19,224. (2) Nonrequested copies distributed through the USPS by other classes of mail: 0. (3) Nonrequested copies distributed outside the mail: 8. e. Total nonrequested distribution: 19,233. f. Total distribution: 38,529. g. Copies not distributed: 124. h. Total: 38,654. i. Percent paid and/or requested circulation: 50.08%. No. copies of single issue published nearest to filing date. a. Total numbers of copies: 36,236. b. Legitimate paid and/or requested distribution. (1) Individual Paid/requested mail subscriptions stated PS Form 3541: 18,193. (2) Copies requested by employers for distribution to employees by name or position stated on PS Form 3541: 170. (3) Sales through dealers and carriers, street vendors, counter sales, and other paid distribution outside USPS: 0. (4) Requested copies distributed by other mail classes through the USPS: 187. c. Total paid and/or requested circulation: 18,550. d. Nonrequested distribution (1) Nonrequested mail subscriptions stated on PS Form 3541: 17,556. (2) Nonrequested copies distributed through the USPS by other classes of mail: 0. (3) Nonrequested copies distributed outside the mail: 0. e. Total nonrequested distribution: 17,556. f. Total distribution: 36,106. g. Copies not distributed: 130. h. Total: 36,236. i. Percent paid and/or requested circulation: 51.19%. 16. Publication of Statement of Ownership for a requester publication is required and will be printed in the November 2009 issue of this publication. 17. Signature and title of Editor, Publisher, Business Manager, or Owner: Alan J. Imhoff, President, IMNG.

RISPERDAL® CONSTA® (risperidone) LONG-ACTING INJECTION

Brief Summary

BEFORE PRESCRIBING RISPERDAL® CONSTA®, PLEASE SEE FULL PRESCRIBING INFORMATION, INCLUDING BOXED WARNING.

WARNING: INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. Analyses of 17 placebo-controlled trials (modal duration of 10 weeks), largely in patients taking atypical antipsychotic drugs, revealed a risk of death in drug-treated patients of between 1.6 to 1.7 times the risk of death in placebo-treated patients. Over the course of a typical 10-week controlled trial, the rate of death in drug-treated patients was about 4.5%, compared to a rate of about 2.6% in the placebo group. Although the causes of death were varied, most of the deaths appeared to be either cardiovascular (e.g., heart failure, sudden death) or infectious (e.g., pneumonia) in nature. Observational studies suggest that, similar to atypical antipsychotic drugs, treatment with conventional antipsychotic drugs may increase mortality. The extent to which the findings of increased mortality in observational studies may be attributed to the antipsychotic drug as opposed to some characteristic(s) of the patients is not clear. RISPERDAL® CONSTA® (risperidone) is not approved for the treatment of patients with dementia-related psychosis. [See Warnings and Precautions]

RISPERDAL® CONSTA® (risperidone) is indicated for the treatment of schizophrenia [see Clinical Studies (14.1) in full PI].

RISPERDAL® CONSTA® is indicated as monotherapy or as adjunctive therapy to lithium or valproate for the maintenance treatment of Bipolar I Disorder [see Clinical Studies (14.2, 14.3) in full PI].

CONTRAINDICATIONS: RISPERDAL® CONSTA® (risperidone) is contraindicated in patients with a known hypersensitivity to the product.

WARNINGS AND PRECAUTIONS: Increased Mortality in Elderly Patients with Dementia-Related Psychosis

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. RISPERDAL® CONSTA® (risperidone) is not approved for the treatment of dementia-related psychosis (see Boxed Warning).

Cerebrovascular Adverse Events, Including Stroke, in Elderly Patients with Dementia-Related Psychosis:

Cerebrovascular adverse events (e.g., stroke, transient ischemic attack), including fatalities, were reported in patients (mean age 85 years; range 73-97) in trials of oral risperidone in elderly patients with dementia-related psychosis. In placebo-controlled trials, there was a significantly higher incidence of cerebrovascular adverse events in patients treated with oral risperidone compared to patients treated with placebo. RISPERDAL® CONSTA® is not approved for the treatment of patients with dementia-related psychosis [See also Boxed Warning and Warnings and Precautions]. **Neuroleptic Malignant Syndrome (NMS):** A potentially fatal symptom complex sometimes referred to as Neuroleptic Malignant Syndrome (NMS) has been reported in association with antipsychotic drugs. Clinical manifestations of NMS are hyperpyrexia, muscle rigidity, altered mental status, and evidence of autonomic instability (irregular pulse or blood pressure, tachycardia, diaphoresis, and cardiac dysrhythmia). Additional signs may include elevated creatine phosphokinase, myoglobinuria (rhabdomyolysis), and acute renal failure. The diagnostic evaluation of patients with this syndrome is complicated. In arriving at a diagnosis, it is important to identify cases in which the clinical presentation includes both serious medical illness (e.g., pneumonia, systemic infection, etc.) and untreated or inadequately treated extrapyramidal signs and symptoms (EPS). Other important considerations in the differential diagnosis include central anticholinergic toxicity, heat stroke, drug fever, and primary central nervous system pathology. The management of NMS should include: (1) immediate discontinuation of antipsychotic drugs and other drugs not essential to concurrent therapy; (2) intensive symptomatic treatment and medical monitoring; and (3) treatment of any concomitant serious medical problems for which specific treatments are available. There is no general agreement about specific pharmacological treatment regimens for uncomplicated NMS. If a patient requires antipsychotic drug treatment after recovery from NMS, the potential reintroduction of drug therapy should be carefully considered. The patient should be carefully monitored, since recurrences of NMS have been reported. **Tardive Dyskinesia:** A syndrome of potentially irreversible, involuntary, dyskinetic movements may develop in patients treated with antipsychotic drugs. Although the prevalence of the syndrome appears to be highest among the elderly, especially elderly women, it is impossible to rely upon prevalence estimates to predict, at the inception of antipsychotic treatment, which patients are likely to develop the syndrome. Whether antipsychotic drug products differ in their potential to cause tardive dyskinesia is unknown. The risk of developing tardive dyskinesia and the likelihood that it will become irreversible are believed to increase as the duration of treatment and the total cumulative dose of antipsychotic drugs administered to the patient increase. However, the syndrome can develop, although much less commonly, after relatively brief treatment periods at low doses. There is no known treatment for established cases of tardive dyskinesia, although the syndrome may remit, partially or completely, if antipsychotic treatment is withdrawn. Antipsychotic treatment, itself, however, may suppress (or partially suppress) the signs and symptoms of the syndrome and thereby may possibly mask the underlying process. The effect that symptomatic suppression has upon the long-term course of the syndrome is unknown. Given these considerations, RISPERDAL® CONSTA® should be prescribed in a manner that is most likely to minimize the occurrence of tardive dyskinesia. Chronic antipsychotic treatment should generally be reserved for patients who suffer from a chronic illness that: (1) is known to respond to antipsychotic drugs, and (2) for whom alternative, equally effective, but potentially less harmful treatments are not available or appropriate. In patients who do require chronic treatment, the smallest dose and the shortest duration of treatment producing a satisfactory clinical response should be sought. The need for continued treatment should be reassessed periodically. If signs and symptoms of tardive dyskinesia appear in a patient treated with RISPERDAL® CONSTA®, drug discontinuation should be considered. However, some patients may require treatment with RISPERDAL® CONSTA® despite the presence of the syndrome. **Hyperglycemia and Diabetes Mellitus:** Hyperglycemia, in some cases extreme and associated with ketoacidosis or hyperosmolar coma or death, has been reported in patients treated with atypical antipsychotics including RISPERDAL®. Assessment of the relationship between atypical antipsychotic use and glucose abnormalities is complicated by the possibility of an increased background risk of diabetes mellitus in patients with schizophrenia and the increasing incidence of diabetes mellitus in the general population. Given these confounders, the relationship between atypical antipsychotic use and hyperglycemia-related adverse events is not completely understood. However, epidemiological studies suggest an increased risk of treatment-emergent hyperglycemia-related adverse events in patients treated with the atypical antipsychotics. Precise risk estimates for hyperglycemia-related adverse events in patients treated with atypical antipsychotics are not available. Patients with an established diagnosis of diabetes mellitus who are started on atypical antipsychotics should be monitored regularly for worsening of glucose control. Patients with risk factors for diabetes mellitus (e.g., obesity, family history of diabetes) who are starting treatment with atypical antipsychotics should undergo fasting blood glucose testing at the beginning of treatment and periodically during treatment. Any patient treated with atypical antipsychotics should be monitored for symptoms of hyperglycemia including polydipsia, polyuria, polyphagia, and weakness. Patients who develop symptoms of hyperglycemia during treatment with atypical antipsychotics should undergo fasting blood glucose testing. In some cases, hyperglycemia has resolved when the atypical antipsychotic was discontinued; however, some patients required continuation of anti-diabetic treatment despite discontinuation of the suspect drug. **Hyperprolactinemia:** As with other drugs that antagonize dopamine D₂ receptors, risperidone elevates prolactin levels and the elevation persists during chronic administration. Risperidone is associated with higher levels of prolactin elevation than other antipsychotic agents. Hyperprolactinemia may suppress hypothalamic GnRH, resulting in reduced pituitary gonadotropin secretion. This, in turn, may inhibit reproductive function by impairing gonadal steroidogenesis in both female and male patients. Galactorrhea, amenorrhea, gynecomastia, and impotence have been reported in patients receiving prolactin-elevating compounds. Long-standing hyperprolactinemia when associated with hypogonadism may lead to decreased bone density in both female and male subjects. Tissue culture experiments indicate that approximately one-third of human breast cancers are prolactin dependent *in vitro*, a factor of potential importance if the prescription of these drugs is contemplated in a patient with previously detected breast cancer. An increase in pituitary gland, mammary gland, and pancreatic islet cell neoplasia (mammary adenocarcinomas, pituitary and pancreatic adenomas) was observed in the risperidone carcinogenicity studies conducted in mice and rats [see Nonclinical Toxicology]. Neither clinical studies nor epidemiologic studies conducted to date have shown an association between chronic administration of this class of drugs and tumorigenesis in humans; the available evidence is considered too limited to be conclusive at this time. **Orthostatic Hypotension:** RISPERDAL® CONSTA® may induce orthostatic hypotension associated with dizziness, tachycardia, and in some patients, syncope, especially during the initial dose-titration period with oral risperidone, probably reflecting its alpha-adrenergic antagonistic properties. Syncope was reported in 0.8% (12/1499 patients) of patients treated with RISPERDAL® CONSTA® in multiple-dose studies. Patients should be instructed in nonpharmacologic interventions that help to reduce the occurrence of orthostatic hypotension (e.g., sitting on the edge of the bed for several minutes before attempting to stand in the morning and slowly rising from a seated