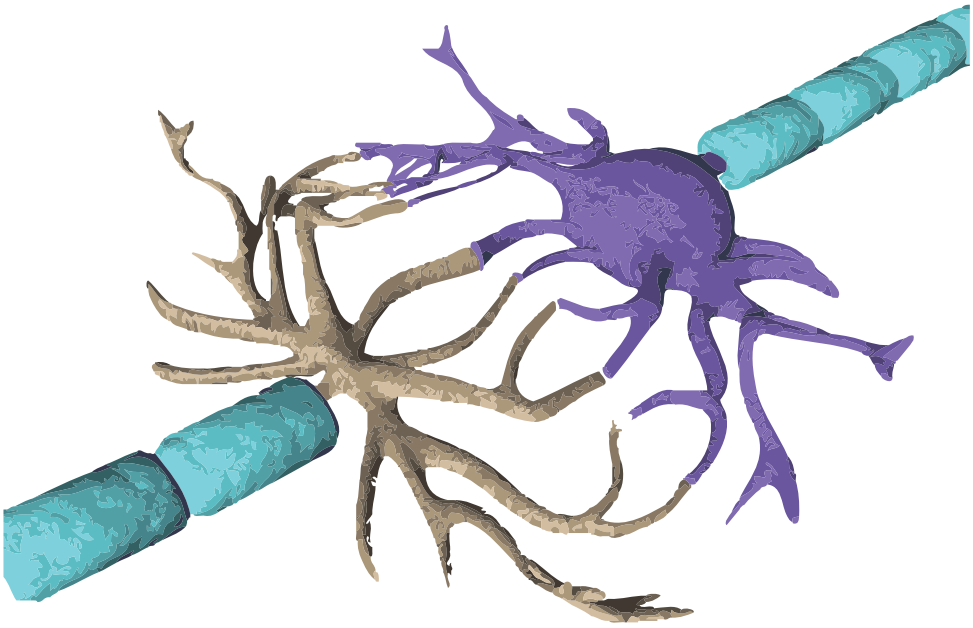


Psychotropic Medication Prescriptions for Yuma County Children: 2002-2005

A report to the Maricopa County Community
from *Arizona HealthQuery*
a Community - University Partnership

Center for Health Information & Research
ASU Ira A. Fulton school of engineering
ARIZONA STATE UNIVERSITY
School of Computing
and Informatics

Psychotropic Medication Prescriptions for Yuma County Children: 2002-2005

Introduction

This report, *Psychotropic Medication Prescriptions for Yuma County Children: 2002-2005*, is one in a series of Community Reports using data from *Arizona HealthQuery* (*AZHQ*). The *AZHQ* database provides valuable information for the community on the prevalence of disease and utilization of health services by individuals in Arizona. The *AZHQ* data system is unique for its ability to provide vast amounts of routinely updated patient-centric health care information across health care systems and insurers and over time. The data are voluntarily shared with *AZHQ* by health systems, physician groups, hospitals, and governmental agencies such as Arizona's Medicaid agency, Arizona Health Care Cost Containment System (AHCCCS). Each data partner maintains ownership of its data and use of the data is governed by an agreement mutually approved by the data partner and the Arizona Board of Regents on behalf of the Center for Health Information & Research. *AZHQ* contains health care information for over 868,000 children and adolescents enrolled in AHCCCS as of September, 2005, of which 36,838 resided in both incorporated and unincorporated Yuma County. In this report, "Yuma" refers to Yuma County and the cities of Yuma, San Luis, and Somerton as well as the town of Wellton unless otherwise noted.

For this report, we reviewed *AZHQ* data for Yuma children enrolled in AHCCCS at any time from October 1, 2001 to September 30, 2005. Children were included in the report for a particular year if they were enrolled in AHCCCS at any time during that year. While this report includes 100% of the total number of children on AHCCCS in Yuma during the study period, it does not include data for all children receiving these psychotropic medications in Yuma. The results presented, therefore, are not meant to be representative of the entire population of Yuma. The medications studied in this report were divided into two categories: central

nervous system stimulants commonly used to treat attention deficit/hyperactivity disorder (ADHD) and antidepressants commonly used to treat depression.

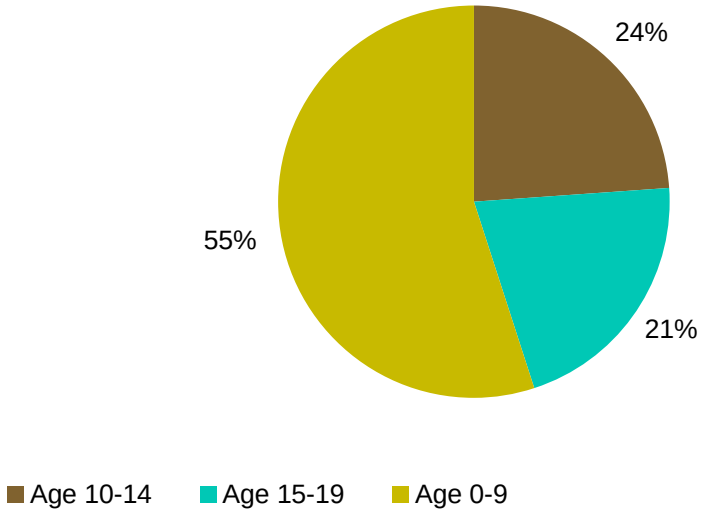
Section I of this report describes the characteristics of children on psychotropic medication for the treatment of depression or ADHD for the time period October 1, 2001 through September 30, 2005, including data presented by age group, racial/ethnic group, and gender. Section II of this report examines episodes of care for these children, and discusses overall patterns in the treatment of depression and ADHD in the group.

Background

The population of Yuma County has increased 18.4% from 2000 to 2005. Yuma County's population in 2005 was estimated at 189,480, of which 88,775 were estimated to live in the City of Yuma and 66,055 in unincorporated areas of the county (Arizona Department of Economic Security [DES], 2006). According to American Community Survey estimates, approximately 56% of Yuma's population is Hispanic (U.S. Census Bureau, 2005). According to the 2000 Census, 46% of Yuma's population speaks a language other than English in the home (U.S. Census Bureau, 2000). The estimated median Yuma County family income in 2005 inflation-adjusted dollars was $38,673 (U.S. Census Bureau, 2005). Approximately 25% of the Yuma County population is insured by AHCCCS.

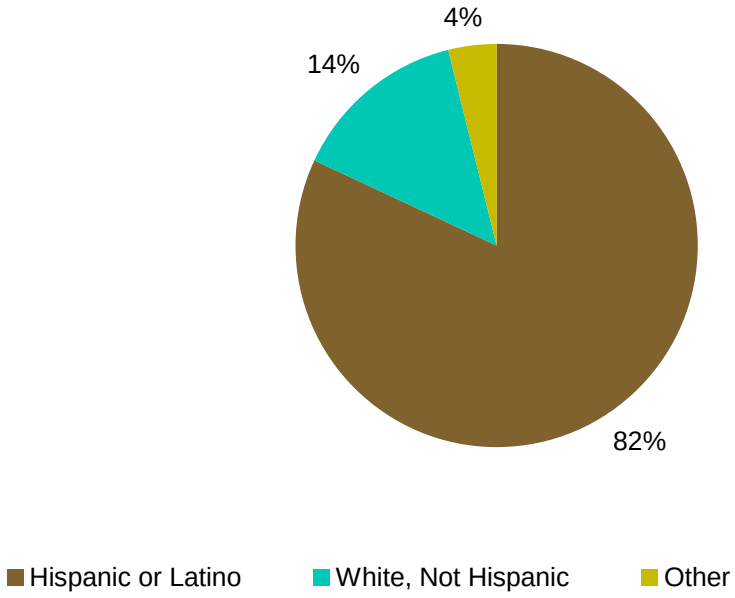
Section I: Characteristics of Children on Psychotropic Medication

Figure 1. Age of Yuma Children Enrolled in AHCCCS, 2005 (N = 36,838)



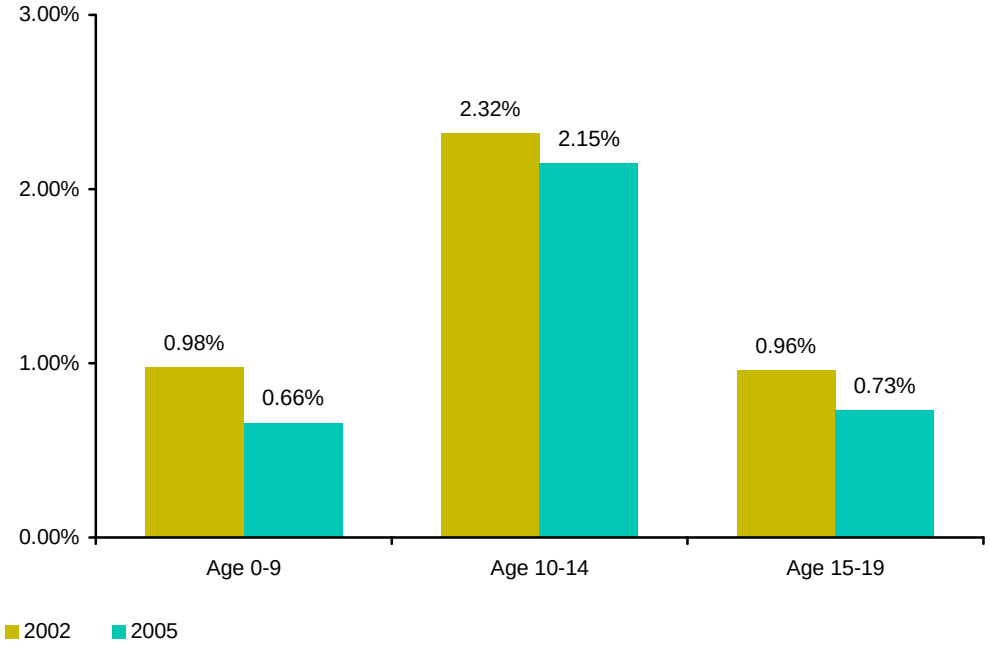
Source: *Arizona HealthQuery*, October 1, 2004 – September 30, 2005.

Figure 2. Race/Ethnicity of Yuma Children Enrolled in AHCCCS, 2005 (N = 36,838)



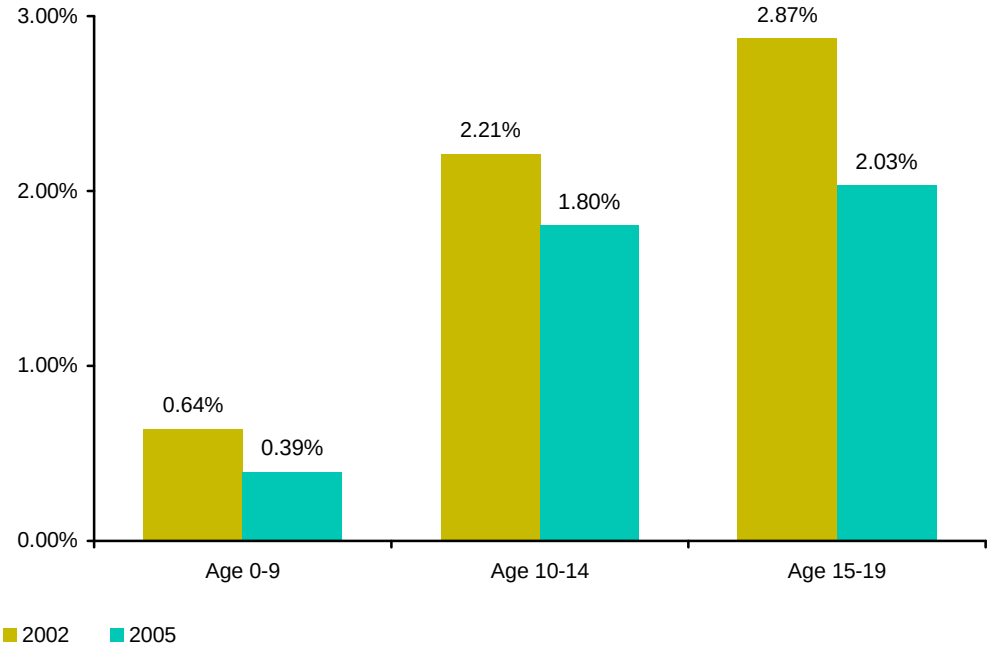
Source: *Arizona HealthQuery*, October 1, 2004 – September 30, 2005.

Figure 3. AHCCCS-enrolled Children in Yuma on ADHD Medication by Age Group, 2002 (N=26,273) vs. 2005 (N=36,838)



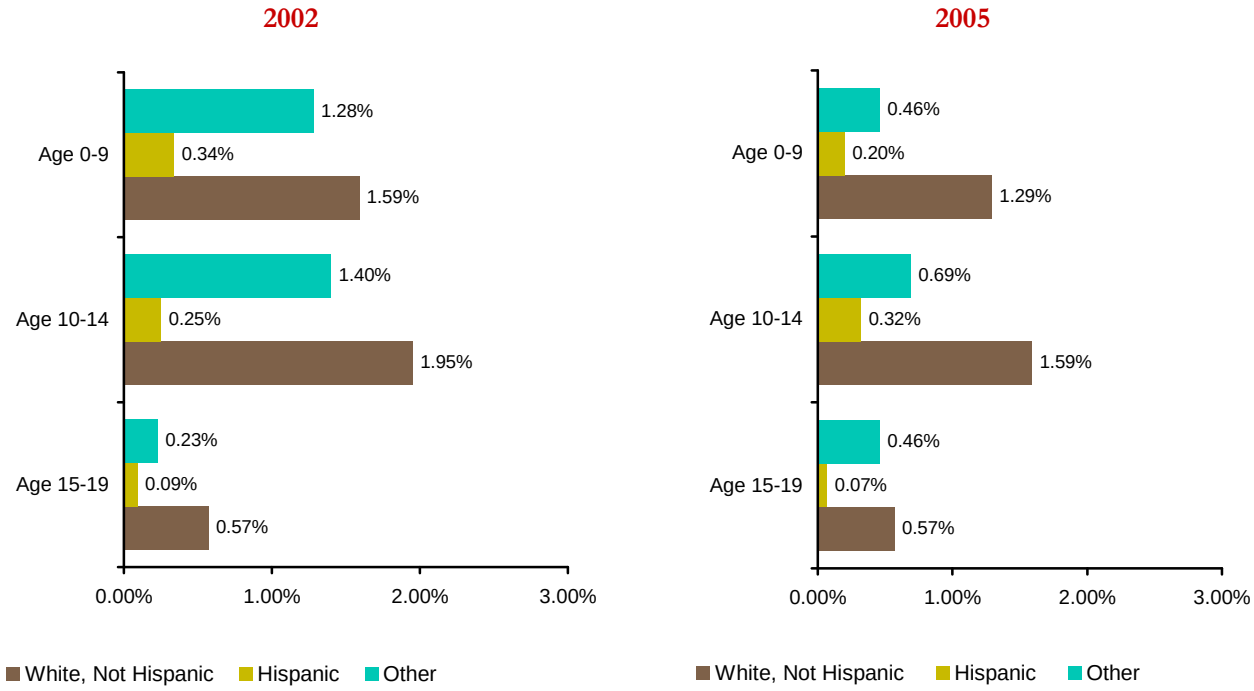
Source: *Arizona HealthQuery*, October 1, 2001 – September 30, 2002 and October 1, 2004 – September 30, 2005.

Figure 4. AHCCCS-enrolled Children in Yuma on Depression Medication by Age Group, 2002 (N=26,273) vs. 2005 (N=36,838)



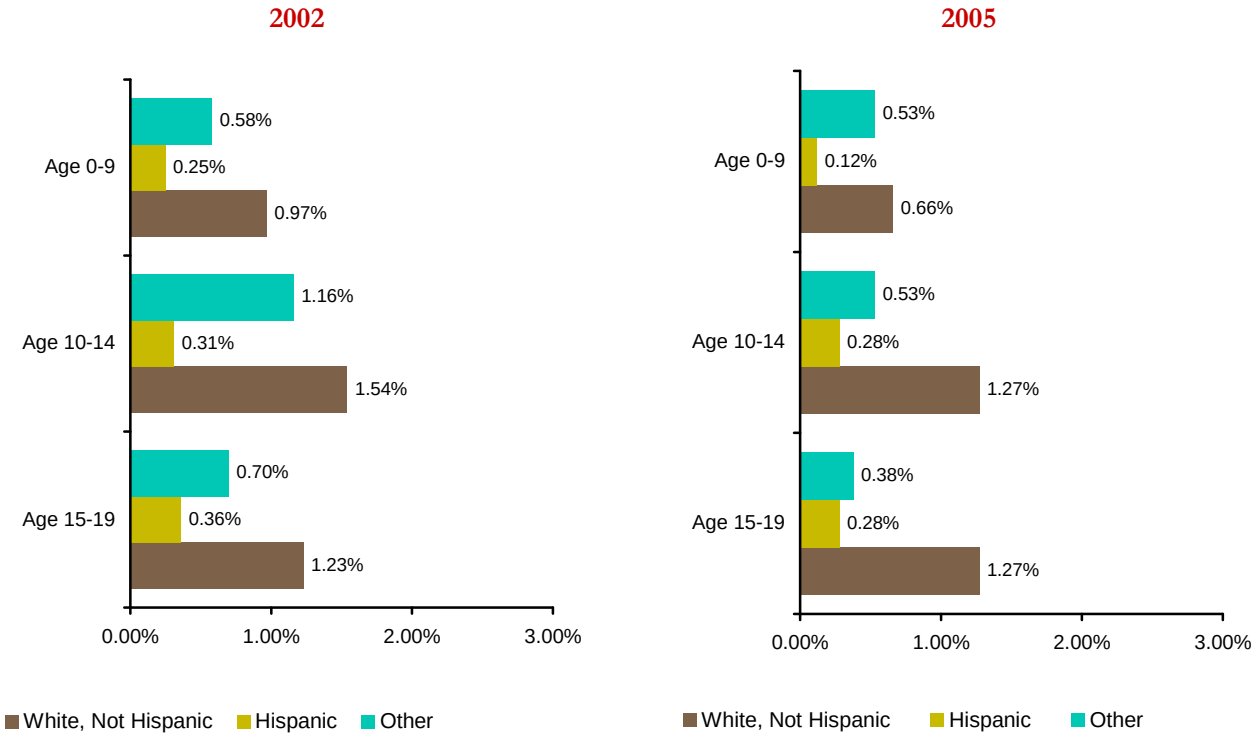
Source: *Arizona HealthQuery*, October 1, 2001 – September 30, 2002 and October 1, 2004 – September 30, 2005.

Figure 5. Proportion of AHCCS-enrolled Children in Yuma on ADHD Medications by Racial/Ethnic Group and Age Group, 2002 (N=26,273) vs. 2005 (N=36,838)



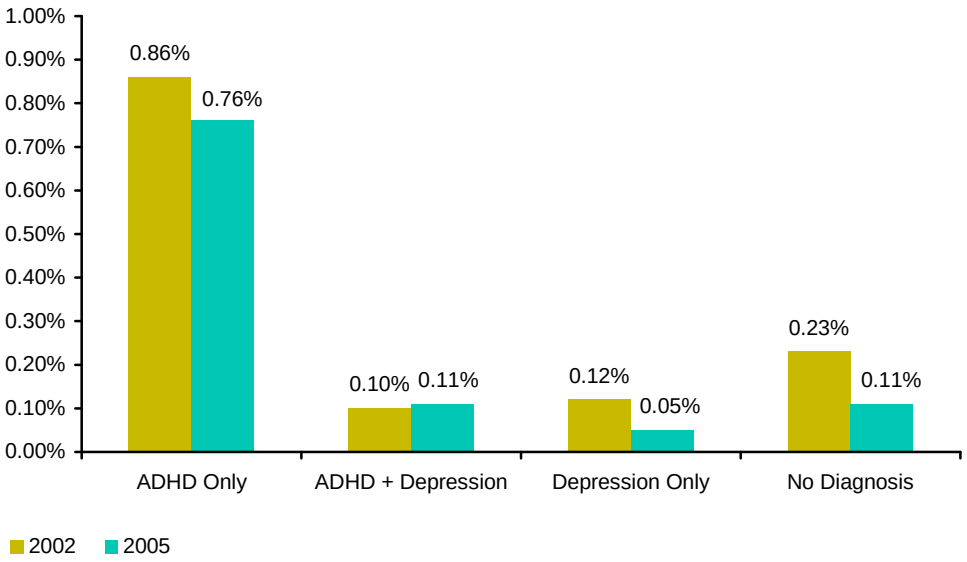
Source: *Arizona HealthQuery*, October 1, 2001 – September 30, 2002 and October 1, 2004 – September 30, 2005.

Figure 6. Proportion of AHCCCS-enrolled Children in Yuma on Depression Medications by Racial/Ethnic Group and Age Group, 2002 (N=26,273) vs. 2005 (N=36,838)



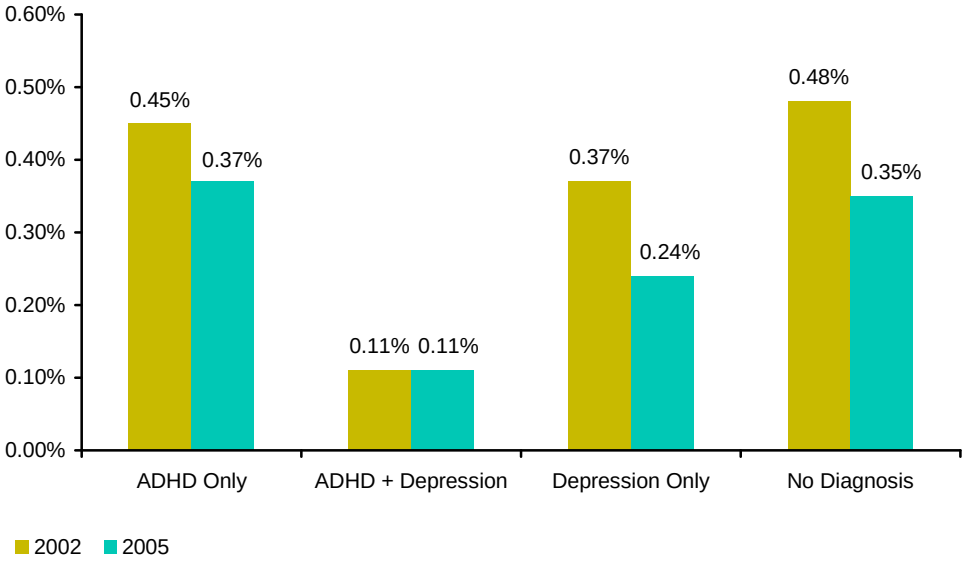
Source: *Arizona HealthQuery*, October 1, 2001 – September 30, 2002 and October 1, 2004 – September 30, 2005.

Figure 7. Percent of Yuma Children Enrolled in AHCCCS on Medications for ADHD by Diagnosis, 2002 vs. 2005



Source: *Arizona HealthQuery*, October 1, 2001 – September 30, 2002 and October 1, 2004 – September 30, 2005.

Figure 8. Percent of Yuma Children Enrolled in AHCCCS on Medications for Depression by Diagnosis, 2002 vs. 2005

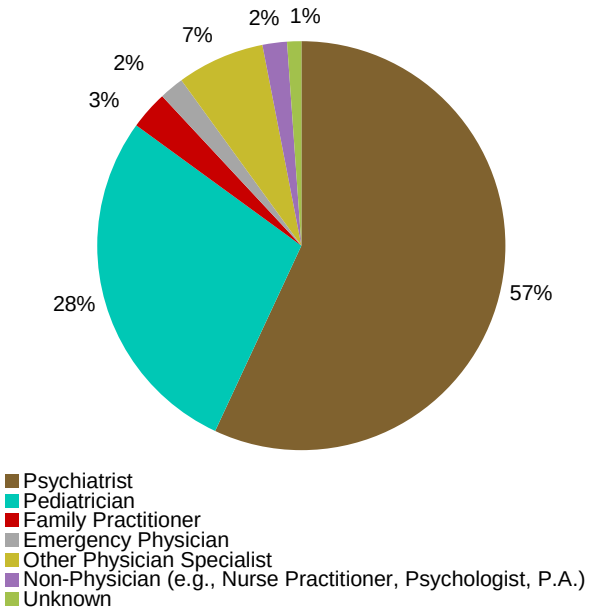


Source: *Arizona HealthQuery*, October 1, 2001 – September 30, 2002 and October 1, 2004 – September 30, 2005.

Section II: Episodes of Care

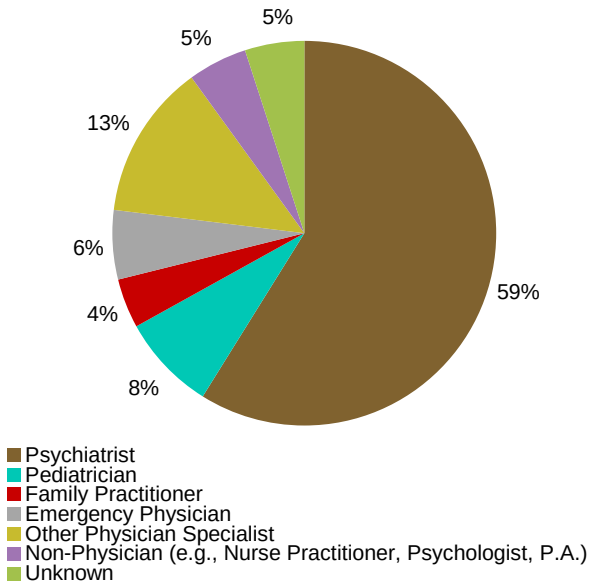
In addition to the analysis described above, an analysis on the episodes of care for ADHD and Depression was performed for Yuma children enrolled in AHCCCS during the period 2002 – 2005. In this kind of analysis, all the care received by a child for their ADHD or Depression is grouped into a single, coherent episode for analysis. This analysis is appropriate because it reflects the way patients receive health care services: not as unrelated transactions but as parts of a complete treatment regimen. Each of these episodes was then analyzed to look at the care received by the child during this time. Figures 9 and 10 show the specialty distribution of lead providers for children with ADHD and Depression.

Figure 9. Lead Clinician for Episodes of ADHD by Specialty (N(episodes)=572)



Source: *Arizona HealthQuery*, October 1, 2004 – September 30, 2005.

Figure 10. Lead Clinician for Episodes of Depression by Specialty (N(episodes)=131)



Source: *Arizona HealthQuery*, October 1, 2004 – September 30, 2005.

Discussion

The increased use of psychotropic medications in children and adolescents has been noted both in the U.S. (Weiner, 1985) and internationally (Psychotropic Substances, 2005). While antidepressant prescriptions for children and adolescents have declined since the Federal Food and Drug Administration's warning in 2004 (Rosack, 2005), the number of physician office visits that resulted in a prescription for any psychotropic medication for an adolescent increased nearly 65% since 1999 (Thomas, 2006), and the consensus among mental health workers is that only a small proportion of adolescents receive the mental health services they need, including psychotropic medications (Hough et al., 2002).

Studies have shown that there are disparities in the number of adolescents who seek care for mental health symptoms, and in the care provided to those who do, including gender and ethnic disparities (McLeod, 2004; Substance Abuse and Mental Health Services Administration [SAMHSA], 2005). There are age disparities in treatment as well, but these can be due to concerns about the lack of adequate safety and efficacy data for the medication's use (Jensen, 1998), especially in younger children.

In August 2006, St. Luke's Health Initiatives (SLHI), a private health care foundation in Phoenix, Arizona, published a report on the use of psychotropic medications in children and adolescents on AHCCCS in Arizona (SLHI, 2006). Their report concluded that use of psychotropic medications in this population declined from 2002 to 2005. The data showed significant differences in the both the diagnoses and the use of psychotropic medications between whites and other ethnic groups; further research was required to attribute these differences to either under-treatment or cultural differences. Additionally, there were a significant number of children not detailed in the analysis who had multiple diagnoses or who were prescribed multiple medications (St. Luke's Health Initiatives [SLHI] 2006, p. 21).

In 2004, SLHI conducted research into the major behavioral health issues in Maricopa County. The research included interviews of experts, focus groups and surveys, as well as data from the AZHQ database. That study noted that the use of mental health treatment was significantly lower in Hispanic or Latino and Asian groups than white and Black or African American groups. The research reported the central role of culture in determining attitudes toward mental health disorders and a disparity in attitude toward treatment: psychiatrists, psychologists and counselors framed this difference as a problem of access to care and under-treatment, while many Hispanics or Latinos preferred to deal with these problems with ways "embedded in their culture (family, faith) instead of 'talking to strangers' about their personal lives" (SLHI, 2004).

Findings

The following are the findings from the first section of the report—the 2002 vs. 2005 snapshot. Chief findings are:

- The overall rate of use of ADHD medications in 2005 among children on AHCCCS is 1.0%, down from 1.3% in 2002. For depression, the current rate is 1.1%, down from 1.4% in 2004.
- White, non-Hispanic children are more likely to be receiving psychotropic medication for either ADHD or depression than Hispanic children.
- Percentage of children treated with psychotropic medications varies by diagnosis and age group.

- The lead physician for the majority of children who are treated with psychotropic medications for either ADHD or depression is a psychiatrist.
- Pediatricians are the lead physicians for 28% of the children receiving psychotropic medications for ADHD but only 8% of the children receiving psychotropic medications for depression.

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