Rhode Island Department of Health
Patricia A. Nolan, MD, MPH, Director of Health

Edited by Jay S. Buechner, PhD

Diabetes: An Epidemic of a Chronic Disease

Barbara Kondilis, MSW, MPH, Joann Lindenmayer, DVM, MPH, and Dona Goldman, RN, MPH

Diabetes is the seventh leading cause of death in the United States and often leads to heart disease, stroke, blindness, or amputation of the leg or foot.[1] In Rhode Island, diabetes was the underlying cause of death for 266 deaths during 1996 and was a contributing cause through its complications for another 693 deaths.[2]

The prevalence of diabetes has been increasing in recent decades at near epidemic rates. Nationally approximately 8.5 million persons (3.2% of the population) were diagnosed with diabetes in 1996. Between 1980 and 1996 the prevalence of diagnosed diabetes increased by 2.7 million persons, representing an increase of 19% in the age-adjusted prevalence rate.[3] For every two cases of diabetes that are diagnosed, there is an additional case that has not been diagnosed. As of the year 2000, an estimated 70,000 Rhode Islanders ages 18 and older had diabetes (with 46,000 cases diagnosed).

Type 2 diabetes represents 95% of all cases of diabetes. There is a strong association between obesity and the development of Type 2 diabetes.[4] Obesity has been increasing both nationally and in Rhode Island, and research has shown that lifestyle change, including weight loss and physical activity, can reduce the incidence of diabetes in high-risk populations.[5]

Methods

Rhode Island utilizes the **Behavioral Risk Factor Surveillance System (BRFSS)** to track population information on diabetes. The BRFSS is a statewide telephone survey of randomly selected adults (ages 18 and older) who live in households with telephones. It asks respondents questions about a variety of health-related behaviors. During 1994-1997, the number of interviews performed was about 1,800 per year (150 per month); during 1998-2000 it increased to approximately 3,600 per year (300 per month). Fifty states and four territories perform the BRFSS with funding and methodological standards provided by the **Centers for Disease Control and Prevention (CDC)**.[6]

The BRFSS question used to measure diabetes prevalence for the years 1994-2000 is: "Have you ever been told by a doctor that you have diabetes?" The survey also asks height and weight of each respondent, from which the **body mass index (BMI)**, defined as weight in kilograms divided by the square of height in meters, is calculated. A BMI of 25 to 29.9 is considered overweight, and a BMI of 30 or above is considered obese.

Results

The prevalence of diagnosed diabetes has been increasing in Rhode Island over the period examined, 1994-2000. (Figure 1) In 2000, the prevalence rate among adults, 6.0%, was nearly one-third higher than the rate in 1994, 4.6%.

Diabetes is far more commonly diagnosed among older adults than younger adults. (Figure 2) The prevalence rate is highest among adults ages 65 years or older, followed by ages 45-64 years, and ages 18-44 years. The rate increases nearly five-fold from the 18-44 age group to the 45-64 age group, then by another 44% among those 65 years and older.

Over the period 1994-2000, the proportion of people who are obese among adult Rhode Islanders increased from 13.4%

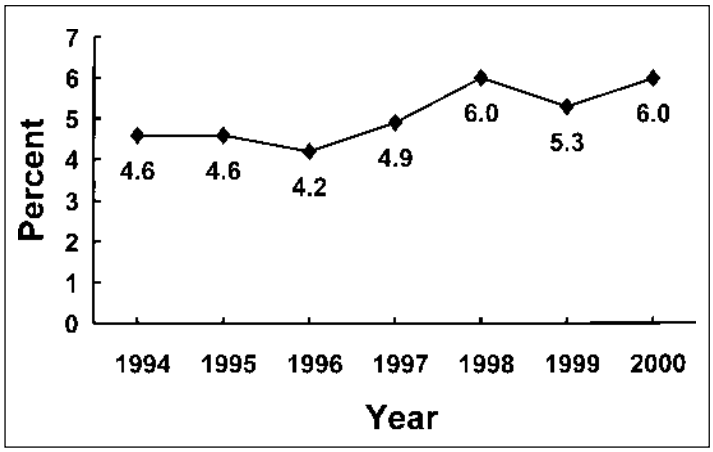

Figure 1. Prevalence of Diagnosed Diabetes among Rhode Island Residents Ages 18 and Older, by Year, 1994-2000.

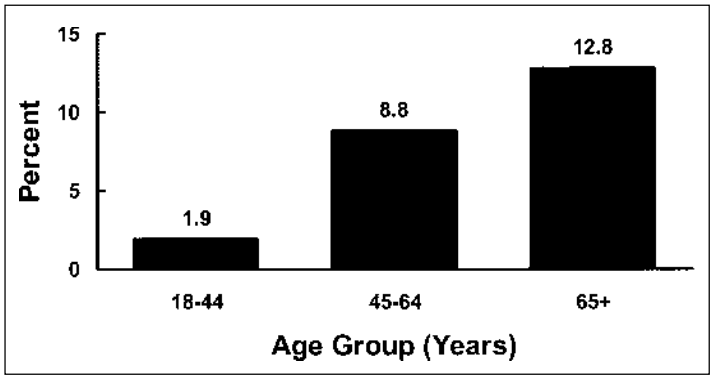

Figure 2. Prevalence of Diagnosed Diabetes among Rhode Island Residents Ages 18 and Older, by Age Group, 2000.

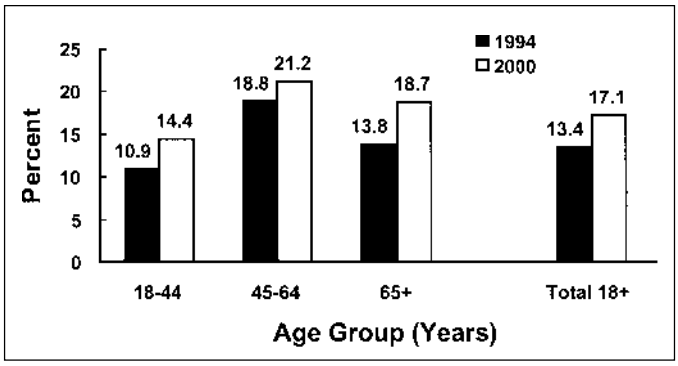

Figure 3. Prevalence of Obesity among Rhode Island Residents Ages 18 and Older,

to 17.1%, or by more than one-quarter. (Figure 3) Increases in obesity were seen among all age groups, but the increases among the elderly (up 36%) and younger adults (up 32%) were noticeably greater than the increase among those ages 45-64 (up 11%).

Discussion

The **Diabetes Control Program** (**DCP**) at the Rhode Island Department of Health is dedicated to integrating health systems for improved provider and patient support for better diabetes control. The DCP is working towards fulfilling the diabetes-related objectives of Healthy People 2010 on reducing mortality, reducing the disease burden, reducing disease complications, and increasing health services and patient protection, including diabetes education.[4] The DCP primarily focuses on secondary prevention and is moving to include primary prevention with community collaborations and guidance from national experts such as the CDC.

National and international studies such as the **Diabetes Prevention Program** (**DPP**) study and the Finnish Diabetes Prevention Study have shown that primary prevention of type 2 diabetes is possible through weight control and physical activity, particularly in persons with impaired glucose tolerance and other high-risk characteristics.[7] Local and national health initiatives face more than programmatic challenges. The ultimate challenge is to support individuals to modify their behavior to prevent obesity and to better manage their diabetes. This includes larger systemic changes such as environmental modifications (i.e. safer walking areas, modest food portions in restaurants, healthier food and beverage choices in schools), and municipal, state, and national policies that encourage people to make better dietary choices and that encourage physical activity.

Acknowledgements.

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Asthma, Particulates, and Diesel Exhaust

Leanne Chiaverini

Asthma exacerbations are caused by irritants known as "triggers." Common triggers include particulate matter and other substances in tobacco smoke and vehicular exhaust, dust mites, pet dander, cockroach feces, mold spores, pollen, and strong odors. Activity, respiratory infections, and climate (temperature and humidity) can also precipitate asthma attacks.

Particulate matter (PM), one of several major air pollutants, is considered an important asthma trigger in urban locations because of the public's heavy reliance on cars, trucks, and buses. The U.S. **Environmental Protection Agency (EPA)** defines PM as a mixture of solid and liquid particles in the air. The EPA and several other federal agencies have labeled it a primary air pollutant and a probable human carcinogen.[1,2] PM less than 2.5 micrometers in diameter ($PM_{2.5}$), a common component of exhaust from vehicles, power plants, and industrial facilities,[2] is of particular concern because its small size allows it to bypass the body's defenses and easily reach the deepest recesses of the lungs where it is more likely to be retained. Because PM can act as an asthma trigger, causing a decrease in lung function and inflammation of the airways, asthmatics are at a considerable risk of experiencing adverse effects from exposure to it.[2-4] Dozens of studies worldwide confirm that PM (often from diesel fuel) can aggravate or produce symptoms of asthma and other respiratory illnesses, retard lung development, and cause premature death, especially among people with cardiopulmonary diseases. A study conducted by the National Health and Environmental Effects Research Laboratory found that exposure to PM promotes airway inflammation and hyperresponsiveness.[5] High levels of PM have been linked with high levels of medication use, hospital and emergency room admissions, and work and school absences.[2-4]

The EPA estimates that diesel exhaust is the source of more than 20% of the fine PM in New England air.[6] Diesel exhaust is comprised of hundreds of constituent chemicals, many of which are harmful to both humans and the environment. Under the Clean Air Act, forty of these chemicals are classified as "hazardous pollutants;" some of them have been designated probable human carcinogens.[3] The major pollutants in diesel exhaust include:

Diesel particulate matter (DPM)
Polynuclear aromatic hydrocarbons (PAH)
Nitrogen oxides (NOx)
Volatile organic compounds (VOC), which include hydrocarbons (HC)
Sulfur dioxide (SO2)
Carbon monoxide (CO)[7]

PM is a significant ingredient in diesel exhaust. Composed of more than 98% $PM_{2.5}$, these particulates are very small.[4] The release of DPM into the atmosphere is caused by poor refinement of diesel fuel and incomplete fuel combustion, and

Table 1. Encapsulated History of Diesel Exhaust Policy in the United States

1970:	Congress revised the Clean Air Act, requiring 90% CO, HC and NOx reductions from light-duty diesel vehicles by 1976. Authority to regulate motor vehicle pollution was given to the United States EPA.[18]
1977:	Congress amended the Clean Air Act, requiring heavy-duty vehicles to make 90% CO and HC reductions by 1984, and a 75% NOx reduction by 1985.[18]
1982:	Air Resources Board regulates PM_{10}[4]
1985:	EPA, under the Clean Air Act, set emissions standards for new diesel-powered trucks and buses.[18]
1987:	EPA regulates PM_{10}[4]
1990:	Congress amended the Clean Air Act, including more stringent control over PM from diesel engines. EPA placed restrictions on the sulfur content of diesel fuel.[18]
1993:	EPA put forth regulations for 80% reduction of sulfur content in fuel, and 60% reduction in particulate emissions from urban buses.[18]
1993:	EPS initiated the Urban Bus Retrofit/Rebuild Program. Required that urban buses operating under certain conditions use EPA certified retrofit pollution control technology or be rebuilt using certified low emission components during engine rebuilds.[1]
1994:	EPA reduced PM standards for new diesel-powered truck and bus engines.[18]
1996:	EPA further reduced PM standards for new diesel-powered truck and bus engines.[18]
1997:	EPA adopted new National Ambient Air Quality Standards for particles under 2.5 microns in size.[4]
2000:	EPA adopted new diesel regulations requiring reduced emissions from new engines, along with the use of ultra low sulfur fuel. Expected to be fully implemented in 2010.[18]

Adapted from: Massachusetts Enhanced Emissions and Safety Test. Diesel Background. http://vehicletest.state.ma.us/dieselbg.html

is directly related to the sulfur and PAH content of the fuel.[8] NOx and VOC combine in the atmosphere to create ozone.[9] Ozone is the prime ingredient in smog, which is annually responsible for an estimated 6 million asthma attacks and 150,000 emergency room visits.[10]

Children, with airways that are small in diameter and not fully developed, are especially sensitive to diesel exhaust. "There is no known safe level of exposure to diesel exhaust for children, especially those with respiratory illness."[3] Diesel exhaust may cause difficulty in breathing, especially if airways are already inflamed or constricted by asthma. Children riding on school buses may be exposed to unusually high concentrations of DPM. In 2001, the National Resource Defense Council found this exposure to be as much as four times that of someone riding in a car in front of the bus.[11] More recently, an **Environment and Human Health, Inc.** (**EHHI**) research team found that concentrations of $PM_{2.5}$ in school buses were often 5-10 times higher than average levels measured at fixed-site monitoring stations.[3] Concentrations increased when buses were idling with windows open (especially when queued to load or unload students), when driving on routes with their windows closed, and when moving through heavy traffic.[3] In the United States, 24 million children make nearly 10 billion school bus rides on 600,000 school buses.[3] More than 99% of school buses in the U.S. are powered by diesel fuel.[3]

Adults are also susceptible to diesel exhaust. Occupational exposures put more than one million workers at risk for adverse health effects ranging from headaches and nausea to cancer and respiratory diseases.[12] Those occupations at increased risk include but are not limited to: workers of railroads, mines, loading docks, farms, toll booths, and bridges and tunnels; truck drivers; and auto, truck and bus mechanics/garage workers.[12]

Sources of diesel exhaust may be categorized into three groups: mobile sources (cars, trucks, tractors, lawnmowers), stationary point sources (factories, refineries, power plants), and smaller stationary area sources (dry cleaners, gas stations).[13] Heavy-duty diesel trucks and buses are a major contributor to air pollution. In the United States, heavy-duty vehicles (such as semi-trucks, buses, and waste-haulers) account for a mere 2% of all on-road vehicles, but produce one third of all nitrogen oxide emissions and almost two-thirds of all particulates from on-road vehicles.[8] Heavy-duty vehicles in Rhode Island emit 347 tons of PM per year and are responsible for 52% of the total PM emitted by all Rhode Island vehicles.[8]

The United States has been cognizant of improving air quality since the creation of the Air Pollution Control Act in 1955.[14] Major actions taken in the past three decades to reduce pollution from diesel exhaust are summarized in Table 1. The Urban Bus Retrofit Program, organized in 1993, has retrofitted or rebuilt approximately 10,000 of 42,000 eligible urban buses.[1] New diesel regulations adopted by the EPA in 2000 are expected to prevent annually an estimated 8,300 premature deaths, 360,000 asthma attacks, 386,000 cases of respiratory symptoms in asthmatic children, 1.5 million lost work days, 7100 hospital admissions, and 2400 emergency room visits for asthma.[15]

Despite these accomplishments and the development of more stringent air quality standards, the matters surrounding diesel exhaust are far from resolved. There are numerous ways to limit emissions of and exposures to diesel exhaust.

- Create and implement anti-idling programs and laws. Anti-idling campaigns, programs, and laws are an inexpensive and efficient approach to reducing diesel exhaust. Idling engines emit unnecessary toxins into the air, adding to the levels of diesel exhaust. For example, idling school buses expose children to high levels of diesel exhaust. In addition to the health impact, vehicle idling is an environmental hazard and an expensive practice. Truck drivers often leave their engines running during 6-hour sleep periods, burning approximately one gallon of diesel fuel each hour.[6] At this rate, a vehicle in operation for 300 days will idle away 1,800 gallons of fuel per year.[6] Each truck releases an annual ten pounds of particulate matter into the air, and at $1.25 per gallon, pays an idling fee of $2,250.[6] With an estimated 1.3 million large trucks and 4.2 million tractor-trailer rigs on US highways, the costs mount.[16] Companies accept this cost because it is convenient (diesels are hard to start when cold) and because running the engines keeps heaters or refrigerators running. Small generators or auxillary power units that supply heat, air conditioning and power, provide efficient alternatives to idling.[6]
- Require, promote or provide incentives to increase the use of cleaner diesel fuels and non-diesel alternatives. Pollution control devices in engines are destroyed by the sulfur in diesel fuel.[8] The use of **ultra-low sulfur diesel fuel** (**ULSD**), which contains less than 15 parts of sulfur per million, can reduce PM by 20-25%.[6] To support these efforts, ULSD should be made available nationwide. Emulsified diesel fuel, which has been mixed with water and other additives, is an option for vehicles that do not remain dormant for long periods. Emulsified diesel fuel can reduce PM by 50%.[6] Other alternatives include battery electric vehicles, hybrid electric vehicles, compressed gases, and fuel cells.[8] Buses that run on natural gas emit 60-98% less carbon than diesel-powered buses.[3]
- Retrofit diesel vehicles with pollution control equipment. Heavy-duty vehicles may be retrofitted with interior air filters, oxidation catalysts, and particulate traps.[3] Use of the latter in combination with ULSD can reduce PM emissions by 90%.[6]
- Replace existing Heavy Duty Engines with newer vehicles. "Require and provide financial support for eventual replacement of existing diesel fleets with low emission vehicles, especially in areas of the country beyond compliance with current federal pollution standards."[3]
- Require routine maintenance and implement routine emissions testing. Require on-board equipment and in-use emissions testing to prevent cheating.[8]
- Federal, state and local governments, and school districts should work together to implement the following changes in school bus emissions:
  - Prohibit school bus idling.
  - Plan and implement a school bus retrofit program.
  - Require routine maintenance and periodic tailpipe

emissions testing.

Require the design and installation of air filtration equipment capable of removing vehicle exhaust from air entering bus passenger cabins.

Limit ride duration.

Allocate buses with the lowest emissions to the longest routes, giving priority to communities with the poorest outdoor air quality and to routes that have the highest traffic intensity.

Reconsider location of bus parking lots.

Adjust contract provisions to lease retrofit buses and require clean fuels.[3]

- Account for other exposures to air pollutants. Develop air quality monitoring programs that consider indoor and within-vehicle exposure to air pollution, and establish health protective standards accordingly. Create additional stationary monitoring networks and use personal monitoring devices to collect data. Efforts to better understand the variability in exposure should begin by focusing on susceptible populations.[3]

Commentary on Public Health Briefing

Charles Sherman, MD

The increased prevalence and incidence of asthma are alarming. Although newer medications have helped in managing symptoms, only through environmental control can we expect to greatly lessen the severity of disease.

Leanne Chiaverini has written an excellent briefing on the adverse health effects of particulate matter, especially diesel exhaust particulates, for both asthmatics and non-asthmatics. She clearly summarizes the significant morbidity and mortality resulting from exposure to small particles. Of great concern is the recent association between diesel exhaust particulates and lung cancer.

Ms. Chiaverini has also outlined several interventions that can limit diesel exhaust particulates. The medical community must support these measures and become more vocal in advocating for tougher air pollution standards.

Physicians can get involved in several ways. They can testify at legislative hearings. They can write letters to local and state representatives, voicing their concerns and those of their patients. Physicians can also work directly with school administrators to devise a plan to reduce school bus emissions (before those emissions drive kids to your office). Contact Molly Clark of the American Lung Association of Rhode Island (MClark@ lungri.org or 401-421-6487) to find out how to get involved.

I often tell my patients that they would do best to live in a bubble, where all respiratory triggers could be eliminated. Given that this solution is not viable, we must control all harmful environmental exposures as a first step.

- Create safer work environments. Use safe work practices, ventilation, and personal protective equipment to protect workers who are exposed to diesel exhaust.
- Promote recycling. The burning of diesel fuel is a significant source of carbon and other greenhouse gas emissions. Recycling reduces the amount of energy used in industrial processes and transportation, thus reducing greenhouse gas emissions. Rhode Island recycling efforts in 1995 reduced greenhouse gas emissions by approximately 30,000 tons of carbon equivalent per year, an amount equal to nearly 5% of all industrial carbon dioxide emissions.[17]

As Rhode Island develops policy to manage PM in the air, the medical and public health communities must work together to assure that health concerns are given appropriate weight. In addition to formal representation at official policy forums, physicians are well-positioned as credible advocates for improved air quality.

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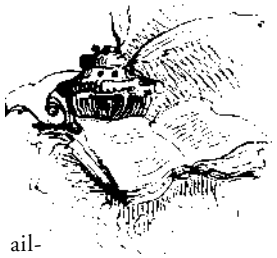
– A Physician's Lexicon –



Hands on Medicine

Mainstream medicine, sometimes called allopathic medicine, has never claimed that it possessed a monopoly over the broad field of health care therapeutics. There had always been competing, alternative health care systems, each with its own premises, operating philosophy and history.

Homeopathic medicine seeks out drugs which produce effects simulating the visible symptoms of the disease in question. It then treats the disease in question with extremely small [homeopathic] doses of the same drug in the hopes of achieving a cure. This doctrine was first enunciated by a German physician, Samuel Hahnemann, in 1795 and was called homeopathy [Greek, *homos*, meaning similar and *pathos*, suffering.] It may have been based on an earlier view of Parcelsus, *similia similibus curantur* [like things are cured by like things].

Hahnemann, in 1824, also coined the descriptive word, allopathic [Greek, *allos*, meaning other, and *pathos*, meaning suffering] to describe the field of conventional medicine.

There have been still other schools of health care such as hydropathy [Gree, *idro-* , meaning water]; naturopathy [Latin, *natura,* meaning an untouched existence]; and balneopathy [Greek, *balneon*, meaning bath] which have emphasized the curative role of bathing, exercise and prudent diet. Many of these schools have diminished in popularity or have been absorbed by still other schools of therapy.

Chiropodist, a word coined in 1785, defines those practitioners who are concerned with ailments of the hand [Gree, *cheiro-* , meaning hand] or feet [Greek, *podos*, the foot]. Currently these practitioners refer to their art as podiatry since virtually all of their skills are now applied to diseases of the foot.

Osteopathy [Greek, *osteon*, meaning bone] was first described by Andrew Taylor Still, a midwestern practitioner who advocated vertebral manipulation or massage to alleviate various neuromuscular disorders. Current osteopathic thinking is gradually merging with allopathic teaching.

Another advocate of spinal manipulation to counteract alleged derangement of the neuromuscular system was an American, David Daniel Palmer, who constructed a system of care called chiropractic [Gree, *cheiro-* , meaning hand and *prakticos*, meaning fit for action]. The Greek, root, *cheiro-* [sometimes spelled *chiro-*] crops up in words such as chiromancy [the reading of palms], chirography [handwriting] and chiroptera [the order of hand-winged mammals, the bats]; and, of course, cheirurgery, the ancient predecessor of the word, surgery.

And then there is the ancient art of acupuncture [Latin, *acus*, meaning needle or sharpness; and *punctura*, meaning to perforate or prick]. The Latin root, *acus*, appears in such words as acute, ague [a corruption of *febris acuta*] and acumen [Latin, *mens*, meaning reason or understanding; thus sharpness of intellect].

– Stanley M. Aronson, MD, MPH

Vital Statistics

Rhode Island Department of Health
Patricia A. Nolan, MD, MPH, Director of Health

Edited by Roberta A. Chevoya

Rhode Island Monthly Vital Statistics Report

Provisional Occurrence Data from the Division of Vital Records

Underlying Cause of Death	Reporting Period			
	April 2001	12 Months Ending with April 2001		
	Number (a)	Number (a)	Rates (b)	YPLL (c)
Diseases of the Heart	261	3,106	296.3	4,385.5 **
Malignant Neoplasms	206	2,391	228.1	6,694.0
Cerebrovascular Diseases	45	504	48.1	660.0
Injuries (Accident/Suicide/Homicide)	38	380	36.2	6,736.0
COPD	45	512	48.8	452.5

Vital Events	Reporting Period		
	October 2001	12 Months Ending with October 2001	
	Number	Number	Rates
Live Births	1249	13,463	12.8*
Deaths	795	10,142	9.7*
Infant Deaths	(8)	(103)	7.7#
Neonatal deaths	(6)	(89)	6.6#
Marriages	820	8,472	8.1*
Divorces	404	3,371	3.2*
Induced Terminations	408	5,478	406.9#
Spontaneous Fetal Deaths	103	1,018	75.6#
Under 20 weeks gestation	(98)	(935)	69.4#
20+ weeks gestation	(5)	(83)	6.2#

(a) Cause of death statistics were derived from the underlying cause of death reported by physicians on death certificates.

(b) Rates per 100,000 estimated population of 1,048,319

(c) Years of Potential Life Lost (YPLL)

Note: Totals represent vital events which occurred in Rhode Island for the reporting periods listed above. Monthly provisional totals should be analyzed with caution because the numbers may be small and subject to seasonal variation.

* Rates per 1,000 estimated population # Rates per 1,000 live births
** Excludes two deaths of unknown age.

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Ninety Years Ago

[April, 1912]

In "The Relation of Sociology to Law and Medicine," J. W. Dealey, Professor of Social and Political Science," noted the rapprochement of the disciplines (law, medicine, political science) - a change from the view of Plato: "Plato...assumed that the presence of lawyers and physicians denoted a decadent, or at any rate, an imperfect civilization, since neither a natural nor a perfect civilization would have use for members of either profession."

Frederick N. Brown, MD, in "As to the Advent of Babies," described the doctor's entrance into the mise en scène of childbirth: "What a sympathetic and worrying mother, an anguished and terrified patient who immediately hails one's presence as the end of her suffering, often a repellent and obtrusively retiring aunt or sister - who never thought much of the match, anyway - to the good old nurse who has long been a friend of the family, who has watched the case closely and has already deduced by infallible signs that it is to be a girl, and who already has the burnt rag, the cotton twine and the kitchen scissors at hand; who is also recognized as the master of ceremonies, and as a matter of entertainment, at once - in the presence of the patient and family - launches off into a long, detailed description of the harrowing scenes she has witnessed - one of which presented much the same symptoms as the patient, and winds up describing the delivery of each of her own seven children - and this dear little friend of hers is sick just as she when her little boy was born with the club feet. Either cowering in a corner is the culprit who is responsible for all this present trouble, or else he is careening over the house in a condition of nervous and uncertain flippancy."

Fifty Years Ago

[February, 1952]

Janis Gailitis, MD, and Anthony Caputi, MD, contributed "Auricular Fibrillation with Complete Heart Block and Adam-Stoke Syncope." This case report discussed a 70 year-old woman admitted to Newport Hospital. She had suffered 5 episodes of dizziness, followed by fainting, in the year before admission. After treatment (epinephrine hydrochloride 1:1,000, with oxygen atrophine with ephedrine), she recovered.

In "Acute Myocardial Infarction: Some Observations," Frank B. Cutts, MD, discussed 216 cases admitted over five years to Rhode Island Hospital. "In general patients were kept at bed rest from 2 to 6 weeks....Mild sedation was prescribed as needed to help promote a placid outlook."

In "Doctors and Scholars," Dennis P. McCarthy, OP, PhD, vice president and head, Department of English, Providence College), discussed the physician-authors Oliver Goldsmith, Thomas Linacre, and Sir Thomas Browne.

An Editorial congratulated Woonsocket Hospital on its new building.

A second Editorial, contributed by the Department of Defense, offered "Explanations of its Policies and Procedures Regarding the Doctor Draft Act."

Twenty Five Years Ago

[February, 1977]

Stanley M. Aronson, MD, introduced this issue on the "Future of Visual Services in Rhode Island." The articles included: "Ophthalmology in Medical Student Education: Philosophy, Control of Process," by Bruce E. Spivey, MD; "Relationship of Ophthalmology to other Science Modalities," by Arthur H. Keeney, MD, DSci; "A Department of Ophthalmology: A Personal View," by Steven M. Podus, MD; "Future of Ophthalmology," by Carl Kupfer, MD; "Visual Sciences at Brown University: One Possible Approach," by Harold F. Spalter, MD; "Another Possible Approach," by A. Robert Bellows, MD; and "Draft Version of the Final Report to the Dean of Medicine from the Committee on Ophthalmology, September 21, 1976."

John E. Farley, Jr., MD, Chair, Drug Abuse Committee Report, contributed an editorial that voiced concern over the misuse of prescribing practices by physicians - a misuse that increased the illegal supplies of controlled substances. Recently the AMA had published guidelines on barbituates; the Rhode Island Medical Society had published guidelines on amphetamines in hyperkineses. The Medical Society opposed use of amphetamines in treatment of intractable obesity.

An editorial, "Glaucoma: A Primer," mentioned possible benefits of marijuana.