LETTERS TO THE EDITOR

Project COPE's Essay Contest

To the Editor:

Project COPE (sponsored by the National Medical Association [NMA], Howard University, North Carolina A&T State University, Morehouse College, Harvard College, and Pfizer Inc) is a three-tier program whose aim is to help build self-esteem and encourage more minority students to prepare for college.

The fulcrum of Project COPE's program is a series of motivational and inspirational presentations designed to offset a variety of factors that work to undermine the goals of minority students. These presentations are delivered by doctors who are members of Med Chi, the Washington, DC affiliate of the NMA. Another facet of this program is a toll-free homework hotline that offers assistance in math and science; college telephone tutors are sponsored by the above referenced educational institutions.

The third tier of this program is "Who Am I?," an essay contest designed to help students build positive self-esteem while improving their writing and communication skills. In the essay, students are asked to define themselves in terms of external or internal standards such as conduct, excellence, and personal assets.

Following is the winning essay submitted by Nicole A. Pratt, an 8th grade student at Garnet-Patterson in Washington, DC.

> Mr Rom Cartwright Executive Director Project COPE Westport, Connecticut

Who Am I?

Who am I? I am somebody; uniquely and magnificently created. I am flesh, soul and spirit. I am human.

Who am I? I am the offspring of a people enriched in faith, endurance, many strengths, and talents. I am a seed formed from the rich soils of Africa; I am my Black heritage.

Who am I? I am my own mind. I can shield myself from negative perceptions by controlling what I allow to penetrate into my being. I can stand against the surroundings of negative influences because within lies the power to resist. I possess mental power-my vehicle to taking me to my highest heights. I am my own destiny. I must and will resist the allurement of drugs. A person can get much more than they bargain for from using or selling illegal drugs. A recent newspaper article told of a drug dealer who was wrapped alive in a quilt and large plastic bag and left in the trunk of a car in 86° weather. When found, he had baked to death. This may be an extreme case, but from that standpoint, drugs will only get you hurt, in jail, or dead.

Who am I? I am determination. I accept the responsibility of an education. I have instilled in myself a will to strive toward the high mark of learning even when I am confronted with obstacles and challenges. There are many young people who drop out of school and are functionally illiterate. When they apply for jobs and are asked to fill out an application, they sometimes lose out on a chance at getting the position because they can't read or write well enough to apply. I realize that I can stretch myself to whatever capacity I am willing to be stretched to. My mind is open to receiving.

Who am I? I am a voice among many. My voice is the sound expression of my concerns, thoughts, and ideas. I am someone who will try to persuade young women not to become teenage mothers. Many young people don't realize the consequences in becoming a teenage mother. A serious consequence that impacts negatively on the children is the mother's lack of experience in being a parent. Another consequence is lack of money to raise the children, which forces many to depend on public assistance for both their care and the children's. I am a voice to be heard.

Who am I? I am my brother's keeper. I will try my best to persuade others to show respect to all and especially to our elders. I recently read an article in the paper where a 79-year-old man told a couple of teenagers that smoking was bad for them and that they shouldn't do it. They proceeded to curse at him and followed through by beating him up. I am a concerned citizen.

Who am I? I AM SOMEBODY!

Nicole Pratt Tri-School Learning Academy Garnet-Patterson Middle Campus Washington, DC

Health, Wealth, and Hygiene

To the Editor:

The excellent article titled, "Income, Race, and Mortality," by T. Sterling, W. Rosenbaum, and J. Weinkam [J Natl Med Assoc. 1993;85:906-911] again highlighted the astonishing relationship between poverty and the increased incidence of disease, including cancer. Standardized mortality ratios for problems such as ischemic heart disease were up to 20.03 higher in black males with low incomes compared with those with basic incomes. It is bewildering that there is a large reduction in mortality with increasing incomes up to \$15 000 per year, yet between \$15 000 and \$20 000 mortality it falls off only continued on page 356

Acknowledgments

The authors thank Robert Hewes, BS, for computer programming and Jeffrey S. Levin, PhD, MPH, and Ivy Savoy-Jones, MD, for comments on the manuscript.

Literature Cited

1. Henshaw SK, Koonin LM, Smith JC. Characteristics of women having abortions, 1987. *Fam Plann Perspect*. 1991;23:75-81.

2. Burr WA, Schulz KF. Delayed abortion in an area of easy accessibility. *JAMA*. 1980;244:44-48.

3. Torres A, Forres JD. Why do women have abortions? *Fam Plann Perspect.* 1988;20:169-176.

4. Petitti D, Coleman C, Binsacca D, Allen B. Early prenatal care in urban black and white women. *Birth.* 1990;17:1-5.

5. Burks JA. Factors in the utilization of prenatal services by low-income black women. *Nurse Pract.* 1992;17:34,46,49.

6. Poland ML, Ager JW, Olson BA. Barriers to receiving adequate prenatal care. *Am J Obstet Gynecol.* 1987;157:297-303.

7. Young C, McMahon JE, Bowman V, Thompson D. Maternal reasons for delayed prenatal care. *Nurs Res.* 1989;38:242-243.

8. Lia-Hoagberg B, Rode P, Skovholt CJ, Oberg CN, Berg C, Mullett S, et al. Barriers and motivators to prenatal care among low-income women. *Soc Sci Med.* 1990;30:487-495.

9. Sable MR, Stockbauer JW, Schramm WF, Land GH. Differentiating the barriers to adequate prenatal care in Missouri, 1987-88. *Public Health Rep.* 1990;105:549-555.

10. Meichenbaum D, Turk DC. Facilitating Treatment Adherence. New York, NY: Plenum Press; 1987.

11. Rosenfeld JA. Emotional responses to therapeutic abortion. *Am Fam Physician*. 1992;45:137-140.

12. Bluestein D, Rutledge CM. Family relationships and depressive symptoms preceding induced abortion. *Fam Pract Res J.* 1993;13:149-156.

13. SAS Institute Inc. SAS/STAT User's Guide, Release 6.03 Edition. Cary, NC: SAS Institute Inc; 1988.

14. Cockerham WC, Lueschen G, Kunz G, Spaeth JL. Social stratification and self-management of health. *J Health Soc Behav.* 1986;27:1-14.

15. Freimuth VS, Mettger W. Is there a hard-to-reach audience? *Public Health Rep.* 1990;105:232-239.

16. Lewin-Epstein N. Determinants of regular source of health care in Black, Mexican, Puerto-Rican, and non-Hispanic white populations. *Med Care*. 1991;29:543-556.

17. Jepson C, Kessler LG, Portnoy B, Gibbs T. Black-white differences in cancer prevention knowledge and behavior. *Am J Public Health.* 1991;81:501-504.

18. Robinson RG, Kessler LG, Naughton MD. Cancer awareness among African Americans: a survey assessing race, social status and occupation. *J Natl Med Assoc.* 1991;83:491-497.

19. Shea S, Stein AD, Basch CE, Lantigua R, Maylahn C, Strogatz DS, Novick L. Independent associations of educational attainment and ethnicity with behavioral risk factors for cardiovascular disease. *Am J Epidemiol.* 1991;134:567-582.

continued from page 327

marginally. On the other hand, black or white, male or female, with the same income, have about the same mortality. The authors summed all this up brilliantly by stating that, "Poverty is associated with increased risk of mortality from both malignant and nonmalignant causes and is no respecter of race." They ended this important article by noting that while poor nutrition, environment, and lack of medical support help explain this astonishing relationship, it was still unclear why poverty should be associated with such a dramatic increase in cancer.

These observations are indeed important in this era of health-care crisis. Perhaps I have an answer. Indeed it is the simplest one. Ocam's Razor determines that the simplest solution is the one most likely to be correct. It is based on the one proposed by Ignaz Semmelweis and Oliver Wendell Holmes that was first hotly rejected, almost 150 years ago.

The first link between hygiene and cancer was shown by the famous London surgeon, Percival Pott (1714-1788).¹ Chimney sweeps suffered a high incidence of cancer of the skin. Potts instituted thorough washing, and this form of common cancer disappeared. Even today, after exposure to chemicals or radiation, thorough washing of the skin is the accepted procedure. Perhaps all cancers have a link to hygiene.

Proof that all forms of cancer have an association to income was shown by Phillips et al² and reinforced by Gillum.³ It surfaced unexpectedly in the levels of serum albumin. Mortality in these longterm famous studies was almost six times higher from all causes when albumin was around 40 g/L, compared with optimal levels of albumin around 48 g/L.² Further, restoration of albumin levels in cancer patients such as those with Hodgkin's disease clearly is associated with permanent recovery.⁴ Albumin levels are usually low in all cancer patients and fail to be restored by diet.⁵

My studies spanning the last 12 years in this area indicate that the level of serum albumin is deeply associated with the standard of personal hygiene, which in turn is associated with poverty.⁶ The myth of the relationship between protein intake and albumin levels was exposed by Klein.⁷ It is clear that in order to maintain and restore optimal albumin levels, one must re*continued on page 368* Burkitt's lymphoma in tropical Africa, where the disease is endemic, may benefit from the administration of steroids.

Literature Cited

1. Chaudary MA, Millis RR, Horkins EOZ. Bilateral primary breast cancer: a prospective study of disease incidence. *Br J Surg.* 1984;71:711-714.

2. Hubbard TB Jr, Montgomery ACA. Non-simultaneous bilateral carcinoma of the breast. *Surgery.* 1953;34:706-723.

3. Mustacchi P, Pandolfi A, Bucalossi P. Bilateral mammary cancer in Italian women. *J Natl Cancer Inst.* 1957;19:1035-1042. 4. Pathology Working Group Breast Cancer Task Force, National Cancer Institute. Standardized management of breast specimens. *Am J Clin Pathol.* 1973;60:789-798.

5. Carroll WW, Shields TW. Bilateral simultaneous breast cancer. *Arch Surg.* 1955;70:672-679.

6. Wiseman C, Liao KT. Primary lymphoma of the breast. *Cancer.* 1972;29:1705-1712.

7. Aghadiuno PU, Ibeziako PA. Clinicopathologic study of breast cancer occurring in pregnancy and lactation. *Int J Obstet Gynecol.* 1983;21:172-176.

8. Cottran RS, Kumar V, Robbins SL. *Pathologic Basis of Disease.* 4th ed. Philadelphia, Pa: WB Saunders Co; 1989:1200.

continued from page 356

duce the level of antibodies in the serum to perfect profiles. Basic knowledge of biochemistry clearly shows that as antibodies and other globulins rise, including fibrinogen, albumin levels must fall in order to maintain osmotic pressure. Further evidence of this is that the total number of serum proteins remains fairly constant in those affected by poverty and also in the elderly. In both cases, it is the level of serum albumin that is reduced.⁸

In summary, it seems clear that the only way to maintain perfect serum profiles is by removing the "overload" from the immune system. It has been reported that blacks have higher levels of antibodies than whites.⁹ My studies indicate that the only way to remove this overload from the immune system is by improved hygiene. Higher levels of antibodies in blacks does not appear to be a genetic factor, but an environmental one. It is the same with the report that albumin is lower in blacks than whites.³ Clearly, all this evidence shows that blacks and whites are equal, given the same opportunities and education.

Todaro and Green¹⁰ showed that cells grown in the presence of optimal levels of albumin lasted up to 10 times longer with almost none turning to cancer lines. This may be explained by the remarkable ability of albumin to detoxify impurities that may be a factor in causing cells to mutate.¹¹ Albumin is an excellent, overlooked measure of homeostasis. It has many forgotten roles such as controlling colloidal/ osmotic pressure and transporting magnesium. copper, zinc. hormones, bilirubin, uric acid, calcium, and vitamins. We tend to forget that thyroid and calcium homeostasis cannot be achieved without proper albumin levels. It also imparts the correct viscosity to the blood. Further, it can be regarded as a very high-density lipoprotein transporting fatty acids, perhaps playing an important role in the association between highdensity lipoprotein and cholesterol.³ Albumin helps buffer the pH of the blood, stabilizes red and white blood cells, and helps control the equilibrium of the fluids in the connective tissue. It also is important in the binding of drugs and is an excellent antioxidant. The flow of nutrients and wastes depends on maintaining "optimal" albumin levels throughout life.

Albumin may be an excellent scientific measure of poverty. It is also an ideal measure of aging and disease status. Clearly, it joins all of

these sciences together. The lower the albumin, the greater the stress on the physiology. My studies, underway since 1986, in attempts to restore albumin in volunteers by improved standards of hygiene, has been most encouraging.⁶ In the last 30 years, I have lived in areas of poverty throughout the world and seen first hand the strong link to poor hygiene. I am certain that while diet is important, it does not explain the high incidence of disease and cancer because calorierestricted animals live up to 50% longer and experience far lower incidence of disease, including cancer.¹² Too many people living under conditions of poverty have no access to motor vehicles and thus are forced to walk, guaranteeing more exercise. It seems clear that diet and exercise are not the reasons.

I call on all medical practitioners to take advantage of their unique role and educate their patients, rich or poor, black or white, on the importance of personal hygiene. Twelve years ago, I tried to convince the medical establishment that even the minute viruses that cause infections to the upper respiratory tract are often spread far more efficiently by fingernails, via selfinoculation, than by aerosol¹³; few *continued on page 372* discrepancy between these studies may be the difference in birthweights: mean birthweight in our study was 1000 g versus approximately 1500 g in other studies.

With regard to animal experiments, data conflict on surfactant production when exposed to cocaine in utero.^{11,12} Sosenko¹¹ found a small but statistically significant increase in the production of surfactant in cocaine-exposed rats. However, in primary cell culture experiments, using type II alveolar cells from rabbit, cocaine decreased synthesis and secretion of surfactant.¹²

CONCLUSION

Intrauterine cocaine exposure does not alter the incidence of RDS in very low birthweight infants. However, large prospective studies are necessary to further evaluate the findings from this study.

Literature Cited

1. Oro AS, Dixon SD. Perinatal cocaine and methamphetamine exposure: maternal and neonatal correlates. *J Pediatr.* 1987;111:571-578.

2. Cherukuri R, Minkoff H, Feldman J, Parekh A, Glass L. A cohort study of alkaloidal cocaine ('crack') in pregnancy. *Obstet Gynecol.* 1988;72:147-151.

3. MacGregor SN, Keith LG, Chasnoff IJ, Rosner MA, Chisun GM, Shaw P, et al. Cocaine use during pregnancy: adverse perinatal outcome. *Am J Obstet Gynecol.* 1987; 157:686-690.

4. Hadeed AJ, Siegel SR. Maternal cocaine use during pregnancy: effect on the newborn infant. *Pediatrics*. 1989;84:205-210.

5. Zuckerman B, Maynard EC, Cabral H. A preliminary report on prenatal cocaine exposure and respiratory distress syndrome in premature infants. *Am J Dis Child.* 1991;145:696-698.

6. Glass L, Rajagowda BK, Evans HC. Absence of respiratory distress syndrome in premature infants of heroin addicted mothers. *Lancet*. 1971;2:685-686.

7. Richardson CJ, Pomerance JJ, Cunningham MD, Gluck L. Acceleration of fetal lung maturation following prolonged rupture of the membranes. *Am J Obstet Gynecol.* 1974; 118:1115-1118.

8. Barrada MI, Viring NL, Edwards LE, Hekanson EY. Maternal intravenous ethanol in the prevention of respiratory distress syndrome. *Am J Obstet Gynecol.* 1977;129:25-30.

9. Curet LB, Rao AV, Zachman RD, et al. Maternal smoking and respiratory distress syndrome. *Am J Obstet Gynecol.* 1983;147:446-450.

10. loffe S, Chernick V. Maternal alcohol ingestion and the incidence of respiratory distress syndrome. *Am J Obstet Gynecol.* 1987;156:1231-1235.

11. Sosenko IRS. Cocaine administration to pregnant rats produces increased surfactant maturation without affecting antioxidant enzyme development. *Pediatr Res.* 1991;29:330A.

12. Guy J, Dhanireddy R. Effect of cocaine on surfactant synthesis and secretion by alveolar type II cells. *Pediatr Res.* 1991;29:60A.

continued from page 368

would listen. Now there is this link to mortality and cancer. Perhaps there is no disease in which the standard of personal hygiene does not play a significant role.

> Kenneth Seaton High Technology Hygiene Ceredo, West Virginia

Literature Cited

1. Wingate P. *The Penguin Medical Encyclopedia*. Middlesex, England: Penguin Reference Books; 1983.

2. Phillips A, Shaper AG, Whincup PH. Association between serum albumin and mortality from cardiovascular disease, cancer, and other causes. *Lancet.* 1989;2:1434-1436.

3. Gillum RF. The association between serum albumin and HDL/total cholesterol. J Natl Med Assoc. 1993; 85:290-292.

4. Gobbi PG, Gendarini A, Crema A, Cavalli C, Attaido-Parrinello G, Federico M, et al. Serum albumin in Hodgkin's disease. *Cancer.* 1985;55:389-393.

5. Gray GE, Meguid MM. Can total parenteral nutrition reverse hypoalbuminemia in oncology patients? *Nutrition.* 1990;6:225-228.

6. Seaton KE. *Breaking the Devil's Circle.* Chagrin Falls, Ohio: Scientific Hygiene Inc; 1989.

7. Klein S. The myth of serum albumin as a measure of nutritional status. *Gastroenterology*. 1990;99:1845-1851.

8. Hyams DE. The blood. In: Brocklehurst JC, ed. *Textbook of Geriatric Medicine and Gerontology*. 3rd ed. New York, NY: Churchill Livingstone; 1985:835-898.

9. Tietz NW. Laboratory reference range values of clinical importance. In:

Wyngaarden JB, Smith LH, eds. *Cecil Textbook of Medicine*. 17th ed. Philadelphia, Pa: WB Saunders Co: 1985:2327.

10. Todaro G, Green H. Serum albumin supplemented media for long-term cultivation of mammalian fibroblast strains. *Proc Soc Exp Biol Med.* 1964;116:688-692.

11. Moskowitz M, Schenck D, Amborski G. Protective effects of albumin on the growth of mammalian cells. *Federation Proceedings of the Federation of American Society for Experimental Biology.* 1963;22:383.

12. Harman D. Free radical involvement in aging. *Drugs Aging.* 1993;3:60-80.

13. Semmelweis H. Is It Possible to Prevent the Common Cold, Cancer, AIDS, etc and Slow the Aging Process? Chagrin Falls, Ohio: Scientific Hygiene Inc; 1987.