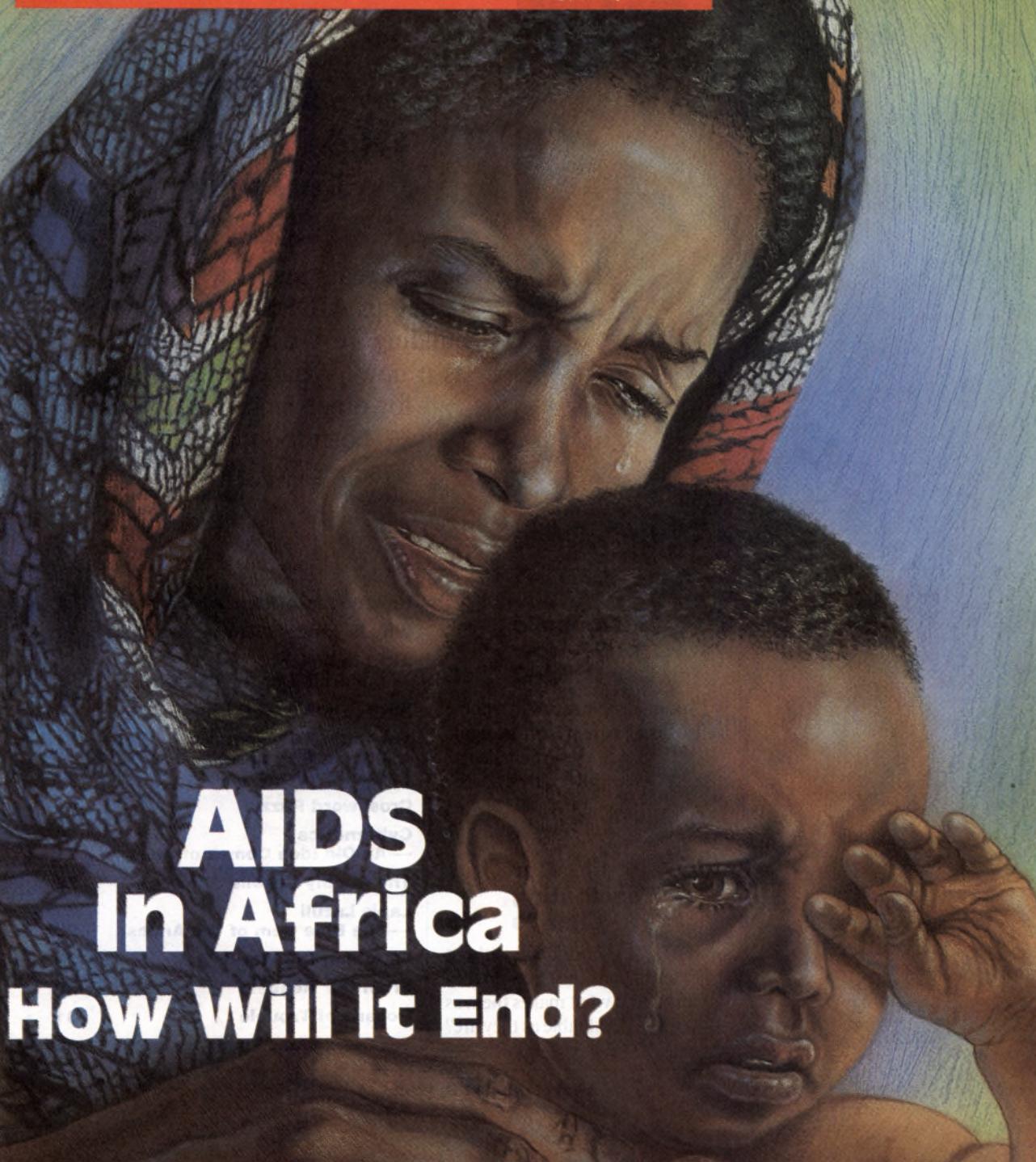


# **Awake!**

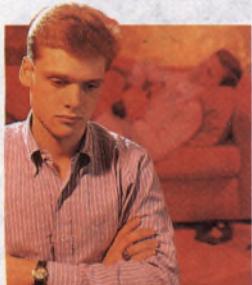
August 8, 1992



## **AIDS In Africa How Will It End?**



WHO/E. Hooper

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# How Bad Is AIDS in Africa?

By Awake! correspondent in Africa

LIKELY you heard the predictions. They were spine chilling. Millions on the continent of Africa would get AIDS. Human immune systems would collapse, leaving the body's natural defenses open to the invasion of horrific diseases. As was true of the bubonic plague that struck Europe in the 14th century, death and destruction on an unprecedented scale would follow.

Then there was a lull. The media were saturated, and the public grew weary of sensational doomsday predictions. Was it really going to be that bad? Exactly what is the true extent of the AIDS epidemic in Africa?

"Nobody knows what the future figures are going to be," says AIDS researcher Dr. Andre Spier. But he is not optimistic. "The number will be substantial and highly destructive to the whole of society." Similarly, at a 1988 international AIDS conference in Stockholm, Sweden, Dr. Lars Kallings predicted that "in only a couple of years . . . [there] will be a frightening body count."

More than "a couple of years" have passed since that forecast. Now many of the predictions are ominously on target. Statistics are starting to turn up as corpses. And the worst is yet to come.

## The Dead and the Dying

A swath of death and destruction is being cut across many parts of sub-Saharan Africa. "In certain urban centres," says a recent report in the scientific magazine *Nature*, "AIDS is now the leading cause of mortality in adults

and one of the main determinants of infant mortality." In one African city, priests are hard-pressed to cope with the scores of AIDS-related funerals they have to conduct.

In October 1991 the heads of Commonwealth governments who met in Harare, Zimbabwe, were presented with a foreboding memorandum on AIDS in Africa. It was revealed that between 50 and 80 percent of all hospital beds in some African countries were currently occupied by AIDS patients. Concerning hard-hit Uganda, AIDS specialist Dr. Stan Houston revealed that AIDS has already killed more people in Uganda than were killed throughout the last 15 years of civil war in that country.

**In some developing countries, "by 1993, AIDS will be the single largest cause of deaths."**

— *The World Today, England*

Equally disquieting are the findings by doctors and scientists in Abidjan, Côte d'Ivoire. Over a period of several months, all the corpses at the two largest city morgues were examined. The result? *Science* magazine, which carried the report, revealed that AIDS was found to be "the leading cause of death" among adult men in Abidjan. The journal adds that the figures quoted "probably underestimate the true mortality due to HIV [Human Immunodeficiency Virus] infection."

Even WHO (World Health Organization), which monitors the worldwide spread of the disease, agrees that this is only the tip of the iceberg. According to the journal *New Scientist*, WHO "is convinced that many countries in East and Central Africa have reported only about a tenth of the cases of AIDS... Reporting is incomplete and inaccurate because surveillance is rudimentary."

### **Latent Infection**

One terrifying thing about AIDS is the long period of infection that precedes the actual physical symptoms of full-blown AIDS. For up to ten years, the infected carrier may harbor deadly HIV in his body. He may look and feel healthy. Unless the victim has undergone a test for the disease, he will never know that he faces terminal illness—until the symptoms strike! It is this seemingly healthy, yet infected, segment of the population that is unwittingly spreading AIDS.

Tests for HIV infection levels reveal the extent to which the lethal plague is now unleashing itself on Africa. The journal *African Affairs*, for example, shows that the "densely populated region along Lake Victoria... reports high [HIV] prevalence..., ranging anywhere from 10 to 18 per cent for adults judged to be at low or average risk to 67 per cent for those with a large number of sexual partners." Similarly, the journal *Nature* estimated that "in the general adult population, infection has spread steadily since 1984, reaching 20-30% in

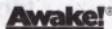
the worst-afflicted urban centres." Imagine —almost a third of the adult population under sentence of death within ten years!

Governments and leaders, once reluctant to reveal the extent of AIDS, are now waking up to the full horror of the epidemic. A former African president gave his sanction to the fight against AIDS—after his own son died from it. Another government leader recently warned that there were 500,000 HIV-infected persons in his country. Most of these did not know they were fatally ill and were spreading the scourge by their promiscuous behavior.

### **"Tell Them What Has Happened Here"**

As the percentage of people afflicted with HIV infection rises steadily, the number that eventually get extremely sick and die will increase dramatically. In their wake they will leave untold grief and suffering. On the AIDS-ravaged Uganda-Tanzania border, it happened to 59-year-old Khamlua. Since 1987 he has buried 11 of his children and grandchildren—all victims of AIDS. "Take my complaints out into the world," he cries, shattered by the disaster. "Tell them what has happened here."

Because of the very methods by which AIDS is spread, what happened to Khamlua in Africa threatens to happen in many other parts of the world. 'But,' you may ask, 'why is Africa bearing the brunt of so much human misery and suffering?'



**Why Awake! Is Published** *Awake!* is for the enlightenment of the entire family. It shows how to cope with today's problems. It reports the news, tells about people in many lands, examines religion and science. But it does more. It probes beneath the surface and points to the real meaning behind current events, yet it always stays politically neutral and does not exalt one race above another. Most important, this magazine builds confidence in the Creator's promise of a peaceful and secure new world before the generation that saw the events of 1914 passes away.

**Would you welcome more information? Write Watch Tower at the appropriate address on page 5.  
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# Why Is Africa Suffering So Much?

JACOB, 42 years old, is a sick man. He has AIDS. He also infected his wife with AIDS. "My wife knows she got it from me," admits Jacob.

But how did Jacob pick up the fatal virus? He explains: "I was living alone in Harare, driving from Zambia, through Zimbabwe, all the way down to Botswana and Swaziland. My wife was living with our children in Mancaland [in Zimbabwe]. And us drivers, we did some things we should have been more careful about."

## The Promiscuous Plague

Today, promiscuous sexual behavior is the main propagator of AIDS in Africa. Simply put, "sexual rules have largely broken down," explains AIDS researcher Dawn Mokhobo. The journal *African Affairs* says that "sub-Saharan Africa puts considerable value on children but minimal value on marriage. Sexuality outside of marriage, even . . . if it leads to pregnancy, is not disapproved of strongly." According to *Nature*, the typical route that the infection follows starts with the prostitute. Says the report: "Female prostitutes

serve to seed the epidemic in most monogamous women through contact with promiscuous husbands."

Not many are willing to change their behavior. The *Panos Document* on AIDS in Africa tells the following experience of a medical researcher in Zaire: "One night, after I had been doing blood tests in a rural area with some Zairian medical colleagues, they went off with some of the local girls. They slept with them, and only one of them used a condom." When he asked them about the risk, "they laughed, saying that you couldn't give up living just because you might get a disease." Yes, casual sex is considered by many to be "living"—fun, entertainment.

As in many other parts of the world, youths are particularly prone to promiscuity. A recent survey conducted among 377 youths in South Africa revealed that over 75 percent had engaged in sexual intercourse. Similarly, a missionary in south-central Africa observed that there are "few girls aged 15 who are not yet pregnant." He adds: "You see a young, single girl, and you think to yourself, 'Next year at this time, she will be pregnant.'"

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However, in the case of Africa, there are other factors that have accelerated the spread of AIDS.

### Disrupted Families

"As long as large numbers of men in their twenties and thirties are forced to work away from their wives and families—whether it be in urban factories, mines, plantations or on the trucking routes—the spread of AIDS will continue unabated," says the journal *Africa South*. African migrants endure a tough life. Separated from their wives and families, many struggle to find accommodations and employment in the cities. According to the journal *African Affairs*, the stress of trying to support himself and a family back home causes the migrant to experience "frustration and a sense of inadequacy." The journal adds that this often encourages the migrant to "renege on his responsibilities entirely."

Truck routes have particularly been singled out as lethal conduits through which AIDS spreads. As one trucker put it, "I must make sure that wherever I go, I have a girlfriend to look after me." A typical breeding ground for AIDS is a compound in an East African slum where 600 prostitutes ply their trade. Many of their customers are truckers who drop in for what they call a tea break. HIV-infection rates among these prostitutes has been measured at over 80 percent. Meanwhile, the infected truckers move on to their next "tea break" and eventually back to their homes—all the while spreading the lethal affliction they carry.

Then there is civil war and political strife—the spawning grounds for millions of refugees. "Where there is political and civil war," observes AIDS expert Alan Whiteside, "there is a breakdown in normal social behaviour. . . . Refugees moving from place to place may provide a pool of infection and they too are likely to have more sexual partners."

### Medical Disaster

Cash-strapped Africa cannot cope with its medical problems. "In many African countries the amount of money budgeted per person per year for health care is less than the cost of a single blood test for the AIDS virus," explains the brochure *Understanding & Preventing AIDS*. Similarly, Keith Edelston, author of the book *AIDS—Countdown to Doomsday*, explains that "even soap to sterilize equipment, or ordinary household bleach to mop up spills, are often just not available."

The practice in some African countries of reusing syringes on many patients prompted Edelston to warn: "Be careful if needing injections . . . in Africa . . . Demand a new syringe and needle taken from sterile wrappers while you watch."

The risk of accidental infection is causing a serious drain on medical professionals. Two doctors attached to a South African hospital sustained needle scratches while treating AIDS patients. They became infected and died. As a result, six foreign doctors resigned from that hospital.

Under these conditions, it is little wonder that many are taking a second look at the practice of transfusing one of the most virulent propagators of AIDS—blood! "Contaminated blood remains an important mode of spread," says the *South African Medical Journal*, adding that "there is still virtually no screening in central Africa and at least 60% of donor blood is infected."

Thus, already beleaguered by many tragedies, Africa is suffering again. And among the most tragic consequences of the AIDS plague in Africa is what has happened to women and children.

### The Innocent Who Suffer

Lucy is an innocent victim of AIDS. She was infected by her promiscuous husband.

Now, a widow at 23 years of age, Lucy struggles with her feelings. "I am still trying to rationalise whether to love his memory or to hate him for infecting me," she says. Lucy's sentiments are typical of the intense pain and suffering that AIDS inflicts upon its innocent victims.

"Although HIV in developing countries will affect women and men in roughly equal numbers," says the journal *The World Today*, "the impact on women is likely to be . . . disproportionately harsh." This is especially true of Africa, where women—severely disadvantaged by illiteracy, poverty, and migrating husbands—suffer in silence.

But the most tragic mark left by AIDS is upon children. UNICEF (United Nations Children's Fund) estimates that as 2.9 million women die of AIDS in Africa this decade, up to 5.5 million children will be orphaned. An official from one country that has at least 40,000 AIDS orphans reports that already "there are villages . . . of children only."

Typical of the dilemma are infected mothers with their infected children. The *South African Medical Journal* explains that "a question commonly raised by a mother of a sero-positive infant is that of 'who will die first?'"

No wonder many women feel vulnerable to AIDS. Zambian doctor M. Phiri says: "We get the women asking if there is something they can take to prevent themselves from catching this disease . . . There is this fear that while they may look after themselves personally, their partner, their husband, may not be as faithful. This worries them."

So, what can a married person do if it is discovered that his or her partner has been promiscuous? If the course of forgiveness and marital reconciliation is followed, the guilty partner should agree to being medically tested for the possibility of harboring HIV. (Compare Matthew 19:9; 1 Corinthians 7:

1-5.) Until the results are known, marriage mates facing such a situation may decide to abstain from sex or at least take protective measures against infection.

Given the long incubation period of AIDS, young persons contemplating marriage should also be careful before committing themselves to marrying someone who has a morally dubious past, even if he or she is currently living by Christian standards. Concerning this risk group, a Tanzanian AIDS expert, Dr. S. M. Tibangayuka, suggests that young people take the precaution of being "tested for HIV before they get married."

In reality, as long as there is AIDS in Africa and, indeed, the rest of the world, innocent victims, including spouses and children, will suffer.

WHO/E. Hooper



***There are many reasons why AIDS is taking such a fearful toll in Africa***

## AIDS in Africa A Warning to the World!

**"IF YOU have 1 lover per year for 6 years, and so do all your lovers, you will virtually have had sexual contact with 45 000 people."** This simple calculation by Dr. K. E. Sapire, quoted in the South African journal *Continuing Medical Education* illustrates the enormous potential for AIDS infection that exists for the promiscuous.

So why focus on Africa?

Because what is happening there is a warning to the world. Africa is not the only place where promiscuity is rampant. It is a global phenomenon. "Ultimately," says AIDS expert Dr. Dennis Sifris, "every sexually active person in the world with more than one partner is potentially at risk." Similarly, according to the magazine *U.S. News & World Report*, by today's standards even "marriage is no guarantor of heterosexuality—or of fidelity—and hence no perfect shield against AIDS."

Thus, for good reasons, the journal *African Affairs* warns: "The epidemic could be replicated elsewhere." All indications are that Africa's crisis is already in the process of being repeated in many other parts of the world.

*Newsweek* magazine reports that in Brazil, for example, "soaring numbers of heterosexuals have caught AIDS from their infected lovers." The health ministry of that country estimates that already half a million are HIV positive. "If nothing is done," says Dr. Carlos Alberto Morais de Sá, director of AIDS research at Rio de Janeiro's Gaffrée e Guinle University Hospital, "we're going to be faced with a public health calamity."

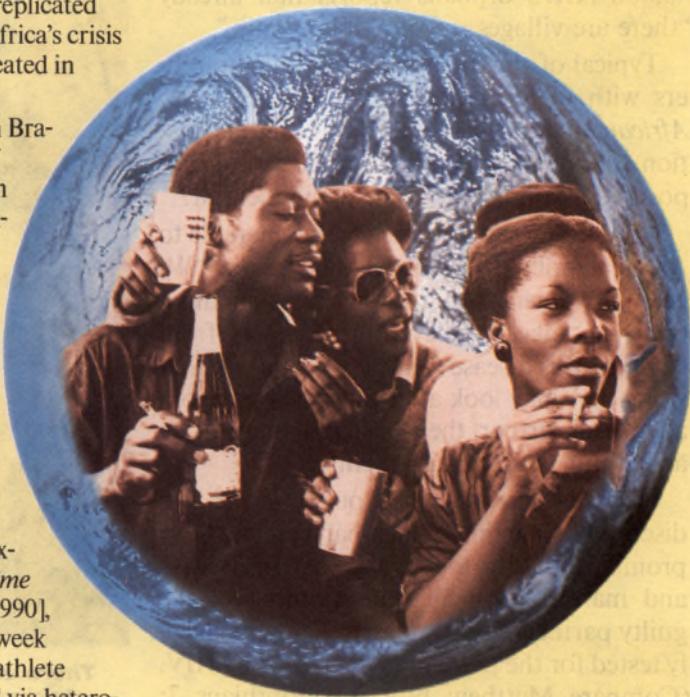
The United States too is threatened. "While the number of heterosexual cases is relatively tiny," reports *Time* magazine, "it jumped 40% last year [1990], faster than any other category." The week after it was revealed that the famous athlete Magic Johnson had contracted AIDS via hetero-

sexual contact, telephone lines to medical services were clogged by panic-stricken people clamoring for more information about the disease.

Asia is also sending out ominous signals of an impending catastrophe. That part of the globe has experienced an increase in HIV positivity from almost nothing in 1988 to more than a million today! "African levels of infection will seem modest in comparison," predicts Dr. Jim McDermott, reporting back after a fact-finding mission to Asia. He adds: "I am convinced Asia is the sleeping giant of a worldwide Aids epidemic."

Trying to pin the blame for the origin and spread of AIDS on any one particular continent or national group is pointless and futile. Dr. June Osborn, dean of the School of Public Health at the University of Michigan, U.S.A., put it bluntly: "It's not who you are but what you do."

Will AIDS continue to wreak its havoc everywhere? Is there a solution, or will AIDS eventually depopulate vast areas of the continent of Africa and other parts of the world?



WHO photo by H. Anenden; background: NASA photo

# AIDS How Will It End?

**I**'M COMPLETELY convinced that we definitely will have a vaccine within this decade."—Jorg Eichberg, head of vaccine research at Wyeth-Ayerst Research Center, Philadelphia, U.S.A.

Imagine if a cure, or even a preventive vaccine, was found for AIDS. How wonderful that would be! For the 9,000 AIDS specialists who gathered in Florence, Italy, last year under the theme "Science Challenging AIDS," the quest for such a cure was no doubt uppermost in their minds.

As 9 out of 10 new infections now take place in the developing world, the pressure to find an effective solution is on. Yet, according to the journal *New Scientist*, many at the Florence conference seemed to have "lost their

**"We do not need to spend billions on research and development . . . We need a return to morality."**

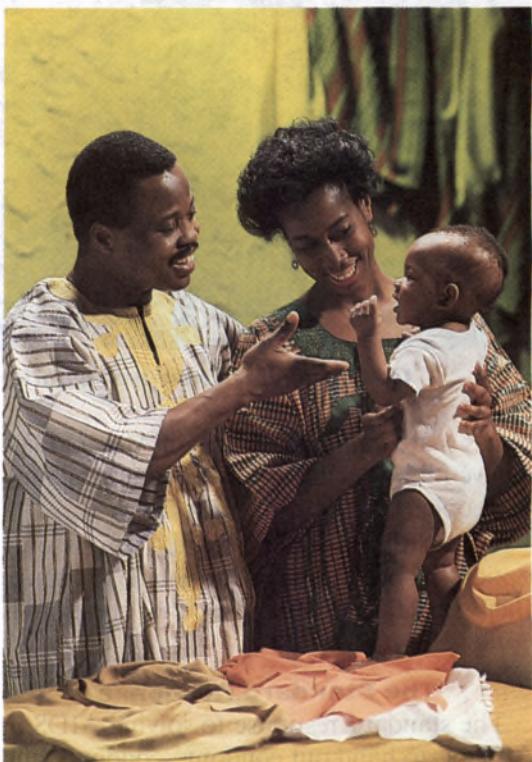
**—Dr. Mark Hendricks,  
South African immunologist**

sense of urgency." "Perhaps," suggests the journal, the disaster is so overwhelming that many "had simply abandoned the problem."

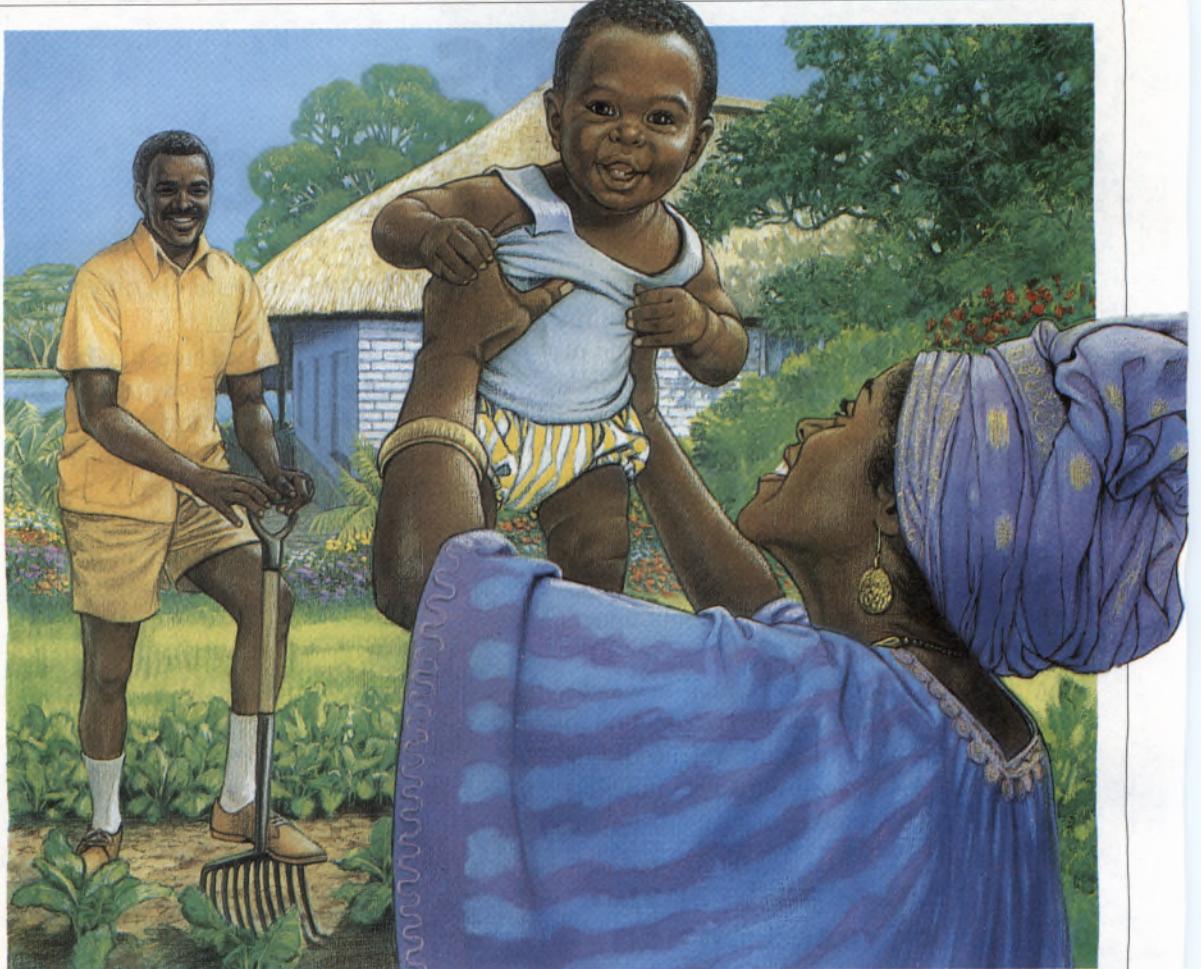
The harsh reality is that scientists are running into more questions than answers. *New Scientist* explains that "10 years into the epidemic, the problems facing virologists and immunologists look almost as great as ever." British AIDS clinician Ian Weller cautioned:

"The Star Wars of antiviral therapy is not around the corner."

But if an anti-AIDS vaccine did become available, how accessible would it be? Dr. Dennis Sifris, a practitioner with first-hand experience of the realities of working in Africa, explains: "We have a highly effective vaccine for TB [tuberculosis] so in theory TB should have been eradicated [as is the case with] measles and Hepatitis B. Yet those three



**Strict monogamy is an important way to avoid the plague of AIDS**



**God promises a new world entirely free from diseases such as AIDS**

diseases are . . . major killers in Africa today. So even if a vaccine is developed accessibility to people is a major problem."

With little hope for a cure, Africa's only option has been to persuade people to change their sexual behavior. But the question is —how?

**The Standard Response**

The standard response to solving AIDS in Africa is to hand out condoms, condoms, and more condoms. Truckers get them free at border posts. Newspapers issue them in en-

velopes. Clinics and health workers stock them in the millions.

While such measures may have some impact on the spread of AIDS, they are not without their problems—especially in Africa. Health worker Stefan van der Borght of Médecins Sans Frontières in Angola explained that if you give out three million condoms, it looks good. But that means that one and a half million men can only make love twice before the supplies run out.

Besides, apart from the logistic complica-

tions, what effect does the indiscriminate distribution of condoms have on promiscuity—the very fountainhead of AIDS in Africa? All indications are that such measures stimulate rather than dampen sexual activity. Even governmental authorities are starting to recognize this fact. One African country has already instructed its State-run media to withdraw condom advertisements, since they encourage promiscuous behavior. Author Keith Edelston takes it one step further in his book *Aids—Countdown to Doomsday*: “In view of the risks . . . inherent in the use of condoms, it is quite clear that *strict monogamy is the only way to be completely safe.*”

But is a return to monogamous morality within the marriage structure a realistic option?

### An End to AIDS

“If people stopped sleeping around tomorrow,” states Professor Reuben Sher, an expert on AIDS in Africa, “the virus would die out. The people who have it would die and that would be it.” Similarly, an editorial in *The Star*, a newspaper published in Johannesburg, South Africa, states that “for somebody who does not sleep around or share needles or have blood transfusions, [HIV] is a very difficult virus to pick up.”

Right now, over 450,000 Witnesses of Jehovah in Africa are avoiding those very things. They firmly believe that morality based on the Bible is worth it. Consider their reasoning: Since the Creator, Jehovah God, made humans, then his code of conduct for human behavior is logically worth taking note of. The principle recorded at Hebrews 13:4 is a good example: “Let marriage be honorable among all, and the marriage bed be without defilement.” Rather than feeling deprived of enjoyment, those who have applied such scriptures have spared themselves much physical and emotional trauma.—Compare

Acts 15:29; 2 Corinthians 7:1; Ephesians 5:3-5.

Interestingly, the media have often commented favorably on the morals of Jehovah’s Witnesses in Africa: “[They] have shown themselves . . . to be decent, orderly citizens living up to a high moral code,” stated the *Daily Telegraph* of London, England. It added: “The promiscuity and polygamy characteristic of African society is simply inconceivable among Witnesses.” Similarly, the author of the book *Contemporary Transformations of Religion*, Bryan Wilson, comments that “in African society, Witnesses . . . become exceptional people” and that “the effect of [their] . . . code of morals is evident among them.”

This is not to say that Jehovah’s Witnesses are totally insulated from the effects of AIDS. Some have become infected by spouses who do not subscribe to the same Christian principles that they do, and others contracted the disease before becoming Witnesses. Also, a few have chosen to lapse back into the loose moral ways of today’s world, and a small number of these have contracted AIDS as part of the fruitage of their ways. (Galatians 6:7) However, those who willfully pursue an immoral life-style have also lost their privilege of remaining in the Christian congregation. (1 Corinthians 5:13; 6:9, 10) But by far the majority of the more than four million Witnesses of Jehovah around the globe enjoy the physical, emotional, and spiritual well-being that results from adhering to the Creator’s principles on morality.

Happily, the Bible indicates that a lasting solution to scourges like AIDS is in sight. (Revelation 21:1-4) Jehovah God promises a new world from which all the immoral causes of diseases such as AIDS will be entirely removed. There will be no such thing as an innocent sufferer, since *everyone* will pursue upright, healthy life-styles that promote true happiness.—Isaiah 11:9; 2 Peter 3:13.

# Should Christians Use Religious Titles?

MUCH is said about a shortage of clergy-men in Christendom today, but there is hardly a shortage of religious titles among them. Some titles are simple; others are pretentious. Here are a few examples:

Clergyman: "Reverend."

Anglican bishop: "Right Reverend the Lord Bishop."

Roman Catholic bishop (in Italy): "His Excellency, the Most Illustrious and Most Reverend Monsignor."

Cardinal: "His Eminence."

The pope: "Most Holy Father."

The titles "reverend" and "bishop" have been in use for such a long time that they do not grate on the ear of most church members. But are such titles authorized by the Bible?

### "Reverend," "Bishop," and "Cardinal"

In the *King James Version*, the term "reverend" appears only once, at Psalm 111:9, which says: "Holy and reverend is his name." Whose name? The next verse says: "The fear of the LORD is the beginning of wisdom." (Psalm 111:10) In one Catholic version, these two passages read: "Holy and awe-

some his name. The root of wisdom is the fear of Yahweh [Jehovah]." (*The New Jerusalem Bible*) Hence, according to God's Word, godly fear, or reverence, belongs exclusively to Jehovah, the Almighty. Is it correct then to give it to humans?

"If a man desire the office of a bishop, he desireth a good work," wrote Paul to Timothy. (1 Timothy 3:1, KJ) However, according to *The New Jerusalem Bible*, the verse reads: "To want to be a presiding elder is to desire a noble task." Early Christians with responsible duties were referred to as "elders" and "overseers." Were those terms used as titles? No. Such men were never called "Bishop Peter" or "Elder James." That is why mature Christian men among Jehovah's Witnesses who serve the congregation as elders never use the term

"elder" as a title. The terms "elder" and "overseer" (bishop) apply to those holding a position of authority and responsibility. The terms also describe the qualifications of the men appointed and the work that they do.

What about the title "cardinal"? Is it found in the Bible? No. It is not in any version. In fact, the Roman Catholic Church admits that this



title is not Biblical. The *New Catholic Encyclopedia* explains: "The word is derived from the Latin word *cardo* meaning 'hinge,' and in the words of Pope Eugene IV, 'as the door of a house turns on its hinges, so on the cardinalate does the Apostolic See, the door of the whole Church, rest and find support.'" This reference work also informs us that "cardinals enjoy the privilege of being directly addressed as 'Eminence.'" Their status also allows them to wear a red gown and a red cap. Did the apostles have those 'privileges'? The Bible answers no.

### **"Lord," "Monsignor," and "Father"**

Should members of the clergy be called lords? Anglican bishops are addressed "lord." Catholic prelates are often addressed "monsignor," which means "my Lord." In some countries, ministers of the Dutch Reformed Church are addressed *dominee*, a title derived from the Latin word *dominus*, meaning "lord." But Jesus instructed his disciples: "You know that in the world, rulers lord it over their subjects, . . . but it shall not be so with you." (Matthew 20:25, 26, *The New English Bible*) Also, the apostle Peter wrote: "Do not lord it over the group which is in your charge, but be an example for the flock." (1 Peter 5:3, *NJB*) On the occasion when Jesus humbly washed the feet of his disciples, he said to them: "You call me Master and Lord, and rightly; so I am." (John 13:13, *NJB*) Is it right for men to use a religious title that belongs to God and to his Son?

Is the religious title "father" correct? It is used widely by Roman Catholics and Anglicans. "Padre," meaning "father," is also widely used. But Jesus taught his disciples: "You must call no one on earth your father, since you have only one Father, and he is in heaven." (Matthew 23:9, *NJB*) *The New English Bible* reads similarly: "Do not call any man on earth 'father.'" Why do clergymen and their

followers disobey this command from the Lord Jesus Christ?

The pope of Rome is usually addressed as "Holy Father." But his Italian staff often address him as *Santissimo Padre*, which means "Most Holy Father." "Holy Father" is a title that appears only once in the Bible. (John 17:11) It is the exclusive title of the Supreme Being. Is it right for creatures, who are earthly and imperfect, to be addressed by that title?

### **Religious Trespassing**

Please read and note the context of Matthew 23:1-12. Jesus begins speaking about the Pharisees, who were a prominent sect of Judaism. They were legalists, sticklers for observance of every detail of the Mosaic Law. They liked to dress and act in such a way as to call attention to themselves. Their religion was one of ostentation—their style of clothing, their principal places at meals, their front seats in the synagogues, and their titles of honor. They even claimed greater respect than that which was given parents. They wanted to be called father. However, Jesus shows that all his followers are equal as God's children. Any title that suggests the opposite is a haughty usurpation of something that belongs to God. Thus, Jesus forbids the use of the word "father" as a title of honor in a religious sense. Jesus insists that his followers have only one Father in the faith, Jehovah.

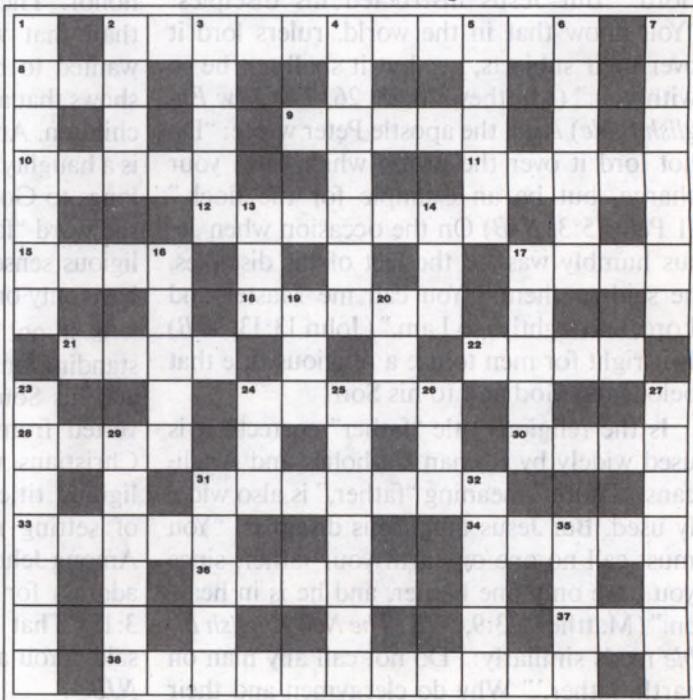
Is it not clear that many clergymen are standing on 'holy ground' reserved for God and his Son, and that much reverence is diverted from them to imperfect men? True Christians today avoid using flattering religious titles, and they avoid the practice of setting men on ecclesiastical pedestals. Among Jehovah's Witnesses the only form of address for ministers is "brother." (2 Peter 3:15) That is in harmony with what Jesus said: "You are all brothers."—Matthew 23:8, *NJB*.

## Crossword Puzzle

### Clues Across

- 2.** Not one of "the twelve" [2 words] (Matthew 10:2-4; Romans 1:1)
  - 8.** Both he and Aaron supported Moses' hands, enabling Joshua to vanquish the Amalekites (Exodus 17:11-13)
  - 9.** Talk (Luke 1:22)
  - 10.** To cleanse with water (Ezekiel 40:38)
  - 11.** Paul passed on this person's greetings to Timothy (2 Timothy 4:21)
  - 12.** Joseph contemplated it when he found out that Mary was pregnant (Matthew 1:18, 19)
  - 15.** Because of the warning of this prophet from Samaria, the captives from Judah were repatriated (2 Chronicles 28:9)
  - 17.** This son of Cosam was an ancestor of Jesus (Luke 3:28)
  - 18.** Where Satan will be captive for 1,000 years (Revelation 20:2, 3)
  - 21.** The first stone in the first row of gems on High Priest Aaron's "breastpiece of judgment" (Exodus 28:15, 17)
  - 22.** Baking chamber (Leviticus 2:4)
  - 24.** Elijah wore one of these "girded about his loins" (2 Kings 1:8)
  - 28.** One of the heads of the people who joined with Nehemiah in sealing a resolution of faithfulness to Jehovah (Nehemiah 10:26)
  - 30.** Jesus accused the Pharisees of cleaning only the outside of this vessel (Luke 11:39)
  - 31.** Thin (Genesis 49:21)
  - 33.** Given to influence another's judgment (Micah 3:11)
  - 34.** A place where John did his baptizing (John 3:23)
  - 36.** Necessary (Habakkuk 3:19)
  - 37.** From just one came all nations on earth (Acts 17:26)
  - 38.** It was first in the Jewish sacred calendar [3 words] (Deuteronomy 16:1)
- 2.** A son of Sheikh Dishan and a descendant of Seir the Horite (Genesis 36:28-30)
  - 3.** Possessed (Genesis 13:5)
  - 4.** Miriam was stricken with it because she spoke against Moses (Numbers 12:10)
  - 5.** Low body joint (Acts 3:7)
  - 6.** Relied upon for support (2 Chronicles 13:18)
  - 7.** Should go only to Jehovah (Luke 4:8)
  - 13.** This Jairite was listed as "a priest of David" (2 Samuel 20:26)
  - 14.** Island off the southwest coast of Asia Minor (Acts 21:1)
  - 16.** An Amorite city conquered by Israel (Numbers 21:30)
  - 17.** Men from this island became skilled rowers for Tyre (Ezekiel 27:8)
  - 19.** One of the insects Samson found in a lion's corpse (Judges 14:8)
  - 20.** "The truth will -- you free" (John 8:32)
  - 23.** Mentioned as a resister of Moses (2 Timothy 3:8)
  - 24.** Month in which Solomon completed the temple (1 Kings 6:38)
  - 25.** The distant past [2 words] (Psalm 93:2)
  - 26.** Observe (Matthew 5:16)
  - 27.** A Levite who made confession to Jehovah in Nehemiah's day (Nehemiah 9:4)
  - 29.** Benjaminite founder of a family (Numbers 26:38)
  - 31.** Number of persons who entered the ark with Noah (2 Peter 2:5)
  - 32.** A "sea monster" (Isaiah 51:9)
  - 35.** Devoid of sensation (Psalm 77:2)

### Crossword Solutions Page 23



### Clues Down

- 1.** Two-wheeled, horse-drawn vehicle (Acts 8:28)

**Young  
People  
Ask...**



# An Alcoholic Parent —How Can I Cope?

**"I hated coming home. I wasn't sure if Mom would be there, and if she was, whether she'd be drunk and start spouting all over the place about what a no-good son I was."**

—Robert.

**"I was so embarrassed to bring people home . . . I was very ashamed of the family."**—Patricia.

**M**ILLIONS of youths endure the daily turmoil of living with an alcoholic parent. Says the book *Teen Troubles*: "Living with an alcoholic parent means living with

stress—stress that comes at you from a dozen directions."

A high proportion of alcoholic parents abuse their children physically or sexually.\* And even when the situation is not so extreme, the book *Options* notes, "if drinking makes [the alcoholic parent] unpredictable, irresponsible, reckless, or moody, it's bad enough."

No wonder, then, that you may feel angry, embarrassed, or frustrated at times. Nevertheless, while living with an alcoholic parent is tough, you can learn to cope.

## **Understanding the Problem**

First of all, it helps to gain some insight into why your parent drinks in the first place.<sup>#</sup> "A man of understanding is the one who acquires skillful direction," says Proverbs 1:5.

An alcoholic is not simply someone who gets drunk once in a while, nor is an alcoholic necessarily a drunkard. Experts define alcoholism as a *chronic* drinking disorder that causes grievous problems affecting life, work, and health. The alcoholic is preoccupied—obsessed—with alcohol and simply cannot control its consumption. Most experts agree that alcoholism can be controlled only by total abstinence from alcohol.<sup>△</sup>

While alcoholism may involve some physiological quirks that may make certain people more prone to alcohol addiction, emotional factors also appear to be involved. For example, chronic self-loathing often lurks beneath an alcoholic's exterior. (Compare Proverbs

\* If you are being abused by an alcoholic parent, you need help. Confide in an adult you trust. Among Jehovah's Witnesses, for example, youths can feel free to approach congregation elders or other mature Christians. Valuable direction on helping abuse victims is found in *Awake!* October 8, 1991.

<sup>#</sup> For simplicity's sake, we will refer herein to the alcoholic as a male. But the principles also apply to female alcoholics.

<sup>△</sup> For more information on alcoholism, see the May 22, 1992, and July 8, 1982, issues of *Awake!* See also the April 15, 1983, issue of *The Watchtower*.

14:13.) "In my experience," says Dr. Abraham Twerski, "I have never come across an alcoholic who had a positive sense of self-worth, feelings of adequacy and self-confidence, *prior to becoming involved with alcohol.*" Indeed, many alcoholics grew up in alcoholic families. Drinking may serve to numb the pain of their childhood emotional scars.

However, drinking simply compounds an alcoholic's problems. According to the book *Under the Influence*, his "actions, thoughts, and emotions are warped by alcohol." The alcoholic thus has much more than a drinking problem; he also has a deep-rooted thinking problem. He may need considerable help, perhaps from a trained professional, to quit drinking. Still, having some understanding of alcoholism, you can at least begin to view your parent with a measure of compassion.

—Proverbs 19:11.

### How You Are Affected

When a parent is an alcoholic, each family member is affected. (Compare 1 Corinthians 12:26.) Your life may be fraught with uncertainty. Is your parent going to come home sober or drunk? Will you be hugged or hit? Yes, alcoholic parents often vacillate between extremes. "They can be loving and responsible when sober, irrationally violent and abusive when drunk," notes Dr. James P. Comer. Such unpredictability can make your life an emotional seesaw. You love your alcoholic parent one moment, you resent him the next. "Some days I just wished he were dead," confessed one young woman.

At times the effects of growing up in an alcoholic household do not become apparent for years. Children of alcoholics often become alcoholics themselves—or marry one. A young Christian woman thus became emotionally involved with a man she describes as "a budding alcoholic." Though she knew some very nice, stable Christian men, she was

not interested in them. Why this attraction to an alcoholic? Speaking for others like her, she says: "These are the only men we've related to and can understand."

A Christian elder was able to help her adjust her thinking in this regard, thus breaking the destructive cycle of alcoholism. Clearly, then, you are not doomed to unhappiness simply because you live in an alcoholic household. It is possible to minimize the potential harm and perhaps even to help your alcoholic parent.

### How to Cope

Dr. Stanton E. Samenow notes: "The environment from which a person comes is less crucial than the choice the individual makes as he responds to that environment." Yes, even if things at home seem out of control, you can take charge of your life. How?

*Do not take responsibility for your parent's drinking.* "My parents told me it was my fault," said 13-year-old Beth. They blamed their drinking on her unruly behavior. "I was very guilty about the whole thing," she admitted. However, your parent—and your parent alone—is responsible for his alcoholism. "Each one will carry his own load," says Galatians 6:5.

You therefore cannot cure your alcoholic parent. Ranting, raving, crying, and arguing with him accomplishes little. On the other hand, you are not obliged to shield him from the consequences of his drinking by lying for him or dragging him off the front porch when he has fallen into a drunken stupor there.

*Encourage him to get help.* Usually this requires the cooperation of your nonalcoholic parent and siblings.\* *Awake!* of December 8, 1982, gave specific suggestions about

\* If the alcoholic parent professes to be a Christian, your family may also want to enlist the assistance of congregation elders.

**Openly discuss  
your feelings with a  
trusted adult**

how family members can (1) help the alcoholic face the consequences of his drinking and (2) confront him directly regarding his drinking. Handling matters in this way may help him see the need to get assistance.

*Leave the scene of trouble.* Says Proverbs 17:14: "Before the quarrel has burst forth, take your leave." Don't put yourself at risk by getting in the middle of a parental quarrel. (Proverbs 26:17) If possible, retire to your room, or go to a friend's house. When the threat of violence exists, outside help may be needed.

*Acknowledge your feelings.* Some youths feel guilty because they sometimes resent their father. But it is only normal to feel this way, especially if his drinking prevents him from rendering you the care and support you need. True, the Bible obligates you to honor your parent. (Ephesians 6:2, 3) But "honor" means to respect his parental authority the way you respect a police officer or judge. It does not mean that you approve of his drinking. (Romans 12:9) Nor are you a bad person because you are repulsed by his drinking; drunkenness *is* repulsive! (See Proverbs 23:29-35.) Perhaps, though, you can learn to focus your hatred on his alcoholism instead of on him personally.—Compare Jude 23.

*Find upbuilding association:* When life at home is chaos, you can lose sight of what is normal. It is therefore important that you enjoy the association of spiritually and emotionally healthy people. The Christian con-



gregation is a source of "brothers and sisters and mothers" who can provide much nurturing and support. (Mark 10:30) They can also provide you an occasional break from family stress. Association with Christian families can further provide you a healthy model of family life, one that can modify the distorted model you observe at home.

*Get help.* Having a mature, trusted adult with whom you can share your feelings really helps. Congregation elders often serve in this role. "No matter how bad you feel," reminds Dr. Timmen Cermak, "remember that you do not have to suffer alone."

No, you may not be able to change the situation at home. But as Dr. Claudia Black wrote: "Family members can change the way in which their lives are affected." Rather than trying to control the alcoholic, focus on the one person you can control—you. Take care of your spiritual needs. (Matthew 5:3; 24:14; Hebrews 10:24, 25) "Keep working out your own salvation," states the Bible at Philippians 2:12. Doing so will help you maintain a positive outlook, and it might even prod your parent to seek help for his problem.



# Our Fascinating Hands

**W**ITH a piercing scream, the young man drops his hammer and grasps his thumb tightly as if to squeeze out the pain. Instead of hitting the nail, he had hit his thumb—again.

At that moment the would-be carpenter likely feels he would be better off without that thumb. But the often “clumsy” thumb is part of a most valuable piece of equipment each of us owns—the human hand.

Because we are so familiar with our hands—the nimble fingers, the flexible joints, the sensitive nerves, and so on—it is easy to take them for granted. But there is hardly any task that we can perform unless we use our hands. “All that your hand finds to do, do with your

very power,” urged wise King Solomon. (Ecclesiastes 9:10) Well did he choose the hand as a symbol of human activities, for it is indeed a precision tool without equal.

### Fascinatingly Made

Our fingers can fly across a typewriter keyboard at perhaps over a hundred words per minute. They can dance over the 88 keys of a grand piano and translate a page of notes into glorious music. But what about the thumb? Well, try this: Spread out your palm, and keep your fingers pointing straight up. Bend each finger, starting with the pinkie. Notice how hard it is to keep the other fingers from moving too? Now bend your thumb, move it up

and down, move it in a circle. You can do it with virtually no movement of the other fingers. This unique independence of the thumb—made possible by the flexible saddle joint at its base and by having its own set of muscles—gives it many special capabilities.

One of these is that our opposable thumb can contact the surface of each of the other fingers, or provide a grip opposite any one of them. An insignificant detail? Try to pick up a coin without using your thumb, or open a jar, or turn a doorknob. Even our carpenter friend needs those “clumsy” thumbs so that he can hold a nail in place or swing his hammer. In fact, to disable captive enemy soldiers, certain ancient nations followed the cruel practice of cutting off their thumbs.—Judges 1:6, 7.

For all the work the fingers can do, they have amazingly few muscles. On the surface, this may seem to be a disadvantage, since more muscles mean more power. However, muscles tend to grow when in constant use. What would happen if our fingers were endowed with powerful muscles? With the amount of work the fingers perform, our hands would soon resemble thick paddles, making delicate work difficult or impossible. How grateful we can be that our Creator wisely placed most of the muscles in the forearms, linking them to the fingers by strong tendons!

### A Perfect-Fitting Glove

The skin over your hand is more than just a covering. Pinch the skin on the back of your hand. You will see that it is loose and movable. It allows the fist to close. Now, what about the palm? The skin there is much less willing to come away from the palm. Just imagine how difficult it would be to keep a steady grip on anything if the skin were shifting back and forth. To reinforce the grip, the palm is cushioned with pads. These fatty de-

posits are especially thick just below the fingers and in the heel of the hand—the common pressure points when we grasp or press against something.

If you closely look at the palm side of your hand, you will note that the skin is not perfectly smooth. Besides the very prominent lines in the palm, the hand is covered with many minute parallel lines and loops called papillary ridges. Like treads on the bottom of your shoes, these ridges provide better traction and improve the grip.

At the tip of the ridges are openings for tiny sweat glands that moisten the palm. No doubt you have seen a workman rub his hands together briskly before tackling a heavy-duty job. This is not just a mannerism. Rubbing generates heat, which stimulates the sweat glands. The moisture provides friction for a better grip. What do you do when you have trouble turning the pages of a book that has very thin paper? Probably the same thing—you rub your fingertips against the thumb to make turning the thin pages easier.

The loops and swirls of the ridges on your fingertips have another use—they form your unique fingerprint. Incredible as it may seem, within that small space of the fingertip lies a pattern of lines that is not duplicated in the more than 50 billion other fingers and thumbs in existence. Even though twins may look identical, their fingerprints tell them apart. Interestingly, as far back as the third century B.C.E., Chinese businessmen identified their customers by means of fingerprints, which proved as reliable as a written signature. In fact, even injuries to the finger will not alter your print. It will grow back unchanged provided the damage is not too deep.

### Thousands of Nerves

Though our hands cannot see, hear, or smell, they are, nonetheless, one of our

principal means of sensing the world around us. What do you do, for instance, when you find yourself in a totally dark room? You stretch out your hands, fingers widespread, and grope around the room. Yes, our hands are not only precision tools but also delicate sensors. They provide us with a continuous flow of information—the stove is hot, the towel is wet, the gown is silky, the cat's fur is soft, and on and on. Our fifth sense, the sense of touch, begins with the hands.

Our fingertips are so sensitive because they have a high concentration of sensory receptors—9,000 of them to the square inch. If you held two pins a quarter inch apart and touched them to your face, they will feel like one pinprick. But touch the same pins to a fingertip, and the densely packed nerves there would instantly tell you that they were feeling two pins. This is what makes it possible for a blind person to read Braille. Who says the hands cannot see?

The only part of the hand that has no nerves are the nails. But that does not mean they are useless. On the contrary, the nails afford the sensitive but fragile fingertips sup-

port and protection. They also come in handy when you need to peel an orange, scrape off a little stain, or pick up a tiny bead. Have you ever wondered how fast the nails grow? That depends on a number of factors. Our nails grow faster in summer than in winter. They grow fastest on the thumb and slowest on the little finger. They grow faster in the dominant hand. And the overall rate is estimated to be about 0.004 inch per day.

### They Tell on Us

Our hands can speak volumes. A warm handshake, a gentle stroke, a clenched fist, a shaking finger—they all tell something about us. In fact, most of us would find it hard to speak without embellishing our words with some sort of emphatic or descriptive gesture. For the deaf, this expressive ability becomes indispensable. Where the spoken word fails, the hand can take over with sign language. American Indians, Hawaiians, and African Bushmen all have their own graceful form of sign language.

More than just tell about us, our hands also tell us something. "In the extent to which they are used to communicate, not only words but emotions and ideas, the hands of man are unique," writes John Napier in his book *Hands*. Even though many animal "hands" look essentially the same as ours, the unique structure and capability of the human hand cannot be explained away by resorting to blind evolution. Rather, its ingenious design clearly demonstrates the wisdom of its Designer, the Designer and Creator of all things, Jehovah God.—Revelation 4:11.

So as our young carpenter, hammer in hand, once again places the nail between his thumb and forefinger, he may have a new-found respect for his precious pair of hands. Truly, we are well equipped to do all that our hand finds to do.



**No two fingers or thumbs among the more than 50 billion in existence have been found with the same print**

**D**O YOU like going to the zoo? There you may chuckle at seeing a mother baboon groom her baby, plucking ticks out of its hair. Or perhaps a visit to an automobile assembly plant is more to your liking. Would you expect to see anything similar there?

Hardly, you may reply. Yet, in modern automobile factories, you may well see mechanical arms picking up and transporting parts and materials for assembly. Indeed, such plants employ the same principles that baboons have been using for ages in grooming one another.

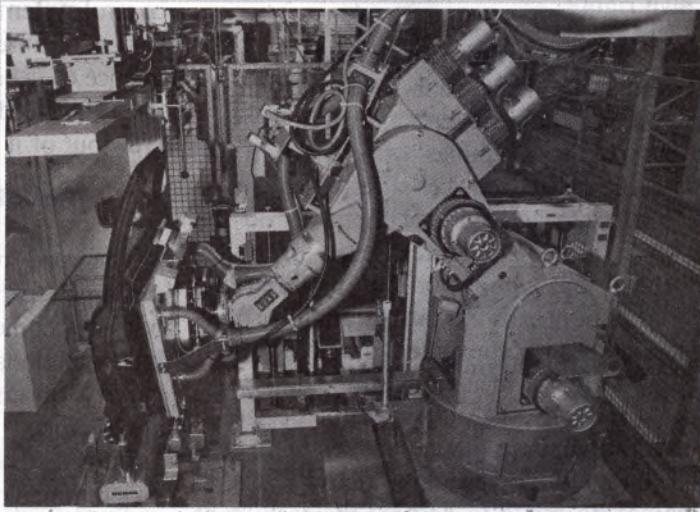
The study of such principles is called cybernetics.

This science may be new, but the word is not. Several thousand years ago, Homer wrote of *ky-ber-ne'tes* when referring to the helmsman of a ship. And Plato later applied the expression to the man at the helm of the ship of state. So, what exactly is cybernetics? *The World Book Encyclopedia* says that it is "a branch of science that deals with control mechanisms and the transmission of information," both in living things and in machines. The means for internal control in an animal—its nervous system—is similar to that within modern machinery. The internal system works by giving commands, feeding back information on progress, and controlling by adjustment as necessary.

Let us examine mother baboon at her grooming. We shall see that she has much in

# Cybernetics

## An Old Idea Comes of Age



BMW Werkfoto Nr. 88090

common with modern machines. First she locates the tick with her eye. Then her brain orders the hand to extract the insect from the fur. The brain constantly monitors progress, carefully making sure her hand grabs the insect and not a bunch of hair. What if the youngster fidgets while this is going on? No problem, for mother's brain is equal to the task, issuing new orders to compensate for his jerking. The baboon thus has a very sophisticated built-in system of command, feedback, and control. Cyberneticians study such automatic control systems in living organisms and in machines. But what sort of machines?

Up-to-date automobile production facilities are largely automatic. They employ not just machines but self-regulating machines, sometimes called robots.

Robots are a practical application of cybernetics in that they employ the same principles

of command, feedback, and control that are present in mother baboon. These principles enable a robot to regulate its own activity and thus be one move ahead of other mechanical devices. But just how did cybernetics reach the robot stage, thus developing as a field in its own right?

### **From Pulleys to Robots**

Throughout history man has been trying to take some of the drudgery and routine out of life by making machines work for him. Of course, the earliest devices still needed a master to operate and control them, to do the thinking. Thus, the wheel, lever, or pulley multiplied muscle power but required the close attention of a human. Gradually, powered machines were invented, driven by water, wind, or steam. But humans still had to be on hand to measure the output of the device, to adjust and to regulate it. So a system was needed to monitor machine activity. Could machines be made to control themselves, at least in part?

Mother baboon's brain not only issues instructions to the hand but also compiles a progress report based on data supplied by her eye. Our diligent primate needs no one to tell her where the next insect is and how to remove it. She has a built-in system of command, feedback, and control that makes her self-regulating. A machine that monitors its own activity must likewise have these elements built into its automatic system.

The industrial revolution that began in the late 18th century provided a stimulus for the development of automatic machines. For example, the steam engine was improved by Watt's invention of a centrifugal governor. By sensing engine speed (feedback) and adjusting a steam inlet valve (control), output of his engine was maintained at a given level (command). The speed of this machine was thus automatically controlled, self-regulating.

But mother baboon can do more than groom her infant; she can feed it and take it for walks as well. Her automatic control system is so adaptable that junior can rely on mom in all situations. Could a machine with such flexibility be designed? It would need a control system that enabled it to accomplish a variety of unrelated tasks. Since the 1950's the science of cybernetics has been attempting to meet this need. One of the developments that grew out of it is the modern robot.

### **Robot—An Outgrowth of Cybernetics**

The word "robot" comes from a Czech term meaning "forced labor." In this century, "robot" has come to mean "a reprogrammable, multifunctional manipulator designed [for] a variety of tasks." Many industrial robots are equipped with computers. They are programmed for a number of jobs and then reprogrammed once the work schedule changes. It has been said that up to 80 percent of a robot can be reused once its computer is fed programs updated for a new assignment.

How does the industrial robot function? Cyberneticians employ the same sort of in-built control system in robots that we observed in mother baboon, with the elements of command, feedback, and control. To begin with, a working routine is fed into the robot's memory. Thereafter, whenever the machine is in operation, command signals from its memory instruct it as to what it should do. A sensing instrument in the machine feeds back a report on progress. Within its memory, a comparison of progress with the original command produces a command to begin the next task. Such machines can push, pull, twist, raise, lower, rotate, or even spray-paint, weld, load, stack, and transport.

Automobile manufacturing is one industry, among many, that uses cybernetics and utilizes

es the robot. This has removed workers from a hostile environment caused by heat, fumes, or noise. One mechanic at an automobile plant reminisced about conditions 30 years ago, saying: "I had to mount gearboxes and ruined my back doing it. That [work] is done by a roby now."

### Supreme Cybernetician

Yet, progress in the field of cybernetics should not blind us to the fact that even the most sophisticated computer-directed robot can do only what it is programmed to do. Both machine and program are of human design. What can we conclude, then, about man's own nervous system? It is clearly of far, far superior quality.

Norbert Wiener, a pioneer in cybernetics, noted: "No other computing machine approaches the economy of energy of the brain. . . . [Man has] the best developed nervous system" of any living thing on earth. Clearly, man offers a superb example of what a system of command, feedback, and control can do. "Transmission of information within the nervous system is more complex than the largest telephone exchanges," reports *The New Encyclopaedia Britannica*, adding: "Problem solving by a human brain exceeds by far the capacity of the most powerful computers."

All credit, then, goes to man's Designer, Jehovah God, who must rank as the most brilliant cybernetician ever. "In a fear-inspiring way I am wonderfully made," wrote David at Psalm 139:14. Each healthy human is equipped at birth with a nervous system enabling him to be master of his own activity. Certain talents are quickly developed. Picking things up and transporting them are literally child's play. Other skills, such as riding a bicycle or playing a piano, require practice.

The human control system is enormously flexible. It can even be used to give moral

guidance. At Ephesians 6:4 the Bible encourages parents to feed upright moral values into their child's brain, the process being called "mental-regulating." A plentiful store of moral guidelines can direct the child in decision making and help him monitor his own activity.

The word *ky·ber'nesis* is found at 1 Corinthians 12:28. There the term denotes "abilities to direct," or as *Vine's Expository Dictionary of Old and New Testament Words* puts it, it is said of "those who act as guides" within the congregation. Even the Christian congregation can act as a cybernetic system, with theocratic goals and standards. Each individual member has the opportunity to monitor his own activity based on values laid down in the Bible.

So cybernetics is really as old as creation. Of course, mother baboon does not know that, nor does she care. But as intelligent creatures of God, let us appreciate the wonderful gift of our inbuilt control system. By using it properly, we can use our gifts to the glory of the Supreme Cybernetician, Jehovah God.

### CROSSWORD SOLUTIONS

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# The Cuddly Cuscus

By Awake! correspondent in  
Papua New Guinea



**S**URPRISED at being the object of attention, the cuddly little creature gazed back at us in all innocence with its enormous liquid eyes. Its round face was dominated by a prominent snout, and its ears were almost hidden in the fur. This curious ball of yellow-white fur with a long hairless tail was a cuscus.

As we pressed forward to get a better look, it retreated higher through the trees, grasping branches with all four feet and occasionally with its tail, to sulk in lofty isolation.

## Koala's Cousin

The cuscus is one of those unusual animals found only on the island of New Guinea, in northern Australia, and on the islands nearby. Though it is not as well-known as its famous cousin the koala, there are many similarities.

Like the koala, the cuscus is a marsupial, which means that after giving birth, it carries and nurses its young—in litters of two to four—in a pouch. The cuscus is also a shy and slow-moving tree dweller. Its daily routine consists of sleep, sleep, and more sleep. Wedged in a fork high up a tree, the pink tail dangling down like an inverted question mark, it passes the day oblivious to the hustle and bustle below. Being nocturnal, it becomes more active at night.

In its natural habitat, the cuscus subsists mainly on tree leaves, buds, and soft-skinned fruits, in addition to small birds and insects. Its scientific name, *Phalanger*, means "Fingery one." We saw one cus-



cus squatting on its ample rump fastidiously peeling a banana and licking it much as we enjoy an ice-cream cone.

### An Appealing Pet

Perhaps because of its docile nature, the cuscus is quite popular as a pet. And its appeal is undeniable. First of all, it is colorful. The fur itself may be anywhere from buff white, russet red, or different shades of gray to almost totally black. Some are spotted, while others have a dark stripe down the back. Its woolly, rounded features, its constant and curious stare, its slow and deliberate movements—all make the cuscus an appealing pet.

If you keep in mind its talonlike claws, you can even cuddle the cuscus like a cat. A cuscus may grow to about two feet long not counting the tail, which is another foot or so in length. The end part of the tail is hairless and is covered with rough scales, making it look and feel like fine sandpaper—a plus for grasping.

One specimen amused us by demonstrating how to eat an ear of corn. Holding the ear in both paws, it chewed along one row of kernels and before proceeding to the next row sniffed carefully along the one just completed to make sure no kernel was missed. When it was all done, it licked its paws clean and stretched out on the tree limb, plump and satisfied.

The cuscus has few enemies other than man. The natives capture the animal for meat and use its beautiful fur for capes and caps. Today, man's encroachment on the cuscus' natural habitat, the rain forest, through land development, mining, tourism, and so on, is dealing a devastating blow to its survival. Here is another instance of man's ruining what God has entrusted to his care.

—Genesis 1:26; Revelation 11:18.

# Lapis Lazuli

## The Blue Gem of the Andes

By Awake! correspondent in Chile

**D**IAMONDS, emeralds, rubies, sapphires—these spectacular gems are well-known to all of us. But have you ever heard of lapis lazuli? Though the name may seem strange, it simply means a blue (lazuli, from Arabic) stone (lapis, from Latin). Because of the intense, deep-blue color, often speckled with shiny spots of golden pyrite, it has been likened to the night sky studded with twinkling stars.

### A Long History

The beauty of lapis lazuli was first reported to the Western world by Marco Polo in 1271. But the gem had been in use in ancient Mesopotamia and Egypt long before that. For example, a Sumerian necklace made of this stone was unearthed among the ruins of Ur. On Pharaoh Tutankhamen's golden death mask, the eyes and eyebrows are made of lapis lazuli. The ancient Egyptians also ground this blue stone into powder and used it as pigment in paintings and eye shadow. In China royal seals and carvings of many kinds were made of this stone.



In the past, lapis lazuli was mined mainly in Afghanistan and in Siberia near Lake Baikal. In recent years, however, Chile has become the principal supplier of this beautiful stone. If you should visit Chile, you will see the name in many souvenir shops and elegant jewelry stores. But why not take a trip to see where most of the supply of this stone comes from?

### To a Mine in the Andes

One of the principal mines can only be reached by mules following a narrow and treacherous trail that winds its way up to the arid and desolate retreat of the condors, 11,800 feet above sea level.

At this elevation, headache and dizziness may plague a newcomer. The ground is covered with snow about seven months out of the year. Thus, during the short summer, the pressure is on to get out of the open-pit mine the greatest amount of raw material possible. The workday is long, and the working conditions harsh. The equipment, by today's standards, is primitive—picks, shovels, wheelbarrows, and a drill for placing dynamite. The

backbreaking work requires physical strength and endurance.

As the day ends, the sound of explosions and the clangs of picks and shovels die. The silence of the night is immense. One hears only the howling of the wind in the canyon and the rumble of falling rocks in the distance. But it makes little difference to the exhausted workers. They fall asleep quickly under the starry skies.

With no modern transportation available, muleteers play an important role. With their knowledge of these rugged mountains and winding paths, they guide their surefooted animals, loaded with sacks of selected stones, to the valley below. From there the stones are shipped to Santiago or they are exported. In this way about 20 tons a year are mined and made available to artisans and jewelers around the world.

### A Visit With an Artisan

Artisans in Chile turn from 30 to 40 percent of the stones they receive from the mines into beautiful earrings, necklaces, bracelets, and rings. The highest quality stones are set in gold and are exported. Second highest quality pieces are used for jewelry set in silver, and lower quality stones are turned into imaginative figurines, such as elephants, lions, or turtles, into handles for letter openers, and even into small tabletops.

Don José is a talented artisan. Even though we interrupted his siesta when we dropped in on him, he gave us a warm welcome and showed us his *taller* (workshop) on the patio.

"How about a demonstration, Don José?" we asked.

"Perfecto!"

First a large stone weighing five or six pounds must be cut with a circular diamond wheel or saw. He explained that *el artesano* must know his stone and have a good eye in

order to make a precise cut to eliminate the white veins while preserving the maximum amount of good quality stone.

"Why do you wet the stone?" someone asked.

"To provide a greater contrast between the white veins and the lapis I want to preserve," responded our amicable *artesano* as he cut the stone into a number of smaller pieces.

He then showed us the next step. With a smaller circular wheel, he shaped the smaller stones to the forms he wanted. With expert dexterity he rapidly formed the pieces into beads, half moons for earrings, and cabochons (rounded, or convex pieces).

Next, he cleaned and polished the pieces with a circular, synthetic brush. Then, with a dab of paste, he burnished them to a high luster. Now they are ready to be set in a ring or arranged on a chain for a necklace. The final touch is a shampoo and warm-water rinse with the use of a toothbrush. In fact, Don José recommended this last process for maintaining the beauty of lapis lazuli jewelry.

Yes, in the hands of skillful and talented artisans like Don José, the riches of the earth can be turned into works of art that bring pleasure and joy to those who see or use them. Lapis lazuli, the beautiful blue rock found high up in the Andes Mountains, is but one of many such riches provided by our loving Creator for our enjoyment and delight.

### In Our Next Issue

#### Chronic Fatigue Syndrome —How to Deal With It

#### The Aral Sea Tragedy

#### I Kept My Promise

## Watching the World

### The Clergy and Sexual Abuse

Australian National Television recently broadcast a documentary entitled "The Ultimate Betrayal." The program claimed that 15 percent of clergymen in Australia had committed sexual offenses, ranging from the molestation of children to the rape of women parishioners. Within hours of the television program, various centers set up to handle complaints of sexual assault were inundated with telephone calls from alleged victims. Many callers said they had kept their experience secret for many years. One woman said that she was speaking about her ordeal as a child for the first time in 40 years! Another said that after her clergyman had sexually abused her as a child, he threatened her with hellfire punishment if she dared to tell anyone. Spokesmen for various church groups disagreed with the 15-percent figure but did admit that the sexual misconduct of clergymen was a serious problem.

### Children Prefer TV

Most children feel that reading books is too strenuous. That was the finding of a study that the German magazine *Eltern* conducted among 1,960 school students from 8 to 15 years of age. The majority preferred watching television. Reporting on the study, the newspaper *Schweinfurter Tagblatt* stated that 64 percent favored TV viewing and that the one thing children like to read most is the guide to television programs. One 14-year-old theorized that TV viewing must be a natural inborn ability of humans while reading is a troublesome process that has to be learned.

### Fewer Varieties of Farm Animals

Many species of domestic farm animals are in danger of extinction, says the Paris newspaper *Le Figaro*. Since the beginning of the century, half of Europe's species of farm animals have become extinct, and a third of those that remain may soon disappear. A basic trend in modern agriculture has been to concentrate on breeding only those strains of livestock that



bring the highest yields and thus the greatest profits. The same trend is prevalent in developing countries. Consequently, as more and more varieties of cattle, swine, and fowl are allowed to die out, the world's food supply becomes increasingly dependent on fewer and fewer species of animals. Scientists now fear that this loss of genetic diversity greatly increases the danger that one new disease could wipe out much of the earth's livestock.

### The Song of a Dead Bird

The song of the huia, a New Zealand bird, has recently been artificially reproduced with the use of a computer and a synthesizer. Considering the fact that the huia became extinct in 1907, this is surprising. According to *The Times* of London, David Hindley located recordings of Henare Hemana, a Maori huia impersonator. In 1954 when the songs were recorded, He-

mana was 80 years old, but he could whistle "an impressive range of huia calls" from memory. Later Hemana's version was confirmed when other recorded imitations of the bird's song were found. With these recordings, and the information gleaned from books, Hindley may have composed a song performed by a huia bird for the last time 85 years ago.

### Rape in South Africa

"South Africa is one of the most violent places on earth," noted the *Sunday Star Review* of Johannesburg, South Africa. One violent crime that is receiving international attention is rape. In South Africa an average of 23,000 rapes are reported yearly. However, it is estimated that "only one in 36 rapes are reported." A large percentage of the rapes are perpetrated by men who know their victims, such as husbands, male relatives, or friends. The *Sunday Star Review* noted that "according to a study on violence by Lloyd Vogelman of the University of the Witwatersrand, one in two South African women will be raped in her lifetime."

### Credit-Card Fraud

The Canadian Bankers' Association (CBA) reports that credit-card fraud in that country has more than doubled in the past two years, and it continues to accelerate. Paul Faccioli, chairman of the CBA's credit-card subcommittee noted that the 'majority of the losses are on lost and stolen cards.' According to *The Globe and Mail*, "stolen, counterfeit and altered credit cards last year cost the two biggest companies, Visa and Mastercard, more than \$46-million —about 14 times the \$3.3-million stolen in all bank robberies."

## Dangerous Buckets

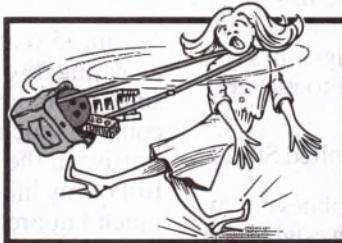
"On average, about one infant every other week drowns after toppling into a large bucket containing water or some other liquid," says Don Barkas of the Santa Barbara City Fire Department in California, U.S.A. An article published by *The California Fire Service* specifically mentioned five-gallon buckets, which are used in many homes for miscellaneous household chores. Apparently, an unattended toddler could pull himself up to the rim of the bucket, reach into it to play, and topple into it. The rigid five-gallon container filled, or even partially filled with liquid is heavier than the average 8-to-12-month-old infant. The article states that over the past seven years, more than 200 small children have drowned in the United States after falling into liquid-filled buckets.

## More People

The United Nations Population Fund recently released their latest estimates for worldwide population growth. According to *The New York Times*, the "new projections show the world adding 97 million new people every year until the end of the century and 90 million a year thereafter until 2025." Ninety-seven percent of this population growth is expected to take place in developing countries. Such population increase poses a serious threat to the quality of human life. "The report warned that such rates of growth mean greater numbers of poor and hungry people, increased migration toward cities and richer countries and increased pressure on the world's reserves of food, water and other natural resources," noted the *Times*. The present world population of 5.5 billion is expected to rise to about 10 billion in the year 2050.

## Injured by Fashion

"There's a long history of fashion being injurious," observed costume historian Barbara Schreier. What did she mean? According to *In Health* magazine, a National Safety Council report revealed that in just one year in the United States, "102,397 people were injured by their clothing and 43,868



were shackled, slashed, or impaled by their jewelry." Carrying heavy handbags has resulted in injury to shoulder and neck muscles. Of course, the above figures reflect only the cases in which people sought medical assistance.

## Slavery Today

The issue of slavery is thought to have been resolved back in the 19th century. Nonetheless, a recent investigation carried out by *Newsweek* magazine "suggests that cases of involuntary servitude reach well into the millions." The British organization Anti-Slavery International alleges that more than 100 million people suffer as slaves throughout the world. People are being held as property and induced into forced labor in places such as the Caribbean, the Middle East, Africa, and Asia. "Many are routinely beaten to enforce obedience," notes *Newsweek*. Some workers are allegedly branded with red-hot irons. In some areas there are men who make a living as slave-traders specializing in the abduction and sale of young women.

In one country the "going rate" for a girl is six cows.

## AIDS in Brazil

Dr. Luís Alberto Pelegriño Ferreira, a Brazilian virologist, recently noted that in the state of Santa Catarina, 42 percent of those sick with AIDS are between the ages of 20 and 29. He stated that the high percentage of AIDS among young adults "leads us to believe that these persons were infected between 15 and 19 years of age." Evidently, promiscuous sexual activity at an early age has contributed to this sad situation. However, it is widely acknowledged that the transmission of HIV is also possible through blood transfusions. The newspaper *O Estado de S. Paulo* reports that six hemophiliacs, members of the same family, all were infected with HIV through contaminated blood transfusions.

## A Belligerent World

The term "New World Order" has recently been used extensively to describe the changed political climate in the world. The term often has a positive connotation, associating this new set of circumstances with the possibility of world peace. However, under the heading "The New World Order," the magazine *Asiaweek* recently listed the names of over 100 nations, painting a more realistic picture of world conditions. The nations were listed in order of army size. At the top of the list was China, with an army of 2,300,000. India and North Korea followed, each with about 1,000,000 soldiers. Some 30 countries boast armies in the six figures. At the bottom of the list was Burkina Faso with an army of 7,000. The grand total of all the armies listed by *Asiaweek* adds up to over 15,000,000 soldiers!

## From Our Readers

**Fighting Illness** I would like to express my appreciation for Hans Augustin's experience in the article "My Fight to Live." (April 22, 1992) I suffer from poor health, but never have I had problems as great as his. I'm reminded of the tale of a man who thought he was bad off because he had no shoes—until he saw a man who had no feet! At any rate, the story of Hans Augustin's ordeal was very faith strengthening to me, and my prayers are with him.

A. M. M., United States

I have suffered headaches, numbness in my right hand and foot, weakening eyesight, and continuous giddiness. I had a CT scan, but it revealed nothing amiss. I became depressed because I could no longer do much in God's service. I also felt despair when I thought about my future. However, Hans Augustin encouraged readers to focus on spiritual values, and I want to imitate his positive viewpoint. I am scheduled for further tests, but however the tests turn out, I have been helped to look ahead and fight the sickness.

K. T., Japan

**World Commerce** A note of appreciation for the series "The Rise and Fall of World Commerce." (January 8–March 22, 1992) I expected them to be hard to read, but I found them to be so well-written, I had no problem grasping them. I thoroughly enjoyed the series.

D. H., United States

**Eating Disorders** I'd like to thank you so very much for printing the article "Helping Those With Eating Disorders." (February 22, 1992) It helped me finally to admit that I suffer from an eating disorder. For the first time, I understand that my problem has nothing to do with food but with other issues, such as my family life. My disorder has complicated so many aspects of my life, in-

cluding my career in the ministry. Since reading the article, I have started to do much research, and I realize that I have a long, tough road of recovery ahead of me. But to know that Jehovah is patient and loving is of great help to me.

J. S., United States

I am 15 years old and have suffered from an eating disorder for a few years now. Ever since my mom read the article, she has become so much more understanding and supportive in the right way. I really feel in control of my life now, and I have to say how much I appreciate your articles. They are always just what I need.

M. G., United States

**Virginity** Thank you for the article "Young People Ask . . . Why Stay a Virgin?" (April 22, 1992) I cried when I read the words of a 14-year-old girl who lost her virginity through fornication. The fact is, I did too. Crying all the tears in the world would never be enough to show how deeply sorry I am as a Christian for failing to keep my virginity. When my father found out, it was the first time I ever saw him cry. Somehow, even though God kindly forgives, from time to time the memories come flooding back, and tears start falling again. How wonderful it is to keep one's virginity rather than to reap the bad results from being someone's plaything.

I. M., Japan

A girl in school propositioned me several times to have sex with her, but I refused her every time. As a result, she accused me of being a homosexual. Your article has strengthened my conviction that my virginity is a good thing. Because of it, I stand a better chance of succeeding in marriage than someone who is sexually permissive.

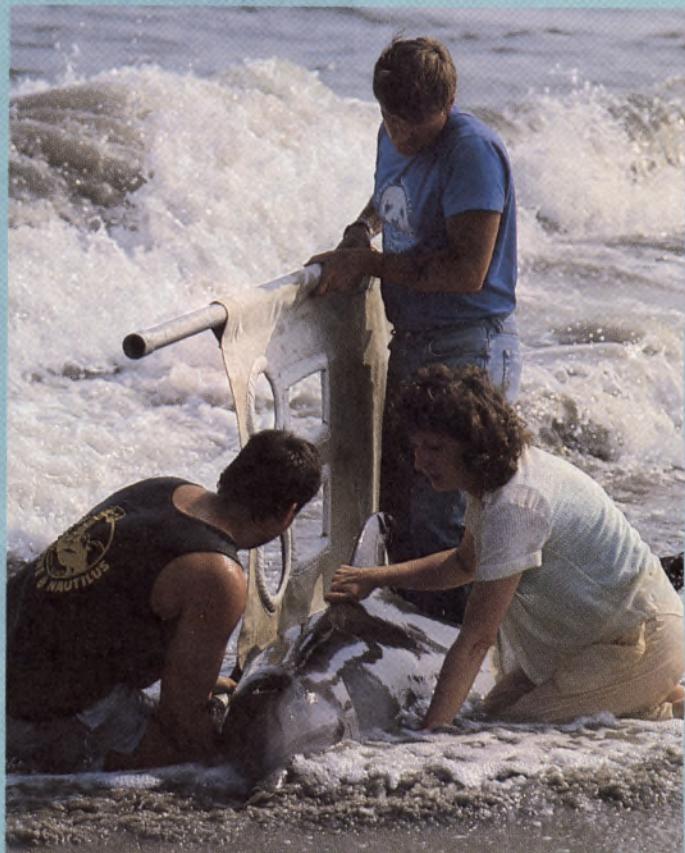
D. L., United States

## Oceans of Trouble

**I**N AN average year, mankind dumps some 34 million gallons of oil into the oceans of the world. That figure, staggering as it is, does not even include the occasional gigantic spills, such as the 1989 *Exxon Valdez* debacle off the coast of Alaska, U.S.A., or the disaster in the Persian Gulf last year, which saw some 42 million gallons of oil a day flooding into the sea!

But man dumps much more than oil into the oceans. In the North Sea off the coast of Germany, industrial chemicals are reaching levels that experts describe as toxic. As far as 120 miles offshore, a lethal component of paint used to protect the hulls of ships is contaminating what oceanographers call the microlayer. This crucial surface layer of the ocean is a nursery for rafts of fish eggs, as well as a home to the microscopic organisms that are the main source of food for many ocean creatures.

South of Europe, scientists have found that the microlayer of the Mediterranean Sea is likewise laden with chemical pollutants, oil, and sewage. Sea mammals, such as whales, are especially hurt by a befouled microlayer, since they must surface regularly to breathe. Thus, some 6,000 sea mammals die in the Mediterranean every year, mostly from pollution. During one period, hundreds of dolphins washed ashore on Mediterranean beaches—up to 50 each week along the French coast alone. A virus had attacked the sleek, graceful creatures. Pollution may well be assisting the disease by lowering the dolphins' resistance. Omnipotently, oceanographer Jean-Michel Cousteau wrote: "If dolphins can die from pollution, so can we."



Mike Bayoff/Black Star

Such a prediction may sound dire. But the fact is, pollution already endangers mankind in myriads of ways. For instance, rescue workers off the coast of Newfoundland have found that pollution hindered their efforts to find survivors of a plane crash. This time the culprit was plastic garbage. It so dotted the ocean that rescue teams couldn't tell if they were sighting pieces of wreckage or pieces of junk. They never found any survivors.

A sad story, isn't it? But just think: If the pollution crisis weighs heavily upon the human heart, how must it feel to the One who created "the seas and all that is in them"? (Nehemiah 9:6) Surely, the time must be fast approaching when he will "bring to ruin those ruining the earth." —Revelation 11:18.

# Teachers Want Them

A 17-year-old student in the Netherlands writes: "My school friend asked many questions about the differences in religions. I used the opportunity to give her the book *Mankind's Search for God*. When our class was assigned to write an essay on a subject of our choice, my friend chose the subject of religion so that she could use her newly acquired book.

"Since we had to present our sources of information, the book came into the hands of our teacher. Later he asked where 'that very interesting book' came from. My friend explained that the book came from me.

"Right away my teacher asked me to provide him with four copies for himself and his friends. The next day I handed the books to him, and right away he showed them to other teachers. A short time later, he told me: 'I have the approval of the school administration to obtain 35 of these books.'"

Many today are recognizing the value of examining religion. Most people know only the religion of their parents and that often only superficially. But should your religion be simply the one you were born into? By comparing your religion with that of others, you will be better equipped to make an intelligent choice.

