

120 countries around the world, IASP brings together scientists, clinicians, health care providers and policymakers to support the study of pain and translate that knowledge into improved pain relief worldwide.

1. What does the speaker say about pain?
2. Why does the problem of pain continue to get worse?
3. Who don't contribute to the study of pain?
4. What does the speaker say is the most nervous experience?

Part III Test yourself

Questions 1 to 3 will be based on the following lecture.

A miscarriage is the natural loss of a baby before the 20th week of pregnancy. Experts say many pregnancies end before a woman even knows she was pregnant. Up to 20 percent of known pregnancies end in a miscarriage.

Miscarriages are generally caused by genetic problems with the baby that prevent it from developing. But whatever the cause, the loss of a pregnancy can be heartbreaking. And sometimes the advice that women receive after a miscarriage can also be heartbreaking.

Some women are told to wait before they try to get pregnant again. A 2005 report from the World Health Organization advised waiting at least six months. Some doctors advise women to wait even longer.

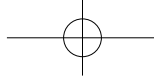
But a Scottish study published in 2010 found no need to delay. Researchers from the University of Aberdeen examined the medical records of 30,000 women. The women visited Scottish hospitals between 1981 and 2000. They had miscarriages in their first known pregnancies and became pregnant again.

The study found that 85 percent of women who waited less than six months to get pregnant had live births, compared to 73 percent of women who waited more than two years.

Those who quickly became pregnant again were less likely to have a dangerous pregnancy form in their fallopian tubes. They were less likely to lose their fetus after 20 weeks, known as a stillbirth. They were also less likely to give birth by caesarean section. And they had fewer preterm births and fewer babies with low birth weight.

The study found that about 40 percent of women became pregnant again within six months. 25 percent got pregnant within six to 12 months.

The women who quickly became pregnant again after a miscarriage were more likely to



be older. Older women might be less likely to delay because they know there are more risks with pregnancy the older they get.

The 2010 report appeared in the BMJ, the *British Medical Journal*. The researchers pointed out that their results were limited to Scottish records and could not be generalized to all women.

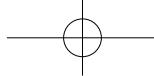
1. What caused the miscarriages?
2. What is not the reason that those who quickly become pregnant again were less likely to have a dangerous pregnancy?
3. Why could not the results be generalized to all women?

Questions 4 to 6 will be based on the following lecture.

For the elderly in society, we have attempted to develop unobtrusive monitors that attach to furniture and sanitation devices. The premise of unobtrusive monitoring is that sensors are not attached to the human body directly, but monitor human physiological parameters indirectly, typically heart and respiratory rates and pulse. We can also measure parameters of body movement and daily activities.

Unobtrusive monitoring has many advantages: No sensors are attached to the body; the subjects feel comfortable and their daily life is not disturbed, even if they are aware of the monitors. In addition, this concept is beneficial for the elderly who are, generally, not familiar with information technology. Since our initial developments, many experimental models have been produced. Some products have reached the market, but very few have become popular. Although people are more aware of their health and the importance of a healthy lifestyle, few try to monitor their physiological parameters. However, once someone becomes ill, such as following a stroke or on developing diabetes, they are willing to monitor their physiological parameters even if the home medical appliances required are complicated.

Chronic disease management is directly correlated with an improved quality of life. Monitoring vital signs related to health can significantly enhance caregivers' ability to maintain and improve the health and wellness of postoperative patients and the elderly. A study of congestive heart failure (CHF) patients showed that patients managing their CHF via telehealth technology decreased their overall utilization of health care resources by 41%: physician office visits decreased by 43%; emergency department visits by 33%; and hospitalizations by 29%. Vital sign monitoring improves one's knowledge of an individual's current health. Unobtrusive



monitoring is one way to popularize health monitoring.

Among the elderly society, the concept of unobtrusive monitoring is very important, although current devices are not very accurate. The advantages of unobtrusive monitoring are that the devices are easy to handle (in fact, no handling is required), daily habits and health conditions are monitored, and patient motivation is not important (the daily activities are monitored regardless of motivation). The issues are privacy, reliability efficiency and security. To use these devices, patient permission is required. The greatest disadvantage is that it was very difficult to get strong evidence of a problem.

Aging in place is now an accepted concept in elderly care. The elderly living in the community—either alone or with a spouse—needs good care and support. Unobtrusive physiological monitoring has great potential for the remote monitoring of activities, as well as cardiovascular and respiratory functions. Evidence-based health is a difficult issue, and we need to continue to collect data in new ways. Furthermore, physicians and medical staff are not greatly interested in “health” as health insurance only covers the treatment of disease. Consequently, if subjects are healthy, medical and care insurance are not applicable.

4. Why do the elders wish to use the unobtrusive monitors?
5. What is one of the advantages of using unobtrusive monitors?
6. Why do doctors take no interest in health?

Questions 7 to 9 will be based on the following lecture.

Today we answer a question. Vu Quang Hien from Vietnam wants to know more about Hepatitis B. Hepatitis is the name for a group of viral infections that attack the liver. These are called A, B, C and so on.

An estimated two billion people are infected with Hepatitis B. The rates are highest in China and other parts of Asia. The World Health Organization says most of these infections happen during childhood.

Hepatitis B is spread through contact with infected blood or other body fluids. Mothers can infect babies at birth. Unsafe injections and sexual contact can also spread the virus. Experts say it can survive outside the body for at least a week.

There are two forms of Hepatitis B—acute and chronic. Acute cases last for several weeks, although recovery can take months. Chronic cases can lead to death from cirrhosis or scarring of the liver and liver cancer.