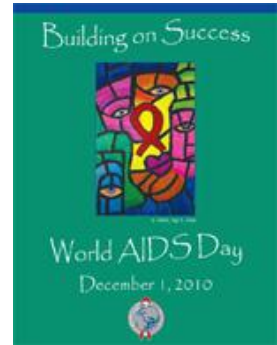




HIV / AIDS: What the Future Holds

When the first cases of what would later be known as AIDS (Acquired Immune Deficiency Syndrome) occurred, it was described as an acute illness with a horrible prognosis. Most people died within six months or less. No one knew how to prevent it, to keep it from spreading, to treat it, or even what caused it.

We have come a long way since then. We know now that HIV (Human Immune Deficiency Virus) is the cause of AIDS. Designer drugs have been developed that attack HIV at multiple stages of its life cycle. These drugs are so effective that they can eliminate nearly all of the circulating HIV in the body. They restore the function of the immune system so that people who are infected with HIV now have an almost normal life expectancy.



By treating HIV infected pregnant women, the risk that their babies will become infected has been reduced from 25% to less than 2%. Health care workers and others who are accidentally exposed to HIV can take those same medications and avoid infection. Some clinics are now offering the HIV negative sexual partners of those who are infected the opportunity to receive preventive treatment, so that if they are accidentally exposed, they will not get infected. This combination of pre-exposure prophylaxis (treatment), post-exposure prophylaxis, and aggressive treatment has transformed a death sentence into a chronic, manageable disease in just 30 years.

In fact one study released in August demonstrated that people who are tested for HIV and diagnosed early, and who are compliant with their medications reduce the risk of HIV transmission to their partners by up to 97%. The study compared people who started treatment right away after diagnosis to those who waited to start treatment until their immune system began to show signs of damage. Of 29 partners who became infected, 28 were among those who waited! The study was stopped early because of that dramatic difference. The Journal Science named this study as the "Number One Breakthrough" of 2011.

Other scientists continue to work to develop an effective HIV vaccine. That goal has not yet been reached, but progress is being made. The hope is that one day HIV will be like smallpox – an extinct disease.

There was a time in the early 1990's that AIDS related conditions were among the top five causes of death. Thanks to early identification through screening tests and better treatment, that is no longer the case. We are already seeing drops in the numbers of new infections and in the numbers of people dying. HIV and AIDS haven't gone away. Perhaps, with more good science, HIV and AIDS will become a thing of the past. Can you imagine a world without AIDS?

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