The Role of Medical Devices to Improve Health Service Delivery

Track 1: Millennium Development Goals 4, 5 and 6

Topic: Self Care

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Nowadays, there are plenty of devices to be used mainly for the purpose of prevention, diagnosis, monitoring or treatment of disease, control of conception, rehabilitation, or measuring, restoring or correcting physiological functions; and many of them are for self use.

Based on the “Call for innovative technologies that address global health concerns” presented at WHO Medical Device Homepage: 15% of the submissions are intended for self-use.

There are wide varieties of self care and home health care medical devices, ranging from complicated devices like voiding equipment, feeding equipment, infant care devices, tele-health equipment, respiratory equipment; to simple items like medical administration sets, test kits, first aid equipment, glasses, prosthesis, wheelchair, etc. Many new devises are introduced almost everyday.

The most common self care devices are thermometers, syringes, bandages, urine sugar strips, pregnancy test kits, and **condoms**.
Some Examples of Medical Devices for Self Care, particularly for MCH

• Digital BP monitors, urine sugar strips, blood glucose monitoring devices are very useful devices for self care. They can be useful in the management of pregnancies complicated by hypertension and diabetes in pregnancy.

• Pregnancy test kits are useful for pregnant women to avoid teratogenic drugs during the first trimester.
Condoms as a Medical Device

The roles of condoms:

- Prevention of diseases: HIV and STIs;
- Control of conception:
  - Family planning (and birth spacing)
  - Prevention of unwanted pregnancies
### What are needed to promote the role of Condoms

- Acceptability by users and societies
- Availability (long-term)
- Accessibility
- Safety
- Education on proper use

- Quality Control
- Affordability
- Advocacy
- Efficacy
- Effective promotion programmes
Condom Promotion Strategies

1. Information, education and communication on the necessity and the importance of condom use
2. Adequate condom supply
3. Condom quality control
4. Promotion of additional water soluble lubricants
5. Promote acceptance of condoms in the society
6. Appropriate local nomenclature for condoms
7. Government policy to promote condoms
8. Availability of condoms in the market
9. Good logistic network, and
10. Effective interventions, such as the 100% condom use programme in entertainment sector
WHAT IS THE 100% CONDOM USE PROGRAMME?

The 100% Condom Use Programme (CUP) is a programme to prevent sexual transmission of HIV in the general population by ensuring high level of condom use among sex workers and their clients.

The main objective of the 100% CUP is to achieve universal condom use in 100% of sexual relations associated with all types of SEX WORK. In other word, “100% CUP” is NOT the “promotion of 100% condom availability”. It goes beyond that.

The Programme was developed in Thailand in 1989 as a pilot project; and subsequently became nationwide in 1991.
HIV SPREADING IN THAILAND (and Asia)

1984-1987
Drug users
Male sex Workers
Female sex workers

Since 1984
Tourists

Since 1988
Blood transfusion

Since 1989

Symbols
Drug users
Men
Women
Women (housewives)

Blood transfusion

HIV SPREADING IN THAILAND (and Asia)
How the 100% CUP prevent mass HIV transmission

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- Drug users
- Male sex workers
- Female sex workers
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100% condom
Use programme

How the 100% CUP prevent mass HIV transmission
THE 100% CONDOM USE PROGRAMME

MAIN PRINCIPLE

- Creating enabling environment to empower ALL sex workers to refuse sex services if customers do not want to use condoms (monopolizing sex business regarding universal use of condoms);
- Customers will be no longer in control of the sex services with regard to the use of condoms. In other word, customers have no choice but to use condoms.
- Local authorities and owners of sex business are responsible for promoting and maintaining such enabling environment.
THE 100% CONDOM USE PROGRAMME

MAIN STRATEGY

- To gain cooperation of government authorities and all owners/managers of sex business to require condom use in all sexual encounters.
- If customers refuse to use condoms, there will be no sex services provided (no condom – no sex).
- The measure must cover all sex business sectors (all places of all types) so that customers will not be able to purchase sex services without using condoms.
- Some forms of sanction will be placed to the non-cooperative sex business owners.
THE 100% CONDOM USE PROGRAMME

IMPLEMENTATION

1. Meeting of local HIV/AIDS committee to obtain consensus on the 100% CUP implementation and preparation to start the programme;

2. Holding a meeting between the HIV/AIDS committee and owners of sex business and senior sex workers to get cooperation in implementing the 100% CUP;

3. Educating sex workers on the programme;

4. Logistic supports (condoms, STI services, education material, including water-soluble lubricants);

5. Monitoring and evaluation of the programme;

Question: What would have happened in Thailand if without the 100% condom use programme?

Answer: Massive spreading of HIV in the country at the scale observed in African epidemic.

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**Whole country**

|                | 3.0 | 3.6 | 3.5 | 4.0 |

*Source: Ministry of Defence, Thailand*
Impact of the 100% Condom Use Programme in Thailand

Number of STI Cases, 1970-2001, and Condom Use Rate in Sex Establishments

Rate of condom use

X 1000 cases

Condom Use Rate in Sex Establishments

Rate of condom use

Impact of the 100% Condom Use Programme in Thailand

9-11 September 2010
First Global Forum on Medical Devices
Bangkok, Thailand
HIV Prevalence among Pregnant Women, Male Conscripts, and Blood Donations
Thailand, 1989-2003

Source: Sentinel sero-surveillance data, Division of Epidemiology, Ministry of Public Health.
Remarks: Switching from bi-annually (June and December) to annually (June) since 1995.
Conscript data in November of each year since 1995 were not shown here.
Thailand – Enormous current benefits of the prevention efforts

Red line represents what might have been if behaviors had not changed

Infections prevented
High Level Advocacy on the Success of the 100% Condom Programme in Thailand

“The 100% Condom Programme has already prevented over 5 million HIV infections in Thailand”

Thaksin Shinawatra
Prime Minister of Thailand
The 15th International AIDS Conference
Bangkok, 11 July 2004
Prevention Programs Can Make a Difference

LESSONS FROM THE SOUTH

“Effective prevention programs have not been implemented early enough in South Africa. Otherwise, we would have prevented millions of infection in the country”.

Professor James McIntyre
Witwatersrand University, South Africa

Promotion of a self-care medical device (condoms) has been successful in preventing HIV/AIDS in Thailand and many Asian countries. Very high level of condom use was observed.

Impact of the 100% CUP includes millions of lives of men, women and newborns saved from HIV. Health care needs from HIV epidemic has been greatly reduced. Direct benefit addresses the MDG 6; and also indirectly covers MDGs 4&5.
The success of the 100% CUP is an evidence demonstrating that **the use of affordable medical devices in conjunction with good plan and management can solve significant public health problems worldwide**.

Successful programmes to promote medical devices required effective strategies addressing the right target groups, nation-wide scale, and sustainable response.
THANK YOU

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