AHRF Meeting
28th April 2004

Women and HIV

Prevention and Psychosocial issues

Dr Chris Wood

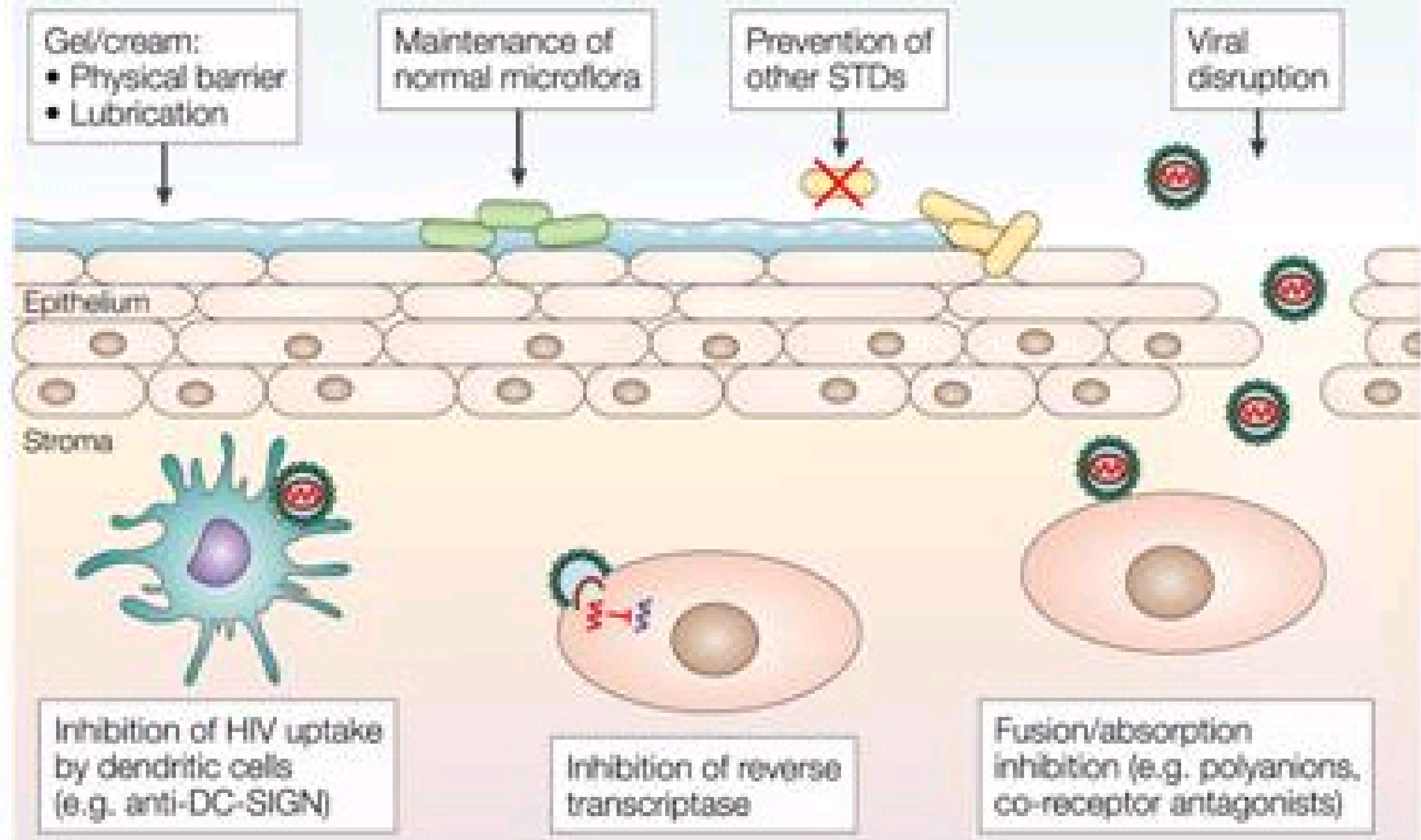
OVERVIEW

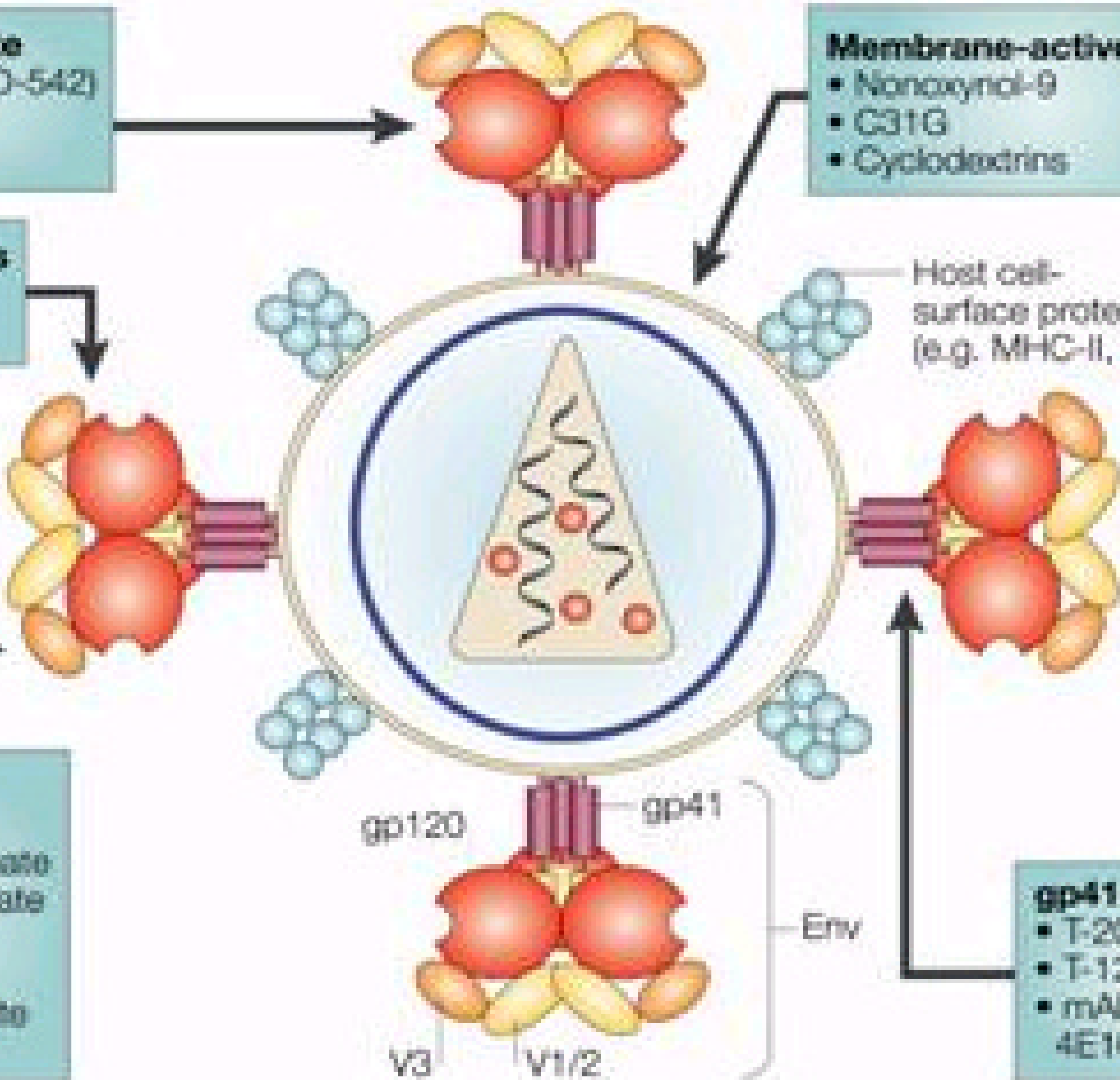
- Prevention :- Microbicides, Vaccines, PEPSE
- Disclosure/Non-disclosure
- Serodiscordance
- Immigration
- Eligibility for NHS treatment
- Partner testing
- Criminalisation of transmission

MICROBICIDES -1

Modes of action include:-

- Destroy/disrupt virus
- Prevent attachment/cell entry
- Prevent replication
- Augment immunity


Gel/cream:
• Physical barrier
• Lubrication
Maintenance of normal microflora
Prevention of other STDs
Viral disruption
Epithelium
Stroma
Inhibition of HIV uptake by dendritic cells (e.g. anti-DC-SIGN)
Inhibition of reverse transcriptase
Fusion/absorption inhibition (e.g. polyanions, co-receptor antagonists)
Nature Reviews | Microbiology



CD4-binding site
• CD4-IgG2 (PRO-542)
• BMS-806
• mAb b12
Membrane-active agents
• Nonoxynol-9
• C31G
• Cyclodextrins
Glycan residues
• mAb 2G12
• Cyanovirin-N
Host cell-surface proteins (e.g. MHC-II, LFA-1)
Polyanions
• PRO-2000
• Dextrin-2-sulphate
• Cellulose sulphate
• Carageenan
• SAMMA
• Cellulose acetate phthalate
gp120
gp41
Env
V3
V1/2
gp41 ligands
• T-20
• T-1249
• mAbs 2F5, 4E10

MICROBICIDES -2

As of March 2004:-

- Microbicide candidates in preclinical development = 44
- Microbicide candidates in clinical development = 18
- Total number microbicides in development = 62

MICROBICIDES - 3

- Ex –vivo cervical explant model
- Dr Robin Shattock – Nothing available before 2010 at least (optimistic timeline)

- www.ipm-microbicides.org
- Secure.microbicicde.org

VACCINES

- Factors responsible for fully effective or protective immunity to HIV infection not understood
- Therefore goals of successful vaccine not clear
- Re-infection is common
- Genetics are important

Disclosure, Discordance and Decisions

The Psychosocial Impact of Antenatal HIV Testing

Disclosure, Discordance and Decisions

North Middlesex Hospital, Edmonton, N18

- Dr Chris Wood
- Portia Kumalo- HIV Antenatal Coordinator
- Dr Jonathan Ainsworth
- Miss Abha Govind
- Dr Maud Meates

Results

- 59 pregnancies identified

- 43/59 (73%) diagnosed during AHT
- 16/59 (27%) known HIV positive prenatally
- 48 (81%) of African origin
- 5 (9%) UK born
- 6 (10%) from elsewhere

Results - Disclosure

- Aggregate data for all 59 women

- **43/59 (73%) disclosed HIV status to male partner**
- 7/43 (16%) male partners declined HIV test
- 3/43 (7%) not known if HIV tested
- 33/43 (77%) male partners tested for HIV
- **21/33 (64%) male partners were HIV negative**
- 12/33 (36%) male partners were HIV positive

Results - Relationship

- Aggregate data for all 59 women

- **21/33(64%) couples were HIV sero-discordant**
- 6/21 (29%) HIV negative male partners left relationship
- **15/21 (71%) HIV negative male partners remained**

- All sero-concordant couples remained together

Results - Disclosure

- Data for 43 women diagnosed by AHT

- **28/43 (65%) disclosed HIV status to male partner**
- 5/28 (18%) male partners declined HIV test
- 3/28 (11%) not known if HIV tested
- 20/28 (71%) tested for HIV
- **16/20 (80%) male partners were HIV negative**
- 4/20 (20%) male partners were HIV positive

Results - Relationship

- Data for 43 women diagnosed by AHT

- **16/20(80%) couples were HIV sero-discordant**
- 4/16 (25%) HIV negative male partners left relationship
- **12/16 (75%) HIV negative male partners remained**

- All sero-concordant couples remained together

Results - Disclosure

- Data for 16 women known to be HIV positive pre-conceptually

- **15/16 (94%) disclosed HIV status to male partner**
- 2/15 (13%) male partners declined HIV test
- 13/15 (87%) male partners tested for HIV
- **5/13 (38%) male partners were HIV negative**
- 8/13 (62%) male partners were HIV positive

Results - Relationship

- Data for 16 women known to be HIV positive pre-conceptually

- **5/13 (38%) couples were HIV sero-discordant**
- 2/5 (40%) HIV negative male partners left relationship
- 3/5 (60%) HIV negative male partners remained

- All sero-concordant couples remained together

Non - disclosure

- Of all the 59 women – **16/59 (27%) did not disclose HIV status to partner.** 7/16 (44%) unable to and 9/16 (56%) chose not to.
- Of the **43 women diagnosed by AHT – 15/43 (35%) did not disclose** HIV status to partner. 7/15 (47%) unable to and 8/15 (53%) chose not to.
- 1/16 (6%) of known HIV positive women did not disclose HIV status to male partner as relationship was already over

Summary of key findings - 1

- AHT revealed high levels of sero-discordant couples
- Significant proportion of HIV positive women do not disclose their HIV status to their male partners
- Disclosure may lead to significant adverse outcomes for the women (eg homelessness, domestic intimidation and/or violence)

Summary of key findings - 2

- HIV negative male partners more likely to leave relationship than HIV positive male partners or those declining to test
- Lack of condom use is frequent amongst discordant couples
- Management of psychosocial consequences of a positive HIV result during AHT may be challenging and time consuming

Summary of key findings - 3

- Non-medical (eg psychosocial) issues may impact significantly on the medical management of these cases
- There may be legal consequences relating to entitlement to care, welfare support etc
- There are significant resource implications for AHT in areas of high prevalence

UNAIDS 2000 –1

Opening up the HIV/AIDS epidemic

"Guidance on encouraging beneficial disclosure, ethical partner counselling & appropriate use of HIV case-reporting"

(*UNAIDS Best Practice Collection-Pub.2000*)

UNAIDS 2000 –2

- beneficial disclosure
- ethical partner counselling
- appropriate use of HIV case-reporting

UNAIDS 2000 –3

- “Because refusal to counsel partners can result in the onward transmission of HIV, HIV counselling and partner counselling programmes should involve strong and professional efforts to encourage, persuade and support HIV-positive persons to notify and counsel partners. *In the few cases in which a properly counselled HIV-positive person refuses to counsel partners, the health care provider should be able to counsel partners, without the consent of the source client,* after there has been an ethical weighing of the potential harms involved, and appropriate steps have been taken.”

UNAIDS 2000 –4

- “These steps involve repeated efforts to persuade the source client to counsel partners, informing the source client that partner counselling will occur, keeping his/her name confidential if possible; and ensuring social and legal support for the source client and other relevant parties (spouses, partners, family members) to protect them from any physical abuse, discrimination and stigma which may result from partner counselling.”

UNAIDS 2000 –5

- “There is much that governments can do to create conditions to encourage ethical partner counselling. These include setting out policies, laws and guidelines which protect confidentiality and informed consent, and outline clearly the limited circumstances under which partner counselling may take place without consent; training health care workers and counsellors in ethical partner counselling; and increasing social and legal support for those who are involved in partner counselling.”

RAPID HIV TESTS IN LABOUR

MIRIAD study:- 70 min turnaround time
-median time from arrival in hospital to HIV result = 5hrs
-point of care testing showed turnaround time of 45mins
-OraQuick was accurrate & quick results ,
-acceptability was high & varied by time of day and week
-CDC recommends rapid testing (Cdc.gov/hiv/rapid)

MMWR Study:-
3360 women
-prevalence was 0.8%
-concerns re false positives

Biology of HIV discordance - 1

- Relevant factors include:-

- Virological
- Genetic (HLA, co-receptor polymorphisms)
- Clinical (eg CD4 count, concurrent STI's)
- Immunological
- Behavioural (eg condom usage)

Biology of HIV discordance - 2

- Other factors include:-

- Viral load (plasma and genital)
- Frequency and type of intercourse
- Duration of relationship
- Development of acquired, HIV- specific protective immunity

HIV Sero-discordance - 3

- **Widely described** - reported rates vary from 10% to 85% in different settings
- **May undermine confidence** in HIV result
- Levels of **condom use variable** and may wane with time
- **Ongoing transmission risk**
- May require **repeated interventions**
- May lead to **false sense of security**

HIV Sero-discordance - 4

- PEPSE at Home
- Therapy for HIV positive partner
- Behavioural interventions re condom use etc.
- Sexual health screening

IMMIGRATION - 1

- Asylum
- Article 3, Human Rights Legislation
- Dispersal
- Home office rejection
- Deportation

IMMIGRATION - 2

- S Creighton et al, BHIVA 2004
- Postal survey to Lead GUM Physicians (55):-

- 78% physicians had direct experience of dispersal
- 69% disagreed with dispersal in any situation
- 90% patients had no medical Care plan
- 95% patients receiving multispecialty care
- 89% patients previous psychological trauma

Key discussion points -1

Psychosocial issues:-

- Management of disclosure
- Management of sero-discordance
- Information needs
- Developing strategies in partnership

Key discussion points -2

Immigration issues:-

- Need to define scale and personal impact of dispersal and home office refusals/threat of deportation
- Are there Public health implications, eg less testing/less disclosure and less contact with services?

Key discussion points -3

- Criminalisation of HIV transmission
- ?Criminalisation of Sexual activity of HIV +ves
- Implications for Health care and voluntary sector workers
- Eligibility Criteria for NHS Care

Key discussion points - 4

Entitlement to NHS care:-

- Everyone entitled to ***emergency*** care, even if charges are made
- Asylum seekers with failed claims and exhausted appeals process are entitled to care if in UK more than 12 months
- If unsuccessful asylum claim and < 12 months, may continue receiving care for existing conditions only
- Less than 12 months– not entitled to ongoing care