HIV TESTING AND CHALLENGES IN PAPUA NEW GUINEA

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PAPUA NEW GUINEA

• Location – Largest Island in the Pacific, to the North of Australia
• Geography of PNG – rugged terrain, limited road access to most rural areas
• Population size – about 7 million, 87% live in Rural
• Current HIV prevalence rate – about 0.7

HIV TESTING TIME LINE

Declaration of a generalised epidemic in PNG
The development of POC Algorithm, set up of the EID program and introduction of CD4 FacsCount
Start of the Roll out of the POC Algorithm and Set up of the National EQA Program
Monitoring and evaluation of HIV testing through the EQA program

NATIONAL HIV LABORATORY ALGORITHM

• Provides more highly sensitive and specific test assay.
• Provides a reference for the POC 2 rapid test algorithm.
• Uses Lateral flow-immuno-chromatographic, particle agglutination and EIA method assay
• Needs to be reviewed

NATIONAL HIV POC ALGORITHM (2-TESTS)

• Provides readily accessible testing services
• Provides faster turn-around-time for results to patients
• Provides faster initiation of Treatment, If needed
• Provides better patient care
• Uses lateral flow-immuno chromatography method(EIA)
• All benefits must occur with Quality Assured Testing
**NATIONAL HIV EQA PROGRAM**

Setup in 2010
Provided and Coordinated by CPHL QA unit

- Panel Testing
- Blinded Rechecking
- Supervision

**HIV SEROLOGY EXTERNAL QUALITY ASSURANCE PROGRAM**

**Panel Testing**

- Bi annual Program – 2 Trials
- First end of March and second end of October
- 3 panel of Dried serum samples + buffer
- One month testing period

**HIV SEQAP OVERALL PERFORMANCE**

Final Result (Trial 1, 2015)

- Correct Final Result (158)
- Incorrect Final Result (5)

**HIV SEQAP OVERALL PERFORMANCE**

- CORRECT FINAL RESULT (158)
- INCORRECT FINAL RESULT (5)

**HIV EQA DBS PERFORMANCE**

Overall Performance(%) 2012 -2015

- Agreed
- Discordant

**Comparison of 2013&2014**

- Total Received
- Total Tested
- Total Agreed
- Total Discordant
- Total Rejected

**EQA- BLINDED RETESTING-DRIED BLOOD SPOT**

- DBS collected on every 20th client
- Retested by EIA method (Vironostika HIV Ag/Ab) Biomerieux
- 237 (54.6%) facilities are currently registered out of 434 trained sites
- 176 (84.6%) sites taking part in 2014 out of 208 registered sites
- Coverage by province is 90%
SUPERVISION/CORRECTIVE ACTIONS

- Telephone Calls
- Quarterly Feedback Reports
- Training
- Supervisory visits

CHALLENGES IN HIV TESTING & QA MONITORING

- Monitoring and supervision especially to testing sites with discordant results
- Regular & consistent participation in the EQA programs by participating sites
- Maintaining a high standard in HIV Testing Training to maintain high quality results
- Increase in volume of DBS testing
- Increase in number of rejected samples received
- 237 (54.6%) facilities are currently participating out of 434 trained sites in HIV testing.
- Review of the Lab algorithm

CONCLUSION

- Panel testing overall performance rate is 98% with discordance of 2%.
- DBS retesting overall performance is 99.4% with discordance of 0.6%.
- The PoCT algorithm is just as accurate and reliable as the laboratory algorithm with great emphasis on EQA participation and training.
- Health care workers apart from lab personals can perform HIV rapid testing confirmation, with a high standard in training.
- PoCT increases coverage and access for HIV testing services and greatly reduces the turnaround time for HIV diagnosis, hence faster referral for treatment and care.

THANK YOU