PRIMARY CARE DATA CODED WITH ICPC-2 AT THE GENERAL OUT-PATIENTS’ CLINIC OF THE GENERAL HOSPITAL, LAGOS, NIGERIA

DR. OLAWUNMI OLAGUNDOYE
CONSULTANT FAMILY PHYSICIAN,
TRAINER- FAMILY MEDICINE RESIDENCY TRAINING PROGRAMME
GENERAL HOSPITAL, LAGOS, NIGERIA
OUTLINE

• BACKGROUND
• OBJECTIVES
• METHODS
• RESULTS
• CONCLUSION
• AUTHORS
• ACKNOWLEDGEMENT
Primary care serves as an integral part of the health systems of many nations.

It is the portal of entry for nearly all patients into the health system.

Paucity of accurate data for health statistics in most part of Africa.

Problems: inadequate technical manpower and infrastructure, inadequate quality of data systems contributing to inaccurate data.

A simple classification such as the ICPC can solve the problem of poor data management at primary care level.
BACKGROUND TO THE STUDY STATE

• SHORT PROFILE ON LAGOS STATE
  • Lagos State was created on May 27, 1967
  • Former Capital of Nigeria until 1991, when the capital was moved to Abuja, the Federal Capital Territory
  • Ikeja is the Capital of Lagos State
  • The Governor, Mr. Babatunde Raji Fashola (SAN)
  • 20 Local Government Areas (LGAs) each subdivided into additional 37 Local Council Development Areas (LCDAs), totaling 57 Local Government Councils
  • Projected Population of 20.5 million with annual Population Growth Rate of 8% estimating 4,193 persons per square km
• HEALTH FACILITIES AND TRAINING INSTITUTIONS

  ➢ Public Health Facilities
  • 1. Primary Health Facilities: 277
  • 2. Secondary Health Facilities: 26
  • 3. Tertiary Health Facilities: 1 (Lagos State University Teaching Hospital) and 10 Maternal & Child Centers

  ➢ Private Health Facilities: Over 3,500 Registered Health facilities.

  ➢ The LASG a PHC revitalization agenda, identified poor data management among the numerous challenges to PHC in Nigeria.
OBJECTIVES

• To present the most common symptoms patients present with, the most frequent diagnoses that resulted from these presentations and the diagnostic and therapeutic procedures involved in the process of care.

• To analyse the predicted value of presented symptoms for the five most commonly encountered health problems in primary care as calculated within the Nigerian context.
Within the Nigerian context, can the ICPC sufficiently code all the elements of a health encounter and provide accurate data for health statistics at the primary care level?
METHODS

- The data structure was based on the concept of the “Episode of Care”, the core of which is formed by the elements of an encounter. (distinguished from an episode of illness)
- Content analysis was conducted on 401 new encounters, randomly selected for clinical coding after consultation with Family physicians/residents.
- Clinical coding of the elements of an encounter was done with the ICPC-2 two pager.
- Data was recorded into excel spread sheets with fields for socio-demographic data such as age, sex, occupation, religion, and ICPC elements of an encounter: reasons for encounter/complaints, diagnoses/problems, and interventions/processes of care.
RESULTS

- Four hundred and one (401) encounters considered yielded 915 reasons for encounters, 546 diagnoses, and 1221 processes.
- This implies an average of 2.3 Reasons for Encounter (RFE), 1.4 Diagnoses, and 3.0 Processes per encounter.
- Nearly half (48.6%) of the 686 rubrics for coding patients complaints and doctors diagnoses were utilized.
- The top 10 Reasons for Encounter, Diagnoses and Processes were determined. Headache and fever, malaria and hypertension uncomplicated were the top two RFE and diagnoses respectively.
- Through the determination of the prior probability of the occurrence of certain diseases beginning with a reason for encounter/complaint, the top 5 diagnoses that resulted from each of the top 5 reasons for encounter were also obtained.
- Malaria (39.3%), Hypertension (11.2%), and upper respiratory infection (4.7%) were the leading diagnoses that resulted from a complaint of headache.
Results continued

- Partial physical/medical examinations, laboratory tests and other diagnostic procedures such as radiologic and electrocardiographic (ECG) tests were some of the most common processes.
- The therapeutic interventions most commonly performed include: generation of medical prescriptions, referral to specialists and referral to other providers such as physiotherapist and dietician and rarely, patient education.
- The average number of laboratory tests per encounter was 0.47.
- The average number of radiographs, electrocardiographs, and prescriptions per encounter was 0.16, 0.07, and 0.86 respectively.
CONCLUSION

• The simplicity of the easy-to-use ICPC-2 two pager with about 1,400 codes is apt for use in primary care, as it will improve the ease and accuracy of data collection at this level.

• It is over 11,000 codes less than The International Statistical Classification of Diseases, Injuries and causes of deaths (ICD-10) which is grossly specified for the purposes of specialized care.

• In a setting where transition to electronic health records is still evolving and fraught with limitations, more accurate paper records or computer-based records are still a reality with the ICPC
LIMITATIONS

• While it would have been more ideal to conduct this study in a number of the primary health care centres in the State, the setting used is also a primary care setting operated by Primary care/Family Physicians.

• It was not fully representative of the children population because of the presence of a children's hospital in the neighbourhood.
AUTHORS

• Olawunmi A. Olagundoye, Kees van Boven, Chris van Weel, Olufunmilola O. Daramola, Olujimi O. Sodipo, Omobolanle O. Akinwunmi.
ACKNOWLEDGEMENT

• Kees van Boven, Dr.O.O Ayankogbe, Mr. Stanley Ayodeji, Dr. Daniel Pinto, Dr. Shabir Moosa, Mrs Y.O. Popoola and Alhaja F.F. Ojebisi.
• WICC members.