



# Improved self management in clients enrolled in the Aboriginal Chronic Care Program (ACCP) at Budyari Community Health Centre

Ms Mwangi S, Clinical Nurse Consultant, Renal, ACCP

Dr. Russell H, Endocrinologist, Liverpool Hospital

Dr. Hasan M, Medical Registrar, Bankstown Hospital

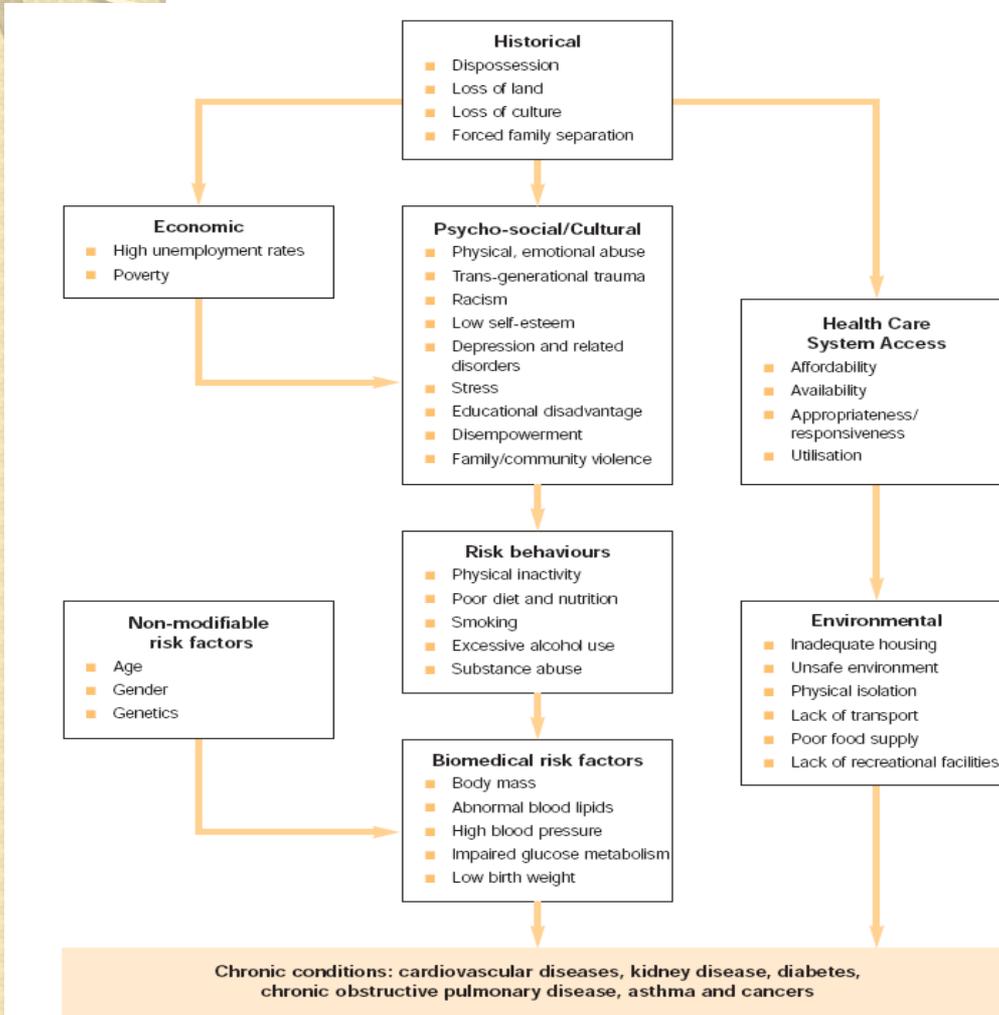
Ms Richards N, Senior Dietitian, Liverpool Hospital, ACCP

Ms Mackay V, Diabetes Educator, ACCP

Ms. Sutton P, Aboriginal Health Worker, ACCP

# Background -

Figure 1. Factors contributing to chronic disease in the Aboriginal community



- Populations at risk of vascular related morbidity and mortality due to chronic diseases benefit from intensive and simultaneous multi targeted approach to cardiovascular risk factor modification (1)

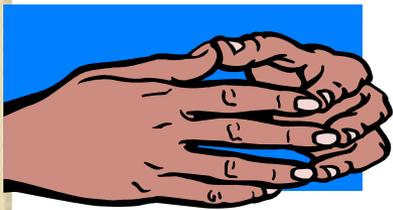
- Health Literacy - Active learning and learner participation- produce better educational outcomes (2)

- Peer led interventions – positive impacts on knowledge, confidence and attitudes (3) Peer mentoring has been acknowledged as important in improving the health of indigenous people living in the Western suburbs of Melbourne (4)

Unknown= Urban Aboriginal population using traditional based education methods that including peer education and using visual charts to interpret medical results.

# Aims

- The two year prospective cohort study aimed at enhancing knowledge and self management skills for Aboriginal people living with chronic disease(s), through the use of simplified colour coded health record charts and lay lead peer health education sessions.



LOOK



# Methods

## **Two year prospective cohort study**

Recruited participants-

- Sample size= 40
- Registered with Aboriginal Chronic Care Program
- One or more chronic condition (diabetes, respiratory, cardiovascular, renal)
- 72.5% were Aboriginal
- 70% female, 30% male
- Average age 60 years (range 26 to 83yrs)
- 52.5% had a background of hypertension
- All clients had diabetes
- 70% were dyslipidemic
- 25% had Ischemic heart disease
- 55% of enrolled clients were non-smoker
- 7.5% already suffered an event of cerebrovascular accident (CVA)

# Methods

## Peer Education-

- Peer educators were people living with a chronic disease, or carers of a person with a chronic disease
- Training of trainers was done – topics diabetes, blood pressure, kidney disease and Lipids
- Education session organised to include other activities – art & craft, painting, cooking classes
- Ten education sessions facilitated by peer educators organised
  - Tharawal Medical services
  - Budyari Community centre
  - Established Aboriginal Community groups

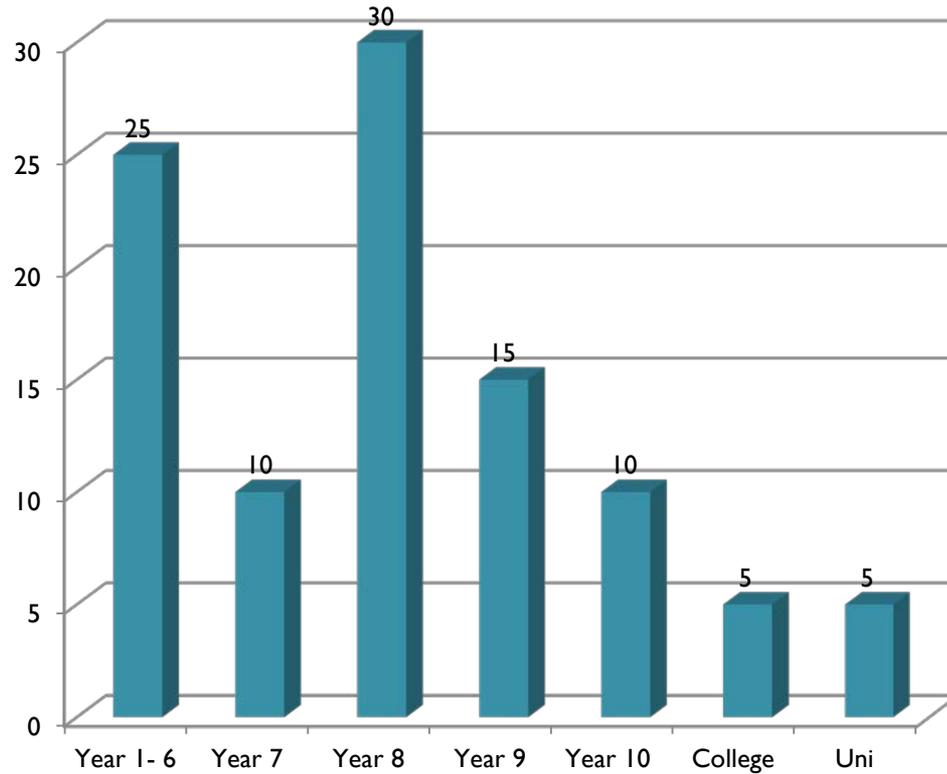
Health Record Book- Similar concept as the 'between the flag' that creates a safety net.

- Provided to all participants
- Colour coded
- Completed by clinician at clinic visit

[Health record booklet January 2014.pdf](#)

# Results

## Research participants – literacy level *in percentage*



# Results Ctd

- Positive response on use of the health record book. “ My kidneys are orange, how do I get them to be on the green?” Quote from two participants. One of them quit smoking as advised, and her kidney function improved.
- 22 Health record books available for review – majority had anthropometric and laboratory measures written

[Client Health Record Book.pdf](#)

- 50% of clients had their retina checked
- 37.5% had podiatrist review

# Results ctd

Clinical Indicator	Pre Intervention	Post Intervention
HbA1c	8.3%	8.0%
Blood pressure	130/80mmHg	129/76mmHg
Albumin creatinine ratio	48.mg/mmol	41.1mg/mmol
eGFR	67ml/min	65.2ml/min
Total Cholesterol	4.4	4.1
LDL	2.2	2.0
Trigs	2	1.9
HDL	1.1	1.1
Weight	96.2kg	97.5kg

# Results

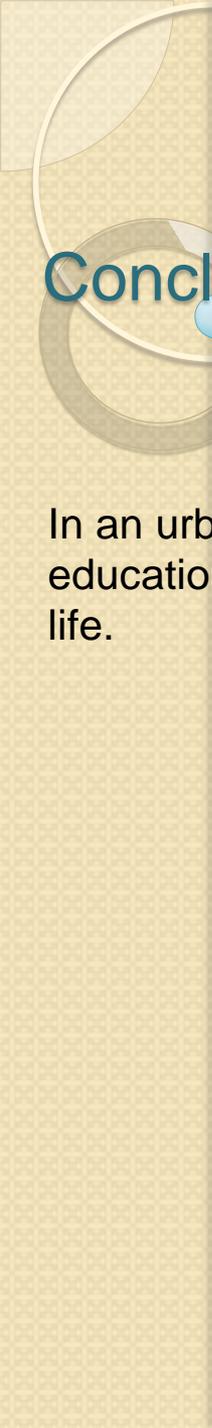
## Peer Education

- Two peer educators completed training of trainers education program
- Four education sessions facilitated by peer educators
- Established Aboriginal community group – full attendance and participation
- 2 out of 5 people invited to Tharawal Aboriginal Medical services attended
- Budyari Community Centre – Nil attendance

*Knowledge Attitude and Practice (KAP) Survey and Patient Satisfaction Surveys analysis currently in progress*

# Discussion

- Peer education was well attended when attached to an existing activity
- Peer educators facilitating a yarn on health topics helped break barriers as participants felt they were of their mob. They have a common language in the community.
- The record book was well utilised by majority of participants
- There was improvement in glycemic control and cardiovascular risk factors – Blood pressure and Lipids, as well as Albumin creatinine ratio (UACR).



## Conclusions

In an urban based Aboriginal population where chronic disease is prevalent, the provision of peer education and health record books contributes to the optimisation of health literacy and quality of life.



# References

Including:

1. Gaede P. Et all. Effects of multifactorial Intervention on Mortality in Type 2 Diabetes. The New England Journal of Medicine 2008;358:580 -91
2. Chris S. Simulation in Health Professional Education. Education Theory and Practice. October 2010
3. Perez-Escamilla R et all. Impact of peer nutrition education on dietary behaviours and health outcomes among Latinos. A systemic literature review. J Nutr Educ Behav.2008:40(4);208-225. doi; 10.1016/j.jned.2008.03.11
4. Paasse G. Working together as a catalyst for change: The development of a peer Mentoring Model for prevention of Chronic Disease in Australian Indigenous Communities. Australian Journey of Primary Health, vol. 17, No 3,2011:214-219\

Figure 1- NSW Department of Health (2005). NSW Aboriginal Chronic Conditions Area Health Service Standard Cardiovascular disease, kidney disease, diabetes, chronic obstructive pulmonary disease, asthma and cancer.

## Contact details

Susan Mwangi [susan.mwangi@sswahs.nsw.gov.au](mailto:susan.mwangi@sswahs.nsw.gov.au) Budyari CHC 8781 8020

Natalie Richards [natalie.richards@sswahs.nsw.gov.au](mailto:natalie.richards@sswahs.nsw.gov.au) Budyari CHC 8781 8020

### Acknowledgements

- All research participants – we acknowledge those that have passed.
- Peer Educators – Lynette Keppler and Mr. Boccassini
- Dr. Hamish Russell– Endocrinologist Liverpool Hospital
- Dr. Mahbub Hasan – Endocrinology registrar- John Hunter Hospital Newcastle
- Vicki Mackay – Acting CNC Connecting Care SWSLHD
- Nathan Jones – Director Aboriginal Health SWSLHD
- Staff at the Aboriginal Chronic Care Program
  - Leslie Jenkins
  - Wendy Pomeroy
  - Pamela Sutton
  - Delphine Leslie
  - Yin Chooi