



**A NEW MODEL OF CARE TO SUSTAIN IMPROVEMENT IN
RISK FACTORS CONTROL FOR SECONDARY ISCHEMIC
STROKE PREVENTION :**

**A PILOT RANDOMIZED CONTROLLED STUDY OF A
NURSE-LED STROKE REVIEW CLINIC (NSRC)**

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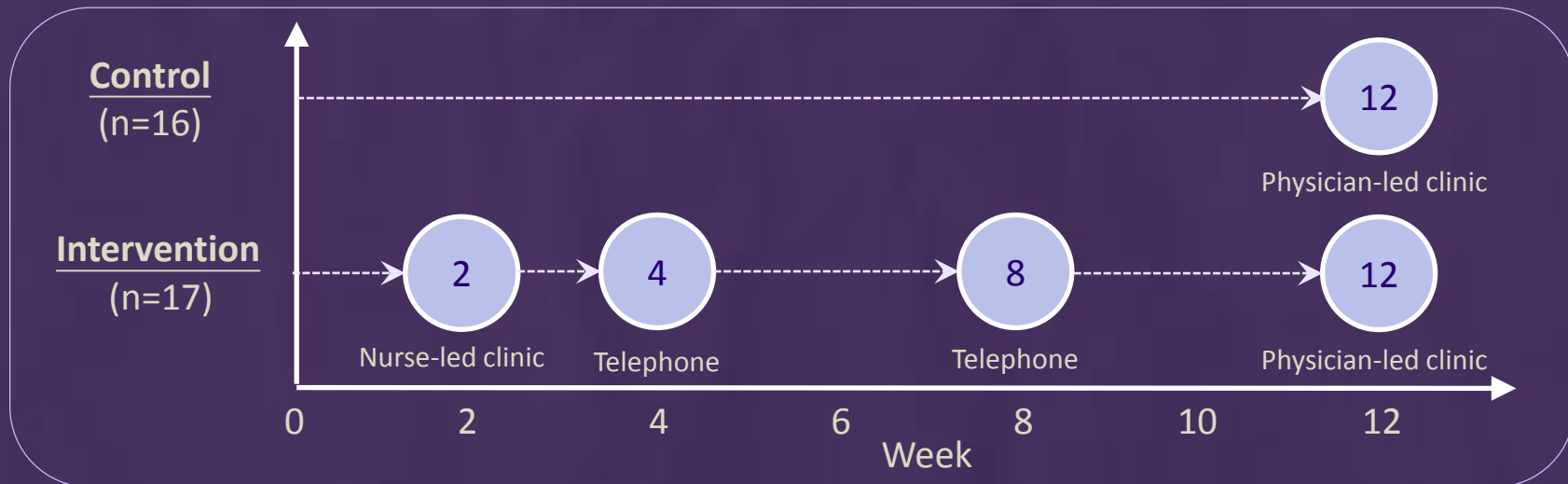
BACKGROUND

- ✧ Secondary stroke prevention is important for ischemic stroke survivors to avoid recurrence
- ✧ Current scenarios :
 - ... The compliance rate to medications and risk factors control was the highest during acute phase (as inpatients) but then declined after discharge to community (as outpatients)
 - ... Post stroke care was discontinued after discharge from hospital
 - ... Long waiting time before review by physician after discharge
- ✧ So there is a need to provide fast review and offer continual care to post-stroke patients to sustain their compliance
- ✧ Extension of roles of nurse from inpatient-based care to post-discharge management : continuing to provide counselling, education, risk factors assessment, emotional support and post-stroke care advice during follow up



OBJECTIVE & METHODS

- ☞ To evaluate the clinical effectiveness of a Nurse-led Stroke Review Clinic (NSRC) in secondary prevention of ischemic stroke
- ☞ Prospective randomized controlled pilot study, between Nov 2011 and Jan 2012 in UCH
- ☞ **Control group** : FU routinely by physician as usual (routinely at week 12) after discharge
- ☞ **Intervention group** : FU by ASU nurse in NSRC at post-discharge week 2, by telephone at week 4 & week 8, by physician at week 12
- ☞ **Primary endpoints** : metabolic risk factors control (smoking, BP, glucose, lipids) and incidence of recurrent ischemic stroke at 3 months and 1 year respectively
- ☞ **Secondary endpoints** : stroke knowledge score and medication compliance score at 3 months



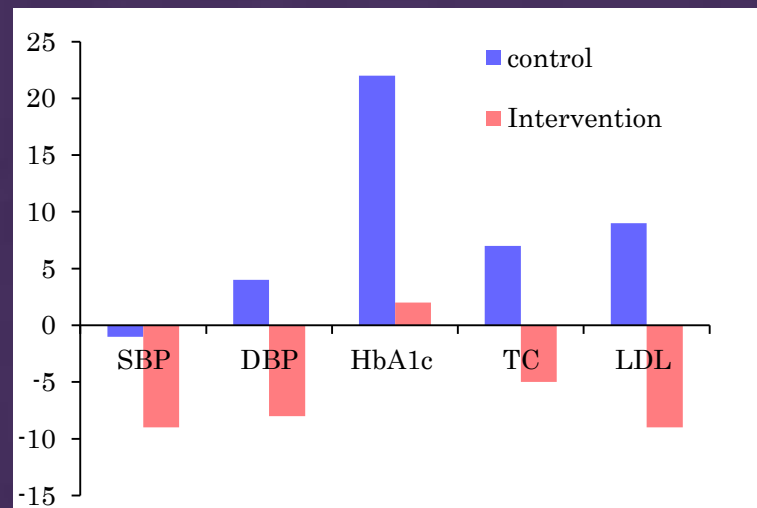
RESULTS

Table 2. Outcomes at 3 months

	Control (n=16)	Intervention (n=17)	p-value
Number of smoking cessation	1 (6%)	5 (29%)	<0.01*
Mean biomedical parameters			
Systolic BP in mmHg	138	136	0.762
Diastolic BP in mmHg	78	74	0.352
FBS (for diabetics) in mmol/L	7.1	5.8	0.173
HbA1c (for diabetics) in %	7.3	6.4	0.189
Total cholesterol in mmol/L	4.1	4.2	0.637
LDL in mmol/L	2.2	2.2	0.884
Morisky medication compliance score	0.69	0.12	0.091
Stroke knowledge	19	26	<0.01*
Recurrent stroke	0	0	N.S.

Table 3. Outcomes at 1 year

	Control	Intervention	p-value
Mean biomedical parameters			
Systolic BP in mmHg	137	124	0.032*
Diastolic BP in mmHg	81	68	0.007 *
FBS (for diabetics) in mmol/L	5.7	6.0	0.410
HbA1c (for diabetics) in %	8.9	6.5	0.079
Total cholesterol in mmol/L	4.4	4.0	0.177
LDL in mmol/L	2.4	2.0	0.156
Recurrent stroke	1 (6%)	0 (0%)	N.S.



% change in metabolic risk factors control at 3 months and 1 year

CONCLUSION

☞ This study demonstrated that Nurse-led Review Clinic (NSRC)

1. was beneficial in secondary ischemic stroke prevention
2. sustained the improvement of risk factors control even at a longer interval of 1 year after ischemic stroke
3. reinforce the compliance to treatments and bridges the gap of care between hospital discharge and physician-led follow up

