Reciprocal Cooperation between Peer Supporters and Community Health Centers in China

Dr Zhong Xuefeng
Institute of Health Education, Anhui
CDC
Project Objectives

• To evaluate feasibility of peer support group approach for individuals with type 2 diabetes in community settings in Anhui province, China

• To evaluate effectiveness of peer support approach for individuals with type 2 diabetes self-management practices
Background

- Total population 68.62 million (2010).
- Area: 139,600km²
- 105 counties and 17 main cities
Overview of Program & Evaluation

• a community randomized controlled trial study in three sub-community, three cities in Anhui Province, China
• 726 eligible participants with type II diabetes being recruited from CHC diabetes-managed records
• 365 intervention group, 351 comparison group
• 19 peer group were organized and based on buildings/complexes
• 19 peer supporters were nominated/recruited by CHC
• groups consisted of 10 to 15 individuals
Program outline

726 individuals with type 2 diabetes have been recruited by CHC for the evaluation trial. 365 patients recruited to 19 peer support groups (Intervention Condition). 19 individuals with type 2 diabetes were recruited as Peer Supporters/Group leaders.
Characteristics of peer supporters

- retired people (100%)
- average age 64 years old
- **84.2% them are males (16/19)**
- 100% have middle or high educational level
- suffering diabetes average age 9.3 years
- good communication skills (1/3 of them used to be teachers/administration staff/health worker/salesman)
- compliance to community health professionals and workers
- 36% of them used to be leader before retired
- have positive personality and be social
- to be volunteer, no pay
Peer support intervention

- a community-and primary care-based model
- face to face meetings/activities twice per month
- group meeting/activities co-led by CHC staff and PS (peer group leaders) monthly
- sub-group informal meeting/activity (Taji group, Fishing, shopping, jogging) led by peer group leaders at unscheduled time (daily or weekly)
PROGRAM DELIVERY

PEER GROUP MEETING/ACTIVITIES

CHC

- co-led meetings
- providing clinical cares
- facilitating activities
- led sub-group activities

PEER SUPPORTER

- co-led meetings
- link group members with CHC

- Learning problem solving skills
- Getting knowledge
- Sharing experience
- Modeling
- Verbal persuasion and encouragement
- Closed relationship

4 KEY OUTCOMES:
• Daily self-management
• Social and emotional support
• Linkages to primary care
  . Ongoing support
How the 4 key functions of peer support were delivered?

1. Assist with daily self-management
   • get information and leaning new skills about self-management
   • learn good modeling from group members
   • sharing experience of daily self-management
   • sub-group activities (exercises and shopping food)

2. Provide social & emotional support
   • “second-home” / “common language” and could talk about their feelings and concerns
   • "group belongs"/"social belongs", feel helped and supported each other
   • "encouraged by peer supporters and group members when felt depression and stress"
3. Link to clinical care

- peer supporters become bridge of CHC and diabetes patients in the community
- CHC providing clinical services based on peer group member needs (discussion in group meeting)

4. Ongoing support (after 6 months)

- sub-peer group keep activities
- PS keep closed relationship with CHC staffs
- CHC continue to provide clinical services to patients based on their needs proposed through PS
Results
1. Self-management

Diabetes self-management practices

1. Healthy diet
   • The mean score increased 0.44 and -0.53, sig. (P<0.01)

2. Physical activities
   • The mean score increased 2.22 and 1.03, sig. (P<0.01)

3. Monitoring glucose
   • The mean score increased 0.27 and -0.79, sig. (P<0.001)

4. Medication adherence
   • The mean score increased 1.11 and 0.37, no sig. (P>0.05)
2. Psychosocial factors

Psychosocial factors

1. Knowledge
   • Mean score increased 1.57 and 0.75, sig. (P<0.01)

2. Attitude
   • Mean score increased 8.0 and 7.5, no sig. (P>0.01)

3. Self-efficacy
   • Mean score increased 2.42 and 1.32, sig. (P<0.01)

4. Social support
   • Mean score increased 2.15 and 0.21, sig. (P<0.01)
3. Emotional support

Qualitative evaluation outcome:

A 61 year old woman commented,

“…I became sick two years ago, and when I found out I had diabetes, I felt upset, and thought that my life was meaningless. When I joined the peer support group, I discovered that many people had the same illness as me, and some people in our group had been living with diabetes for more than 20 years. They lived very well, and now they are more than 80 years old, so it encouraged me to believe that I too can live a long and healthy life if I can control my blood sugar and manage my life suitably.” (Chao Jin-lan, female, housewife, 61 years old, Da Qing community)
4. Clinical outcomes

1. BMI
   • The mean score decreased 1.12 and 0.16

2. Systolic blood pressure (SBP)
   • The mean score decreased \(-2.59 \pm 7.89\) and \(-1.03 \pm 10.2\), sig. (P<0.01)

3. Fasting Plasma Glucose (FPG)
   • The mean score increased -0.99 and 0.06, sig. (P<0.05)

4. Two-hour postprandial plasma glucose (2hrPPG)
   • The mean score increased -0.96 and -0.15, sig. (P<0.05)
Conclusions

• The results demonstrate that, when adapted, **PLSP is culturally acceptable and feasible in China** when delivered according to a community-and primary care based model and integrated into the routine of community government organizations and community health services.
Future Challenges

- How to deliver this model to China rural areas?

- How to use group peer support for young individuals with diabetes?

- CHC capacity building

- How to integrate into the routine of health organizations (such as CDC) and community primary health services?
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