Community Pharmacists for Diabetes Patients intervention Study in Japan: COMPASS Project 1

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Background

Intervention Study for Diabetes patients in Community Pharmacy

The number of Diabetes patients in Japan is increasing due to the change in eating habits, which have become more Westernized. There are over 10 million diabetes patients in Japan. It’s the sixth highest number in the world. And the acceleration of demographic aging is happening very quickly in Japan. The shortage of medical resources has become a serious problem. We thought one of the solutions would be to promote effective use of community pharmacies. But there are no trials in Japan that are in effect at the moment. So the COMPASS Project was started which is an intervention study in community pharmacies for diabetes patients.

Methods

For the recruitment of study subjects and their follow-ups, we collaborate with chain pharmacy companies. Education divisions of these companies recruited pharmacists in their companies to participate in the study. Each pharmacy formed clusters, as the unit of randomization. Community pharmacies recruited T2DM patients who usually came to their community pharmacy, aged 20-75 with HbA1c of 7.9-10.4%. Lifestyle support is delivered by community pharmacists to candidates every visit for six months. Each candidate was given a pedometer and a record of their ped numbers a day, and a news letter every month. Study subjects are followed up for one year by annual health checkups. Primary outcome is the HbA1c and life change of T2DM patients.

Profile of Participants

<table>
<thead>
<tr>
<th>Intervention (n=90)</th>
<th>Baseline (n=42)</th>
<th>6-month (n=47)</th>
<th>Control (n=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Ave.±SD)</td>
<td>63±10</td>
<td>61±11</td>
<td></td>
</tr>
<tr>
<td>Male/Female</td>
<td>46/47</td>
<td>24/21</td>
<td></td>
</tr>
<tr>
<td>BMI (kg/m² Ave.±SD)</td>
<td>24.9±4.9</td>
<td>24.5±6.1</td>
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<tr>
<td>HbA1c (% Ave.±SD)</td>
<td>8.4±0.9</td>
<td>7.6±1.2</td>
<td>8.3±0.6</td>
</tr>
</tbody>
</table>

Results

Pharmacies and Participants

Randomized 70 Pharmacies

Drop Out 9 Pharmacies

36 Intervention Group

34 Control Group

27 Pharmacies (n=90)

21 Pharmacies (n=42)

Profile of Participants

Success ratio (HbA1c -0.5%): Kaplan-Meier

Cox hazard model were associated with intervention (OR 2.2 95%CI 1.2-4.1) and independent of age and sex.

Conclusions

We have launched the COMPASS project, community pharmacist intervention trial to improve the blood glucose level in T2DM by using Motivational interviewing skills and information giving in community pharmacies. This trial is expected to contribute to evidence-based real-world preventive practice.

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