Personalised care planning for adults with chronic or long-term health conditions (Review)

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Personalised care planning for adults with chronic or long-term health conditions

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A B S T R A C T

Background

Personalised care planning is a collaborative process used in chronic condition management in which patients and clinicians identify and discuss problems caused by or related to the patient's condition, and develop a plan for tackling these. In essence it is a conversation, or series of conversations, in which they jointly agree goals and actions for managing the patient's condition.

Objectives

To assess the effects of personalised care planning for adults with long-term health conditions compared to usual care (i.e. forms of care in which active involvement of patients in treatment and management decisions is not explicitly attempted or achieved).

Search methods

We searched the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, EMBASE, PsycINFO, ProQuest, clinical-trials.gov and WHO International Clinical Trials Registry Platform to July 2013.

Selection criteria

We included randomised controlled trials and cluster-randomised trials involving adults with long-term conditions where the intervention included collaborative (between individual patients and clinicians) goal setting and action planning. We excluded studies where there was little or no opportunity for the patient to have meaningful influence on goal selection, choice of treatment or support package, or both.

Data collection and analysis

Two of three review authors independently screened citations for inclusion, extracted data, and assessed risk of bias. The primary outcomes were effects on physical health, psychological health, subjective health status, and capabilities for self management. Secondary outcomes included effects on health-related behaviours, resource use and costs, and type of intervention. A patient advisory group of people with experience of living with long-term conditions advised on various aspects of the review, including the protocol, selection of outcome measures and emerging findings.

Main results

We included 19 studies involving a total of 10,856 participants. Twelve of these studies focused on diabetes, three on mental health, one on heart failure, one on end-stage renal disease, one on asthma, and one on various chronic conditions. All 19 studies included components that were intended to support behaviour change among patients, involving either face-to-face or telephone support. All but three of the personalised care planning interventions took place in primary care or community settings; the remaining three were located in hospital clinics. There was some concern about risk of bias for each of the included studies in respect of one or more criteria, usually due to inadequate or unclear descriptions of research methods.

Physical health

Nine studies measured glycated haemoglobin (HbA1c), giving a combined mean difference (MD) between intervention and control of -0.24% (95% confidence interval (CI) -0.35 to -0.14), a small positive effect in favour of personalised care planning compared to usual care (moderate quality evidence).

Six studies measured systolic blood pressure, a combined mean difference of -2.64 mm/Hg (95% CI -4.47 to -0.82) favouring personalised care (moderate quality evidence). The pooled results from four studies showed no significant effect on diastolic blood pressure, MD -0.71 mm/Hg (95% CI -2.26 to 0.84).

We found no evidence of an effect on cholesterol (LDL-C), standardised mean difference (SMD) 0.01 (95% CI -0.09 to 0.11) (five studies) or body mass index, MD -0.11 (95% CI -0.35 to 0.13) (four studies).

A single study of people with asthma reported that personalised care planning led to improvements in lung function and asthma control.

Psychological health

Six studies measured depression. We were able to pool results from five of these, giving an SMD of -0.36 (95% CI -0.52 to -0.20), a small effect in favour of personalised care (moderate quality evidence). The remaining study found greater improvement in the control group than the intervention group.

Four other studies used a variety of psychological measures that were conceptually different so could not be pooled. Of these, three found greater improvement for the personalised care group than the usual care group and one was too small to detect differences in outcomes.

Subjective health status

Ten studies used various patient-reported measures of health status (or health-related quality of life), including both generic health status measures and condition-specific ones. We were able to pool data from three studies that used the SF-36 or SF-12, but found no effect on the physical component summary score SMD 0.16 (95% CI -0.05 to 0.38) or the mental component summary score SMD 0.07 (95% CI -0.15 to 0.28) (moderate quality evidence). Of the three other studies that measured generic health status, two found improvements related to personalised care and one did not.

Four studies measured condition-specific health status. The combined results showed no difference between the intervention and control groups, SMD -0.01 (95% CI -0.11 to 0.10) (moderate quality evidence).

Self-management capabilities

Nine studies looked at the effect of personalised care on self-management capabilities using a variety of outcome measures, but they focused primarily on self efficacy. We were able to pool results from five studies that measured self efficacy, giving a small positive result in favour of personalised care planning: SMD 0.25 (95% CI 0.07 to 0.43) (moderate quality evidence).

A further five studies measured other attributes that contribute to self-management capabilities. The results from these were mixed: two studies found evidence of an effect on patient activation, one found an effect on empowerment, and one found improvements in perceived interpersonal support.

Other outcomes

Pooled data from five studies on exercise levels showed no effect due to personalised care planning, but there was a positive effect on people's self-reported ability to carry out self-care activities: SMD 0.35 (95% CI 0.17 to 0.52).

We found no evidence of adverse effects due to personalised care planning.

The effects of personalised care planning were greater when more stages of the care planning cycle were completed, when contacts between patients and health professionals were more frequent, and when the patient's usual clinician was involved in the process.

Authors' conclusions

Personalised care planning leads to improvements in certain indicators of physical and psychological health status, and people's capability to self-manage their condition when compared to usual care. The effects are not large, but they appear greater when the intervention is more comprehensive, more intensive, and better integrated into routine care.

PLAIN LANGUAGE SUMMARY

Effects of personalised care planning for people with long-term conditions

Background

People with long-term health conditions play an important part in managing their own health. But some of the tasks involved can be complicated, and require confidence and skill. Such tasks include taking medicines properly, monitoring symptoms, adopting or maintaining healthy lifestyles, managing their emotions, solving practical problems, knowing when and how to seek medical advice or community support, and coping with the impact of the condition(s) on their daily lives. Personalised care planning aims to provide support from health professionals that is tailored to the needs of individual patients. Such support recognises patients' concerns, and helps them become more able to manage their own health. Personalised care planning is a conversation, or series of conversations, between a patient and a clinician when they jointly agree on goals and actions for managing the patient's health problems.

Review question

We carried out this systematic review to find out whether a personalised approach, in which patients are encouraged to participate in setting goals and action plans and determining their support needs, leads to better outcomes than when these decisions are taken by health professionals alone.

Results

We found 19 randomised trials published before July 2013 that addressed this issue, involving 10,856 participants with conditions such as diabetes, mental health problems, heart failure, kidney disease, and asthma. The studies looked at a range of different interventions designed to involve patients and support self management. We combined and summarised results from studies that measured similar outcomes and found that involvement in personalised care planning probably led to small improvements in some indicators of physical health (better blood glucose levels, lower blood pressure measurements among people with diabetes, and control of asthma). It also probably reduced symptoms of depression, and improved people's confidence and skills to manage their health. We observed no effect on cholesterol, body mass index or quality of life. We found no evidence of any harms arising from personalised care planning. We found that the process worked best when it included preparation, record-sharing, care co-ordination and review, involved more intensive support from health professionals, and was integrated into routine care. However, the quality of evidence was only moderate, meaning that further research might change these findings.

Conclusion

We concluded that personalised care planning is a promising approach that offers the potential to provide effective help to patients, leading to better health outcomes. More research is needed to work out which aspects are most effective for specific patient groups.