

The support of patients with heart disease and their partners

by David Thompson (FRCN 1992)



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This article describes a programme of research focused on supporting people with heart disease. The development of this programme, which continues to evolve, arose from my clinical experience in the early 1980s when I was a senior nurse in a coronary care unit.

The frequent emotional distress that I observed in patients and their loved ones following a myocardial infarction (MI)

sparked my interest in measuring such problems, and later I decided to try to do something to ameliorate them. I therefore designed and conducted the first study to evaluate a nurse-delivered, in-hospital counselling programme for patients and their partners after a first MI, which was reported in 1990 in the *Journal of Psychosomatic Research*. The link to that paper and its abstract are provided below.

A prospective evaluation of in-hospital counselling for first time myocardial infarction men

Abstract

Self-ratings of anxiety and depression were studied over six months in 60 male patients, under 66 years of age, who were admitted to a coronary care unit with a first time acute myocardial infarction. Patients were randomly assigned to either a treatment group, where they received a simple programme of in-hospital counselling in addition to routine care, or to a control group, where they received routine care only.

All patients completed the Hospital Anxiety and Depression scale and a battery of visual analogue scales measuring anxiety on a range of topics related to recovery from a myocardial infarction. Patients who received in-hospital counselling reported statistically significantly less anxiety and depression than those who received routine care alone. This effect was sustained for six months after leaving hospital. It is concluded that a simple programme of in-hospital counselling, provided by a coronary care nurse, is efficacious and should be routinely offered to first myocardial infarction patients in hospital.

Citation

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Link

www.sciencedirect.com/science/article/abs/pii/002239999090080N

Introduction and background

This article, coupled with another (Thompson and Meddis 1990), reports the first randomised controlled trial of an in-hospital package (four 30-minute sessions) of counselling delivered by cardiac nurses to patients with a myocardial infarction (MI) and their wives. This simple, brief intervention was associated with significant reductions in anxiety and depression

and improvements in knowledge (Thompson 1991) and satisfaction (Thompson et al 1990) among patients and wives, which were sustained for six months.

The study was informed by my experience as a senior clinical nurse working in coronary care in the 1980s. I had long been struck by the apparent distress displayed by many patients and their partners after a MI and

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decided to explore the literature pertaining to this topic. I was surprised at the dearth of published research on the emotional aspects of this population, even though the literature exhorted clinicians to provide information and offer emotional support to coronary patients: there was hardly any mention of partners. I therefore started to investigate the experiences of patients and partners coping with such a stressful event and measure their reactions, particularly anxiety, to it (Thompson et al 1982, 1987; Thompson and Cordle 1988). At that time, the emotional needs of patients, and especially partners, often went unrecognised or were given scant attention by nurses, largely I suspect because many nurses deemed them to be comparatively unimportant or felt ill-equipped to deal with them. I found such a gap in clinical care surprising and unacceptable and was determined to try to address it.

In 1986, I was awarded a Department of Health research fellowship to fund me to undertake a PhD in psychology while remaining in clinical practice. Informed by my earlier exploratory research findings, I embarked on designing and conducting a study that aimed to evaluate the efficacy of a simple nurse-delivered package of education and emotional support. I consulted with a clinical psychologist and enlisted the support of a like-minded graduate nurse.

I was surprised that the most challenging aspect of the study was gaining ethical approval. The chair of the ethics committee rang to tell me that members would have had no problem approving the study if it was a drug trial but were flummoxed having to consider an application proposing to 'simply talk to people'! Fortunately, my medical consultant colleague, unstintingly supportive, wrote a letter to the ethics committee guaranteeing to vouch for me and accept responsibility for any adverse consequences should they eventuate.

After pilot work and refinement, the intervention comprised four 30-minute sessions of in-hospital educative-supportive counselling delivered to male patients admitted to coronary care with a first MI, and their wives. Two nurses were trained by the psychologist and me to deliver the intervention, in addition to usual care, over the four sessions: within 24 hours of admission to the coronary care unit; at 48 hours (just prior to transfer to the medical ward); at 72 hours (24 hours after transfer); and at five days (24 hours prior to discharge home).

Patients at that time were predominantly male with wives as partners, hence the choice of sample. Patients and wives as dyads were randomly allocated to either the intervention (counselling) or control (usual care) group. The nurses delivering the intervention were video recorded to ensure fidelity and minimise bias. Outcomes were assessed using standardised instruments and scored by an independent researcher blind to the intervention.

At completion of the trial, analysis of the data revealed statistically significant differences in most, but not all, of the primary outcomes in favour of the intervention. Though pleased, I was also concerned that this may be an atypical finding. Fortunately, when I presented my findings at various nursing research conferences (for example, the International Intensive Care and the Royal College of Nursing (RCN) Research Society) and published them, I learnt that another researcher, a psychologist, had independently developed a broadly similar intervention, but for patients only, and found similar results.

Influence and impact

When the study findings were published there was widespread popular, nursing, psychological and medical press interest and coverage, not only in the UK but overseas, especially in Australia, Canada and the United States. The publishing arm of the RCN, Scutari Press, published the whole study (Thompson 1990), which undoubtedly helped increase its influence, impact and reach.

In 1991, I was invited to participate in a prestigious conference 'Outcomes of nursing: Setting priorities for research' hosted by the Department of Health, and present my work at a select 'by invitation' symposium 'Psychosocial aspects of cardiac rehabilitation' hosted by the British Heart Foundation. These afforded me the opportunity to share my study, network with key opinion leaders and influencers, raise my profile and shape the next steps of my research.

This involved me building and leading a research programme on recovery and rehabilitation after a cardiac event (Thompson 1998) with a continued focus on exploring the emotional reactions and needs of patients and partners (Mayou et al 2000). Drawing on earlier work (Thompson et al 1995), this focus was extended to include patients and partners from different cultural and ethnic backgrounds (Webster et al 2002).

An important strand of this work was to ensure psychosocial aspects (McGee and Thompson 1995) were addressed as a matter of routine in cardiac rehabilitation (Coats et al 1995). Thus, I secured funding from the Department of Health and, together with the RCN, Royal College of Physicians and British Heart Foundation, surveyed the national provision and cost of cardiac rehabilitation and hosted a series of presentations with input from patients, carers, clinicians, researchers, health service managers and policy makers. This culminated in a consensus conference and subsequent formulation of national clinical guidelines and audit standards (Thompson et al 1996). These guidelines emphasised an evidence-based, individualised, needs-led, menu-driven approach rather than the typical conventional 'one size fits all' approach.

However, when we conducted a national survey of adherence to these guidelines, we found it was suboptimal, with psychosocial factors being particularly poorly addressed (Lewin et al 1998). Subsequently, we developed a core set of standardised instruments, including ones for assessing psychosocial status, endorsed by the British Association for Cardiac Rehabilitation and the British Heart Foundation, to be used routinely in cardiac rehabilitation (Lewin et al 2004).

We also conducted further trials of an individualised educational behavioural treatment delivered by cardiac nurses in hospital which indicated substantial benefits for patients (Mayou et al 2002). Building on this work, we also conducted systematic reviews and meta-analyses of these types of interventions for patients and partners (Reid et al 2013, Ski et al 2016), the findings of which lent support to my initial study.

Taken as a whole, this work has been influential nationally and internationally. It has informed and been cited in national and international clinical guidelines (Thompson et al 1997), consensus statements (for example, Colquhoun et al 2013, Glozier et al 2013), Cochrane reviews (for example, Richards et al 2018) and health policy documents (for example, Department of Health 2000). I have been invited to contribute to a variety of influential policy bodies such as the NHS Centre for Reviews and Dissemination, Department of Health working group on health outcome indicators, Scottish Intercollegiate Guidelines Network (SIGN) and Healthcare Commission, and to

advise international cardiac rehabilitation organisations in Australia, Canada, Hong Kong, New Zealand and the United States.

As an indicator of influence and impact, the original publication has been cited well over 100 times (Google Scholar) and serves as the basis of a vibrant, growing, long-term research programme.

Current and future relevance

It is worth remembering that cardiovascular disease is the most common non-communicable disease and leading cause of death and disability globally. The human and economic burden is immense, and efforts are focused on disease prevention, management and rehabilitation to reduce this burden and to enhance the quality of life and well-being of people with the disease. My modest contribution to such efforts is on trying to prevent or alleviate the, often considerable, emotional distress many people (patients and family members, especially partners) experience. In contemporary cardiac care, where this issue is increasingly recognised, and in-hospital patient stay and nurse-patient contact time is reduced markedly, this work is likely even more relevant (Thompson et al 2018). It is likely to help patients and partners (many of whom are informal carers) achieve better health outcomes and experiences, and enhance nurses' knowledge, skills, satisfaction and self-esteem.

The challenge now is to adapt this type of intervention to a variety of patients and partners (regardless of sex, age, race, class, marital status) with different cardiac diagnoses (angina, heart failure, atrial fibrillation, cardiac surgery) and settings (hospital, home, community), taking account of the patient's (and partner's, caregiver's) values, needs, preferences, expectations and outcomes, and evaluate it, not simply in terms of 'does it work?' but 'what works for whom, when and why?' (Thompson and Clark, 2020). Thus, a 'one size fits all' approach is no longer tenable. For example, issues such as choice of delivery and preferred outcomes are important considerations (Thompson et al 2019).

Related to this is my research pertaining to the appropriateness of commonly used outcome measures, particularly of emotional distress, for other cardiac (Conway et al 2016) or ethnic (Le Grande et al 2017) populations. Patient outcomes are rarely shaped by a single factor such as age, gender, race and class but rather a combination of these,

such as a middle-class female older adult of Asian origin who is an immigrant to the UK (Allana et al 2020). It is through adopting such nuanced approaches to designing, describing and understanding the nature and effects of the intervention that we can help identify factors such as its crucial characteristics and determinants of issues such as self-care as well as context, settings and possible mechanisms. I believe the focused, concerted, systematic and on-going programme of research I have described contributes to the body of science in nursing and improvement of healthcare for the people, families and communities who nurses and nursing profess to serve.

I am particularly keen to exploit the rapidly developing field of eHealth technology as an aid to enabling nurses to deliver this type of intervention more effectively and efficiently to help the profession support the attainment of the United Nations' strategic development goals of good health and well-being, gender equality, quality education and reduced inequalities. This poses not inconsiderable challenges already alluded to and will involve new ways of learning, thinking and doing, but I have spent my research career to date trying to be creative, taking risks and being prepared for disappointment. Not always very well. But remember, if at first you don't succeed...

References

- Allana S, Thompson DR, Ski CF et al (2020) Intersectionality in heart failure self-care: ignorance is not an option. *Journal of Cardiovascular Nursing*, 35, 3, 231-233. doi: 10.1097/JCN.0000000000000661
- Coats AJS, McGee HM, Stokes HC et al (1995) BACR Guidelines for Cardiac Rehabilitation. Blackwell, Oxford.
- Colquhoun DC, Bunker SJ, Clarke DM et al (2013) Screening, referral and treatment for depression in patients with coronary heart disease. *Medical Journal of Australia*, 198, 9, 483-484. doi: 10.5694/mja13.10153
- Conway A, Sheridan J, Maddicks-Law J et al (2016) Accuracy of anxiety and depression screening tools in heart transplant recipients. *Applied Nursing Research*, 32, 177-181. doi: 10.1016/j.apnr.2016.07.015
- Department of Health (2000) National Service Framework for Coronary Heart Disease. DoH, London.
- Glozier N, Tofler GH, Colquhoun DC et al (2013) Psychosocial risk factors for coronary heart disease. *Medical Journal of Australia*, 199, 3, 179-180. doi: 10.5694/mja13.10440
- Le Grande M, Ski CF, Thompson DR et al (2017) Social and emotional wellbeing assessment instruments for use with Indigenous Australians: a critical review. *Social Science and Medicine*, 187, 164-173. doi: 10.1016/j.socscimed.2017.06.046
- Lewin RJP, Ingleton R, Newens AJ et al (1998) Adherence to cardiac rehabilitation guidelines: a survey of rehabilitation programmes in the United Kingdom. *BMJ*, 316, 7141, 1354-1355. doi: 10.1136/bmj.316.7141.1354
- Lewin RJP, Thompson DR, Roebuck A (2004) Development of the BACR/BHF minimum dataset for cardiac rehabilitation. *British Journal of Cardiology*, 11, 4, 300-301.
- Mayou R, Gill D, Thompson DR et al (2000) Depression and anxiety as predictors of outcome after myocardial infarction. *Psychosomatic Medicine*, 62, 2, 212-218. doi: 10.1097/00006842-200003000-00011
- Mayou RA, Thompson DR, Clements A et al (2002) Guideline-based early rehabilitation after myocardial infarction: a pragmatic randomised controlled trial. *Journal of Psychosomatic Research*, 52, 2, 89-95. doi: 10.1016/s0022-3999(01)00300-2
- McGee HM, Thompson DR (1995) Psychosocial aspects of cardiac rehabilitation. In Coats AJS, McGee HM, Stokes HC et al (Eds) BACR Guidelines for Cardiac Rehabilitation. Blackwell, Oxford, 102-124.
- Reid J, Ski CF, Thompson DR (2013) Psychological interventions for patients with coronary heart disease and their partners: a systematic review. *PLoS One*, 8, 9, e73459. doi: 10.1371/journal.pone.0073459
- Richards SH, Anderson L, Jenkinson CE et al (2018) Psychological interventions for coronary heart disease: Cochrane review and meta-analysis. *European Journal of Preventive Cardiology*, 25, 3, 247-259. doi: 10.1177/2047487317739978
- Ski CF, Jelinek M, Jackson AC et al (2016) Psychosocial interventions for patients with coronary heart disease and depression: a systematic review and meta-analysis. *European Journal of Cardiovascular Nursing*, 15, 5, 305-316. doi: 10.1177/1474515115613204
- Thompson DR (1990) *Counselling the Coronary Patient and Partner*. Scutari Press, London.
- Thompson DR (1991) Effect of in-hospital counseling on knowledge in myocardial infarction patients and spouses. *Patient Education and Counseling*, 18, 2, 171-177. doi: 10.1016/0738-3991(91)90009-T
- Thompson DR (1998) The development of a programme of research in cardiac rehabilitation. *International Journal of Nursing Studies*, 35, 1, 72-78. doi: 10.1016/S0020-7489(98)00004-2
- Thompson DR, Bowman GS, Kitson AL et al (1996) Cardiac rehabilitation in the United Kingdom: guidelines and audit standards. National Institute for Nursing, the British Cardiac Society and the Royal College of Physicians of London. *Heart*, 75, 1, 89-93. doi: 10.1136/hrt.75.1.89
- Thompson DR, Bowman GS, de Bono DP et al (1997) *Cardiac Rehabilitation: Guidelines and Audit Standards*. Royal College of Physicians, London.
- Thompson DR, Clark AM (2020) Heart failure disease management interventions: time for a reappraisal. *European Journal of Heart Failure*, 22, 4, 578-580. doi: 10.1002/ehfj.1777
- Thompson DR, Cordle CJ (1988) Support of wives of myocardial infarction patients. *Journal of Advanced Nursing*, 13, 2, 223-228. doi: 10.1111/j.1365-2648.1988.tb01411
- Thompson DR, Meddis R (1990) Wives' responses to counselling early after myocardial infarction. *Journal of Psychosomatic Research*, 34, 3, 249-258. doi: 10.1016/0022-3999(90)90081-e
- Thompson DR, Cordle C, Sutton T (1982) Anxiety in coronary patients. *International Rehabilitation Medicine*, 4, 4, 161-164. doi: 10.3109/09638288209166907
- Thompson DR, Ersser S, Webster RA (1995) The experiences of patients and their partners 1 month after a heart attack. *Journal of Advanced Nursing*, 22, 4, 707-714. doi: 10.1046/j.1365-2648.1995.22040707.x
- Thompson DR, Ski CF, Clark AM (2019) Cardiac rehabilitation and secondary prevention: wrong terms, aims, models and outcomes? *European Journal of Preventive Cardiology*, 26, 9, 995-997. doi: 10.1177/2047487319834385
- Thompson DR, Ski CF, Saner H (2018) Psychosocial assessment and interventions - are we doing enough? *Heart and Lung*, 47, 4, 278-279. doi: 10.1016/j.hrtlng.2018.05.006
- Thompson DR, Webster RA, Cordle CJ et al (1987) Specific sources and patterns of anxiety in male patients with first myocardial infarction. *British Journal of Medical Psychology*, 60, 4, 343-348. doi: 10.1111/j.2044-8341.1987.tb02753.x
- Thompson DR, Webster RA, Meddis R (1990) In-hospital counselling for first-time myocardial infarction patients and spouses: effects on satisfaction. *Journal of Advanced Nursing*, 15, 9, 1064-1069. doi: 10.1111/j.1365-2648.1990.tb01987.x
- Webster RA, Thompson DR, Mayou RA (2002) The experiences and needs of Gujarati Hindu patients and partners in the first month after acute myocardial infarction. *European Journal of Cardiovascular Nursing*, 1, 1, 69-76. doi: 10.1016/S1474-5151(01)00005-6