

ORIGINAL ARTICLE

The dilemma of patient responsibility for lifestyle change: Perceptions among primary care physicians and nurses

PIIA JALLINOJA¹, PILVIKKI ABSETZ¹, RISTO KURONEN^{2,3}, AULIKKI NISSINEN¹,
MARTTI TALJA², ANTTI UUTELA¹ & KRISTIINA PATJA¹

¹National Public Health Institute, ²Päijät-Häme Central Hospital, ³Asikkala Health Care Centre, Finland

Abstract

Objective. To explore physicians' and nurses' views on patient and professional roles in the management of lifestyle-related diseases and their risk factors. **Design.** A questionnaire study with a focus on adult obesity, dyslipidemia, high blood pressure, type 2 diabetes, and smoking. **Setting.** Healthcare centres in Päijät-Häme hospital district, Finland. **Subjects.** Physicians and nurses working in primary healthcare (n = 220). **Main outcome measures.** Perceptions of barriers to treatment of lifestyle-related conditions, perceptions of patients' responsibilities in self-care, experiences of awkwardness in intervening in obesity and smoking, perceptions of rushed schedules, and perceptions of health professionals' roles and own competence in lifestyle counselling. **Results.** A majority agreed that a major barrier to the treatment of lifestyle-related conditions is patients' unwillingness to change their habits. Patients' insufficient knowledge was considered as such a barrier less often. Self-care was actively encouraged. Although a majority of both physicians and nurses agreed that providing information, and motivating and supporting patients in lifestyle change are part of their tasks, only slightly more than one half estimated that they have sufficient skills in lifestyle counselling. Among nurses, those with less professional experience more often reported having sufficient skills than those with more experience. Two-thirds of the respondents reported that they had been able to help many patients to change their lifestyles into healthier ones. **Conclusions.** The primary care professionals experienced a dilemma in patients' role in the treatment of lifestyle-related diseases: the patient was recognized as central in disease management but also, if reluctant to change, a major potential barrier to treatment.

Key Words: *Counselling, diabetes mellitus, dyslipidemia, family practice, high blood pressure, lifestyle, obesity, smoking, type 2 diabetes*

Prevalence of overweight and obesity is increasing in Western countries, including Finland [1]. Type 2 diabetes incidence is rising [2] and the positive development in population cholesterol level has come to an end [3]. Although there have been major developments in pharmacotherapy of lifestyle-related risk factors, lifestyle change remains a central part of treatment of type 2 diabetes [4], dyslipidemia, and high blood pressure [5].

Lifestyle modification, however, is a debated and even a controversial issue. During the past decades, healthcare professionals' and patients' responsibilities in health counselling and lifestyle change have been under discussion. The general trend has been a gradual replacement of authoritarian and instructive care traditions with patient-centred methods aiming

at empowerment [6]. Self-management of chronic diseases has become the patient's responsibility [7] and it is stressed that the most important choices affecting the health of a person are made by that person, not by health professionals [8]. In respect of smoking cessation, for example, interventions supporting patient autonomy have been shown to be associated with greater cessation rates than conventional community care [9,10]. A meta-analysis of client-centred motivational interviewing showed that it outperforms traditional advice-giving in 80% of studies [11]. Nevertheless, many primary healthcare professionals lack appropriate communication skills, leading to ineffective and impersonal counselling that focuses on factors which are irrelevant to the patient [12]. Moreover, as patient-centeredness and

A majority of physicians and nurses considered lifestyle counselling as part of their duties and lifestyle change as part of the treatment of dyslipidemia, high blood pressure, and type 2 diabetes.

- Patients' willingness to change was regarded as a crucial but as yet unresolved component of treatment of lifestyle-related diseases, smoking, and obesity.
- Information provision was regarded a central but often insufficient part of health counselling.
- A significant proportion of physicians and nurses reported a lack of skills in lifestyle counselling. Nurses with less professional experience reported sufficient counselling skills more often than nurses with more experience, as measured by the number of years in the profession.

empowerment represent relatively new concepts in healthcare [6], ambivalence related to professionals' and patients' respective roles is likely to exist.

In this study we explore how primary care physicians and nurses perceive the role of patients and professionals in treatment of lifestyle-related diseases in general, and more specifically, in the case of adult obesity, dyslipidemia, high blood pressure, type 2 diabetes, and smoking. Since both physicians and nurses form the chain of referrals around chronic disease prevention and management, it is critical to study perceptions in both groups. Finally, we examine whether the years of working are associated with the perceptions.

Material and methods

The present study forms part of the Current Care Guidelines Implementation Programme (VALTIT) which aims to adapt and implement the Finnish Current Care guidelines on metabolic syndrome in Päijät-Häme Hospital District in the Southern Finland. Lahti, with nearly 100 000 inhabitants, is the biggest town in the region. The programme is part of the GOAL project (Good Ageing in Lahti Region) aiming to promote primary prevention and to improve treatment of chronic diseases [13].

The questionnaire was piloted among professionals attending a training program on type 2 diabetes organized by the hospital district. The questionnaire and two reminders were mailed between October 2004 and January 2005 to personnel in primary healthcare and personnel treating metabolic syndrome and lifestyle-related diseases in

secondary care. The present paper reports results for primary healthcare professionals only.

The questionnaire covered use of and attitudes towards clinical guidelines [14], as well as practices of and attitudes towards lifestyle counselling. Special emphasis was placed on adult obesity, smoking, high blood pressure, dyslipidemia, and type 2 diabetes.

In the present paper, attitudes towards patients' and professionals' responsibilities were analysed. Key barriers to treatment were assessed with two statements, both measured in respect of adult obesity, dyslipidemia, high blood pressure, type 2 diabetes, and smoking: "A key barrier to treatment is patients' insufficient knowledge of the risks of [name of the condition]", and "A key barrier to treatment is patients' unwillingness to change their lifestyle". Patient role and the role of lifestyle change were assessed in respect of dyslipidemia, high blood pressure, and type 2 diabetes with the statements "Patients must be assigned responsibility for self-care", and "Lifestyle change is a central part of treatment". Views of patients' need for support were assessed in respect of adult obesity and smoking with the statements "A dieter/a quitter needs support from a healthcare professional". In all measures, the scale was: always, nearly always, seldom, and never.

In respect of professionals' role and responsibilities in lifestyle counselling in general, we analysed the following items (scale: totally agree, partially agree, in between, partially disagree, totally disagree): "My task is to give information on lifestyle-related risks"; "My task is to motivate and support the patient in his/her lifestyle change"; "My task is to make the patient follow the given lifestyle instructions"; "I have sufficient skills for lifestyle counselling"; "I feel uneasy intervening in an obese patient's overweight"; "I feel uneasy intervening in smokers' smoking"; "I have been able to help many of my patients to change their lifestyle to a healthier one"; and "Our current working schedule is too hectic to allow us to tackle the patient's life situation".

The number of working years since graduation was categorized as ≤ 15 years and ≥ 16 years.

Distribution of questionnaires was based on employee lists provided by the chief nurses and head physicians of the healthcare centres of the hospital district, and the occupational healthcare centre of Lahti. Because we could not obtain a list of names of physicians in Lahti, we posted undesignated questionnaires to be delivered to them in the Lahti units (18 returned questionnaires). Likewise, undesignated questionnaires were sent to all units to be distributed to any new employee not on the list (10 returned questionnaires). The total response rate was 59% (physicians 53%, $n = 59$; nurses 62%, $n = 161$) and the total number of respondents was 220.

Of the physicians, 52% were men ($n=31$) and 48% women ($n=28$); 99% ($n=159$) of the nurses were women. The mean age of physicians was 46 years (range 24–61 years) and of nurses 45 years (range 22–60 years). Of the nurses, 61% ($n=98$) were public health nurses, 26% ($n=42$) were registered nurses, and 13% ($n=21$) had some other education (e.g. assistant nurse, practical nurse, midwife). Of the physicians, 54% ($n=32$) had the basic education of licensed medical doctor, 37% ($n=22$) were specialists in general practice, and 9% ($n=5$) were specialists in some other field. In total, 66% ($n=35$) of the physicians and 46% ($n=73$) of the nurses had at least 16 years of work experience since graduation.

The results are presented in cross-tables. Statistical testing of differences between the frequency distributions of physicians and nurses was carried out using a chi-squared test. The research plan for the questionnaire study was approved by the Ethics committee of the Finnish National Public Health Institute.

Results

A majority of physicians (88%) and nurses (95%) agreed that patients themselves must accept the responsibility for lifestyle-related decisions. In respect of all the conditions presented, a majority of physicians and nurses considered that patients' unwillingness to change is always or nearly always a key barrier to treatment (Table I). Patients' insufficient knowledge of the risk of the condition was much more seldom regarded as a barrier – an opinion most pronounced in respect of adult obesity and smoking.

A majority of physicians and nurses were of the opinion that patients must be assigned responsibility for the self-care of dyslipidemia, high blood pressure, and type 2 diabetes. With regard to high blood pressure, nurses more often than physicians were of the opinion that this is always the case. Physicians with a greater number of years of professional experience were more likely to consider that patients with dyslipidemia must always or nearly always be assigned responsibility for the self-care of these diseases (97% vs. 78% $p=0.028$). Dieters more often than quitters were seen as in need of professional support in their effort to make a lifestyle change.

A clear majority of both physicians and nurses considered that information provision, and motivating and supporting patients in lifestyle change are part of their tasks (Table II). However, only slightly more than half of these professionals estimated that they have enough skills in lifestyle counselling, and

two-thirds considered that they have been able to help many patients to change their lifestyles into healthier. Two-thirds of the physicians and one half of the nurses reported that their schedule is too hectic to allow them to go into patients' life situations. Nurses more often than physicians reported that they felt uneasy intervening in respect of patients' weight or smoking. Nurses with fewer years of professional experience were more likely to report having enough skills for lifestyle counselling (70% vs. 43%, $p=0.001$).

Discussion

Despite the perceived central role of pharmacotherapy in the treatment of lifestyle-related diseases we have reported elsewhere [15], a majority of primary healthcare professionals emphasized patients' own activity and responsibility, especially for type 2 diabetes. Others have stressed the importance of individualized care and care focusing not only on pharmacotherapy in the management of type 2 diabetes [16,17]. Moreover, a majority of professionals considered patients' unwillingness to change as a major barrier to treatment. It is notable that the unwillingness to change was equally estimated as a barrier in the case of obesity as well as risk factors that may also be treated with pharmacotherapy. These views were shared by both physicians and nurses, even though the nurses favoured more strongly the self-management of high blood pressure than did the physicians in the study.

Our results showed that information provision and enhancement of motivation are perceived as at the core of healthcare professionals' duties. At the same time, however, more than half of both physicians and nurses consider that lack of information is only seldom or never a barrier to treatment of chronic conditions, especially obesity and smoking cessation. These results indicate a view that information is a central but often an insufficient part of health counselling, leaving patient motivation and willingness to change as a crucial but unresolved dilemma of treatment of many chronic conditions. The seemingly contradictory result that nurses with less professional experience felt more often that they have enough skills for lifestyle counselling can be interpreted in the light of changes in the nursing school curriculum with increasing emphasis on counselling skills over the years.

Pessimism as regards patients' lifestyle modification has also been reported earlier [18], and it reflects the observation that treatment aiming at lifestyle change has only limited effects [19]. Other studies have shown that although a majority of individuals with lifestyle-related diseases are willing

Table I. Perceptions of patients' responsibilities in treatment of adult obesity, dyslipidemia, high blood pressure, type 2 diabetes, and smoking, percentage of respondents: physicians n = 59, nurses n = 161, total n = 220.

	A key barrier to treatment is patients' insufficient knowledge of the risks of the conditions		A key barrier to treatment is patients' unwillingness to change lifestyle ¹		Patients must be assigned responsibility for self-care		Lifestyle change is a central part of treatment		A dieter/quitter need support from a healthcare professional	
	Physicians	Nurses	Physicians	Nurses	Physicians	Nurses	Physicians	Nurses	Physicians	Nurses
Adult obesity										
Always	2	1	21	17	Not asked	Not asked	Not asked	Not asked	7	7
Nearly always	17	18	74	77					81	82
Seldom	62	69	5	6					12	10
Never	19	12 n.s.	0	0 n.s.					0	0 n.s.
Dyslipidemia										
Always	2	2	16	16	39	48	39	48	Not asked	Not asked
Nearly always	29	43	67	72	52	49	54	52		
Seldom	57	52	16	12	9	2	7	0		
Never	12	3 n.s.	0	0 n.s.	0	1 n.s.	0	0 p=0.007		
High blood pressure										
Always	3	2	5	9	28	51	28	34	Not asked	Not asked
Nearly always	35	43	67	77	63	46	60	62		
Seldom	60	51	28	14	10	3	12	4		
Never	2	4 n.s.	0	0 p=0.049	0	0 p=0.006	0	0 n.s.		
Type 2 diabetes										
Always	2	2	21	15	55	67	69	59	Not asked	Not asked
Nearly always	45	52	62	72	43	31	29	39		
Seldom	47	41	17	13	2	2	2	2		
Never	7	5 n.s.	0	0 n.s.	0	0 n.s.	0	0 n.s.		
Smoking										
Always	4	2	20	21	Not asked	Not asked	Not asked	Not asked	5	5
Nearly always	2	7	57	65					70	59
Seldom	63	59	21	14					25	35
Never	32	31 n.s.	2	0 n.s.					0	1 n.s.

¹With regard to smoking the statement was "A key barrier to treatment is patients' unwillingness to quit".

Table II. Physicians' and nurses' perceptions of their tasks in lifestyle counselling, percentages of respondents completely or partly agreeing with the statements: physicians n = 59, nurses n = 161, total n = 220.

	Physicians (%)	Nurses (%)	p-value
My task is to give information on lifestyle-related risks	98	98	n.s.
My task is to motivate and support the patient in his/her lifestyle change	98	100	n.s.
My task is to make the patient follow the given lifestyle instructions.	79	87	n.s.
I have sufficient skills for lifestyle counselling.	55	58	n.s.
I feel uneasy intervening in an obese patient's overweight	17	32	p = 0.031
I feel uneasy intervening in a smoker's smoking	5	17	p = 0.026
I have been able to help many of my patients to change their lifestyle to a healthier one	68	64	n.s.
Our current working schedule is too hectic to allow us to tackle the patient's life situation.	61	50	n.s.

to alter their diet to a more healthy one, a considerable proportion are not living according to this will to do so [20]. Healthcare professionals refer to low patient compliance [21] and lack of patient interest [22,23] as barriers to disease prevention.

Yet another reason behind professionals' rather negative judgements concerning their patients' willingness to change might be unrealistic and even idealistic expectations in respect of lifestyle change. This leads to attributions of total failure even if some significant lifestyle changes are achieved. Sometimes even maintenance of current weight can help to prevent a disease, and should therefore be interpreted as a success [24]. The primary care physicians and nurses studied here hold a view that while patients are responsible for their lifestyle change, for the majority they are not able to act in their best interests. The dilemma of this situation might be frustrating for professionals, and it might also lead some to neglect lifestyle counselling as useless and rely predominantly on pharmacotherapy in the treatment of lifestyle-related conditions.

The frustration might be even stronger among such professionals who see that information provision is insufficient in enhancing lifestyle change. However, information is also needed since studies among patients with type 2 diabetes have revealed many misunderstandings about the disease and its treatment [25], and have also shown that improved diabetes knowledge improves glycaemic control [26].

The total response rate of 59% was satisfactory. Nurses responded more actively than physicians. A proportion of the non-respondents might be those who are the busiest or are sceptical about healthcare research.

More detailed studies, using not only quantitative but also qualitative methods, are needed to analyse the logics of patient roles and responsibilities, and how they are affected by interventions. As a major proportion of the respondents in the present study estimated patients' unwillingness to change as a key barrier in treatment of chronic

conditions, further studies are needed to explore this unwillingness.

Acknowledgements

The study has been supported by the Academy of Finland, grant decision no: 207476.

References

- [1] Lahti-Koski M, Jousilahti P, Pietinen P. Secular trends in body mass index in Eastern Finland from 1972 to 1997. *Int J Obes* 2001;25:727–34.
- [2] Peltonen M, Korpi-Hyövälti E, Oksa H, Puolijoki H, Saltevo J, Vanhala M, et al. Lihavuuden, diabeteksen ja muiden glukoosiaineenvaihdunnan häiriöiden esiintyvyys suomalaisessa aikuisväestössä. Dehkon 2D-hanke (D2D) [Prevalence of obesity, type 2 diabetes, and other disturbances in glucose metabolism in Finland – the FIN-D2D survey]. *Suom Laakaril* 2006;61:163–70.
- [3] Laatikainen T, Tapanainen H, Alftan G, Finnriski 2002. Tutkimuksen toteutus ja tulokset 1 [Finnriski 2002. Implementation and results of the research]. Helsinki: National Public Health Institute; 2003.
- [4] Tuomilehto J, Lindström J, Eriksson J, Valle T, Hamalainen H, Ilanne-Parikka P, et al. Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. *N Engl J Med* 2001;344:1343–50.
- [5] Mattila R, Malmivaara A, Kastarinen MJ, Kivelä S-L, Nissinen A. Effectiveness of multidisciplinary lifestyle intervention for hypertension: A randomised controlled trial. *J Hum Hypertens* 2003;17:199–205.
- [6] Kuokkanen L, Leino-Kilpi H. Power and empowerment in nursing: Three theoretical approaches. *J Adv Nurs* 2000;31: 235–41.
- [7] Feste C, Anderson RM. Empowerment: From philosophy to practice. *Patient Educ Couns* 1995;26:139–44.
- [8] Glasgow R, Anderson RM. In diabetes care: Moving from compliance to adherence is not enough. *Diabetes Care* 1999; 22:2090–2.
- [9] Williams GC. Testing a self-determination theory intervention for motivating tobacco cessation: Supporting autonomy and competence in a clinical trial. *Health Psychology: The Official Journal of the Division of Health Psychology. American Psychological Association* 2006;25:91–101.
- [10] Williams GC. Facilitating autonomous motivation for smoking cessation. *Health Psychology: The Official Journal of the Division of Health Psychology. American Psychological Association* 2002;21:40–50.

- [11] Rubak S, Sandback A, Lauritzen T, Christensen B. Motivational interviewing: a systematic review and meta-analysis. *Br J Gen Pract* 2005;55:305–12.
- [12] Poskiparta M, Kasila K, Kiuru P. Dietary and physical activity counselling on Type 2 diabetes and impaired glucose tolerance by physicians and nurses in primary healthcare in Finland. *Scand J Prim Health Care* 2006;24:206–10.
- [13] Fogelholm M, Valve R, Absetz P, Heinonen H, Uutela A, Patja K, et al. Rural–urban differences in health and health behaviour: a baseline description of a community health-promotion program for the elderly. *Scand J Public Health* 2006;34:632–40.
- [14] Kuronen R, Jallinoja P, Ilvesmäki V, Patja K. Valtimotautiriskeihin liittyvät Käypä Hoito-suositukset: asenteet, tutustuminen ja käyttö Päijät-Hämeessä [Current Care Clinical Guidelines associated with cardiovascular disease: Familiarity, attitudes and use in the Päijät-Häme region, Finland]. *Suom Laakaril* 2006;61:4571–7.
- [15] Jallinoja P, Kuronen R, Absetz P, Patja K. Lääkehoidon, elintapahoidon ja ryhmäneuvonnan asema elintapaisauroksien hoidossa – tutkimus lääkäreiden ja hoitajien näkemyksistä Päijät-Hämeessä [The role of pharmacotherapy, lifestyle modification and group counselling in treatment of lifestyle related diseases – a study of physicians’ and nurses’ attitudes in Päijät-Häme Province]. *Suom Laakaril* 2006;61:3747–51.
- [16] De Fine Olivarius N. Diabetes care today: Not everyone should have intensive multipharmacological treatment. *Scand J Prim Health Care* 2004;22:67–70.
- [17] Hansen LJ, De Fine Olivarius N, Siersma V, Drivsholm T, Sahl J. Individualised treatment goals in diabetes care. *Scand J Prim Health Care* 2004;22:71–7.
- [18] Ienatsch G. Knowledge, attitudes, treatment practices, and health behaviours of nurses regarding blood cholesterol. *J Continuing Education in Nursing* 1999;30:13–9.
- [19] Kastarinen MJ, Puska P, Korhonen MH, Mustonen JN, Salomaa V, Sundvall J, et al. Non-pharmacological treatment of hypertension in primary health care: A 2-year open randomized controlled trial of lifestyle intervention against hypertension in eastern Finland. *J Hypertens* 2002;20:2505–12.
- [20] Neuhauser ML, Miller DL, Kristal AR, Barnett MJ, Cheskin LJ. Diet and exercise habits of patients with diabetes, dyslipidemia, cardiovascular disease or hypertension. *J Am Coll Nutr* 2002;21:394–401.
- [21] Kushner RF. Barriers to providing nutrition counseling by physicians: A survey of primary care practitioners. *Prev Med* 1995;24:546–52.
- [22] Cornuz J, Ghali WA, DiCarantonio D, Pecoud A, Paccaud F. Physicians’ attitudes towards prevention: Importance of intervention-specific barriers and physicians’ health habits. *Fam Pract* 2000;17:535–40.
- [23] Castaldo J, Nester J, Wasser T, Masiado T, Rossi M, Young M, et al. Physician attitudes regarding cardiovascular risk reduction: The gaps between clinical importance, knowledge, and effectiveness. *Disease Management* 2005;8:93–105.
- [24] Lindstrom J. Prevention of type 2 diabetes with lifestyle intervention – Emphasis on dietary composition and identification of high-risk individuals. Helsinki: National Public Health Institute; 2006.
- [25] Holmström I, Rosenqvist U. Misunderstandings about illness and treatment among patients with type 2 diabetes. *J Adv Nurs* 2005;49:146–54.
- [26] Collieran K, Starr B, Burge M. Putting diabetes to the test. *Diabetes Care* 2003;26:2220–1.