OXFORD

Health Service Research

Couple relationship problems—a task for the general practitioner? A cross-sectional survey from Norway

Siri Dalsmo Berge[a,*,ⓞ], Eivind Meland[a], Mette Brekke[b], Gunnar Tschudi Bondevik[a,c], Frode Thuen[d] and Thomas Mildestvedt[a]

[a]Department of Global Public Health and Primary Care, University of Bergen, Bergen, [b]General Practice Research Unit, Institute of Health and Society, University of Oslo, Oslo, [c]National Centre for Emergency Primary Health Care, NORCE Norwegian Research Centre, Bergen and [d]Centre for Evidence-Based Practice, Western Norway University of Applied Sciences, Bergen, Norway

*Correspondence to Siri Dalsmo Berge, Department of Global Public Health and Primary Care, University of Bergen, Postboks 7804, 5020 Bergen, Norway; E-mail: Siri.Berge@uib.no

Abstract

Background A healthy couple relationship is a predictor of good health. There is a lack of knowledge about what role family and couples counselling should have in general practice.

Objectives To identify the prevalence of patients who have talked, or want to talk, with their general practitioner (GP) about their couple relationship, to investigate what characterizes these patients and to explore whether they believe that couple relationship problems should be dealt with in general practice.

Methods We conducted a cross-sectional survey in 70 general practices in Norway during spring 2019. A questionnaire was answered by 2178 consecutive patients (response rate 75%) in GP waiting rooms. Data were examined using frequencies and linear and logistic regression models.

Results We included 2097 responses. Mean age was 49.0 years and 61.3% were women. One in four (25.0%) had already talked with their GP about couple relationship problems, while one in three (33.5%) wanted to talk with their GP about their couple relationship problems. These patients more frequently had experience of divorce, poor self-rated health, an opinion that their couple relationship had a significant impact on their health and lower couple relationship quality when adjusted for age, sex, present marital status and children living at home. We found that 46.4% of patients believed that GPs should be interested in their couple relationship problems.

Conclusion Relationship problems are frequently addressed in general practice. GPs should be prepared to discuss this issue to facilitate help for couples earlier than they might otherwise expect.

Key words: Couple therapy, family practice, general practice, marital conflict, marital relationship, primary care.

Background

A healthy couple relationship is a predictor of good health (1). Data from American national surveys suggest that marital happiness contributes far more to global happiness than any other variable, including satisfaction with work and friendships (2). Higher-quality marital relationships are related to better health, including lower risks of mortality

and cardiovascular disease. Couples who show hostile behaviour during marital conflict have elevated blood pressure and heart rate, higher levels of circulating catecholamines (norepinephrine and epinephrine) and cortisol, greater cytotoxic activity of natural killer cells (which play a key role in fighting viruses) and higher levels of circulating markers of inflammation compared to less hostile couples (3). Chronic and

---

Key Messages

- One in four patients has talked with their GP about their couple relationship.
- One in three would like to discuss relationship problems with their GP.
- Almost half believe that GPs should be interested in their couple relationship.
- Most patients believe that their couple relationship has an impact on their health.
- GPs should be prepared to address couple relationship problems when needed.

---

persistent inflammation has been implicated as a central mechanism explaining how psychosocial factors can contribute to chronic disease, including atherosclerosis and cancer (3).

High-quality marriages may protect against cardiovascular disease for women (4) and lower the risk of infectious disease in pregnancy (5). The association between marital quality and depression is well known (6). Negative dimensions of marital functioning have an indirect influence on health outcomes through depression and health habits and a direct influence on cardiovascular, endocrine, immune, neurosensory and other physiological mechanisms (2). Children's health is affected by the quality of their parents' marriage (7). Higher marital functioning is associated with lower child cortisol levels (8). Newborns have a higher risk of infections if their parents' relationship satisfaction was low during pregnancy (9). Childhood abuse or household dysfunction during childhood increases the risk for several diseases during adulthood, including ischaemic heart disease, cancer, chronic lung disease, skeletal fractures and liver disease (10).

In Norway, 35–50% of all marriages end in divorce (the estimate depends on how divorce incidence is calculated) (11,12). Cohabitants with children have three times higher risk of separation than married couples with children (13). People who are divorced experience lower levels of happiness, higher levels of distress and more physical health problems when compared with those who are married (7). Parental divorce is associated with risk of mental illness and lower self-esteem, lower academic success, poorer conduct and psychological adjustment, less social competence and poorer long-term health in children, although the association also depends on concomitant factors (7,14). It is not known to what extent people see their couple relationship quality as an important aspect of their health.

The regular general practitioner (GP) scheme, which assigns every inhabitant to an individual GP, was introduced in Norway in 2001. On average, every inhabitant in Norway has 2.7 consultations with their GP per year (15), which means most people visit their GP regularly. GPs offer a comprehensive range of services. They are the patients' first contact point with the health service for most medical problems (16), and they have a gatekeeping role for access to specialized health care services. Patients generally have a high level of confidence in their doctors (17). There are comprehensive studies on the reasons for patient encounters in general practice with an emphasis on symptoms and complaints (18,19). A mental health problem is addressed in a quarter of GP consultations (18), and family/partner conflicts take up a substantial part of the GPs' psychosocial consultations (20). Middle-aged and divorcees are more willing to address family-related issues with their GP (21). About one-third of GP patients think that most patients would see their GP regarding relationship problems (17), but a substantially lower number have claimed that GPs should be concerned with the feelings of family members and give advice regarding relationship problems (21).

We do not know how common it is for patients to talk about couple relationship problems with their GP, and we know little about what characterizes the patients who want to talk, or who have already talked, with their GP about their couple relationship. It is

not known to what extent patients want their GP to give them advice and offer counselling regarding their couple relationship problems, as former studies have focused on family relations in general and not couple relationship in particular.

The aims of this study, therefore, were to identify the prevalence of patients who have talked or who want to talk with their GP about their couple relationship, to investigate what characterizes these patients and to explore whether the patients believe that couple relationship problems should be dealt with in general practice.

Method

Data collection and participants

A cross-sectional survey was conducted in 70 GP practices in the southwestern region of Norway during spring 2019. Medical students at the University of Bergen, Norway, attend 6 weeks of deployment in general practice in their final year. Out of 83 medical students deployed, 70 submitted data for the study. On average, each student collected data from 32 consecutive patients (range 7–40) irrespective of the cause for the patients' visit. No compensation for study participation was offered. The response rate of 75% was calculated from reports made by 64 students, as the remaining 6 students did not systematically report the proportion of patients who agreed to participate. The questionnaires were self-administered by the patients and were filled out while they were waiting for their appointment in the GP waiting room. Patients returned the questionnaires to the physician's assistant in sealed envelopes, and the medical students brought them to the reception of the Department of Global Public Health and Primary Care at the University of Bergen. The completed questionnaires were anonymous.

Measurements

The one-page questionnaire comprised demographic variables (age, sex, relationship history/experience, children and native country), self-rated health (a single question validated in a similar type of study (22)) and questions about couple relationship quality [a five-item version of the Relationship Satisfaction Scale (RSS) (23)]. We asked the participants to rate the following statement: 'I think my couple relationship has a significant impact on my health'. We used a six-point Likert scale, ranging from 'strongly disagree' to 'strongly agree'. The respondents were also asked if they had ever talked with their GP about their couple relationship, and there were three questions about their views on the GP's role regarding couple relationship problems. The two statements 'I think that my GP should be interested in my couple relationship' and 'I want to talk with my GP about couple relationship problems' were dichotomized into disagree (Answers 1–3) and agree (Answers 4–6).

Statistical analysis

The statistical analyses were performed using IBM SPSS Statistics version 25. We present the demographics with frequencies and mean

scores. Independent variables in the regression models were categorized for the whole population and for both sex groups.

The outcome variable 'Have you ever talked with your GP about your couple relationship?' was studied using a binary logistic regression model. The model contained four independent adjustment variables (age, sex, children living at home and marital status) and five predictor variables that were examined one by one, together with the adjustment variables. The predictor variables were self-rated health, divorce experience, relationship satisfaction, the patients' opinion on whether their couple relationship has a significant impact on their health and the patients' opinion on whether it has been useful to talk with their GP about their couple relationship. We used a linear regression model to assess the impact from the same factors to the six-level ordinal outcome variable 'I want to talk to my GP about couple relationship problems' (skewness = 0.498).

Ethical approval

We conducted the study in compliance with the ethical guidelines of the Helsinki Declaration. The study was approved by the Regional Committee for Medical and Health Research Ethics (Ref. No. 2019/40).

Results

We received responses from 2178 patients (75%). Questionnaires with missing age and/or sex and patients <18 years old were excluded. The 2097 remaining patients had a mean age of 49.0 years [standard deviation (SD) = 17.5 years; range = 18–92 years]. Each question's response rate varied from 56.8% to 100%. The questions about relationship quality were most often missing. Respondent demography and main results are given in Table 1. The patients were born in 67 different countries; 90.3% of them were born in Norway. Of the respondents living with partners, 93.8% were in a heterosexual relationship. Mean relationship duration was 21.8 years (SD = 16.3), mean self-rated health was 3.18 (SD = 1.06) and the RSS had a mean value of 5.03 (SD = 0.81; 1–3 = very low; 3–4 = low; 4–5 = high; 5–6 = very high).

The number of patients who agreed to the statements about their view on GPs' role in couple relationship problems was increasingly higher, ranging from personal experience of discussing relationship problems, to intending to discuss and, finally, a general opinion about how GPs should attend to relationship problems. In the subgroup of 739 respondents who had been divorced, 39.1% had talked with their GP about their couple relationship.

Simple logistic regression revealed that patients <30 years [odds ratio (OR) = 0.6; 95% confidence interval (CI) = 0.4–0.8] and ≥65 years (OR = 0.5; 95% CI = 0.4–0.7) had talked with their GP about their couple relationship less often than those aged 30–65 years. We investigated how different variables influenced whether or not patients talked with their GP about their couple relationship. Prior experience of usefulness in deliberating upon relationship problems had the strongest association with the outcome (OR = 8.7; 95% CI = 6.3–12.2). Other factors that significantly impacted this outcome were low and very low relationship satisfaction (OR = 2.5; 95% CI = 1.5–4.2 and OR = 5.4; 95% CI = 2.8–10.5), experience of divorce once or twice (OR = 2.9; 95% CI = 2.2–3.9 and OR = 4.0; 95% CI = 2.7–6.0) and poor self-rated health (OR = 1.6; 95% CI = 1.2–2.1; Table 2).

Table 3 presents the results from the linear regression analysis, investigating the impact of the different variables on patients' desire to talk with their GP about their couple relationship. Prior experience of usefulness in discussing relationship problems impacted this outcome most (β = 0.58; 95% CI = 0.53–0.63). Lower relationship satisfaction (β = 0.10; 95% CI 0.04–0.16 to β = 0.19; 95% CI = 0.13–0.25), believing that one's relationship impacted one's health (β = 0.12; 95% CI = 0.06–0.18) and divorce experience (β = 0.07; 95% CI = 0.01–0.13) were other factors significantly associated with the outcome.

Discussion

Summary of key findings

Nearly half of the patients we surveyed believed that their GP should take an interest in their couple relationship. One-third wanted to talk with their GP about their couple relationship problems, and a considerable number already did so. These patients more frequently displayed divorce experience, poor self-rated health, an opinion that their couple relationship has a significant impact on their health and lower couple relationship quality when adjusted for age, sex, marital status and children living at home. Women tended to talk with their GP about their couple relationship more often than men.

Comparison with existing literature

Other studies support our findings that patients do indeed talk with their GP about couple relationship issues (20,24). The one-third of our respondents who wanted to talk with their GP about couple relationship problems corresponds to a recent Norwegian study (17). A far lower number of patients from an Estonian study (15%) would consult their GP for relationship problems than we found. The Estonian patients also had a considerably lower belief (7%) that GPs should be interested in their couple relationships (21). This difference may be explained by the short history (10 years) of family physicians in Estonia when the study was conducted (25). In Norway, GPs have existed for decades, and the population is used to visiting their GP for a wide range of problems.

Patients in the GP waiting room have reduced self-rated health compared to the population in general (22). Divorced patients have poorer health (e.g. cardiovascular disease (26)) and seek health professionals more often than married/cohabiting patients (7,27). A substantial number of patients found it useful to talk with their GP about couple relationship problems. However, we do not know whether these conversations had a primary positive impact on the patients' relationships or a secondary positive impact on their health and the health of their families (28). The GPs' focus on primary prevention also needs to prioritize relationship issues because healthy relationships are as important for health as more traditional advice on lifestyle (3,4). GPs have a holistic approach to patients' symptoms and worries and know that diseases are influenced by cultural, social, economic and biological factors (29). Assessment tools to reveal relationship quality exist but are mostly used for research or, in some cases, by couples therapists, and they are not validated for use in general practice (23,30,31).

Family, couples and relational problems are neglected areas in the training of GPs. People postpone seeking professional help until their couple relationship problems get serious (32). GPs should have basic diagnostic skills to assess couple relationship problems earlier, including recognizing domestic violence, and basic counselling skills for couples with minor to moderate problems. Couples therapy is more long-term than couples counselling and focuses on a broader range of issues. Research has claimed

Table 1. Demographic variables of 2097 consecutive patients (in 2019) attending a cross-sectional study about couple relationship problems and the GP in Norway

Variables	Total
	N, *n* (%)
Age	2097
30–65 years	1277 (60.9)
< 30 years	332 (15.8)
≥ 65 years	488 (23.3)
Number of children living at home	1627
0 children	854 (52.5)
≥ 1 child	773 (47.5)
Marital status	2035
Single	495 (24.3)
Married/cohabitant	1540 (75.7)
Self-rated health[a]	2026
Very good	816 (40.3)
Good	704 (34.7)
Poor	506 (25.0)
Have you experienced divorce/break-up?	1929
No	1178 (61.1)
Yes, once	547 (28.4)
Yes, twice, or more	204 (10.6)
Relationship satisfaction (RS5)[b]	1333
Very high	667 (50.0)
High	526 (39.5)
Low	96 (7.2)
Very low	44 (3.3)
I believe my couple relationship has a big impact on my health[c]	1450
Disagree	108 (7.4)
Agree	1342 (92.6)
It has been useful to talk with my GP about my couple relationship[c]	1192
Disagree	704 (59.1)
Agree	488 (40.9)
I believe that my GP should be interested in my couple relationship[c]	1421
Disagree	762 (53.6)
Agree	659 (46.4)
I want to talk with my GP about couple relationship problems[d]	1426 (mean 2.75; SD 1.49)
Have you ever talked with your GP about your couple relationship?	1957
No	1468 (75.0)
Yes	489 (25.0)

N = the number of respondents to each question.

[a]Poor = 1–2, Good = 3, Very good = 4–5.

[b]Very low = 1.00–3.00, Low = 3.01–4.00, High = 4.01–5.00, Very high = 5.01–6.00.

[c]Disagree = 1–3, Agree = 4–6

[d]1 = Strongly disagree…6 = Strongly agree

that many family physicians could include couples counselling skills in their clinical practice with adequate training (33), and other studies have shown how it could be done (34). Most family doctors are not adequately prepared to counsel relationship problems and need additional training regarding relationship management (35). Traditional couple relationship education (CRE) in classes and traditional couples therapy only targets a limited section of the population (32,36). Brief couple interventions are

Table 2. Effects of different variables predicting if patients have talked with their GP about their couple relationship, adjusted for age, sex, children living at home and marital status (2019)

Independent variables (*n*)	%	OR	95% CI	*P*
Adjustment variables				
Age (1530)				
30–64 years (1006)	65.8	1.0		
<30 years (194)	12.7	0.8	0.6–1.2	0.263
≥65 years (330)	21.6	0.8	0.5–1.1	0.165
Sex (1530)				
Male (608)	39.8	1.0		
Female (922)	60.3	1.3	1.0–1.7	0.032
Children living at home (1530)				
0 children (782)	51.1	1.0		
≥1 child (748)	48.9	1.9	1.4–2.5	<0.001
Marital status (1530)				
Single (312)	20.4	1.0		
Married/cohabitant (1218)	79.6	0.4	0.3–0.6	<0.001
Predictor variables				
Self-rated health (1491)				
Very good (600)	40.3	1.0		
Good (538)	36.1	1.5	1.1–1.9	0.008
Poor (353)	23.7	1.6	1.2–2.1	0.004
Have you experienced divorce/break-up (1482)				
No (898)	60.6	1.0		
Yes, once (430)	29.0	2.9	2.2–3.9	<0.001
Yes, twice or more (154)	10.4	4.0	2.7–6.0	<0.001
Relationship satisfaction, RS5 (1069)				
Very high (523)	48.9	1.0		
High (426)	39.9	1.1	0.8–1.5	0.618
Low (79)	7.4	2.5	1.5–4.2	<0.001
Very low (41)	3.8	5.4	2.8–10.5	<0.001
I believe my couple relationship has a big impact on my health (1144)				
Disagree (76)	6.6	1.0		
Agree (1068)	93.4	1.8	0.97–3.4	0.064
It has been useful to talk with my GP about my couple relationship (949)				
Disagree (550)	58.0	1.0		
Agree (399)	42.0	8.7	6.3–12.2	<0.001

Logistic regression analysis.

more accessible and are as effective as CRE (37). GPs meet all kinds of people, not only the upper middle class, which is the largest group attending CRE (36), or patients with serious couple relationship problems, which is the largest group seeking Family Welfare Service to get couples therapy (32).

Implications for research

It is important to critically evaluate what role GPs should have in couples counselling, especially when the GP role is under pressure from additional duties and long working hours (38,39). Further research is needed to learn what experience GPs have in talking with patients about couple relationship problems, what additional training they need to be prepared and familiar with this issue and how to increase their skills in dealing with couple relationship problems. Qualitative methods can provide insight into the patients' experience from GP consultations regarding couple relationship problems and what impact these conversations have on the patients' relationships and health. Another question that should be addressed is whether there is a risk of defining relationship problems as an illness when handling them in general practice (28).

Table 3. Effects of different variables predicting if patients want to talk with their GP about their couple relationship, adjusted for age, sex, children living at home and marital status (2019)

Independent variables (*n*)	β	95% CI	*P*
Adjustment variables			
Age (1426)			
30–64 years			
<30 years	0.02	–0.04 to 0.08	0.463
≥65 years	–0.07	–0.13 to 0.003	0.063
Sex (1426)			
Male			
Female	–0.06	–0.12 to –0.004	0.036
Children living at home (1172)			
0 children			
≥1 child	0.07	0.0003 to 0.14	0.049
Marital status (1404)			
Single			
Married/cohabitant	–0.07	–0.12 to –0.01	0.023
Predictor variables			
Self-rated health (1385)			
Very good			
Good	0.08	0.02 to 0.14	0.015
Poor	0.06	–0.005 to 0.12	0.072
Have you experienced divorce/break-up (1340)			
No			
Yes, once	0.07	0.01 to 0.13	0.018
Yes, twice, or more	0.07	0.01 to 0.13	0.017
Relationship satisfaction, RS5 (1313)			
Very high			
High	0.11	0.05 to 0.17	<0.001
Low	0.10	0.04 to 0.16	0.001
Very low	0.19	0.13 to 0.25	<0.001
I believe my couple relationship has a big impact on my health (1413)			
Disagree			
Agree	0.12	0.06 to 0.18	<0.001
It has been useful to talk with my GP about my couple relationship (1177)			
Disagree			
Agree	0.58	0.53 to 0.63	<0.001

Linear regression analysis.

Strengths and limitations

This study has strong external validity. It includes a large sample of unselected patients from a large number of general practice on random days. The high response rate, age and sex distributions and mean values of self-rated health are in line with previous research in general practice (17,22). Mean values of the five-item RSS corresponded to previous studies using this psychometric tool (23).

The questionnaire was in the Norwegian language, thus excluding patients who were not fluent in Norwegian (on average 10% of patients registered with GPs (40)). We acknowledge that a certain number of patients abstained from answering some of the questions. This could threaten the external validity of the study; however, reports from study sites revealed that the factors that caused missing responses were, in the main, time constraints and other random contextual factors. The questions with lower response rates were at the end of the questionnaire (time constraints). These questions also concerned the quality of the relationship and were irrelevant to the respondents without a partner. Generalization to all patients in general practice should, therefore, be feasible.

Patients were recruited in the GPs' waiting rooms. Sensitivity towards personal questions on relationships, interruptions when being

called into appointments and local differences in participation procedure may have affected both response rates and partial completion rates of the questionnaires (personal feedback from students collecting data).

Conclusion

Couple relationship problems and health risks are connected. We found that patients expect their GPs to attend to couple relationship problems, and a substantial number of GPs do so. Education in family and couples counselling is absent from both the medical school curriculum and GP training in Norway. As doctors need to increase their skills in this field, GP specialist education is best placed to offer training courses. These courses could cover a wider range of relational and family problems and, at the same time, offer advice on how to define and frame the doctor's role in this field. We claim that GPs are in a good position to spot who needs help with their couple relationship and to facilitate help for couples earlier than they might otherwise expect.

Acknowledgements

The authors acknowledge the contribution of all study respondents.

Data availability

The data underlying this article cannot be shared publicly due to ethical reasons and the privacy of individuals that participated in the study. The data will be shared on reasonable request to the corresponding author.

Declarations

References

1. Kiecolt-Glaser JK, Wilson SJ. Lovesick: how couples' relationships influence health. *Annu Rev Clin Psychol* 2017; **13**: 421–43.
2. Kiecolt-Glaser JK, Newton TL. Marriage and health: his and hers. *Psychol Bull* 2001; **127**(4)**:** 472–503.
3. Robles TF, Slatcher RB, Trombello JM, McGinn MM. Marital quality and health: a meta-analytic review. *Psychol Bull* 2014; **140**(1)**:** 140–87.
4. Gallo LC, Troxel WM, Kuller LH *et al*. Marital status, marital quality, and atherosclerotic burden in postmenopausal women. *Psychosom Med* 2003; **65**(6)**:** 952–62.
5. Henriksen RE, Torsheim T, Thuen F. Relationship satisfaction reduces the risk of maternal infectious diseases in pregnancy: the Norwegian Mother and Child Cohort Study. *PLoS One* 2015; **10**(1)**:** e0116796.
6. Goldfarb MR, Trudel G. Marital quality and depression: a review. *Marriage Fam Rev* 2019; **55**(8)**:** 737–63.
7. Amato PR. The consequences of divorce for adults and children. *J Marriage Fam* 2000; **62**(4)**:** 1269–87.
8. Pendry P, Adam EK. Associations between parents' marital functioning, maternal parenting quality, maternal emotion and child cortisol levels. *Int J Behav Dev* 2007; **31**(3)**:** 218–31.
9. Henriksen RE, Thuen F. Marital quality and stress in pregnancy predict the risk of infectious disease in the offspring: the Norwegian mother and child cohort study. *PLoS One* 2015; **10**(9)**:** e0137304.
10. Felitti VJ, Anda RF, Nordenberg D *et al*. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med* 1998; **14**(4)**:** 245–58.

11. Zahl-Olsen R, Thuen F, Espehaug B. Divorce and remarriage in Norway: a prospective cohort study between 1981 and 2013. *J Divorce Remarriage* 2019; **60**(8)**:** 600–11.

12. Statistics Norway. *Marriages and Divorces.* https://www.ssb.no/befolkning/statistikker/ekteskap/aar (accessed on 6 June 2020).

13. Texmon I. *[Intimate Relationships In Norway At The End Of 20th Century. A Description Of Diversity And Change.] Samliv I Norge Mot Slutten Av 1900-Tallet. En Beskrivelse Av Mangfold Og Endring (In Norwegian).* Vol. **25**; Vedlegg 3. Oslo, Norway: Norges Offentlige Utredninger, 1999.

14. Auersperg F, Vlasak T, Ponocny I, Barth A. Long-term effects of parental divorce on mental health—a meta-analysis. *J Psychiatr Res* 2019; **119:** 107–15.

15. Statistics Norway. *GPs and Emergency Primary Health Care.* https://www.ssb.no/helse/statistikker/fastlegetj/aar (accessed on 6 June 2020).

16. Eide TB, Straand J, Björkelund C *et al.* Differences in medical services in Nordic general practice: a comparative survey from the QUALICOPC study. *Scand J Prim Health Care* 2017; **35**(2)**:** 153–61.

17. Eide TB, Straand J, Rosvold EO. Patients' and GPs' expectations regarding healthcare-seeking behaviour: a Norwegian comparative study. *BJGP Open* 2018; **2**(4)**:** bjgpopen18X101615.

18. Bjørland E, Brekke M. What do patients bring up in consultations? An observational study in general practice. *Scand J Prim Health Care* 2015; **33**(3)**:** 206–11.

19. Williams S, Weinman J, Dale J, Newman S. Patient expectations: what do primary care patients want from the GP and how far does meeting expectations affect patient satisfaction? *Fam Pract* 1995; **12**(2)**:** 193–201.

20. Fritzsche K, Sandholzer H, Brucks U *et al.* Psychosocial care by general practitioners–where are the problems? Results of a demonstration project on quality management in psychosocial primary care. *Int J Psychiatry Med* 1999; **29**(4)**:** 395–409.

21. Kalda R, Oona M, Maaroos HI, Lember M. Patient evaluation on family doctors' family orientation. *Patient Educ Couns* 2005; **56**(3)**:** 296–301.

22. Mildestvedt T, Herikstad VV, Undheim I, Bjorvatn B, Meland E. Factors associated with self-rated health in primary care. *Scand J Prim Health Care* 2018; **36**(3)**:** 317–22.

23. Roysamb E, Vittersø J, Tambs K. The Relationship Satisfaction scale—psychometric properties. *Norsk Epidemiologi* 2014; **24**(1–2)**:** 187–94.

24. Bellón JA, Delgado-Sánchez A, de Dios Luna J, Lardelli-Claret P. Patient psychosocial factors and primary care consultation: a cohort study. *Fam Pract* 2007; **24**(6)**:** 562–9.

25. Koppel A, Meiesaar K, Valtonen H, Metsa A, Lember M. Evaluation of primary health care reform in Estonia. *Soc Sci Med* 2003; **56**(12)**:** 2461–6.

26. Engström G, Khan FA, Zia E *et al.* Marital dissolution is followed by an increased incidence of stroke. *Cerebrovasc Dis* 2004; **18**(4)**:** 318–24.

27. Bracke PF, Colman E, Symoens SA, Van Praag L. Divorce, divorce rates, and professional care seeking for mental health problems in Europe: a cross-sectional population-based study. *BMC Public Health* 2010; **10:** 224.

28. Barsky AJ. The paradox of health. *N Engl J Med* 1988; **318**(7)**:** 414–8.

29. Burditt AM. Defining family medicine as a scientific discipline. *Can Fam Physician* 2006; **52**(10)**:** 1206–7.

30. Gottman JS, Gottman JM. *10 Principles For Doing Effective Couples Therapy.* New York, NY/London, UK: W.W. Norton & Company, 2015.

31. Fincham FD, Rogge R. Understanding relationship quality: theoretical challenges and new tools for assessment. *J Fam Theory Rev* 2010; **2**(4)**:** 227–42.

32. The Family Welfare Service. Knowledge and impression in the population. Familievernkontoret. Kjennskap og inntrykk i befolkningen. (in Norwegian). *Report from The Norwegian Directorate For Children Youth And Family Affairs,* 2017. https://bufdir.no/Bibliotek/Dokumentside/?docId=BUF00004434 (accessed on 6 June 2020).

33. Starling BP, Martin AC. Improving marital relationships: strategies for the family physician. *J Am Board Fam Pract* 1992; **5**(5)**:** 511–6.

34. Yalcin BM, Karahan TF. Effects of a couple communication program on marital adjustment. *J Am Board Fam Med* 2007; **20**(1)**:** 36–44.

35. Oona M, Kalda R, Lember M, Maaroos HI. Family doctors' involvement with families in Estonia. *BMC Fam Pract* 2004; **5:** 24.

36. Carroll JS, Doherty WJ. Evaluating the effectiveness of premarital prevention programs: a meta-analytic review of outcome research. *Fam Relat* 2003; **52**(2)**:** 105–18.

37. Kanter JB, Schramm DG. Brief interventions for couples: an integrative review. *Fam Relat* 2018; **67**(2)**:** 211–26.

38. Svedahl ER, Pape K, Toch-Marquardt M *et al.* Increasing workload in Norwegian general practice—a qualitative study. *BMC Fam Pract* 2019; **20**(1)**:** 68.

39. Dayan M, Arora S, Rosen R, Curry N. *Is General Practice In Crisis?* London, UK: Nuffield Trust, 2014.

40. Kaldheim O. *[General Practitioners and Language Interpreter Services.] Fastleger og Tolketjenester (in Norwegian).* The Directorate of Integration and Diversity, 2007. https://www.imdi.no/arkiv/arkiverte-publikasjoner/2007/fastleger-og-tolketjenester/ (accessed on 6 June 2020).