What professional activities do general practitioners find most meaningful? Cross sectional survey of Norwegian general practitioners

Peder Andreas Halvorsen1,2,6*, Adrian Edwards3, Ivar Johannes Aaraas1, Olaf Gjerløw Aasland4,5 and Ivar Sønbø Kristiansen5

Abstract

Background: Health reforms in many countries affect the scope and nature of primary care. General Practitioners (GPs) are expected to spend more time developing public health, preventive health care, coordination of care and teamwork. We aimed to explore which professional activities GPs consider to be meaningful and how they would like to prioritise tasks.

Methods: In a cross sectional online survey 3,270 GPs were invited to consider twenty different activities in general practice. They were asked to rate each of them on a Likert scale anchored from 1 (not meaningful) to 5 (very meaningful). They then selected three activities from the item list on which they would like to spend more time and three activities on which they would like to spend less time. We used multinomial logistic regression to explore associations between the GPs’ preferences for time spent on preventive health care activities and age, gender and practice characteristics.

Results: Approximately 40% (n=1,308) responded. The most meaningful activities were handling common symptoms and complaints (94% scored 4 or 5), chronic somatic diseases (93%), terminal care (80%), chronic psychiatric diseases (77%), risk conditions (76%) and on call emergency services (70%). In terms of priority the same items prevailed except that GPs would like to spend less time on emergency services. Items with low priority were health certificates, practice administration, meetings with local health authorities, medically unexplained symptoms, addiction medicine, follow up of people certified unfit for work, psychosocial problems, preventive health clinics for children and school health services. In multivariate regression models physician and practice characteristics explained no more than 10% of the variability in the GPs’ preferences for time spent on preventive health care services.

Conclusions: The GPs found diagnosis and treatment of diseases most meaningful. Their priorities were partly at odds with those of the health authorities and policy makers.

Keywords: Health priorities, Health care reforms, General practice
Background

Despite substantial health reforms in many countries affecting the scope and nature of primary care, little is known about the aspects of care that GPs find most meaningful and valuable for themselves and their patients. Strong primary care is frequently seen by policy-makers as essential for effective and cost-effective health care [1,2]. Qualities of primary care include provision of personal and personalized health care, knowledge of patients’ values and preferences, and patient trust that GPs will secure the appropriate care that they need. Many health reforms seek to build on the strengths of their primary health care sectors, but also to contain secondary care costs, improve chronic disease management and increase preventive activities [3-10]. In the UK, GPs are being given unprecedented responsibility for commissioning services at regional level [6]. In Canada and the Netherlands a diverse range of primary health care reform initiatives have been implemented, including the development of primary health care teams and networks, blended payment systems, increasing the workforce and measures to improve quality and safety [7,8]. In Norway the Coordination Reform is currently being implemented. Coordination of care, preventive medicine and cost containment are salient priorities [5].

Primary health care reforms will necessarily involve all kinds of health personnel, but general practitioners (GPs) in particular have been expected to take on new responsibilities [5]. This, however, may come at a cost in terms of money or other activities forgone. If GPs are to use more time on preventive measures and team work, less time will be available for individual consultations with their patients. More GPs may be needed, or else current GPs may have to work more. However, it is not clear to what extent the priorities of policy-makers and the health authorities are consistent or compatible with those of the GPs themselves. If they are incongruent, the aims of primary health care reforms may be difficult to achieve.

It has been shown that Norwegian GPs spend about 70% of their total working hours on direct work with patients [11]. A majority of Norwegian GPs would prefer a shorter working week, but the proportion that perceive their workload as unacceptable is now less than 40% and decreasing [11]. In other countries it has been shown that relationships with patients [12-14], clinical competence [12,15], and clinical autonomy [14] are highly valued by physicians including GPs. Conversely, some studies have identified administrative burdens, paperwork and governmental regulations as sources of dissatisfaction [12,16].

What GPs would like to prioritize for themselves may not necessarily be the same as what is in their patients’ best interest. Nevertheless, for health authorities, policymakers and GP leaders who wish to implement health reforms in patients’ best interests, knowledge about how GPs would like to spend their time seems important. In the present study we aimed to explore what GPs might wish to prioritize among a broad range of common activities in general practice. Specifically, we asked to what extent different work activities were considered meaningful and whether GPs would like to spend more or less time on them.

Methods

In December 2009 3,270 GPs registered with the Norwegian Medical Association in Norway were sent an e-mail asking them to participate in an online survey pertinent to the forthcoming Coordination Reform [5]. We aimed to include all GPs in Norway at the time (n= 4,049, Table 1), but GPs engaged in another survey taking place at the same time were excluded. Thus a random sample comprising 81% of all Norwegian GPs were invited. The online questionnaire was administered by the Research Institute of the Norwegian Medical Association (NMA). The front screen gave a short presentation of the Coordination Reform and stated that knowledge about GPs’ views about core issues pertaining to the reform was needed. Return of the online, anonymous questionnaire was considered as consent to participate in the study.

The GPs were presented with a list of twenty items covering a broad range of activities in general practice, such as handling common symptoms and complaints, follow up of chronic diseases, preventive health care, teaching, research and administrative tasks (Table 2). The GPs were asked to rate each item on a Likert scale anchored at 1 (not meaningful) and 5 (very meaningful). Subsequently, they were asked to select three activities from the list – in order of priority - on which they would like to spend more

Table 1 Respondent characteristics

| Variable                      | Respondents n=1,308 | All Norwegian GPs n=4,049 |
|-------------------------------|---------------------|---------------------------|
| Age, mean                     | 47 y                | 49 y                      |
| Females                       | 36%                 | 35%                       |
| Specialty attainment          | 66%                 | 55%                       |
| Mean number of patients listed per doctor | 1,209               | 1,182                     |
| Municipality, number of inhabitants |                     |                           |
| <5,000                        | 13%                 | 14%                       |
| 5,000-9,999                   | 13%                 | 14%                       |
| 10,000-19,999                 | 18%                 | 17%                       |
| 20,000-49,999                 | 24%                 | 21%                       |
| 50,000 +                      | 32%                 | 34%                       |

1. Statistics Norway (www.ssb.no accessed 24th of March 2011).
2. http://www.helsedirektoratet.no/finansiering/refusjonsordninger/tall-og-analyse/Documents/hovedtallsrapport-2010.pdf.
3. http://www.legeforeningen.no/id/18 14.04.2011.
time and three activities on which they would like to spend less time. Additionally, they were asked about preferences for practice organisation and remuneration (reported elsewhere) [17]. During the data collection period these questions raised some discussion and criticism in an internet forum for Norwegian GPs, including doubts about whether the study was independent of governmental reform interests (although it was independent). The main outcome measures were consideration of meaningfulness and priority of job tasks.

For each task we calculated the proportion of GPs who scored 4 or 5 on the meaningfulness scale. With respect to priority, we calculated proportions that would like to spend more and less time on the different tasks. For preventive health care services, nursing home medicine and following up people certified unfit for work, i.e. tasks that the health authorities expect GPs to prioritize, we tested the hypotheses that the GPs’ priorities might vary by practice characteristics. We used multinominal logistic regression with GPs’ preferences for time spent on the different task, i.e. less time, more time or no change, as the dependent variable. Note that “no change” in this case means that the task in question was not among the three tasks each GP was allowed to select for “less time” and “more time”, respectively. Independent variables were population size of practice municipality, number of patients listed, number of GPs in the practice, specialty attainment and remuneration scheme (private practice versus salaried positions), and we adjusted for age and sex. We also considered using ordinal logistic regression, but regression diagnostics indicated that the proportional odds assumption was violated. We used SPSS version 19.0 for data analysis. p – values less than 0.05 were considered statistically significant. According to Norwegian law studies like ours do not require review by a research ethics committee. However, the study was approved by the Norwegian Social Science Data Services, which is the privacy ombudsman for all Norwegian universities as well as the Research Institute of the NMA. The funding source had no involvement in the conception and design of the study, the drafting of the manuscript or the decision to submit the article for publication.

**Results**

We obtained responses from 1,308 (40%) of the GPs. The proportion of specialists in general practice was slightly higher among the respondents (66%, 95% CI 63% to 68%) compared to all Norwegian GPs (55%). Otherwise the respondents were representative of Norwegian GPs with respect to age, sex, number of patients listed and population size of practice municipality (Table 1).

In terms of meaningfulness the top ranked activities were handling common symptoms and complaints, follow up of chronic diseases, terminal care, management of risk conditions such as hypertension, hypercholesterolemia and osteoporosis, and on call emergency care (Table 2). In terms of priority, the same activities prevailed except for on call emergency health care (Table 3). More than one out of four GPs would like to spend less time on health certifications, practice administration, medically unexplained symptoms, following
up persons certified unfit for work, and drug abuse/ad-
diction (Table 3).

In the multinominal regression analyses, smaller pa-
tient lists (< 1,200) were associated with preferences for
less time on managing risk conditions (Table 4). On the
other hand, GPs with larger patient lists were less likely
to prefer spending time on school health services and
preventive health clinics for children and adolescents
(Table 4). GPs in salaried positions tended to prefer
more time for school health services. Specialists in gen-
eral practice, however, were less likely to want more
time in school health services (Table 4). In general GPs’
preferences for time spent on preventive health care were
not strongly associated with practice characteristics, and
the regression models explained no more than 10% of
the variability in those preferences (Table 4). Compared
to older colleagues, GPs under 50 years of age were
more likely to want to spend less time with those certi-
fied unfit for work (OR 1.7, CI 1.3 to 2.3). GPs with
smaller patient lists (less than 1,200) were more likely to
prefer more time for nursing home medicine (OR 1.8,
CI 1.2 to 2.7), as were GPs working in smaller munici-
palities (< 20,000 inhabitants, OR 1.5, CI 1.04 to 2.31).

Discussion

Principal findings

GPs reported that dealing with common symptoms and
complaints, chronic diseases, risk conditions, emergencies
and terminal care were the most meaningful tasks. Except for emergency health care, our respondents would also like to spend more time on these tasks. On the other hand, they would like to spend less time on health certifications, practice administration, meeting with local health authorities, medically unexplained symptoms, following prescriptions, the possibility of unmeasured confounders remains. In particular, the above mentioned criticism of our survey during the data collection period, and the fact that our study was carried out during a period of heated debate about the future of general practice in Norway, may have had a negative impact on the response rate, and nature of responses, and introduced bias for which we were unable to control.

Relation to theories and other studies
Various theoretical perspectives may be pertinent to our findings. For example, psychological theories emphasize factors such as individual needs, values, personality, self-efficacy, goals, incentives and job characteristics as important for work motivation [19,20]. Economic theory assumes that individuals aim to maximise their utility (welfare, wellbeing) [21]. Empirical work indicates that for GPs, utility may depend on factors such as income [22-24], professional autonomy [14,24,25], a sense of clinical competence [12,15], and not least relationships with patients [13,14,22]. Our findings suggest that care for individual patients in terms of diagnosis and treatment of diseases is the most highly valued task among GPs, which seems consistent with both pertinent theories and previous studies.

Implications for policy, practice and research
With the exception of patient list size, GPs’ priorities did not vary consistently by practice characteristics, specialty attainment or size of practice municipality. Proposed policy initiatives targeted at these factors per se, e.g. increasing the proportion of specialists in general practice, increasing practice size, offering more salaried positions, and merging small practices into larger ones, may not be effective in changing GPs’ priorities. Policy makers may, however, note that fairly large proportions of GPs were ready to spend less time on health certifications and practice administration.

Table 4 Multinomial logistic regression analysis of GPs’ preferences for time spent on preventive health care services

| Independent variables | Risk conditions | Preventive health clinics | School health services |
|------------------------|-----------------|---------------------------|-----------------------|
|                        | Less time | More time | Less time | More time | Less time | More time |
| Age 50+                 | OR (95% CI) | OR (95% CI) | OR (95% CI) | OR (95% CI) | OR (95% CI) | OR (95% CI) |
| Female                  | 1.0 (0.6 – 1.6) | 1.1 (0.8 – 1.5) | 1.3 (0.8 – 2.0) | 1.5 (0.6 – 3.8) | 1.4 (0.9 – 2.1) | 1.8 (0.6 – 5.5) |
| Municipality >20,000 inhabitants | 1.0 (0.6 – 1.5) | 1.3 (1.0 – 1.7) | 0.8 (0.6 – 1.3) | 1.0 (0.5 – 2.2) | 0.6 (0.4 – 0.9) | 2.0 (0.8 – 4.7) |
| Specialist in GP        | 1.1 (0.7 – 1.8) | 0.9 (0.7 – 1.3) | 1.4 (0.9 – 2.1) | 0.6 (0.2 – 1.4) | 1.0 (0.7 – 1.6) | 0.4 (0.1 – 1.1) |
| List size < 1,200       | 1.6 (0.9 – 2.8) | 0.8 (0.5 – 1.0) | 1.0 (0.6 – 1.6) | 0.5 (0.2 – 1.3) | 1.0 (0.6 – 1.6) | 0.2 (0.1 – 0.6) |
| < 4 GPs in the practice | 1.8 (1.1 – 2.9) | 0.7 (0.5 – 1.0) | 0.6 (0.4 – 0.9) | 1.4 (0.6 – 3.4) | 0.6 (0.4 – 0.9) | 2.0 (0.7 – 5.7) |
| Salaried position       | 0.6 (0.3 – 0.9) | 0.8 (0.6 – 1.1) | 1.4 (1.0 – 2.1) | 0.7 (0.3 – 1.6) | 1.0 (0.7 – 1.5) | 0.6 (0.2 – 1.4) |
| Pseudo R-Square (Nagelkerke) | 0.03 | 0.05 | 0.10 |

1 In the multinomial models the GPs’ preferences for using less time as well as more time were contrasted to no change in the time spent on different preventive health care services.

2 p=0.026, CI includes 1.0 due to rounding.
Measures to reduce administrative burdens as well as patient list size per doctor could potentially make more time available for preventive medicine, teamwork, coordination of care and other high priority tasks.

During the past decade there has been concern, particularly in the Scandinavian countries, that an increasing emphasis on risk factor management may have undesirable consequences on doctor-patient relationships, and change clinical priorities [26,27]. It has even been claimed that GPs would prefer to spend less time on risk factors such as hypertension, elevated blood cholesterol and osteoporosis [28]. In contrast, we found that risk factor management was among the top ranked items, both in terms of meaningfulness and priority. In Norway GPs typically manage patients with risk factors in their own surgery, whereas they have to leave their surgery to work in preventive health clinics, school health services and nursing homes. It is conceivable that busy clinicians – i.e. with large patient lists – are more reluctant to leave their surgeries unless the activity is perceived as meaningful. Qualitative studies might deepen our understanding of what tasks GPs find meaningful in their work and why.

It is also noteworthy that compared to younger colleagues, GPs aged 50 and above assigned relatively higher scores (in terms of priority) to follow up of persons unfit to work. We can speculate that valuing such tasks comes with experience and long term relationships with patients, or else that medical school and/or post graduate education programs do not prepare young GPs sufficiently for these tasks. Indirectly, our findings may support initiatives for extended learning periods in community settings [29].

Conclusions
Care for individual patients in terms of diagnosis and treatment was the most highly valued task among GPs in terms of meaningfulness and priority. If the GPs were to decide on their own, there would probably be less time spent on health certification, practice administration, meetings with local health authorities, medically unexplained symptoms, follow up of persons unfit to work, psychosocial problems, drug abuse and addiction medicine, preventive health clinics and school health services. These priorities are partly at odds with those of policy-makers and the health authorities. This suggests that in the patients’ best interests, GPs, health authorities, patient organisations and health policymakers should engage in a respectful and meaningful dialogue.

Competing interests
The authors declare that they have no competing interests.

Authors’ contributions
PAH designed the study, did the statistical analyses and drafted the manuscript. AE assisted with drafting and critical revision of the manuscript. OGA was responsible for data collection and participated in critical revision of the manuscript. UIA piloted the study and assisted with design and critical revision of the manuscript. ISK conceived of the study and assisted with design and critical revision of the manuscript. All authors read and approved the final manuscript.

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