General practice organisation and healthcare reform: what do Maltese general practitioners think?

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ABSTRACT

Background

In Malta, two-thirds of primary healthcare is delivered by private general practitioners (GPs), mostly working single-handed without supporting staff. The combined lack of patient registration and transferable medical records lead to fragmentation of care, duplication of resources and suboptimal disease prevention and management. In 2009, the government proposed a reform to encourage partnerships which was shelved.

Aims

To explore the opinions of GPs about how practice organisation might influence them and their patients. To seek GPs' views about possible healthcare reform initiatives.

Methods

A postal cross-sectional survey of all specialists in family medicine resident in Malta. An instrument was designed, piloted and validated. SPSS® (v. 20) was used for analysis.

Results

One hundred and fifty (44%) questionnaires were returned. Respondents were representative of the sample as regards demographic and employment characteristics.

Only 26% of GPs are female, but most work in partnerships or the public service. Seventy-seven per cent of private GPs work single-handed. Group practitioners are more likely to utilise electronic medical records and appointments, and to employ secretaries.

Doctors acknowledge that although patients prefer one GP, partnerships can deliver better patient care. GPs believe that partnerships are beneficial for themselves, and would consider joining one. Females and young doctors favour partnerships. Respondents, particularly young doctors, favour patient registration and reform. Public doctors who work part-time privately oppose reform.

Conclusions

Most GPs favour group practices and health reform, especially females and young doctors (whose proportions are increasing). Primary care should be urgently reformed and patient registration introduced. Public-private agreements would stimulate partnership formation. Public group practices could cater for means-tested citizens.

KEYWORDS

General practice, physician's practice patterns, delivery of healthcare, healthcare reform

INTRODUCTION

Private GPs cover two-thirds of primary healthcare consultations in Malta (Azzopardi Muscat and Dixon, 1999). The majority of them work completely alone, without the support of ancillary staff or other professionals (Sammut, 2000; Sciortino, 2002).

As there is no official patient registration system yet, patients often shop around for GPs and other specialists (sometimes inappropriately), frequently switching between public and private services. Such behaviour is not usually accompanied by concurrent transfer of patient records so it leads to fragmentation of care, duplication of resources and possible threats to patient safety. At the other extreme, some individuals may not seek healthcare and remain invisible to the system until they get complications.

The lack of continuous and multidisciplinary care in Malta undermines the role of primary healthcare as the provider of a comprehensive service, as central coordinator of healthcare and as gatekeeper to the use of

secondary care. Consequent to the inefficiency of primary care, secondary care services are being chronically inundated with health problems (The Times of Malta, 2010) that could have been prevented, minimised or managed entirely within primary care.

Reform of primary healthcare has been promised in electoral manifestos since 1991. In 2009, the Ministry for Social Policy launched a nation-wide consultation on a document entitled 'Strengthening Primary Care Services: implementation of a personal primary health care system in Malta' (Ministry for Social Policy, 2009). The main theme of this proposal was the introduction of patient registration, whereby citizens would register with a GP of their own choice. It also recommended financial incentives to encourage GPs to form group practices. Strong resistance from the medical profession was one of the reasons why this proposal was shelved (Massa, 2012).

In this study, a group practice is defined as two or more GPs working together in close collaboration, sharing work, resources and profits. Married GP couples fit this definition.

OBJECTIVES

- To obtain detailed data about the current organisation of general practice in the Maltese islands.
- To examine how GPs might view practice organisation affecting aspects related to patient care, including continuity of care, accessibility, comprehensiveness, multidisciplinary care, quality of clinical care and patient safety.
- To investigate how GPs might see practice organisation influencing them directly in their professional autonomy, hours of work, home visits, income, job satisfaction, burnout, professional isolation, continued professional development (CPD) and specialist training.
- To test the opinion of Maltese GPs about possible future reforms in local family medicine, namely patient registration, formation of group practices and multidisciplinary teams.

METHODS

A cross-sectional census was undertaken in March 2013 of all Specialists in Family Medicine registered with the Medical Council who were residing in Malta (Medical Council, 2012). Only non-residents were excluded from the sample.

The literature was searched for a pre-validated instrument. Unfortunately, identified questionnaires were

country specific and locally inapplicable. Therefore, an original questionnaire was designed.

The core dimensions of primary healthcare identified by Kringos et al. (2010) were used to formulate questions about practice organisation vis-à-vis patient care. These include the process (accessibility, continuity, coordination, comprehensiveness) and outcomes dimensions (quality, efficiency). For questions regarding the effects of practice setup on doctors, themes were obtained from studies of perceptions, motivations and concerns of GPs (Farrugia, 2003; Feron et al., 2003; Kendall et al., 2009; Pederson et al., 2012). Questions regarding healthcare reform were generated from the main themes of the consultation document proposed by the previous government (Ministry for Social Policy, 2009).

The questionnaire consisted of 55 questions/ statements. Seven dealt with demographic, employment and practice characteristics. Forty-five statements were flanked by a five-point Likert scale: 14 statements vis-à-vis patient care, 21 relating to doctors and 10 dealing with reform proposals. Two questions inquired about the ideal size of patient lists and partnerships. An open question solicited comments about practice organisation.

A pilot study was held with ten doctors to evaluate the relevance, comprehensibility and practicality of the questionnaire. Their feedback resulted in minor changes being made to the demographic section.

The Cronbach α coefficient was used to confirm the internal consistency of the questionnaire. Data was inputted into SPSS® (v.20). Statements were grouped according to themes. Those that lowered Cronbach α were excluded from analysis. Reliable values over 0.8 were obtained.

Ethical clearance was obtained from the Research Ethics Committee of the University of Ulster. The questionnaire was mailed once, together with a covering letter to explain the rationale, methods, and ethical considerations. Respondents remained completely anonymous throughout the study.

In the analysis, ordinal five-point Likert-type responses were condensed into nominal variables with 'agree'/'disagree' categories - 'don't know' answers were labelled as user-missing. Pearson's Chi-square Test was used to identify associations between nominal variables. When cells had expected counts less than 5, Fisher's Exact Test was used preferentially because of its greater reliability in small numbers (McCrum-Gardner, 2008). For the main themes, responses to several Likert-type statements were combined into Likert scale variables

whose variance was tested for different subgroups using one-way ANOVA, after confirming normal distribution. Probability values less than 0.05 were considered statistically significant and less than 0.01 as highly significant.

RESULTS

Respondent characteristics, employment and practice setup

One hundred and fifty (44%) GPs returned the questionnaire. Twenty-six per cent were female - a percentage almost identical to the 24% in the parent GP population. The median age group of respondents (50 to 59 years) is very close to the mean age of the sample (49 years). Female GPs are highly significantly younger (p=0.000) (Figure 1).

Respondents work all over the archipelago. Figure 2 shows their employment distribution, and the considerable overlap between categories. Forty-nine per cent of males and 26% of females work privately full-time. This difference is significant (p=0.017). Contrastingly, 26% of males and 45% of females work in the public service (p=0.034). Sixty-five per cent of private GPs work completely single-handed, while 12% have locum arrangements. Twelve per cent work in close partnership with colleagues and 10% are married to other GPs (Figure 3).

Forty-eight per cent of respondents work in their own clinic and 41% work in premises owned by someone else. Thirty per cent work in a public health centre, while 6% work in another governmental department. Three per

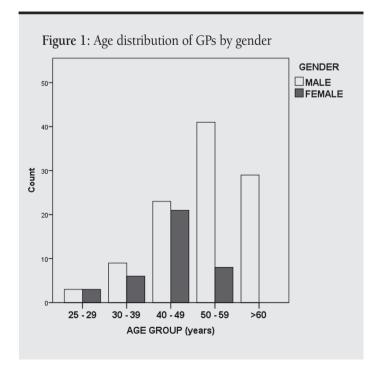


Figure 2: Employment status of GPs

Full-time private

54

8

Occupational

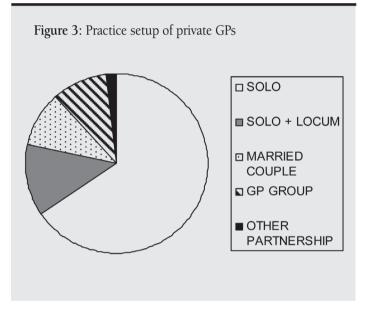
Part-time
Private

30

Public

20

22

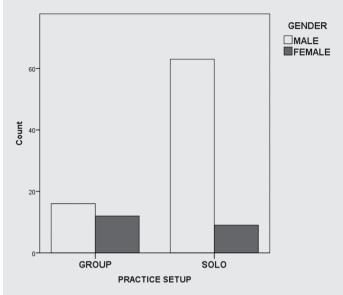


cent provide home visits only. Sixty-three per cent of full-time private GPs have their own clinic.

In March 2013, 20% (68/339) of all GPs held some form of employment with the public service (personal communication, Sammut, M.R., July 2013). In the present study, 31% (46/150) of respondents were employed by the public service. Although public doctors were slightly over-represented in the response, the percentage is quite close to that in the sample. Therefore, respondents are fairly representative of the sample in terms of employment status.

Forty-six per cent of group practitioners (including married to GPs) are female. This high representation is highly significant (p=0.001) (Figure 4). There is no significant association between age and group practice (p=0.305). Group practitioners are more numerous in the west and outer harbour regions and completely absent in Gozo (p=0.017).

Figure 4: Practice setup of private GPs by gender



Of full-time private GPs, 43% keep electronic medical records, 25% use appointments and 19% use the services of a secretary. Group practitioners are significantly more likely to keep electronic records (p=0.000), use appointments (p=0.015) and employ a secretary (p=0.019). Only one solo GP employs a nurse.

GP Opinions

Table 1 summarises the responses to 45 Likert-type statements, condensed into 'agree'/'disagree'/'don't know' categories. Salient findings are further described below.

Practice Setup vis-à-vis the Patient

Fifty-three per cent of respondents think that solo practice excels in continuity of patient care and personalised care. Categories that show greater agreement are: males (p=0.005); doctors older than sixty (p=0.008); private GPs (p=0.001) and single-handed GPs (p=0.000).

Thirty per cent of GPs agree and 45% disagree that 'solo practice provides better patient care'. Males (p=0.000), doctors older than forty (p=0.003), private GPs (p=0.003) and solo practitioners (p=0.001) tend to agree more. Fifty-five per cent of respondents do not agree that 'solo practice is safer for patients', but males show greater agreement (p=0.011). Agreement with this statement correlates positively with age (p=0.002).

Over 80% of doctors believe that group practice improves accessibility, after-hours and emergency care, and comprehensiveness. Fifty-six per cent believe that coordination of care is better in groups, 69% think that partnerships can excel in multidisciplinary care and 84% believe that 'nurses have an important contribution to give

to primary care'. Solo GPs (p=0.044), males (p=0.004) and public doctors who also work part-time privately (p=0.024) think that partnerships would lead to higher fees.

A Likert scale of combined median responses of six statements related to patient care shows that GPs think that group practices deliver better healthcare overall. Sixty-one per cent of respondents think that 'patients prefer solo GPs', with males (p=0.000) and solo GPs (p=0.000) being more likely to agree.

Practice Setup vis-à-vis the GP

Fifty-seven per cent of GPs, especially those older than fifty (p=0.028) and solo practitioners (p=0.000), think that 'solo practice gives more professional autonomy'. Thirty-three per cent agree and 20% disagree that 'solo GPs do more home visits', 47% agree while 19% disagree that 'group practice is more efficient' and 57% disagree that 'solo practice is more flexible'. Females (p=0.028) and GPs younger than fifty (p=0.036) tend to disagree. Sixty-nine per cent of respondents concur that 'group practitioners work less hours'.

Fourteen per cent of respondents agree and 21% disagree that group practitioners earn less income than solo GPs. Seventy-seven per cent concur that 'group practice enables paid leave while solo practice does not', 74% think that 'group practices can better afford renting or buying premises' and 79% believe 'it is easier for group practices to employ staff'.

Thirty-five per cent of respondents agree while 21% disagree that 'group practice gives better job satisfaction'. Doctors younger than forty (p=0.028) and group practitioners (p=0.045) show greater agreement. Seventy-one per cent of GPs, especially those younger than fifty (p=0.01), believe that single-handed GPs are more prone to suffer from emotional burnout. Twenty-nine per cent of GPs feel professionally isolated, with public doctors feeling less so (p=0.045).

Fifty-seven per cent of doctors think that solo practice is lonely. This is particularly true for females (p=0.011), doctors younger than forty (p=0.009) and group practitioners (p=0.016). Seventy-seven per cent believe that 'group practice enables healthy social interaction between partners', 87% think that group practitioners learn from each other, 73% think that 'group practitioners have more time for CPD' and 63% believe that 'group practices provide a better environment for specialist training'.

Twenty-eight per cent of respondents agree and 40% disagree that 'group practice is very hard because of conflict between GPs'. Males (p=0.001) and doctors older than

 Table 1: Responses to Likert type statements (n=150)

STATEMENT	AGREE	DISAGREE	DON'T KNOW
Solo practice gives more professional autonomy	86	45	19
Group practice is not suitable for Malta	16	104	30
Patients prefer solo GPs	91	31	28
Group practice improves accessibility for patients	127	10	13
Patients want to see the same GP	126	7	17
Group practice doctors earn less income than solo GPs	21	31	98
Solo practice gives more personal care to patients	81	52	17
Group practice doctors work less hours per week	103	12	35
Continuity of care is better in solo practice	79	53	18
Group practice doctors have more time for CPD	109	9	32
Group practice is very hard because of conflict between GPs	42	60	48
Group practice enables healthy social interaction between GPs	115	9	26
Group practice doctors learn from each other	130	5	15
Solo practice gives better patient care	45	68	37
Group practice can offer a broader range of services	125	8	17
Group practice gives better job satisfaction	53	32	65
Group practice enables paid leave; solo practice does not	115	7	28
Solo practice is more flexible	44	86	20
I feel professionally isolated	44	80	26
Solo practice is lonely	86	50	14
Group practice improves after hours availability	126	9	15
Group practice caters for emergencies better	120	12	18
Solo practice is safer for patients	27	83	40
It is harder for a solo GP to keep up-to-date	65	63	22
It is easier for group practices to employ staff	118	3	29
Group practices can better afford renting/ buying premises	111	7	32
Group practices make family medicine impersonal	32	80	38
Group practice is more efficient	70	28	52
Group practice means higher fees	38	36	76
Solo GPs are more likely to suffer from professional burnout	106	20	24
Group practices provide better GP training environment	94	24	32
Group practices provide better coordinated care	84	25	41
Group practices enable better multidisciplinary care	104	19	27
Solo GPs do more home visits	50	30	70
I would consider working in a group practice	98	26	26
I would never trust a colleague enough to share all my work and income	21	98	31
Group practice is the way forward for the country	80	25	45
Government should encourage group practice formation with financial incentives and loans	115	14	21
Government should not favour any type of practice over another	92	36	22
Nurses give an important contribution to primary care	126	2	22
Any reform in primary care should be introduced gradually	127	8	15
Patient registration is sorely needed in Malta	92	31	27
Government should subsidise the employment of practice nurses by private GPs	95	16	39
Public group practices can be set up in Government Health Centres	78	23	49
Solo practice should remain the backbone of Malta's primary care	35	68	47
one product should remain the backbone of main 3 primary care			11

forty (p=0.04) show greater agreement, but solo and group practitioners do not differ in opinion. A Likert scale based on the medians of responses to 18 statements shows that GPs think that partnerships are the best setup for doctors. Sixty-five per cent of GPs would consider working in a partnership, except those older than sixty (p=0.017) and public doctors who also work part-time privately (p=0.028) (Figure 5).

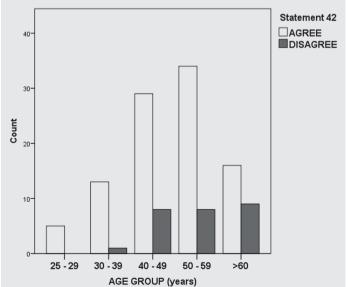
Healthcare Reform and Group Practices

Sixty-one per cent of respondents believe that 'patient registration is sorely needed in Malta', although public doctors who also work part-time privately tend to disagree (p=0.015). On average, GPs think that each doctor should have a maximum list size of 2000.

Forty-five per cent of respondents disagree while 23% agree that 'solo practice should remain the backbone of Malta's primary care'. Males (p=0.034), GPs older than forty (p=0.045), private doctors (p=0.035) and solo GPs (p=0.013) show more agreement. Sixty-nine per cent of GPs, but 92% of females (p=0.003), disagree that 'group practice is unsuitable for Malta'. Fifty-three per cent of GPs think that 'group practice is the way forward for the country'. Public doctors who work part-time privately tend to disagree (p=0.035).

Seventy-seven per cent of GPs think that the state should encourage the formation of group practices with financial incentives. Public doctors who also work part-time privately tend to disagree (p=0.038). Sixty-three per cent of respondents agree that 'the government should subsidise the employment of practice nurses by private

Figure 5: Level of agreement by age group with statement 42: 'I would consider working in a group practice'



GPs' and 52% favour the setting up of public group practices. On average, GPs believe that the best number of partners for a practice would be four.

A Likert scale based on the medians of responses to three statements shows that GPs are in favour of primary healthcare reform in the direction of group practices. This opinion does not vary significantly by age, gender, geographical area of work, employment status or practice organisation. Eighty-five per cent of GPs think that reform should be introduced gradually.

DISCUSSION

The vast majority of private GPs work single-handed, most without the aid of professional or secretarial staff. Paradoxically, this survey has revealed that most GPs believe that group practices are superior to solo practice both in the provision of patient care and in permitting doctors a better quality of life. Solo practice was deemed better only in allowing better relationship continuity of care and professional autonomy. A large majority of GPs answered that they would actually consider working in a group practice. Despite these opinions, there are evidently practical factors that impede private GPs from joining partnerships.

When asked whether income is lower in a group practice, 14% of respondents agreed, 21% disagreed and the majority did not know. This response indicates uncertainty about this topic. In a group practice, partners can benefit financially from economies of scale in pooling and sharing of resources. However, international studies have shown that many solo GPs resist joining partnerships because they fear a reduction in income (Josephs, 1982; Feron et al., 2003; Kendall et al., 2009). This fear can materialise particularly in the local situation, where private GPs derive their income solely from fees they charge their patients in a competitive free market, without the assurances of patient registration, fixed fees, or state financial aid.

Another factor that may hinder the formation of group practices is lack of trust in colleagues. All partnerships presuppose a sharing of power and absolute trust between the partners (World Health Organisation, 2009). Lack of trust has been observed locally by a male in his fifties:

'Practice organisation in Malta depends much on the concept of trust and support, which I feel is lacking and is the reason why group practices have not flourished.'

Females and GPs younger than forty are more critical of single-handed practice than their colleagues. Only one-fourth of Maltese GPs are female, but most work in partnerships or the public service. Indeed, international

data shows that females are more likely to work in a salaried post or a partnership (Boerma, Groenewegen and Spreeuwenberg, 2003; Britt et al., 1996; Cooke and Ronalds, 1985; Maheux et al., 1988). These choices may reflect a preference of females for a non-competitive and supportive environment, for fixed hours of work and income, and a need to balance work with family responsibilities. The proportion of local female GPs is small but is increasing progressively, following the global trend of feminisation of the profession (Boerma and van den Brink Muinen, 2000). Indeed, 58% of GPs who graduated in Malta between 2010 and 2013 were female (Sammut, M.R., personal communication, 2013).

This survey did not find any association between age and group practice. This goes against the trend in Europe, where young GPs tend to participate more in partnerships (Feron et al., 2003, Baudier et al., 2010; Grytten et al., 2005; Mayorova et al., 2005; Pederson et al., 2012). The average age of Maltese GPs is 49 years, but is expected to fall due to the considerable influx of young doctors occurring since the introduction of specialist training. In fact, 26 GPs have graduated over the last three years (Sammut, M.R., personal communication, 2013).

The majority of respondents favour primary healthcare reform and patient registration. The advantages were beautifully expressed by a male in his fifties:

'Patient registration... would not only underline the role of the GP as the real gatekeeper to our health system but would discourage doctor shopping, which is rampant... we are sometimes trodden upon roughly by our colleagues the consultants...'

Most respondents think that the future of primary care lies in partnerships, and that the state should invest in private group practices. Public doctors who also work part-time privately tend to oppose patient registration and partnerships, probably because these developments would threaten their income from private work. Contrastingly, GPs younger than forty are more in favour of reform in the direction of group practices, auguring well for the future of partnerships in Malta.

LIMITATIONS

This study was a cross-sectional observational survey. Such a study can identify associations between factors, but can never prove causation, unlike interventional studies.

The survey was mailed because of practical difficulties encountered in obtaining up-to-date e-mail addresses of all GPs. When e-mail reminders were sent on available addresses, many of these proved invalid.

The response was poor at 44%. Non-response bias can invalidate survey data, because non-respondents might have different opinions from respondents (Parker and Dewey, 2000). Still, non-response bias is generally of less concern in physician surveys than in surveys of the general public (Kellerman, 2001). Although most GPs did not return the questionnaire, respondents are fairly representative of the sample in demographic and employment characteristics.

CONCLUSIONS

This study has achieved its aims by accurately describing the current practice setup of Maltese GPs and their opinions about how practice organisation might influence them and their patients. In addition, it has tested their views about primary healthcare reform.

The results clearly show that GPs strongly favour partnerships. They acknowledge that, though patients prefer one doctor, a group practice is able to deliver better healthcare. Most doctors think that partnerships would also benefit professionals. A large majority of GPs favours healthcare reform and patient registration. Furthermore, most believe that the state should stimulate the development of group practices with financial incentives.

RECOMMENDATIONS

- Primary healthcare in Malta should be urgently reformed, adopting an integrated model so as to reduce healthcare inequalities.
- There should be extensive discussion with the associations and the Malta College of Family Doctors (MCFD) throughout all stages of planning and implementation.
- Reform should be implemented in an incremental fashion perhaps over a decade.
- Patient registration should be introduced to reinforce the GP functions of disease prevention, first point of care, management of chronic disease and gatekeeper to secondary care.
- Public-private partnerships should be established, thus utilising the patient-friendliness, management skills, efficiency and cost-containing strengths of the private sector.
- Group practice formation should be encouraged by providing financial aid to private GPs in the form of interest-free loans for acquiring/restructuring premises, and for buying equipment.
- The state should promote multidisciplinary care by subsidising the employment of secretarial and nursing staff by private GPs, who should retain the right to choose their employees.

- Public group practices could be established in government health centres, utilising current premises and staff. These practices would be equivalent to the private service in all respects, except that they would remain free of charge to cater for means-tested citizens.
- Public GPs who do not wish to join a partnership could continue to run a 24hr walk-in emergency service.
- The following measures would help preserve relationship continuity of care:
 - list size not exceeding 2000 patients
 - practices not exceeding four partners
 - use of personal lists and appointments

- Management continuity of care could be ensured through a nation-wide IT system to unite primary and secondary care in both public and private sectors.
 This would allow monitoring and audit of healthcare processes and outcomes.
- Private practices should receive financial incentives linked to:
 - preventive interventions
 - quality chronic disease management
 - patient satisfaction
 - approved learning/teaching activities.
- The MCFD should organise courses in partnership management, harnessing the expertise of group practitioners.

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