

Equity of Access to Quality of Care in Family Medicine

GUEST EDITORS: M. F. HARRIS, J. S. FURLER, S. W. MERCER, AND S. J. WILLEMS





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Guest Editors: M. F. Harris, J. S. Furler, S. W. Mercer,
and S. J. Willems



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Editorial

Equity of Access to Quality of Care in Family Medicine

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Accessibility is an important characteristic of primary health care contributing in large part to its success in making health care more efficient and equitable. Countries which have comprehensive primary health care systems have lower costs and generally healthier populations [1, 2]. To get the benefits of PHC services, people need to be able to access and use them. Access to primary health care has also been proposed as a strategy to address health inequities [3].

Access varies in different contexts. In some countries, there are major barriers to access to basic primary health care. In others, even though there is reasonably equitable access to primary health care, there are inequitable barriers to accessing quality or comprehensive care and to subsequent referral services, sometimes referred to as access *in care*. “Inverse Care” is where persistent barriers to access exist for people from disadvantaged backgrounds, despite their higher need [4]. Where such inverse care persists, health care can inadvertently become part of the system that sustains unjust inequities in health-making action at this level imperative [5].

Access arises from a complex interplay between patient, provider, and system factors. Accessibility can be defined as the opportunity or ease with which consumers or communities are able to use services in proportion to their need [6]. Patient factors include economic resources, health literacy, and attitudes. Provider and system factors are closely linked and have been summarised by 5As originally described by Pechansky and others [7, 8] as follows.

Availability. of a sufficient volume of services (including professionals, facilities, and programmes) to match the needs of the population and the location of services close to those

needing them. This is underpinned by the distribution of the health workforce.

Affordability. (cost versus consumers’ ability to pay, impact of health care costs on socioeconomic circumstances of patients). This is influenced by the way in which government funds primary health care and the regulation of and access to the health insurance.

Accommodation. the delivery of services in such a manner that those in need of them can use them without difficulty (e.g., appropriate hours of opening and accessible buildings).

Appropriateness. to socioeconomic, educational, cultural, and linguistic needs of patients.

Acceptability. in terms of consumer attitudes and demands.

This special issue presents a number of studies of the complex interplay of all these patient, provider, and system factors. Two papers deal with access to mental health services. In a qualitative study in northwestern England, K. Bristow et al. in “*Help seeking and access to primary care for people from “hard-to-reach” groups with common mental health problems*” identify four factors which influence access to mental health care by “hard-to-reach groups” including patient conceptualisation of health care and their help seeking behaviours as well as barriers such as lack of time and the challenge of negotiating a range of services. Patients hoped for a GP willing to listen and refer or liaise with specialist services but did not always get this due to lack of GP time and linkages with social care and nongovernment organizations, something that other research has demonstrated to be

a barrier in disadvantaged communities, and it has been suggested that colocation of services may be a useful strategy to address this [9]. The second paper J. Benson et al. “A new era in mental health care in Vanuatu” describes access to mental healthcare in a small Pacific Island country with a less developed economy—Vanuatu. In this setting, traditional models of specialised mental health services are unsustainable. The paper describes an approach to training key health and social service providers and the provision of a support network for them.

Another group who suffer access problems in many countries are minority ethnic population groups. In a mixed methods study in the Netherlands, C. H. Liu et al. in “Barriers to health care for Chinese in the Netherlands” describe access barriers for people of Chinese background to all primary health care including mental health problems. Important barriers include inadequate knowledge of the health system that leads to nonregistration with GPs and language barriers (with inadequate access to interpreters).

The need for workforce development has given rise to a number of innovative solutions which involve other kinds of health professionals. In North America, physician assistants have been developed to address the shortage of doctors in health services in many areas. However, like the medical workforce, the distribution of physician assistants is also subject to inequities. This is addressed in the paper by J. M. Coombs et al. “Factors associated with physician assistant practice in rural and primary care in Utah” in a survey of physician assistants in Utah. While making a significant contribution to the primary care workforce, deficiencies in rural areas remain. They noted that PAs who grew up in rural areas were more likely to practice in rural areas. This has important implications for recruitment and retention strategies and supports extension of some of the strategies used to attract and retain the rural medical workforce.

Funding is another key determinant of availability and affordability. C. Teljeur et al. in “Spatial variation in general medical services income in Dublin general practitioners” have examined the allocation of government funding for general practice services in Dublin. Although, as a whole, GPs practicing in disadvantaged areas attract more total funding, the provision of universal funding for care for patients over 70 years of age tends to be skewed towards more advantaged areas. This raises not only issues about implications of this in support for primary health care in disadvantaged areas but also optimal mix of universal and targeted funding for health care more generally and the impact this can have on the distribution of the workforce. Almost all countries have problems regarding the distribution of the workforce in disadvantaged compared with advantaged communities, and the mechanism for funding for primary health care has an important influence on the choices doctors make about where to practice.

Finally, V. Bercic et al. in “Development of a tool to identify poverty in a family practice setting: a pilot study” in Canada developed a simple set of acceptable questions that clinicians can ask to determine if patients are affected poverty. This allows the detection of important causes of inequities and potentially enables affordability issues to be more directly

discussed in the consultation—especially affordability of referral services or treatments. This emphasizes the importance of not only describing and advocating inequities through professional bodies but also of clinicians playing a direct role in addressing inequities of access affecting their own patients.

The British Medical Association recently published a paper describing the role of the doctor to address the social determinants of health [9]. In his forward, Michael Marmot stresses that addressing access is only part of the picture and that health inequalities are related to a range of structural determinants such as age, income, education, occupation, gender, ethnicity, and place of residence. However, he gives examples of measures to improve access for groups such as homeless people and access to interpreter services for people facing language barriers to care. While not the whole solution, retaining and improving equitable access to primary health remains an important priority for health systems and one which should not be taken for granted.

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Research Article

Factors Associated with Physician Assistant Practice in Rural and Primary Care in Utah

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Physician Assistants (PAs) have become an integral part of the United States (U.S.) health care system since the profession began in the late 1960s. PAs have been suggested as solutions to predicted physician shortages especially in primary care. This study examined the predictors of primary care and rural practice patterns of PAs in Utah. A cross sectional survey design was utilized. The outcome variables were practice specialty and practice location. The predictor variables were age, gender, number of years in practice, location of upbringing, and professional school of graduation. There was a response rate of 67.7%. The Utah Division of Occupational and Professional Licensing (DOPL) provided the list of licensed PAs in the state. Physician assistants who reported being raised in rural communities were 2.29 times more likely to be practicing in rural communities (95% CI 0.89–5.85). Female PAs had lower odds of practicing in a rural area (OR: 0.26; 95% CI: 0.10–0.66). Female PAs had lower odds of practicing in primary care versus their male counterparts (OR: 0.56; 95% CI: 0.33–0.96). Graduation from the Utah PA Program was more likely to result in primary care practice (OR: 2.16; 95% CI: 1.34–3.49).

1. Introduction

Approximately 80% of the Utah population lives on the Wasatch Front, centering on Salt Lake City. Population growth along the Wasatch Front has made Utah one of the most urban states in the nation [1]. When the ratio of primary care physicians to population is assessed, Utah ranks last in the country [2]. There were 89.6 primary care physicians per 100,000 population in the US in 2008; Massachusetts ranked the highest with 129.4 primary care physicians and Utah the lowest, 63.4. Nationally, primary care shortages are predicted as increasing numbers of physicians are selecting specialty practice [3–7]. One strategy to address primary care shortages has been to turn to physician assistants (PAs). PAs have been shown to improve access to care for the underserved [8]. Increasing numbers of PAs are also entering specialty care although the flexibility and career

mobility of PAs suggest they can also move out of specialties and into primary care [9].

A Utah study in 2006 found there were 4,484 total physicians, which equated to 165 physicians per 100,000 population. In 2003, 29% of Utah physicians were in generalist fields. This study estimated Utah would need to recruit up to 270 physicians per year due to population growth, age demographics, loss of full-time equivalent (FTE), and retirement. Out of state, trained physicians will be required because Utah's medical school will only meet 19%–22% of the projected annual demand for physicians [10]. Because the Governor's Office of Planning and Budget (GOPB) projects Utah's overall population to increase from 2.7 million to 3 million by 2012 and another million by 2020, more doctors may be needed. According to the US Census Bureau, Utah was the second fastest growing state in the nation during 2009 with an annual growth rate of 2.1%. The number of

Utahans over age 65 (as a percentage of the population) is expected to increase with estimates that the age 65 and older population will grow from 213,201 in 2000 to 319,564 in 2015 (a growth rate of 50%) [11].

The demographics of Utah are unique, ranking first in the country for population growth (due almost entirely to a high fertility rate) [12]. More than 20% of the population are dependent children, stretching public services including public schools and health care [13]. Three factors—high fertility rate, growing elderly, and increased utilization of health care services—are expected to increase the demand for primary care services.

Since the turn of the new century, workforce studies have focused on the increasing supply of PAs in the state. In Utah, the visibility of PAs has been increasing. From 2003 to 2008, the number of PAs has grown from 324 active PA licenses to 700 active PA licenses (116% growth).

To better understand the current distribution of PAs, along with the enablers and barriers to primary care and rural practice selection, we undertook a study on this labor force. Our research questions center on the following.

- (1) What is the distribution of PAs in the state of Utah?
- (2) What are the factors associated with primary care and rural practice selection?
- (3) Can PAs help address the increasing need for primary care providers in Utah by choosing primary care specialties?

2. Methods

A list of licensed PAs was obtained through the Utah Department of Commerce's Division of Professional Licensing (DOPL). In 2008, there were 700 licensed PAs in the state; a survey was sent to every PA. A total of three separate mailings were conducted over the period of October 2008 through January 2009. A total of 474 responses were received which equates to a 67.7% response rate. Of the 474 respondents, 432 PAs said they are actively practicing in Utah (90.7%). Survey responses were not weighted for nonrespondents for the purpose of the regression analysis. When checked for potential response biases based on year of licensure, age, gender, and geography, a particularly low response rate was identified for Iron County, a rural county located in southwest Utah. Targeted mailings to the PAs with addresses located in Iron County were conducted in an attempt to increase the response rate from that county.

2.1. Design of the Survey. A survey instrument was constructed based on two previous surveys (1998 and 2003) and a physician workforce survey (2006). A PA study committee included the University of Utah PA Program Director, the Executive Director of the Utah Academy of Physician Assistants, and three practicing PAs. Useful questions from previous surveys were incorporated.

2.2. Study Population. The study population was the universe of PAs licensed to practice in Utah in October 2008. PAs were

categorized as primary care if their self-reported specialty was family practice, general internal medicine, pediatrics, or obstetrics and gynecology. Rural or urban designation was based on county. Cache, Davis, Provo, Salt Lake, Weber, and Washington County were considered urban; 20 of the 26 counties were classified as rural. Utah has 5 urban communities, Salt Lake, Logan, Ogden, Provo, and St. George and within these so-called urban communities, rural communities exist. The remaining counties all have populations less than 50,000 in the county.

2.3. Study Variables and Statistical Analysis. Five variables related to demographic information were available within the survey. Multinomial logistic regression analysis was performed using SPSS 16.0 to assess the relationship of the predictive variable to the outcome of rural and/or primary care practice, using odds ratios with 95% confidence intervals (CIs).

3. Results

Responses were obtained from 432 of 700 physician assistants who are actively practicing in the state of Utah (Table 1). Thirty-six percent of Utah PAs are between the ages of 31 and 40 years, with males at 60.6% of the total respondents. Nearly half (47.4%) of the respondents have been in practice between 0 and 5 years. Location of upbringing was 17.2% urban, 52.2% suburban, and 30.5% rural. Nearly half (47.6%) of the respondents graduated from the University of Utah Physician Assistant Program. Forty-five percent of physician assistants in Utah provide primary care and 85.3% practice in an urban location.

Except for Washington County, all of the counties with greater than 40% nonresponse rate were counties with fewer than 10 PAs in them. The only county with more than 5 PAs and greater than 50% nonresponse rate was Iron County. A targeted separate mailing was sent to Iron County PAs in order to attempt to increase response rates (Table 2). Response rate for males was higher than females, 71% and 63%, respectively. Increasing age and years of license resulted in slightly higher response rates (Table 3).

In logistic regression analysis, PAs age 31–40 had the highest odds of practicing in primary care (OR: 1.74; 95% CI: 0.85–3.57); however, it did not achieve statistical significance (Table 4). Female PAs had lower odds of practicing in primary care versus their male counterparts (OR: 0.56; 95% CI: 0.33–0.96). PAs had lower odds of practicing primary care if they reported a rural or suburban upbringing (OR 0.49; 95% CI: 0.26–0.93, and OR: 0.33; 95% CI: 0.16–0.66). Graduation from the Utah PA Program was more likely to result in primary care practice (OR 2.16; 95% CI: 1.34–3.49). The only statistically significant predictors of primary care practice were being male ($P = 0.036$), obtaining training in the state of Utah ($P = 0.002$), and urban upbringing ($P = 0.008$).

In logistic regression analysis, female PAs had lower odds of practicing in a rural area (OR: 0.26; 95% CI: 0.10–0.66, $P = 0.005$) (Table 5). PAs who reported graduating from

TABLE 1: 2008 Utah PA characteristics for the study population.

PA characteristics	N = 432	Percent
Age		
21–30	55	12.7%
31–40	158	36.6%
41–50	100	23.1%
51–60	91	21.1%
61+	28	6.5%
Gender		
Female	170	39.4%
Male	262	60.6%
Years of practice		
0–5	203	47.4%
6–10	89	20.8%
11–15	67	15.6%
16–20	34	7.9%
21+	35	8.3%
Practice type		
Primary care ¹	191	45.6%
Specialty care	228	54.4%
Practice location²		
Practice in rural county	60	14.7%
Practice in urban county	349	85.3%
Location of upbringing³		
Urban	74	17.2%
Suburban	224	52.2%
Rural	131	30.5%
Physician assistant school of graduation		
Utah	203	47.6%
Other	223	52.3%

* 474 surveys were returned, 432 (90.7%) reported they are clinically active in Utah.

¹Primary care definition: family practice, general internal medicine, pediatrics, and obstetrics and gynecology.

²Five Utah counties, Cache, Provo, Salt Lake, Weber and Washington county: urban; all others are considered rural. Location based on practice address zip code.

³Self-reported location of upbringing rural/suburban/urban.

the Utah Physician Assistant Program had higher odds of practicing in a rural area (OR: 1.33; 95% CI: 0.67–2.65, $P = 0.413$), but this did not achieve statistical significance. PAs who practiced in a rural environment were more likely to report a rural upbringing (OR: 2.29; 95% CI: 0.89–5.85, $P = 0.001$). The only statistically significant factors were male gender ($P = 0.005$) and rural upbringing ($P = 0.001$). Age and years of practice were not significantly associated with predictors of rural practice in Utah. From 2003 to 2008, specialty practice choice of family medicine declined from 40% to 31.5% of the total Utah PA workforce (Table 6).

4. Discussion

PAs in Utah mirror the changing workforce demographics of the state: young, primarily urban, and suburban-raised

TABLE 2: Response characteristics by county.

County	Response rate
Beaver	50.0%
Box Elder	60.0%
Cache¹	78.3%
Carbon	50.0%
Daggett	100.0%
Davis	63.1%
Duchesne	33.3%
Emery	100.0%
Garfield	0.0%
Grand	66.7%
Iron	44.4%
Juab	100.0%
Kane	100.0%
Millard	100.0%
Morgan	0.0%
Rich	100.0%
Salt Lake	70.6%
San Juan	100.0%
Sanpete	60.0%
Sevier	100.0%
Summit	66.7%
Tooele	62.5%
Uintah	100.0%
Utah	68.0%
Wasatch	50.0%
Washington	56.4%
Wayne	100.0%
Weber	66.0%
Out of State	58.9%
Total	66.7%

¹ Bold: US Census Bureau metropolitan area designation (urban county).

TABLE 3: Response rate by age, gender, and years of licensure.

Demographic variable	Response rate
Gender	
Male	71%
Female	63%
Age	
21–30	66.6%
31–40	64.6%
41–50	64.1%
51–60	71.8%
61+	71.4%
Years of licensure	
0 to 5	66.0%
6 to 10	67.4%
11 to 15	65.1%
16 to 20	75.0%
21+	77.7%

TABLE 4: Predictors of primary care¹/specialty care practice.

Independent variable	N = 381*	OR (95% CI)	P value
Age ^a			
21–30	53	1.00	—
31–40	137	1.74 (0.85–3.57)	0.129
41–50	87	1.58 (0.67–3.74)	0.289
51–60	83	1.49 (0.55–4.02)	0.429
61+	21	0.52 (0.12–2.15)	0.367
Gender ^b			
Male	227	1.00	—
Female	154	0.56 (0.33–0.96)	0.035
Years of practice ^{2,c}			
0–5	183	1.00	—
6–10	77	0.67 (0.35–1.28)	0.228
11–15	60	0.33 (0.14–0.76)	0.010
16–20	32	0.26 (0.09–0.76)	0.014
21+	29	0.49 (0.15–1.51)	0.214
Physician assistant school of graduation ^d			
Non-Utah PA school	198	1.00	—
Utah	183	2.16 (1.34–3.49)	0.002
Location of upbringing ^{3,e}			
Urban	66	1.00	—
Suburban	198	0.49 (0.26–0.93)	0.029
Rural	117	0.33 (0.16–0.66)	0.002

* After deleting missing cases for all predictor variables listed above (for logistic regression), 381 of the 432 total records were left for analysis.

¹Primary care definition: Family practice, General internal medicine, pediatrics, and obstetrics and gynecology.

²Years of practice: number of years since first license issue.

³Self-reported location of upbringing rural/suburban/urban.

Baseline category for comparison is: ^aage <31 yrs; ^bmale; ^c0–5 yrs of practice; ^dnon-Utah PA school graduate; ^eurban upbringing.

professionals. Under the current scenario, the potential use of PAs to blunt predicted rural and primary care shortages of Utah physicians may fall short. Within the last 10 years, Utah has increasingly relied on PAs trained in other states because the state's PA program of 40 PAs graduates per year is insufficient. In 2008, a total of 88 PAs practiced in rural counties, consisting of 21.6% (19) female PAs and 78.4% (69) male PAs.

Efforts are underway to bolster the nation's primary care workforce, and the Patient Protection Affordable Care Act (PPACA) legislation of 2010 injects \$250 million to improve primary care education for doctors, PAs and NPs. However, primary care may not be possible without incentives to practice in this specialty because salary was not independently predictive of either rural or specialty practice, nor were years of practice [9]. Influencing factors upon primary care and/or rural practice include loan repayment and tax incentives—strategies that have been employed with success in other states.

Although many PAs have been shifting into specialty practice, primary care still remains a viable choice for many PAs entering the workforce [14]. The finding that female PAs may be more likely to practice in specialty care may be due to the increased job availability of specialty care in recent years. PAs may be different from their physician

counter parts when it comes to specialty choices [15]. Utah PAs were twice as likely to practice in a rural environment if they reported being raised in a rural community. Male gender has been significantly associated with rural practice and is reflected in this research. Although Utah has been traditionally male dominated PA profession, this is slowly changing. On average, the PA workforce in Utah graduated from a PA training program 15 years ago (median of 8 years). The mean number of years of experience for male PAs is much higher than for females PAs. There are 21.3% (79) of male PAs in the Utah workforce with over 20 years of experience, whereas only 6.1% (15) of female PAs have greater than 20 years of experience.

In this study, rural location of upbringing was associated with statistically significant lower odds of practicing in primary care when compared to urban location of upbringing. One possible explanation is the overall increase in urban location of many primary care practice jobs. In general, the results of this study showed increased urbanization of the young profession. This may explain why urban upbringing is a predictor of primary care practice.

Limitations of this study include the 67.7% response rate to the survey. This is higher than the American Academy of Physician Assistants (AAPA) survey 2009 response rate of 35%. The data were not weighted in the analysis. Low

TABLE 5: Predictors of rural/urban¹ practice.

Independent variable	N = 381*	OR (95% CI)	P value
Age ^a			
21–30	51	1.00	—
31–40	136	0.98 (0.33–2.92)	1.012
41–50	86	1.18 (0.34–4.09)	0.848
51–60	76	1.48 (0.34–6.35)	0.674
61+	19	2.08 (0.31–14.0)	0.479
Gender ^b			
Male	218	1.00	—
Female	150	0.26 (0.10–0.66)	0.005
Years of practice ^{2,c}			
0–5	179	1.00	—
6–10	76	0.34 (0.12–0.97)	0.045
11–15	57	0.75 (0.24–2.29)	0.617
16–20	28	0.42 (0.09–1.87)	0.255
21+	28	0.21 (0.03–1.26)	0.089
Physician assistant school of graduation ^d			
Non-Utah PA school	190	1.00	—
Utah	178	1.33 (0.67–2.65)	0.413
Location of upbringing ^{3,e}			
Urban	62	1.00	—
Suburban	191	0.62 (0.23–1.67)	0.352
Rural	115	2.29 (0.89–5.85)	0.083

* After deleting missing cases for all predictor variables listed above (for logistic regression), 381 of the 432 total records were left for analysis.

¹ Five Utah counties, Cache, Provo, Salt Lake, Weber, and Washington county: urban; all others are considered rural. Location based on practice address zip code.

² Years of practice: number of years since first license issue.

³ Self-reported location of upbringing rural/suburban/urban.

Baseline category for comparison is: ^aage <31 yrs; ^bmale; ^c0–5 yrs of practice; ^dnon-Utah PA school graduate; ^eurban upbringing.

TABLE 6: Comparison of specialty for practicing physician assistants in Utah, 2003 to 2008*.

Specialty	2003	2008	Change (percentage points)
Family medicine	40%	31.5%	–8.6
Orthopedic surgery	6.5%	10.6%	4.0
Emergency medicine	5.4%	6.0%	0.6
Pediatrics-General	6.2%	5.8%	–0.4
Internal Medicine/General	6.5%	4.4%	–2.2
Dermatology	4.2%	4.2%	0.0
Prev Med/Occ Med	3.8%	3.2%	–0.7
Urology	1.9%	3.0%	1.1
Cardiology	3.1%	2.8%	–0.3
Hematology/Oncology	2.7%	2.8%	0.1
OB/Gynecology	1.5%	2.5%	1.0
Other Surgical Subspecialty	0.8%	2.5%	1.7
Cardio-Thoracic Surgery	1.5%	1.9%	0.4
Otolaryngology	0.4%	1.9%	1.5
Neurology	1.2%	1.6%	0.4

* Includes specialties with 10 or more PAs.

numbers of PAs practicing in some rural areas may limit the analysis. Effort was made to locate the PA practice location, not the home address in the analysis, and zip codes were used to classify county of practice. Because Utah has a clear pocket of urban living on the western slope of the Wasatch Mountains and one more pocket in the southern end of the state, and given the small number of PAs in the state, finer zip code detail in the analysis did not result in a more informative study.

A second limitation of the study was the self-classification of rural, urban, and suburban upbringing. Because of the changing nature of rurality in the state and the age of the person answering the question, it was decided that self-classification was the method to employ. In this case, perception may be reality, and primarily for the sake of simplicity, this method, which has been employed in other similar studies, was utilized [16]. Finally, the classification of rural, urban, and suburban was used in the survey to improve the self-reporting of upbringing, although the analysis only used rural or urban in reporting outcomes.

5. Conclusion

Factors such as rural, urban, or suburban upbringing, gender, age, and years of practice are important as they relate to primary care and rural health care practice among PAs in Utah. A consistent and well-trained supply of PAs is critical to access to care for Utah citizens. Our findings suggest Utah will continue to experience shortages of primary care physicians that will be amplified in underserved and rural communities. Substantially increasing the number of PAs practicing in these areas may require a number of strategies that take into consideration demographic as well as personal factors. Rural versus urban practice choice among PAs in Utah could potentially be influenced by recruitment, training, and retention efforts that facilitate workforce placement in critical areas. Key groups and leaders in primary care and rural health care could be canvassed as to how to implement effective strategies to influence PAs to enter primary care and/or rural practice. For example, county commissioners, small town majors, rural hospital administrators, and local health department employees may have special interests and expertise in PA recruitment and mentoring. An absence of proactive strategies may be an opportunity missed as the path toward increasing specialization and urbanization has been well worn.

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Research Article

Barriers to Health Care for Chinese in the Netherlands

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This study examines utilisation of the Dutch health care system by Chinese people in the Netherlands as well as their attitudes to the system, paying special attention to mental health. Information was gathered by semistructured interviews ($n = 102$). The main issues investigated are access, help-seeking behaviour, and quality of care. Results showed that most respondents used Dutch health care as their primary method of managing health problems. Inadequate knowledge about the system and lack of Dutch language proficiency impede access to care, in particular registration with a General Practitioner (GP). Users complained that the care given differed from what they expected. Results also showed that the major problems are to be found in the group coming from the Chinese-speaking region. Western concepts of mental health appear to be widely accepted by Chinese in the Netherlands. However, almost half of our respondents believed that traditional Chinese medicine or other methods can also help with mental health problems. The provision of relevant information in Chinese appears to be important for improving access. Better interpretation and translation services, especially for first-generation migrants from the Chinese-speaking region, are also required.

1. Introduction

The Chinese population in the Netherlands, as in many other countries, has increased greatly in the last ten years. This population is currently approaching 100,000 [1, 2], making it the fourth largest ethnic minority in the country as well as one of the longest established. In this paper we include in the category “Chinese” not only persons originating from the Chinese-speaking region (mainland China, Hong Kong, Macau, and Taiwan), where Chinese culture is dominant, but also those coming from overseas Chinese communities in, for example, Indonesia or Surinam. We also include children of migrants who were born in the Netherlands, that is, the second generation.

Traditionally, Chinese have had a reputation for keeping themselves to themselves; they are often assumed to solve their problems within their own community. Language barriers have also hampered contact with Dutch society [1, 3]. For all these reasons, Chinese remain an invisible minority to most Dutch people, and up to now little research has been done on them, in particular regarding their health. This paper reports an investigation into the attitudes of this group

towards the Dutch health care system and the factors influencing their willingness to make use of it.

In the Dutch health care system, the general practitioner (GP) functions as a “gatekeeper” to specialist services [4]. Our main interest in this study was in mental health care, but since this is fully integrated within the general health care system and is only accessible through the GP, we also asked questions about health care in general.

Mental health services in the Netherlands are financed from the social health insurance system, in which participation is compulsory for all residents. For some treatments, a partial contribution from the patient is required. Outpatient services are provided by a network of community mental health care centres, backed up by inpatient services.

Research in many countries has shown that Chinese people are less likely than other ethnic groups to utilise mainstream health services and has identified some of the barriers to uptake [5–12]. In the Netherlands, however, very little is known about the use of health services in general, and mental health care in particular, by this group. Geense [13] and Liu et al. [1] reported that, while it is unclear whether Chinese

use mental health care less than other ethnic groups, there are indications that care delivery for them is far from optimal. To be able to provide more appropriate care for this group it is first necessary to understand the factors which may impede their use of the existing services.

The aim of this exploratory study was therefore to gain insight into the attitudes of Chinese in the Netherlands to the Dutch health care system, paying particular attention to mental health. What factors influence their willingness to make use of the system? What are their beliefs concerning mental health? Information was gathered by semistructured interviews. Before describing the study we will briefly discuss the main issues it deals with: access, help-seeking behaviour, and quality of care.

1.1. Access. Access to health services has two main ingredients: *entitlement* to use the services and the *accessibility* of services in terms of how easily they can be located and how many barriers to their use are experienced. Entitlement to use Dutch health services is restricted to legal residents who have paid the compulsory health insurance contributions. Undocumented migrants, although not allowed to join the insurance system, may receive government-subsidised health care if they are unable to pay costs themselves. However, many appear not to know this.

Accessibility can be broken down into several components. To start with, people must identify themselves as having a problem that can be helped by the available services. Differences in health-seeking behaviour may thus result from divergent beliefs concerning illnesses, their causes, and treatment; Kleinman's concept of "explanatory models" [14] was developed to explore such beliefs. Explanatory models among Chinese may be strongly influenced by traditional Chinese medicine. Secondly, people need knowledge about the health care system and skills for obtaining help from it (health literacy). For example, those who are unfamiliar with the system may have difficulty getting past gatekeeper agencies such as general practitioners, resulting in overutilisation of crisis or emergency services [15, 16].

Another important barrier to access is lack of *trust*. If people do not trust the services, they will be inclined to seek help only when absolutely obliged to—for example in an emergency or in advanced stages of illness [17]. They may suppress or hide their problems, resort to traditional healers and self-medication, or return to their home country for treatment [18, 19].

Perhaps the most serious barriers to access are formed by communication problems [20]. Unless health services provide effective ways of overcoming such problems they can lead to inaccurate diagnoses, noncompliance with treatment, and inappropriate use of services [1, 16, 21]. It is important that both parties understand not only each other's words but also their perspectives and expectations.

1.2. Help-Seeking Behaviour. Help-seeking behaviour will be influenced by the barriers to access which migrants encounter. Chinese in the USA and UK show several different

patterns of health-seeking behaviour [22–24]: either self-treatment and home remedies, combinations of Western and traditional health services, or exclusive utilisation of either Western or traditional Chinese treatments.

Regarding mental health, Fang and Schinke [25] found that a high percentage (84%) of Chinese migrants in the USA attending a community mental health service used complementary therapies. Research on Chinese migrants in British Columbia has reported that demographic characteristics (age, place of origin, educational level, and marital status) influence the utilisation of mental health care [10]. Chen et al. [12] found an association between language proficiency and mental health care utilisation. Chung [26] mentioned shame and stigma as important barriers to help-seeking, while Fung and Wong [9] suggested that explanatory models of mental illness and the perceived availability of appropriate services determined the readiness to use mental health services.

In the Netherlands, Liu et al. [1] found that language barriers and lack of knowledge about the services available were major factors discouraging Chinese from using mental health services. Other cultural barriers were the pervasive stigma attached to mental health problems, differences in communication style, the tendency to conceal problems, different ideas about appropriate help, and distrust of mental health care professionals.

Hsiao et al. [23] suggested that Chinese-Americans lacking English proficiency were more likely to use complementary and alternative medicine than Chinese-Americans who were proficient in English. At the same time, Chinese-Americans who immigrated more than 10 years ago were less likely to use complementary medicine alongside Western health care than Chinese-Americans who were born in the USA. Like Ying and Miller [27], these researchers suggested that acculturation was an important predictor of help-seeking behaviour. In the present research, we examined the effect of length of residency in the Netherlands and three other acculturation-related factors: self-labelling of ethnicity, Dutch language proficiency, and social contacts with Dutch people.

1.3. Quality of Care. The perceived quality of available health services is another factor influencing the readiness of users to seek help [28]. Research into the quality of health care for migrants and ethnic minorities [16, 29, 30] studies its effectiveness in terms of outcomes, the satisfaction of both users and health care workers, and the extent to which the treatment process was properly carried out, avoiding therapy noncompliance and dropout. All these aspects of good care are undermined by poor communication [31, 32]. Clients with a migrant background are often perceived by professionals as making inappropriate, incoherent, or ill-formulated requests, while from the point of view of these clients the professional listens poorly, lacks insight into the problem, and proposes inappropriate or irrelevant solutions [33].

Using the concepts discussed above, the following research questions were formulated: What is the respondents'

level of acculturation? How easy is their access to health care? What are their help-seeking tendencies? What are their attitudes to Dutch health care and to issues concerning mental health?

2. Methods

2.1. Subjects and Procedure. The present study can be characterised as “mixed-methods” research because quantitative data were supplemented by qualitative data from open-ended questions. We examined both the statistical associations of behaviour and attitudes and the reasons or explanations given by respondents. The semistructured questionnaire used in this study was prepared in both Chinese and Dutch versions and contained six sections: demographics, acculturation, access to health care, help-seeking tendencies, opinions about Dutch health care, and mental health issues. Before use, the questionnaire was tested and fine-tuned in a pilot study with 10 Chinese respondents.

Five interviewers were employed (including the researcher), each of whom was proficient in at least one of the following: Dutch, Mandarin, and Cantonese. In this way it was possible to interview all respondents in their preferred language or dialect. Although the questionnaire was self-administered, the interviewers were available to assist the respondents with difficulties in understanding or answering the questions.

The sample consisted of Chinese residing in the Netherlands and originating from the Chinese-speaking region (defined here as mainland China, Hong Kong, and Taiwan) or overseas Chinese communities. The latter group are recognised by the Council of the Chinese Minority in the Netherlands (Inspraakorgaan Chinezen) as members of the Chinese minority in the Netherlands [34].

Respondents were recruited in shopping areas of “Chinatowns” or in the vicinity of large Chinese supermarkets in Amsterdam, The Hague, Rotterdam, and Utrecht (the cities in which half Chinese in the Netherlands live [35]). These areas are visited by Chinese people, even those living in other parts of the Netherlands, for shopping and social events. Interviewers approached potential respondents on the street and 53% were willing to cooperate ($n = 102$). To ensure a reasonably representative sample, researchers approached equal numbers of men and women and aimed at a wide age range. Each interview took 10 to 15 minutes and data were collected anonymously.

2.2. Measures. The topics covered in the six sections of the interview are described here in more detail.

2.2.1. Demographic Information. Background variables included age, gender, civil status, education, region of birth, mother tongue, migration generation, reason for migration, age of migration to the Netherlands, and length of residence.

Civil Status. This comprised five categories: married, partnered, single, separated, and widowed. This was recoded as

“partnered” (including married or partnered) and “not partnered” (single, separated, or widowed).

Education. This was determined by the highest education completed either in the Netherlands or in the region of origin. The answers were grouped into three categories: (1) primary school or lower, (2) secondary or lower vocational education, and (3) higher education.

Region of Birth. This included 9 categories (China, Hong Kong, Taiwan, the Netherlands, Indonesia, Suriname, Malaysia, Singapore, and “other regions”). China, Hong Kong, and Taiwan are defined as the Chinese-speaking region, while Indonesia and Suriname are former Dutch colonies. The variable was recoded into four categories: Chinese-speaking region, former Dutch colonies, “other regions,” and the Netherlands.

Mother Tongue. This question was open-ended. When the mother tongue of the respondent was Chinese, details of the dialect were asked for.

Migration Generation. Two groups were formed: (1) first generation (born outside the Netherlands) and (2) second generation (born in the Netherlands). None of the respondents were from the third or later generations.

Reason for Migration. Answers to this open-ended question were grouped into five categories: family reunification or formation, economic migration, study, political factors, and “other reasons.”

Length of Residence in the Netherlands. This was measured in years.

2.2.2. Acculturation Factors. Three aspects of acculturation were measured: self-labelling of ethnicity, Dutch language proficiency, and social contacts with Dutch people.

Self-Labelling of Ethnicity. Respondents were asked which ethnicity they used to describe or introduce themselves to other people. Answers were coded as Chinese, Dutch, mixed ethnicity, or other ethnicity. Mixed ethnicity could combine Chinese, Dutch, or other ethnicities.

Dutch Language Proficiency. Respondents assessed their own proficiency in reading, writing, and speaking Dutch. Answers were coded using a 4-point scale: none (0), poor (1), moderate (2), and good (3). Because of the high degree of intercorrelation between these three variables ($\alpha = 0.97$), a summary variable (Dutch proficiency) was created using the mean of all three.

Social Contacts. Two questions were asked: “which ethnic background do most of your friends have?” and “what is the frequency of your contact with native Dutch?” Answers to the first question were coded as Chinese, Dutch, mixed ethnicity,

or other ethnicities. The options for the frequency of contact with native Dutch were “seldom,” “sometimes,” and “often,” based on the respondents’ self-perception.

A positive correlation was found between the variables “Dutch language proficiency” and “frequency of contact with native Dutch” ($r = 0.56, P < .01$).

2.2.3. Access to Health Care. Questions on this subject related to entitlement, accessibility, and utilisation of Dutch health care.

Entitlement. Respondents were asked if they had health insurance. If the answer was “no,” interviewers asked what the reason was.

Accessibility of Dutch Health Care. Two items were included: (1) whether respondents had received information about the Dutch health care system and (2) whether they were registered with a general practitioner (GP).

Utilisation of Dutch Health Care. Respondents were asked whether they had ever used Dutch health care.

2.2.4. Help-Seeking Tendency. Respondents were asked which form of care they usually used for regaining health. The options were: Dutch health care, traditional Chinese medicine, both of these, or other kinds of care. Respondents who used other kinds of care were asked to give further details. A new variable “tendency to seek help from the Dutch care system” was made, contrasting positive attitudes to seeking help from the Dutch system (whether or not in conjunction with other forms of treatment) with negative ones.

2.2.5. Opinions about Dutch Health Care. Respondents were asked whether or not they had difficulties in using Dutch health care. An open-ended question asked for their opinions about Dutch health care and the ways in which it could be improved for Chinese migrants.

2.2.6. Mental Health Issues. This section comprised three questions: (1) is Dutch (Western) health care helpful for problems related with mental health? (2) Are there other ways of dealing with mental problems? (3) What kind of care would you suggest for family or friends who have mental problems? The response alternatives were “yes,” “no,” and “do not know/not applicable.” Respondents were asked to give further details to clarify their answers.

2.3. Analysis. Relationships between the quantitative variables were examined using parametric and nonparametric tests of bivariate association. Because of the moderate sample size, only limited multivariate analyses could be used. In the presentation of results only significant differences will be mentioned.

3. Results

3.1. Demographics and Migration Background. Table 1 shows the characteristics of the research sample. Four groups are identified: three first-generation groups (born in the Chinese-speaking region, former Dutch colonies, or other regions) and the second-generation group (born in the Netherlands). Eighty-two percent of respondents belonged to the first generation and 18% to the second. The majority (69%) came from the Chinese-speaking region.

Respondents’ ages varied widely, from 17 to 79 ($M = 39, SD = 16$). The mean age of the four groups varied considerably; the average age of migrants from former Dutch colonies was 59, while second-generation Chinese who had grown up in the Netherlands were less than half as old. Women comprised the majority of the latter two groups, while the second generation was better educated than the first. Comparing these data with figures for the Dutch population revealed an increased proportion with the lowest and the highest levels of education, with fewer in between ($X^2 = 28.11, df = 3; P < .01$).

For most respondents (83%) Chinese was their mother tongue. Five different dialect groups were spoken: Mandarin (official spoken Chinese), Yue (Cantonese), Wu, Hakka, and Min. Other mother tongues were Dutch (11%) and Indonesian (5%).

About half the respondents (47%) had lived in the Netherlands for more than 20 years. People who had lived in the Netherlands for less than five years comprised 18% of the research group. The main reasons for migration were family reunion or formation (48%) and economic migration (24%). Four percent had migrated because of the political situation in their country of origin.

Half of those arriving since 2000 came in order to study. None of those who migrated to the Netherlands before that year came for this purpose. The average educational level of those arriving since 2000 was also considerably higher than that of earlier migrants (means: 2.39 versus 1.79, $t(79) = 3.85, P < .001$). These findings reflect a marked change in the character of recent Chinese migration to the Netherlands.

3.2. Acculturation Factors. Most respondents born in the Chinese-speaking region described their own ethnicity as Chinese (91%), while most born in the Netherlands or former Dutch colonies described it as mixed (42% and 52%). Whereas 82% of the respondents from the first generation referred to themselves as Chinese, only 20% from the second generation did so.

Considerable differences in mean Dutch proficiency scores were found between the different regions in which respondents were born, ranging from 1.16 for the Chinese-speaking region to 2.94 for the Netherlands. Respondents from former Dutch colonies scored almost as well (2.62) as those born in the Netherlands. The 5 respondents born in other countries also had fairly high scores (2.27). The scores of respondents born in the Netherlands were significantly higher than those born in the Chinese-speaking region ($t(85.9) = 14.8, P < .001$). Table 2 shows

TABLE 1: Characteristics of different subgroups.

	First generation (N = 70)			Second generation		Whole sample (N = 102)
	Chinese-speaking region*	Former Dutch colonies (N = 9)	Other (N = 5)	The Netherland (N = 18)		
Demography						
Mean age	40	59	44	28	39	
% female	50	78	60	67	56	
% partnered	39	56	40	89	49	
Education (1-3)	2.0	2.1	2.2	2.5	2.1	
% mother tongue: Chinese	100	11	60	61	83	
Acculturation factors						
Dutch proficiency (0-3)	1.2	2.6	2.3	2.9	1.7	
Contact with Dutch (1-3)	2.2	3.0	2.6	2.9	2.4	
Access						
% with health insurance	90	100	100	100	93	
% received information about health care	40	56	40	67	46	
% registered with GP	79	89	100	100	84	
Utilisation						
% used Dutch health care	77	89	100	94	82	
% seek help Dutch care	80	100	100	94	85	
Opinions on health care						
% difficulty using care	49	11	40	17	40	
% thinks room for improvement**	82	60	100	50	75	
Attitudes towards mental health						
% confidence Mental Health care**	77	75	80	89	79	
% belief in alternatives**	60	50	60	75	62	
% recommend Mental Health care**	84	100	80	88	86	

* Includes China, Hong Kong, and Taiwan, ** Percentage of saying "yes" among the respondents who gave a "yes/no" answer.

TABLE 2: Correlations (Pearson) between variables concerning demographics, acculturation, and utilisation of health care (N = 102).

Variables	Age	Gender	Partnered	Education	Migration generation	Age on arrival in NL	Dutch proficiency	Contact with Dutch	Information received about Dutch care	Family doctor	Use of Dutch care	Difficulty in using Dutch care
Age	1.00											
Gender (1 = M, 2 = F)	.13	1.00										
Partnered (0 = no, 1 = yes)	.44**	-.08	1.00									
Education	-.48**	.04	-.30**	1.00								
Migration generation	-.34**	.09	-.36**	.27**	1.00							
Age on arrival in NL	.58**	.08	.36**	-.20	.32**	1.00						
Dutch proficiency	-.20*	.23*	-.31**	.23*	.59**	-.44**	1.00					
Contact with Dutch	-.40**	.10	-.32**	.30**	.33**	-.34**	.56**	1.00				
Information received about Dutch health care	.07	.23*	.00	.04	.19	.15	.21*	.08	1.00			
Registration with a family doctor (GP)	.17	.21*	.01	-.12	.21*	-.09	.47**	.16	.24*	1.00		
Use of Dutch care	.27**	.21*	.11	-.22*	.10	.02	.25*	.02	.27**	.51**	1.00	
Difficulty in using Dutch health care	.30**	.02	.28**	-.08	-.25*	.34**	-.35**	-.32**	.10	-.12	.04	1.00

** P < .01 (2-tailed). * P < .05 (2-tailed).

the intercorrelations between the variables relating to demographics, acculturation factors, and utilisation of health care.

What determines the level of Dutch language proficiency among the group born in China? Stepwise multiple regression analysis showed that gender, educational level, age, and the length of time people had been living in the Netherlands did not significantly affect language proficiency. A higher age on arrival in the Netherlands, as well as coming to the Netherlands for purposes of study, had a negative influence on Dutch language proficiency; the frequency of contact with Dutch had a positive influence. The main determinant was the age at which respondents had migrated to the Netherlands ($\beta = -.047$, $P < .001$). The second most important factor was whether they had come for study or for other purposes. Students appeared to make little effort to learn Dutch, perhaps because they did not expect to stay in the country ($\beta = -.800$, $P < .001$).

Finally, the frequency of contact that respondents had with native Dutch also increased their language proficiency ($\beta = .329$, $P = .002$), though this influence was probably in both directions. These results should, however, only be regarded as tentative, as the sample on which they are based ($N = 70$) is relatively small.

3.3. Access to Health Care

3.3.1. Entitlement. Only seven respondents had no health insurance. All were men who had migrated from the Chinese-speaking region since 1990. Compared to other men in this category, they were less well educated ($t(42) = -2.00$, $P = .05$). One of them mentioned financial reasons for not taking out insurance, while another considered insurance unnecessary because he seldom used Dutch health care. The remaining five were undocumented and not allowed to take out insurance.

3.3.2. Accessibility of Dutch Health Care. Knowledge of the Dutch health care system: less than half of the respondents (46%) had received information about how to use the Dutch health care system. Sources of information included health insurance companies, health care providers (including municipal health centres), official brochures, school, work, or the media.

Female respondents were significantly more likely than males to report having received information (56% versus 33%; $X^2 = 5.27$, $df = 1$, $P < .05$). Respondents who grew up in the Netherlands or a former Dutch colony were also more likely to have received information than those coming from the Chinese-speaking region or other countries (62% versus 40%; $X^2 = 4.17$, $df = 1$, $P < .05$). Interestingly, there were no associations with any acculturation variables.

Registration with a GP: sixteen percent of respondents reported that they had not registered with a GP. Reasons given included lack of insurance, lack of information about how to find a GP and get registered, and no idea about the function of the GP (using emergency care instead). In some cases the workplace or school had organised a clinic centre for primary care.

Those who registered with a GP were slightly more likely to have received information about the use of Dutch health care than those who did not (51% versus 19%; $X^2 = 5.70$, $df = 1$, $P < .05$). The Dutch proficiency of those who did not register was very low (0.48 versus 1.88; $t = -5.33$, $P < .01$).

3.3.3. Utilisation of Dutch Health Care. Eighteen percent of respondents ($N = 18$) had never used the Dutch care system. There was a high degree of overlap with the group who had not registered with a GP; however, 21% of those who had registered with a GP had never used health care.

Using the system was more common among elderly people ($r = 0.27$, $P < .01$), among women rather than men (90% versus 73%; $X^2 = 4.51$, $df = 1$, $P < .05$) and people with less education ($r = -0.22$, $P < .05$). People who had been in the Netherlands longer ($r = 0.42$, $P < .01$), had better Dutch proficiency ($r = 0.25$, $P < .05$), and had received information about the system (82% versus 55%; $X^2 = 7.61$, $df = 1$, $P < .01$) were more likely to use Dutch health care as well.

3.4. Help-Seeking Tendency. Most respondents (73%) sought help only from the Dutch health care system, 4% used only traditional Chinese medicine, and 13% used both. The other respondents (11%) said they preferred to help themselves, for example, by buying medicines over the counter. There were no significant associations with demographic or acculturation variables.

A new variable was made contrasting those with positive attitudes to seeking help from the Dutch system (perhaps in conjunction with other forms of treatment) with those who had negative attitudes. Only 15% of the sample had negative attitudes. Their Dutch proficiency was extremely low in comparison with those who had positive attitudes (0.56 versus 1.85, $t(25.5) = 6.06$, $P > .001$). Moreover, a lower percentage had health insurance (60% versus 99%, $P < .001$ by Fisher's exact test) and was registered with a GP (40% versus 92%, $P < .001$ by Fisher's exact test).

3.5. Opinions about Dutch Health Care. A substantial proportion of the respondents (40%) said they had difficulties in using the Dutch care system. They named problems such as language barriers, long waiting times and procedures, diverging health concepts, and discrimination. A few people reported that, due to their lack of Dutch proficiency, GPs did not want to take the time to explain the diagnosis or treatments to them. All respondents who mentioned language barriers had labelled themselves as Chinese, and most of them (71%) originated from the Chinese-speaking region. Respondents from the second generation ($X^2 = 6.31$, $df = 1$, $P < .05$) and those with better Dutch proficiency ($r = -.35$, $P < .01$) were less likely to report difficulties.

Seventy-five percent of those who gave yes/no answers believed there was room for improvement in Dutch health care for Chinese. Half of them mentioned the provision of interpretation or translation services. Other suggestions included reducing waiting lists, offering walk-in services, increasing the cultural sensitivity of health workers, and

providing information for Chinese people about Dutch (Western) medical concepts.

Some of those who did not think there is room for improvement said they thought it unlikely that the system would be adapted just for the benefit of a small group of users. A female respondent of Indonesian origin suggested that Chinese health care users should try to improve their Dutch proficiency instead of asking for additional language facilities.

3.6. Mental Health Issues. When asked if they had confidence that Dutch (Western) mental health care could help people with mental illness, 20% of the respondents said that they did not know or that the question was not applicable. Of those who did give a definite answer, 79% said “yes.” Second-generation Chinese were more likely to say “yes” (90%) than first-generation ones (76%).

Sixty-two percent of those giving yes/no answers thought that there are alternative methods of helping with mental problems besides Dutch mental health care. These methods included both traditional Chinese remedies and general ones such as social support.

Regarding the willingness to recommend seeking help for mental problems (not necessarily from Dutch mental health care), 86% of the 89% who gave a definite answer said they would suggest their relatives or friends seek help if they thought it was needed. Those answering “yes” to this question had a higher level of education than those answering “no” ($t(87) = 2.19, P < .04$).

Fifty-seven percent of respondents had relatives or friends with mental health problems or had themselves experienced issues related to mental health problems in the Netherlands.

4. Discussion and Conclusions

This study is set out to examine the utilisation of health care services by the Chinese minority in the Netherlands and this group’s attitudes concerning health, paying particular attention to mental health.

Table 1 shows that there are three groups of first-generation migrants, originating from the Chinese-speaking region, former Dutch colonies, and other countries. The latter group was too small for statistical analyses, but there was a clear difference between the first two in terms of age and acculturation variables. Migrants from former Dutch colonies were older and had better Dutch language proficiency than those from the Chinese-speaking region. They were also more likely than the latter group to identify themselves as being of mixed ethnicity. Many of them would have made acquaintance with Dutch language and culture before migrating.

A fresh wave of young migrants from the Chinese-speaking region, with a higher average level of education, arrived from 2000 onwards. Half of them came for purposes of study. The second generation, born in the Netherlands, had the highest level of education and were mostly very well acculturated. These findings reflect the immigration patterns described by Cheung and Lam [36].

4.1. Access to Health Care. Data on health care utilisation and attitudes showed that the major problems are to be found in the group coming from the Chinese-speaking region. This group contains all of those with no health insurance, as well as most of those who had received no information about Dutch health care, were not registered with a GP, and did not use the Dutch health system. All these characteristics were associated with low levels of Dutch language proficiency (cf. Liu et al. [1]). This proficiency, in turn, was associated with the age at which migrants had arrived in the Netherlands, their frequency of contact with native Dutch, and whether or not they had come to study.

Lack of information about the Dutch health care system was also a barrier to utilisation. Particularly for newcomers, better provision of information about health and health care in Chinese would appear to be important for improving access. Vogels et al. [3] emphasise that learning Dutch is crucial for the integration of Chinese immigrants.

Despite these problems of entitlement and health literacy, most respondents stated a preference for Dutch health care as their main way of managing health problems. There was no evidence of differences in health-seeking tendencies as a function of age, sex, education level, or length of residence in the Netherlands.

Nevertheless, 39% of respondents reported difficulties in using the system. These were mainly associated with lack of Dutch proficiency. Language barriers need to be addressed energetically [16, 37]. Chen et al. [12] suggested that language is functioning as an indicator of cultural differences and go on to discuss possible cultural barriers to service uptake. However, the findings we report suggest that the main barrier to access in their study may simply have been lack of language proficiency.

Many of those affected are relatively old and not well equipped to improve their language skills. Better interpretation and translation services are clearly required; the employment of more Chinese health workers would go some way to reducing both linguistic and cultural barriers. Respondents also complained about long waiting times and discrimination. Waiting lists are a problem that affects everybody in the Netherlands.

4.2. Attitudes towards Mental Health Care. It is certainly not the case that Chinese do not recognise the existence of mental illness. Nevertheless, it is known [38] that mental illness is associated with stigma for Chinese people, and this may present a major obstacle to receiving help. In the present study, however, we did not get the impression that mental health problems were heavily stigmatised by our respondents. Most of them seemed to feel comfortable talking with us about mental health and said they were willing to talk about it with relatives and friends.

Western methods of treating mental illness appear to be widely accepted by Chinese in the Netherlands, as indeed they are in the Chinese-speaking region itself. However, 62% of the respondents who answered the question believed that there are also other ways of dealing with mental health problems. This “health pluralism” is a common

phenomenon in developing countries, but it is also found in Western societies, where “alternative therapies” and self-help account for a large proportion of all health expenditure [39].

This study suggests that Chinese with a higher level of acculturation—in particular, better Dutch language proficiency—have better access to Dutch health care and make more use of it; however, this does not necessarily mean that they abandon a belief in traditional Chinese medicine or other forms of help. This is in line with the US study of Hsiao et al. [23] and the British study of Ma [22], which showed that acculturated Chinese mostly drew upon two medical systems, conventional medicine and traditional Chinese medicine.

4.3. Limitations of This Study. In this study it was not possible to compare Chinese with any other ethnic groups. Nor was any information collected on the nature or prevalence of health problems (mental or otherwise).

The recruitment of respondents on the streets of Chinatowns frequently visited by Chinese for daily shopping and social events may have deprived us of the opportunity to gather ideas from people working during the daytime, especially those working in the restaurant business. In addition, it will have led to under representation of those who do not visit Chinatowns, who may be more acculturated than those who do.

Finally, although the sample size was large enough to reveal many significant effects, a larger sample would make it possible to use more advanced multivariate analyses (e.g., path analysis) in order to disentangle the relationships among variables. In-depth qualitative studies of how Chinese deal with their mental health problems are also required in order to shed more light on the question of how to provide more accessible and appropriate services for this group.

4.4. Conclusion. Despite its limitations, the present study shows that access to health care for Chinese in the Netherlands is closely linked to their proficiency in Dutch. The “Chinese community” comprises several different populations with different demographic and cultural characteristics. The group with the greatest problems of access to health care are those who have migrated from the Chinese-speaking region during the last two decades.

Cultural differences in relation to health certainly exist, but a belief in Chinese traditional remedies does not necessarily form a barrier to using Dutch care. A lack of cultural competence among health care workers, on the other hand, does. Barriers were not confined to mental health care services but concerned access to health care in general.

For migrants with a low level of Dutch proficiency, better interpretation and translation services are urgently required; the employment of more Chinese health workers would help to improve both access and the quality of care. Our results suggest that special measures to overcome language barriers need to be taken with migrants from the Chinese-speaking region who arrive later in life, those who seldom have contact with native Dutch, and students not intending to stay permanently. Finally, to overcome the lack of knowledge

about health care, activities to improve health literacy are clearly needed, carefully targeted, and adapted so as to have maximum impact on the groups who need them the most [40].

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Research Article

Help Seeking and Access to Primary Care for People from “Hard-to-Reach” Groups with Common Mental Health Problems

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Background. In the UK, most people with mental health problems are managed in primary care. However, many individuals in need of help are not able to access care, either because it is not available, or because the individual's interaction with care-givers deters or diverts help-seeking. *Aims.* To understand the experience of seeking care for distress from the perspective of potential patients from “hard-to-reach” groups. *Methods.* A qualitative study using semi-structured interviews, analysed using a thematic framework. *Results.* Access to primary care is problematic in four main areas: how distress is conceptualised by individuals, the decision to seek help, barriers to help-seeking, and navigating and negotiating services. *Conclusion.* There are complex reasons why people from “hard-to-reach” groups may not conceptualise their distress as a biomedical problem. In addition, there are particular barriers to accessing primary care when distress is recognised by the person and help-seeking is attempted. We suggest how primary care could be more accessible to people from “hard-to-reach” groups including the need to offer a flexible, non-biomedical response to distress.

1. Introduction

According to the World Health Organization, half of all people with ill health in Western Europe have mental illness, with the majority coming into the diagnostic categories of anxiety and depression [1]. Such problems impose substantial emotional, social and economic burdens on those who experience them, their families and carers, and society as a whole [2].

The National Service Framework for mental health in England [3] dictated that the majority of patients with common mental health problems should be managed in primary care. Currently 90% of people with mental health problems in the UK are managed by GPs. Primary care provides the first point of contact for many people and also act as a gatekeeper to other statutory services. GPs can refer patients to primary care mental health teams for short-term psychosocial interventions, but in reality have limited access to secondary care services [4].

The UK's National Health Service (NHS) states it has an explicit access-driven health policy framework [5–8], yet there is evidence that individuals with high levels of mental distress may be unable to access care, either because it is not available or because the individual's interaction with care-givers deters or diverts help-seeking [9]. This is the premise of the AMP study (“AMP—Improving Access to Primary Mental Health Care” in Liverpool and Manchester) [10], a National Institute for Health Research funded project (RP-PG-0606-1071). The aim of AMP is to increase equity of access to high quality mental health services in primary care. Groups with inadequate access to primary care include people, from black and minority ethnic (BME) communities, asylum seekers, homeless people and adolescents with eating disorders [11–13]. Groups who receive inadequate help when they do access primary care include elders, people with advanced cancers, those at risk of long-term sickness absence, and people with medically unexplained symptoms (MUS) [14–16].

As outlined by Kovandžić et al. [17], research on access has been driven by two different disciplinary perspectives. Firstly, health services research has traditionally examined access to health care from the point of entrance to the formal system of care. The focus here is on supply-side factors, the availability of treatments, and on structural and organisational change to remove barriers, rather than on demand issues governing the journey of the patient in need. Key concepts such as demand, availability, utilization, and patterns of use are developed in a functionalist view of the relation between service provision and use [18]. In addition, the literature has tended to focus on whether mental health issues are recognised by primary care practitioners.

Secondly, behavioural and social science traditions focus mainly on an “out-of-service” perspective, for example, on processes that happen before the point of entrance into formal systems of care, formulating the scope of research into an umbrella term of “help-seeking”. Broadhurst [19] identifies a series of three-stage models of help-seeking, summarizing their variations in (a) problem definition, (b) deciding to seek help, and (c) actively seeking help. Access is conceptualised as an interaction between supply and demand of services mediated and codified by professionally defined needs for services. Dixon-Woods et al. [18] describe a model of access which attempts to explain where barriers might be for people seeking care. *Candidacy* captures how people’s eligibility for healthcare is determined by the interaction between patients and health services. Following identification of candidacy, individuals attempt *navigation* and *negotiation* to gain a point of entry to health services. Rogers et al.’s concept of *recursivity* refers to the interdependency between a user’s experiences of health services and her/his future actions in regards to health and help seeking [20]. A further term, *concordance*, was used by Stevenson and Scambler [21] to convey the need for the help seeker and the practitioner to find common ground in terms of what the problem and its subsequent solutions might be. Concepts such as candidacy, navigation, recursivity, and concordance imply that user perspectives and their interaction with clinicians in primary care are vital to understand the type of care given and received and its influence on future help-seeking.

Most of the literature around detection of mental health problems in primary care relates to depression and for over 40 years, GPs have been told that they fail to diagnose depression [22, 23]. Some studies, however, indicate that [23, 24] clinically significant depression (moderate to severe depressive illness) is detected by GPs at later consultations by virtue of the longitudinal patient-doctor relationship and it is milder forms, which may recover spontaneously, that go undetected and untreated. Some authors draw attention to the dangers of the erroneous diagnosis of depression in patients with a slight psychological malaise and little functional repercussion leading to the risk of unnecessary and potentially dangerous medicalisation [25, 26]. Detection of depression may be poor if primary care clinicians lack the necessary consultation skills or confidence to make the diagnosis correctly. Initiatives to improve GPs’ skills in the detection and management of depression have been

evaluated [27] but such interventions alone have not led to improvements in patient outcome.

There is only a limited literature considering the patient perspective and this focuses on the limited value of Western approaches to mild and moderate depression in patients of different ethnic groups. This literature indicates that people may have difficulty in presenting their distress and discussing their concerns with their doctor, especially when they are uncertain that depression is a legitimate reason for seeing the doctor [28].

Some people consider that the GP is not the most appropriate person to talk to or believe that symptoms of distress should not be discussed at all in the primary care consultation. Others feel that they do not deserve to take up the doctor’s time or that it is not possible for doctors to listen to them and understand how they feel [29]. Whilst previous literature attempts to explain the difficulties people from hard-to-reach groups have in dealing with mental health problems, they focus on understandings of mental illness, rather than *access* per se. This paper aims to explore help-seeking and access to care from the perspectives of potential patients from “hard-to-reach” groups.

2. Methods

The data for this paper are derived from a qualitative study within the AMP programme. Ethical approval was granted by Wrightington, Wigan and Leigh Research Ethics Committee (Reference: 08/H1014/39).

2.1. Recruitment. This paper focuses on groups identified by AMP as being less likely to seek care and in groups where there was little published literature. We focussed on those with eating disorders, who are homeless, who are asylum seekers, and people from BME communities—Chinese Irish, Somali, and South Asian. Participants were purposively recruited as a convenience sample using links established with local community groups as a part of the AMP programme of work. Such groups offer support to people with distress and life difficulties. Flyers were displayed in the meeting rooms where the groups meet. The participants were invited to participate in this study by the researchers, who described the study and provided an information sheet explaining the study. Key contacts within these organisations also identified potential participants and gave them an information sheet about the study. Participants were people or their carers who identified themselves as having experience of mental health problems or having knowledge of the issues relating to a specific group. Potential participants were informed that they would be reimbursed for their time and travelling expenses (the participants’ reimbursement was £20 for time and £10 expenses). Those who expressed an interest were subsequently contacted by the researcher to organise a suitable time for interview. We aimed to interview at least five people in each group. No diagnostic criteria were used as inclusion or exclusion criteria. A number of interviews were conducted with people who it became apparent had severe and enduring mental

health problems (and were psychotic), so this data was not used in the analysis.

A total of 34 people from the seven groups were recruited, see Table 1.

2.2. Data Collection. Data was collected between June and October 2008.

Semistructured interviews were used to generate data to gain an initial understanding of the parameters of the access issues for each of the groups. Interviews were conducted once formal written consent has been established and in locations convenient to the participant, where necessary interpreters were used and all the interviews were digitally recorded and transcribed verbatim.

A semistructured approach was taken using story-telling to explore the following topics: experience of seeking help from the GP/health centre/community services for mental health difficulties and needs, aspects of the service found helpful, issues that prevented access, and suggestion for improvements in terms of services and information. The topic guide was developed in reference to AMP's model [10] for researching access to primary mental health care (see topic guide in the Algorithm 1). Interviews were continued until category saturation was achieved across the dataset.

2.3. Analysis. The transcripts were analysed using an iterative approach as the data were collected and this analysis and conclusions led to later work in the AMP programme. Data were then reanalysed by the authors once the data collection was complete. Each author was responsible for the analysis of one or two of the seven groups. Transcripts from each group were interrogated using a thematic framework guided by the following questions (generated from the literature about access to care for mental health problems, particularly the issue of candidacy): how do the respondents frame the problems they are experiencing? What help seeking strategies are employed? What do the respondents perceive the role of their general practitioner to be in relation to their problems? What are the implications of the data for primary mental health care policy and practice? Discussion between authors led to the agreement of themes and all transcripts were then reinterrogated by KB to find commonalities and discrepancies in the themes emerging from across the groups. Discussion between authors on the final interpretation led to agreement of the themes. Both manual coding and NVivo 8 software were used to organise the data.

3. Findings

The findings are presented under four main themes which directly relate to access to primary care: (1) conceptualising distress, (2) seeking help, (3) barriers to help seeking, and (4) navigating and negotiating services. Data is presented from transcripts and identified by the interview identifier allocated to the participant (see Table 1). Some of the themes presented relate to a specific group whilst others are cross cutting.

3.1. Conceptualising Distress. Respondents conceptualised distress in broad terms, linking this to their current or past life difficulties. Thus, those respondents who had eating disorders or were homeless associated their problems with traumas occurring earlier in their lives.

Underlying all this had been for years and years an eating disorder which had its roots in a series of traumas that I suffered from the age of about 14. At one time I took an overdose, I was raped . . . (AED3)

I've had a lot of stress in me life, me mum died when I was young, my brother died, he got killed in a car crash when I was young, mum died when I was 8. Then I went off the rail, I went to prison and all that. (HL3)

For asylum seekers distress was related, understandably, to the reasons they were seeking asylum. This was compounded by their current circumstances of being in the UK.

I left Country X, yeah. I was raped, you know, they raped me but I have a child but it's still in Country X, I don't know if she's safe or she's going to school, I don't want to think about that, you know. (AS2)

Other respondents related to the stress of issues such as being carers or the deaths of their elderly parents or spouses.

So I had me Mum dying, me son taking his GCSEs, I had to get all me things in to a friends house, I had to put J [her son] in to me Mum's house, she's dying and I had to stay with me partner, then after that me and me partner split up, so I had all these things going on. (I5)

Older people especially reported that their low mood was linked to poor physical health and exacerbated by feelings of loneliness and isolation.

When I retired, . . . And I'm beginning to feel scared and I sat down and said "Is that me finished now? Is that the end?" End of these things. Then I start looking round and I was suffering from, and then the stroke came on. And from the stroke, mental health came on, when I used to go very angry, very snappy, won't talk to people. And I wouldn't do anything for myself. And then eventually, when I realised he's, the doctor told me I've got depression. (SA2)

How distress is conceptualised is likely to influence the decision to seek help. Some respondents explained their distress by attributing external factors as causative mechanisms and suggested that their feelings were understandable, given their circumstances. However, at a certain point all respondents described realising the need for help.

3.2. Seeking Help. It was clear from the findings that the respondents looked for a variety of different sources of help and did not necessarily view the GP as an appropriate source or at least not their first or preferred choice.

TABLE 1: Respondent details.

Group		Gender	Age	Education	Employment
Eating disorders					
AED1		F	29	College	Professional dancer
AED2	Carer	F	56	GCEs	Foster carer
AED3		F	44	Graduate	Teacher
AED4	Carer/AED recovered	F	18	A levels	Police officer
AED5		F	24	Graduate	Unemployed
Homeless					
HL1		M	Missing data	Missing data	Unemployed
HL2		M	Missing data	Missing data	Unemployed
HL3		M	34	GCSEs	Unemployed
HL4		F	43	GCSEs	Unemployed
HL5		M	40	Left school at 13 years	Unemployed
HL6		F	Missing data	Missing data	Unemployed
Asylum Seekers					
AS1		F	39	Graduate	Missing data
AS2		F	33	College	Missing data
AS3		F	43	Masters	Volunteer
AS4		M	26	A levels	Volunteer
AS5		M	18	GCSEs	Studying
Chinese					
C1	Interpreted	F	60	Attended school between ages of 11 and 16	Missing data
C4	Interpreted	F	81	No schooling	Agriculture and catering (retired)
C5	Interpreted	F	77	Disrupted schooling between ages of 12 and 21	Cook/waitress (retired)
C6	Interpreted	M	76	Left school at 12 years	Cook (retired)
C7	Interpreted	F	67	Left school at 14 years	Home-maker
Irish					
I2		M	31	GCSE	Unemployed
I3		F	32	Left school at 11 years	Unemployed
I4		F	59	PostGraduate diploma	Freelance consultant
I5		F	46	Missing data	Support Worker
South Asian					
SA1	Interpreted	F	63	Missing data	Machinist/Market trader
SA2		M	72	Missing data	Clothes designer (retired)
SA3	Interpreted	F	56	Left school at 12 years	Home-maker
SA4	Interpreted	F	49	Left school at 10 years	Unemployed
SA5		F	28	GNVQ	Home-maker
Somali					
S1	Interpreted	F	58	No schooling	Not working due to health problems
S2		F	34	Left school at 12 years	Missing data
S3		M	40	College	Unemployed

3.2.1. GP Not Appropriate. The elderly respondents reported being in regular contact with their GPs but reported not mentioning nonphysical issues such as low mood in their consultations.

I only go to see the doctor for my physical health problems, you know I never talk about the mental or emotion side and I assume that he can't do anything and he won't listen anyway. Because of my age the doctor cannot do much more things on me. If my back pain is not that painful I'm maybe happy but if the pain coming you know I'm a little bit unhappy or depressed. (C4)

Such a response suggests that some people look to their doctor for help with physical health problems but do not consider distress as a legitimate reason to attend the GP.

For others, difficulty registering with a GP led respondents to use the Emergency Department (ED) at a time of need.

I don't have a stable doctor, I don't even know how to register to get a doctor, even in I mean, different cases, I'm always running to the Accident & Emergency. (AS4)

Asylum seekers described obtaining a diagnostic label of a mental health problem and thus help during, or possibly as a result of their claim for asylum, completely by-passing the GP.

I went to the Medical Foundation (Medical Foundation for the Care of Victims of Torture) and she finished and then she write a letter, the letter, yeah and then the doctor write to psychiatry, yes. (AS5)

3.2.2. Crisis Precipitates Help-Seeking. For some participants, for example, women with an eating disorder, the decision to seek help tended to arise once their physical health was seriously affected. It was often made by others, and at a time of crisis.

I took her to the Doctors; he told me that often in these cases, "things should be left, and see how they go". She then shortly after that started secondary school. I was very unhappy about that comment because I knew what was wrong with her by then. I was sure that she had anorexia. I knew that she wasn't eating and I was concerned because she was so small anyway, that a significant loss of weight was going to be quite detrimental to her health. (AED2, mother)

Similarly homeless people were also likely to ask for help when they were experiencing a crisis of some sort, but would go to their local crisis team or ED rather than the GP. They did not see the GP as the person who could provide care.

"I've had mental health problems for the last nine years and throughout the nine years on

numerous occasions I've been to see the crisis team at the Royal and other hospitals." (HL1)

Thus, particularly vulnerable people, such as those who were homeless and asylum seekers, whose lives and living conditions have little stability and thus perceive problems as crises, are not best placed to access primary care systems designed for more well-established populations.

3.2.3. Importance of Community Support. Key to the Irish respondents receiving help, on arrival in England, was their knowledge of the Irish community network.

But basically we've got ... me and my partner, that's my partner that came to London first, we'd not planned on coming to Liverpool, and when we got to London met a few Irish... Like it's a new, if the Irish Centre hadn't got involved, it's ... they're sort of taking on people with mental health issues and all kind of drug problems in the past and things like that." (I2)

The Irish centre was reported to sign-post people to and liaise with Social Services and the Drug Dependency Unit (DDU) but there was little mention of referral to/liaison with the GP.

Older people across the BME groups described the importance of local community services including council run day centres, third sector services, and groups within their own ethnic communities as being arenas where they could gain respite from their feelings of isolation and low mood.

Yes. And the doctor said to me "well, you've got depression" and he give me some tablets. It helps a little bit but it still didn't take depression away very quickly, or took quite a long time. But day centre is the therapy. (SA2)

Those support workers take her to the elderly persons' centre and go to the Chinese supermarket, when she have the day trip to going out, that's the most happy. (C7)

Likewise, women who cared for their sick relatives described gaining support from third sector services.

Since that day, the lady informed me about this project and I'm really happy, I'm glad that I come here. I feel relaxed. Even now, when she phoned me to take a taxi, I don't feel confident taking a taxi so I said no. They gave me a lot of help, they guided me, they've given me guidance as well. (SA4)

Having a good community network helped me, no doctors helped me you know, no services of any kind, the only erm ... I mean I was lucky ... that I just, me Mum was part of this (Irish Centre) and they helped her and that's what guides people through, you stick together you know, so they helped me, they guided me,

really guided me but the think without these, I probably would have had a severe nervous breakdown . . . (I5)

Thus respondents described third sector support as accessible and vital to their recovery. The GP was not seen as accessible to patients whose lives were perhaps more chaotic, but neither was the GP seen necessarily as the person from whom to seek help by other respondents who consulted with physical health problems but were less inclined to present psychosocial distress.

3.3. Barriers to Help-Seeking. Respondents described a range of issues that made seeking help for their distress problematic.

3.3.1. Previous Experiences. The participants who had or cared for someone with an eating disorder reported that their GPs' did not pick up on their concerns, and in some cases had been dismissive. Their eligibility as a candidate for help did not seem to be acknowledged.

I went to the doctor and said to him I think I've got a problem, this was my GP, and took my weight and he said I was very underweight, I was only six stone, and he said to me, it's just a phase, you'll grow out of it and he sent me out the door. (AED5)

People in the homeless group articulated concerns that they had been discriminated against because of their homelessness and addictions.

All I got told is "what do you want me to do about it, it's your own fault for going on it [drugs]". You know, so the health service, I've got no faith in them at all. (HL3)

Reticence to seek help generally, not only relating to consulting the GP, was linked to a concern that they might be stigmatised if they were seen to have mental health problems.

I didn't want to say I was suffering from depression because probably the community would see me as going mad. (S3)

3.3.2. Communication. The ability to speak English is a key factor in whether someone is able to communicate their problems effectively. Even with the help of an interpreter non-English speakers described how they have been misunderstood or have difficulty understanding.

Everybody speaks to me in English and I don't understand all of it, but if they speak Bengali, I can reply to them. (SA3)

Reticence and barriers to considering eligibility to consult a GP are recursive. They are affected by the respondents' previous experiences associated with concerns that their problems would be dismissed, be deemed their own fault, or result in stigma and or discrimination. A more practical issue was the ability for many people from the BME communities and asylum seekers to communicate effectively in English.

3.4. Expectations—Navigating and Negotiating Services. Navigation began with registering with a GP. This was described as problematic by some respondents, particularly asylum seekers who reported difficulties registering with a GP while their claims were being assessed. Others do succeed in registering, but described how their attempts to make an appointment with a doctor were confounded by complex systems that did not offer immediate access and incurred long and expensive phone calls.

In the morning, you have to book an appointment, by that same day. So if you have something which is really pressing and you can't book in the afternoon, you don't have money, you have to have a phone in the house, or you have to use your mobile to top up. (AS1)

Respondents described in detail their attempts to make their distress known to the GP within the consultation. Some respondents with eating disorders perceived GPs as the gatekeeper to other services, but attempts to negotiate a referral were seen as being blocked by the GP. However these respondents reported resourcefulness and persistence in their efforts to seek referrals to what were felt to be scant resources, and they approached multiple agencies as well as repeated visits to their GP.

I also went back to the doctor's, GP, and I asked to be put on the list for the dietician. He told me that I'd probably go to the bottom of the list because the priority was diabetics and people who have high blood pressure or obesity are a priority. But I still haven't received any help whatsoever, so I went to a nutritionist and paid for it myself . . . I also went and took a course in nutritional therapy . . . (AED5)

One respondent described an encounter when her request for a 'talking treatment' was met by the instruction from the GP to complete a PHQ-9 (PHQ-9 is a patient health questionnaire using a nine itemed depression scale. It is required by Quality Outcomes Framework (QOF) when a diagnosis of depression is made in UK Primary Care [26].) which was perceived by the person as a barrier to further discussion.

Then me Dad died three months later, and I organised all the funerals, all the probate, I had to organise the house, I sorted J (her son) out and then eventually I went to the doctors because I just couldn't cope and I was really, really crying and I said to the doctor, "I need to speak to somebody", and he said "Well, that'll take 12 or 13 weeks, fill this form in and bring it back next week and we'll see how depressed you are." (I5)

Respondents described how the GP responded to their distress by the offer of sick note certification or medication.

S3: Well my GP actually was extremely nice but he was only, but I don't know that I can actually get any other help other than the tablets.

Interviewer: Okay, what would you like to have been offered?

S3: Possibly counselling or other ways of, more information about depression itself.

Thus some respondents, for instance, the women with eating disorders, appeared to actively navigate and negotiate to find the help they wish to obtain. Others described more passivity in not being able to access a practice or, even if a consultation is obtained, they find they are not able to ask for specific help. For all respondents, it was the process of negotiation in terms of what they hoped for and what their GP offered that was problematic.

4. Discussion

The purpose of this paper was to provide greater insight into the way people from “hard-to-reach” groups seek and access help for their needs which might relate to mental health problems.

There are highly diverse and complex reasons why people are deemed “hard-to-reach”. These range from specific mental health problems, such as women with eating disorders, social status such as seeking asylum or being homeless, or being a member of different BME groups who have different cultural needs and expectations of primary care health services. Being a member of one group obviously does not exclude people from also coming under another. Thus, the issues emerging from respondents’ interviews in this paper are both diverse and cross-cutting.

Where, when, and if the problems and distress encountered in everyday life become a mental health problem is uncertain and complex. In order to move beyond this complexity and bring further insights into the barriers to access to primary mental health care, Kovandžić et al. [17] describe a five-staged framework. The notion of *silent suffering* conveys the idea that people do not necessarily voice their distress in terms of a mental health issue or in ways that require the assistance of others. All respondents in our study expressed their distress and needs in relation to their past and current social context and experiences. The notion that depression is a social construct and moulded by the medicalisation of chronic distress or unhappiness [30] thus offers a challenge to the position for the need for treatment for what could be viewed as social-existential variations on life. That is, it raises the possibility that a person’s mental health needs may or may not be met within the constraints of a general medical setting.

Help-seeking is a complex iterative process [20] where the actors, health care seekers, and health care providers have to navigate and negotiate not only their own different conceptual understandings of the issues at hand but a range of structural (institutional and statutory) challenges [18, 31]. Thus, help-seeking involves a high degree of *recursivity*. It is dependent on the meaning an individual derives from their past and current lived experience and their specific interactions with relevant others, such as, family and friends, statutory and third sector personnel, and health care workers.

For example, asylum seekers, while very likely to have significant mental and social distress, are more likely to obtain a diagnosis and care as they interact with the Home Office or when they get referred to Medical Foundation or other relevant agencies. This confirms a Canadian study which suggested that the nonuse of mental health services by two immigrant groups reflected their understanding and interpretation of their distress and symptoms, their use of different forms of knowledge, both popular and biomedical, and their belief that the origin of their problem resided in social, economic, and political spheres [32].

The women with eating disorders may acknowledge their problem and of the risks involved, but they have more personal agency and therefore control over how and when they decide to ask for specific help. Their awareness for the need for psychosocial intervention is perhaps known to them well in advance but acted upon only at a stage when their condition is recognised by others as needing attention.

In line with previous research [28], the older Chinese participants did not necessarily view their low mood in terms of their eligibility for treatment other than indirectly through relief of their physical symptoms. Deciding to remain silent also appears to be related to fear of discrimination and stigma, especially for people from across the BME groups. Other literature [33, 34], however, suggests whilst people from BME groups provide multifaceted theories of causality and attribution of mental health problems, they are not unfamiliar with the concept of depression. In addition, accounts of help-seeking strategies included prior knowledge of medical and nonmedical “treatments” and talking therapies which may be available to deal with distress. It is likely that sociocultural differences in the way people from BME communities communicate their problems impact on the consultation.

At a more basic level, a person’s fluency in English or the ability of a GP to work effectively with an interpreter are also highly important. Past experiences of discrimination have resulted in some of the homeless respondents mistrusting and therefore by-passing their GPs altogether. The possibility that some people feel they do not deserve help as described in other research [29] was not identified in our study.

Common to all seven groups, despite their differences, was what they expected or hoped for from their consultation with the GP. This included their doctor being willing to listen, to refer, or be in liaison with the appropriate specialist services including talking treatments. None of our respondents appeared to go to their GP solely for a medical diagnosis of their problem or a biomedical approach to treatment.

The management GPs can offer to people with mental health problems is limited by set targets and priorities for specific health problems [35]. The structure of GP consultations assume that diagnostic and management decisions can be made within an average of ten minutes, decisions which are increasingly likely to be constrained or driven by a plethora of clinical guidelines [36]. These restrictions may make it hard for GPs to respond appropriately to highly complex needs. Thus Leydon et al. [37] describe how the requirement to carry out a severity questionnaire

such as the PHQ-9 can be seen by GPs as reductionist and unhelpful in some consultations. This situation lends itself to medicalisation [25, 26, 30] and suggests a need to reconfigure primary mental health care within a more overtly social and pluralistic model [17, 38] where GPs are members of a broad range of locally based services.

This resonates with our respondents' desire for locally based statutory and third sector social services rather than the label of depression and biomedical treatment with antidepressants. Kokanovic et al. [39] talk in terms of a *collision* between the person in distress and current medical practice. That GPs would like to offer an alternative approach which was reported by the Mental Health Foundation [40] suggesting that, while they acknowledge the role of talking treatments including mindfulness, some GPs fall back to a more straight forward approach that lends itself to medicalisation [30] due to lack of alternative approaches in practice.

Whilst many of these lessons could be applicable for anyone attempting to consult primary care with a possible mental health problem, they are perhaps of more consequence for people whose lives are chaotic (homeless, asylum seekers), who are isolated (elderly, BME), or whose approach to illness is such that help is sought at a time of crisis (AED, homeless). So whilst many people consulting GPs with depression can be reasonably managed according to NICE guidelines [41], with referral into IAPT services [42] this may not be appropriate or acceptable for people in marginalised groups. The IAPT initiative [42] particularly needs to be able to offer interventions which are flexible and responsive to the needs of different groups of patients.

5. Strengths and Limitations

The data from which this paper is derived were gathered as part of a qualitative study within the AMP programme to gain understanding of the key issues relating to access to primary health care for hard-to-reach groups. The main strengths of this paper are its ability to provide first-hand data from members of marginalised communities, approached purposively through local third sector organisations, and the increased trustworthiness of the analysis through participation of researchers from a number of disciplines [43]. Some interviews were conducted using an interpreter; while there may be concerns over the accuracy of translation, this also strengthens the study, by adding voices that would otherwise be missed.

Data analysis was conducted in two stages: the initial analysis was conducted parallel with data collection by the research team members conducting the interviews. Reanalysis of the dataset reported in this paper was conducted by original researchers and new researchers, against a framework developed from the literature and previous work within AMP [10]. Whether this could be defined as secondary analysis [44] is open to argument. The data had been collected to explore issues around access to care for mental health problems and some of the researchers involved in collecting the data were involved in the reanalysis, so it could be argued that the analysis here was a progression of

the primary analysis. However, the data were interrogated using a new conceptual framework [17] and researchers new to the data were involved, which arguably makes the process a secondary analysis. The involvement of new researchers may have improved the quality of the analysis or, by removing analysis from the initial data collection, may have reduced the validity of the analysis.

An advantage of secondary analysis is that it reduces respondent burden and research resources (reducing the repetition of repeated data collection), while multiplying original respondents' contributions and primary researchers' efforts. Van der Berg (2005) suggests that secondary analysis permits only a limited range of possibilities for research but acknowledges that for some research goals, secondary analysis may constitute a very fruitful alternative provided that sufficient contextual information is made available to the researchers [45]. We would argue that the analysis presented here has made an effective and efficient use of precollected data.

Our recruitment strategy, sampling from existing community groups, and relying on flyers to publicise the study and the group leaders to invite potential participants, meant that we do not have any information on how many people were approached in order to achieve our target. We did not achieve a full range of sociodemographic variables within each of the groups involved: for instance, all the Chinese participants were over 60. There is a gender bias in that the majority of our participants were female. We experienced difficulty recruiting participants from the Somali community group, despite intensive efforts.

We focussed this work on hard-to-reach groups identified as important within the AMP study, and we recognise that there are other marginalised groups which we did not investigate. It is possible that participants selected via the community groups may have, out of loyalty, emphasised the support they had received from these agencies over and above other services. A nominal fee of £20 and travel expenses were paid to each participant, and it is not known whether this might have affected the recruitment and participants' motives for taking part.

6. Implications

This study illuminates the complex reasons why people from "hard-to-reach" groups may not conceptualise their distress as a biomedical problem to present to the GP, and hence may not present or present to alternative services. In addition, the barriers to accessing primary care by people from marginalised groups when distress is recognised by the person, and help-seeking attempted, are described. There is an extensive literature on the need to GPs to improve their skills in detecting distress and mental health problems [22, 23], but it is clear that people may not even get as far as a GP consultation to present their distress because of perceptions of what primary care can offer, which may be based on previous experiences.

So what are the implications of this study for policy and practice? We suggest that interventions are needed at a number of levels.

Topic guide

(I) **Introduction**

Explanation of ethics and confidentiality of dialogues and consent

Aim of AMP study

Objectives of the Phase 1

Structure of the dialogue and timing

(II) **Story telling (30 min)**

Decision to do something about perceived mental health problem and eventually an initial demand to services as “critical incidents” and departure points for storytelling

(III) **Consultation (Service user/carer as a consultant) (30 min)**

(a) Right type of treatment (preferable content of a therapeutic intervention)

(b) Right way of getting treatment

(1) Appropriate Place

(2) Appropriate Time

(3) Appropriate Communication (including Consultation)

(c) Resources

(1) Information and knowledge

(2) Finances, time, skills and other practical assets

(IV) **Closure of the dialogue**

Next steps in the SP3 and how this dialogue will contribute to AMP programme.

ALGORITHM 1: Topic guide.

It is vital to enable people with distress to present their problems to primary care, so a public health campaign alerting people to the appropriateness of such a presentation, allowing people to feel candidates for care, is required. Such public health messages need to take account of cultural issues and health literacy in hard-to-reach groups.

At a practice level, awareness raising and training of primary care practitioners in cultural competence is vital [46], emphasising how it specifically relates to the lives and experiences of all groups within their practice population. Practitioners need to attempt to enter the “life-world” of their patients and understand the patient’s language representing distress, as well as how the broader social context can impact on people. It is important that primary care practitioners recognise the impact of economic and social deprivation, isolation, and loneliness on psychological health. Practitioners need to understand the broader causes and context(s) of depression and offer alternative treatment options to the biomedical model. In particular, recognition of the roles played by social isolation in suffering and the need to “be with people” suggests that interventions should address such issues.

GPs need knowledge of third sector services, community groups, and referral pathways, in order to support people in accessing more acceptable support to help address their problems. This will require to improve links between health, social, and third sector care. There may be opportunities for innovative commissioning decisions by GP-led commissioning consortia [47] working with local populations, to enable more psychosocial interventions to be available

for patients with distress which may be conceptualised as common mental health problems. Whilst primary care is driven by biomedical protocols [26], however, opportunities for GPs to avoid medicalising people with distress may be limited.

Appendix

See Algorithm 1.

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Research Article

Spatial Variation in General Medical Services Income in Dublin General Practitioners

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The general medical services (GMS) scheme provides care free at the point of use for the 30% most economically deprived section of the population and the elderly. Almost all people of over-70-year olds are eligible for the GMS scheme potentially directing resources away from those most in need. The aim of this study is to analyse the relationship between practice GMS income and deprivation amongst Dublin-based general practitioners (GPs). The practice GMS income in Dublin was analysed in relation to practice characteristics including the number of GPs, catchment area population, proportion of over-70-year olds in the catchment area, catchment deprivation, number of GMS GPs within 2 km, and average GMS practice income within 2 km. Practice GMS income was highest in deprived areas but is also a valuable source of income in the least deprived areas. The capitation rate for over-70-year olds provides an incentive for GPs to locate in affluent areas and potentially directs resources away from those in greater need.

1. Introduction

General practitioners (GPs) can be paid by a variety of methods: capitation fees, fee for service, and salary being the most common [1]. Fee for service tends to result in overtreatment of patients, whereas capitation tends to encourage undertreatment and preventive measures [2]. In addition to the method of payment, financial incentives have been used in various countries to attract GPs to locate in disadvantaged areas [3]. The incentives are typically in the form of payments calculated based on the socioeconomic characteristics of practice catchments. However, targeting on the basis of areas may result in a failure to reach many deprived individuals as not all deprived people live in deprived areas and not all people in a deprived area are necessarily deprived [4].

In Ireland, and unlike the United Kingdom, GPs are paid through a combination of fee for service for private patients and capitation fees for eligible patients funded by the state. The capitation rates are linked to the age and sex of the patient and the distance they live from the GP practice. Approximately thirty percent of the Irish population is covered for GP care under the general medical services (GMS) scheme, while the remaining 70% of the population pay full fees to access GPs [5]. Although covering only a third of the

population nationally, the GMS scheme accounts for 57% of GP income and is highly valued by GPs as it is superannuated and attracts staffing subsidies. Nearly all general practices in Ireland now combine GMS and private practice.

Patient eligibility for the GMS scheme is determined on a means-tested basis, and GPs are reimbursed on a capitation basis for treating GMS patients. Prior to the 2002 general election, the government decided that GMS eligibility should be extended to all over-70-year olds. Having announced their intentions prior to entering contract talks, the government found itself in a weak negotiating position. Only the fees for the newly eligible over-70-year olds were under negotiation, and the existing coverage and capitation fees were maintained. A much higher capitation rate was agreed for treating the newly eligible over-70-year olds. Universal eligibility for over-70-year olds was removed at the end of 2008 although it was estimated that 95% of over-70-year olds would continue to be eligible for free care [6]. The cessation of universal cover for over-70-year olds was accompanied by a new unified capitation fee for all over-70-year olds to end the differential fee [7].

While in situ, the differential capitation rate for the over-70-year olds may have worked to attract GMS GPs to affluent areas with a large elderly population, but a previous study

by the authors established that variation in access to GP services by deprivation in urban parts of Ireland is relatively small [8]. It appeared that the GMS scheme had not unfairly distorted the distribution of GPs in relation to deprivation. However, the provision of free care to over-70-year olds largely irrespective of income may be directing resources away from those most in need. The aim of this paper is to analyse the relationship between GP income derived from the GMS scheme and deprivation amongst Dublin-based GPs, taking into account the population distribution of over-70-year olds.

2. Methods

2.1. Setting. County Dublin is a predominantly urban area with a population of 1.2 million as of the 2006 census, equivalent to 28% of the national population. Seven percent of the Dublin population is over 70 years of age, slightly below the national figure of 7.7%. There are 322 electoral divisions (EDs) in county Dublin with a mean population of 1244 (range 76–32288). Thirty percent of the Dublin EDs are in the most deprived decile nationally and 22% in the least deprived decile nationally [9]. Half of the over-70-year olds in Dublin are split equally between least deprived decile and the most deprived decile of EDs.

Since 1989, under the general medical services (GMS) scheme, the state has contracted GPs to provide care free at the point of use for the poorest 30% of the population on a capitation basis. Coverage of the GMS scheme has varied between 28.1% and 32.5% of the population from 1999 to 2008. Since 2005, coverage has been increasing gradually. At the time of the study, an estimated 95% of over-70-year olds were eligible for the GMS scheme. Approximately 96% of GP practices nationally provide care under the GMS scheme although within Dublin the figure is closer to 85%. From 2001 to 2008, the capitation fee for a patient over-70-year old without prior eligibility for the GMS was €672 compared to €147 and €162 for previously eligible (i.e., based on means testing) males and females over-70-year olds, respectively. Since January 2009, there has been an average capitation fee of €290 for all over-70-year olds eligible for the GMS scheme. The gross weekly income limits for GMS eligibility are €184, €201.50, and €700 for a single person aged under 66, 66 to 69 and over 70 years, respectively. Allowances for dependent children apply to those under 70 years of age.

2.2. Data. The primary care reimbursement service (PCRS) publishes the list of GPs in receipt of GMS payments [10]. The most recent year available was 2009 with data distinguishing between practice support and GMS fees. Multiple GPs in the same practice may be in receipt of practice support which is used to subsidise the cost of a practice manager and nursing and secretarial staff. The addresses of GPs were obtained from a variety of sources including the Irish College General Practitioners (ICGP), CervicalCheck, and the Irish Medical Directory [11–13]. GP addresses were then geocoded to a point location.

EDs were assigned deprivation scores based on the 2006 national deprivation index [9]. The deprivation index is

similar in structure to that of the Townsend deprivation index used extensively in the UK. The index combines four indicators of material deprivation into a score: unemployment, low social class, car ownership, and local authority housing. The deprivation score can also be expressed in deciles to label the most deprived 10% of EDs. For this study, the deprivation score is used in preference to the deciles to capture the variability that can occur within a single deprivation decile. As the deprivation score is positively skewed, the most deprived decile spans a wide range of scores.

The characteristics of practice catchments were estimated using data from local EDs. The ED practice was used as the centre of the practice catchment. The deprivation and population contribution of each ED to a catchment profile reduced with increasing distance from the practice ED. The distance weighting was estimated using a distance decay function developed in a previous study [8]. A practice-specific deprivation score was computed using the nearest 20 EDs to the practice ED. The deprivation scores were weighted using a combination of the weights generated by the distance decay function multiplied by the ED populations. Practice population of over-70-year olds was computed based on distance weighting alone. Catchment area population is not a measure of practice list size but acts as a proxy for demand in a practice catchment area.

Patients with GMS eligibility can choose which GMS GP they attend within their locality. Restrictions apply as there is a cap on how many GMS patients a GP can have in his list at any one time, but there is a scope for choice of practice on the part of the patient. A large number of GMS GPs in a locality can represent oversupply and reduce incomes. As a proxy for competition, we determined the number of GMS GPs and the average GMS income of GPs within 2 km of each practice.

2.3. Statistical Analysis . To acknowledge the clustered data structure and the large number of clusters ($n = 202$) involved, total practice income was analysed using a Bayesian hierarchical model with practice (level 1) nested within electoral division (level 2). Total practice income was transformed to the \log_e scale to address both skewness and heteroscedasticity in the distribution of income and then back transformed for purposes of reporting results. The Bayesian modelling was carried out via JAGS [14] using the *R* statistical program [15] with the *rjags* package (v 2.2.0-3) employing 3 chains. The number of MCMC iterations was 400,000 with a burn-in of 20,000. All model coefficients had successfully converged based on a Gelman & Rubin statistic of 1.04 and the Heidelberg & Welch test offered by *Coda* [16]. Predictions of total practice income were simulated using the distribution of the dependent variable conditional on the estimated parameters from the model. As is customary in Bayesian model reporting, to assess the significance of the model coefficients, a 95% Bayesian credible interval is reported in lieu of a *P* value. The *mgcv* package (v 1.7-2) within *R* was used with the default choice of smoothing spline to visualise the dependency between predicted total practice income and deprivation.

TABLE 1: Characteristics of Dublin GMS GP practices.

Characteristic	Median	(IQR)
Number of GPs in practice	1	(1-2)
Total practice support income (€,000s)	31.5	(3.7-74.2)
Total practice GMS fees (€,000s)	171.2	(73.9-298.1)
GPs within 2 km	21	(13-32)
Average GMS income of GPs within 2 km (€,000s)	168.5	(135.5-214.4)
Population in catchment area	3200	(2846-3961)
Over 70s in catchment area	270	(212-308)
Over 70s in catchment area (%)	8.5	(5.3-10.5)
Deprivation score	0.60	(-0.59-2.87)

3. Results

Five hundred and eighty-four Dublin-based GPs are listed as having some GMS income in 2009. Address records could not be found for three GPs leaving 581 included in this analysis. After address coding, a total of 383 distinct practices were identified which were distributed across 202 EDs. The average number of GMS patients per GMS GP in Dublin is 528 compared to a figure of approximately 540 nationally. The overall mean practice income was €271,572 which comprised practice support (mean = €49,738) and GMS fees (mean = €221,847). The mean estimated percentage of patients over 70 years old per practice was 7.6% (range 1.5%–14.5%). Sixty eight percent of practices had only one GP in receipt of GMS fees with only 6 practices having 5 or more GMS GPs. The median number of GPs within 2 km of a practice was 21. The median and interquartile ranges (IQR) for the main practice level and ED level characteristics are given in Table 1.

Using a regression model, deprivation and proportion population over-70-year olds were found not to be significant predictors of the number of GMS GPs in a practice. Thus, there was no tendency for larger practices in more or less deprived areas or in areas with high proportions of over-70-year olds.

There is a modest trend for a decreasing proportion of over-70-year olds in the catchment population with increasing practice deprivation (see Figure 1). The size of the circles in Figure 1 is proportional to the total practice income. Few of the practices at the least deprived end of the spectrum have large GMS-derived incomes. It is likely that almost all GMS income for these practices comes from treating eligible patients of over-70-year olds. Conversely, for practices in the most deprived areas, the income comes almost entirely from GMS patients under 70 years of age.

The contribution of different predictors to total practice GMS income was estimated using a hierarchical Bayesian model (see Table 2). Deprivation is a significant predictor of practice income; however, as the relationship is quadratic, total income tends to fall again at high levels of deprivation (see Figure 2). The percentage of over 70s has, on average,

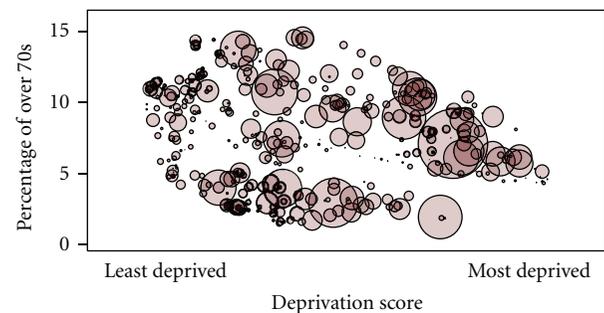


FIGURE 1: Proportion catchment population over 70 by deprivation score (circle size proportional to total practice GMS income) in county Dublin.

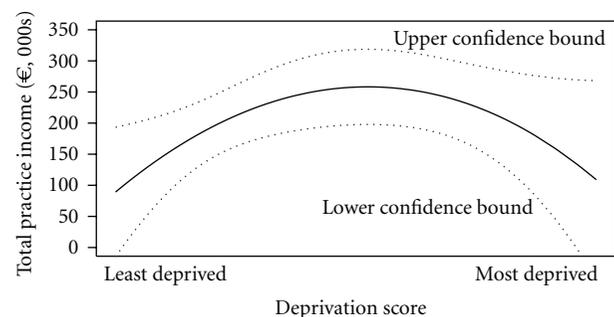


FIGURE 2: Predicted total practice GMS income by deprivation score in county Dublin.

no impact on total income. The number of GMS GPs within 2 km negatively impacts on total income; as anticipated, competition acts to reduce practice income.

GMS incomes in practices in the least deprived areas are lower with the largest incomes in areas with moderate levels of deprivation (Figure 2). However, low incomes are also observed in the practices with the most deprived catchments. These practices are characterised by mostly being single handed with low proportion of patients of over-70-year olds.

TABLE 2: Model coefficients and 95% Bayesian credible intervals for predictors of total practice income in 383 practices across 202 electoral divisions.

Predictor	Coefficient	(95% credible interval)
Intercept	93,901	(773–9,065,622)
Population	0.98	(0.56–1.73)
Deprivation score	1.30	(1.05–1.62)
Deprivation score squared	0.95	(0.90–1.00)
Percentage of over 70s in practice catchment	1.04	(0.99–1.08)
Number of GMS GPs in practice	1.80	(1.56–2.05)
Number of GMS GPs within 2 km	0.82	(0.97–0.99)

4. Discussion

GPs in Ireland are funded through a mixture of fee for service for private patients and capitation fee for publicly funded patients. Almost all over-70-year olds are eligible for state-funded care. Practices in more deprived areas have higher GMS incomes than those in affluent areas suggesting that state-funded care is both profitable and generally reaching those who can least afford to pay for care. The profitability in deprived areas stems primarily from the high volume of patients under 70 years of age.

The biggest impact on total practice GMS income is predictably the number of GPs in the practice. A larger workforce enables a bigger volume of patients to be treated. The percentage of over-70-year olds has a modest positive impact on income, and we have shown that less deprived areas have higher percentages of over-70-year olds. The level of competition from neighbouring practices has a significant negative impact on practice GMS income highlighting the contribution of supply and demand to practice income. Practice deprivation score plays a relatively minor role differentiating Ireland from UK, where population level deprivation has traditionally made an important contribution due to the explicit use of deprivation scores in primary care resource allocation.

This study has only investigated income from the GMS which represents 57% of total GP income. For practices in more deprived areas, the GMS income may well represent most if not all of practice income. In more affluent areas, on the other hand, where a significant proportion of patients pay for services, the GMS income will only represent a small portion of the total practice income. A patient over 70 is, in monetary terms, equivalent to 3 to 4 patients aged 16 to 44 years and 2 patients aged 45 to 69 years. Clearly, a small number of patients of over-70-year olds can provide a useful source of income in affluent catchment areas.

Incomes in practices serving the most deprived communities are relatively low compared to other deprived areas. It is probable that GPs working in the most deprived areas work fewer sessions in an effort to control workload and stress [17]. We were not able to adjust the results for the number of sessions or list size. Data are not available on non-GMS practice income which would provide useful counterbalance

and enable an estimate of the value of GMS patients of over-70-year olds in affluent areas.

Although GP utilisation increases with age, the disparity in both capitation fee and eligibility criteria between those under and over 70 years of age is introducing inequity into the health care system. In a fixed-budget health system with limited resources, if care cannot be provided for all, then it must surely be directed to those most in need. But, by providing free GP care to those of over-70-year olds largely irrespective of the level of personal wealth, the state directs resources away from those most in need and provides a valuable income to GPs located in the least deprived areas. A small nondeprived but elderly catchment can be as valuable as a larger deprived catchment with a younger population. The combination of higher workloads and stress associated with practice in a deprived catchment and the differential capitation payments may act to encourage GPs to locate in less deprived areas. We have shown that despite the near universal cover for over-70-year olds, GMS incomes are highest in deprived areas although they are lower in the most deprived areas. It is encouraging to observe that GPs continue to locate in deprived areas. However, in the absence of universal free GP care, resources should not be channelled away from those who cannot afford to pay towards those who can.

Conflict of Interests

T. O'Dowd is a GP with a GMS contract.

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Research Article

Development of a Tool to Identify Poverty in a Family Practice Setting: A Pilot Study

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Objective. The goal of this pilot study was to develop and field-test questions for use as a poverty case-finding tool to assist primary care providers in identifying poverty in clinical practice. **Methods.** 156 questionnaires were completed by a convenience sample of urban and rural primary care patients presenting to four family practices in British Columbia, Canada. Univariate and multivariate logistic regression analyses compared questionnaire responses with low-income cut-off (LICO) levels calculated for each respondent. **Results.** 35% of respondents were below the “poverty line” (LICO). The question “Do you (ever) have difficulty making ends meet at the end of the month?” was identified as a good predictor of poverty (sensitivity 98%; specificity 60%; OR 32.3, 95% CI 5.4–191.5). Multivariate analysis identified a 3-item case-finding tool including 2 additional questions about food and housing security (sensitivity 64.3%; specificity 94.4%; OR 30.2, 95% CI 10.3–88.1). 85% of below-LICO respondents felt that poverty screening was important and 67% felt comfortable speaking to their family physician about poverty. **Conclusions.** Asking patients directly about poverty may help identify patients with increased needs in primary care.

1. Introduction

Tremendous advances have been made in health care delivery; however, poverty still has a profound impact upon the health of many patients [1–4]. Poverty is recognized as one of the most significant determinants of health, both as an independent risk factor and a predictor of morbidity for many chronic conditions [1, 2, 4–10]. Family physicians are well positioned to address these needs from within a patient-centered primary care model and on a population level [11, page 1651] [12–14].

Many family physicians recognize the ongoing impact of poverty upon their patients’ lives; however, they often feel ill equipped to address these issues in a systematic way [15].

The first step is to identify those affected by poverty and its associated poor health outcomes. In this context, a clinician might consider “case finding for poverty”, for instance, in new patient visits, periodic health exams, or as they see fit. This would introduce this important determinant of

health into the clinical encounter and facilitate better patient-centered care for those in need while helping physicians identify disparities within their practice populations.

The concept of poverty case finding faces several challenges, such as an increased clinical workload, inappropriate financial compensation for additional care required, and investment in community services to support the needs of this higher-risk group. Despite these challenges, disparities left unaddressed will lead to further adverse patient outcomes and increased costs in the long term [16, 17].

Case finding for poverty in clinical practice creates an opportunity to address a patient’s unique needs while working towards more equitable resource distribution within a practice population [18]. In Canada, health inequities have been studied primarily on the neighbourhood level, which often determines health service provision for clustered disadvantaged populations such as Vancouver’s Downtown Eastside. However, for communities or practice populations with a diverse socioeconomic makeup, this leads to an ecological fallacy where population characteristics are attributed

to an individual [19]. This may be harmful for poor patients attending a primary care clinic in mixed or higher income neighbourhoods. A poverty case-finding tool employed in the clinical encounter provides the foundation for targeted interventions to reduce effects of poverty and risks of adverse health outcomes in low-income patients (Box 1).

2. Methods

A literature review was conducted (MEDLINE, EMBASE, CINAHL, Web of Science, PsycINFO, HAPI) to identify previously validated social determinant questionnaires. A questionnaire was developed including direct and surrogate markers of poverty; items were selected from previously validated studies or reviewed by a panel of physicians and doctoral research experts working in the field and targeted to a Grade 8 reading level [31–37]. Sufficient demographic data was collected to assess respondents' income status: estimated yearly household income, postal code, and number of people per household. Four questions assessed respondent levels of comfort and perceived importance of proposed case-finding questions. The study design and questionnaire were approved by the University of British Columbia Ethics Committee.

Between February and April 2009, questionnaires were completed by primary care patients in waiting rooms of four university-affiliated clinics in one rural and one urban centre in British Columbia, Canada. Equal samples of rural and urban, poor and wealthy respondents were sought, following the principle of maximum variation in sampling. A convenience sample of 100 questionnaires was required in order to ensure a margin of error of less than 10%. Inclusion criteria were the ability to read and write English and age over 19 years. Students were excluded from participating. Participants were alerted to the study by posters in the waiting rooms and direct offers by front desk staff. Participants were provided with an information letter about the study explaining anticipated benefits and harms; consent was confirmed by the completion of the questionnaire.

Using the results of the written questionnaire, proposed case-finding questions were correlated with demographic data. The LICO (low-income cut-off) and LIM (Low Income Measure) were calculated for each respondent based on demographic data collected. These are both measures used by Statistics Canada to identify individuals below the "poverty line." The LICO uses calculations of family and community size to estimate the "income threshold at which families are expected to spend 20 percentage points more than the average family on food, shelter, and clothing" [38, 39]. The LIM uses family composition to determine a poverty line "set at 50% of adjusted median family income" [38, 39]. The two measures were compared and correlated; based on this correlation, the LICO was chosen as the gold standard measure of poverty against which responses to the proposed poverty case-finding questions were compared.

We divided the respondents into 2 groups: above and below LICO. The answers to each proposed case-finding question, if measured by a likert scale, were recoded as binary

outcomes. The sensitivity and specificity of each question to predict LICO status were calculated in a series of two-by-two tables. A multivariate stepwise logistic regression method employed likelihood ratios to identify which combination of questions was best predictor of whether individuals were above or below LICO. A *P* value of less than .05 was considered statistically significant in all of our analyses. Patient views on poverty case finding were reported in two likert scale questions; responses were compared to optional, open-ended qualitative comments which were read by the investigators to provide further insight into responses.

3. Results

One hundred and fifty six questionnaires were collected: 75 in Golden, BC (population 4500) and 81 in Greater Vancouver, BC (population 2.1 million). Of these, 145 had sufficient data for calculation of the LICO and LIM and inclusion in the subsequent analysis. A Cohen's kappa of 0.925 reflects the strong correlation between these two measures of poverty, and the LICO was chosen for the remainder of the analysis.

Table 1 shows the demographic characteristics of the sample cross-tabulated with income status calculated as above or below LICO. Of particular interest is that 84% of respondents below the LICO were "single" and 45% did not own a telephone. Aboriginal ethnicity, educational attainment, and access to extended health insurance were similar in both the above-and below-LICO groups. Six percent of respondents (*N* = 10) selected "don't know" when asked to estimate their yearly household income; no respondents left the question blank.

A univariate analysis was conducted; in identifying best questions for poverty case finding, below LICO status was considered a positive outcome, and a positive response to a case-finding question was considered a positive risk factor for the outcome. Sensitivity and specificity were calculated for each of the questions, and likert scales were collapsed to facilitate analysis (Table 2). All results calculated were statistically significant (*P* < .05). Three questions about job insecurity were excluded from the analysis as preliminary calculations indicated that these were poor predictors of LICO status. The best performing question was (Table 2: Q7) "Do you (ever) have difficulty making ends meet at the end of the month?" (sensitivity 98%; specificity 60%; OR 32.3, 95% CI 5.4–191.5).

A stepwise multivariate analysis of the proposed case-finding questions was conducted to determine if a combination of questions would perform better than any single question. Three questions were identified (Table 2: Q1, Q4, Q7), with a combined specificity of 94.4% and a sensitivity of 64.3%. Their combined odds ratio was 30.2 (95% CI 10.3–88.1).

When asked "How difficult has it been for you to get health care when you needed it in the last year?" none of the respondents above LICO found it "very difficult," compared to 37% of respondents below LICO who found it very or somewhat difficult obtaining healthcare. When asked

- (i) “Accessible” care that is continuous, nonpaternalistic, and patient centered [15, 20, 21]
- (ii) Vigilance in prescription of lowest-cost generic medications [22]
- (iii) Longer appointment times facilitating identification, treatment, and referral of at-risk families [23, 24]
- (iv) Diligence around preventive and chronic illness care for low-income patients will lead them to use medical attention less often [25–27]
- (v) Mental health screening to address the significant underidentification of mental illness in low socioeconomic groups [23, 28]
- (vi) Particular attention to adequate pain treatment for common chronic conditions for which low-income patients have reported inadequate treatment [23]
- (vii) Addressing direct health impacts of indebtedness and financial insecurity such as sleeplessness, substance use, and depression [7]
- (viii) Favourable billing schemes adjusted for income level and complex care [22]
- (ix) Interactive and incentive-based physical activity and nutrition interventions [29]
- (x) Integrated and home-based geriatric care management [30]
- (xi) Increased coordination of interdisciplinary services to reduce use of institutional or inpatient services, and improve patient satisfaction [13, 20].

Box 1: Poverty interventions in family practice.

“... what kind of help did you need that you did not receive?” below-LICO respondents identified the following from a list of issues taken from the Canadian Community Health Survey [39]: information about service availability, mental illness and its treatments; therapy or counselling; help with personal relationships, alcohol, drugs, and addictions. For these areas, the below-LICO respondents were 4 to 7 times more likely to answer that they had difficulty getting help.

The majority of below-LICO respondents (85%, $N = 40$) felt that poverty case-finding was very or somewhat important, and 67% ($N = 33$) felt very or somewhat comfortable speaking to their family physician about poverty-related issues. Sixty-five respondents volunteered comments when asked if any case-finding questions were “inappropriate” or “especially important” to be asked in a primary care setting. Four respondents identified that asking about a patient’s source and amount of income was inappropriate. Thirty-seven respondents stated that none of the questions were inappropriate. Four respondents replied that the questions were acceptable if asked “in an appropriate way.” When asked to identify “especially important questions,” 12 respondents replied either that all questions were important or identified three or more topic areas as especially important, including access to food, housing, and health care; finances; mental health and coping; ability to pay for medications.

4. Discussion

In the development of this study, it was debated whether to test known indicators of income poverty (social determinants of health such as food, job, and housing security) or other indicators directly relevant to family practice (e.g., access to a telephone or extended health insurance). As shown in Table 1, these latter indicators performed poorly, justifying the choice of the former in developing a poverty case-finding tool. We suspect that the high prevalence of

TABLE 1: Demographics.

	Above LICO no. (%)	Below LICO no. (%)	Total valid no.
Overall	94 (65.0%)	51 (35.0%)	145
Above LIM	90 (98.9%)	1 (1.1%)	91 (62.7%)
Below LIM	4 (7.4%)	50 (92.6%)	54 (37.2%)
Male	35 (37.6%)	27 (54.0%)	68 (43.6%)
Female	58 (62.4%)	22 (44.0%)	84 (53.8%)
Rural	52 (76.5%)	16 (23.5%)	68 (47.5%)
Urban	40 (53.3%)	35 (46.7%)	75 (52.4%)
Married/ common law	62 (66.7%)	8 (15.7%)	73 (47.4%)
Sep/divorced/ widow/single	31 (33.3%)	43 (84.3%)	24 (15.6%)
Aboriginal	9 (9.8%)	5 (10.4%)	14 (9.3%)
High school	38 (41.3%)	23 (46.9%)	66 (43.7%)
College/ university	49 (53.3%)	25 (51.0%)	76 (50.3)
Has extra insurance	72 (77.4%)	33 (64.7%)	105 (72.9%)
Owens phone	90 (96.8%)	27 (52.9%)	117 (81.3%)
No phone	3 (3.2%)	23 (45.1%)	26 (18.1%)

extended insurance coverage among low-income respondents can be accounted for by government-funded insurance programs available to respondents receiving disability or income assistance. In general, rural respondents reported more additional health insurance, which may be due to coverage offered by major employers in Golden, BC, including forestry. Interestingly, education had no predictive value of respondents’ above or below LICO status. This correlates with research suggesting that education is a less sensitive indicator of poverty as it is a fixed variable with larger

TABLE 2: Results of univariate analysis for proposed case-finding questions.

Survey questions*	Above LICO no. (%)	Below LICO no. (%)	Total valid no. (%)	Sensitivity % (95% CI)	Specificity % (95% CI)
(Q1) In the past year, was there any day when you or anyone in your family went hungry because you did not have enough money for food? <i>Answer: Yes</i>	5 (5.6%)	32 (64%)	37 (25.8%)	64 (55.2–69.4)	94.6 (89.9–97.5)
(Q2) Can you afford to eat balanced meals? <i>Answer: Rarely/Never</i>	1 (1.1%)	13 (25.5%)	14 (9.6%)	25.5 (19.2–27.1)	98.9 (95.5–99.8)
(Q3) After paying your monthly bills, do you typically have enough money left over for food? <i>Answer: No</i>	9 (9.9%)	27 (60%)	36 (26.4%)	60.6 (49.6–68)	90.1 (85–94.1)
(Q4) In the last month, have you slept outside, in a shelter, or in a place not meant for sleeping? <i>Answer: Always → Rarely</i>	4 (4.3%)	20 (39.2%)	24 (16.5%)	39.2 (31.1–43.8)	95.7 (91.4–98.2)
(Q5) Do you ever worry about losing your place to live? <i>Answer: Always → Rarely</i>	36 (38.3%)	44 (86.3%)	80 (55.1%)	86.3 (76.4–92.8)	61.7 (56.4–65.3)
(Q6) How many times have you moved in the last year? <i>Answer: 3 or more times</i>	3 (3.2%)	17 (33.3%)	20 (13.7%)	33.3 (25.8–37)	96.8 (92.7–98.9)
(Q7) Do you have difficulty making ends meet at the end of the month? <i>Answer: Always → Rarely</i>	55 (59.8%)	48 (98%)	103 (73.0%)	98 (90.4–99.6)	40.2 (36.2–41.1)
(Q8) Considering your current income, how difficult is it to make ends meet? <i>Answer: Difficult</i>	25 (27.2%)	38 (77.6%)	63 (44.6%)	77.6 (66.9–85.9)	72.8 (67.2–77.3)
(Q9) Do you have enough money to get by? <i>Answer: Rarely/Never</i>	5 (5.4%)	18 (36.7%)	23 (16.3%)	36.7 (28.2–42.2)	94.6 (90–97.5)

* Three job security questions present in survey were poorly performing and excluded from full analysis.

gradations and variability in measurement compared to income [40].

A potential sample bias exists as all respondents were surveyed in clinic waiting rooms, demonstrating an ability and willingness to access care. Despite this, unmet needs were reported in the below-LICO group. Respondents' comments further suggested that access may still be a concern for some low-income patients already accessing primary care services. These areas of need are well correlated with previous research describing similar conditions that both influence and are a consequence of poverty [41]. These unmet needs provide fertile ground for intervention by a primary care practitioner.

4.1. Univariate Analysis. In the assessment of case-finding questions, the authors favoured sensitivity over specificity

in the univariate analysis, as it is more useful for family physicians to accurately identify poverty as opposed to ruling out "wealth." We also excluded questions which had a highly subjective response as these were not felt to be reliable.

There is robust evidence identifying food security as a reliable surrogate marker of poverty [42]. This study correlates well with this literature in that the lack of money to pay for food and hunger related to lack of food were good predictors of below-LICO status (Table 2: Q1, Q3). Comments volunteered by respondents further illustrated the link between food insecurity and poor health. Sensitivity and specificity were comparable for Q1 and Q3 which used slightly different wording to assess food security. While Q1 had a marginally higher sensitivity, the simplified wording of Q3 is much more applicable for use in a family practice.

An important element of this study is the comparison of direct and indirect markers of poverty: Can we ask patients directly about poverty? Palliative care research suggests that patients often prefer that physicians speak to them directly about difficult issues [43, 44]. Our study supports this concept as it applies to poverty, as the best-performing question in the univariate analysis was “Do you (ever) have difficulty making ends meet at the end of the month?” (Table 1: Q7). Overall, respondents felt that asking about poverty-related issues in primary care is important. One participant offered that these questions “can be very important, especially when getting help with special diets or medications.” Another stated “I think it is very important that the doctor be aware of their patients’ financial situation especially when it comes to prescriptions and their cost.”

Asking patients “How difficult is it to make ends meet?” (Q8) had poorer sensitivity compared to Q7 “Do you have difficulty...” (78% versus 98%: Table 2). This may be attributed to the relatively subjective nature of the former question. The high sensitivity of Q7 (98%; OR 32.3; 95% CI 5.4–191.5) could also be explained by the collapse of likert scale responses. Assigning a positive response to those who had always, most of the time, sometimes, or rarely had difficulty making ends meet included all respondents who had *ever* had difficulty and may reflect the dynamic or fluctuant nature of income poverty [40]. In developing direct poverty case-finding questions, it was impossible to avoid the use of colloquial terminology to describe poverty. Despite the high performance of Q7, “making ends meet” may be difficult to understand by patients for whom English is a second language. “Paying your bills” may be a more accessible phrase to be tested clinically or in future research.

4.2. Multivariate Analysis. The multivariate analysis identified three questions to form a best-performing multi-item poverty case-finding tool (Table 2: Q7, Q1, Q4). Q4 was included despite a low sensitivity of 39% in the univariate analysis. Its value in a multi-item case-finding tool can be explained by its high specificity (96% of respondents above LICO had never slept outside, in a shelter, or in a place not meant for sleeping) and low correlation with Q7 and Q1. The sensitivity and specificity of the multi-item tool were 64.3% and 94.4%, respectively. These results are superseded, however, by the high sensitivity (despite poorer specificity) of Q7 alone as well as comparable odds ratios between Q7 and the three-item tool (OR 32.3 versus OR 30.2). The authors, therefore, suggest the use of the single direct poverty case-finding question identified with the possibility of adding supplementary questions at the clinician’s discretion.

4.3. Limitations. This study has several limitations. First and foremost, we adopted a binary definition of poverty for the purpose of this study; however, we recognize that poverty is a dynamic variable which presents along a continuum. In addition, both the LICO and LIM are generally considered to be poor estimates of the “poverty line.” There are likely some individuals who are classified as below LICO who have a good quality of life and do not “suffer” from poverty;

there are likely more individuals who are classified as above LICO who have significant difficulties making ends meet. Self-reported income is also confounded by recall bias, social desirability bias, lack of control over and thus knowledge of income, and fear of disclosure of income. Also, the most recent LICO and LIM data were from 2007 and 2006, respectively, which may imperfectly correspond to reported incomes in 2009.

It is significant to note that we excluded individuals who could not read and write English for the pilot testing of case-finding questions. Given the growing body of literature demonstrating the association between low literacy, deprivation, and poor health outcomes [45], this exclusion likely caused an important segment of the population to be missed in this study. However, future research anticipates testing this question orally in a clinical setting in order to study its use in patients with all literacy levels. Furthermore, this study was conducted in Canada where universal health coverage is available to all citizens. The impact of poverty case finding and applicability of these results may vary significantly in different health care systems. Finally, a convenience sample was selected for this pilot study for the purpose of validating the questions. As this was not a representative sample, the results are not yet generalizable without further study.

5. Conclusion

The purpose of this study was to create an evidence-based tool for family physicians to identify poverty in primary care. Asking patients directly about poverty may help identify patients with increased needs in a practice population. The question “Do you (ever) have difficulty making ends meet at the end of the month?” not only was acceptable to patients but also had the highest sensitivity (98%) and Odds Ratio (32.3) of all questions tested in this study. A well-performing multi-item tool was also identified with good sensitivity and specificity, indicating that surrogate markers of poverty could be effectively used as adjunctive case-finding measures; these findings correlate with previous research demonstrating that food insecurity and recent homelessness are robust predictors or indicators of poverty.

This pilot study aims to facilitate the recognition of health disparities in a family practice population by providing a foundation for further research. It also suggests that openly discussing poverty in the clinical encounter is likely important and acceptable to most patients. Next steps will involve testing this question orally in a representative sample and comparing results to other markers of disparity including, for example, health literacy status. Given the enormity of the epidemic of poverty, the development and application of such a tool is long overdue.

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Review Article

A New Era in Mental Health Care in Vanuatu

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Inequity in health-care delivery for those with mental illness is widespread throughout low- and middle-income countries. In the Pacific Island countries there are many barriers to addressing the growing mental health burden. In an effort to address this problem, the WHO is coordinating the Pacific Islands Mental Health Network involving 18 countries in the Pacific region with the financial support of New Zealand Aid (NZAid). JB and DP have developed and presented mental health training to health professionals, community leaders, and social service personnel in an environment in Vanuatu that is very different from that of their usual Australian-based general practices. They discuss evidence for their work, an outline of the programme, some difficulties working across different cultures, and the enthusiasm with which the training has been greeted. Vanuatu is now well on its way to addressing the inequity of access to mental health care with a culturally appropriate and self-sustaining mental health workforce.

1. Introduction

In most high-income countries access to good quality, evidence-based health-care continues to improve. Because of the overwhelming burden of disability caused by mental health problems throughout the world, many high-income countries have begun to address the inequity of access to mental health care with improvements in policies; training; work-force; primary, secondary, and tertiary services; programmes; and public education. As a recent WHO report concludes, people with mental health conditions are among the most marginalized and vulnerable groups. It is important that they be empowered to reach their goals and participate fully in society [1].

Governments in many developed countries are recognizing the importance of integrating mental health into primary care services and general hospitals, as well as providing public

education, and protecting and promoting the human rights of people with mental disabilities.

However for those in many low- and middle-income countries (LAMICs), globalization, urbanization, and rapid social change are part of a slowly worsening profile for mental health and the resources for the management of these problems do not match the increased need [2]. Experience in China, India, and Eastern Europe has alerted health professionals to the importance of preparing the health workforce in countries where the traditional culture is being replaced by a more “modern” Westernised culture. For many LAMICs there are many barriers to making good quality mental health care available and until this is addressed the disability and suicide rates due to mental health problems are likely to increase. In some LAMICs there has been an increase in tertiary-level mental health facilities which will only be available to very few people because of access

and affordability. Making mental health care available to all should also involve primary health care practitioners, traditional healers, teachers, police, corrections, and community leaders—a whole-of-community approach that reflects the complex nature of mental health aetiology and management.

Vanuatu, with a population of about 220,000 people, has 22 doctors and 450 nurses spread over 83 islands. This very small health workforce mostly operates at a primary care level; there are no full-time publicly available mental health professionals and only a few people with any mental health training at all. Building up, supporting and mentoring a mental health workforce, reducing stigma in the community, training the informal mental health workforce, and advocating with Government and NGOs are all important aims of the Pacific Islands Mental Health Network (PIMHnet), a WHO initiative funded by NZAid.

JB and DP, both General Practitioners (Family Physicians) in Australia, have developed and implemented intensive 3-week mental health training programmes to doctors, nurse practitioners, nurses, NGO workers, teachers, police, corrections, public health officers, and nursing lecturers over 2009 and 2010. The training has included case studies drawn from the experience of the group, an emphasis on primary health care skills, supervised visits to local villages, and the hospital and simple research techniques. In 2010 JB visited many of these professionals in their place of work, often on remote islands, to supervise, mentor, and further train them. Further visits in 2011 will aim to consolidate skills so that more health professionals can be trained and there is a strong network in the country of support for each other.

2. Global Mental Health

Poverty, lack of education, unemployment, conflict, disasters, and gender imbalance are well known as the social determinants of mental health [1, 3]. Mental disorders account for 8.8% of the total burden of disease in LAMICs [4] and the additional risks of urbanization, loss of tradition, loss of subsistence farming activity, and loss of extended family mean that those who live in countries in economic transition such as the Pacific Islands are likely to have a worsening mental health profile [2, 3]. Any figures on mental health do not take into account the disability experienced within the family unit, their community, or their country because of the mental illness [3, 5]. The treatment gap for serious mental health disorders in LAMIC is 76–85%, and even for those who are treated, it is often sporadic or with inadequate doses of outdated medication [1].

As deaths decrease from infectious diseases such as measles, pneumonia, gastroenteritis, tuberculosis and malaria, there has been an increase in suicides and alcohol-related deaths in countries such as Eastern Europe, India, South America, and China [2, 3, 6]. Yet many governments of LAMICs have been slow to prioritise mental health. The few resources that are available are often spent on tertiary institutions that are inaccessible for the majority of the population [7]. NGOs and governments need to work together to ensure that mental health is given priority

and that this is embedded in the primary care workforce [7]. One-off Western-style training has not been found to be successful, whereas it is both efficient and cost-effective to train primary care workers in a culturally appropriate manner in psychological and pharmacological interventions and then to ensure that they are supervised and supported [7, 8]. Such a strategy will not only decrease morbidity, comorbidity, and mortality but can also encourage resilience, problem-solving, and social support and hence improve the prevention of mental health disorders and decrease referral to high-cost tertiary institutions [6]. Including NGOs, community organizations and traditional resources such as chiefs, traditional healers, and religious pastors as part of mental health training will ensure a more holistic and sustainable approach for addressing mental health problems [1, 5].

The World Health Organization (WHO) and World Organization of Family Doctors (WONCA) recently collaborated to write a report entitled “Integrating mental health into primary care. A global perspective” that sets out “Seven good reasons for integrating mental health into primary care” and “10 Principles for integrating mental health into primary care” (see boxes herein after) [8].

Box 1. Seven good reasons for integrating mental health into primary care are as follows.

- (1) The burden of mental disorders is great.
- (2) Mental and physical health problems are interwoven.
- (3) The treatment gap for mental disorders is enormous.
- (4) Primary care for mental health enhances access.
- (5) Primary care for mental health promotes respect of human rights.
- (6) Primary care for mental health is affordable and cost effective.
- (7) Primary care for mental health generates good health outcomes.

Box 2. 10 Principles for integrating mental health into primary care are as follows.

- (1) Policy and plans need to incorporate primary care for mental health.
- (2) Advocacy is required to shift attitudes and behaviour.
- (3) Adequate training of primary care workers is required.
- (4) Primary care tasks must be limited and doable.
- (5) Specialist mental health professionals and facilities must be available to support primary care.
- (6) Patients must have access to essential psychotropic medications in primary care.
- (7) Integration is a process, not an event.
- (8) A mental health service coordinator is crucial.

- (9) Collaboration with other government nonhealth sectors, nongovernmental organizations, village and community health workers, and volunteers is required.
- (10) Financial and human resources are needed.

3. The Pacific Islands Mental Health Network (PIMHnet)

The need for more mental health services in the Pacific region grew out of a situational analysis conducted by WHO which showed that most Pacific nations had growing rates of mental health problems (including suicide) but had few resources to tackle the burden [9]. PIMHnet was formally launched in March 2007 in response to requests by Ministers of Health of Pacific Island countries (Meeting of Pacific Islands Ministers of Health March 2005 Samoa). Its vision is that the people of Pacific island countries will enjoy the “highest standards of mental health and well-being through access to effective, appropriate, and quality mental health services and care”. Its mission is to “facilitate and support cooperative and coordinated activities within and among member countries that contribute to sustainable national and subregional capacity in relation to mental health” [10].

In consultation with its 18 Pacific Island members, several priority areas were identified which needed to be addressed:

- (i) human resource development and training,
- (ii) service development focused on primary care,
- (iii) policy and planning,
- (iv) law reform,
- (v) advocacy.

Since its inception three countries have mental health policies in place with another nine having draft policies. Two countries have new mental health laws and another five have begun planning. Thirteen countries have developed plans for human resource development and training and seven of these are already implementing them. These processes are not sequential and so, for instance, in Vanuatu, the implementation of the human resource development and training plan proceeded prior to the formal adoption of the mental health policy and strategic plan. More information on the activities of PIMHnet can be found at http://www.who.int/mental_health/policy/pimhnet/en/index.html.

4. Situation in Vanuatu

Vanuatu is defined by the UN as a “Least Developed Country” with approximately 75% of the population living in rural areas [11]. Accessing health services is very difficult for most people because most of the health services are in cities and large villages and there is a wide distribution of the population and often difficult terrain [12]. As with many LAMICs there is a migration of healthcare workers out of the

country, primarily to Australia and New Zealand, and training in any specialty area including mental health is generally conducted overseas with the assistance of fellowships.

The health services in Vanuatu are divided between the Northern Health Group which has a main referral hospital at Luganville on Espiritu Santo and the Southern Healthcare Group with Vila Central Hospital on Efate Island. Each hospital has two mental health beds and a secure “safe room”. There are 5 smaller provincial hospitals; 29 health centres, each with a nurse or nurse practitioner; 74 dispensaries, each with a nurse; and 123 health aid posts and 6 mobile clinics, each with a community worker who does health promotion [12].

Vanuatu has been a subsistence society with a culture of traditional problem-solving through chiefs in each village. There are over 110 different “mother-tongues” spoken in the country and these are the languages where the words for mood, philosophical concepts, and deeper traditional ideas are found. The common language of Bislama is a trade language with no direct translations of any of the Western words for mental health such as depression or anxiety and only a limited mood vocabulary. Social problems have always been taken to the chief to resolve, mostly in a fairly autocratic manner but each chief has had a different style and collaborative approach. Human rights issues for people with severe psychosis depended on the support of the community, the family, how dangerous they were, and what contact they had had with the criminal justice system. People with severe untreated schizophrenia, bipolar disorder and brief psychotic disorder have been given traditional medication and religious exorcism and cared for by their family and community. Women tended to move to their husband’s village and look after the extended family, usually sharing gardening tasks with their husband. Life has revolved around traditional ceremonies, tending the garden, caring for the houses and village and family issues.

As subsistence farming has decreased, young men have moved to the cities to drive taxis and try to get jobs. This urbanization and selling of land has broken many of the family traditions, increased poverty, increased unemployment, decreased social support, and so forth. Young people in the cities are bored and have increased substance misuse and interactions with police. Women are now more educated and want to choose between education, career, marriage, and children. Many people do not want the chiefs to make decisions on their behalf. The chiefs themselves are often feeling overwhelmed with the stress of their positions and the change in their status and are at risk of depression. Vanuatu has a strong religious background with 92% of them Christians. The church and pastors have always had a very important role in counseling and problem-solving for those in their congregation and have mostly been the only source of mental health care available for many people. However a recent survey by a psychiatrist from Australia found that there was a great deal of misunderstanding about mental illness both in the church leaders and in the congregations. 45% of those surveyed thought that mental illness was a sin, 34% due to demon possession, and 38% due to a curse [13].

As the country changes, the health system must change with it to take into account the new illnesses that are likely to emerge. Based on prevalence rates from the World Mental Health Survey in 2004, it is estimated that 13% of the adult population are likely to have a mental health disorder, 3% of these severe [12]. However in 2007 only 48 people in Vanuatu were recorded to have received treatment for a mental disorder [12] indicating a treatment gap of over 99%.

5. Vanuatu Training Programme

JB and DP, two general practitioners from Australia who have an interest in mental health, were asked by the WHO to develop and present a programme for PIMHNet over 3 years. This involved developing a culturally appropriate mental health training programme, training key health, and social service personnel; supervising those who have been trained in their places of work; mentoring and setting up support networks for them; presenting more advanced training; and training local doctors and nurses to be mental health trainers and mentors themselves. JB and DP also spent time networking with the formal and informal mental health stakeholders in Vanuatu, including hospital administration, government, church organization, and nongovernment organizations.

Box 3. Training visits for health workers and the community are as follows:

- (i) *first visit:* nurses from Vila Central Hospital (4), NGO workers (3), nursing lecturers from Vila (2), military medic (1), government health administrators (2), and doctors from Vila Central Hospital (2);
- (ii) *second visit:* 8 nurses, nurse practitioners and nurse aides from outlying islands (three nurses from Santo, one nurse from Pentecost, one nurse practitioner from Tanna, one nurse practitioner from Malekula, one nurse from Torba, one nurse's aid from the local village of Erakor), and 5 social services personnel (one nurse who works in administration in the Department of Health, a chief from an NGO on Santo, a senior Education department administrator, a Correctional Services officer, and the Senior Sergeant of Police); in every session there was someone trained during the first visit to assist with the training; they had done a two-day "Train the trainer" course before the start of the training;
- (iii) *third visit:* visiting all the doctors, nurses, and social services personnel in their workplaces; discussing cases, giving additional training, mentoring, seeing difficult patients, and training those people the nurses had trained.

Box 4. Programme of presentations for PIMHnet in Vanuatu are as follows:

- (i) what is mental illness?
- (ii) depression,
- (iii) anxiety,

- (iv) communication skills,
- (v) structured problem-solving,
- (vi) cognitive behavioural therapy,
- (vii) narrative and family therapy,
- (viii) alcohol and substance abuse,
- (ix) risk management and crisis intervention,
- (x) psychosis and bipolar disorder,
- (xi) personality disorders,
- (xii) child mental health,
- (xiii) adolescent mental health,
- (xiv) mental health and the elderly,
- (xv) research skills.

During the first visit to Vanuatu for training, a combination of teaching methods was used. The mornings were taught using an interactive didactic format and the afternoons in workshop style. In the afternoons participants brainstormed topics in groups, role-played what they had learnt in the morning, and refined skills in small group discussions. The content of the case studies and role-plays were built up over the course of the training as JB and DP developed an understanding of the problems that caused mental health issues and how they might present in Vanuatu. Many of these were very different to those in Australia—for instance, the use of kava causing social disruptions in families, the strong religious culture in the community, the role of chiefs in resolving family and community issues, arranged marriages, the importance of making "lap-lap" (traditional dish made with ground taro or yam roots), young men coming to Port Vila to find work, the controversy about the use of marijuana, and so forth.

Because of the importance of keeping the presentations relevant, culturally appropriate and in-tune with the needs of the participants, most of the sessions were prepared during the first visit to Vanuatu. Both JB and DP have had about 30 years of experience as General Practitioners (Family Physicians) in Australia.

Many resources were used from the WHO but other important ones included JB's book on "Mental Health Across Cultures" [14], "Where there is no Psychiatrist" by Patel [15], and "Essential Skills for Mental Health Care"—a handbook from Ghana [16].

The training sessions during the second visit were more difficult as the group that had been identified for training comprised some of the most highly trained nurse practitioners in Vanuatu and others who had no health background or experience at all. The first day was spent discussing the challenge of how to prevent the disability associated with mental health problems becoming so severe that the only avenues available to manage the situation were hospitals, police, corrections, church elders, and so forth. This was a very useful discussion because it enabled this very diverse group to focus on a common goal. Even though they came from such different backgrounds, after about the third day, the differences had almost disappeared and

everyone seemed to be working at a similar level. One of the differences between the participants was the issue of clinical care, something the nurses were very familiar and comfortable with. The social services personnel brought a different perspective to many of the sessions because they insisted on discussing the philosophy behind strategies such as confidentiality, parenting, the role of spirituality in mental health, and human rights.

As with the first training group, the postworkshop questionnaire showed that everyone had enjoyed the course very much, that they thought it was relevant to their current situations, that it had changed the way they related to patients with mental health problems, that their confidence in diagnosing and treating mental health problems had increased because of the course, and that they could help people with mental health problems have better lives. Most thought they could make a management plan for people with depression, anxiety, suicidal risk, crisis, or substance abuse but still felt tentative about being able to develop management plans for those with schizophrenia, bipolar disorder, or somatisation.

The practical nature of this training was very different to the mental health training that some of the participants had experienced in the past. Previous training was theoretical, with an emphasis on written material and DSMIV and ICD10 diagnoses, and as a consequence health workers were not able to apply any new knowledge or skills in the clinical setting. As General Practitioners, JB and DP were able from the outset to emphasise the acquisition of skills that were practical and relevant. For instance, participants were encouraged to grade patient's illness on a Likert scale from 1 to 10 but also to scale the disability on a scale from 1 to 10. They were then able to ask what would make the patient better or worse, prepare an appropriate risk management plan, and mobilize the patient's resources. Drawings such as the "social atom" to discuss social structure and family trees for children and the "hand exercise" that helps access social and personal assets were very popular. The use of stories and humour and discovery of resilience in Narrative Therapy and the "Cultural Awareness Tool" which helps a health professional find the meaning of a situation for the patient were thought to be two particularly useful tools [14]. These are tools that help explore the patient's understanding of their beliefs and access their own resilience. The Cultural Awareness tool is a series of patient-centred questions, and in Narrative therapy the problem is externalized and the patient is more able to access their own resources for dealing with their problems. They are especially useful when patient and health professionals come from different cultural backgrounds. Respect for the diverse traditional, cultural, and religious beliefs in the group was also extremely important but challenging and using differences in beliefs as problem-solving exercises proved the immediate relevance of the use of this tool. Slow breathing and relaxation techniques were practiced every day until everyone in the group felt confident that they could teach these techniques to patients with panic and anxiety disorder.

As the skills of the groups improved, the cases developed for the training became more realistic and difficult and

they were able to revise and consolidate their knowledge and develop and communicate management plans for the role-playing cases. DP spent time with the first group on her second visit, consolidating their skills and exploring new concepts and strategies with them. This deepened their understanding and improved their confidence in using techniques such as CBT. Only the nurse practitioners and doctors in the group (4 people) were able to prescribe medication; so the emphasis in the course was on diagnosis, assessment, and psychotherapy.

6. Supervision and Mentoring

The third trip involved JB and the main mental health nurse from Vila Central Hospital travelling to five different islands, some of them very remote with limited electricity, accessibility, or support for the few health professionals there. Seeing people in their own communities was found to be of the utmost importance. It helped with skill development; it raised the profile of mental health and encouraged local people and other health professionals to trust the nurses who had been trained; it gave the nurses confidence that they were on the right track; it highlighted the importance of mental health being embedded in the primary health care model.

The list of mental disorders was almost identical to that which a GP in Australia would see, except that most of them had no previous treatment. Because there are no words for mental health in Bislama, clinics were advertised as "Sik long bran" (Brain clinics) and so physical illnesses which can affect mental health were seen such as grand mal seizures, petit mal seizures, temporal lobe epilepsy, parkinsons disease, anaemia, vitamin B12 deficiency, hyponatraemia, liver disease, sequelae of encephalitis, sequelae of cerebral malaria, hypertension, and migraine. All of these except hypertension were clinical diagnoses as there were absolutely no facilities for testing or referral. The rest of the patients had depression, anxiety disorders, bipolar disorder, schizophrenia, substance abuse, personality disorders, and so forth. The only other difference was that of "brief psychotic disorder" which is rarely seen in developed countries [17]. This is often associated with religious experiences as JB found in Vanuatu and lasts less than a month with a return to premorbid functioning.

Western-based ideas of confidentiality, screening tools, pattern recognition, appropriate places for consultations, management plans, and follow-up all needed to be modified to suit the environment. Consultations were held in many diverse places such as in the grass huts that served as remote nurse aid posts, in patient's houses, in the centre of the village, and in more formal settings in the hospital. Almost all patients came with family or community members, with up to ten people accompanying very sick patients with schizophrenia. Sometimes two local interpreters were needed as patients did not speak Bislama but only the local mother tongue.

In every area the focal nurses, and nurse practitioners had trained other nurse practitioners, nurses and nurse aids in basic mental health awareness, diagnostic techniques, and

treatment skills. They had also been considerably active in raising awareness about mental health problems in their communities. Everywhere the team went there were more people than could possibly be seen during a short visit. Many of the patients had been identified by the nurse aid who had been trained by the nurses that JB and DP had trained. In some places the local chief accompanied the patient and identified other patients who needed to be seen, and others responded to signs or announcements in church.

All of the “untreated” patients with very disruptive psychosis had been treated with custom medication and had a traditional understanding of what was causing the problem. One of the most powerful health promotion tools was to say that people all over the world have this same disease with very similar symptoms and that this is an illness and not black magic. Untreated psychosis is an enormous burden and worry for families and there is a great deal of stigma associated with the community thinking there is a curse on the person.

Many of the nurses in remote areas were feeling quite lonely in their quest to diagnose and treat mental health problems and were very pleased to have someone to listen to their successes and problems. Working through case studies and actually seeing patients together was a fertile ground for further training and such supervision is invaluable.

Because the participants of the training on mental health worked in very different workplaces, they found that different skills were useful for them. So, for instance, the nurse in Emergency at Vila Central Hospital had enormous success with using the slow breathing techniques for people who were coming in regularly with “asthma attacks” and had decreased the number of presentations dramatically. The chief had used structured problem-solving to change the way he dealt with the people who came to see him. The nurse in the paediatric ward had used family therapy a great deal and wanted to expand her understanding of this skill. One of the doctors had found it very useful to be able to properly assess the risk of suicide and use some CBT techniques. She had also started to use medication for more people, as she felt more confident about it. One of the remote nurses had found simple narrative therapy very useful and had taught the nurses aids in the area basic diagnostic skills, the hand exercise, slow breathing, and narrative therapy skills. Another remote nurse had started a “mental health clinic” one afternoon a week and had the Likert scales for disease and disability and the “hand exercise” in every patient’s notes. He had taught the two other nurses who worked with him so that they were also now doing this. The nurse in Vila Central hospital who had done further training in Australia was seeing a lot of people with schizophrenia and was doing a full mental state examination on all these patients which gave him a clearer picture of the their mental state. The police and corrections people saw a lot of people with substance abuse problems and found the assessment tools and motivational interviewing very useful.

All of these practitioners were very enthusiastic about having more training as they were often seeing rapid changes in the attitudes, functionality, health, and social circumstances of patients who had previously been struggling with

mental health problems but had not been able to alter the situations they were in. All the participants were eager to teach their colleagues what they had found useful and some of those who had been taught in this way had begun to teach others.

As well as the training, JB and DP spent time networking with mental health stakeholders in Vanuatu, advocating with the government for more resources in mental health, mental health promotion, liaison with churches, development of templates and questionnaires for use in the communities and in hospital, and so forth. By the second visit in 2009, the Vanuatu Mental Health Policy and Strategic Plan (2009–2014) had been approved and many of the students were actively using the techniques and instruments to assist people with mental health problems in the community and the hospital. An Australian volunteer psychologist had been recruited and based in the community and support had been gained from chiefs, the church, and other NGOs to assist with mental health problems in several villages. The hospital was proceeding with delivery of mental health care and is working on a process to facilitate communication between the hospital and the community. Education in mental health was proceeding in other areas such as the military, police, and education department.

Teaching evaluation and basic research skills was seen to be an integral part of the training as well as the importance of evaluating any programme so that its usefulness could be assessed and lessons learned. The groups discussed the importance of ethics and confidentiality and validated the translations of research tools.

The Kessler 10 (K10) has been translated into many languages but not into Bislama [18]. After much debate in the group, three different translations were made. The debate highlighted the value of a formal validation process if the K10 was going to be used as a research tool, the caution needed when using such a tool to screen people for mental health problems, and the importance of using clinical judgement rather than a tool to make a diagnosis of mental illness. Patients in the hospital and people in several of the surrounding villages were assessed using these versions of the K10. None had been given a medical diagnosis of mental illness and none were currently being treated for psychological issues, stress, or mental health problems. The collation and analysis of the results was a way of helping health workers understand simple mental health assessment procedures, statistical, and research techniques but lacked the thorough methods required for rigorous research. Of the 80 people (40% male, 60% female) interviewed at Vila Central Hospital, 25% had “severe mental health distress” (defined as a K10 score of over 30). Particularly vulnerable groups were women in the antenatal clinic (30% scored over 30) and men in the 40–49 year age group (75% in the severe range). Comments from learners included a remark that most people were happy to be interviewed as no one usually asked them about these issues. Other participants commented that doing the social atom helped the interviewee stand apart from her problem and look at it, and that doing the “hand” exercise helped people identify their personal resources.

7. Conclusion

Work in Vanuatu as part of WHO PIMHnet has shown that equity of access to mental health care is possible when it is integrated into primary care, the workforce is properly trained and mentored, and the Government supports the process. As with many LAMICs, the high need for mental health care in the Western Pacific region was not being met because of lack of workforce, lack of culturally appropriate and practical training, limited financial resources, stigma, and the isolation of many communities. Training the primary health care workforce has begun to address this inequity. With the support of WHO and NZAid, further visits to Vanuatu will support those already trained and begin to target those who can be trainers and mentors themselves. Similar activities are happening in other Pacific Islands. It is the beginning of a new era in mental health care in Pacific Island countries.

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