

*Full Length Research Paper*

# Reasons for patient visit to a rural general practitioner (GP) practice in Kwa-Zulu Natal, South Africa compared with those in first world countries

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The common symptoms that patients present with, to a rural general practitioner (GP) in South Africa may be different to those of GP practices in urban areas and different from patient presentations in first world countries. This study looked at the common reasons for which patients visited a GP in Kwa-Dukuza, South Africa over a four month period during 2006. Kwa-Dukuza is located on the North Coast of Kwa-Zulu Natal to establish the common symptoms and clinical assessments of patients visiting a GP's private practice and to ascertain the demographics of patients coming to the practice. A cross sectional descriptive survey whereby the reason for every visit, age, sex, payment method (cash or medical aid) and the clinical assessment were recorded for every patient from February to May 2006. The common reasons for patients visiting the GP were cough, fever, and diarrhoea, feeling weak, headaches, sore throat, abdominal pain and runny nose. There were a substantial number of visits for administrative reasons. The common symptoms related to respiratory tract illness, gastrointestinal complaints, stress and depression, skin and back complaints. Reasons for patient visit to an urban GP practice were similar to GP visits in other first world studies (United Kingdom, USA and Canada). Substantial time with patients is spent on administrative issues. It appears that patients visit doctors in rural and urban geographic areas of South Africa for similar reasons to other patients elsewhere.

**Key words:** General practitioner, rural practice, reasons for doctor visits, administrative issues.

## INTRODUCTION

The common symptoms that patients present with to a rural general practitioner (GP) in South Africa may be different to that of GP practices in urban areas and different from patients of first world countries. Family physicians need to be aware of the common problems that present to their practices to adequately and contextually manage these problems and develop their skills towards meeting these specific challenges (McWhiney, 1997). With the stage set for the introduction of the National Health Insurance system in the near future in South Africa (<http://www.polity.org.za>), it is imperative that the general practitioner who is regarded as the gatekeepers to health care be well informed about

the common conditions in his/her practice. This enhance budgetary planning for appropriate resource allocation. There have not been any prior studies looking at the common reasons for patients visiting GPs in private practice in Kwa-Zulu Natal. The researchers were interested in knowing more about the demographics and common reasons for patients visiting this particular rural practice. This practice is located on the North coast of Kwa-Zulu Natal. Kwa-Dukuza is a small town which serves a rural population of about 1.2 million people.

People from surrounding Ntshaweni, Lindelani, Maphumalo, Shakaskraal, Lot 14, Glenhills, Etete, Groutville, Shakaville, Salt Rock and Mandeni come to medical practices in Kwa-Dukuza. Kwa-Dukuza is predominantly a sugar cane farming town. We set out to establish the demographics, common symptoms and clinical assessments of patients visiting a rural private

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**Table 1.** Age group and gender of patients seen at the KwaDukuza practice.

Age	Number	Percentage
0-5	177	15
6-15	124	10
16-25	167	14
26-35	237	20
36-45	194	16
46-55	193	16
>56	98	8
Total	1190	100

  

Gender	Number	Percentage
Female	644	55
Male	546	45
Total	1190	100

**Table 2.** Payment method by patient seen at the KwaDukuza practice.

Payment	Number	Percentage
Cash	612	51.43
Medical aid	573	48.57
Total	1190	100

practice in a rural location of the KwaZulu-Natal Province.

## METHODS

A cross-sectional descriptive survey was conducted whereby the reason for patient encounter, age, sex, payment method (cash or medical aid) (Table 2), presenting symptoms and signs, and the clinical assessments (Table 5) were recorded for every patient from 1st February 2006 to 30th May 2006. For data collection, structured information sheets were used to capture patient details which were then transferred to Microsoft Excel spread-sheet for computation. Data capturing was done by the GP (owner of the private practice) at the time of the patient's visit. During the month of June 2006, a statistician analysed the data.

## RESULTS

There were 1190 consultations by the GP during the study period. According to Table 1, the largest number of patients was aged 16 to 45 years. The elderly population (>56 years) formed the smallest age group. Almost two in ten patients comprised children of five years and below. The practice comprised of more females than males. Table 3 indicates the comparison in the presenting symptoms in the two first world based practices and the rural practice. Notably, administration was the most

common reason for consultation in the KwaDukuza practice. Whereas cough was the most common reason for consultation in the two urban practices of the first world countries; it came only third in the rural practice of KwaDukuza. Table 4 indicates that there are similar reasons for patient visits in Kwa- Dukuza and in the USA with respiratory problems being the most common complaints. The assessment of erectile dysfunction was made on the history of weak or no erections and/or premature ejaculations. Wheezing was recorded when the patient said that his or her chest made a wheezy sound when breathing out. Tight chest was recorded when the patient said his or her chest felt tight when breathing. Administration issues included chronic medication application, medicals for insurance, professional driver permits and pre placement medical examinations, blood test results, blood tests for general check ups, death certification and cremation medical forms, repeat scripts, extracts from clinical records, extension of sick leaves and injury on duty reports. Chronic diseases review was recorded as administrative issues. Comparing the male and female patients, Table 6 indicates that the majority of female patients seen in the KwaDukuza Practice were aged 20 to 29 (62%), while in males it was the paediatric group, aged 1 to 4 (56%).

Patients presenting to the practice for the first time with chronic diseases and not as follow up visits were recorded as per the chronic disease such as hypertension or diabetes. A large part of a 'general practitioner's' work involves practice administration and management.

## DISCUSSION

This survey shows an almost equal number of male and female patients attending this practice with most of the patients aged between 25 and 40 years of age. There were also an equal number of people paying cash for their consultations compared to those on medical aids. One would have expected a greater percentage of medical aid patients in this private medical practice, since those patients who are unable to afford a medical aid may prefer going to the state clinics where services are offered free of charge. The most common presenting symptoms were: fever, cough, diarrhoea, feeling weak, headaches, sore throat, abdominal pain, runny nose, blocked nose, vomiting, chest pain, wheezing, backache, tight chest and sneezing. The most common symptoms relate to respiratory tract illnesses. A common reason for a visit to this GP was for administration reasons. These reasons included medical examinations for insurance, pre employment, pre travel, or general check ups, blood tests and coming in to check the blood test results, filling in chronic application forms, repeat scripts, medical reports prior to burial or cremation. A study by Van der Kar et al. (1992) also suggested that patients sometimes expect

**Table 3.** Ten most common presenting symptoms in patients from a Canadian, British and the practice in KwaDukuza.

<b>Canadian practice (urban)</b>	<b>British practice (urban)</b>	<b>Kwaduza practice (rural)</b>
Cough	Cough	Administration
Sore throat	Rash	Fever/chills
Colds	Sore throat	Cough
Abdominal/pelvic pain	Abdominal pain	Wheezing
Rash	Bowel symptoms	Diarrhoea
Fever/chills	Chest pain	Feeling weak
Earache	Back pain	Headaches
Back problems	Spots, sores ulcers	Sore throat
Skin inflammation	Headache	Abdominal pain
Chest pain	Joint pain	Runny nose

**Table 4.** Frequency comparison of the most common affected systems among General Practitioners in USA and KwaDukuza.

<b>ICD-9 chapters</b>	<b>USA (%)</b>	<b>KwaDukuza (%)</b>	<b>CI (95% confidence level)</b>
Respiratory	21	30	70.0 (52.0-83.0)
Preventive and administrative	12	10	83.3 (55.0-95.0)
Circulation	9	14	64.3 (38.7-83.7)
Injuries and poison	9	0.6	11.1 (2.0-43.5)
Nervous system	7	11	63.6 (35.3-85.0)
Musculoskeletal and connective tissue	7	4	57.1 (25.0-84.2)
Symptoms, signs and ill defined disorder	5	7	71.4 (35.9-91.8)
Genitourinary system	5	2	40.0 (11.8-76.9)
Skin and subcutaneous tissue	5	3	60.0 (23.1-88.2)
Digestive	4	18	22.2 (9.0-45.2)
Mental disorders	4	2	50.0 (15.0-85.0)

**Table 5.** Most common clinical assessments in the Kwa-Dukuza practice.

<b>Presenting reason</b>	<b>Percentage (%)</b>
<b>Administration</b>	<b>9.9</b>
<b>Respiratory (total)</b>	<b>29.5</b>
Sinusitis	1.4
Sneezing	2.3
Tight chest	2.3
Chest pain	2.9
Runny nose	3.4
Wheezing	5.3
Cough	8.6
Blocked nose	3.2
<b>Digestive</b>	<b>17.9</b>
Diarrhoea	5.3
Sore throat	4.5

**Table 5.** Contd.

Abdominal pain	4.4
Vomiting	3.0
Nausea	0.7
<b>Genitourinary system</b>	<b>2.4</b>
Premature ejaculation	1.0
Erectile dysfunction	0.7
Lower Abdominal Pain	0.7
<b>Musculoskeletal and connective tissue</b>	<b>4.8</b>
Lower backache	1.9
Backache	2.3
Pain in shoulder	0.6
<b>Nervous system</b>	<b>11.4</b>
Dizziness	1.9
Feeling weak	4.8
Headaches	4.7
<b>Mental disorders</b>	<b>1.8</b>
Insomnia	0.9
Stress	0.9
<b>Skin and subcutaneous tissue</b>	<b>2.5</b>
Skin rash	1.9
Sores on feet	0.6
<b>Body injuries</b>	<b>0.6</b>
<b>Symptoms, signs and ill defined disorder</b>	<b>9.2</b>
Fever	8.6
Burning chest	0.6

**Table 6.** Patient profiles by sex and age-NDTI.

<b>Age groups</b>	<b>Male (%)</b>	<b>Female (%)</b>
0-1	48	52
1-4	56	44
5-11	53	47
12-19	47	53
20-29	38	62
30-39	41	59
40-54	48	53
55-64	49	51
65+	45	55

information from their general practitioner rather than medical treatment. The GP also has a travel clinic and is the medical referee for the local crematorium. This has

resulted in many visits by people for reasons other than being sick on that day. The National Disease and Therapeutic Index of South Africa (2006) is a continuing

**Table 7.** Male patient profiles by age –NDTI.

Rank	Who classification	Diagnosis (%)
1	Oi1000 – essential primary hypertension	4.11
2	0a0900 – diarrhoea and gastroenteritis of presumed	2.61
3	Oj0690 – acute upper respiratory tract infections	1.99
4	Oj4000 – bronchitis, not specified as acute	1.86
5	Oz0900- follow up examination after surgery	1.80
6	Oj1110 – influenza with other respiratory	1.56
7	Oj3290 – chronic sinusitis unspecified	1.55
8	Of3290 – depressive episode, unspecified	1.50
9	On3900 – urinary tract infections – site not specified	1.50
10	Oj0390 – acute tonsillitis unspecified	1.38
11	Oz3490 – supervision of normal pregnancy	1.31
12	Oe1490 – unspecified diabetes mellitus	1.24
13	Oj0290 – acute pharyngitis unspecified	1.15
14	Oh6690 – otitis media, unspecified	1.09
15	Om5490 – dorsalgia, unspecified	0.96
16	Oe7800 – pure hypercholesterolaemia	0.87
17	Or1040 – other and unspecified abdominal pain	0.85
18	Oj4590 – asthma unspecified	0.85
19	Ok2970 – gastritis unspecified	0.84
20	Other	62.98

research study conducted and published by IMS Health. Data is collected by 360 doctors throughout South Africa. The NDTI also reports that the majority of visits are for reasons other than that classified into WHO categories (Table 7). The majority (63%) of diagnosis are for 'other reasons'. This includes administrative reasons as stated in the NDTI report Van der Kar et al. (1992). Respiratory illness ranked third most common and abdominal disorders second most common. Abdominal pain, diarrhoea and vomiting were among the most common symptoms in this particular GP survey also. Thus, it is seen that the visits to this rural private GP practice are similar to the NDTI national survey of South Africa (Van der Kar et al., 1992). The Canadian (Bass, 1977) (Table 3), British (Morrel, 1972) (Table 3) and USA (U.S. Department of Health, Education and Welfare, 1977 - 1978) (Table 4) surveys also produced similar results of common symptoms to those found at this GP practice with respiratory and abdominal symptoms being common throughout. However, there were more patients presenting with rashes to the Canadian (The National Disease and Therapeutic Index of South Africa, 2006) and British (Bass, 1977) practices. There was no record of visits for administration purposes in these surveys.

## LIMITATIONS

Only one GP practice was studied. The profile of patients and illness seen may be different from other practices.

However this practice was selected as a typical rural

South African practice. Depending on individual personalities, age and sex people choose to visit particular doctors. This four-month survey may not be representative of the whole year with different disease patterns. The NDTI survey was carried out from January 2006 to April 2006, while this audit was carried out from February to 31 May, 2006.

## Conclusions

The majority of patients presented to this practice with fever, cough and diarrhoea, with a substantial number of people visiting the GP practice for administrative reasons. The common presenting symptoms to this practice are similar to those patients from a Canadian and British practice. The common clinical assessments are similar to those reported by the NDTI of South Africa. Family physicians in private practice need to focus their continuing medical education on practice management administrative issues, respiratory and gastro intestinal problems to manage these challenges better. South African patient and First World patient visits to their respective 'general practitioners' seem to be for similar reasons.

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