

## **DISCUSSION AND CONCLUSIONS**

### **7.1 Introduction**

The main focus of this study was to examine the prescribing patterns of Health Care Professionals working within Public Health Facilities located in informal settlements in Gauteng. A number of observations were made out of the findings from analysis of different sections of the study. This chapter will be devoted to discussing observations from all the previous chapters in more depth and out of the discussion draw some conclusions and make recommendations where appropriate.

### **7.2 Demographics of Informal Settlements Health Care Facility Clients**

It was noted that the majority of clients visiting health care facilities were under the age of 18 and the proportions of clients kept decreasing with increasing age. This presents a pyramid-like image of the client age distribution. While this may be consistent with the age distribution within the general population in the different regions, it presents a

paradoxical picture in terms of the expected age distribution of clients likely to visit health care facilities in general.

When looking at age profiles of clients visiting health care facilities in general, one would expect a bimodal type age distributions profile, with a large proportion of clients representing clients under the fives, a relatively low proportion of clients representing clients younger than forty five years of age and a large proportion of clients being forty five and older.

One would expect the above bimodal profile to present itself because the under fives are at a very vulnerable age and likely to be malnourished and not fully immunized against a large variety of childhood illnesses and the over 45 and the aged being at the age where they are more at risk of chronic life style related illnesses as well as problems associated with general body failure as a result of advanced age. The graph in figure 5 in chapter 3 presents this profile in terms of the aged and the under fives, but not true about young adults.

Contrary to what one would expect, the profile presented in figure 5 appears to be trimodal, instead of the expected bimodal profile. A

logical explanation for this would be that although young adults may have acquired resistance and immunity as well as being at the peak of their physical fitness, they are at risk of life style related illnesses and infection such as sexually transmitted infections. As a matter of fact, most of the clients between the ages 20 and 35 observed in this study, presented with infection related conditions.

One of the explanations for the pyramid like appearance of the age profile may be that the client age profile reflects the demographics of the catchment populations for the health care facilities studied. The seemingly low turn up of elderly clients may attributed to a number of reasons, such as access related barriers; distance, transport or escort, nature of complaints; this may necessitate visit to higher levels of care and not PHC.

### **7.3 Staffing of Primary Health Care Facilities**

It was observed that the majority of clients at informal settlements health care facilities were attended to by PHC trained sisters. There was a very low proportion of clients who consulted professional sisters and an even lower proportion of clients who consulted medical doctors at the health care facilities studied. The observed client distribution

amongst health care workers may be interpreted to indicate an uneven case-load distribution within the facilities. However, note should be made of the fact that staffing distribution within these facilities is not even and as such the client distribution among health care workers is, in fact, a reflection of the staffing distribution as opposed to case load distribution. Such a distribution is to be expected within PHC facilities as a large proportion of the clinical staff is comprised PHC trained sisters.

It appears as if Government is making some major inroads in terms of staffing within primary health care facilities. Two challenges remain being a threat to staffing within the public health sector, attrition due HIV and AIDS as well as brain drain by emigrating health care personnel.

#### **7.4 Disease Profiles in Informal Settlements Health Care Facilities**

Respiratory, urogenital, cardiovascular, dermatological and gastrointestinal systems related complaints were found to be the main causes of morbidity in the informal settlements.

The highest proportion of complaints were related to the respiratory system, followed by those of the urogenital system, dermatological and the cardiovascular systems. Pain, as could be expected, was also found to present in a large proportion of the patients seen. As has already been alluded to in chapter 6, pain coexists with most conditions although it may not be the primary complaint. Other conditions such as the disorders of the GIT, epilepsy, bilharzia and ENT infections appeared at relatively very low frequencies among the patients studied.

It is interesting to note that the leading cause of morbidity is from complaints of the respiratory system. This may be due to the nature of the housing structures in terms of how the structures were constructed and the spatial arrangement of neighboring structures. In terms of construction the structures are generally very small, there are gaps within the walls which allows for draught to seep into the dwelling. In terms of spatial arrangement there is close physical proximity between the structures. The first consideration may be associated with colds, flu and asthma due to ease of entry of irritants and draught into the dwelling. The second consideration becomes a catalyst in the spread of airborne infectious agents.

The second largest cause of morbidity was from dermatological related complaints. In their study, Mathee and Swart (2001), found a strong association between poor health outcomes and indoor informal settlements. One of the conditions cited in their study was a preponderance of dermatological conditions amongst dwellers of indoor informal settlements. This may be attributed to poor ventilation, which may favor collection of skin irritants as well as other infectious agents that may affect the skin.

The third cause of morbidity was found to be complaints of the urogenital system. The majority of complaints in this category were actually from STIs and the occurrence these infections may be due to a number of factors such as low educational status, lack of information, overcrowding lack of entertainment and many others.

After pain cardiovascular complaints, particularly hypertension, were observed with a very high frequency. Hypertension is generally considered to be an affluent life style related condition, although there is recognition of contribution by genetic and environmental factors. Of note, is that the majority of people in the settlements studied are usually recent arrivals from rural areas from within and outside South

Africa. This raises questions that were the majority of clients having a high genetic predisposition to hypertension or was there a high environmental contribution to the presence of hypertension. Again, it should be noted that dwellers of informal settlements are usually new arrivals so the contribution of the environment could not have been profound over such a short period of time. Furthermore, informal settlement dwellers are selected for purely by chance, this works against the genetic predisposition theory. A more plausible postulation may be that probably dietary habits may not be that different between urbanized and rural communities or between the more affluent and the poorer communities.

Gastrointestinal complaints may be directly associated with poor water quality, poor food preparation or storage, lack of access to sanitation and many other causes. The relative low frequencies at which GIT complaints were observed came as a surprise. However, close inspection of the infrastructure put in place in the informal settlements studied revealed presence of either a mobile or fixed flushable toilet after about every three to four housing units. In addition, there was one running water tap at the very least located at each street corner to

service the whole block. In some instances the regularity of running water taps was even much higher.

### **7.5 Prescription Patterns of Health Care Professionals**

The most salient observation made on analysis of prescription patterns was that health care professionals do not adhere to prescribing drugs by generic name. This may have two or more implications on the delivery of health care within the context of primary care system.

Firstly, for the provider of health care there may be cost implications in terms of duplication in purchasing drugs. Depending on the manufacturer, a drug may be marketed under a number of trade names and this may lead to overstocking of the same drug substance.

Secondly, the non-generic name prescription practice may interfere with standard treatment guidelines where drugs are listed by their generic name. This may lead to deviation in following protocols and health care professionals may approach management of clinical conditions in a non standard manner.



Thirdly, from the health service users' view, there may be a danger of overdosing with the same agent that may be provided under different names, a practice that may have deleterious effects on the delivery of safe, efficacious and effective medicines as well as quality of care and delivery of affordable health care.

## **7.6 Discussion and Conclusions**

The health care facilities offer services to a large majority of under fives, mainly for respiratory system related condition. Teenage and young adult patients visit health care facilities largely with dermatological and sexually transmitted infections. Middle age adults presented largely with hypertension and diabetes.

Staff in all health care facilities visited were generally satisfied about their staffing needs. Also the majority of professional sisters had undergone training and obtained some qualification in primary health care.

All drugs prescribed were listed in the EDL. However, more than half of the drugs were prescribed using non generic name.

## **7.7 Recommendations**

- A youth outreach program needs to be instituted to reduce the proportion of youth population presenting with STIs.
- A retention strategy needs to be put in place to retain and attract more staff in the public health sector, specifically the primary health care setting.
- Prescribers need to be encouraged to use generic name when prescribing drugs that have generic equivalents.