

4.4.1.4 Referral to GPs

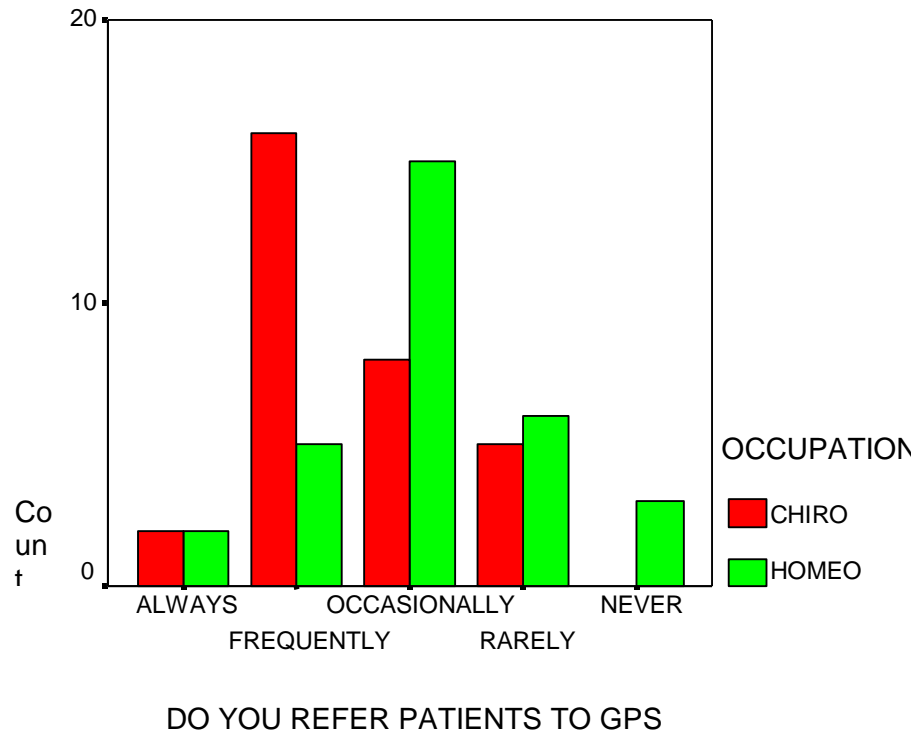


Figure 15: Referral to GPs by occupation

There was a significant difference ($p = 0.027$) between the two occupations and referral to GPs. Figure 15 shows that chiropractors tended to refer patients to GPs more frequently than to homeopaths. This may elucidate the findings that show a disparity between the referrals between chiropractors to homeopaths (67.7%) (Figure 13 and table 6) and homeopaths to chiropractors (96.8%); perhaps the balance of the chiropractor's patient referrals are to GPs. Reasons for these findings may include: patient referral for primary care or for second opinions, market share values (Van Den Brink-Muinen, 2000; Haldeman and Meeker, 2002; Double, 2004) similarity / dissimilarity of professions (Temoshok, 2004); patient influence based on their expectations of the health care system (Alonso, 2004). Thus it cannot be assumed that referral differences are attributable to only one cause.

In Summary

The relationship that exists between homeopaths seems to be low due to the fact that they rarely refer patients to each other. The same could be said about the relationship between chiropractors. This low rate of referrals could be due to the fact that the practitioners hold themselves in high regard as regards their ability and / or clinical experience (Temoshok, 2004), referring only for the purposes of accessing skills that they do not possess (Van Den Brink-Muinen, 2000).

The relationship that exists between homeopaths and chiropractors is good, and may be due to the fact that homeopaths are not well skilled manual therapists, or that they require a second opinion in an area where they may feel less skilled (Van Den Brink-Muinen, 2000). The converse may be said about the relationship between chiropractors and homeopaths where chiropractors occasionally refer patients to homeopaths because homeopaths are better generalist practitioners, and may thus only refer because of second opinion, for a secondary complaint or to establish whether there is a primary complaint resulting in musculoskeletal manifestations (Van Den Brink-Muinen, 2000). Furthermore the patient may request such referrals (Alonso, 2004).

The relationship that exists between chiropractors and physiotherapists seems to be occasional and may be the result of the need for a second opinion or because:

- Both are manual therapists (CASA, 2005).
- The physiotherapist works in the same rooms / multidisciplinary setting as the chiropractor.

The opposite may be said about the relationship between homeopaths and physiotherapists where homeopaths rarely refer patients to physiotherapists because this may be a function of patient requests (Alonso, 2004) but may also be as a direct result of the paradigm in which the practitioner operates (Tauber, 2002; Temoshok, 2004) or related to the need for a second opinion from a diagnostic profession (Grumbach et al.,

1995).

Thus it would seem that chiropractors refer well to GPs, followed by physiotherapists, and homeopaths. Homeopaths do not refer well to GPs perhaps because they share the similar pool of patients, and have a similar pool of conditions that they treat (Grumbach et al., 1995), but work better with chiropractors followed by physiotherapists.

4.4.2 The Nearest Practitioner Referral



Figure 16: Nearest practitioner for referral by occupation

Figure 16 shows that the nearest practitioner that homeopaths referred patients to tended to be chiropractors, while the nearest practitioner that chiropractors referred patients to tended to be GPs. This was statistically significant ($p < 0.001$).

These results re-enforce the results obtained in terms of the referral patterns to GP's where chiropractors referred to a greater extent.

4.4.3 Number of Referrals in last Six Months

It is noted that for this section, a caution must be stated. The question as stated in the questionnaire indicated that the categories were as follows:

- 0 - 10 and
- 10 – 20.

In instance number one (0-10), there is a possibility that no referrals were affected by the respondent, however on the converse it could mean that up to 10 referrals were affected by the respondent. Thus it is not easy to differentiate these 2 options from one another in the discussion or analysis of the discussion and this limitation is thus borne in mind.

In addition the upper end of the first scale and the lower end of the second scale coincide and therefore it is possible that similar responses were marked in different categories.

Notwithstanding the above, there was no significant differences between chiropractors and homeopaths in terms of the number of times in the last six months that they referred a patient to a chiropractor ($p = 0.542$). Figure 17 shows that homeopaths referred patients to chiropractors slightly more times than chiropractors referred to other chiropractors.

It is likely that homeopaths refer more patients to chiropractors than chiropractors to fellow chiropractors because:

- Homeopaths refer more musculoskeletal conditions which chiropractors treat, and
- There would be no need for a chiropractor to refer a musculoskeletal condition that he or she can treat.

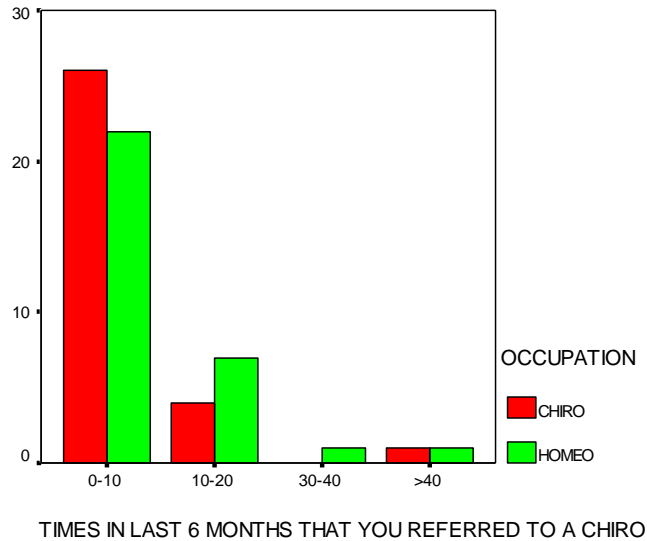


Figure 17: Number of times in the last six months that participants referred patients to chiropractors by occupation

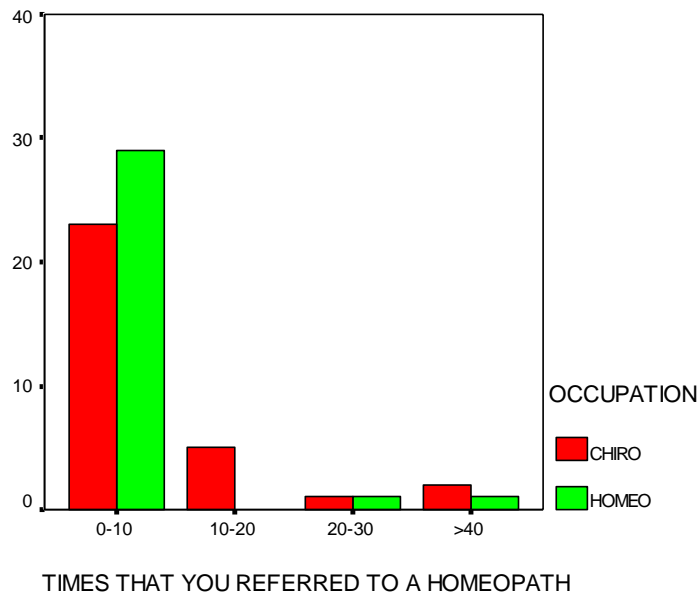


Figure 18: Number of times in the last six months that participants referred patients to a homeopath by occupation

Figure 18 shows the same for referrals to homeopaths in the last six months. It was slightly higher for chiropractors to refer to homeopaths than for homeopaths to refer to homeopaths, but not significantly ($p = 0.110$). This would be congruent with the results of

referral noted earlier as well as the perception that there would be an unlimited number of referrals to homeopaths based on their scope of practice (HSA, 2005).

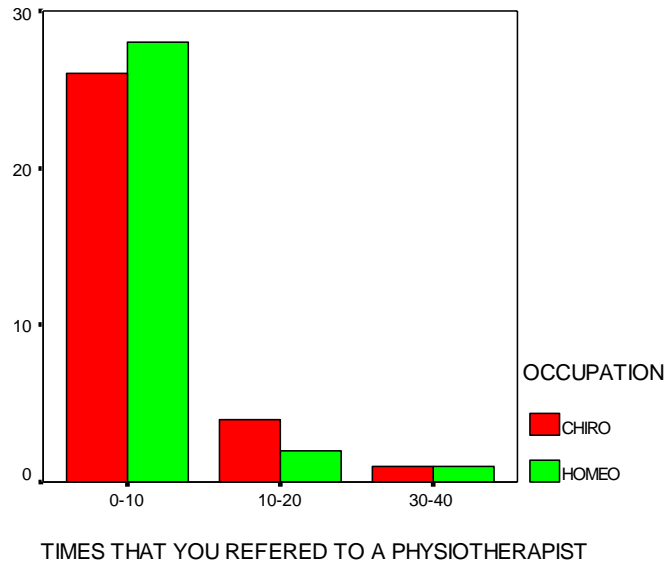


Figure 19: Number of times in the last six months that participants referred patients to a physiotherapist by occupation

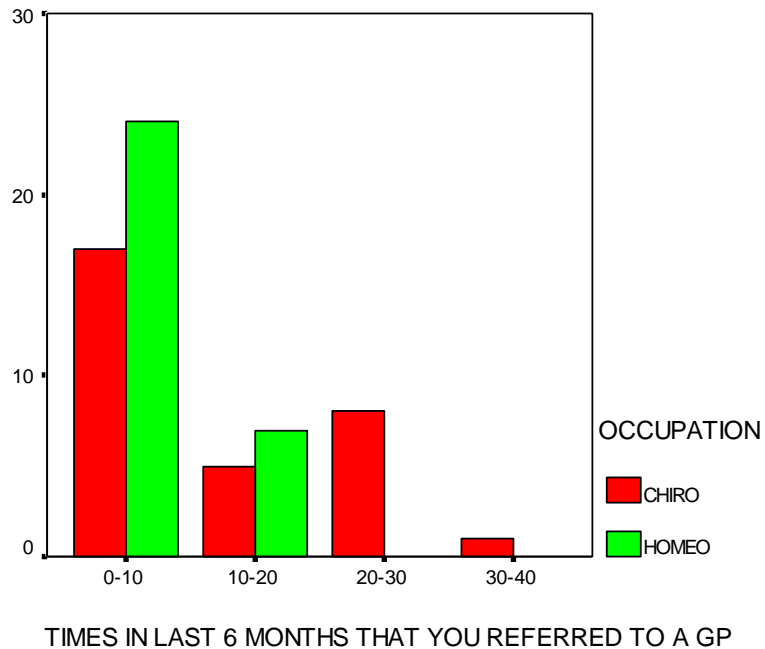


Figure 20: Number of times in the last six months that participants referred patients to a GP by occupation

Figure 19 shows that both chiropractors and homeopaths referred infrequently to physiotherapists ($p = 0.690$). However, in Figure 20 it can be seen that chiropractors refer patients significantly more frequently to a GP than homeopaths do ($p = 0.015$).

It would seem that chiropractors do not refer to physiotherapists as often because they treat similar conditions. This is in contrast to the referrals to GPs since chiropractors do not treat non musculoskeletal conditions (CASA, 2005) and thus require another provider to assist in patient treatment. Another reason for referring more to GPs than physiotherapists may be that chiropractors want to tap into a larger pool of patients for potential increase in the market share (Haldeman and Meeker, 2002). These results show that chiropractors tend to work between / across paradigms as compared to homeopaths that tend to work within their paradigm. This paradigm shift by practitioners in the field supports the suggestion by Haldeman and Meeker (2002) that chiropractic has reached a cross roads in terms of the paradigm of approach that is being, and will be, taught to future chiropractors (Haldeman and Meeker, 2002).

4.4.4 Referral Responses

Three questions in the questionnaire (12, 13 and 14) dealt with referral responses:

- If a patient were to ask for a referral to the following registered providers, would the referral be given?
- Do you return a patient to the care of the referring provider?
- Do you report back to the referring provider?

To all the above questions no significant findings were found between the respondents chiropractors and homeopaths (see Appendix 10 for data).

However, the results did indicate that the majority of respondents would consider:

- A patient referral if the patient requested a referral whether it was to a chiropractor

(90%), homeopath (81.7%), physiotherapist (71.7 %) or GP (78.3%). The only requested referral that showed deviation from the norm noted was the referral to a physiotherapist at the level of the frequent, occasional and rare referrals. This was however not significant.

- That the patient would be returned to the practitioner that had referred the patient; 63.3% of the time with respect to chiropractors, 53.3% with homeopaths, 43.3% with physiotherapists and 48.3% with GPs. These results would therefore suggest that chiropractors are more likely to return the patient to the practitioner who had initially referred the patient to them, with the physiotherapists being least likely to refer back to the initiating provider.
- That the chiropractor (58.3%), homeopath (50.0%), physiotherapist (46.7%) and the GP (55.0%) would report back to the referring provider with regard to the referred patient.

It would thus seem as though the chiropractors are most active in responding to patients' request for a referral to a particular practitioner, returning patients to the initial health care provider who initiated the first referral, as well as reporting back to the health care provider that first initiated the referral.

4.5 Treatment and Referral for Specific Conditions

The following section was analysed descriptively using trends, rather than statistically due to the large number of categories with small values. It should be noted that the labels on the Figures only represent those combination or single referrals as noted by the respondents. Therefore, if a label is not present in one Figure and it is present in another figure, then it implies that there was a response for one condition for a particular practitioner and not for that practitioner for another condition.

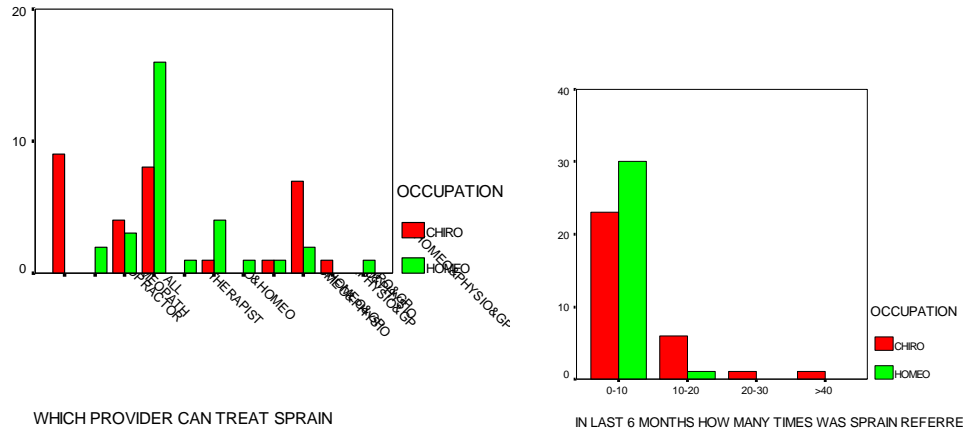


Figure 21: Provider to treat a Sprain by occupation / Figure 35: Times in the last six months that Sprains were referred to chiropractors and homeopaths

Figure 21 shows that homeopaths mainly indicated all practitioners for treating *sprain*, while chiropractors mainly indicated themselves. Homeopaths seem to have either:

- Felt that all practitioners can treat the problem, or
- Are undecided as to the best treatment protocol based on a limited understanding of the other practitioners' scope of practice.

Chiropractors perceive they treat sprains well. Perhaps homeopaths refer sprains more to chiropractors and / or physiotherapists because they perceive these providers to be more appropriate in the treatment of sprains. In addition it could imply that the homeopaths feel a need for the patient to receive a form of manual therapy in the treatment of this condition and regard chiropractors as the most appropriate provider for such an intervention. GPs were not marked by any of the respondents as being the only other provider who can treat this condition, which is why they do not appear on their own in Figure 21.

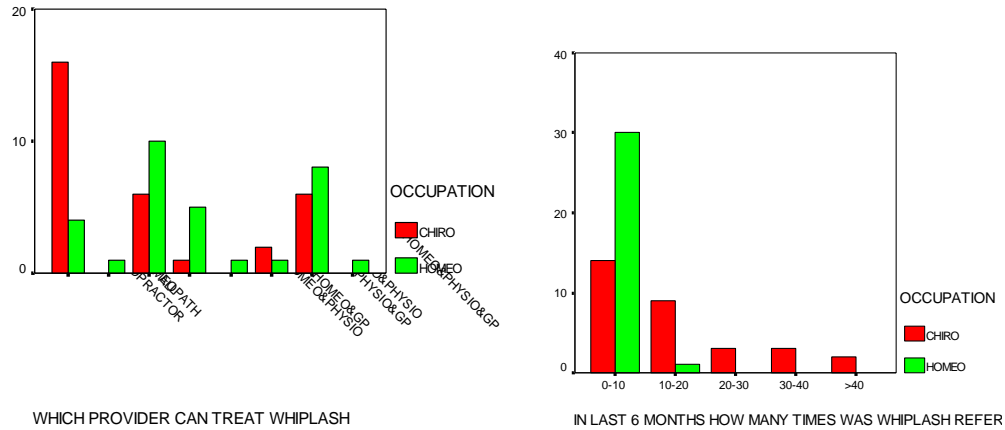


Figure 23: Provider to treat Whiplash by occupation / Figure 37: Times in the last six months that Whiplash was referred to chiropractors and homeopaths

Opinions differed between chiropractors and homeopaths as to the practitioner best suited to treat *whiplash*. Chiropractors mainly indicated themselves, while homeopaths mainly indicated all practitioners. This is shown in Figure 23.

As with sprains, homeopaths seem to have been generalist as to the choice of the provider. The presentation of whiplash as a sprain injury may have contributed to the similarity of referral pattern to that of sprain. On the other hand chiropractors suggest they treat whiplash well and there is no need to refer to other practitioners, and this is supported by the referrals from homeopaths that imply that the chiropractor is the most appropriate point for referral. This possibly shows that homeopaths work between both disciplines, as compared to chiropractors that work within their discipline. However, this presentation is possibly modifier dependant (i.e. condition) (Snyderman, 2002).

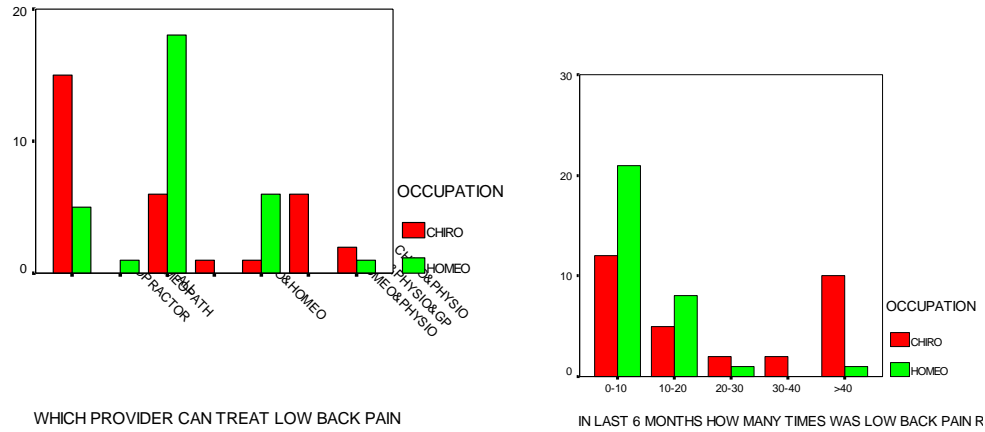


Figure 24: Provider to treat Low Back Pain by occupation / Figure 38: Times in the last six months that Low Back Pain was referred to chiropractors and homeopaths

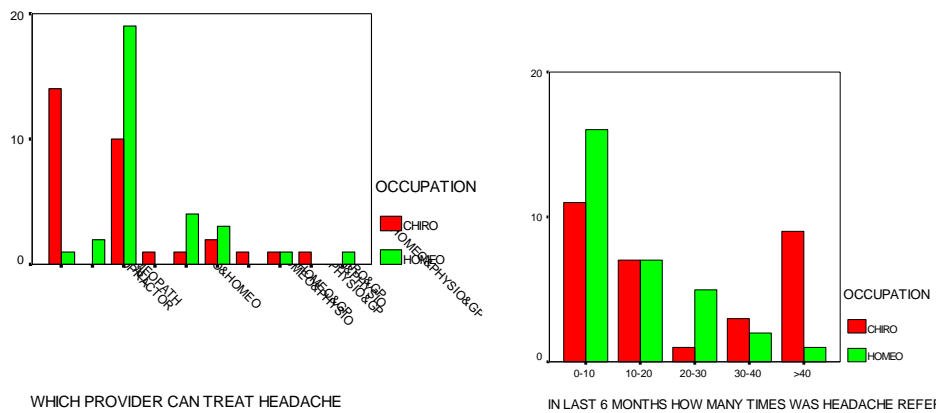


Figure 25: Provider to treat Headache by occupation / Figure 39: Times in the last six months that Headache was referred to chiropractors and homeopaths

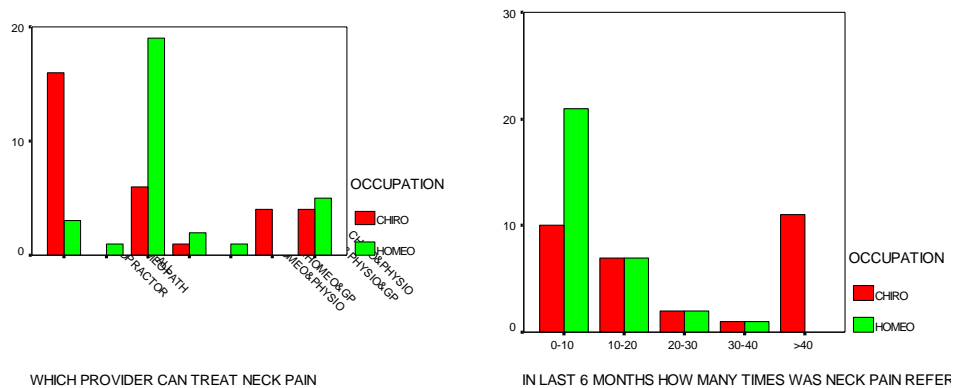


Figure 26: Provider to treat Neck Pain by occupation / Figure 40: Times in the last six months that Neck Pain was referred to chiropractors and homeopaths

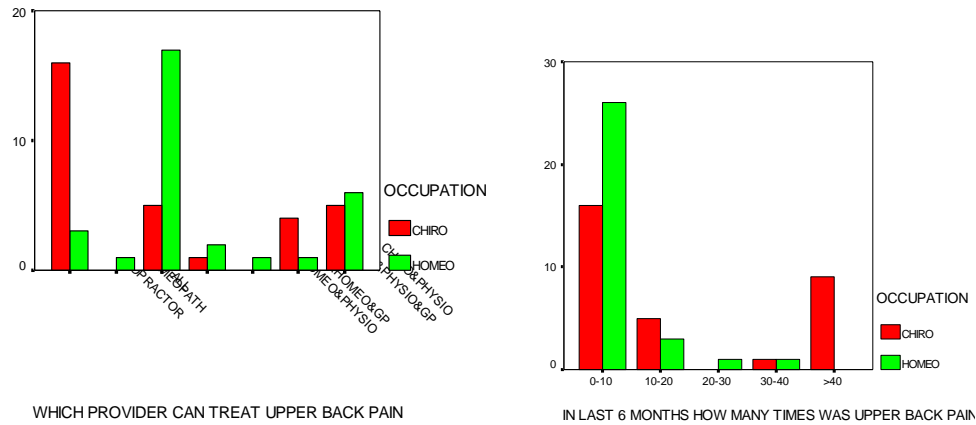


Figure 27: Provider to treat Upper Back Pain by occupation /

Figure 41: Times in the last six months that Upper Back Pain was referred to chiropractors and homeopaths

Low back pain, headache, neck pain and upper back pain, seem to fall into the same category as with whiplash and sprains, were it is evident from Figures 24 to 27 that:

- Homeopaths again seemed to take a generalist approach.
- Chiropractors suggest they treat these problems well and there is no need to refer to other practitioners unless there is a particular skill required that did not reside within the scope of practice of the referring chiropractor.

The trend developing by the homeopaths seems to indicate that there may be inappropriate referral based on a perception of the other health care provider’s scope of practice (Grumbach et al., 1995). However, one thing is clear; the homeopaths seem to understand the limitations of their practice and therefore promptly refer as opposed to retaining the patients.

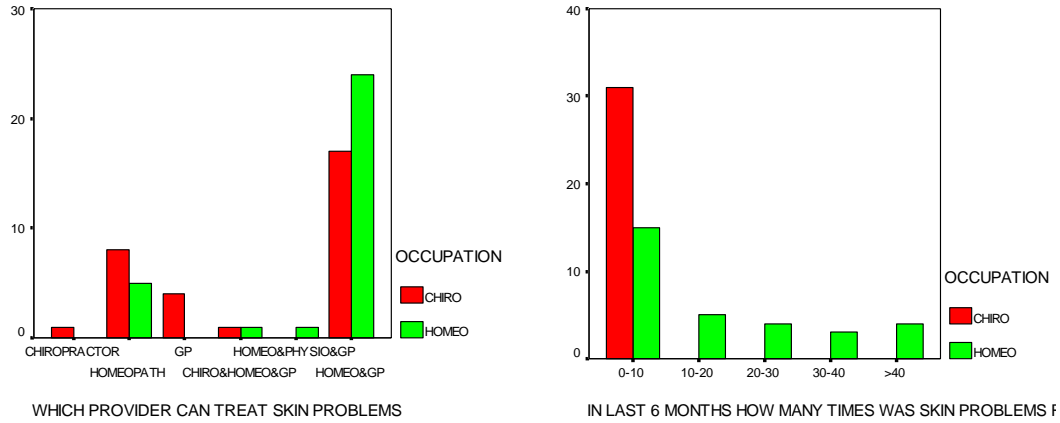


Figure 31: Provider to treat Skin problems by occupation / and Figure 45: Times in the last six months that Skin problems were referred to chiropractors and homeopaths

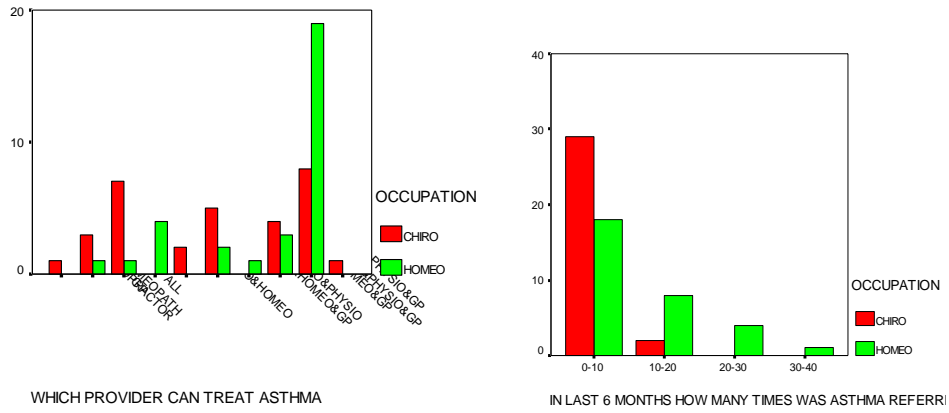


Figure 32: Provider to treat Asthma by occupation / Figure 46: Times in the last six months that Asthma was referred to chiropractors and homeopaths

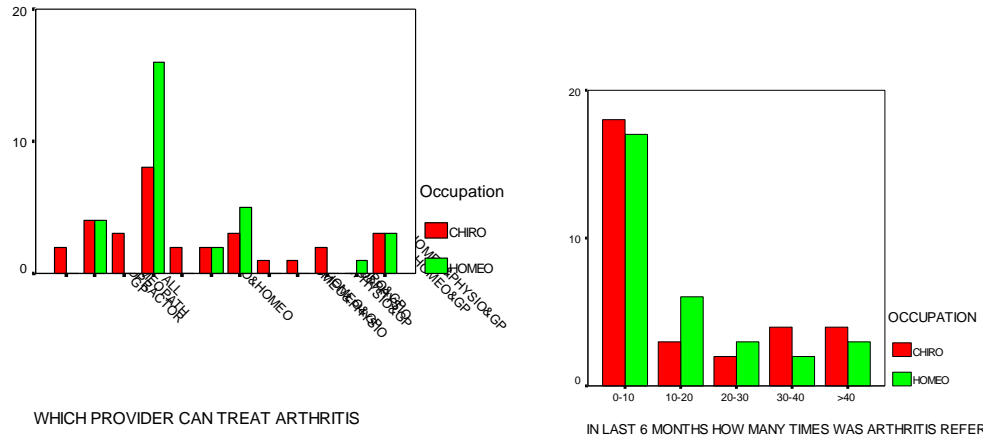


Figure 33: Provider to treat Arthritis by occupation

Figure 47: Times in the last six months that Arthritis was referred to chiropractors and homeopaths

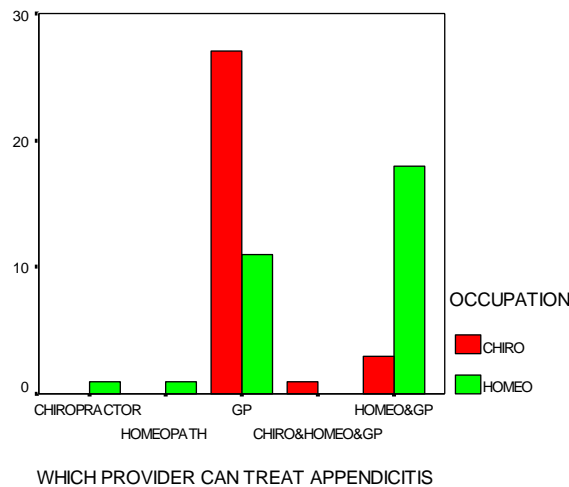


Figure 34: Provider to treat Appendicitis by occupation

Diabetes, cold and flu, cancer, skin problems, asthma, arthritis and appendicitis:

Most participants indicated homeopaths and GPs as being able to treat these conditions. More chiropractors than homeopaths indicated GPs and more homeopaths than chiropractors indicated homeopaths and GPs. This is shown in Figures 28 to 32.

It would seem that homeopaths feel that these conditions can be treated by a colleague or a GP, and this goes against the general trend of poor referral between fellow

homeopaths, and between homeopaths and GPs – this referral pattern may however be based on the modifier or condition as indicated by Snyderman (2002).

On the other hand chiropractors follow the trend of good referral between themselves and GPs with regard to these conditions. In addition chiropractors seem to understand the limitations of their practice, which is restricted to musculoskeletal care of the patient. This is supported by the fact that the results show that most arthritic patients were referred to chiropractors. This could be because homeopaths and chiropractors feel that this condition has more mechanical problems, which chiropractors can and are able in their scope of practice to treat (CASA, 2005).

Appendicitis seems from the above to be the domain of the GP, with the majority of the patients being referred to them from the chiropractors and the homeopaths consistently, which is consistent with the respective scopes of practice of the chiropractors, homeopaths and physiotherapists.

4.6 Summary of Conditions

Participants were asked how many times in the last six months any of the listed conditions were referred to them. This was analysed descriptively due to small sample size in many categories. Total analysis was however also done and a description follows below.

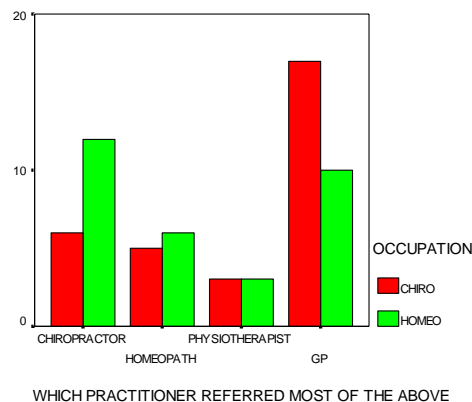


Figure 48: The practitioner who referred most of the listed conditions to chiropractors and homeopaths in the study

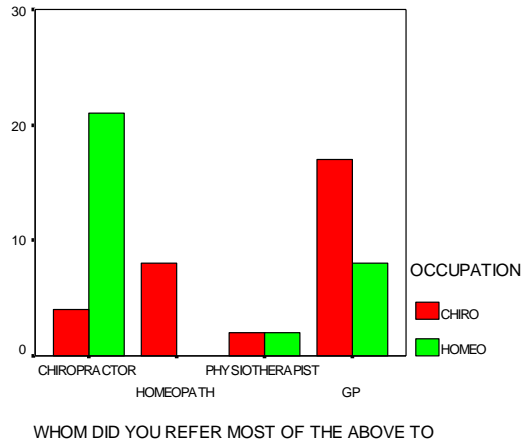


Figure 49: The practitioner to whom most of the listed conditions were referred by chiropractors and homeopaths in the study

Participants were asked which practitioner referred most of the above conditions to them. Chiropractors indicated that GPs had mostly referred the cases to them, while homeopaths indicated that they had received most of their referrals from chiropractors. This was not statistically significant ($p = 0.272$). This is shown in Figure 48. Figure 49 shows which practitioner the participants mostly referred the listed conditions to. This corresponds well with Figure 48, in that chiropractors tended to refer to GPs and homeopaths tended to refer to chiropractors.

4.7 Factors Affecting Referral from Homeopaths to Chiropractors

Factors affecting referral from homeopaths to chiropractors were examined in this section.

4.7.1 Demographic Factors

Table 7: Mann-Whitney test to compare median referral score to chiropractors in homeopath respondents (n = 31) between genders

	Gender	N	Mean Rank	Sum of Ranks	P value
Score for referral to chiropractor	Male	13	18.12	235.50	0.275
	Female	18	14.47	260.50	
	Total	31			

Gender of the homeopath did not influence the referral rate of patients to chiropractors ($p = 0.275$). This is shown in Table 7. Therefore the suggestion made in the demographic portion of this discussion where it was indicated that there may be an indication that gender plays a role has been negated by this correlation. Nevertheless it is indicated that females had slightly lower scores than males, indicating that they were more likely to refer than males. Thus it could be inferred that females may have a greater affinity for interdependence (Covey, 1999) and therefore may be more likely to refer. This is however a limited judgement as this is based on trends rather than a significant p-value and it is further suggested that an increased sample size is required to elucidate this potential relationship in future research.

Table 8: Kruskal-Wallis test for comparison of median referral score in homeopaths

	Age group	N	Mean Rank	P value
Score for referral to chiropractor	20-30	15	12.20	0.070
	30-40	8	20.38	
	40-50	8	18.75	
	Total	31		

Age of the homeopath was nearly significantly associated with referral to chiropractors ($p = 0.070$). However, with this being insignificant, no conclusions can be drawn other than that the possibility of age being a modifier is not likely in the greater Durban Metro area scenario, even in view of the suggestions made under the demographic discussion where age has been associated with increased referrals. Therefore the results are different from international statistics that are available (Tauber, 2002; Alonso, 2004; Temoshok, 2004). It is nevertheless noted that an increased sample size could have changed the outcome of these statistics.