Research
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Community Service Physiotherapists – What do they know about HIV/AIDS?

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ABSTRACT: *Southern Africa has been identified as the heart of the HIV/AIDS pandemic for more than two decades. At its heart lies KwaZulu Natal with more than a third of its ten million inhabitants infected. In its effort to ensure service to all, the South African National Department of Health has instituted several strategies to ensure some service delivery to the rural and urban poor communities. One of these strategies was the introduction of community service in 2002, for physiotherapists and other health care professionals for one year following successful completion of the University degree. In keeping with this, Physiotherapy curricula had to change with the changing needs of the increased demands placed on the new graduates. This study undertook to find out the knowledge, attitudes and experience of the 2004 community service physiotherapists in KwaZulu Natal with regard to HIV/AIDS in their community service year. Seventy-seven community service physiotherapists who serviced KwaZulu Natal in 2004 participated. Of the 59 contactable subjects, 47 returned their questionnaires and only 44 were viable for analysis. The results showed that 100% of the participants had contact with HIV/AIDS patients during their community service year. These therapists felt that a physiotherapist can play a vital role in the care of these patients. Seventy five percent believed that their undergraduate programmes did not prepare them adequately to cope with these patients in the community. However, their exposure to these patients improved their attitudes towards people with the syndrome. In conclusion although these young therapists started off being ill equipped, the exposure improved their ability to meet the challenges. This information is useful for curriculum development and transformation in physiotherapy.*

KEY WORDS: KNOWLEDGE, ATTITUDES ON HIV/AIDS, COMMUNITY SERVICE PHYSIOTHERAPISTS.

Introduction

The introduction of community service by new physiotherapy graduates in South Africa was associated with enthusiasm by the developers of the system and trepidation by the consumers, parents and new graduates (Gounden 2002). The burden and responsibility by the educating community was not instantly apparent. When health care service providers such as physiotherapists were scarce in facilities that managed the rural and urban poor patients, compulsory community service provided much needed service in unserviced or inadequately serviced areas of the country (Reid, 2002; Mohamed, 2005).

As with the implementation of any new service, monitoring and evaluation is crucial to its long-term success. Thus the implementation of community service in physiotherapy required feedback from those on the frontline, the community service therapists. This is especially important when the prevalence rates in HIV/AIDS was increasing (Department of Health survey 2008) or the burden associated with those already infected, which fell also in the physiotherapy domain was increasing. The burdens associated with HIV/AIDS include a myriad of effects that arise from a compromised immune system and the medications used to manage the condition. These include neurological, cardio respiratory and dermatological manifestations and complications. From the perspective of palliation, death and dying is a complex issue especially for new graduates- but they were thrown in at the deep end- so to speak.

This paper reports on the results of a study undertaken to see where new physiotherapy graduates placed in community service posts saw the need for support and development in training and their feelings towards independent exposure to patients living with HIV/AIDS. Previous studies (Puckree et al 2004; Puckree et al 2002, Johnson and Sim 1998, Schlebusch et al 1991) have shown that curriculum transformation at the undergraduate level was required in the face of changing demands on the health care front. Gounden (2002) also suggested that introspection with regard to the Physiotherapy curriculum on introduction of community service was needed. The introduction of continuous professional development (CPD) will take care of those already graduated and the transformed new curriculum will take care of those in training. Although the Professional Board for Physiotherapy, Biokinetics and Podiatry has suggested the inclusion of HIV/AIDS into the

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undergraduate curriculum, no evidence of this has been published to date. Anecdotal evidence does suggest however that different training institutions have included aspects that they deemed relevant, thereby making the HIV/AIDS curriculum content variable by institution. The increase in the HIV/AIDS caseloads in training hospitals provides an appropriate clinical training exposure to students. However the extent to which this is exploited through planned learning strategies is also not known. While this paper will touch on community therapists' opinions with regard to the undergraduate curriculum, it is beyond the scope of the current study to undertake an in-depth discussion on curricular transformation with particular reference to HIV/AIDS education either at the undergraduate or postgraduate level. Therefore only suggestions that emanate from the responses obtained from the respondents will be made. The fact that there is a dearth of publications on the physiotherapy curriculum requires further investigation. In the United States of America, a survey of HIV/AIDS–related curricula in programs of Occupational Therapy showed that three and six classroom hours were devoted to this topic in technical and professional programs respectively (DeGraff and Bennett 1995). The majority of program directors indicated that there was no need to increase exposure of students on this topic. Oyeyemi et al (2007) reported that Nigerian students showed unsatisfactory knowledge, attitudes and willingness to provide care to people living with HIV/AIDS. They suggested a more comprehensive HIV/AIDS curriculum.

Methods

A cross-sectional survey on a saturation sample of all community service physiotherapists in KwaZulu Natal in 2004 was conducted. In 2004, 77 community service physiotherapists were placed at various urban and rural hospitals throughout KwaZulu Natal, one of nine provinces in South Africa. A self-administered questionnaire consisting of 3 subsections, namely demographic information about the participants, information about their experiences during the community service year, and the third section on knowledge, and attitudes about people with HIV/AIDS, as well as gaps in training, was compiled based on the literature. Respondents were also asked to make recommendations on where support was required. Questions in the questionnaire were open and closed ended and of Likert style. The questionnaire was piloted on ten volunteer therapists to ensure internal consistency, construct and content validity. Since the questions in the questionnaire were drawn based on the aims of the study, which were derived after reviewing all available relevant literature, the therapists who participated in the pilot study provided expert opinion. The results of the pilot study suggested that the questionnaire would achieve the aims of the study. Reliability of the questionnaire was assured through the use of one investigator who managed the administration of all the questionnaires and data capture. All questionnaires, together with an information sheet and consent form were mailed, faxed, or e-mailed to participants. Self-addressed envelopes were also sent for return of the questionnaire. Response rate had to be increased through several follow-ups by e-mail and telephone. Ethical clearance to conduct the study was obtained from the Institutional Review Board. The data was analyzed using SPSS version 11.5. Descriptive statistics allowed for the reduction of data to percentages. Spearman's correlations were used to determine correlations between specific variables. The probability was set at $p< 0,05$. The response rate for similar qualitative responses was converted to percentages. The comments made was thematically analysed and presented as narratives to support the quantitative data.

Results

Of the total of 77 community service physiotherapists in KwaZulu Natal in 2004, 47 participants returned their questionnaires. Only 44 (58%) of these were usable. Almost seventy three percent (32) were female, 50% (22) were Indian, with the remaining 32%(14) White, 11,4% (5) Black and 7% (3) Coloured. Respondents ranged in age from 22 to 28 years (mean = 24 years). The majority, 54,5% (graduated from the former University of Durban-Westville the only university training physiotherapists in KwaZulu Natal, with the remainder from other Universities in South Africa. Each of the remaining training institutions (5) were represented by 15% or less of the participants. Two universities were not represented. The relationship between knowledge of HIV/AIDS and the institution from which the participants graduated could not be analysed due to the disparate representation of the institutions.

Fifty percent of the participants were placed at rural institutions. No differences were noted in the response of urban placed therapists compared to their rural placed counterparts. All participants reported having treated patients with HIV/AIDS. Sixteen percent of respondents suffered from poor health during the community service year, reporting influenza, chest infections and pulmonary tuberculosis. No significant correlations existed between the prevalence of poor health, knowledge and precautions taken during therapy.

Sixty one percent of the respondents stated that more than half of their caseload at any specific time included patients with HIV/AIDS. Since the diagnosis may not be indicated in case notes, this may not be a true reflection. The majority of patients were in the 20-40 year age range with gender being variable.

Knowledge

The majority of respondents (61,4%) believed that they had good knowledge of HIV/AIDS but in fact only 13,6 percent did. Respondents' lack of knowledge ranged from an inability to identify the acronym HIV/AIDS (43%) to precautions that should be taken when suctioning a patient (45%), to the stages of the disease (93%). Seventy two percent of the participants did not know the conditions associated with HIV/AIDS. The majority of the participants (86%) knew that the prevalence of HIV/AIDS in South Africa was highest in the province of KwaZulu Natal.

Attitudes

Forty percent of the respondents felt that they had the right to refuse to care for a patient with HIV/AIDS. About 84% of the participants felt confident in their abilities to treat HIV/AIDS patients and almost 80% had positive attitudes towards these patients. Eighty percent of the respondents felt that their exposure to HIV/AIDS patients improved their attitudes and skills to treat this kind of patients.

Recommendations to improve their ability.

Seventy to ninety percent of therapists made suggestions on strategies to improve their skills namely workshops (88,6%), formal addition to the undergraduate curriculum (77,3%) and review of undergraduate clinical practice (72,7%). Specific aspects that should be included were conditions associated with HIV/AIDS, role of physiotherapy, and counseling. Eighty four percent of the participants felt that that their undergraduate preparation to cope with patients with HIV/AIDS during their community year was inappropriate and inadequate.

Discussion

The results of this study cannot be compared to other similar studies since none exist. Reid (2002) reported on the experiences of doctors, dentists and pharmacists. Related studies and evidence to support or refute the findings have been used to explain the results.

In 2004, 77 community service therapists served KwaZulu Natal. The Health Systems Trust statistics (www. Hst.org.za/healthstats) showed that between 1999 to 2005, KwaZulu Natal received the largest number of community health service professionals since it is the most populous province in South Africa carrying about 20,6% of the total population (www.Hst.org.za/healthstats). Fifty percent of the 2004 community service physiotherapists were placed in urban state health facilities. The public: private sector and urban: rural maldistribution of health care workers was one of the motivating factors for the institution of community service therapists (Mohamed 2005). It is also known that once their community service year is completed, physiotherapists as well as other health care professionals either take up positions at urban public health care facilities or in the private sector or leave the country to gain experience (Department of Health 2006). The reasons for this have also been widely published in the lay and scientific media. While the need for physiotherapy service in rural areas is well known, the 50% placement of therapists in urban facilities may be due to the fact that urban state hospitals are never fully staffed at any specific time, due to a range of factors including a wide disparity between the salaries of therapists in the public and private sector (Department of Health 2006).

The race and gender distribution of the respondents in this study reflect the approximate ratios by these categories in the profession in KwaZulu Natal (HPCSA registers). The majority of therapists graduated from the former University of Durban-Westville, the only training institution in the province. Also quite interesting was that over 70% of the therapists remained in the public sector after their community service. This is different from the normal trend explained by the National Department of Health (Department of Health 2006). It is not known whether this has been sustained.

From anecdotal and published evidence, physiotherapists have been identified as health care professionals to whom patients can talk, get answers and actually receive emotional support (McClure 1993). From this standpoint it is important for physiotherapists to improve their skills and knowledge so that they serve out the best advice and treatments to those under their care. This allows them to also provide useful information to patients who often lay their trust in them (Coates 1990). The Professional Board accredits all Physiotherapy training centers in South Africa for Physiotherapy, Biokinetics and Podiatry as part of the South African Health Professions Council. By 2004, the Board had not included HIV/AIDS in the minimal standards for training of physiotherapy students (as reflected in form 96 on the Professional Board website in 2004). Based on the prevalence of the syndrome in training hospitals, all training centers had incorporated varying degrees of theoretical and clinical training in their undergraduate curricula. As shown by the results of this study, the curricular inclusions were insufficient to inform independent practice by newly graduated therapists. Anecdotally, it seems that since 2004, training institutions have increased exposure of students to both theoretical and clinical components of HIV/AIDS. However, evidence to support this does not exist. Oyeyemi et al (2007) reported that deficiencies in the Nigerian Physiotherapy curricula had resulted in unsatisfactory knowledge, attitudes and willingness on the part of Nigerian students to treat people with HIV/AIDS. Useh et al (2003) also found inadequate knowledge about HIV/AIDS amongst physiotherapists in Zimbabwe and Nigeria. In Rwanda, Uwimana and Struthers (2007) reported that over 50% of health care professionals were not trained in palliative care. This is similar to previous studies, which looked at physiotherapy students and qualified physiotherapists in South Africa (Puckree et al 2002, Puckree et al 2004).

For graduated therapists, continuous professional development (CPD) has been put in place to ensure quality delivery to the patient. However, when one looks at the array of courses offered for CPD for Physiotherapists in South Africa (http://www.physiosa.org.za), only a handful of lucrative specialties feature prominently in the schedules- one then begs the question- who should be monitoring the success of this venture and what is the true aim of CPD? Should CPD activities be linked to consumer needs?

Based on their own admission, community service therapists, in KwaZulu Natal in 2004, did not feel empowered to manage HIV/AIDS patients on entry. The latter was due largely to inadequate preparation to treatment HIV/AIDS patients during their undergraduate training. The failure of undergraduate programs to support graduates through adequate knowledge, skills and attitudes

in delivering adequate service to HIV/AIDS patients has been supported by Useh et al (2003), Oyeyemi et al (2007), Uwimana and Struthers (2007), and Dijkstra et al (2007). A study undertaken by Thaver and Puckree (unpublished 2004) showed that between 2001 and 2004, all Universities admitted to giving physiotherapy students some exposure to HIV/AIDS in their curriculum. Only two universities were offering more comprehensive theoretical and clinical exposure to their students. Since 2004, it is not clear what curricular changes have occurred in the South African Physiotherapy curriculum since no published evidence exists in this regard. Oyeyemi et al (2007) suggested comprehensive changes to their Physiotherapy curricula.

A discrepancy between the perception of having knowledge and actual acknowledge may suggest that although students may have received knowledge during their undergraduate training, this was not reinforced sufficiently. No published evidence to support or refute this exists in the South African literature. Dijkstra et al (2001) also reported inadequate knowledge about HIV/AIDS and policy amongst professional staff at a hospital in Tswane and suggested further training. However, as stated by the participants in the current study, the exposure to HIV/AIDS patients during the community service year led to growth and development and by the end of the year community service therapists felt more confident managing patients with HIV/AIDS and had developed positive attitudes towards these patients. This response is similar to that reported by pharmacy and medical community service professionals (Reid 2002). Many of the responses by the community service physiotherapists related to HIV/AIDS patients since this condition made up the bulk of the caseload. The above shows that knowledge gained through formal lectures must be reinforced in the clinical setting to bring about meaningful empowerment of graduates as clinicians.

A mentor system to support community therapists was initiated by the South African Society of Physiotherapy and Public Service Forum in 2005. (http://www.physiosa.org.za/?=node/566). The success of this system is not known and should be monitored and supported by all stakeholders.

Community service therapists in this sudy made suggestions to improve the ability of future therapists to cope with HIV/AIDS patients. This included both theoretical (formal lectures) and actual clinical practice on HIV/AIDS patients during the various stages of the disease. It will be helpful if students are exposed to patients presenting with a variety of complications and manifestations of the syndrome and the adverse effects of anti retroviral medication.

Based on the large number of therapists who felt that they could refuse to treat a patient with HIV/AIDS, a need to expose the student to the Declaration of Geneva and other ethical principles as laid down by the SA HPCSA seems imperative. It is gratifying to note that the Professional Board has implemented compulsory ethics training as part of CPD (hpcsa.co.za). This is being extended to the undergraduate level as well.

Since a large proportion of the participants suffered ill health during their community service year, educators may want to review their curricula to ensure that aspects that pertain to the precautions to be taken by health care workers are included or if included, reinforced in the clinical setting. The results however, did not show any correlation between knowledge, health and precautions taken. Anecdotally, physiotherapy students are advised about infection control measures both by the academic Physiotherapy Department and the Wellness Centers or student clinics located at each of the different training institutions. However the extent to which this critical part of student training is integrated into clinical practice has not been addressed either through publication or curriculum discussions. This is especially important in the face of new threats by emerging viruses as well the Multiple Drug Resistant (MDR) and Extra Drug Resistant (XDR) tuberculosis in South Africa. In 2007, the detection of MDR and XDR Tb in South Africa prompted the institution of compulsory mask wearing by all students during patient treatment.

While it is the duty of the training institutions to ensure a transforming curriculum, the Health Professions Council should also be ensuring that curricula are appropriate for the changing demands in the field especially when its primary mandate is to protect the patient. If practitioners report an inadequate undergraduate curriculum, one wonders whether the curricular of training institutions are monitored for outcomes achieved. An unpublished investigation into whether training institutions have included HIV/AIDS in their curricula for the years 2001-2004 showed that the former White Universities were more progressive in this regard (Thaver and Puckree unpublished research 2004). This then also begs the question as to whether Professional Board members who carry a huge burden to protect the patient are actually ensuring that they are current with regard to the literature and demands in the field. This study therefore leaves us with many more questions than answers. These include 1. How effective are training institutions in ensuring that only properly trained persons are allowed to graduate. Are academic staff at training institutions transforming with the changing needs of consumers? Are accreditors keeping pace with movements on the ground namely at training institutions and the patient care centers or community or with National Health Policy?

In keeping with the Declaration of Geneva, if the primary need is to protect the patient then all parties involved in providing care to the patient must take responsibility for any decline in the quality of such care. This therefore places greater responsibility on educators and accrediting bodies that are responsible for decisions relating to quality of graduates.

Conclusion

While this study has shown that physiotherapists in community service report that the undergraduate Physiotherapy curriculum is not meeting the optimal needs of graduating