# Barriers to HIV Care and Treatment by Doctors: A review of the literature.

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**Keywords**: barriers, fear, knowledge, doctors, losing patients.

### **Abstract**

This paper provides a review of the reported barriers that prevent doctors from managing HIV infected patients. The four most commonly reported barriers were: fear of contagion, fear of losing patients, unwillingness to care, and inadequate knowledge /training about treating HIV patients. Barriers to treating HIV infected patients is frequently reported in many countries and it is important for developing countries such as South Africa to learn from these experiences by identifying local problems so that constructive interventions and strategies can be developed to address these barriers, thereby improving the quality of patient care. Further research in respect of the local situation is required.

### Introduction

Over the last two decades acquired immunodeficiency syndrome (AIDS) has emerged as one of the most serious public health problems in the world, and by the end of 2003 it was estimated that 5.3 million South Africans were human immunodeficiency virus (HIV) positive, which corresponds to 21.5% of the population. In the early phase of the HIV epidemic few doctors saw infected patients and treatment options were limited. As a result many doctors were reluctant to provide care to HIV infected patients and homophobia amongst doctors, fear of contact with patients and unwillingness to care were frequently reported. However, there has been an exponential increase in the number of HIV and AIDS related cases and more doctors are encountering infected individuals. This review summarizes our current knowledge of barriers to treatment of HIV infected patients by doctors.

### Method

A comprehensive literature review was undertaken by searching the MEDLINE database, Psychlit, ISI Web, EBSCOHost, and Sabinet on line, for English language literature published between 1985 and 2004. The database search terms included keywords such as fear/s, barrier/s, concern, HIV, AIDS, attitudes, physician/s (doctor/s), practice, treatment, care and knowledge. A variety of combinations of these words were entered. All duplicate articles were removed and only studies that used doctors as the sample population were considered. Titles expressing comment, news items, opinion pieces or letters were rejected.

### Results

Thirty two relevant studies were identified from the literature search. The four most commonly reported barriers were: fear of contagion, fear of losing patients, unwillingness to care, and inadequate knowledge /training about treating HIV patients.

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/training about treating HIV patients.

### **Fear of Contagion**

Fear of contagion was the most common barrier which prevented doctors from treating HIV infected patients. Fear of contagion ranged from 1.2% to 97%. This barrier was most frequently reported in the early 1990 in most countries, but in some developing countries such as Nigeria this fear remained high even during the 21st century.16 Fears were expressed not only in respect of surgical procedures, but some doctors even feared droplets from sneezing and shaking hands. [9,17,18,21] Some doctors even feared working in HIV areas or for caring for HIV and AIDS patients.[11,15,19,23] (Table I).

### Fear of losing patients

Fear of losing existing HIV uninfected patients if it was found that they treated HIV and AIDS patients, ranged from 5.4% to 40% of the doctors sampled, with the majority of the

Table I: Studies reporting Doctors' Fear of Contagion.

Type of Fear	Percentage (n)	Country	Date	Reference no.
	37% (645)		1991	11
	60% (454)		1991	14
Feared contracting HIV from patients	35% (211)		1993	12
	50% (128)	USA	1990	10
	97% (29)		1993	3
	93% (148)		1994	4
	73% (77)		1994	5
	63% (206)		1992	6
	56% (280)		1990	7
	55% (172)		1987	8
	53% (35)		1989	9
	38% (697)		1991	11
	23% (103)	France	1992	15
	63% (384)	Netherlands	1997	22
	22% (107)	Australia	1990	20
	62% (775).	Singapore	2000	18
	No percentages-cited	Japan	1997	25
	54% (67)	Greece	1992	19
	28% (36)	Turkey	2001	23
	82% (105)			
Concerned about occupational HIV infection.	72% (184)	USA	1990	10
	67% (219)		1992	6
	93% (114)	Greece	1992	19
	25% (20)	Austria	1992	24
	95% (62)	Nigeria	2003	16
	20% (18)	USA	1992	13
	39% (493)	Singapore	2000	18
Fear the risk of transmitting HIV to own family	32% (82)	USA	1990	10
Fear AIDS more than other diseases.	49% (121)	USA	1990	10
	23% (401)	USA	1991	11
Would not practice in area with high prevalence of AIDS-due to risk of AIDS.	22% (383)		1992	15
	14% (76)	Canada	1992	15
	4% (14)	France	1992	15
Hesitate to carry out simple procedures.	43% (46)	Nigeria	1995	17
Not perform surgery despite adequate precautions.	33% (35)	Nigeria	1995	17
Feared could contract AIDS by shaking hands with an	1% (15)	Singapore	2000	18
infected person	50% (42)	Uganda	1997	21
Feared could contract AIDS if infected person	25% (318)	Singapore	2000	18
coughed or sneezed	72% (60)	Uganda	1997	21
Feared contracting HIV from HIV+ co-worker	32% (27)	Uganda	1997	21

studies indicating that over 25% of the doctors expressed such fears. [5.6,10,12-14,24,26,27]. This barrier was identified mostly amongst doctors in the USA. However a study in Austria showed 86% of the doctors sampled expressing such fear. [24] Generally this fear has decreased over the years.

## Unwillingness to treat HIV and AIDS Patients

In both developed and developing countries, doctors were found to refuse to care for patients, or they felt it was their right to refuse to treat HIV and AIDS patients. Studies undertaken between 1990 and 2002 showed that if given a choice, many

doctors would not treat HIV and AIDS patients. **Table II**.

# Knowledge / Experience as barrier to treatment

During the 1990's studies undertaken in many developed countries identified lack of training, [13,20] lack of adequate medical knowledge [6,12,20,29,32,33], and lack of experience [27,33] in treating HIV infected patients as the main reason for not wanting to treat HIV-infected patients. A survey amongst doctors in the USA in 1991 showed that 83% of respondents lacked adequate knowledge of AIDS, <sup>29</sup> despite the disease having been first reported in

the USA over a decade before. In addition 79.6% of doctors in Northern Ireland were uncertain about having appropriate counselling skills.<sup>33</sup>

# Other barriers to providing treatment to HIV-infected persons

Other barriers commonly reported by doctors were financial risk or the lack of insurance. [5,12, 23,27]

Demand of physicians time was also a commonly cited reason for not treating HIV and AIDS patients in the developed world. [5,20,29,32,33,34] Barriers like lack of support staff, <sup>27</sup> structure of general practice, <sup>32</sup> lack of speciality back up support for patients in whom

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Table II: Studies Reporting Doctors' Unwillingness to treat HIV and AIDS patients:

Attitudes to wards treating HIV infected patients.	Percentage (n)	Country	Date	Reference
If given choice prefer not to treat AIDS patients	50% (561)		1991	29
	48% (76)		1994	4
	25% (27)	USA	1999	5
	23%(420)		1991	11
	23% (401)		1992	15
	14% (76)	Canada	1992	15
	21% (23)	Spain	1997	31
	4% (14)	France	1992	15
	62% (82)	Austria	1992	24
	83% (134)	Kuwait	2002	30
Refused or referred new cases of HIV infection.	No percentage cited	Japan	1997	25
	16% (20)	Greece	1992	19
	39% (129)	USA	1992	6
	14% (46)		1995	26
	36% (73)		1992	28
	48% (548)		1991	29
	48% (97)		1992	28
	14% (62)		1992	13
	32% (356)		1991	29
	42% (54)	Turkey	2001	23
Felt that healthcare workers should have right to refuse to work with AIDS patients	26% (130)	USA	1990	7
	44% (70)		1994	4
	64% (480)		1991	14
	31% (41)	Austria	1992	24
Do not like to care for terminally ill patients.	16% (93)	USA	1993	12
Hesitate to treat	24% (26)	Nigeria	1995	17
Hesitate to carry out simple procedures.	43% (46)	Nigeria	1995	17
Not carry out surgery despite adequate precautions.	33% (35)	Nigeria	1995	17
Agreed that people in health care system are unwilling to treat HIV infected persons	69% (863)	Singapore	2000	18
Staff would be upset if HIV infected patients were treated where they (staff) worked.	60% (754)	Singapore	2000	18

complications develop or the lack of community social services, or resources<sup>[12,26]</sup> also posed impediment to treatment and care by doctors.

### Discussion:

This review highlights several barriers amongst doctors to treatment of HIV and AIDS patients.

The care of people with HIV and AIDS is challenging due to its multidisciplinary nature, its medical complexity, physical manifestations, the need for infection control procedures and the associated stigma. Despite gains in knowledge, several problems affect the care of patients by doctors such as fear of becoming infected, homophobia, burnout, religious attitudes, and the unwillingness to care.35 Professional staff and health care students frequently report fear of occupational exposure,36, which is further fuelled by the potential discrimination against health professionals who do become infected.37 The US Centres for Disease Control has assessed the risk of HIV infection and AIDS amongst physicians after a single accidental exposure to HIV at work to be 0.5% or less. This figure is lower than the published risk of contracting most other infectious diseases after a single exposure e.g. the risk for hepatitis B is 10% to 20%. 10 Although this mode of transmission is rare, it is still understandably an area of considerable concern for many health care workers<sup>38</sup> and it is essential to appreciate these fears and not harshly condemn health care workers for them. However, the rapid expansion of the AIDS epidemic has made it essential for every physician and health care worker to confront HIV and AIDS and avoiding or refusing care is unacceptable and cannot be condoned. [39, 40] If health care professionals are to come to terms with their fear of contagion, continued education and psychiatric resources should be part of a comprehensive response to HIV and AIDS.<sup>9</sup>

The stigma of caring for and treating patients with HIV and AIDS could pose a significant barrier. The stigma surrounding the treatment of contagious diseases is not restricted to HIV. A study completed after an outbreak of severe acute respiratory syndrome (SARS) showed that the outbreak had emotionally affected the lives of the doctors. It was not just the physical threat of SARS but the secondary effects such as potential loss of loved one, fear of stigmatization and worry about losing patients should their clinics be named publicly in contact tracing that affected their lives as well.41

Several studies identified lack of training and knowledge to be a barrier to treating HIV and AIDS patients, thus further education of health care workers is probably one of the most important interventions which may alleviate some of the treatment barriers.[14,42] However improvements in clinical practice is not always quaranteed nor does it persist following educational interventions.<sup>43</sup> In addition, a study done in Mexico found that attitude toward high risk groups and fear of contagion but not knowledge were related to behavioral intention to provide AIDS care. This finding was consistent with research indicating that knowledge based programs that fail to address the affective component of AIDS care are insufficient for changing AIDS care intentions and behaviours.44

The finding in the study by Gerbert and colleagues indicating that one third of primary care physicians perceive no ethical difficulty with denying medical care to patients who are infected with HIV, presents a disturbing prospect for future care, particularly as the number of patients with AIDS continues to rise.<sup>29</sup>

A major impediment to clinical care for people with HIV disease in the future is likely to be the lack of health care workers to provide the necessary services. Thus one of the continuing and still urgent needs is attracting, training, supporting and retaining health care workers at all levels and types of skills.<sup>40</sup>

## Conclusion and recommendations

From this review it can be concluded that barriers do exist that could prevent doctors from managing HIV and AIDS patients. The most important intervention for addressing barriers to care is probably further education. Given the high HIV prevalence rate in South Africa, interventions to address possible barriers to treatment of HIV-infected persons is essential and further research on the barriers to treating HIV infected people in a local setting is required.

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### References:

- HIV and AIDS in South Africa.http:// www.avert.org/aidssouthafrica.htm. [Accessed 05/04/2005]
- Douglas C, Kalman C, Kalman T. Homophobia among physicians and nurses: An empirical study. Hosp Comm Psychiatr 1985; 36: 1309.
- Epstein RM, Christie M, Frankel R, Rousseau S, Shields C, Suchman AL. Understanding fear of contagion among physicians who care for HIV patients. Fam Med 1993; 25(4): 234-5.
- Dubois JM. Beebie M. Bartter TC. Pratter MR Respiratory care practitioners attitudes toward patients with aids. Chest. 1994; 106(2): 427-30.
- Gleeson CJ, Havron A, Wadland WC. Family physician management of HIV and AIDS: A Vermont study. J Fam Pract 1994; 39(1):50-4.
- Weinberger M, Conover CJ, Samsa GP, Greenberg SM. Physicians attitudes and practices regarding treatment of HIV infected patients. South Med J 1992; 85(7): 683-6.
- Bresolin LB, Rinaldi RC. Attitudes of US Primary Care Physicians about HIV Disease and AIDS. AIDS Care 1990; 2(2): 117-25.
- Richardson JL, Lochner T, Mc Guigan K, Levine AM. Physician attitudes and experience regarding the care of patients with AIDS and related disorders (ARC). Med Care 1987; 25 (8): 675-85.
- Wallack JJ. AIDS anxiety among health care professionals. Hosp Comm Psychiatr 1989; 40(5): 507-10.
- Taylor KM, Eakin JM, Skinner HA, Kelner M, Shapiro M. Physicians' perceptions of personal risk of HIV infection and AIDS through occupational exposure. Can Med Assoc J 1990; 143(6): 493-500
- Hayward RA, Shapiro MF. A National study of AIDS and residency training: experiences, concerns and consequences Ann Int Med 1991; 114(1): 23-32.
- Samuels ME, Shi L, Baker SL, Sy FS, Richter DL, Stoskopf CH. Incentives for physicians to treat HIV seropositive patients: results of a statewide survey. South Med J 1993; 86(4): 403-8.
- Abadie R, Hoffman E. Physician practices and attitudes on HIV-related issues: a survey of LSMS primary care physicians. J La State Med Soc. 1992; 144(6):283-8.
- Bredfeldt RC, Dardeau FM, Wesley RM, Vaughan-Wrobel BC, Markland L. AIDS: Family physician's attitudes and experiences. J Fam Pract 1991;32 (1): 71-5
- Shapiro MF Hayward RA, Guillemot D, Jayle D. Residents' experiences in, and attitudes toward, the care of persons with AIDS in Canada, France, and the United States. JAMA 1992; 268 (4): 510-15.
- Owotade FJ, Ogunbodede EO, Sowande OA. HIV/AIDS pandemic and surgical practice in a Nigerian teaching hospital. Trop Doct 2003; 33(4): 194-6.
- Adelekan ML, Joyalemi SO, Ndom RJ, et al. Caring for people with AIDS in a Nigerian teaching hospital: staff attitudes and knowledge. AIDS Care 1995; 7(1): S63-72.
- Bishop GD, Oh HML, Swee HY. Attitudes and beliefs of Singapore Health Care Professionals concerning HIV and AIDS. Singapore Med J 2000; 41(2):55-63.
- Roumeliotou A, Kornarou E, Papaevangelou V, et al. Knowledge, attitudes and practices of Greek health professionals in relation to AIDS. Eur J Epidemiol 1992; 8(6): 812-5.
- Commonwealth AIDS Research Grant Committee Working Party: Attitudes, knowledge and behaviour of GP in relation to HIV infection and

- AIDS. Med J Aust 1990; 153(1): 5-12. 21. Mungherera M, van der Straten A, Hall TL, Faigeles B, Fowler G, Mandel JS. HIV/AIDS-related attitudes and practices of hospital based health workers in Kampala, Uganda. AIDS 1997; 11(1): 79-85.
- Storosum JG, Sno HN, Schalken HFA, et al Attitudes of health- care workers towards AIDS at 3 Dutch hospitals. AIDS 1991; 5: 55-60.
- Duyan V, Agalar F, Sayek I., Surgeon's attitudes toward HIV/AIDS in Turkey. AIDS Care 2001; 13(2):243-50.
- Fazekas C, Diamond M, Mose JR, Neubauer AC AIDS and Austrian physicians. AIDS Educ Prev 1992; 4(4): 279-94.
- Feldman MD, Feldman AJD, Coates TJ. HIV and the Primary Care Physician in Japan, J Acquir Immune Defic Syn Human Retrovirol 1997; 14(2), S30-S34
- Samuels ME, Shi L, Stoskopf CH, Richter DL, Baker SL, Sy FS. Rural physicians: a survey analysis of HIV /AIDS patient management. AIDS Patient Care 1995: 9(6): 281-9.
- Rawlings MK Grimes RM, Easling I. A preliminary study of African-American physician involvement in care of HIV infected patients. J Natl Med Assoc 1999; 91(6): 343-8.
- Lewis CE, Montgomery K. Primary care physicians' refusal to care for patients infected with the human immunodeficiency virus. West J Med 1992; 156(1):36-8.
- Gerbert B, Maguire BT, Bleecker T, Coates TJ, McPhee SJ. Primary care physicians and AIDS. Attitudinal and structural barriers to care. JAMA 1991; 266(20): 2837-42.
- Fido A, Al Kazemi R. Survey of HIV/AIDS knowledge and attitudes of Kuwaiti family. Fam Pract 2002; 19(6): 682-4.
- Suarez-Varela Übeda JF, Zunzunegui MV, Bimbela JL., Vilches A. Attitude and Structural barriers detected in primary care physicians towards treating patients with HIV and AIDS infection. Aten Primaria 1997; 20(9) 486-92.
- King M, Petchey R, Singh S et al. The role of the general practitioner in the community care of people with HIV infection and AIDS: A comparative study of high-and low-prevalence areas in England. Br J Gen Pract 1998; 48, 1233-6.
- Boyd JS, Kerr S, Maw RD, Finnighan EA, Kilbane PK. Knowledge of HIV infection and AIDS ,and attitudes to testing and counseling among general practitioners in Northern Ireland. Br J Gen Pract 1990; 40: 158-60.
- Fournier PO, Baldor RA, Warfield ME, Frazier B. Patients with HIV/AIDS: physicians' knowledge, attitudes, and referral practices. J Fam Pract. 1997; 44(1): 85-9.
- Robinson N. People with HIV/AIDS: who cares?
   J Adv Nurs 1998; 28(4): 771.
- Valimaki M, Suominen T, Peate I. Attitudes of professionals, students and the general public to HIV/AIDS and people with HIV/AIDS: a review of the research. J Adv Nurs 1998; 27(4) 752.
   Gerbert B, Maguire B, Badner V, Altman D, Stone
- 37 Gerbert B, Maguire B, Badner V, Altman D, Stone G. Why fear persists: Health Care Professionals and AIDS. JAMA 1988; 260(23): 3481-83.
- The African Community Involvement Association: http://.www.acia-uk.org/prevention\_health\_workers.doc [Accessed 12/9/05]
- 39. Sharp SC. The physician's obligation to treat AIDS patients. South Med J 1988; 81(10): 1282-5.
- 40. Friedland GH. A Journey through the Epidemic. Bull N Y Acad Med 1995 Supplement 1: 178-86.
- Verma S, Mythily S, Chan YH, Deslypere JP, Teo EK. Post SARS psychological Morbidity and Stigma among General Practitioners and Traditional Chinese Medicine Practitioners in Singapore. Ann Acad Med Singapore 2004; 33(6): 743-8.
- Bell PF, Williams AK, Ross MW, Boswarva PA, Strunin L. HIV /AIDS: knowledge and attitudes of accident and emergency healthcare professionals. J Assoc Nurses AIDS Care 1993; 4(4): 7-14.
- Mc Cann TV. Reluctance amongst nurses and doctors to care for and treat patients with HIV/AIDS. AIDS Care 1999; 11(3):355-9.
- Fusilier M, Manning MR, Santini Villar AJ, Torres Rodriguez D. AIDS knowledge and attitudes of health -care workers in Mexico. J Soc Psychol 1998; 138(2): 203-10.

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