Abstract
Prisons often lack the basic health services required by HIV/AIDS patients. As with many other chronic illnesses, the treatment of HIV is expensive in terms of medication, hygiene, testing and staff training. Strategies to combat the disease have been thoroughly developed, particularly in Europe (WHO/UNAIDS, 2006). The purpose of this study was to assess quality of life (QOL) of the only 5 reported cases of HIV/AIDS patients in Roumieh prison (the country’s largest male top-security prison) using the WHOQOL and the WHO guidelines on HIV infection and AIDS in prison. Virtually all prisoners reported that their rights had been violated. Isolation measures were taken to prevent the spread of the disease. According to UNAIDS, this particular measure has been proven ineffective. In conclusion, other approaches should be implemented to respect inmates’ rights and reduce transmission of the virus.

Keywords: HIV/AIDS, quality of life, health, prisoners, human rights.

Résumé
Les prisons n’ont pas souvent les services de santé de base requises pour le traitement du VIH/SIDA. C’est le cas aussi d’autres maladies chroniques, le traitement du VIH coûte cher en terme de médicaments, d’hygiène, de test, et la formation du personnel. Les stratégies pour combattre la maladie ont été bien développées, particulièrement en Europe (OMS/ONUSIDA, 2006). L’objectif de cette étude était d’évaluer la qualité de vie (QDV) de 5 prisoniers malades du VIH/SIDA qui ont été signalés dans la prison de Roumieh (la plus grande prison du pays pour les hommes de haute sécurité) utilisant les guides de l’OMSQDV sur l’infection du VIH et le SIDA. Pratiquement tous les prisonniers signalèrent que leurs droits ont été violés. Des mesures d’isolement ont été prises pour prévenir la propagation des maladies. Selon l’ONUSIDA cette mesure particulière s’est avérée inefficace. En conclusion, d’autres approches devraient être mises en œuvre pour respecter les droits des détenus et réduire la transmission du virus.

Mots clés: VIH/SIDA, qualité de vie, santé, prisonniers, droits de l’homme.

Introduction
There is an alarming increase in the human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) in developing countries (Wig et al., 2006). This increase is accompanied by paucity in figures hindering estimation of the treatment cost as well as frequency and burden of the disease.

Most countries in the Middle East have no accurate statistics regarding the number of individuals infected and/or being treated for HIV/AIDS. UNAIDS (2006) reported 480 000 HIV-infected adults and children in the Arab world, Iran, Israel and Turkey. Nevertheless, this estimate is very broad mainly because systematic surveys and data collection are not readily available in Middle Eastern countries. Data collection in Middle Eastern countries is particularly challenging because of powerful stigmas connected with HIV/AIDS. In turn, individuals are usually rejected and alienated from their communities.

The HIV epidemic constitutes a major health burden for all prisons around the world (UNAIDS, 2000). Generally, prisons are ideal environments for the spread of disease, mainly because of the number of injecting drug users (IDUs) and the higher prevalence of risky behaviour (Gaughwin, Douglas, & Wodak, 1991). Furthermore, prisons and jails are open spaces where prisoners, security staff and visitors move in and out daily. Additional explanations could include drug trafficking, men having sex with other men (in all-male prisons), overcrowding, lack of information about HIV, lack of adequate health services, etc. (UNAIDS, 1997).

Data regarding HIV transmission are rarely available in prison because access to this population is challenging in itself (CDC, 1986; Dolan & Wodak, 1999).

Usually, HIV/AIDS-infected subjects are apprehensive about the time they have left to live as well as their quality of life (QOL). HIV/AIDS does not only affect physical health but takes a toll on the mental and social well-being of the patients. Concerns include human rights, safety, social stigmas, etc. (UNAIDS, 2006). There is no consensus when it comes to defining QOL (Susan et al., 1999). For example, according to the Center for Health Promotion...
Most prisoners had little or no knowledge concerning HIV/AIDS prisoners. WHO prison guidelines were used as a reference to concerning prisoners' rights. In the investigation of the prisoners' well-being, the WHO guidelines focus on health management and human rights of HIV/AIDS in prisons (UNAIDS, 2006). In other words, these standards would ensure adequate QOL among infected inmates, when adopted properly.

The health-related QOL generally encompasses four domains: (i) physical status and functional abilities; (ii) psychological status and well-being; (iii) social interactions; and (iv) economic status and economic factors. This approach is very much in tune with the medical view in the sense that it values subjective assessments (Spiker, 1990). In other words, QOL measures strongly depend on the patient's own perceptions and judgments where an individual's overall satisfaction with life and one's general sense of personal well-being are measured (Spiker, 1990, p.4). In the Middle East, the challenges of HIV/AIDS for the individual are not solely limited to treatment and transmission but also to social rejection which could include discrimination from family, friends and colleagues, getting fired from the job, being refused medical care, etc. (Alaei et al., 1997).

The case of Lebanon is comparable in many ways to other countries in the region, i.e. lack of data availability and taboo associated with the disease. According to the Lebanese National AIDS control programme supported by UNAIDS (2008), there are around 400 HIV-infected patients being treated and around 3 000 others that are non-symptomatic or and not following any type of treatment.

There are 24 prisons in Lebanon holding an average of 5 000 – 6 500 inmates (UNAIDS/WHO, 2008) Roumieh prison, built in 1971, is the main top-security male prison in the country, and lodges about 50% of inmates in Lebanon. According to ISF statistics, this prison is servicing twice its anticipated operational resources and is holding about 4 500 inmates at one time.

Prisons in Lebanon do not abide by the agreed international laws concerning prisoners' rights. In the investigation of the prisoners' well-being WHO prison guidelines were used as a reference to determine the Lebanese prison standards for dealing with HIV/AIDS prisoners.

Most prisoners had little or no knowledge concerning HIV/AIDS increasing stigma and fear of contamination among inmates. For example, most prisoners were not aware of HIV/AIDS transmission and preferred to stay away from the infected individuals. The prison community at large, including guards, inmates and other personnel were not offered formal training regarding the disease. Lack of awareness in health standards and prison conditions among prison administration, staff and inmates increases the likelihood of additional health threats and exposure to other infectious diseases.

HIV testing before incarceration is mandatory in Roumieh prison, which is in violation with WHO guidelines recommending compulsory testing with informed consent and availability of test results. Although Roumieh prison contains about 8 000 inmates and pre-admission testing is required, only 6 inmates were reported to be infected with HIV/AIDS. The low number of HIV/AIDS-infected prisoners within Roumieh prison is questionable and highlights the need for strict testing upon prison entry.

Lack of epidemiological data hampers comparing and assessing HIV/AIDS-related concerns and procedures in Lebanese prisons. Although several suggestions have been debated regarding prevalence of the disease, no accurate figures are available for attaining information about major changes (UNGASS, 2010). The main focus of this study was to assess the QOL of HIV prisoners in the Lebanese prison system as it compares to international standards. Generally, prisons in Lebanon fall behind local and international standards regarding all levels of prison management and promotion of prisoners' general well-being. However, to our knowledge, the effects of such violations have not yet been measured in terms of QOL.

Standard assessment questions do not always provide a complete understanding of the patients QOL (Leppege et al., 1997). To our knowledge, no questionnaire has been tailored specifically to Lebanese HIV patients and definitely none to HIV-positive prisoners in Lebanese prisons. Nevertheless, a debate is still open regarding a unanimous definition and measurements of QOL, and the WHO definition supporting the health-related approach was adopted.

The purpose of the present study was to investigate the QOL of HIV/AIDS prisoners in Roumieh prison. As mentioned earlier, Roumieh prison is particularly overcrowded and understaffed compared with other prisons in Lebanon and international prison guidelines. As a result, it is our belief that the QOL of prisoners and more specifically HIV/AIDS prisoners is highly compromised. We hypothesised that if the WHO guidelines were followed then the QOL of prisoners should rank high. WHO guidelines reflect the basic needs and rights of prisoners with HIV and in turn ensure appropriate (basic) living conditions.

Research design and methodology
A case study method was used for this particular study, for the following reasons: the number of HIV/AIDS prisoners is limited (only 5 prisoners) and the accessibility to prisons was limited to only one prison. A direct examination of a small group of participants could reflect the general QOL of prisoners with HIV/AIDS. Because HIV/AIDS prisoners came from diverse backgrounds and nationalities, the data would be significant in terms of assessing QOL and thus a case study approach would be most effective.
This study followed the recommendation of Yin (1994) related to designing, conducting, analysing the case study and developing the conclusions, recommendations and implications.

Since the focus of the study was exploratory and descriptive, emphasis was on the purpose and aims and not on formulating propositions. Moreover, the rationale of the administered questionnaire was based on World Health Organization (WHO) instruments and a thorough literature review.

Participants

Even though Roumieh prison holds the largest number of male prisoners in the country, the number of HIV-infected subjects was only 5. The participants completed a socio-demographic data form containing questions regarding age, nationality, time served, and reason for incarceration. All participants signed a consent form prior to the interview. The confidentiality of all information was guaranteed.

Case 1

A 46-year-old Lebanese, incarcerated 6 years ago for drug trafficking. His wife is also HIV positive. He has two children. When the prison staff received a report concerning his having HIV/AIDS, he was isolated without his consent, but is receiving appropriate medical treatment. His wife is not allowed to visit him regularly and he cannot see his children. The only support that he is getting is from a nun in the prison.

Case 2

A 26-year-old Iraqi (Lebanese mother), not married, moved from Iraq to live with his mother. He was incarcerated for illegal papers, has been there for 4 months. Upon admission to prison he was diagnosed with HIV/AIDS and test results were given to him. He claims he does not have AIDS and refuses treatment.

Case 3

This 31-year-old Brazilian was imprisoned for drug trafficking and has been in prison for 3 years and 9 months. He was diagnosed with HIV/AIDS before coming to Lebanon and the prison is offering him treatment. He has no family support but a nun who works in the prison is available.

Case 4

A 39-year-old Somali accused of murder and has been incarcerated for 8 years. He claims he is innocent. Although diagnosed with HIV/AIDS, he denies his sickness and declines medication. He was not given an informed consent concerning isolation. He has no contact with any individual from his country and refuses to give information about his family. The only support that he has is from the nun in the prison.

Case 5

A 26-year-old Indian, in jail for illegal papers, has been imprisoned for 4 months. He has no knowledge about his disease. When he was diagnosed he refused to accept his situation and refuses treatment.

Table 1. Prisoners’ responses to WHO guidelines

| WHO/Cases                        | Case 1       | Case 2       | Case 3       | Case 4       | Case 5       |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| Availability of HIV/AIDS testing | Yes          | Yes          | Yes          | Yes          | Yes          |
| Communication of test results    | Prison doctor| Prison doctor| Prison doctor| Prison doctor| Prison doctor|
| Confidentiality                  | Absent       | Absent       | Absent       | Absent       | Absent       |
| Availability of test results     | Available    | Available    | Available    | Available    | Available    |
| Informed about HIV               | Info is given| Barely anything| Info from own country | Barely anything| Barely anything|
| Availability of drug treatment programme | Available but absence of confidentiality | Available but absence of confidentiality | Available but absence of confidentiality | Available but absence of confidentiality | Available but absence of confidentiality |
| Share activities with other prisoners | Not allowed | Not allowed | Not allowed | Not allowed | Not allowed |
| Workshops                        | Workshops are offered but in isolation | Workshops are offered but in isolation | Workshops are offered but in isolation | Workshops are offered but in isolation | Workshops are offered but in isolation |
| Informed consent concerning isolation | Not informed | Not informed | Not informed | Not informed | Not informed |
| Appropriate medical and psychological treatment | Satisfied | No medical treatment but needs psychological support | No medical treatment but needs psychological support | No medical treatment but needs psychological support | No medical treatment but needs psychological support |
| Access to info on treatment      | Yes          | Refuses to take the treatment | Yes          | Refuses to take the treatment | Refuses to take the treatment |
| Discrimination of foreigners in relation to needs | Yes | Yes | Yes | Yes | Yes |
| Support (medical, psychological, social services) | Support from a nun only | Support from a nun only | Support from a nun only | Support from a nun only | Support from a nun only |
| Ability to complain              | No           | No           | No           | No           | No           |
He keeps asking for psychological support believing that isolation from inmates is causing problems.

**Procedure**

Prior to data collection, researchers followed WHO recommendations for ethical protection of vulnerable research participants. These standards aim to minimise harm. Relevant ethical issues were thoroughly followed throughout the experimental process. All steps were approved by the Lebanese American University internal review board (IRB) for ethical concerns and safety.

Researchers provided detailed information regarding the study to government authorities including the Ministry of Interior, director and medical officer of Roumieh prison. In turn, a confidential agreement was received including the list of names of HIV/AIDS-infected inmates. All participants signed informed consent forms. For confidentiality, all participants were interviewed individually in a separate room provided by the prison warden. During the interview, researchers reassured each prisoner that all information collected would remain confidential and anonymous.

Two questionnaires were used to assess QOL, the WHOQOL-Bref (Nelson & Lotfy, 1999,) and the WHO prison guidelines (WHO, 2006).

The WHOQOL-Bref divides QOL into four parts: (i) physical health and level of independence assessing areas related to presence of pain and discomfort; dependence on substances or treatments; energy and fatigue; mobility; sleep and rest; activities of daily living; perceived working capacity; (ii) psychological well-being assessing areas including affect; both positive and negative self concept; higher cognitive functions; body image and spirituality; (iii) social relationships assessing areas concerned with social contacts; family support and ability to look after family; sexual activity and (iv) environment assessing areas such as freedom; quality of prison environment; physical safety and security and financial status; involvement in recreational activity; health and social care: quality and accessibility. Two other items were examined separately: the individual’s overall perception of QOL and overall perception of his or her health.

The WHO guidelines are composed of comprehensive guidelines divided into fourteen sections ranging from general principles to evaluation and research. Only the following sections pertaining to our study were used: general principles, HIV testing in prisons, preventive measures, and management of HIV-infected prisoners, confidentiality in relation to HIV/AIDS, care and support of infected prisoners, and contacts with the community and monitoring. From each of these sections some subsections were used.

The WHOQOL and the WHO guidelines were merged into one questionnaire. Questions were selectively chosen from both surveys to eliminate redundancy. The subjects had no or little education and in turn were incapable of rating or scoring. Therefore an interview format was used where open-ended questions based on the merged questionnaire were administered by two trained researchers.

**Data collection and analysis**

The data collection and analysis occurred concurrently. The research questions guiding the case study focused on QOL variables. Researchers recorded and synthesised prisoners’ statements. The literature was revisited between interviews to gain a better understanding of the new data being collected.

**Limitations**

The sample size in this study was very small (only 5) and did not reflect numbers in the community. In addition, during the interview, some subjects were incapable of responding on a number scale because of their low educational background, and interpretation was used to ensure responses. An audio-recorder was not available for security reasons, and all answers were hand-recorded by the interviewees.

**Results**

Results pertaining to the quality of life as experienced by the prisoners in Roumieh prison were presented and analysed based on the four WHOQOL domains, i.e. psychological, social, environmental and physical, and the WHO guidelines concerning HIV/AIDS.

The interview started with a question pertaining to general satisfaction regarding QOL. Most of the responses reflected a high level of dissatisfaction. Cases 2, 4 and 5 rated themselves as highly dissatisfied with their QOL. While case 1 believed his life is fairly satisfying, he felt better off in jail since outside he cannot work. Case 3 claimed that he was used to this daily life, and that it did not matter whether to be satisfied or not.

**Psychological**

When asked to what extent they accepted their bodily appearance, responses varied. Cases 1 and 3 did not accept their bodily appearance, while case one refused to mention anything related to body appearance.

| Table 2. Psychological well-being of the prisoners |
|-----------------------------------------------|
| Cognitive functions | Body image | Negative feelings | Positive outlook on life |
| Case 1 | Moderate | Not at all | Quite often | Moderate |
| Case 2 | Not at all | Completely | Always | Not at all |
| Case 3 | Not at all | Not at all | Quite often | Moderate |
| Case 4 | Not at all | Completely | Always | Not at all |
| Case 5 | Not at all | Completely | Always | Not at all |
As for ability of concentration, responses were as follows: Case 1 was generally able to concentrate, but recently he was worried that since his time was approaching to leave, it would be difficult for him to find work. Case 3 was not able to concentrate; he thought of his family too much. Case 4 felt that if there were more things to do other than watching TV and reading the same book, he would be able to concentrate.

All prisoners conveyed frequent negative feelings such as blue mood, despair, anxiety and depression. Their answers ranged from always experiencing negative feelings to quite often. Table 2 summarises the psychological well-being of the prisoners.

Social
The responses pertaining to the social domain and how the prisoners feel and rate themselves as related to the level of satisfaction, interaction with others and support received by families and peers were as follows: When prisoners were asked how satisfied they were with the support they got from their friends, responses were as follows (Table 3): Case 1 did not have much support; his wife was too sick to come and see him and his children too young to come on their own. Cases 3, 4 and 5, being foreigners, did not have any friends who support them, at least not directly. Case 2 had his girlfriend as support. In all cases, their support could not do much for them, leaving the prisoners unsatisfied.

Environmental
Table 4 summarises the level of satisfaction experienced by the prisoners with regard to the quality of the prison, physical safety, recreational activities, health care, the prison staff and the educational resources.

Results revealed that prisoners were generally unsatisfied with the environment except for the notion of safety. When they were asked how safe they felt in their daily life all of them responded that they felt pretty safe since they were all isolated from the rest.

When asked how satisfied they were with their physical environment (health) all responded that they were dissatisfied. They had no beds, there was too much humidity, and there was no hot water. Case 1 had other illnesses such as ulcers which made him more uncomfortable. Cases 2 and 5 felt that they were in perfect health, and they did not believe they have AIDS. Case 3’s rates showed that he was dissatisfied. Case 4 felt that he had many psychological problems.

Physical
For the last domain, physical health and level of independence, responses varied between satisfaction and no satisfaction at all.

When asked to what extent they felt that physical pain prevented them from doing what they needed to do, case 1 felt that even
though there was physical pain, he was used to it. Cases 2, 4 and 5 claimed they had no physical pains. Case 3 said that while in Brazil he was able to play soccer, but here the prison did not allow it.

For the question of whether they have enough energy for their everyday life, all cases felt they had enough energy for their daily activities. However, they all complained about sleeping arrangements. All of them slept on the floor. Cases 3 and 4 said they also had too much on their minds, which made it even harder to sleep.

The question related to how satisfied they were with their capacity for work, most responses reflected a belief in the ability to work. However, case 1 was terrified that upon his release he would not be able to find something he is capable of doing. The other cases felt as capable as anyone else of working.

**WHO guidelines**
The second step used in this study was to compare the Lebanese standards in dealing with HIV/AIDS prisoners to the WHO guidelines.

All 5 cases responded affirmatively when asked if voluntary HIV/AIDS testing was available in jail with adequate pre- and post-test counselling. Only the doctor who worked at the prison communicated the results. However, all cases complained about lack of confidentiality. All the other inmates knew who they were, and some even avoided them due to their illness. The fact that they were isolated from the rest didn't make it any easier.

When asked whether they were informed about HIV/AIDS and about ways to prevent transmission, and whether information was consistent with that given in the community (leaflets, awareness, etc.), case 1 thought the information given was enough. All other cases reported that no information was provided to them. Case 3 said everything he knew about AIDS was from his country. Here in Lebanon, no one taught him anything.

Prisoners were asked about the amount of occupational activities, sports and recreation provided. They responded that there weren't any. HIV/AIDS prisoners did not have the right to join in any activity in the prison because they were considered to be ill. Case 3 argued that when he was in Brazil, he was allowed to play football. Restrictive measures including segregation, isolation and limited physical and occupational activity have not been proven effective for prevention and treatment of HIV/AIDS-infected individuals.

Isolation measures are only recommended during infectious stages. Prisoners reported that no informed consent agreement was signed prior to confinement. Case 5 complained about being locked in solitary confinement for 25 days without his consent or information regarding his status. A fair level of satisfaction was expressed related to appropriate medical treatment equivalent to the community. Case 1 was satisfied with the treatment he was getting. All other remaining cases did not receive medical treatment but expressed their need for psychological interventions. Cases 2, 4 and 5 refused to take the treatment provided to them, because they denied their disease. In other words, a fair amount of freedom is given as it relates to the right to refuse treatment.

Regarding community-based medical care, psychological support and social services organised to facilitate integration into the community after release, all cases spoke of a nun who used to visit them on a weekly basis to provide them with basic needs (food and clothing). No efforts were made to facilitate later integration into the community. Foreign prisoners complained about the standard of treatment, discrimination and ethical principles; their complaints were not heard by any independent body (see Table 1).

**Discussion**
Results indicated that all HIV/AIDS prisoners were dissatisfied with their living conditions. Generally, inmates' responses of level of satisfaction were comparable and consistent across the four domains.

Two significant variables including cognitive abilities and negative feelings were highlighted in the psychological domain. Cognitive functioning such as concentration is central for normal psychological functioning and completion of daily tasks. In addition, lack of information about HIV/AIDS, scarcity of resources needed for health promotion, and minimal psychological support contributed to increased negative feelings such as anxiety, fear and depression. The prison administration does not respect privacy or confidentiality when it comes to HIV/AIDS. Disclosure of one's disease to other inmates' and uncertainty related to longevity and death are major contributors to increased anxiety, fear and depression. This finding supports prior research reporting a strong correlation between loss of concentration and negative feelings among HIV/AIDS prisoners (Hudson et al., 2004). Fear and anxiety are also associated with stigma, limited social support and perceived powerlessness (Gaskins, 1999; Hudson et al., 2001).

Low psychological support could be upset by affording a positive productive environment within the prison where confidentiality and health promotion are emphasised.

The present results agree with the findings of Wright (1989) and Toch (1977), where prisoners ranked family support as the highest factor contributing to well-being, followed by emotional feedback, activity, safety, social isolation, freedom and privacy. In other words, improving the psychological and social domains of HIV-infected individuals is crucial for optimising QOL. In the current study, isolation and increased stigma combined with imprisonment have a depressing impact on psychological and social well-being. HIV/AIDS prisoners are restricted in their liberty of movement and freedom of communication with other inmates, family and friends. Prisoners, and more specifically HIV/AIDS inmates, have a greater need for family support, especially foreign prisoners. Since prisons are created and built by society as an institution to punish lawbreakers, it does not mean that prisoners have to lose their rights as human beings, to be isolated or deprived of reintegration with their inmates. Family support, coupled with religion, social norms and values, are perceived as preventive measures and factors for halting the spread of HIV. If these factors are in place, we can say that we are planting the seeds for development of awareness, knowledge and appreciation among HIV prisoners and the whole community of the prison.

Results from the environment domain included increased discrimination, dissatisfaction in safety and health care,
less communal activities, lack of educational resources and discrimination from staff. Most prisoners complained about the same issues, including lack of hygiene, lack of water, humidity and lack of beds. HIV/AIDS patients are the most vulnerable and stigmatised individuals among prison populations; they are more susceptible to social isolation, violence and deprivation of human rights. Therefore these considerations could have ramifications within prison community at large success of prison intervention programs. Lack of adequate health care is considered as a violation of the United Nations Universal Declaration of Human Rights (UNAIDS 2006). Scarcity of environmental and hygienic resources contributed to negative perceptions of self, feelings of hopelessness and disciplinary violation in prison (Dhami, Ayton, & Lowenstein, 2007).

Implementing education and awareness programmes for both staff and fellow prisoners would limit stigmas, improve social and in turn improve QOL. Other strategies including distribution of condoms and sterilised needles have been used in many countries. However, in view of cultural, philosophical and/or religious differences, the UNAIDS and WHO support such interventions and presume that sexual activity and injection of drugs by inmates cannot be completely prevented by means of traditional methods. In Lebanon, homosexuality is still against the law and prison officials deny sexual activity and/or drug use within prison walls. Additional programmes such as physical and social activities, psychosocial support and community integration would unquestionably sustain positive well-being and QOL.

Preventive measures, including empowering the prison community, implementing effective policies and strategies, improving prison conditions and supporting HIV-positive prisoners are relatively effective in HIV/AIDS management. The educational interventions involving peer health educators will also contribute positively to the acquisition of knowledge among prisoners (Vaz, Gloyd & Trindale, 1996). Unfortunately, Lebanon is behind other countries in implementing recommended standards and maintaining acceptable QOL among inmates. There is a pressing need for intervention programmes to protect human rights by ensuring confidentiality, stopping isolation measures and promoting mental and physical health.

Results revealed that HIV/AIDS inmates were isolated and separated from their fellow prisoners. Indeed, these inmates were secluded in a different segment within the prison with separate access to bathrooms, kitchen, beds, etc. Although these administrative measures were undoubtedly intended to protect these prisoners and optimise their QOL, they proved to be ineffective. Separation of HIV-positive prisoners is not supported by the UNAIDS (1997) because it is thought to be generally ineffective in controlling transmission of the virus. UNAIDS acknowledges that transmission of HIV/AIDS is higher within the prison walls but suggests other measures that are believed to be more effective and ethical. The decision to isolate prisoners strongly affected their social and psychological well-being. Indirectly, seclusion of the five prisoners made their disease public among the prison community and thus jeopardised confidentiality. Consequently, instead of using seclusion with its negative ramifications on the psyche of the prisoners, provision of counselling to both patients and inmates and upgrading the monitoring and surveillance system would be a better option. Under-reporting as the critical issue in the fight against HIV/AIDS must be borne in mind. Conflict of interest, duplication of activities and competition among the stakeholders needs to be better addressed to ensure an effective and efficient response to HIV/AIDS. In addition, enhanced coordination and synergy of activities should be undertaken among NGOs in the country. Isolation, breach of confidentiality, inadequate physical and social environment raises health and human rights apprehension. The Joint United Nations Program on HIV/AIDS issued the following statement to the United Nations Commission on Human Rights: ‘[By] entering prisons, prisoners are condemned to imprisonment for their crimes; they should not be condemned to HIV and AIDS. There is no doubt that governments have a moral and legal responsibility to prevent the spread of HIV among prisoners and prison staff and to care for those infected. They also have a responsibility to prevent the spread of HIV among communities. Prisoners are the community. They come from the community, they return to it. Protection of prisoners is protection of our communities.’ (UNAIDS, 1997). The challenge of HIV/AIDS in prisons is overwhelming but an action plan is deemed necessary for protection of inmates behind bars as well as individuals within the community. HIV/AIDS in prison constitutes a public health issue where effectiveness of prevention, management, treatment and protective techniques could have major ramifications for community health.

References
Alaei, K. & Alaei, A. (2004). The best practice model for prevention and care for HIV/AIDS and potentials for expansion into a Muslim Country Program. Paper given at twenty-Fifth International AIDS conference, Satellite Meeting of Global Researchers of HIV/AIDS in the Middle East and North Africa Region, Bangkok, Thailand.

Centers for Disease Control (CDC). (1998). Acquired immunodeficiency syndrome in correctional facilities: report of the National Institute of Justice and the American Correctional Association. MMMW Morb Mortal Weekly Rep; 35:195-199.

Coulter, D. (1990). Home is the place: Quality of life for young children with developmental disabilities. In R. Schalock (ed.), Quality of Life: Perspectives and Issues (American Association on Mental Retardation, Washington, DC.)

Dhami, M., Ayton, P. & Lowenstein, G. (2007). Adaptation to imprisonment: Indigenous or imported. Criminal Justice and Behavior, 34(8), 1085-1100.

Dolan, K., & Wodak, A. (1999). HIV transmission in a prison system in an Australian State. Medical Journal of Australia, 171:14-17.

Flanagan, T. I. (1980a). The pains of long term imprisonment. British Journal of Criminology, 20, 148-156.

Friedland, J., Renwick, R., & McColl, M. (1996). Coping and social support as determinants of quality of life. HIV/AIDS. AIDS care, 8(1), 15–31.

Gaskins, S. (1999). Issues for women with heterosexually transmitted HIV disease. AIDS Patient Care and STDs, 13, 89-96.

Gaughwin, MD, Douglas, RM, & Wodak, A.D. (1991). Behind Bars-Risk behaviors for HIV transmission in prisons, a review. In: Norberry J, Gerull, SA, Gaughwin, MD, eds HIV/AIDS and prisons conference proceedings. Canberra: Australian Institute of Criminology, 89-108

Hensley, C., Trewsbury, R. (2005). Wardens’ perceptions of prison sex. The Prison Journal, 85 (2), 186-197.

Hudson, A.L., Lee, K.A., Miramontes, H. & Portillo, C.J. (2001). Social interactions, perceived support, and level of distress in HIV-positive women. Journal of the Association of Nurses in AIDS Care, 12, 68-76.

Hudson, A., Kirksey, K., Holzemer, W. (2004). The influence of symptoms on quality of life among HIV-infected women. Western Journal of Nursing Research, 26 (1), 9-23.

Human Rights Watch (2001). Rape crisis in US prisons. Press release. http://hrw.org/english/docs/2001/04/19/usdom168.htm. Retrieved 2008-06-07.

Kassira E., Bauserman, R., Tomoyasu, N., Caldeira, E., Swetz, A., & Solomon, L. (2001). HIV and AIDS surveillance among inmates in Maryland Prisons. The Journal of Urban Health: Bulletin of the New York Academy of Medicine, 78(2), 256-263.

Leplege, A., Rude, N., Ecosse, E., Ceinos, E. Dohin, E. & Pouchot, J. (1997). Measuring quality of life from the point of view of HIV positive subjects: the
HIV-QL31. Quality of Life Research, 6, 585-594.
Lyles, CM., Kay, LS., Crepaz, N., Herbst, JH., Passin, WE, Kim, AS., Rama, SM., Thadiparthi, S., DeLuca, JB. (2007). Best-evidence interventions: findings from a systematic review of HIV behavioral interventions for US populations at high risk, 2000-2004. American Journal of Public Health, 97(1), 133-43.
Man, C.D., Cronan, J.P . (2001). Forecasting sexual abuse in prison: The prison subculture of masculinity as a backdrop for “deliberate indifference”. Journal of Criminal Law and Criminology 92, (1), 127-186
McDowell, I & Newell, D. (1999). Measuring health: A guide to rating scales and questionnaires. New York: Oxford Univ. Press, 205.
Nelson, CR., Lofty, M. (1999) . The World Health Organization’s WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. WHO (MNH/MHP/99.7).
Rapposelli, KK, Kennedy, M., Miles, J., Tinsley, M., Rauch, K., Austin, L., Dooley, S., Aranda Naranjo, B. & Moore, R. (2002). HIV/AIDS in correctional settings: A salient priority for the CDC and HRSA. Supplement HIV/AIDS in Correctional settings, 14 (5), 103-130.
Sisker, B. (1990). Quality of Life in Clinical Trials. Raven, New York.
Struckman-Johnson, C. & Struckman-Johnson, D. (2000). Sexual coercion rates in seven Midwestern prisons for men. The Prison Journal, 80 (4), 379-390.
Susan, S. Mohr, J., Justis, JC, Berman, S., Squier, C., Wagener, M.M., & Singh, N. (1999). QOL in patients with human immunodeficiency virus infection: impact of social support, coping style and hopelessness. International Journal of STD AIDS, 10:383-391.
Toch, H. (1977). Living in prison: The ecology of survival. Washington D.C. American Psychological Association.
UNAIDS (1997). Joint United Nations Program on HIV/AIDS.
UNAIDS/WHO (2008). Epidemiological Fact Sheet on HIV and AIDS.
UNAIDS/WHO (2006). WHO guidelines on HIV infection and AIDS in prisons.
UNAIDS (2006). HIV/AIDS Prevention, Care, Treatment and Support in Prison Settings: A Framework for an Effective National Response Co-published with the World Health Organization and the Joint United Nations Program on HIV/AIDS
UNAIDS (2000). Report on the global HIV/AIDS Epidemic. Joint United Nations Program on HIV/AIDS (UNAIDS), UNAIDS/00.13E, Geneva.
UNGASS (2010). Country Progress Report Lebanon. National AIDS Control Program Ministry of Public Health.
Vaz, R.G., Gloyd, S. & Trindale, R. (1996). The effects of peer education on STD and AIDS knowledge among prisoners in Mozambique. International Journal of STD and AIDS, 7 (1) 51-54.
Wig, N., Lekshmi, R., Pal, H., Abuja, V., Mittal, C.M. & Agrawal, SK. (2006). The impact of HIV/AIDS on the quality of life: A cross sectional study in North India. Indian Journal of Medical Science, 60, 3-12.
WHO/UNAIDS (2006). Progress in scaling up access to HIV treatment in low and middle income countries. Fact Sheet Geneva, WHO/UNAIDS.
Wright, K. N. (1989). Race and economic marginality in explaining prison adjustment. Journal of Research in Crime and Delinquency, 26, 67-89.
Yin, R. (1994). Case Study Research: Design and Methods (2nd Ed.). Beverly Hills, CA: Sage Publishing.

Full text version of S A H A R A J
Available online at www.sahara.org.za